



Lucent Gateway Platform TL1 Reference Guide

Part Number 255-400-002R3.10.1
Issue 34, June 3, 2005
Software Version 3.10.1

Copyright © 2005 Lucent Technologies
All Rights Reserved



Copyright 2005 by Lucent Technologies. All Rights Reserved.

This material is protected by the copyright and trade secret laws of the United States and other countries. It may not be reproduced, distributed, or altered in any fashion by any entity (either internal or external to Lucent Technologies), except in accordance with applicable agreements, contracts or licensing, without the express written consent of Lucent Technologies and the business management owner of the material.

For permission to reproduce or distribute, please contact the following:

Product Development Manager 1 888-LTINFO6 (domestic)
1-317-322-6848 (international)

Notice

Every effort has been made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change.

Mandatory customer information

Safety

Always observe the Safety Instructions when operating the system.

Trademarks

All trademarks and service marks specified herein are owned by their respective companies.

Ordering information

The order number of this document is 255-400-002R3.10.1.

Support

Technical support

Please contact your Lucent Technologies Local Customer Support Team (LCS) for technical questions about the information in this document.

Information product support

To comment on this information product online, go to <http://www.lucent-info.com/comments> or email your comments to comments@lucent.com.

Manual Contents

Document Title	Document Number	Issue and Date
Manual Contents	120-000-000	Issue 34 – May 14, 2004
Index	120-100-000	Issue 34 – May 14, 2004
Introduction to TL1	120-200-000	Issue 2 – April 09, 2001
Facility	120-300-000	Issue 2 – May 14, 2004
Equipment, Chassis	120-310-100	Issue 5 – May 14, 2004
Equipment, Module	120-310-200	Issue 5 – May 14, 2004
Fault	120-320-000	Issue 7 – May 14, 2004
ISDN-Primary Rate Interface	120-330-000	Issue 12 – May 14, 2004
Log	120-340-000	Issue 3 – May 14, 2004
Security	120-350-000	Issue 5 – August 04, 2003
SS7 Transport (MTP2/3)	120-360-000	Issue 13 – May 14, 2004
System, Administrative	120-370-100	Issue 5 – May 14, 2004
System, OS Access	120-370-200	Issue 8 – May 14, 2004
Test and Diagnosis	120-380-000	Issue 12 – May 14, 2004
Inter-Machine Trunks	120-710-000	Issue 16 – May 14, 2004
Routing	120-720-000	Issue 11 – May 14, 2004
Global Configuration	120-730-000	Issue 9 – May 14, 2004
Numbering Configuration	120-740-000	Issue 6 – May 14, 2004
Equal Access to Carriers	120-750-000	Issue 7 – May 14, 2004
Intelligent Network Functions	120-760-000	Issue 5 – May 14, 2004
Subscriber Management	120-770-000	Issue 8 – May 14, 2004
Channel-Associated Signaling	120-780-000	Issue 4 – May 14, 2004
GR303	120-782-000	Issue 3 – February 27, 2004
Session Initiation Protocol	120-784-000	Issue 4 – May 14, 2004
Media Gateway Controller Protocol	120-786-000	Issue 2 – May 14, 2004
Media Resource Provisioning	120-790-000	Issue 3 – November 10, 2003

CALEA	120-792-000	Issue 4 – May 14, 2004
Voice Mail System Provisioning	120-794-000	Issue 2 – February 27, 2004
VoIP System	120-820-000	Issue 7 – May 14, 2004
VoIP Connections	120-825-000	Issue 7 – May 14, 2004
SNMP	120-830-000	Issue 3 – February 27, 2004
Automatic Messages	120-390-000	Issue 6 – October 31, 2003
Access Identifiers	120-400-000	Issue 9 – February 27, 2004
Error Messages	120-600-000	Issue 2 – May 31, 2002

Index of Commands and Messages

ACT-USER	(System, Administrative)
ALW-EX-EQPT	(Equipment, Module)
ALW-LPBK-OC12	(Facility)
ALW-LPBK-OC3	(Facility)
ALW-LPBK-STS1	(Facility)
ALW-LPBK-T1	(Facility)
ALW-LPBK-T3	(Facility)
ALW-MSG-USER	(System, Administrative)
ALW-SWTOPTOTN-EQPT	(Equipment, Module)
ALW-SWTOWKG-EQPT	(Equipment, Module)
ALW-TL1-CMD	(System, Administrative)
CANC	(Automatic Messages)
CANC-USER	(System, Administrative)
CANC-USER-SECU	(Security)
CPY-MEM	(Equipment, Module)
DLT-ALMQ	(Security)
DLT-ANNC-EXT	(Intelligent Network Functions)
DLT-ANNC-MAP	(Intelligent Network Functions)
DLT-AUDIO-ANNC	(Media Resource Provisioning)
DLT-AUDIO-MSG	(Media Resource Provisioning)
DLT-BACKUP-SYS	(System, Administrative)
DLT-BICC-TRK	(Inter-Machine Trunks)
DLT-CALL-CAPT	(Test and Diagnosis)
DLT-CALL-CAPTVERBOSE	(Test and Diagnosis)
DLT-CALLING-AREA	(Numbering Configuration)
DLT-CAPT-SYS	(Test and Diagnosis)
DLT-CARRIER	(Equal Access to Carriers)
DLT-CAS-IF	(Channel-Associated Signaling)
DLT-CAS-LINE	(Channel-Associated Signaling)
DLT-CAS-TRK	(Inter-Machine Trunks)
DLT-CCC-LIST	(CALEA)
DLT-CDC	(CALEA)
DLT-COUNTRY	(Numbering Configuration)
DLT-CRS-T0	(Test and Diagnosis)
DLT-DIALPLAN	(Intelligent Network Functions)
DLT-DIALPLAN-TRIGGER	(Intelligent Network Functions)
DLT-DIGITMOD-DN	(Routing)
DLT-DIGITMOD-GEN	(Routing)
DLT-DIGITMOD-PARAM	(Routing)
DLT-DIGITMOD-TNS	(Routing)
DLT-DIGIT-SCREEN	(Routing)
DLT-DN-RAF	(Global Configuration)
DLT-ENET	(Facility)

DLT-ENET-ENDPTVOIP	(Facility)
DLT-EQPT	(Equipment, Module)
DLT-EQPT-ALL	(Equipment, Module)
DLT-GMSC-LAESDN	(CALEA)
DLT-GR303-CRV	(GR303)
DLT-GR303-IF	(GR303)
DLT-GR303-PORT	(GR303)
DLT-HOME-NPA	(Numbering Configuration)
DLT-HOME-NXX	(Numbering Configuration)
DLT-IPHOST-SECU	(Security)
DLT-IPROUTE	(Equipment, Chassis)
DLT-ISDN-IF	(ISDN-Primary Rate Interface)
DLT-ISDN-LNK	(ISDN-Primary Rate Interface)
DLT-LAES-CASE	(CALEA)
DLT-LCC	(Subscriber Management)
DLT-LIST-AINTRIGGER	(Intelligent Network Functions)
DLT-LIST-AUTHCODE	(Subscriber Management)
DLT-LIST-SUBSCRNBLK	(Subscriber Management)
DLT-LIST-TRIGESC	(Intelligent Network Functions)
DLT-LNPSCREEN-DIGITS	(Global Configuration)
DLT-LRN	(Numbering Configuration)
DLT-LSET	(SS7 Transport [MTP2/3])
DLT-MGC	(Global Configuration)
DLT-MGCP-GW	(Media Gateway Controller Protocol)
DLT-MGCP-LINE	(Media Gateway Controller Protocol)
DLT-MGCP-LNGRP	(Media Gateway Controller Protocol)
DLT-NATIONAL-NPA	(Numbering Configuration)
DLT-NP-POOLED	(Global Configuration)
DLT-NP-PORTEDOUT	(Global Configuration)
DLT-NP-RESERVED	(Global Configuration)
DLT-OC12	(Facility)
DLT-OC3	(Facility)
DLT-PC	(SS7 Transport [MTP2/3])
DLT-PRFL-CAS	(Channel-Associated Signaling)
DLT-PRFL-CIC	(Inter-Machine Trunks)
DLT-PRFL-FAILCND	(Routing)
DLT-PRFL-FRAUDTRAP	(Routing)
DLT-PRFL-PARAMDEFAULTS	(Routing)
DLT-PRFL-PARAMSUPPRESS	(Routing)
DLT-PRFL-PC	(SS7 Transport [MTP2/3])
DLT-PRFL-PVCVOIP	(VoIP Connections)
DLT-PRFL-SCHED	(Routing)
DLT-PRFL-SDP	(Inter-Machine Trunks)
DLT-PRFL-SLKL2	(SS7 Transport [MTP2/3])
DLT-PRFL-SLKL3	(SS7 Transport [MTP2/3])

DLT-PRFL-TGBILLING	(Inter-Machine Trunks)
DLT-PVC-ENDPTVOIP	(VoIP Connections)
DLT-RATE-CENTER	(Numbering Configuration)
DLT-ROUTE	(Routing)
DLT-ROUTE-DIGITS	(Routing)
DLT-ROUTE-LIST	(Routing)
DLT-ROUTE-SCHED	(Routing)
DLT-ROUTE-SS7	(SS7 Transport [MTP2/3])
DLT-SCCP-ROUTE	(Intelligent Network Functions)
DLT-SCCP-SSN	(Intelligent Network Functions)
DLT-SCREEN-LIST	(Subscriber Management)
DLT-SIP-IPADDR	(Session Initiation Protocol)
DLT-SLHR-SCP	(Intelligent Network Functions)
DLT-SLK	(SS7 Transport [MTP2/3])
DLT-SNMP-ACCESS	(SNMP)
DLT-SNMP-COMM	(SNMP)
DLT-SNMP-TRAP	(SNMP)
DLT-SNMP-USER	(SNMP)
DLT-SNMP-VIEW	(SNMP)
DLT-SS7-TRK	(Inter-Machine Trunks)
DLT-STs1	(Facility)
DLT-SUB-ALTDN	(Subscriber Management)
DLT-SUB-IF	(Subscriber Management)
DLT-SUB-SCFLIST	(Subscriber Management)
DLT-SUB-SPEED	(Subscriber Management)
DLT-SUBSCRIBER	(Subscriber Management)
DLT-SUBSCRIBER-CL4	(Routing)
DLT-T1	(Facility)
DLT-T3	(Facility)
DLT-TOLLFREE-NPA	(Global Configuration)
DLT-TRANS-PLAN	(Routing)
DLT-TRANS-SCHED	(Routing)
DLT-TREATMENT	(Routing)
DLT-TRKGRP	(Inter-Machine Trunks)
DLT-USER-SECU	(Security)
DLT-VMS-CKTID	(Voice Mail System Provisioning)
DLT-VMS-LNK	(Voice Mail System Provisioning)
ED-ACBAR-SYS	(Global Configuration)
ED-ANNC-EXT	(Intelligent Network Functions)
ED-AUDIO-ANNC	(Media Resource Provisioning)
ED-AUDIO-MSG	(Media Resource Provisioning)
ED-AUDIO-SYS	(Media Resource Provisioning)
ED-BILLSYS	(Global Configuration)
ED-CALLING-AREA	(Numbering Configuration)
ED-CARRIER	(Equal Access to Carriers)

ED-CAS-IF	(Channel-Associated Signaling)
ED-CAS-LINE	(Channel-Associated Signaling)
ED-CAS-TRK	(Inter-Machine Trunks)
ED-CCC-LIST	(CALEA)
ED-CDC	(CALEA)
ED-CHASSIS-EQPT	(Equipment, Chassis)
ED-CRS-T0	(Test and Diagnosis)
ED-DAT	(System, Administrative)
ED-DIALPLAN	(Intelligent Network Functions)
ED-DIGITMOD-DN	(Routing)
ED-DIGITMOD-GEN	(Routing)
ED-DIGITMOD-PARAM	(Routing)
ED-DIGITMOD-TNS	(Routing)
ED-DIGIT-SCREEN	(Routing)
ED-ENET	(Facility)
ED-ENET-ENDPTVOIP	(Facility)
ED-EQPT	(Equipment, Module)
ED-EQPT-ALL	(Equipment, Module)
ED-GMSC-ANSISYS	(Global Configuration)
ED-GMSC-GSMSYS	(Global Configuration)
ED-GR303-CHAN	(GR303)
ED-GR303-CRV	(GR303)
ED-GR303-IF	(GR303)
ED-INSYS	(Equal Access to Carriers)
ED-ISDN-IF	(ISDN-Primary Rate Interface)
ED-ISDN-LNK	(ISDN-Primary Rate Interface)
ED-LAES-CASE	(CALEA)
ED-LCC	(Subscriber Management)
ED-LIST-AINTRIGGER	(Intelligent Network Functions)
ED-LIST-AUTHCODE	(Subscriber Management)
ED-LIST-TRIGESC	(Intelligent Network Functions)
ED-LSET	(SS7 Transport [MTP2/3])
ED-MGC	(Global Configuration)
ED-MGCP-GW	(Media Gateway Controller Protocol)
ED-MGCP-LINE	(Media Gateway Controller Protocol)
ED-MGCP-LNGRP	(Media Gateway Controller Protocol)
ED-MGCP-SYS	(Media Gateway Controller Protocol)
ED-NP-POOLED	(Global Configuration)
ED-NP-PORTEDOUT	(Global Configuration)
ED-NP-RESERVED	(Global Configuration)
ED-OC12	(Facility)
ED-OC3	(Facility)
ED-PC	(SS7 Transport [MTP2/3])
ED-PID	(Security)
ED-PRFL-CAS	(Channel-Associated Signaling)

ED-PRFL-CIC	(Inter-Machine Trunks)
ED-PRFL-FAILCND	(Routing)
ED-PRFL-FRAUDTRAP	(Routing)
ED-PRFL-PARAMDEFAULTS	(Routing)
ED-PRFL-PARAMSUPPRESS	(Routing)
ED-PRFL-PC	(SS7 Transport [MTP2/3])
ED-PRFL-PVCVOIP	(VoIP Connections)
ED-PRFL-SCHED	(Routing)
ED-PRFL-SDP	(Inter-Machine Trunks)
ED-PRFL-SLKL2	(SS7 Transport [MTP2/3])
ED-PRFL-SLKL3	(SS7 Transport [MTP2/3])
ED-PRFL-TGBILLING	(Inter-Machine Trunks)
ED-PVC-ENDPTVOIP	(VoIP Connections)
ED-ROUTE	(Routing)
ED-ROUTE-DIGITS	(Routing)
ED-ROUTE-LIST	(Routing)
ED-ROUTE-SCHED	(Routing)
ED-SCCP-SSN	(Intelligent Network Functions)
ED-SCREEN-LIST	(Subscriber Management)
ED-SERVICE-ACCESSCODE	(Equal Access to Carriers)
ED-SIP-IPADDR	(Session Initiation Protocol)
ED-SIP-SYS	(Session Initiation Protocol)
ED-SLHR-SCP	(Intelligent Network Functions)
ED-SLK	(SS7 Transport [MTP2/3])
ED-SNMP-ACCESS	(SNMP)
ED-SNMP-COMM	(SNMP)
ED-SNMP-SYS	(SNMP)
ED-SNMP-TRAP	(SNMP)
ED-SNMP-USER	(SNMP)
ED-SS7-TRK	(Inter-Machine Trunks)
ED-SS7SYS	(Global Configuration)
ED-STATE-ISDNBCHAN	(ISDN-Primary Rate Interface)
ED-STATE-LSET	(SS7 Transport [MTP2/3])
ED-STATE-SLK	(SS7 Transport [MTP2/3])
ED-STS1	(Facility)
ED-SUB-ALTDN	(Subscriber Management)
ED-SUB-IF	(Subscriber Management)
ED-SUB-SCFLIST	(Subscriber Management)
ED-SUB-SPEED	(Subscriber Management)
ED-SUBSCRIBER	(Subscriber Management)
ED-SUBSCRIBER-CL4	(Routing)
ED-SWITCH-CFG	(Global Configuration)
ED-SYS-SECU	(Security)
ED-SYS-TL1	(System, Administrative)
ED-T1	(Facility)

ED-T3	(Facility)
ED-TESTPORT	(Test and Diagnosis)
ED-TMGREF	(Equipment, Chassis)
ED-TRAFFICSTATS	(Global Configuration)
ED-TRANS-PLAN	(Routing)
ED-TRANS-SCHED	(Routing)
ED-TREATMENT	(Routing)
ED-TRKGRP	(Inter-Machine Trunks)
ED-USER-SECU	(Security)
ED-VMS-LNK	(Voice Mail System Provisioning)
ED-VMS-SYS	(Voice Mail System Provisioning)
ED-VOIP-NETSYS	(VoIP System)
ED-VOIP-SYS	(VoIP System)
ENT-ACBAR-SYS	(Global Configuration)
ENT-ANNC-EXT	(Intelligent Network Functions)
ENT-ANNC-MAP	(Intelligent Network Functions)
ENT-AUDIO-ANNC	(Media Resource Provisioning)
ENT-AUDIO-MSG	(Media Resource Provisioning)
ENT-BACKUP-SYS	(System, Administrative)
ENT-BICC-TRK	(Inter-Machine Trunks)
ENT-CALL-CAPT	(Test and Diagnosis)
ENT-CALL-CAPTVERBOSE	(Test and Diagnosis)
ENT-CALLING-AREA	(Numbering Configuration)
ENT-CAPT-SYS	(Test and Diagnosis)
ENT-CARRIER	(Equal Access to Carriers)
ENT-CAS-IF	(Channel-Associated Signaling)
ENT-CAS-LINE	(Channel-Associated Signaling)
ENT-CAS-TRK	(Inter-Machine Trunks)
ENT-CCC-LIST	(CALEA)
ENT-CDC	(CALEA)
ENT-COUNTRY	(Numbering Configuration)
ENT-CRS-T0	(Test and Diagnosis)
ENT-DIALPLAN	(Intelligent Network Functions)
ENT-DIALPLAN-TRIGGER	(Intelligent Network Functions)
ENT-DIGITMOD-DN	(Routing)
ENT-DIGITMOD-GEN	(Routing)
ENT-DIGITMOD-PARAM	(Routing)
ENT-DIGITMOD-TNS	(Routing)
ENT-DIGIT-SCREEN	(Routing)
ENT-DN-RAF	(Global Configuration)
ENT-ENET	(Facility)
ENT-ENET-ENDPTVOIP	(Facility)
ENT-EQPT	(Equipment, Module)
ENT-EQPT-ALL	(Equipment, Module)
ENT-GMSC-LAESDN	(CALEA)

ENT-GR303-CRV	(GR303)
ENT-GR303-IF	(GR303)
ENT-GR303-PORT	(GR303)
ENT-HOME-NPA	(Numbering Configuration)
ENT-HOME-NXX	(Numbering Configuration)
ENT-IPHOST-SECU	(Security)
ENT-IPROUTE	(Equipment, Chassis)
ENT-ISDN-IF	(ISDN-Primary Rate Interface)
ENT-ISDN-LNK	(ISDN-Primary Rate Interface)
ENT-LAES-CASE	(CALEA)
ENT-LCC	(Subscriber Management)
ENT-LIST-AINTRIGGER	(Intelligent Network Functions)
ENT-LIST-AUTHCODE	(Subscriber Management)
ENT-LIST-SUBSCRNBLK	(Subscriber Management)
ENT-LIST-TRIGESC	(Intelligent Network Functions)
ENT-LNPSCREEN-DIGITS	(Global Configuration)
ENT-LRN	(Numbering Configuration)
ENT-LSET	(SS7 Transport [MTP2/3])
ENT-MGC	(Global Configuration)
ENT-MGCP-GW	(Media Gateway Controller Protocol)
ENT-MGCP-LINE	(Media Gateway Controller Protocol)
ENT-MGCP-LNGRP	(Media Gateway Controller Protocol)
ENT-NATIONAL-NPA	(Numbering Configuration)
ENT-NP-POOLED	(Global Configuration)
ENT-NP-PORTEDOUT	(Global Configuration)
ENT-NP-RESERVED	(Global Configuration)
ENT-OC12	(Facility)
ENT-OC3	(Facility)
ENT-PC	(SS7 Transport [MTP2/3])
ENT-PRFL-CAS	(Channel-Associated Signaling)
ENT-PRFL-CIC	(Inter-Machine Trunks)
ENT-PRFL-FAILCND	(Routing)
ENT-PRFL-FRAUDTRAP	(Routing)
ENT-PRFL-PARAMDEFAULTS	(Routing)
ENT-PRFL-PARAMSUPPRESS	(Routing)
ENT-PRFL-PC	(SS7 Transport [MTP2/3])
ENT-PRFL-PVCVOIP	(VoIP Connections)
ENT-PRFL-SCHED	(Routing)
ENT-PRFL-SDP	(Inter-Machine Trunks)
ENT-PRFL-SLKL2	(SS7 Transport [MTP2/3])
ENT-PRFL-SLKL3	(SS7 Transport [MTP2/3])
ENT-PRFL-TGBILLING	(Inter-Machine Trunks)
ENT-PVC-ENDPTVOIP	(VoIP Connections)
ENT-RATE-CENTER	(Numbering Configuration)
ENT-ROUTE	(Routing)

ENT-ROUTE-DIGITS	(Routing)
ENT-ROUTE-LIST	(Routing)
ENT-ROUTE-SCHED	(Routing)
ENT-ROUTE-SS7	(SS7 Transport [MTP2/3])
ENT-SCCP-ROUTE	(Intelligent Network Functions)
ENT-SCCP-SSN	(Intelligent Network Functions)
ENT-SCREEN-LIST	(Subscriber Management)
ENT-SIP-IPADDR	(Session Initiation Protocol)
ENT-SLHR-SCP	(Intelligent Network Functions)
ENT-SLK	(SS7 Transport [MTP2/3])
ENT-SNMP-ACCESS	(SNMP)
ENT-SNMP-COMM	(SNMP)
ENT-SNMP-TRAP	(SNMP)
ENT-SNMP-USER	(SNMP)
ENT-SNMP-VIEW	(SNMP)
ENT-SS7-TRK	(Inter-Machine Trunks)
ENT-SS7SYS	(Global Configuration)
ENT-STS1	(Facility)
ENT-SUB-ALTDN	(Subscriber Management)
ENT-SUB-IF	(Subscriber Management)
ENT-SUB-SCFLIST	(Subscriber Management)
ENT-SUB-SPEED	(Subscriber Management)
ENT-SUBSCRIBER	(Subscriber Management)
ENT-SUBSCRIBER-CL4	(Routing)
ENT-T1	(Facility)
ENT-T3	(Facility)
ENT-TOLLFREE-NPA	(Global Configuration)
ENT-TRANS-PLAN	(Routing)
ENT-TRANS-SCHED	(Routing)
ENT-TREATMENT	(Routing)
ENT-TRKGRP	(Inter-Machine Trunks)
ENT-USER-SECU	(Security)
ENT-VMS-CKTID	(Voice Mail System Provisioning)
ENT-VMS-LNK	(Voice Mail System Provisioning)
EXEC-BACKUP-PLEXUS	(System, OS Access)
EXEC-BULK-DOWNLOAD	(System, OS Access)
EXEC-CAT	(System, OS Access)
EXEC-CD	(System, OS Access)
EXEC-CP	(System, OS Access)
EXEC-CP-FROMSTBY	(System, OS Access)
EXEC-CP-TOSTBY	(System, OS Access)
EXEC-FTP-GET	(System, OS Access)
EXEC-FTP-PUT	(System, OS Access)
EXEC-LS	(System, OS Access)
EXEC-MKDIR	(System, OS Access)

EXEC-MV	(System, OS Access)
EXEC-NETSTAT	(System, OS Access)
EXEC-PWD	(System, OS Access)
EXEC-RESTORE-PLEXUS	(System, OS Access)
EXEC-RM	(System, OS Access)
EXEC-RMDIR	(System, OS Access)
EXEC-RUN-UPGRADE	(System, OS Access)
EXEC-TAR-CREATE	(System, OS Access)
EXEC-TAR-EXTRACT	(System, OS Access)
EXEC-TAR-EXTRACTSTBY	(System, OS Access)
INH-EX-EQPT	(Equipment, Module)
INH-LPBK-OC12	(Facility)
INH-LPBK-OC3	(Facility)
INH-LPBK-ST51	(Facility)
INH-LPBK-T1	(Facility)
INH-LPBK-T3	(Facility)
INH-MSG-USER	(System, Administrative)
INH-SWTOPTN-EQPT	(Equipment, Module)
INH-SWTOWKG-EQPT	(Equipment, Module)
INH-TL1-CMD	(System, Administrative)
INIT-MGCP-LINE	(Media Gateway Controller Protocol)
INIT-REG-CC	(Test and Diagnosis)
INIT-REG-DPC	(SS7 Transport [MTP2/3])
INIT-REG-GMSC	(Global Configuration)
INIT-REG-ISDNMSG	(ISDN-Primary Rate Interface)
INIT-REG-ISUPMSG	(SS7 Transport [MTP2/3])
INIT-REG-LAPD	(ISDN-Primary Rate Interface)
INIT-REG-LSET	(SS7 Transport [MTP2/3])
INIT-REG-MGCPMSG	(Media Gateway Controller Protocol)
INIT-REG-MTP3	(SS7 Transport [MTP2/3])
INIT-REG-RC	(Test and Diagnosis)
INIT-REG-SIPMSG	(Session Initiation Protocol)
INIT-REG-SLK	(SS7 Transport [MTP2/3])
INIT-REG-SLKL2	(SS7 Transport [MTP2/3])
INIT-REG-SLKL3	(SS7 Transport [MTP2/3])
INIT-REG-SS7ROUTE	(SS7 Transport [MTP2/3])
INIT-REG-T1	(Facility)
INIT-REG-T3	(Facility)
INIT-REG-VMSLNK	(Voice Mail System Provisioning)
INIT-SYS	(System, Administrative)
INIT-T0	(Equipment, Module)
OPR-ACO	(Fault)
OPR-CCR	(Inter-Machine Trunks)
OPR-CQM	(Inter-Machine Trunks)
OPR-CVT	(Inter-Machine Trunks)

OPR-LPBK-ENET	(Facility)
OPR-LPBK-GR303PORT	(GR303)
OPR-LPBK-OC12	(Facility)
OPR-LPBK-OC3	(Facility)
OPR-LPBK-STS1	(Facility)
OPR-LPBK-T1	(Facility)
OPR-LPBK-T3	(Facility)
REPT ALM <ReptAid>	(Automatic Messages)
REPT ALM SECU	(Automatic Messages)
REPT BKUP	(Automatic Messages)
REPT COND <ReptAid>	(Automatic Messages)
REPT DBCHG	(Automatic Messages)
REPT EVT <ReptAid>	(Automatic Messages)
REPT EVT SESSION	(Automatic Messages)
RLS-CALL	(Routing)
RLS-LPBK-ENET	(Facility)
RLS-LPBK-GR303PORT	(GR303)
RLS-LPBK-OC12	(Facility)
RLS-LPBK-OC3	(Facility)
RLS-LPBK-STS1	(Facility)
RLS-LPBK-T1	(Facility)
RLS-LPBK-T3	(Facility)
RMV-EQPT	(Equipment, Module)
RST-EQPT	(Equipment, Module)
RTRV-ACBAR-SYS	(Global Configuration)
RTRV-ALM-<AidType>	(Fault)
RTRV-ANNC-EXT	(Intelligent Network Functions)
RTRV-ANNC-MAP	(Intelligent Network Functions)
RTRV-ATTR-LOG	(Log)
RTRV-ATTR-SECULOG	(Security)
RTRV-AUDIO-ANNC	(Media Resource Provisioning)
RTRV-AUDIO-MSG	(Media Resource Provisioning)
RTRV-AUDIO-SYS	(Media Resource Provisioning)
RTRV-AUDIO-VMSG	(Media Resource Provisioning)
RTRV-BACKUP-SYS	(System, Administrative)
RTRV-BICC-TRK	(Inter-Machine Trunks)
RTRV-BILLSYS	(Global Configuration)
RTRV-BKUPSCHED-EQPT	(System, Administrative)
RTRV-CALL-CAPT	(Test and Diagnosis)
RTRV-CALL-CAPTVERBOSE	(Test and Diagnosis)
RTRV-CALLING-AREA	(Numbering Configuration)
RTRV-CAPT-SYS	(Test and Diagnosis)
RTRV-CARRIER	(Equal Access to Carriers)
RTRV-CAS-IF	(Channel-Associated Signaling)
RTRV-CAS-LINE	(Channel-Associated Signaling)

RTRV-CAS-TRK	(Inter-Machine Trunks)
RTRV-CCC-LIST	(CALEA)
RTRV-CDC	(CALEA)
RTRV-CHASSIS-EQPT	(Equipment, Chassis)
RTRV-COND-<ReptAid>	(Fault)
RTRV-COUNTRY	(Numbering Configuration)
RTRV-CRS-T0	(Test and Diagnosis)
RTRV-DATASERVER-HOSTCFG	(Global Configuration)
RTRV-DIALPLAN	(Intelligent Network Functions)
RTRV-DIALPLAN-TRIGGER	(Intelligent Network Functions)
RTRV-DIGITMOD-DN	(Routing)
RTRV-DIGITMOD-GEN	(Routing)
RTRV-DIGITMOD-PARAM	(Routing)
RTRV-DIGITMOD-TNS	(Routing)
RTRV-DIGIT-SCREEN	(Routing)
RTRV-DN-RAF	(Global Configuration)
RTRV-ENET	(Facility)
RTRV-ENET-ENDPTVOIP	(Facility)
RTRV-EQPT	(Equipment, Module)
RTRV-EQPT-ALL	(Equipment, Module)
RTRV-EXSCHED-EQPT	(Equipment, Module)
RTRV-FAILCND	(Routing)
RTRV-FAN-EQPT	(Equipment, Module)
RTRV-FRAUDCALLS	(Routing)
RTRV-GMSC-ANSISYS	(Global Configuration)
RTRV-GMSC-GSMSYS	(Global Configuration)
RTRV-GMSC-LAESDN	(CALEA)
RTRV-GR303-CHAN	(GR303)
RTRV-GR303-CRV	(GR303)
RTRV-GR303-IF	(GR303)
RTRV-GR303-PORT	(GR303)
RTRV-HDR	(System, Administrative)
RTRV-HOME-NPA	(Numbering Configuration)
RTRV-HOME-NXX	(Numbering Configuration)
RTRV-INFO-CHASSIS	(Equipment, Chassis)
RTRV-INFO-EQPT	(Equipment, Module)
RTRV-INFO-STS1	(Facility)
RTRV-INSYS	(Equal Access to Carriers)
RTRV-IPHOST-SECU	(Security)
RTRV-IPROUTE	(Equipment, Chassis)
RTRV-ISDN-IF	(ISDN-Primary Rate Interface)
RTRV-ISDN-LNK	(ISDN-Primary Rate Interface)
RTRV-LAES-CASE	(CALEA)
RTRV-LCC	(Subscriber Management)
RTRV-LIST-AINTRIGGER	(Intelligent Network Functions)

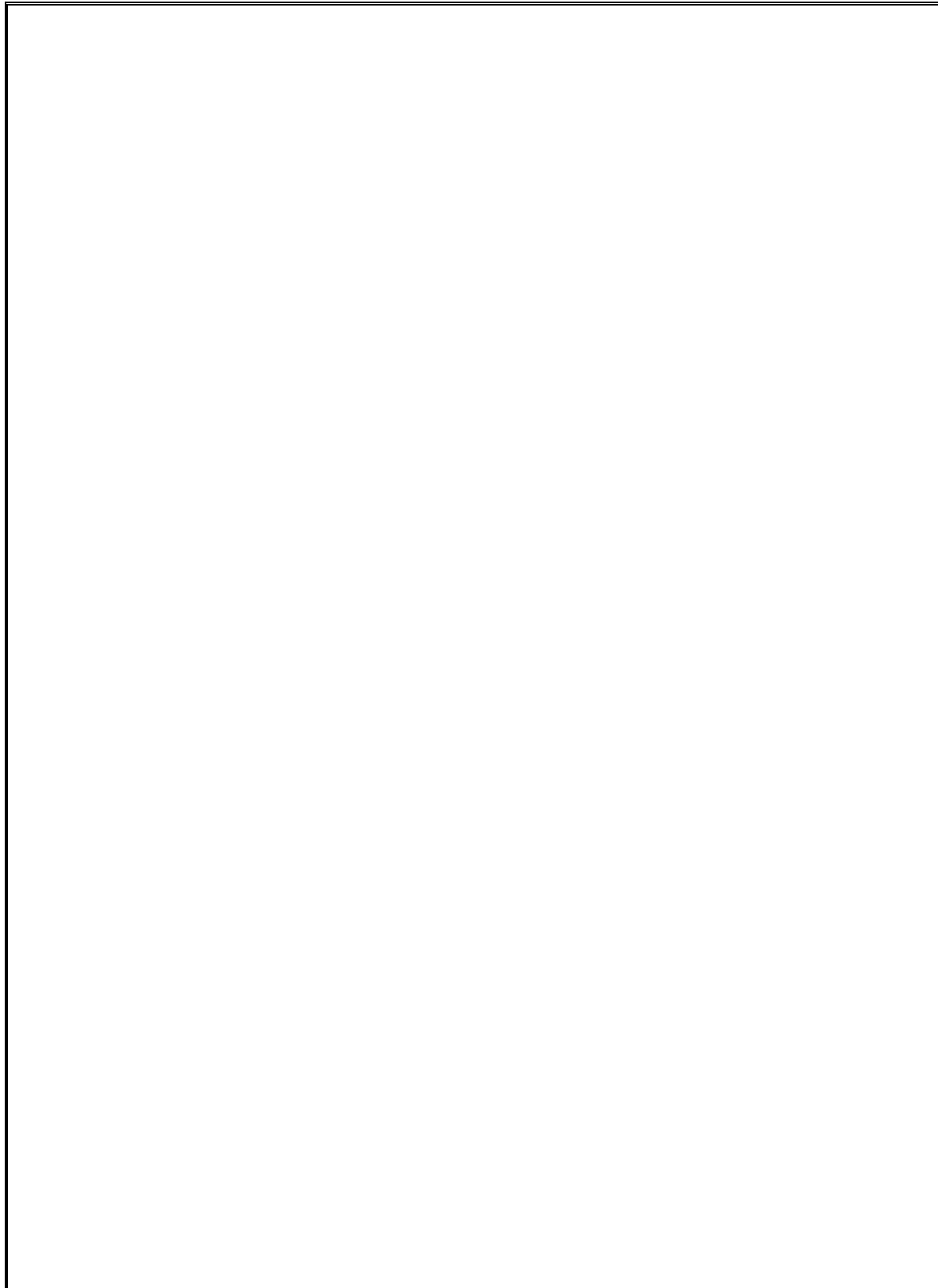
RTRV-LIST-AUTHCODE	(Subscriber Management)
RTRV-LIST-TRIGESC	(Intelligent Network Functions)
RTRV-LIST-SUBSCRNBLK	(Subscriber Management)
RTRV-LNPSCREEN-DIGITS	(Global Configuration)
RTRV-LOG	(Log)
RTRV-LRN	(Numbering Configuration)
RTRV-LSET	(SS7 Transport [MTP2/3])
RTRV-MGC	(Global Configuration)
RTRV-MGCP-GW	(Media Gateway Controller Protocol)
RTRV-MGCP-LINE	(Media Gateway Controller Protocol)
RTRV-MGCP-LNGRP	(Media Gateway Controller Protocol)
RTRV-MGCP-SYS	(Media Gateway Controller Protocol)
RTRV-MSG-USER	(System, Administrative)
RTRV-NATIONAL-NPA	(Numbering Configuration)
RTRV-NETTYPE	(System, Administrative)
RTRV-NP-POOLED	(Global Configuration)
RTRV-NP-PORTEDOUT	(Global Configuration)
RTRV-NP-RESERVED	(Global Configuration)
RTRV-OC12	(Facility)
RTRV-OC3	(Facility)
RTRV-PC	(SS7 Transport [MTP2/3])
RTRV-PM-C	(Facility)
RTRV-PM-CALEA	(CALEA)
RTRV-PM-CC	(Test and Diagnosis)
RTRV-PM-DPC	(SS7 Transport [MTP2/3])
RTRV-PM-GMSC	(Global Configuration)
RTRV-PM-ISDNMSG	(ISDN-Primary Rate Interface)
RTRV-PM-ISUPMSG	(SS7 Transport [MTP2/3])
RTRV-PM-LAPD	(ISDN-Primary Rate Interface)
RTRV-PM-LSET	(SS7 Transport [MTP2/3])
RTRV-PM-MGCPMSG	(Media Gateway Controller Protocol)
RTRV-PM-MTP3	(SS7 Transport [MTP2/3])
RTRV-PM-RC	(Test and Diagnosis)
RTRV-PM-SIPMSG	(Session Initiation Protocol)
RTRV-PM-SLK	(SS7 Transport [MTP2/3])
RTRV-PM-SLKL2	(SS7 Transport [MTP2/3])
RTRV-PM-SLKL3	(SS7 Transport [MTP2/3])
RTRV-PM-SS7ROUTE	(SS7 Transport [MTP2/3])
RTRV-PM-T1	(Facility)
RTRV-PM-T3	(Facility)
RTRV-PM-VCCVOIP	(VoIP Connections)
RTRV-PM-VMSLNK	(Voice Mail System Provisioning)
RTRV-PM-VOIPCKT	(VoIP Connections)
RTRV-PM-VPVOIP	(VoIP System)
RTRV-PMDAY	(System, Administrative)

RTRV-PRFL-CAS	(Channel-Associated Signaling)
RTRV-PRFL-CIC	(Inter-Machine Trunks)
RTRV-PRFL-FAILCND	(Routing)
RTRV-PRFL-FRAUDTRAP	(Routing)
RTRV-PRFL-PARAMDEFAULTS	(Routing)
RTRV-PRFL-PARAMSUPPRESS	(Routing)
RTRV-PRFL-PC	(SS7 Transport [MTP2/3])
RTRV-PRFL-PVCVOIP	(VoIP Connections)
RTRV-PRFL-SCHED	(Routing)
RTRV-PRFL-SDP	(Inter-Machine Trunks)
RTRV-PRFL-SLKL2	(SS7 Transport [MTP2/3])
RTRV-PRFL-SLKL3	(SS7 Transport [MTP2/3])
RTRV-PRFL-TGBILLING	(Inter-Machine Trunks)
RTRV-PVC-ENDPTVOIP	(VoIP Connections)
RTRV-RATE-CENTER	(Numbering Configuration)
RTRV-RDT-L2	(GR303)
RTRV-RDT-L3	(GR303)
RTRV-ROUTE	(Routing)
RTRV-ROUTE-DIGITS	(Routing)
RTRV-ROUTE-LIST	(Routing)
RTRV-ROUTE-SCHED	(Routing)
RTRV-ROUTE-SS7	(SS7 Transport [MTP2/3])
RTRV-SCCP-ROUTE	(Intelligent Network Functions)
RTRV-SCCP-SSN	(Intelligent Network Functions)
RTRV-SCREEN-LIST	(Subscriber Management)
RTRV-SERVICE-ACCESSCODE	(Equal Access to Carriers)
RTRV-SESSIONS	(System, Administrative)
RTRV-SIP-IPADDR	(Session Initiation Protocol)
RTRV-SIP-SYS	(Session Initiation Protocol)
RTRV-SLHR-SCP	(Intelligent Network Functions)
RTRV-SLK	(SS7 Transport [MTP2/3])
RTRV-SNMP-ACCESS	(SNMP)
RTRV-SNMP-COMM	(SNMP)
RTRV-SNMP-SYS	(SNMP)
RTRV-SNMP-TRAP	(SNMP)
RTRV-SNMP-USER	(SNMP)
RTRV-SNMP-VIEW	(SNMP)
RTRV-SS7-TRK	(Inter-Machine Trunks)
RTRV-SS7SYS	(Global Configuration)
RTRV-STATE-PORTS	(Facility)
RTRV-STATS-CC	(Test and Diagnosis)
RTRV-STATS-ENET	(Facility)
RTRV-STATS-ISDNMSG	(ISDN-Primary Rate Interface)
RTRV-STATS-ISUPMSG	(SS7 Transport [MTP2/3])
RTRV-STATUS-ALMQ	(Security)

RTRV-STATUS-CAPT	(Test and Diagnosis)
RTRV-STATUS-CTXT	(VoIP Connections)
RTRV-STATUS-GR303CRV	(GR303)
RTRV-STATUS-GR303IF	(GR303)
RTRV-STATUS-ISDNBCHAN	(ISDN-Primary Rate Interface)
RTRV-STATUS-LSET	(SS7 Transport [MTP2/3])
RTRV-STATUS-MG	(VoIP System)
RTRV-STATUS-MGCPGW	(Media Gateway Controller Protocol)
RTRV-STATUS-PC	(SS7 Transport [MTP2/3])
RTRV-STATUS-ROUTE57	(SS7 Transport [MTP2/3])
RTRV-STATUS-SLK	(SS7 Transport [MTP2/3])
RTRV-STATUS-TDMTERMID	(VoIP Connections)
RTRV-STATUS-VOIPTERMID	(VoIP Connections)
RTRV-STATUS-VPS	(VoIP System)
RTRV-STS1	(Facility)
RTRV-SUB-ALTDN	(Subscriber Management)
RTRV-SUB-CFV	(Subscriber Management)
RTRV-SUB-COT	(Subscriber Management)
RTRV-SUB-IF	(Subscriber Management)
RTRV-SUB-SCFLIST	(Subscriber Management)
RTRV-SUB-SPEED	(Subscriber Management)
RTRV-SUBSCRIBER	(Subscriber Management)
RTRV-SUBSCRIBER-CL4	(Routing)
RTRV-SWITCH-CFG	(Global Configuration)
RTRV-SYS-SECU	(Security)
RTRV-SYS-TL1	(System, Administrative)
RTRV-T1	(Facility)
RTRV-T3	(Facility)
RTRV-TESTPORT	(Test and Diagnosis)
RTRV-TH-SLK	(SS7 Transport [MTP2/3])
RTRV-TH-T1	(Facility)
RTRV-TH-T3	(Facility)
RTRV-TL1-INH	(System, Administrative)
RTRV-TMGREF	(Equipment, Chassis)
RTRV-TOLLFREE-NPA	(Global Configuration)
RTRV-TRAFFICSTATS	(Global Configuration)
RTRV-TRANS-PLAN	(Routing)
RTRV-TRANS-SCHED	(Routing)
RTRV-TREATMENT	(Routing)
RTRV-TRKGRP	(Inter-Machine Trunks)
RTRV-USER-SECU	(Security)
RTRV-VMS-CKTID	(Voice Mail System Provisioning)
RTRV-VMS-LNK	(Voice Mail System Provisioning)
RTRV-VMS-SYS	(Voice Mail System Provisioning)
RTRV-VOIP-NETSYS	(VoIP System)

RTRV-VOIP-SYS	(VoIP System)
SCHED-BKUP-EQPT	(System, Administrative)
SCHED-EX-EQPT	(Equipment, Module)
SET-ACO	(Fault)
SET-ATTR-LOG	(Log)
SET-ATTR-SECULOG	(Security)
SET-DATASERVER-HOSTCFG	(Global Configuration)
SET-PMDAY	(System, Administrative)
SET-SID	(System, Administrative)
SET-TH-SLK	(SS7 Transport [MTP2/3])
SET-TH-T1	(Facility)
SET-TH-T3	(Facility)
STA-CAPT	(Test and Diagnosis)
STA-DGN-IPPING	(Test and Diagnosis)
STA-DGN-IPTRACEROUTE	(Test and Diagnosis)
STP-CAPT	(Test and Diagnosis)
STP-DGN-IPPING	(Test and Diagnosis)
STP-DGN-IPTRACEROUTE	(Test and Diagnosis)
SW-TOPROTN-EQPT	(Equipment, Module)
SW-TOPROTN-GR303IF	(GR303)
SW-TOPROTN-ISDN	(ISDN-Primary Rate Interface)
SW-TOWKG-EQPT	(Equipment, Module)
TEST-TRANS	(Routing)
TRC-CALL-EQPT	(Test and Diagnosis)
TRC-CALL-LNK	(Test and Diagnosis)
TRC-CALL-TRK	(Test and Diagnosis)

NOTES

A large, empty rectangular box with a thin black border, occupying the majority of the page below the 'NOTES' header. It is intended for handwritten or typed notes.

Introduction to TL1

1.	Introduction	2
2.	TL1 Message Specification.....	2
2.1	TL1 General Message Syntax	2
2.2	Characters and Information Units	3
2.2.1	Identifiers	4
2.2.2	Symbolic Names	4
2.2.3	Alphanumerics	5
2.2.4	Decimal Numbers.....	5
2.2.5	Nondecimal Numbers.....	5
2.2.6	Text Strings	5
2.2.7	Arithmetic Expressions	6
2.2.8	Numeric Strings.....	6
2.2.9	Integers	6
2.2.10	Inner Strings	6
2.3	Parameter Block Syntax	7
2.3.1	Position-Defined Parameters.....	7
2.3.2	Name-Defined Parameters	7
2.3.3	Name/Position Syntax Conflicts	8
2.4	Boolean Flag Parameters.....	8
2.5	Defining Parameter Values	8
2.5.1	Compound Arguments	9
2.5.2	Grouping of Arguments	9
3.	Types of TL1 Messages	10
3.1	Input Command Messages	10
3.1.1	Command Code.....	10
3.1.1.1	Verb	10
3.1.1.2	Modifiers.....	11
3.1.2	Staging Parameter Blocks	11
3.1.2.1	Target Identifier (TID) Block	12
3.1.2.2	Access Identifier (AID) Block.....	12
3.1.2.3	Correlation Tag (CTAG) Block.....	12
3.1.2.4	General Block	12
3.1.3	Message Payload	12
3.2	Acknowledgements	13
3.3	Output Response Messages.....	14
3.3.1	Header	14
3.3.2	Response Identification	15
3.3.3	Text Block.....	16
3.3.4	Terminator.....	17
3.4	Autonomous Messages.....	17
3.4.1	Header	18
3.4.2	Autonomous Message Identification.....	18
3.4.2.1	Alarm Code (<almcde>)	18
3.4.2.2	Autonomously-Generated Correlation Tag (<atag>).....	19

3.4.2.3	<verb>[^<modifier>[^<modifier>]]	19
3.4.3	Text Block	19
3.4.4	Terminator	19
4.	User Access Privilege Levels	20

1. Introduction

Transaction Language 1 (TL1) is defined for OS/NE (machine-to-machine) interfaces. Operations functions such as surveillance, memory administration, and access and testing use short messages to cause specific actions at the NE. *Transactions* are the initiation, communication, and execution of these actions. Many, but not all, of these transactions require two-way interactive exchange of related messages. TL1 is defined by restricting the features used in the message definitions and the form transmitted by each side of the OS/NE interface. The scope of this section includes the specification of a general syntax and commonly applied semantics for the TL1 OS/NE interface. Each TL1 message is expressed in American Standard Code for Information Interchange (ASCII) characters.

Complete implementation-level requirements for TL1 are specified in GR-831-CORE, *Language for Operations Application Messages*.

2. TL1 Message Specification

This section defines the language structures used in the input and output messages that pass between the Plexus 9000 and an operations system. It also specifies syntax and semantics conventions.

2.1 TL1 General Message Syntax

The following table lists the specification characters, using the Backus-Naur Form (BNF), that define the syntax:

Symbol	Syntax Definition
< >	Encloses a symbol character (e.g., <int-num> can specify any integer number).
[]	Encloses an optional symbol or information unit (e.g., a[b]c represents abc or ac as b is optional).
' '	Encloses a literal character (e.g., 'a' really means literal character a, as opposed to a symbol representing a value).
()	Encloses a group of symbols for the following operators:
*	<i>Post-fix</i> operator meaning that the preceding symbol or group of symbols may occur <i>zero</i> or more times (e.g., a(bc)* represents a or abc or abcbc or ...).

^	Space (i.e., the literal blank character, used only in examples of messages).
+	<i>Post-fix</i> operator meaning that the preceding symbol or group of symbols may occur <i>one</i> or more times (e.g., <i>a(bc)+</i> represents <i>abc</i> or <i>abcbc</i> or ...).
	<i>Infix</i> operator meaning alternative; either the preceding or succeeding symbol may occur, but not both in succession (e.g., <i>a b c</i> represents <i>a</i> or <i>b</i> or <i>c</i>).
::=	Separates the left and right sides of a grammar rule (e.g., <i><digit> ::= (0 1 ... 9)</i> is a grammar rule representing <i>the symbol <digit> is 0 or 1 or ... or 9</i>).

The syntax for *input messages* and *output messages* is considerably different. Among the fundamental differences are the application of *format effectors*, particularly *spaces*, *linefeeds*, and *carriage returns*. Format effectors are meaningless when present in input messages and may or may not be ignored in output messages.

Input messages group parameters into *blocks* separated by *colons* and, within *parameter blocks*, separated by *commas*; *parameters* may be further modified with *compounding*, *ranging*, and *incrementing operators*.

2.2 Characters and Information Units

The legal ASCII character set specified by TL1 is shown in the following matrix. Each column of the matrix is labeled by the most significant hexadecimal digit of the character code and each row by the least significant hexadecimal digit.

	0	1	2	3	4	5	6	7
0			<sp>	0	@	P	`	p
1			!	1	A	Q	a	q
2			"	2	B	R	b	r
3			#	3	C	S	c	s
4			\$	4	D	T	d	t
5			%	5	E	U	e	u
6			&	6	F	V	f	v
7			'	7	G	W	g	w
8		<can>	(	8	H	X	h	x
9	<ht>		)	9	I	Y	i	y
A	<lf>		*	:	J	Z	j	z
B	<vt>		+	;	K	[	k	{

C		<ff>	,	<	L	\	l	
D		<cr>	-	=	M	]	m	}
E		.	>	N	^	n	~	
F			/	?	O	_	o	

In the above matrix, the format effectors are defined thusly: <ht> = Horizontal Tab, <lf> = Line Feed, <vt> = Vertical Tab, <ff> = Form Feed, <cr> = Carriage Return, <can> = Cancel, and <sp> = Space. The cancel character <can> is legal for input messages (commands) only. The characters not used by TL1 are reserved for implementation-dependent use by lower layers of the communications protocol: PAD control, XON/XOFF stream control, etc.

Format effectors within input messages (i.e., spaces, tabs, carriage returns, etc.) are ignored, except within text strings, and thus do not terminate information units. For example, within a command, COMMAND CODE and COMMANDCODE are treated in exactly the same way. Within output messages, format effectors may or may not be ignored (see subsections 3.2, 3.3, and 3.4). The backslash (\) character is used for escape syntax within text strings; i.e., it causes the character following to be literally interpreted.

TL1 messages are built from basic entities called *information units* (analogous to English words) combined and delimited by punctuation characters. The types of information units are described in the following subsections.

2.2.1 Identifiers

An identifier starts with a letter and is followed by any number of letters or digits. For example, A, abc, and xy50 are valid identifiers. Identifiers are defined as follows:

<ident> ::= <let> (<let> | <dig>)*

2.2.2 Symbolic Names

A symbolic name must contain at least one *letter*, *plus-sign* (+), *pound-sign* (#), or *percent-sign* (%) and optionally any *digits*. For instance, #7SWS, 1A0, 10%, and abc are all valid symbolic names. Symbolic names are defined as follows:

<sym name> ::= <dig>*
((<let> | '+' | '#' | '%') <dig>*)+

2.2.3 Alphanumerics

An alphanumeric starts with a letter or digit and is followed by any number of letters or digits. Alphanumerics, like identifiers and symbolic names, are used for names or other non-numeric information. Although lowercase is allowed, uppercase is the norm for most implementations (including the Plexus 9000). Alphanumerics are defined as follows:

`<alphanum> ::= (<let> | <dig>)+`

2.2.4 Decimal Numbers

A decimal number is a string of decimal digits with an optional non-trailing period (.). It does not permit a leading plus-sign (+) or hyphen (-), or have any provision for exponential notation. Some examples are 88, .005, and 004.100, but 12. is not valid because of the trailing period (.). Leading zeros are optional except for values constrained to a fixed format (e.g., date and time). The optional leading D' (D apostrophe), indicating a decimal number, is permitted only in a particular parameter if it is so stated in the semantics of the command involving that parameter. Decimal numbers are defined as follows:

`<dec num> ::= [D'] <dig>* [.] <dig>+`

2.2.5 Nondecimal Numbers

The nondecimal number types, *hexadecimal*, *octal*, *binary*, and *keyed*, are permitted in TL1 only in a particular parameter if it is so stated in the semantics of the command involving that parameter. The Plexus 9000 does not utilize these information units.

2.2.6 Text Strings

A text string is any string of ASCII (alphanumeric and/or punctuation) characters (see the matrix in subsection 2.2) enclosed in double-quotes ("). This allows a great deal of flexibility in defining values because the limitations of identifiers and symbolic names are overcome at the small cost of quoting the characters for message entry. To enter a double-quote (") character within a text string, use an escaped double-quote (\"). Text strings are defined as follows:

`<text str> ::= " (\\" | \\ | <any character
except " or \>)* "`

2.2.7 Arithmetic Expressions

In TL1, arithmetic expressions are used to represent explicitly signed, positive or negative decimal numbers. The syntax is an optional plus-sign (+) or minus-sign (-), followed by a string of decimal digits with an optional non-trailing period. The entire expression is contained in parentheses to prevent parsing ambiguities. Examples of legal arithmetic expressions are (12), (-15), (+137.038), and (67.23). Arithmetic expressions are defined as follows:

```
<arith exp> ::= '(' ['+' | '-'] <dig>* [.]  
               <dig>+ ' )'
```

2.2.8 Numeric Strings

A numeric string is a subtype of decimal numbers consisting of only decimal digits. Each digit in the string is an ASCII representation of a numeric digit. Numeric strings are defined as follows:

```
<num str> ::= <dig>+
```

2.2.9 Integers

An integer is either a numeric string or an arithmetic expression not containing a period (decimal point). Integers are defined as follows:

```
<integer> ::= <num str> |  
              '(' ['+' | '-'] <dig>+ ' )'
```

2.2.10 Inner Strings

An inner string is similar to a text string but is used only within quoted lines of output messages (see subsections 3.3 and 3.4). Because the double-quote character (") has already been used to enclose the line, another symbol is needed to bracket text containing punctuation or other special characters. The symbol used is the escaped double-quote (\"). Within an inner string, a literal double-quote (") is represented by double double-quote (""), and a literal backslash (\) by double backslash (\\); for example,

```
"<startTextString>\ "<startInnerString>""<and>  
  \\"<endInnerString>\ "<endTextString>"
```

2.3 Parameter Block Syntax

A parameter block always follows a colon and contains a (possibly empty) list of parameters, separated by commas. In TL1, trailing colon (:) block separators may be omitted if there are no parameters entered in those last blocks. The parameter syntax, in general, consists of an optional parameter name, equal-sign (=), and a parameter value. However, the precise use of these options depends on the type of parameters entered in that block. A block shall only contain all position-defined parameters or all name-defined parameters. These two formats are characterized in the following subsections.

2.3.1 Position-Defined Parameters

In a block of position-defined parameters, the individual parameters must be entered in a specific order without names unless specifically allowed by the message description. A parameter entry may be omitted provided the associated comma separator is retained to indicate the position of the parameter omitted. The parameter names are implicit and not necessary in a positional block, where it is the order of parameter entries that associates each value with the corresponding parameter. Some examples of valid position-defined parameter blocks follow:

```
: 5, 6, Yes:  
: , 6;
```

2.3.2 Name-Defined Parameters

For a block of name-defined parameters, every parameter entry must have a parameter name and value, with successive entries made in arbitrary order. Parameter names are always transmitted with name-defined parameters (and order is not significant nor required).

The use of void parameters, indicated by adjacent separators, is valid only for positional entry and not for name-defined entry. Parameter defaulting is done by omitting a parameter entry. Three equivalent examples of a block of name-defined parameters are shown in the following (assuming the default values are as in the first example):

```
: P1=1.0, P2=2.0, P3=off:  
-or-  
:P3=off, P1=1.0:  
-or-  
:P2=2.0:
```

2.3.3 Name/Position Syntax Conflicts

The syntax of an entered block of parameters must be consistent with either a name-defined or a position-defined syntax. The following rules characterize resolution of potential syntax conflicts:

In TL1, a parameter block must be position-defined if:

- Any parameter values appear without parameter names (i.e., without NAME=)
- Any void parameters (indicated by adjacent separators) appear.

Otherwise, the parameter block has valid syntax for both a position-defined and a name-defined block.

In the case of position-defined parameters, entered parameter names must match the defined parameter positions. If more parameters are entered than are defined, the block is in error. But, if fewer are entered, defaults are applied to the trailing parameter positions.

When names are attached to all parameter entries, the association of the entry with the parameter definition is clear. If a parameter name appears more than once, an error will be generated. If a parameter does not appear at all, the parameter defaults to the specific default action defined for that particular parameter of that particular command.

2.4 Boolean Flag Parameters

Some messages use Boolean parameters (e.g., on/off, yes/no). A possible implementation is to represent one state by the presence of a symbol and the other by its absence. To minimize the introduction of new symbols, the parameter value symbol chosen may be the parameter name. While this mechanism is perfectly legal under TL1, the parameter actually has two values: the parameter name value represents one state, while a null symbol represents the (default) other state.

2.5 Defining Parameter Values

A parameter value consists of one or more TL1 information units that may be compounded and/or grouped together. When a parameter is defined for a particular command, the valid range of parameter values is defined, along with its interpretation. This includes the implicit set of units associated with any numeric values.

Although there are exceptions, usually parameter values are interpreted as character strings that must match exactly or as numeric values that must satisfy a given range. When numeric values are specified, they must have a default base associated with them. This will normally be the decimal base, but it may be binary or any other semantic interpretation desired for

that parameter. For TL1, the use of non-decimal numbers is not supported in general. If it is necessary to allow a parameter to be entered in bases other than its default base, it must be specifically stated in that parameter's description.

For non-numeric parameter values, typically a list of character strings will specify their valid values. The parameter values, unlike parameter names, are case sensitive; e.g., the identifiers "A1" and "a1" do not match.

A particular parameter may have a valid range that includes both numeric and character values. For example, a parameter SETTING may take on values of 0 to 15, the identifier NONE or the text string "N/A". Note that the slash (/) in "N/A" requires that it be entered as a text string.

A parameter value containing a single information unit is called a simple parameter argument. The compound arguments and argument grouping are described in the next two subsections.

2.5.1 Compound Arguments

Closely related information can be compounded into one parameter value by joining the information units with the hyphen character (-). For example, it may be desirable to use one parameter, LOCATION, to represent two map components, one given by a letter and the other by a number. LOCATION = A-21 is an instance of this type of construct.

Compounding is equivalent to two separate positional parameters combined into one, but compound fields cannot be omitted the way positional parameters can. For example, A--C is invalid syntax but A-null-C (where null is a literal parameter value meaning the parameter is missing) or A-""-C could be specified for use in a particular command. It is also permissible to specify both simple and compound values for the same parameter.

2.5.2 Grouping of Arguments

Both simple and compound arguments may be grouped together so one parameter may actually convey several arguments. This is done by using the connectors *ampersand* (&) and *double-ampersand* (&&).

The ampersand (&) character is most useful when a parameter takes on any combination of arguments in a specified set. If there are three OPTIONS (e.g., x, y, and z) that can be selected in any combination, some possible entries could be OPTIONS = x&z or OPTIONS = x&y&z.

The use of double-ampersand (&&) is reserved for expressing ranges of values. An example of this usage is RANGE = 1&&10 to enter the values 1,2,3,...,10. Compound parameters may be also grouped, but note that *double-ampersand* (&&) can only be used to range over the last field of the compound parameter (e.g., 2-5-1 && -10 means 2-5-1 & 2-5-2 & ... & 2-5-10).

In TL1, the use of double-ampersand (&&) for ranges cannot be used for a particular parameter unless it is specifically stated in the semantics of the parameter. In such cases, the ordering of parameter values must be defined. Unless otherwise stated, numeric values have the usual ordering.

3. Types of TL1 Messages

The TL1 syntax divides into four basic areas that specify the following four types of operations application messages:

- Input Command Messages
- Acknowledgments
- Output Response Messages
- Autonomous Messages

3.1 Input Command Messages

An input command message is a message to a network element (NE). The message requests the NE to perform some operations-related action. The general structure of a TL1 input message is of the form:

```
<command_code>:<staging_parameter_blocks>:  
  <message_payload_block(s)>;
```

The *command code* determines the action (i.e., pragmatics) to be taken at the NE as a result of receiving the input message. The *staging parameter blocks* determine the target NE and the identity of the object to be acted upon by the input message. The *message payload block(s)* is the subject matter relating to the action to be performed by the input message. The *semi-colon* character (;) terminates a TL1 input message.

3.1.1 Command Code

Each command must begin with a command code consisting of a mandatory verb followed by up to two other optional modifiers, each separated by a hyphen.

```
<command code> ::= <verb>[-<modifier>  
  [-<modifier>]]
```

3.1.1.1 Verb

The verb identifies the action to be taken at the NE as a result of receiving a TL1 message from an OS. The semantic values of the verb are defined within the context of the functional application in which the message is intended to be used (e.g., ENT, ED, RTRV).

3.1.1.2 Modifiers

The command code modifiers are optional depending upon the specific command and the application domain. In normal TL1 command usage, the first modifier identifies the object of the verb where the action is to be applied in the NE. The second modifier further modifies the object of the verb and is interpreted differently for different operations domains. For example, a *<verb>-EQPT* can be used to indicate that an action, specified by the value of the *verb*, is to be taken on an equipment object; a *<verb>-T0* indicates an action is being taken on a DS0 circuit (where T0 indicates transmission hierarchy level 0).

As another example, for switching NEs, the command *<verb>-<administrative view>* indicates an action is to be taken on an object entity within the specified *administrative view* of the switching NE database. The information groupings within a switching NE are called administrative views, in which individual data elements are represented in the form of flat tables or matrices. Each row of an administrative view represents an object entity; each column represents an attribute (parameter) shared by all of the object entities in the view. An administrative view is similar in concept to relations in relational database theory.

The second modifier may be used to further define the identity of the object upon which the action is to be taken. For example, the command *DLT-ROUTE-SS7* will disconnect (DLT) an SS7 route. That is, the modifier *ROUTE* is further defined to only identify SS7 routes.

3.1.2 Staging Parameter Blocks

The *staging parameter blocks* are a series of four data blocks following the *command code* that provide information necessary to establish (i.e., *stage*) and uniquely identify an object entity within an NE to be managed by a remote OS and to specify certain options as to how the input command is to be executed in the NE. The *staging parameter blocks* determine the target NE and the identity of the object to be acted upon by the input message. The structure of the staging parameter blocks is of the form:

:[<tid>]:[<aid(s)>]:<ctag>:[general block]:

The first three staging parameter blocks are discussed in the following subsections. The general block is required for all input commands but its value can be null (i.e., the general block is represented by two successive colons). This is the case for the Plexus 9000.

3.1.2.1 Target Identifier (TID) Block

TID is the Target Identifier. It identifies the destination network element (NE) to which the input command is directed. The value of the TID can be up to 20 alphanumeric characters long. Spaces are not allowed. TIDs are not case-sensitive. Although the TID block is required for all input commands, its value can be null (i.e., the TID block is represented by two successive colons) if an NE is the only target possible for a message sent on a connection. This is the case for the Plexus 9000.

3.1.2.2 Access Identifier (AID) Block

AID is the Access Identifier. This block contains one or more parameters that uniquely identify the entities within the target NE that are the object of the input message. Section 120-400-000 of this reference guide lists the Access Identifiers used by the Plexus 9000.

3.1.2.3 Correlation Tag (CTAG) Block

CTAG is the Correlation Tag. It correlates an input command with its associated output response(s). The value of the CTAG is a non-zero integer of up to six characters.

3.1.2.4 General Block

The general block includes support parameters whose values affect the way in which the input command is to be executed in the NE. The general block is required for all input commands but its value can be null (i.e., the general block is represented by two successive colons that are optional when no message payload follows). This is the case for the Plexus 9000.

3.1.3 Message Payload

The remaining part of any TL1 input command is the message payload; that is *subject matter* of the *message*. This section of the message may consist of zero (for instance, for RTRV messages) or more data blocks in the following general form:

$$(: <p_x> (, <p_x>)^*)^* ;$$

where “ p_x ” represents a parameter (i.e., data item). Each data block is delimited by colons (:) and the last is terminated by a semi-colon (;). Each data block may have an unlimited number of data items, each delimited by commas (,). For example, a payload consisting of three parameter blocks, each containing three parameters would be of the form

$$... : <p_1> , <p_2> , <p_3> : <p_4> , <p_5> , <p_6> : <p_7> , <p_8> , <p_9> ;$$

The data items within a data block may either be name-defined (of the form `<key_word>=<value>`) or position-defined where the values are specified and the keyword is implied by its position in the data block. All of the data items must be of the same type within a given data block. The semantics of the data items are operation domain-specific and vary according to the operation to be performed as a result of the input message.

Whenever an equal sign (=) is detected within a data block, the data block type is defined to be a name-defined data block. This implies the data block to be of the form:

```
...:Keyword1=<value>, Keyword2=<value>, ...  
KeywordN=<value>:...
```

If a position-defined parameter (i.e., a value with no “keyword =”) is included in a name-defined data block, an error will be generated indicating a data block error. That is according to the rule that data types cannot be intermixed in the same data block.

3.2 Acknowledgements

An *acknowledgment* is a short reply from the Plexus 9000 indicating that an input command message is being acted upon or has been immediately rejected. The essential purpose of an acknowledgment is to assure a human user that a command that takes a long time to execute has been received by the NE. An acknowledgement is sent if an output response message to the command cannot be transmitted within two seconds of receipt of the command. In general, an acknowledgment is later followed by an output response message to the command. However, in some circumstances, an acknowledgment is the only output message triggered by a command.

The *format* of an acknowledgment is as follows:

```
<acknowledgment code> ^ <ctag> <cr> <lf>
```

The acknowledgment code identifies the reason for the acknowledgment. The CTAG identifies the associated input command. The *less than* (<) character is the acknowledgment terminator. The following table shows the valid values for acknowledgment codes and their meanings.

Acknowledgement Code		Meaning
IP	In Progress	These acknowledgments imply that the command is being executed. They are used often for test and access messages requiring a long execution time, e.g., a 1-minute noise test. These acknowledgments may be followed by either completed or denied output response messages.
PF	Printout Follows	

OK	All Right	Command received and requested action initiated and completed.
NA	No Acknowledgement	Command received but control of the processing has been lost, making correct acknowledgement impossible. Initiation or execution of the command is uncertain. This acknowledgment can also be used to respond to a command that is garbled during transmission. If the CTAG value of the command could not be determined, then the single character <i>zero</i> (0) is used as the acknowledgment CTAG value.
NG	No Good	The command is valid, but the requested action conflicts with current system or equipment status. This acknowledgment is seldom used because specific error codes in output response messages can be employed to signify the same information.
RL	Repeat Later	Requested action cannot be executed due to unavailable system resources caused by system overload, excessive queue lengths, busy programs, etc. The command may be entered again later.

3.3 Output Response Messages

An *output response message* is a detailed reply (or set of replies) to an input command message. It contains information indicating whether the command was executed successfully and any data that needs to be returned to the OS/user. The general structure of a TL1 output response message is of the form:

```
<header> <response identification>
[<text block>] <terminator>
```

The required *header* represents information common to all output response messages; i.e., it is independent of the type of output response. The required *response identification* identifies the type of output response message. The optional *text block* represents information specific to the particular output response message. The *terminator* indicates the termination or continuation of the output response message.

3.3.1 Header

The form of the *header* is

```
<cr><lf><lf>^^^<sid>^<year>-<month>-<day>^
<hour>:<minute>:<second>
```

and is composed of a system identifier (<sid>) and date and time stamps.

The <sid> is restricted to 20 characters maximum and identifies the NE generating the message. The syntax of <sid> is any TL1 identifier (simple or compound) or text string. For the Plexus 9000, the CLLI code is used for the source identifier. The <sid> value is checked by the NE against the <tid> parameter of the input command to verify that the NE's <sid> matches the command's intended target (i.e., <tid>).

The <year>-<month>-<day> construct generally represents the day on which the command is executed. This construct consists of three components separated by hyphens (-). Each component is specified by exactly two digits.

The <hour>:<minute>:<second> construct generally represents the time when the command is executed. This construct consists of three components separated by colons (:). Each component is specified by exactly two digits.

3.3.2 Response Identification

The form of the response identification is

`<cr><lf>M^^<ctag>^<completion code>`

and is composed of the character *M*, a *correlation tag* (<ctag>), and a *completion code*. The character *M* signifies that the message is the response to an input command message. The output response message has the same <ctag> value as the corresponding input command message, thus enabling the OS to associate the received output response message with a previously sent command. The following table shows the valid values for completion codes and their meanings.

Code	Meaning
COMPLD	represents total successful execution of the input command.
DENY	represents total denial of the input command.
PRTL	represents partial successful execution of the input command. This response code is returned for output response to input commands specifying multiple AIDs of which only a subset (but not an empty subset) have been successfully executed. If all AIDs have failed to be executed, the response code is DENY.
DELAY	represents successful queuing of the input command submitted for delayed activation.
RTRV	represents output response of an input retrieve command (i.e., command verb = RTRV) that retrieves extensive amount of information from the NE and thus causes lengthy processing in the NE for gathering all the requested information. For

	effective operation, the NE may start returning available information to the OS even before all the requested information is gathered. In this case, the RTRV completion code may be used. Multiple responses with RTRV completion codes are permitted for the same RTRV command, but the final response must have a COMPLD completion code.

When the *<ctag>* of an input command cannot be identified (e.g., during dial-up asynchronous connections with noise and errors prevalent), either the 2-letter acknowledgment NA may be returned or the DENY response containing the appropriate error message with the *<ctag>* set to the single character *zero* (0) may be returned.

3.3.3 Text Block

The optional *text block* is used to represent information specific to the particular output response. The form of the *response text* is

```
((<cr><lf>^^^<unquoted line>)|
  (<cr><lf>^^^<quoted line>)|
  (<cr><lf>^^^<comment>))*
```

It consists of three possible types of components, namely, *<unquoted line>*, *<quoted line>*, or *<comment>*. Both *<unquoted line>* and *<quoted line>* are machine parsable, while *<comment>* is not. Each type of component may appear zero or more times within the *text block* and interleave with other component types in any order.

The *<unquoted line>* consists of name- or position-defined parameters separated by required whitespace (*<ws>*) and optional commas. A whitespace is a space character, a horizontal tab, a vertical tab, or a form feed. The most popular usage of the unquoted line component is for representing error codes in some response messages, e.g., in a denial response (i.e., when the response code is DENY). The error code is specified by four characters that may contain numerals after the first character, if appropriate (e.g., SN4W for Status error, Not equipped 4-Wire circuit).

The *<quoted line>* consists of parsable text and is always preceded and followed by the *double-quote* character ("). The syntax of the parsable text is equivalent to that of an input command message, i.e., a series of colon-delimited parameter blocks. Parameters within each block are separated by required commas and optional format effectors. Format effectors are space, horizontal tab, vertical tab, form feed, carriage return, and line feed.

The comment component is used to allow free format (i.e., human readable, not machine parsable) text. The free form text shall always be preceded by the pair of characters *slash asterisk* (/*) and followed by the pair of characters *asterisk slash* (*). Note that either the *semicolon* (;) or the *greater than* (>) character does not terminate the output response message when they are present as part of a quoted line or within a text string.

3.3.4 Terminator

The form of the *terminator* is:

<cr> <lf> (; | >)

and is required as the termination block for all TL1 message types . The terminator is represented by either the *semicolon* (;) character or the *greater than* (>) character. The *semicolon* (;) character is used to indicate the termination of the output response message. The *greater than* (>) character is used to indicate that more output associated with this response will follow under another header.

The specified size of an output message may not exceed 4096 bytes. If the size of an output response message exceeds 4096 bytes, the output information is partitioned into multiple output response messages. A *continuation message* (i.e., subsequent message) must have another *header* and *response identification* with the same <ctag>, along with an additional <text block>. Each message is terminated by the *greater than* (>) character, except the last message, which is terminated by the *semicolon* (;) character to indicate the completion of the response. The (>) terminator is also used for intermediate responses in a timed measurement series.

3.4 Autonomous Messages

An *autonomous (automatic) message* is one generated by the Plexus 9000 either on a periodic timed basis or to report some unusual occurrence. It is sent without having an explicit input message associated with it. Typical scenarios where autonomous messages are used include:

- Reporting of alarmed and/or non-alarmed trouble events
- Reporting of scheduled diagnostic tests in the Plexus 9000
- Reporting of Performance Monitoring Data
- Reporting of a change in the Plexus 9000's database
- Periodic reporting of selected Plexus 9000 conditions.

The general structure of a TL1 autonomous message is:

`<header> <auto id> [<text block>] <terminator>`

The required *header* block represents information common to all output response and autonomous messages. The required *auto id* block identifies the severity and the nature of the autonomous message. This block contains the parameters *almcde* and *ATAG*, which are discussed in the following two subsections. The optional *text block* represents information specific to the particular autonomous message. The *terminator* indicates the completion or continuation of the autonomous message.

3.4.1 Header

The *header* is the standard response header defined in paragraph 3.3.1 above. It contains a system identifier (*<sid>*) and date and time stamps.

3.4.2 Autonomous Message Identification

The form of the *<auto id>* entry for an autonomous message is:

`<cr> <lf> <almcde>^<atag>^<verb>
[^<modifier>[^<modifier>]]`

and comprises an *alarm code* (*<almcde>*), an *autonomously-generated correlation tag* (*<atag>*), and a *<verb>* [*^<modifier>* [*^<modifier>*]] entry.

3.4.2.1 Alarm Code (*<almcde>*)

The alarm code indicates the severity of an autonomous message. Valid values for *<almcde>* in decreasing order of severity are as follows:

<i><almcde></i>	Description
*C	Critical alarm
**	Major alarm
*^	Minor alarm
A^	Non-alarm message

Critical, *Major*, and *Minor* correspond to the reporting of alarmed events. The *Non-alarm message* designation is used when the Plexus 9000 is reporting non-alarmed events, periodic measurements, or results of previously scheduled diagnostics or audits. If multiple alarms are reported in the same message, the alarm code is the highest severity of those being reported.

3.4.2.2 Autonomously-Generated Correlation Tag (<atag>)

ATAG (Autonomously-generated correlation Tag) is a numeric transaction identifier similar to CTAG (see subsection 3.1.2.3). It is sequentially assigned by the Plexus 9000 and must be included in all autonomous messages. The TL1 agent automatically generates the ATAG value, which is used exclusively as a sequence number for autonomous messages. The value is a number from 1 to 9999. The first ATAG used is “1” when the agent first initializes or is reset. It automatically wraps. OSSs can use the ATAG to spot if messages are being lost.

3.4.2.3 <verb>[^<modifier>[^<modifier>]]

The <verb>[^<modifier>[^<modifier>]] entry identifies the nature of the spontaneous output and allows for quick identification of the semantics of the information in the text block. It consists of up to three valid TL1 identifiers separated by the *space character*, represented by a *caret* (^). The first identifier (<verb>) is the autonomous message verb and is a required entry. In most cases, the verb in an autonomous message will be REPT (Report). The autonomous message verb can have up to two optional modifiers. The first identifier following the verb modifies the verb. The second identifier specifies the object generating the message. Certain modifiers mean that the <aid> parameter (if it exists) is addressing a particular type of entity in the Plexus 9000.

3.4.3 Text Block

The optional *text block* is used to represent information specific to the particular output response. The form of the *response text* is

```
((<cr><lf>^^^<unquoted line>)|  
 (<cr><lf>^^^<quoted line>)|  
 (<cr><lf>^^^<comment>))*
```

It consists of three possible types of components, namely, <unquoted line>, <quoted line>, or <comment>. Both <unquoted line> and <quoted line> are machine parsable, while <comment> is not. Each type of component may appear zero or more times within the *text block* and interleave with other component types in any order. Refer back to paragraph 3.3.3 for a more complete description of the individual components.

3.4.4 Terminator

The form of the *terminator* is:

```
<cr> <lf> ( ; | > )
```

and is required as the termination block for all TL1 message types. See paragraph 3.3.4 for more information regarding terminator types, and message size and continuation.

4. User Access Privilege Levels

User access privilege levels for commands are defined below in descending order of security. Higher levels include lower levels.

AccessPrivilege Levels	Description
ADMIN	Administrative permits the user to perform all TL1 commands including managing user accounts or profiles and downloading new software.
SW	SoftWare, in addition to all commands with security levels SA, NSA, and VIEW, allows the user to issue commands to download software. This level of access security applies to the System command CPY-MEM.
SA	Service-Affecting, in addition to all commands with security levels NSA and VIEW, allows the user to issue service-affecting commands. This level applies to DSFacility, Equipment, Signalling, and Test commands, and System command ED-DAT.
NSA	Non-Service-Affecting, in addition to all commands with security level VIEW, allows the user to issue non-service-affecting commands. This level applies to Log commands, System commands (excepting CPY-MEM and ED-DAT), and DSFacility commands ALW/INH/SCHED-PMREPT, INIT-REG, and SET-TH.
VIEW	VIEW allows the user to issue RTRV commands (except RTRV-IPHOST-SECU and RTRV-USER-SECU, which are ADMIN level) to view the Plexus 9000's status and statistics information. This lowest level of access security also applies to ACT-USER (to log on), CANC-USER (to log off), ED-PID (with which users can change their passwords), and to REPT autonomous messages.

ALW/INH/OPR/RLS-LPBK-OC12

Commands:

ALW-LPBK-OC12: Allow Loopback OC12 Facility

INH-LPBK-OC12: Inhibit Loopback OC12 Facility

OPR-LPBK-OC12: Operate Loopback OC12 Facility

RLS-LPBK-OC12: Release Loopback OC12 Facility

Descriptions:

ALW-LPBK-OC12 permits the Plexus 9000 to automatically operate loopbacks on a specified OC12 port in the Plexus 9000. This command controls whether the Plexus 9000 will respond to remote loopback requests.

INH-LPBK-OC12 lets the user prevent remote automatic loopback on an OC12 port.

OPR-LPBK-OC12 lets the user operate a loopback on a specified OC12 port associated with a test access session in the Plexus 9000. The loop may be accomplished at either the near or the far end. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

RLS-LPBK-OC12 lets the user release a loopback on a specified OC12 port associated with a test access session in the Plexus 9000. The loop may be released from either the near or the far end. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for all commands

Input Formats:

ALW-LPBK-OC12: [TID]:<src>:[CTAG];

INH-LPBK-OC12: [TID]:<src>:[CTAG];

OPR-LPBK-OC12: [TID]:<lpbk_id>:[CTAG]::[<locn>],
[<orgn>],[<intext>],[<lpbktype>];

RLS-LPBK-OC12: [TID]:<lpbk_id>:[CTAG]::[<locn>],
[<orgn>],[<intext>],[<lpbktype>];

Output Format: none

Parameters:

- src** Identifies the AID (for ALW/INH) as an OC12 port on an I/O Module in the Plexus 9000.
Type: OC
Range: IOM-{8,10}-OC12-{1-4}
Default value: none
- lpbk_id** Identifies the AID (for OPR/RLS) as the OC12 port on an I/O module in the Plexus 9000 on which the loopback is performed or released.
Type: OC
Range: IOM-{8,10}-OC12-{1-4}
Default value: none
- locn** Identifies the location where the loopback occurs. The value “FEND” is not supported.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- orgn** Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end office
NEND = Near end office
BOTH = Both offices
Default value: null
- intext** Directs the Plexus 9000 to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: EXT = External
INT = Internal
Default value: null

lpbktype Identifies the type of loopback signal to be operated or released. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information. However, loopbacks on OC12 ports can only be the LINE type.

Type: enum

Range: LINE = 622.08 Mbps loopback signal

Default value: LINE

Input Examples:

ALW-LPBK-OC12::IOM-8-OC12-1;

INH-LPBK-OC12::IOM-8-OC12-1;

OPR-LPBK-OC12::IOM-8-OC12-1:::NEND,,LINE;

RLS-LPBK-OC12::IOM-8-OC12-1:::NEND,,LINE;

Related Commands: none

ALW/INH/OPR/RLS-LPBK-OC3

Commands:

ALW-LPBK-OC3: Allow Loopback OC3 Facility
INH-LPBK-OC3: Inhibit Loopback OC3 Facility
OPR-LPBK-OC3: Operate Loopback OC3 Facility
RLS-LPBK-OC3: Release Loopback OC3 Facility

Descriptions:

ALW-LPBK-OC3 permits the Plexus 9000 to automatically operate loopbacks on a specified OC3 port in the Plexus 9000. This command controls whether the Plexus 9000 will respond to remote loopback requests.

INH-LPBK-OC3 lets the user prevent remote automatic loopback on an OC3 port.

OPR-LPBK-OC3 lets the user operate a loopback on a specified OC3 port associated with a test access session in the Plexus 9000. The loop may be accomplished at either the near or the far end. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

RLS-LPBK-OC3 lets the user release a loopback on a specified OC3 port associated with a test access session in the Plexus 9000. The loop may be released from either the near or the far end. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for all commands

Input Formats:

```
ALW-LPBK-OC3:[TID]:<src>:[CTAG];  
INH-LPBK-OC3:[TID]:<src>:[CTAG];  
OPR-LPBK-OC3:[TID]:<lpbk_id>:[CTAG]:[<locn>],  
    [<orgn>],[<intext>],[<lpbktype>];  
RLS-LPBK-OC3:[TID]:<lpbk_id>:[CTAG]:[<locn>],  
    [<orgn>],[<intext>],[<lpbktype>];
```

Output Format: none

Parameters:

- src** Identifies the AID (for ALW/INH) as an OC3 port on an I/O Module in the Plexus 9000.
Type: OC
Range: IOM-{8,10}-OC3-{1-4}
Default value: none
- lpbk_id** Identifies the AID (for OPR/RLS) as the OC3 port on an I/O module in the Plexus 9000 on which the loopback is performed or released.
Type: OC
Range: IOM-{8,10}-OC3-{1-4}
Default value: none
- locn** Identifies the location where the loopback occurs. The value “FEND” is not supported.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- orgn** Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end office
NEND = Near end office
BOTH = Both offices
Default value: null
- intext** Directs the Plexus 9000 to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: EXT = External
INT = Internal
Default value: null

lpbktype Identifies the type of loopback signal to be operated or released. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information. However, loopbacks on OC3 ports can only be the LINE type.

Type: enum

Range: LINE = 155.52 Mbps loopback signal

Default value: LINE

Input Examples:

ALW-LPBK-OC3::IOM-8-OC3-1;

INH-LPBK-OC3::IOM-8-OC3-1;

OPR-LPBK-OC3::IOM-8-OC3-1:::NEND,, , LINE;

RLS-LPBK-OC3::IOM-8-OC3-1:::NEND,, , LINE;

Related Commands: none

ALW/INH/OPR/RLS-LPBK-STS1

Commands:

ALW-LPBK-STS1: Allow Loopback STS1 Facility

INH-LPBK-STS1: Inhibit Loopback STS1 Facility

OPR-LPBK-STS1: Operate Loopback STS1 Facility

RLS-LPBK-STS1: Release Loopback STS1 Facility

Descriptions:

ALW-LPBK-STS1 permits the Plexus 9000 to automatically operate loopbacks on a specified STS1 port in the Plexus 9000. This command controls whether the Plexus 9000 will respond to remote loopback requests.

INH-LPBK-STS1 lets the user prevent remote automatic loopback on an STS1 port.

OPR-LPBK-STS1 lets the user operate a loopback on a specified STS1 port associated with a test access session in the Plexus 9000. The loop may be accomplished at either the near or the far end. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

RLS-LPBK-STS1 lets the user release a loopback on a specified STS1 port associated with a test access session in the Plexus 9000. The loop may be released from either the near or the far end. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for all commands

Input Formats:

ALW-LPBK-STS1:[TID]:<lpbk_id>:[CTAG];

INH-LPBK-STS1:[TID]:<lpbk_id>:[CTAG];

OPR-LPBK-STS1:[TID]:<lpbk_id>:[CTAG]::[<locn>],
[<orgn>],[<intext>],[<lpbktype>];

RLS-LPBK-STS1:[TID]:<lpbk_id>:[CTAG]::[<locn>],
[<orgn>],[<intext>],[<lpbktype>];

Output Format: none

Parameters:

- lpbk_id** Identifies the AID as an STS1 port on an I/O module in the Plexus 9000.
Type: STS1
Range: IOM-{1-17}-STS1-{1-8}
Default value: none
- locn** Identifies the location where the loopback occurs. The value “FEND” is not supported.
Type: enum
Range: FEND = Far end
 NEND = Near end
Default value: NEND
- orgn** Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end office
 NEND = Near end office
 BOTH = Both offices
Default value: null
- intext** Directs the Plexus 9000 to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: EXT = External
 INT = Internal
Default value: null

lpbktype Identifies the type of loopback signal to be operated or released. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information. However, loopbacks on STS1 ports can only be the LINE type. A null value indicates that this parameter is not applicable.

Type: enum

Range: LINE = 51.84 Mbps loopback signal

Default value: null

Input Examples:

ALW-LPBK-STS1::IOM-1-STS-1;

INH-LPBK-STS1::IOM-1-STS-1;

OPR-LPBK-STS1::IOM-1-STS-1:::NEND,, ,LINE;

RLS-LPBK-STS1::IOM-1-STS-1:::NEND,, ,LINE;

Related Commands: none

ALW/INH/OPR/RLS-LPBK-T1

Commands:

ALW-LPBK-T1: Allow Loopback DS1 Facility
INH-LPBK-T1: Inhibit Loopback DS1 Facility
OPR-LPBK-T1: Operate Loopback DS1 Facility
RLS-LPBK-T1: Release Loopback DS1 Facility

Descriptions:

ALW-LPBK-T1 permits the Plexus 9000 to automatically operate loopbacks on a specified T1 port in the Plexus 9000. This command controls whether the Plexus 9000 will respond to remote loopback requests.

INH-LPBK-T1 lets the user prevent remote automatic loopback on a T1 port.

OPR-LPBK-T1 lets the user operate a loopback on a specified T1 port associated with a test access session in the Plexus 9000. The loop may be accomplished at either the near or the far end. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

RLS-LPBK-T1 lets the user release a loopback on a specified T1 port associated with a test access session in the Plexus 9000. The loop may be released from either the near or the far end. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for all commands

Input Formats:

```
ALW-LPBK-T1:[TID]:<src>:[CTAG];  
INH-LPBK-T1:[TID]:<src>:[CTAG];  
OPR-LPBK-T1:[TID]:<lpbk_id>:[CTAG]::[<locn>],[<orgn>],  
    [<intext>],[<lpbktype>];  
RLS-LPBK-T1:[TID]:<lpbk_id>:[CTAG]::[<locn>],[<orgn>],  
    [<intext>],[<lpbktype>];
```

Output Format: none

Parameters:

- src** Identifies the AID (for ALW/INH) as a T1 port on an I/O Module in the Plexus 9000.
Type: PORT
Range: IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}
Default value: none
- lpbk_id** Identifies the AID (for OPR/RLS) as the T1 port on an I/O module in the Plexus 9000 on which the loopback is performed or released.
Type: PORT
Range: IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}
Default value: none
- locn** Identifies the location where the loopback occurs. The value “FEND” is not supported.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- orgn** Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end office
NEND = Near end office
BOTH = Both offices
Default value: null

intext Directs the Plexus 9000 to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.

Type: enum

Range: EXT = External
INT = Internal

Default value: null

lpbktype Identifies the type of loopback signal to be operated or released. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information.

Type: enum

Range: LINE = 1.544 Mbps loopback signal
PAYLOAD = 1.536 Mbps loopback signal

Default value: LINE

Input Examples:

ALW-LPBK-T1::IOM-1-PORT-1;

INH-LPBK-T1::IOM-1-PORT-1;

OPR-LPBK-T1::IOM-1-PORT-1:::NEND,,,LINE;

RLS-LPBK-T1::IOM-1-PORT-1:::NEND,,,LINE;

Related Commands: none

ALW/INH/OPR/RLS-LPBK-T3

Commands:

ALW-LPBK-T3: Allow Loopback DS3 Facility

INH-LPBK-T3: Inhibit Loopback DS3 Facility

OPR-LPBK-T3: Operate Loopback DS3 Facility

RLS-LPBK-T3: Release Loopback DS3 Facility

Descriptions:

ALW-LPBK-T3 permits the Plexus 9000 to automatically operate loopbacks on a specified T3 port in the Plexus 9000. This command controls whether the Plexus 9000 will respond to remote loopback requests.

INH-LPBK-T3 lets the user prevent remote automatic loopback on a T3 port.

OPR-LPBK-T3 lets the user operate a loopback on a specified T3 port associated with a test access session in the Plexus 9000. The loop may be accomplished at either the near or the far end. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

RLS-LPBK-T3 lets the user release a loopback on a specified T3 port associated with a test access session in the Plexus 9000. The loop may be released from either the near or the far end. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for all commands

Input Formats:

ALW-LPBK-T3:[TID]:<src>:[CTAG];

INH-LPBK-T3:[TID]:<src>:[CTAG];

OPR-LPBK-T3:[TID]:<lpbk_id>:[CTAG]::[<locn>],[<orgn>],
[<intext>],[<lpbktype>];

RLS-LPBK-T3:[TID]:<lpbk_id>:[CTAG]::[<locn>],[<orgn>],
[<intext>],[<lpbktype>];

Output Format: none

Parameters:

src	Identifies the AID (for ALW/INH) as a T3 port on a DS3 I/O Module in the Plexus 9000. Type: T3 Range: IOM-{1-17}-T3-{1-8} Default value: none
lpbk_id	Identifies the AID (for OPR/RLS) as the T3 port on an I/O module in the Plexus 9000 on which the loopback is performed or released. Type: T3 Range: IOM-{1-17}-T3-{1-8} Default value: none
locn	Identifies the location where the loopback occurs. The value "FEND" is not supported. Type: enum Range: FEND = Far end NEND = Near end Default value: NEND
orgn	Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank. Type: enum Range: FEND = Far end office NEND = Near end office BOTH = Both offices Default value: null
intext	Directs the Plexus 9000 to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank. Type: enum Range: EXT = External INT = Internal Default value: null

lpbktype Identifies the type of loopback signal to be operated or released. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information. However, loopbacks on T3 ports can only be the LINE type.

Type: enum

Range: LINE = 44.736 Mbps loopback signal

Default value: LINE

Input Examples:

```
ALW-LPBK-T3::IOM-1-T3-1;  
INH-LPBK-T3::IOM-1-T3-1;  
OPR-LPBK-T3::IOM-1-T3-1:::NEND,, ,LINE;  
RLS-LPBK-T3::IOM-1-T3-1:::NEND,, ,LINE;
```

Related Commands: none

DLT/ED/ENT/RTRV-ENET

Commands:

DLT-ENET: Delete ENET Facility

ED-ENET: Edit ENET Facility

ENT-ENET: Enter ENET Facility

RTRV-ENET: Retrieve ENET Facility

Descriptions:

DLT-ENET lets the user disconnect an ENET port from operation.

ED-ENET lets the user edit parameters associated with an Ethernet port on an I/O module in the Plexus 9000. These parameters include the port's transmission mode, format, and primary state.

ENT-ENET lets the user establish the parameters associated with an Ethernet port on an I/O module in the Plexus 9000. These parameters include the port's transmission mode, format, and primary state. ENT-ENET is dependent on ENT-EQPT; that is, ENT-ENET will not work unless ENT-EQPT has already been issued.

RTRV-ENET lets the user retrieve parameters associated with an Ethernet port. These parameters include the port's transmission mode, format, primary state, and secondary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-ENET: [TID]:<enetId>:[CTAG];

ED-ENET: [TID]:<enetId>:[CTAG]::[MODE=<mode>],
[FORMAT=<format>]:[<pst>];

ENT-ENET: [TID]:<enetId>:[CTAG]::[MODE=<mode>],
[FORMAT=<format>]:[<pst>];

RTRV-ENET: [TID]:<enetId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<enetId>:MODE=<mode>,FORMAT=<format>:<pst>,
    [<sst>]"
;
```

Parameters:

- enetId** Identifies the AID (for DLT, ED, and RTRV output) as an Ethernet port on an I/O Module in the Plexus 9000.
Type: ENET
Range: IOM-{8,10}-ENET-{1-4}
Default value: none
- enetId** Identifies the AID (for ENT and RTRV input) as an I/O module or an Ethernet port on an I/O module in the Plexus 9000. A null value for the second part of the AID is equivalent to "ALL"; that is, by leaving the field blank, parameters will be returned for all Ethernet ports configured on the specified I/O module.
Type: IOMorENET
Range: IOM-{8,10}[-ENET-{1-4}]
Default value: none
- mode** Identifies the transmission mode for the port; that is, whether communication on the port is in one direction at a time (half-duplex), both directions simultaneously (full-duplex), or whether the mode is determined automatically.
Type: enum
Range: AUTONEG = mode automatically negotiated
 FULLDUPLEX = full-duplex mode
 HALFDUPLEX = half-duplex mode
Default value: AUTONEG
- format** Identifies the Ethernet format.
Type: enum
Range: ENET_802_3 = 802.3 format
 ENET_DIX_II = Dix II format
Default value: ENET_802_3

- pst** Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.
- Type:** enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS
- sst** Identifies the secondary state of the port. The value indicates the desired secondary state of the port. A null value means no change to the current value.
- Type:** enum
Range: ACT = Active
FAF = Facilities Failure
FEPO = Far End Processor Outage
FLT = Faulted
LPBK = Loopback
SGEO = Supporting Entity Outage
UAS = Unassigned
WRK = Working
Default value: AINS

Input Examples:

```
DLT-ENET::IOM-8-ENET-1;  
ED-ENET::IOM-8-ENET-1:::MODE=AUTONEG,  
  FORMAT=ENET_802_3:IS;  
ENT-ENET::IOM-8-ENET-1:::MODE=AUTONEG,  
  FORMAT=ENET_802_3:IS;  
RTRV-ENET::IOM-8-ENET-1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
  "IOM-8-ENET-1:AUTONEG=ON,MODE=FULL,  
    FORMAT=ENET_802_3:IS,ACT"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-ENET-ENDPTVOIP

Commands:

DLT-ENET-ENDPTVOIP: Delete ENET Facility Endpoint

ED-ENET-ENDPTVOIP: Edit ENET Facility Endpoint

ENT-ENET-ENDPTVOIP: Enter ENET Facility Endpoint

RTRV-ENET-ENDPTVOIP: Retrieve ENET Facility Endpoint

Descriptions:

DLT-ENET-ENDPTVOIP lets the user end the association of an Ethernet port with an Ethernet endpoint.

ED-ENET-ENDPTVOIP lets the user edit parameters of an Ethernet endpoint associated with an Ethernet port. These parameters include the subnet mask, the default gateway, whether to enable IP link monitoring, the heartbeat frequency, the maximum heartbeat timeouts allowed, the usable bandwidth percentage, the maximum number of packets per second allowed, and the primary state.

ENT-ENET-ENDPTVOIP lets the user establish the association of an Ethernet port with an Ethernet endpoint. Parameters include the subnet mask, the default gateway, whether to enable IP link monitoring, the heartbeat frequency, the maximum heartbeat timeouts allowed, the usable bandwidth percentage, the maximum number of packets per second allowed, and the primary state. ENT-ENET-ENDPTVOIP is dependent on ENT-EQPT; that is, ENT-ENET-ENDPTVOIP will not work unless ENT-EQPT has already been issued.

RTRV-ENET-ENDPTVOIP lets the user retrieve parameters associated with an Ethernet endpoint. These parameters include the primary and secondary IP addresses, the subnet mask, the default gateway, whether to enable IP link monitoring, the heartbeat frequency, the maximum heartbeat timeouts allowed, the usable bandwidth percentage, the maximum number of packets per second allowed, and the primary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-ENET-ENDPTVOIP:[TID]:<enetId>:[CTAG];  
ED-ENET-ENDPTVOIP:[TID]:<enetId>:[CTAG]::  
[SUBNETMASK=<subnetmask>],  
[DEFAULTGATEWAY=<defaultgateway>],  
[IPLNKMON=<ipLnkMon>],[LNKMONPER=<lnkMonPer>],  
[LNKMAXTMOUTS=<lnkMaxTmouts>],[BWLMT=<bwLmt>],  
[PKTLMT<pktLmt>]:<pst>;  
ENT-ENET-ENDPTVOIP:[TID]:<enetId>:[CTAG]::  
IPADDR=<ipaddr>,MATEIPADDR=<mateipaddr>,  
SUBNETMASK=<subnetmask>,  
DEFAULTGATEWAY=<defaultgateway>,  
[IPLNKMON=<ipLnkMon>],[LNKMONPER=<lnkMonPer>],  
[LNKMAXTMOUTS=<lnkMaxTmouts>],[BWLMT=<bwLmt>],  
[PKTLMT<pktLmt>]:<pst>;  
RTRV-ENET-ENDPTVOIP:[TID]:[<enetId>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<enetId>:IPADDRESS=<ipaddress>,  
MATEIPADDR=<mateipaddr>,SUBNETMASK=<subnetmask>,  
DEFAULTGATEWAY=<defaultgateway>,  
IPLNKMON=<ipLnkMon>,LNKMONPER=<lnkMonPer>,  
LNKMAXTMOUTS=<lnkMaxTmouts>,BWLMT=<bwLmt>,  
PKTLMT<pktLmt>:<pst>"  
;
```

Parameters:

enetId Identifies the AID (for DLT, ED, and RTRV output) as an Ethernet port on an I/O Module in the Plexus 9000.

Type: ENET
Range: IOM-{8,10}-ENET-{1-4}
Default value: none

enetId Identifies the AID (for ENT and RTRV input) as an I/O module or an Ethernet port on an I/O module in the Plexus 9000. A null value for the second part of the AID is equivalent to “ALL”; that is, by leaving the field blank, parameters will be entered or returned for all Ethernet ports configured on the specified I/O module.

Type: IOMorENET

Range: IOM-{8,10}[-ENET-{1-4}]

Default value: none

ipaddress Identifies the IP address for the Ethernet endpoint.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

mateipaddress Identifies the IP address for the standby Ethernet port on the protection IOM.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

subnetmask Identifies the subnet mask.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

defaultgateway Identifies the default gateway.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

ipLnkMon Identifies whether to enable IP link monitoring for a valid remote peer IP address.

Type: BoolYN

Range: N = do not enable IP link monitoring

Y = enable IP link monitoring

Default value: N

lnkMonPer Identifies the frequency, in seconds, that IP ping heartbeat messages are sent by the VoIP IOM.

Type: integer

Range: {1-5}, in 0.5 increments

Default value: 1

lnkMaxTmouts Identifies the number of consecutive IP ping heartbeat time-outs allowed before loss of IP connectivity and subsequent ENA-IOM failover occurs. When the ENA-IOM is connected to a router through a series of switches that have 802.1D spanning tree protocol enabled (and the value of *lnkMonPer* is “1”), the number of consecutive timeouts must be greater than three times the configured forward delay timer configured in the Ethernet switches (default is 15 seconds).

Type: integer

Range: {10-65535}

Default value: 60

bwLmt Identifies the percentage of the bandwidth for the port that can be used.

Type: integer

Range: {0-100}

Default value: 100

pktLmt Identifies the maximum number of packets per second allowed for the PVC endpoint. A value of “0” signifies no limit.

Type: integer

Range: {0, 10000-500000}

Default value: 0

pst Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: none

Input Examples:

```
DLT-ENET-ENDPTVOIP::IOM-8-ENET-1;
```

```
ED-ENET-ENDPTVOIP::IOM-8-ENET-1:::  
SUBNETMASK=255.255.255.00, DEFAULTGATEWAY=10.0.0.90,  
IPLNKMON=N, LNKMONPER=1, LNKMAXTMOUTS=60, BWLMT=100,  
PKTLMT=0:PST=IS;
```

```
ENT-ENET-ENDPTVOIP::IOM-8-ENET-1:::  
IPADDRESS=10.0.0.89, MATEIPADDRESS=10.0.0.91,  
SUBNETMASK=255.255.255.00, DEFAULTGATEWAY=10.0.0.90,  
IPLNKMON=N, LNKMONPER=1, LNKMAXTMOUTS=60, BWLMT=100,  
PKTLMT=0:PST=IS;
```

```
RTRV-ENET-ENDPTVOIP::IOM-8-ENET-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "IOM-8-ENET-1:IPADDRESS=10.0.0.89,
    MATEIPADDRESS=10.0.0.91,
    SUBNETMASK=255.255.255.00,
    DEFAULTGATEWAY=10.0.0.90,IPLNKMON=N,LNKMONPER=1,
    LNKMAXTMOUTS=60,BWLM=100,PKTLMT=0:PST=IS"
;
```

Related Commands:

DLT/ED/ENT/RTRV-PVC-ENDPTVOIP

DLT/ED/ENT/RTRV-OC12

Commands:

DLT-OC12: Delete OC12 Facility
ED-OC12: Edit OC12 Facility
ENT-OC12: Enter OC12 Facility
RTRV-OC12: Retrieve OC12 Facility

Descriptions:

DLT-OC12 lets the user disconnect an OC12 port from operation.

ED-OC12 lets the user edit parameters associated with an OC12 port on an I/O module in the Plexus 9000. These parameters include line code, primary state, and secondary state.

ENT-OC12 lets the user establish the parameters associated with an OC12 port on an I/O module in the Plexus 9000. These parameters include line code, primary state, and secondary state. ENT-OC12 is dependent on ENT-EQPT; that is, ENT-OC12 will not work unless ENT-EQPT has already been issued.

RTRV-OC12 lets the user retrieve parameters associated with an OC12 port. These parameters include line code, primary state, and secondary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-OC12:[TID]:<oc_id>:[CTAG];
ED-OC12:[TID]:<oc_id>:[CTAG]::[LINECDE=<linecde>]:
[<pst>],[<sst>];
ENT-OC12:[TID]:<oc_id>:[CTAG]::[LINECDE=<linecde>]:
[<pst>],[<sst>];
RTRV-OC12:[TID]:<oc_id>:[CTAG];

Output Format:

SID DATE TIME
M CTAG COMPLD
"<oc_id>:LINECDE=<linecde>:<pst>,[<sst>]"
;

Parameters:

- oc_id** Identifies the AID (for DLT, ED, and RTRV output) as an OC12 port on an I/O Module in the Plexus 9000.
Type: OC
Range: IOM-{8,10}-OC12-{1-4}
Default value: none
- oc_id** Identifies the AID (for ENT and RTRV input) as an OC12 I/O Module or an OC12 port on an I/O Module in the Plexus 9000.
Type: IOMorOC
Range: IOM-{8,10}
IOM-{8,10}-OC12-{1-4}
Default value: none
- linecde** Identifies the signal inserted for zero code suppression on an OC12. This parameter is reserved for future use; leave it blank.
Type: enum
Range: NRZ = Non-Return to Zero
RZ = Return to Zero
Default value: NRZ
- pst** Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.
Type: enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS

sst Identifies the secondary state of the port. The value indicates the desired secondary state of the port. A null value means no change to the current value.

Type: enum

Range: ACT = Active

AINS = Automatic, In-service

FAF = Facilities Failure

FLT = Faulted

INIT = Initializing

LPBK = Loopback

MEA = Mismatch of Equipment and Attributes

MON = Monitor

NBK = No Backup

PRI = Protection Release Inhibited

PSI = Protection Switch Inhibited

RWT = Remove Wait state

SGEO = Supporting Entity Outage

STBYC = Standby Cold

STBYH = Standby Hot

UAS = Unassigned

UEQ = Unequipped

WRK = Working

Default value: AINS

Input Examples:

```
DLT-OC12::IOM-8-OC12-1;
```

```
ED-OC12::IOM-8-OC12-1:::LINECDE=NRZ:IS,AINS;
```

```
ENT-OC12::IOM-8-OC12-1:::LINECDE=NRZ:IS,AINS;
```

```
RTRV-OC12::IOM-8-OC12-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "IOM-8-OC12-1:LINECDE=NRZ:IS,AINS"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-OC3

Commands:

DLT-OC3: Delete OC3 Facility
ED-OC3: Edit OC3 Facility
ENT-OC3: Enter OC3 Facility
RTRV-OC3: Retrieve OC3 Facility

Descriptions:

DLT-OC3 lets the user disconnect an OC3 port from operation.

ED-OC3 lets the user edit parameters associated with an OC3 port on an I/O module in the Plexus 9000. These parameters include line code, primary state, and secondary state.

ENT-OC3 lets the user establish the parameters associated with an OC3 port on an I/O module in the Plexus 9000. These parameters include line code, primary state, and secondary state. ENT-OC3 is dependent on ENT-EQPT; that is, ENT-OC3 will not work unless ENT-EQPT has already been issued.

RTRV-OC3 lets the user retrieve parameters associated with an OC3 port. These parameters include line code, primary state, and secondary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-OC3: [TID]:<oc_id>:[CTAG];
ED-OC3: [TID]:<oc_id>:[CTAG]::[LINECDE=<linecde>]:
[<pst>],[<sst>];
ENT-OC3: [TID]:<oc_id>:[CTAG]::[LINECDE=<linecde>]:
[<pst>],[<sst>];
RTRV-OC3: [TID]:<oc_id>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<oc_id>:LINECDE=<linecde>:<pst>,[<sst>]"
;
```

Parameters:

- oc_id** Identifies the AID (for DLT, ED, and RTRV output) as an OC3 port on an I/O Module in the Plexus 9000.
Type: OC
Range: IOM-{8,10}-OC3-{1-4}
Default value: none
- oc_id** Identifies the AID (for ENT and RTRV input) as an OC3 I/O Module or an OC3 port on an I/O Module in the Plexus 9000.
Type: IOMorOC
Range: IOM-{8,10}
IOM-{8,10}-OC3-{1-4}
Default value: none
- linecde** Identifies the signal inserted for zero code suppression on an OC3. This parameter is reserved for future use; leave it blank.
Type: enum
Range: NRZ = Non-Return to Zero
RZ = Return to Zero
Default value: NRZ
- pst** Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.
Type: enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS

sst Identifies the secondary state of the port. The value indicates the desired secondary state of the port. A null value means no change to the current value.

Type: enum

Range: ACT = Active

AINS = Automatic, In-service

FAF = Facilities Failure

FLT = Faulted

INIT = Initializing

LPBK = Loopback

MEA = Mismatch of Equipment and Attributes

MON = Monitor

NBK = No Backup

PRI = Protection Release Inhibited

PSI = Protection Switch Inhibited

RWT = Remove Wait state

SGEO = Supporting Entity Outage

STBYC = Standby Cold

STBYH = Standby Hot

UAS = Unassigned

UEQ = Unequipped

WRK = Working

Default value: AINS

Input Examples:

```
DLT-OC3::IOM-8-OC3-1;
```

```
ED-OC3::IOM-8-OC3-1:::LINECDE=NRZ:IS,AINS;
```

```
ENT-OC3::IOM-8-OC3-1:::LINECDE=NRZ:IS,AINS;
```

```
RTRV-OC3::IOM-8-OC3-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "IOM-8-OC3-1:LINECDE=NRZ:IS,AINS"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-STs1

Commands:

DLT-STs1: Delete STs1 Facility

ED-STs1: Edit STs1 Facility

ENT-STs1: Enter STs1 Facility

RTRV-STs1: Retrieve STs1 Facility

Descriptions:

DLT-STs1 lets the user disconnect an STs1port from operation.

ED-STs1 lets the user edit parameters associated with an STs1 port on an I/O module in the Plexus 9000. These parameters include path trace and STS mapping information, line build-out, service mode, primary state, and secondary state.

ENT-STs1 lets the user establish the parameters associated with an STs1 port on an I/O module in the Plexus 9000. These parameters include path trace and STS mapping information, line build-out, service mode, primary state, and secondary state. ENT-STs1 is dependent on ENT-EQPT; that is, ENT-STs1 will not work unless ENT-EQPT has already been issued.

RTRV-STs1 lets the user retrieve parameters associated with an STs1 port. These parameters include path trace and STS mapping information, line build-out, service mode, primary state, and secondary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-STs1:[TID]:<sts_id>:[CTAG];

ED-STs1:[TID]:<sts_id>:[CTAG]:[EXPTRC=<exptrc>],
[STSMAP=<stsmmap>],[TRC=<trc>],[LB0=<lbo>],
[OMODE=<omode>]:[<pst>],[<sst>];

ENT-STs1:[TID]:<sts_id>:[CTAG]:[EXPTRC=<exptrc>],
[STSMAP=<stsmmap>],[TRC=<trc>],[LB0=<lbo>],
[OMODE=<omode>]:[<pst>],[<sst>];

RTRV-STs1:[TID]:<sts_id>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<sts_id>:EXPTRC=<exptrc>,STSMAP=<stsmap>,
    TRC=<trc>,LBO=<lbo>,OMODE=<omode>:<pst>,<sst>"
;
```

Parameters:

- sts_id** Identifies the AID (for DLT, ED, and RTRV output) as an STS1 port on an I/O Module in the Plexus 9000.
Type: STS1
Range: IOM-{1-17}-STS1-{1-8}
Default value: none
- sts_id** Identifies the AID (for ENT and RTRV input) as an I/O module or an STS1 port on an I/O module in the Plexus 9000.
Type: IOMorSTS1
Range: IOM-{1-17}
IOM-{1-17}-STS1-{1-8}
Default value: none
- exptrc** Identifies the expected Path Trace (J1) content.
Type: string
Range: up to 62 ASCII characters
Default value: none
- stsmap** Identifies the type of mapping supported by the STS-1 SPE (Synchronous Payload Envelope).
Type: enum
Range: VTLOCK = Identifies locked VT (Virtual Tributary, a unit of sub-SONET bandwidth that can be combined, or concatenated, for transmission through the network) mode; can't transport asynchronously mapped VT SPEs.
VTFLOAT = Identifies floating VT mode.
Default value: VTFLOAT

- trc** Identifies the path trace message to be transmitted. Trace byte (J1) continuously transmits a 64-byte, fixed length ASCII string (the last two bytes of which are a CR and an LF), one byte at a time. A null value causes the Plexus to transmit 62 NULL chars (Hex 00), a CR, and an LF.
- Type:** string
Range: up to 62 ASCII characters
Default value: none
- lbo** Identifies the line build-out (in feet); that is, the attenuation distortion equalization setting to compensate for the length of the coaxial cable connecting to the port.
- Type:** integer
Range: {0-450}
Default value: not applicable
- omode** Specifies what will be transmitted from the STS1 output port when out of service.
- Type:** enum
Range: NORM = Normal (cross-connected data if mapped, idle signal as specified by the IDLE keyword if not mapped)
AIS = Alarm Indication Signal
Default value: AIS
- pst** Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.
- Type:** enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS

sst Identifies the secondary state of the port. The value indicates the desired secondary state of the port. A null value means no change to the current value.

Type: enum

Range: ACT = Active

AINS = Automatic, In-service

FAF = Facilities Failure

FLT = Faulted

INIT = Initializing

LPBK = Loopback

MEA = Mismatch of Equipment and Attributes

MON = Monitor

NBK = No Backup

PRI = Protection Release Inhibited

PSI = Protection Switch Inhibited

RWT = Remove Wait state

SGEO = Supporting Entity Outage

STBYC = Standby Cold

STBYH = Standby Hot

UAS = Unassigned

UEQ = Unequipped

WRK = Working

Default value: AINS

Input Examples:

```
DLT-STS1::IOM-1-STS1-1;
```

```
ED-STS1::IOM-1-STS1-1::EXPTRC=EXPECTEDPATHTRACE,  
  STSMAP=VTFLOAT,LBO=10,OMODE=AIS:IS,AINS;
```

```
ENT-STS1::IOM-1-STS1-1::EXPTRC=EXPECTEDPATHTRACE,  
  STSMAP=VTFLOAT,LBO=10,OMODE=AIS:IS,AINS;
```

```
RTRV-STS1::IOM-1-STS1-1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
  "IOM-1-STS-1:EXPTRC=EXPECTEDPATHTRACE,  
    STSMAP=VTFLOAT,TRC=PATHTRACEMESSAGE,LBO=0,  
    OMODE=AIS:IS,ACT"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-T1

Commands:

DLT-T1: Delete DS1 Facility

ED-T1: Edit DS1 Facility

ENT-T1: Enter DS1 Facility

RTRV-T1: Retrieve DS1 Facility

Descriptions:

DLT-T1 lets the user disconnect a T1 port from operation.

ED-T1 lets the user edit parameters associated with a T1 port on an I/O module, or a timing port, in the Plexus 9000. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state.

ENT-T1 lets the user establish the parameters associated with a DS1 port on an I/O module in the Plexus 9000. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state. ENT-T1 is dependent on ENT-EQPT; that is, ENT-T1 will not work unless ENT-EQPT has already been issued.

RTRV-T1 lets the user retrieve parameters associated with a DS1 port. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-T1: [TID]:<ds_id>:[CTAG];

ED-T1: [TID]:<ds_id>:[CTAG]:[EQLZ=<eqlz>],[FMT=<fmt>],
[LINECDE=<linecde>],[OMODE=<omode>],
[TMGREF=<tmgref>],[IFTYPE=<iftype>]:[<pst>],
[<sst>];

ENT-T1: [TID]:<ds_id>:[CTAG]:[EQLZ=<eqlz>],
[FMT=<fmt>],[LINECDE=<linecde>],[OMODE=<omode>],
[TMGREF=<tmgref>],[IFTYPE=<iftype>]:[<pst>],
[<sst>];

RTRV-T1: [TID]:<ds_id>:[CTAG];

Output Format:

```

        SID DATE TIME
M   CTAG COMPLD
    "<ds_id>:EQLZ=<eqlz>,FMT=<fmt>,LINECDE=<linecde>,
      OMODE=<omode>,[TMGREF=<tmgref>],IFTYPE=<iftype>:
      <pst>,[<sst>]"
    ;

```

Parameters:

ds_id Identifies the AID (for DLT) as a T1 port on an I/O Module in the Plexus 9000.

Type: PORT

Range: IOM-{1-17}-PORT-{1-28}
 IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
 IOM-{1-17}-T3-{1-8}-PORT-{1-28}

Default value: none

ds_id Identifies the AID (for ED and RTRV output) as a T1 port on an I/O module or a timing port in the Plexus 9000.

Type: PORTorBITS

Range: IOM-{1-17}-PORT-{1-28}
 IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
 IOM-{1-17}-T3-{1-8}-PORT-{1-28}
 TMG-{A,B}

Default value: none

ds_id Identifies the AID (for ENT) as an I/O module or a T1 port on an I/O module in the Plexus 9000.

Type: IOMorT3orPORT

Range: IOM-{1-17}
 IOM-{1-17}-PORT-{1-28}
 IOM-{1-17}-STS1-{1-8}
 IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
 IOM-{1-17}-T3-{1-8}
 IOM-{1-17}-T3-{1-8}-PORT-{1-28}

Default value: none

- ds_id** Identifies the AID (for RTRV input) as an I/O module, a T1, STS1, or T3 port on an I/O module, or a timing port in the Plexus 9000.
Type: IOMorT3orPORTorBITS
Range: IOM-{1-17}
IOM-{1-17}-PORT-{1-28}
IOM-{1-17}-STS1-{1-8}
IOM-{1-17}-STS1-{1-8}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}
TMG-{A,B}
Default value: none
- eqlz** Identifies the attenuation distortion equalization setting to compensate for the length of a 22-gauge cable in feet. This parameter is not used when provisioning a T1 port on a T3 or STS1 I/O module.
Type: integer
Range: {0-655}
Default value: 0
- fmt** Identifies the DS1 digital signal framing format; a null value defaults to SF or “not applicable”.
Type: enum
Range: SF = Superframe format
ESF = Extended Superframe format
ESF_NOFDL = Extended Superframe format – No Facilities Data Link
Default value: ESF
- linecde** Identifies the signal inserted for zero code suppression on a DS1.
Type: enum
Range: AMI = Alternate mark inversion (“bipolar”)
B8ZS = Bipolar with 8-zero substitution
Default value: B8ZS
- omode** Identifies what will be transmitted from the DS1 output port when out of service.
Type: enum
Range: NORM = Normal (cross-connected data if mapped, idle signal as specified by the IDLE keyword if not mapped)
AIS = Alarm Indication Signal
Default value: AIS

- tmgref** Identifies whether the TMG-A or TMG-B is to be used as the primary or secondary timing source for the system. This parameter is used only for configuring the BITS interface, and is presently not supported; leave it blank.
- Type:** enum
Range: PRI = Primary timing source
SEC = Secondary timing source
NONE = Not a timing source
Default value: NONE
- iftype** Identifies whether the subject T1 port affects the network or user side. This parameter presently supports only the value “NETWORK”; leave it blank.
- Type:** enum
Range: NETWORK = network side
USER = user side
Default value: NETWORK
- pst** Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.
- Type:** enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS

sst Identifies the secondary state of the port. The value indicates the desired secondary state of the port. A null value means no change to the current value. This parameter is not supported presently; leave it blank.

Type: enum

Range: ACT = Active

AINS = Automatic, In-service

FAF = Facilities Failure

FLT = Faulted

INIT = Initializing

LPBK = Loopback

MEA = Mismatch of Equipment and Attributes

MON = Monitor

NBK = No Backup

PRI = Protection Release Inhibited

PSI = Protection Switch Inhibited

RWT = Remove Wait state

SGEO = Supporting Entity Outage

STBYC = Standby Cold

STBYH = Standby Hot

UAS = Unassigned

UEQ = Unequipped

WRK = Working

Default value: AINS

Input Examples:

```
DLT-T1::IOM-1-PORT-1;
```

```
ED-T1::IOM-1-PORT-1::EQLZ=10,FMT=ESF,LINECDE=B8ZS,  
OMODE=AIS:OOS;
```

```
ENT-T1::IOM-1-PORT-1::EQLZ=10,FMT=ESF,LINECDE=B8ZS,  
OMODE=AIS:OOS;
```

```
RTRV-T1::IOM-1-PORT-1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"IOM-1-PORT-1:EQLZ=10,FMT=ESF,LINECDE=B8ZS,  
OMODE=AIS,IFTYPE=NETWORK:IS,AINS"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-T3

Commands:

DLT-T3: Delete DS3 Facility

ED-T3: Edit DS3 Facility

ENT-T3: Enter DS3 Facility

RTRV-T3: Retrieve DS3 Facility

Descriptions:

DLT-T3 lets the user disconnect a T3 port from operation.

ED-T3 lets the user edit parameters associated with a T3 port on an I/O module, or a timing port, in the Plexus 9000. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state.

ENT-T3 lets the user establish the parameters associated with a DS3 port on an I/O module in the Plexus 9000. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state. ENT-T3 is dependent on ENT-EQPT; that is, ENT-T3 will not work unless ENT-EQPT has already been issued.

RTRV-T3 lets the user retrieve parameters associated with a DS3 port. These parameters include equalization/build-out, framing, line code, service mode, timing reference, primary state, and secondary state.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-T3:[TID]:<ds_id>:[CTAG];
ED-T3:[TID]:<ds_id>:[CTAG]:[AISC=<aisc>],
[AIST=<aist>],[FMT=<fmt>],[IDLE=<idle>],
[LB0=<lbo>],[LINECDE=<linecde>],[MAP=<map>],
[OMODE=<omode>],[PBIT=<pbit>],[XBIT=<xbit>],
[XBITRCV=<xbitrcv>],[XPOL=<xpol>]:[<pst>],[<sst>];
ENT-T3:[TID]:<ds_id>:[CTAG]:[AISC=<aisc>],
[AIST=<aist>],[FMT=<fmt>],[IDLE=<idle>],
[LB0=<lbo>],[LINECDE=<linecde>],[MAP=<map>],
[OMODE=<omode>],[PBIT=<pbit>],[XBIT=<xbit>],
[XBITRCV=<xbitrcv>],[XPOL=<xpol>]:[<pst>],[<sst>];
RTRV-T3:[TID]:<ds_id>:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ds_id>:AISC=<aisc>,AIST=<aist>,FMT=<fmt>,
IDLE=<idle>,LB0=<lbo>,LINECDE=<linecde>,
MAP=<map>,OMODE=<omode>,PBIT=<pbit>,XBIT=<xbit>,
XBITRCV=<xbitrcv>,XPOL=<xpol>:<pst>,[<sst>]"
;
```

Parameters:

ds_id	Identifies the AID (for DLT, ED, and RTRV output) as a T3 port on a DS3 I/O Module in the Plexus 9000. Type: T3 Range: IOM-{1-17}-T3-{1-8} Default value: none
ds_id	Identifies the AID (for ENT and RTRV input) as an I/O module or a T3 port on a DS3 I/O module in the Plexus 9000. Type: IOMorT3 Range: IOM-{1-17} IOM-{1-17}-T3-{1-8} Default value: none

- aisc** Identifies the alarm indication signal cause (can be one or more values connected with a “&”). This parameter is presently not supported; leave it blank.
Type: enum
Range: LOF = Loss of frame
LOS = Loss of signal
NONE = AIS cause not identified
Default value: LOS&LOF
- aist** Identifies the type of alarm indication signal (AIS) to be sent on the outgoing cross-connected signal when an AIS is on the incoming signal. This parameter is presently not supported; leave it blank.
Type: enum
Range: FONES = Translate to framed all ones
NAS = North American Standard
ONES = Translate to unframed all ones
Default value: NAS
- fmt** Identifies the DS3 digital signal framing format.
Type: enum
Range: ASYNC = asynchronous format
CBIT = C-bit parity format
Default value: ASYNC
- idle** Identifies whether the T3 port is set to ON or OFF. This parameter is presently not supported; leave it blank.
Type: enum
Range: OFF
ON
Default value: OFF
- lbo** Identifies the line build-out (in feet); that is, the attenuation distortion equalization setting to compensate for the length of the coaxial cable connecting to the port.
Type: integer
Range: {0-450}
Default value: 0
- linecde** Identifies the signal inserted for zero code suppression on a DS3.
Type: enum
Range: B3ZS = Bipolar with 3-zero substitution
CCHAN = Clear channel
Default value: B3ZS

- map** Identifies the form of mapping for DS3 payloads in SONET add/drop applications. A null value defaults to “NA”. This parameter is presently not supported; leave it blank.
- Type:** enum (can be one or more values connected with an “&”)
Range: ASYNC = asynchronous mapping
DL = SYNTRAN datalink is transported; only applicable with SYNC map.
NA = Not applicable
SYNC = Observable SYNTRAN mapping
Default value: NA
- omode** Specifies what will be transmitted from the DS3 output port when out of service.
- Type:** enum
Range: AIS = Alarm Indication Signal
NORM = Normal (cross-connected data if mapped, idle signal as specified by the non-editable IDLE keyword if not mapped)
Default value: AIS
- pbit** Identifies whether the P-bits are corrected on output. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: OFF = P-bits are not changed (transparent)
ON = P-bits are altered to correct parity
Default value: OFF
- xbit** Identifies how X-bits are handled for this particular channel. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: PASS = Pass X-bits with no modification (default)
XLAT = Translate X-bits to match terminating equipment.
Default value: PASS
- xbitrcv** Identifies the usage of the incoming X-bits.
- Type:** enum
Range: ALM0 = All the X-bits equal to 0 for indicating incoming remote alarm
ALM1 = All the X-bits equal to 1 for indicating incoming remote alarm
IGNORE = Ignore the X-bits.
Default value: ALM0

- xpol** Identifies the value/polarity to which the outgoing X-bits are forced.
Type: enum
Range: 0 = Set X-bits to fixed zero.
1 = Set X-bits to fixed one.
ALM0 = Set X-bits to zero for indicating alarm.
ALM1 = Set X-bits to one for indicating alarm.
Default value: ALM0
- pst** Identifies the primary state of the port. The value indicates the desired state of the port. A null value means no change to the current value.
Type: enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: null
- sst** Identifies the secondary state of the port. The value indicates the desired secondary state of the port. A null value means no change to the current value. This parameter is presently not supported; leave it blank.
Type: enum
Range: AINS = Automatic, in service
Default value: null

Input Examples:

```
DLT-T3::IOM-1-T3-1;  
ED-T3::IOM-1-T3-1::AISC=LOS&LOF,AIST=NAS,  
FMT=ASYNC,IDLE=OFF,LB0=0,LINECDE=B3ZS,MAP=NA,  
OMODE=AIS,PBIT=OFF,XBIT=PASS,XBITRCV=ALM0,  
XPOL=ALM0:OOS;  
ENT-T3::IOM-1-T3-1::AISC=LOS&LOF,AIST=NAS,  
FMT=ASYNC,IDLE=OFF,LB0=0,LINECDE=B3ZS,MAP=NA,  
OMODE=AIS,PBIT=OFF,XBIT=PASS,XBITRCV=ALM0,  
XPOL=ALM0:OOS;  
RTRV-T3::IOM-1-T3-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "IOM-1-T3-1:AISC=LOS&LOF,AIST=NAS,FMT=ASync,
    IDLE=OFF,LB0=0,LINECDE=B3ZS,MAP=NA,OMODE=AIS,
    PBIT=OFF,XBIT=PASS,XBITRCV=ALM0,XPOL=ALM0:IS,
    AINS"
;
```

Related Commands: none

INIT-REG-T1 / RTRV-PM-T1

Commands:

INIT-REG-T1: Initialize Register DS1 Facility

RTRV-PM-T1: Retrieve Performance Monitors DS1 Facility

Descriptions:

INIT-REG-T1 instructs the Plexus 9000 to initialize one or more storage registers or event counters associated with specific T1 ports in the Plexus 9000. In most cases, registers contain performance data.

RTRV-PM-T1 lets the user retrieve current and historical performance data for T1 ports on DS3 IOMs.

Category: Facility

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-T1:[TID]:<entity_id>:[CTAG]::<montype>,  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];  
  
RTRV-PM-T1:[TID]:<pm_id>:[CTAG]::[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<aid>:MONTYPE=<montype>,MONVAL=<monval>,  
      [VLDTY=<vldty>],[LOCN=<locn>],[DIRN=<dirn>],  
      [TMPER=<tmper>],[MONDAT=<mondatt>],  
      [MONTM=<montm>]"  
;
```

Parameters:

entity_id Identifies the AID (for INIT-REG) as a T1 port on a DS3 I/O module. A null value for the T1 port is equivalent to “ALL”; that is, by leaving the “PORT” field blank, registers for all T1 ports on the specified T3/STS1 port will be initialized.

Type: T3PORT

Range: IOM-**{1-17}**-STS1-**{1-8}**[-PORT-**{1-28}**]
IOM-**{1-17}**-T3-**{1-8}**[-PORT-**{1-28}**]

Default value: none

pm_id Identifies the AID (for RTRV-PM input) as a T1 port on a DS3 I/O module. A null value for the T1 port is equivalent to “ALL”; that is, by leaving the “PORT” field blank, information for all T1 ports on the specified T3/STS1 port will be returned.

Type: T3PORT

Range: IOM-**{1-17}**-STS1-**{1-8}**[-PORT-**{1-28}**]
IOM-**{1-17}**-T3-**{1-8}**[-PORT-**{1-28}**]

Default value: none

aid Identifies the AID (for RTRV-PM output) as a T1 port on a DS3 I/O module (by slot number and port number).

Range: IOM-**{1-17}**-STS1-**{1-8}**-PORT-**{1-28}**
IOM-**{1-17}**-T3-**{1-8}**-PORT-**{1-28}**

montype Identifies a type of monitored parameter for T1 ports on DS3 IOMs, as defined in ANSI T1.231-1997.

Type: enum

Range: AISS-P = Alarm Indication Signal Seconds Count – Path

ALL = All types

CSS-P = Controlled Slip Second – Path

CSS-PFE = Controlled Slip Second – Path, Far End

CV-L = Coding Violation – Line

CV-P = Coding Violation – Path

CV-PFE = Coding Violation – Path, Far End

ES-L = Errored Second – Line

ES-LFE = Errored Second – Line, Far End

ES-P = Errored Second – Path

ES-PFE = Errored Second – Path, Far End

ESA-P = Errored Second, type A – Path

ESA-PFE = Errored Second, type A – Path, Far End

ESB-P = Errored Second, type B – Path

ESB-PFE = Errored Second, type B – Path, Far End

FC = Failure Count

FC-FE = Failure Count – Far End

LOSS-L = Loss of Signal Seconds – Line

SAS-P = SEF/AIS (Severely Errored Frame / Alarm
Indication Signal) Second – Path

SEFS-PFE = Severely Errored Frame Second – Path, Far End

SES-L = Severely Errored Second – Line

SES-P = Severely Errored Second – Path

SES-PFE = Severely Errored Second – Path, Far End

UAS-P = Unavailable Second – Path

UAS-PFE = Unavailable Second – Path, Far End

Default value: none

monval Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. See ANSI T1.231-1997 for the range applicable for each *montype*. This parameter is presently unused (for INIT-REG); leave it blank.

Type: integer

Range: {0-9999}

Default value: 0

- monlev** Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: none
- locn** Identifies the location of the storage registers or event counters identified by *montype*. A null value defaults to both "FEND" and "NEND".
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: both FEND and NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the Plexus 9000. A null value defaults to all applicable directions (currently only "BTH"). This parameter is presently unused; leave it blank. The Plexus 9000 currently returns only the value "BTH".
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods.

Type: enum

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

mondatt Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

```
INIT-REG-T1::IOM-1-T3-1-PORT-1::ALL,,NEND,,24-HR;  
RTRV-PM-T1::IOM-1-T3-1-PORT-1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"IOM-1-T3-1-PORT-1:MONTYPE=ALL,MONVAL=100,  
VLDTY=COMPL,LOCN=NEND,DIRN=BTH,TMPER=15-MIN,  
MONDAT=05-14,MONTM=14-37"  
;
```

Related Commands: none

INIT-REG-T3 / RTRV-PM-T3

Commands:

INIT-REG-T3: Initialize Register DS3 Facility

RTRV-PM-T3: Retrieve Performance Monitors DS3 Facility

Descriptions:

INIT-REG-T3 instructs the Plexus 9000 to initialize one or more storage registers or event counters associated with specific T3 ports in the Plexus 9000. In most cases, registers contain performance data.

RTRV-PM-T3 lets the user retrieve current and historical performance data for DS3 ports.

Category: Facility

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-T3:[TID]:<entity_id>:[CTAG]::<montype>,  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

```
RTRV-PM-T3:[TID]:<pm_id>:[CTAG]::[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
  "<aid>:MONTYPE=<montype>,MONVAL=<monval>,  
    [VLDTY=<vldty>],[LOCN=<locn>],[DIRN=<dirn>],  
    [TMPER=<tmper>],[MONDAT=<mondatt>],  
    [MONTM=<montm>]"  
;
```

Parameters:

entity_id Identifies the AID (for INIT-REG) either as a DS3 I/O module (by slot number), or as a T3 port on a DS3 I/O module (by slot number and port number).

Type: IOMorT3

Range: IOM-{1-17}
IOM-{1-17}- T3-{1-8}

Default value: none

pm_id Identifies the AID (for RTRV-PM input) either as a DS3 I/O module (by slot number), or as a T3 port on a DS3 I/O module (by slot number and port number).

Type: IOMorT3

Range: IOM-{1-17}
IOM-{1-17}- T3-{1-8}

Default value: none

aid Identifies the AID (for RTRV-PM output) either as a DS3 I/O module (by slot number), or as a T3 port on a DS3 I/O module (by slot number and port number).

Range: IOM-{1-17}
IOM-{1-17}-T3-{1-8}

montype Identifies a type of monitored parameter, as defined in ANSI T1.231-1997.

Type: enum

Range: AISS-P = Alarm Indication Signal Seconds – Path
ALL = All types
CVCP-P = Coding Violation – Path, DS3 CP-bit parity
CVCP-PFE = Coding Violation – Path, Far End, DS3 CP-bit parity
CVL = Coding Violation – Line
CVP-P = Coding Violation – Path, P-bit parity
ESA-L = Errored Second , type A – Line
ESACP-P = Errored Second , type A – Path, DS3 CP-bit parity
ESACP-PFE = Errored Second , type A – Path, DS3 CP-bit parity, Far End
ESAP-P = Errored Second , type A – Path, DS3 P-bit parity
ESB-L = Errored Second , type B – Line
ESBCP-P = Errored Second , type B – Path, DS3 CP-bit parity
ESBCP-PFE = Errored Second , type B – Path, DS3 CP-bit parity, Far End
ESBP-P = Errored Second , type B – Path, DS3 P-bit parity
ESCP-P = Errored Second – Path, DS3 CP-bit parity
ESCP-PFE = Errored Second – Path, DS3 CP-bit parity, Far End
ESL = Errored Second – Line
ESP-P = Errored Second – Path, P-bit parity
FCCP-PFE = Failure Count – Path, DS3 CP-bit parity, Far End
FCP = Failure Count – Path, Near End
LOSS-L = Loss of Signal Seconds count – Line
SAS-P = SEF/AIS Second count
SASCP-P = SEF/AIS Second – CP-bit parity
SES-P = Severely Errored Second – Path
SESCP-P = Severely Errored Second – Path, DS3 CP-bit parity
SESCP-PFE = Severely Errored Second – Path, DS3 CP-bit parity, Far End
ESL = Severely Errored Second – Line
UASCP-P = Unavailable Second – Path, DS3 CP-bit parity
UASCP-PFE = Unavailable Second – Path, DS3 CP-bit parity, Far End
UASP-P = Unavailable Second – Path, P-bit parity

Default value: none

- monval** Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. See ANSI T1.231-1997 for the range applicable for each *montype*. This parameter is presently unused (for INIT-REG); leave it blank.
Type: integer
Range: {0-9999}
Default value: 0
- monlev** Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: none
- locn** Identifies the location of the storage registers or event counters identified by *montype*. A null value defaults to both "FEND" and "NEND". The value "FEND" applies only to T3 ports with C-bit parity format for DS3 digital signal framing (The value of *fmt* in ENT-T3 is "CBIT").
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: both FEND and NEND

dirn Identifies the direction of the data stored in statistics counters relative to the Plexus 9000. A null value defaults to all applicable directions (currently only “BTH”). This parameter is presently unused; leave it blank. The Plexus 9000 currently returns only the value “BTH”.

Type: enum

Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive

Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods.

Type: enum

Range: {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

mondatt Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

```
INIT-REG-T3::IOM-1-T3-1:::ALL,,NEND,,24-HR;
```

```
RTRV-PM-T3::IOM-1-T3-1-PORT-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "IOM-1-T3-1:MONTYPE=ALL,MONVAL=100,VLDTY=COMPL,
    LOCN=NEND,DIRN=BTH,TMPER=15-MIN,MONDAT=05-14,
    MONTM=14-37"
;
```

Related Commands: none

OPR/RLS-LPBK-ENET

Commands:

OPR-LPBK-ENET: Operate Loopback ENET Facility

RLS-LPBK-ENET: Release Loopback ENET Facility

Descriptions:

OPR-LPBK-ENET lets the user operate a loopback on a specified (out of service) Ethernet port associated with a test access session in the Plexus 9000. The loop may be accomplished at either the near or the far end, or on the line. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV-COND message.

RLS-LPBK-ENET lets the user release a loopback on a specified Ethernet port associated with a test access session in the Plexus 9000. The loop may be released from either the near or the far end. The Plexus 9000 issues an error response if not in a state that allows a loopback to occur. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV COND message.

Category: Facility

Security: SA for both commands

Input Formats:

OPR-LPBK-ENET:[TID]:<enetId>:[CTAG]::[<locn>],
[<orgn>],[<intext>],[<lpbktype>;

RLS-LPBK-ENET:[TID]:<enetId>:[CTAG]::[<locn>],
[<orgn>],[<intext>],[<lpbktype>;

Output Format: none

Parameters:

enetId Identifies the AID as the Ethernet port on an I/O module in the Plexus 9000 on which the loopback is performed or released.

Type: ENET

Range: IOM-{8,10}-ENET-{1-4}

Default value: none

- locn** Identifies the location where the loopback occurs. The value “FEND” is not supported.
Type: enum
Range: FEND = Far end
 NEND = Near end
Default value: NEND
- orgn** Identifies the office originating the looped-back signal. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end office
 NEND = Near end office
 BOTH = Both offices
Default value: null
- intext** Directs the Plexus 9000 to provide or release a loopback that is with/without the benefit of signal processing, such as reshaping, recoding, scrambling, retiming, etc. A null value indicates that this parameter is not applicable. This parameter is not supported presently; leave it blank.
Type: enum
Range: EXT = External
 INT = Internal
Default value: null
- lpbktype** Identifies the type of loopback signal to be operated. Depending on the transmission system, various parts of a signal may be looped back. For example, the LINE loopback may very well be a full metallic loopback, while a PAYLOAD loopback may result in a signal that has been recoded with new and different header and/or CRC information. A null value indicates that this parameter is not applicable. This parameter is presently not supported; leave it blank.
Type: enum
Range: LINE = 44.736 Mbps loopback signal
 PAYLOAD = 44.512 Mbps loopback signal
Default value: null

Input Examples:

```
OPR-LPBK-ENET::IOM-8-ENET-1;  
RLS-LPBK-ENET::IOM-8-ENET-1;
```

Related Commands: none

RTRV-INFO-STS1

Command:

RTRV-INFO-STS1: Retrieve Information STS1 Facility

Description:

RTRV-INFO-STS1 lets the user retrieve information about STS1 ports. Retrieved information includes the path trace message, the content of the STS SPE, the STS Path RDI, and the Signal Label portion of the V5 byte.

Category: Facility

Security: View

Input Format:

RTRV-INFO-STS1: [TID]:<sts_id>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<sts_id>:STSTRACE=<ststrace>,
  STSPAYLOAD=<stspayload>, PATHRDI=<pathrdi>,
  VTPAYLOAD=<vtpayload>"
;
```

Parameters:

sts_id Identifies the AID as an I/O module or an STS1 port on an I/O module in the Plexus 9000.

Type: IOMorSTS1

Range: IOM-{1-17}
IOM-{1-17}-STS1-{1-8}

Default value: none

ststrace Identifies the path trace message to be received. Trace byte (J1) continuously transmits a 64-byte, fixed length ASCII string (the last two bytes of which are a CR and an LF), one byte at a time. A null value causes the Plexus to transmit 62 NULL chars (Hex 00), a CR, and an LF.

Type: string

Range: up to 62 ASCII characters

Default value: none

stspayload Identifies the STS Path Signal Label byte (C2), as defined in GR-253, to indicate the content of the STS SPE (Synchronous Payload Envelope).

Type: integer

Range: three digits representing a two-character hex code

Default value: none

pathrdi Identifies the STS Path RDI (Remote Defect Indicator) signal portion of the STS Path Status byte (G1), as defined in GR-253, to convey the Path terminating status and performance back to the originating STS PTE (Path Terminating Equipment).

Type: integer

Range: four digits representing a three-character hex code

Default value: none

vtpayload Identifies the Signal Label portion of the VT Path Overhead byte (V5) for the 28 possible virtual tributaries

Type: string

Range: up to 28 digits separated by commas

Default value: none

Input Example:

```
RTRV-INFO-STS1::IOM-1-STS1-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"IOM-1-STS1-1:STSTRACE=TRACE1,STSPAYLOAD=123,
PATHRDI=1234,VTPAYLOAD=2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2"
;
```

Related Commands: none

RTRV-PM-C

Command:

RTRV-PM-C: Retrieve Performance Monitoring Compressed

Description:

RTRV-PM-C lets the user retrieve current and historical performance data for all ports on an IOM in a compressed format; that is, it returns performance data only for those montypes that exceed their specified thresholds, regardless of the type of port.

Category: Facility

Security: View

Input Format:

```
RTRV-PM-C:[TID]:<pm_id>:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<pm_id>:<montype>,<monval>,[<vldty>],[<locn>],  
    [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

pm_id Identifies the AID as a DS3 I/O module by slot number.

Type: IOMODULE

Range: IOM-{1-17}

Default value: none

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: AISS-P = Alarm Indication Signal Seconds – Path

ALL = All types

CVCP-P = Coding Violation – Path, DS3 CP-bit parity

CVCP-PFE = Coding Violation – Path, Far End, DS3 CP-bit parity

CVL = Coding Violation – Line

CVP-P = Coding Violation – Path, P-bit parity

ESA-L = Errored Second , type A – Line

ESACP-P = Errored Second , type A – Path, DS3 CP-bit parity

ESACP-PFE = Errored Second , type A – Path, DS3 CP-bit parity, Far End

ESAP-P = Errored Second , type A – Path, DS3 P-bit parity

ESB-L = Errored Second , type B – Line

ESBCP-P = Errored Second , type B – Path, DS3 CP-bit parity

ESBCP-PFE = Errored Second , type B – Path, DS3 CP-bit parity, Far End

ESBP-P = Errored Second , type B – Path, DS3 P-bit parity

ESCP-P = Errored Second – Path, DS3 CP-bit parity

ESCP-PFE = Errored Second – Path, DS3 CP-bit parity, Far End

ESL = Errored Second – Line

ESP-P = Errored Second – Path, P-bit parity

FCCP-PFE = Failure Count – Path, DS3 CP-bit parity, Far End

FCP = Failure Count – Path, Near End

LOSS-L = Loss of Signal Seconds count – Line

SAS-P = SEF/AIS Second count

SASCP-P = SEF/AIS Second – CP-bit parity

SASCP-PFE = Far End SEF/AIS Second – CP-bit parity

SES-P = Severely Errored Second – Path

SESCP-P = Severely Errored Second – Path, DS3 CP-bit parity

SESCP-PFE = Severely Errored Second – Path, DS3 CP-bit parity, Far End

SESL = Severely Errored Second – Line

UASCP-P = Unavailable Second – Path, DS3 CP-bit parity

UASCP-PFE = Unavailable Second – Path, DS3 CP-bit parity, Far End

UASP-P = Unavailable Second – Path, P-bit parity

Default value: ALL

- monlev** Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- monval** Identifies (in output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates.
Type: integer
Range: {1-9999}
Default value: none
- vldty** Identifies (in output) the validity of the monitored interval.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: none
- locn** Identifies the location of the storage registers or event counters identified by *montype*.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the Plexus 9000. The Plexus 9000 currently returns only the value "BTH".
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: BTH

- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
 NA = Not applicable (no value)
Default value: 15-MIN
- mondatt** Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD.
- Type:** enum
Range: {1-12}-{1-31}
Default value: current date
- montm** Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM.
- Type:** enum
Range: {0-23}-{0-59}
Default value: current time

Input Example:

```
RTRV-PM-C::IOM-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "IOM-1-T3-1:ALL,100,PRTL,FEND,RCV,24-HR,05-14,
    08-45"
;
```

Related Commands: None

RTRV/SET-TH-T1

Commands:

RTRV-TH-T1: Retrieve Threshold DS1 Facility

SET-TH-T1: Set Threshold DS1 Facility

Descriptions:

RTRV-TH-T1 lets the user retrieve the current threshold level of one or more monitored performance counts associated with specific T1 ports in the Plexus 9000. The violation of these thresholds will trigger a condition. Provision thresholds with SET-TH.

SET-TH-T1 lets the user set the performance monitoring parameter threshold levels for T1 ports on DS3 IOMs. This command cannot be used to turn off threshold crossing alerts; i.e., the threshold level cannot be set to some "non-applicable" value. The Plexus 9000 sends a REPT ALM or REPT EVT message when thresholds are exceeded, depending on the notification code associated with the threshold condition. Threshold setting for multiple monitored parameters requires multiple invocations of this command – wildcarding is not permitted.

Category: Facility

Security: NSA for SET-TH, View for RTRV-TH

Input Formats:

RTRV-TH-T1: [TID]:<pm_id>:[CTAG]:[:<montype>],[<locn>],
[<tmper>;

SET-TH-T1: [TID]:<pm_id>:[CTAG]:[:<montype>,<thlev>,
[<locn>],[<dirn>],[<tmper>;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<pm_id>,[<entitytype>]:<montype>,[<locn>],<thlev>,"
  [<tmper>]"
;
```


Parameters:

pm_id Identifies the AID (for SET and RTRV output) as a T1 port on an I/O module. This AID is currently restricted to T1 ports on DS3 IOMs.

Type: T3PORT

Range: IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}

Default value: none

pm_id Identifies the AID (for RTRV input) as either a T1, T3, or STS1 port on an I/O module.

Type: T3orPORT

Range: IOM-{1-17}-STS1-{1-8}[-PORT-{1-28}]
IOM-{1-17}-T3-{1-8}[-PORT-{1-28}]

Default value: none

entitytype Identifies (for RTRV-TH output) the type of facility, link, or other addressable entity targeted by the message.

Type: enum

Range: ALL = Keyword for all entities in range.
COM = Common – designates the Plexus 9000
EQPT = Equipment
LINE = Subscriber line
LINK = Link (except OS/NE link)
PLK = Packet link
SLK = Signaling link
T0 = DS0
T1 = DS1
T3 = DS3
TRK = Trunk

Default value: not applicable for output

montype Identifies a type of monitored parameter for T1 ports on DS3 IOMs, as defined in ANSI T1.231-1997. A null value (in RTRV input) is equivalent to "ALL".

Type: enum

Range: AISS-P = Alarm Indication Signal Seconds Count – Path
ALL = All types (RTRV input only – not valid for SET)
CSS-P = Controlled Slip Second – Path
CSS-PFE = Controlled Slip Second – Path, Far End
CV-L = Coding Violation – Line
CV-P = Coding Violation – Path
CV-PFE = Coding Violation – Path, Far End
ES-L = Errored Second – Line
ES-LFE = Errored Second – Line, Far End
ES-P = Errored Second – Path
ES-PFE = Errored Second – Path, Far End
ESA-P = Errored Second, type A – Path
ESA-PFE = Errored Second, type A – Path, Far End
ESB-P = Errored Second, type B – Path
ESB-PFE = Errored Second, type B – Path, Far End
FC = Failure Count
FC-FE = Failure Count – Far End
LOSS-L = Loss of Signal Seconds – Line
SAS-P = SEF/AIS (Severely Errored Frame / Alarm Indication Signal) Second – Path
SEFS-PFE = Severely Errored Frame Second – Path, Far End
SES-L = Severely Errored Second – Line
SES-P = Severely Errored Second – Path
SES-PFE = Severely Errored Second – Path, Far End
UAS-P = Unavailable Second – Path
UAS-PFE = Unavailable Second – Path, Far End

Default value: ALL

thlev Identifies (for SET-TH and RTRV-TH output) the current threshold level for the monitored parameter identified by *montype*. The value for *thlev* (in SET-TH) must be within the range specified for the affected *montype* in Table 17 of ANSI T1.231-1997 (extracted below).

Type: integer

Range:

Parameter	Threshold range	
	15 minute	Day
CV	1-16383	1-1048575
CSS, ES, SAS, SES, UAS	1-900	1-65535
Notes: 1. For CVs, the upper end of the range is based on a 14-bit register for the 15-minute interval and a 20-bit register for the 1-day interval. 2. The 15-minute and 1-day ranges for the CSS, ES, SAS, SES, and UAS parameters correspond to 100% and 76% of possible seconds, respectively.		

Default value: none

locn Identifies the location of the storage registers or event counters to be initialized. A null value defaults to both “FEND” and “NEND”.

Type: enum

Range: FEND = Far end
NEND = Near end

Default value: both FEND and NEND

dirn Identifies the direction in which to set the threshold relative to the entity identified by the AID. A null value defaults to all applicable directions (currently only “BTH”). This parameter is not supported presently; leave it blank.

Type: enum

Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive

Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods.

Type: enum

Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

Input Examples:

```
RTRV-TH-T1::IOM-1-T3-1-PORT-1:::LOSS-L,NEND,15-MIN;  
SET-TH-T1::IOM-1-T3-1-PORT-1:::LOSS-L,900,NEND,,  
15-MIN;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"IOM-1-T3-1-PORT-1,T1:LOSS-L,NEND,900,15-MIN"  
;
```

Related Commands: none

RTRV/SET-TH-T3

Commands:

RTRV-TH-T3: Retrieve Threshold DS3 Facility

SET-TH-T3: Set Threshold DS3 Facility

Descriptions:

RTRV-TH-T3 lets the user retrieve the current threshold level of one or more monitored performance counts associated with specific T3 ports in the Plexus 9000. The violation of these thresholds will trigger a condition. Provision thresholds with SET-TH.

SET-TH-T3 lets the user set the performance monitoring parameter threshold levels for T3 ports. This command cannot be used to turn off threshold crossing alerts; i.e., the threshold level cannot be set to some "non-applicable" value. The Plexus 9000 sends a REPT ALM or REPT EVT message when thresholds are exceeded, depending on the notification code associated with the threshold condition. Threshold setting for multiple monitored parameters requires multiple invocations of this command – wildcarding is not permitted.

Category: Facility

Security: NSA for SET-TH, View for RTRV-TH

Input Formats:

RTRV-TH-T3: [TID]:<pm_id>:[CTAG]:[:<montype>],[<locn>],
[<tmper>;

SET-TH-T3: [TID]:<pm_id>:[CTAG]:[:<montype>,<thlev>,
[<locn>],[<dirn>],[<tmper>;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<pm_id>,[<entitytype>]:<montype>,[<locn>],<thlev>,"
    [<tmper>]"
;
```

Parameters:

pm_id Identifies the AID (for SET and RTRV input) either as a DS3 I/O module (by slot number), or as a T3 port on a DS3 I/O module (by slot number and port number).

Type: IOMorT3

Range: IOM- $\{1-17\}$
IOM- $\{1-17\}$ -T3- $\{1-8\}$

Default value: none

pm_id Identifies the AID (for RTRV output) as a T3 port on a DS3 I/O Module in the Plexus 9000.

Type: T3

Range: IOM- $\{1-17\}$ -T3- $\{1-8\}$

Default value: none

entitytype Identifies (for RTRV-TH output) the type of facility, link, or other addressable entity targeted by the message.

Type: enum

Range: ALL = Keyword for all entities in range.
COM = Common – designates the Plexus 9000
EQPT = Equipment
LINE = Subscriber line
LINK = Link (except OS/NE link)
PLK = Packet link
SLK = Signaling link
T0 = DS0
T1 = DS3
T3 = DS3
TRK = Trunk

Default value: not applicable for output

montype Identifies a type of monitored parameter for T1 ports on DS3 IOMs, as defined in ANSI T1.231-1997. A null value (in RTRV input) is equivalent to "ALL".

Type: enum

Range: AISS-P = Alarm Indication Signal Seconds – Path
ALL = All types (RTRV input only – not valid for SET)
CVCP-P = Coding Violation – Path, DS3 CP-bit parity
CVCP-PFE = Coding Violation – Path, Far End, DS3 CP-bit parity
CVL = Coding Violation – Line
CVP-P = Coding Violation – Path, P-bit parity
ESA-L = Errored Second , type A – Line
ESACP-P = Errored Second , type A – Path, DS3 CP-bit parity
ESACP-PFE = Errored Second , type A – Path, DS3 CP-bit parity, Far End
ESAP-P = Errored Second , type A – Path, DS3 P-bit parity
ESB-L = Errored Second , type B – Line
ESBCP-P = Errored Second , type B – Path, DS3 CP-bit parity
ESBCP-PFE = Errored Second , type B – Path, DS3 CP-bit parity, Far End
ESBP-P = Errored Second , type B – Path, DS3 P-bit parity
ESCP-P = Errored Second – Path, DS3 CP-bit parity
ESCP-PFE = Errored Second – Path, DS3 CP-bit parity, Far End
ESL = Errored Second – Line
ESP-P = Errored Second – Path, P-bit parity
FCCP-PFE = Failure Count – Path, DS3 CP-bit parity, Far End
FCP = Failure Count – Path, Near End
LOSS-L = Loss of Signal Seconds count – Line
SAS-P = SEF/AIS Second count
SASCP-P = SEF/AIS Second – CP-bit parity
SES-P = Severely Errored Second – Path
SESCP-P = Severely Errored Second – Path, DS3 CP-bit parity
SESCP-PFE = Severely Errored Second – Path, DS3 CP-bit parity, Far End
SESL = Severely Errored Second – Line
UASCP-P = Unavailable Second – Path, DS3 CP-bit parity
UASCP-PFE = Unavailable Second – Path, DS3 CP-bit parity, Far End
UASP-P = Unavailable Second – Path, P-bit parity

Default value: ALL

thlev Identifies (for SET-TH and RTRV-TH output) the current threshold level for the monitored parameter identified by *montype*. The value for *thlev* (in SET-TH) must be within the range specified for the affected *montype* in Table 17 of ANSI T1.231-1997 (extracted below).

Type: integer

Range:

Parameter	Threshold range	
	15 minute	Day
CV	1-16383	1-1048575
CSS, ES, SAS, SES, UAS	1-900	1-65535
Notes: 3. For CVs, the upper end of the range is based on a 14-bit register for the 15-minute interval and a 20-bit register for the 1-day interval. 4. The 15-minute and 1-day ranges for the CSS, ES, SAS, SES, and UAS parameters correspond to 100% and 76% of possible seconds, respectively.		

Default value: none

locn Identifies the location of the storage registers or event counters to be initialized. A null value defaults to both “FEND” and “NEND”.

Type: enum

Range: FEND = Far end

NEND = Near end

Default value: both FEND and NEND

dirn Identifies the direction in which to set the threshold relative to the entity identified by the AID. A null value defaults to all applicable directions (currently only “BTH”). This parameter is not supported presently; leave it blank.

Type: enum

Range: AZ = Transmit

BTH = Both directions

NA = Not applicable

RCV = Receive direction only

TDTC = Transmit direction toward customer

TDTN = Transmit direction toward network

TRMT = Transmit direction only

ZA = Receive

Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods.

Type: enum

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

Input Examples:

```
RTRV-TH-T3::IOM-1-T3-1:::LOSS-L,NEND,15-MIN;
```

```
SET-TH-T3::IOM-1-T3-1:::LOSS-L,900,NEND,,15-MIN;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"IOM-1-T3,T3:LOSS-L,NEND,900,15-MIN"
;
```

Related Commands: none

RTRV-STATE-PORTS

Command:

RTRV-STATE-PORTS: Retrieve State Ports

Description:

RTRV-STATE-PORTS lets the user retrieve the primary and secondary states for all ports on a specific IOM.

Category: Facility

Security: View

Input Format:

RTRV-STATE-PORTS:[TID]:<ioModule>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<port>:<pst>,<sst>"
;
```

Parameters:

ioModule Identifies the AID (in input) as an I/O module in the Plexus 9000.

Type: IOMODULE

Range: IOM-{1-17}

Default value: none

port Identifies the AID (in output) as a T1 port on an I/O Module in the Plexus 9000.

Type: PORT

Range: IOM-{1-17}-PORT-{1-28}

IOM-{1-17}-STS1-{1-8}-PORT-{1-28}

IOM-{1-17}-T3-{1-8}-PORT-{1-28}

Default value: none

- pst** Identifies the primary state of the port.
Type: enum
Range: IS = In-Service
IS-NR = In-Service, Normal
OOS = Out-Of-Service
OOS-AU = Out-Of-Service, Autonomous
OOS-MA = Out-Of-Service, Managed
OOS-AUMA = Out-Of-Service, Autonomous and Managed
Default value: none
- sst** Identifies the secondary state of the port.
Type: enum
Range: ACT = Active
FAF = Facilities Failure
FEPO = Far End Processor Outage
FLT = Faulted
LPBK = Loopback
SGEO = Supporting Entity Outage
UAS = Unassigned
WRK = Working
Default value: AINS

Input Example:

```
RTRV-STATE-PORTS::IOM-2;
```

Output Examples:

Example 1: DS1 IOM

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"IOM-2-PORT-1:OOS-AU,FAF"
"IOM-2-PORT-2:OOS-AU,FAF"
"IOM-2-PORT-3:OOS-AU,FAF"
"IOM-2-PORT-4:OOS-AU,FAF"
"IOM-2-PORT-5:OOS-AU,FAF"
"IOM-2-PORT-6:OOS-AU,FAF"
"IOM-2-PORT-7:OOS-AU,FAF"
"IOM-2-PORT-8:OOS-AU,FAF"
"IOM-2-PORT-9:OOS-AU,FAF"
"IOM-2-PORT-10:OOS-AU,FAF"
"IOM-2-PORT-11:OOS-AU,FAF"
"IOM-2-PORT-12:OOS-AU,FAF"
"IOM-2-PORT-13:OOS-AU,FAF"
"IOM-2-PORT-14:OOS-AU,FAF"
```

```
"IOM-2-PORT-15:00S-AU, FAF"  
"IOM-2-PORT-16:00S-AU, FAF"  
"IOM-2-PORT-17:00S-AU, FAF"  
"IOM-2-PORT-18:00S-AU, FAF"  
"IOM-2-PORT-19:00S-AU, FAF"  
"IOM-2-PORT-20:00S-AU, FAF"  
"IOM-2-PORT-21:00S-AU, FAF"  
"IOM-2-PORT-22:00S-AU, FAF"  
"IOM-2-PORT-23:00S-AU, FAF"  
"IOM-2-PORT-24:00S-AU, FAF"  
"IOM-2-PORT-25:00S-AU, FAF"  
"IOM-2-PORT-26:IS"  
"IOM-2-PORT-27:IS"  
"IOM-2-PORT-28:IS"  
;
```

Example 2: DS3 IOM

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"IOM-2-T3-1-PORT-1:00S-AU, FAF"  
[...]  
"IOM-2-T3-1-PORT-28:00S-AU, FAF"  
"IOM-2-T3-2-PORT-1:00S-AU, FAF"  
[...]  
"IOM-2-T3-2-PORT-28:00S-AU, FAF"  
[...]  
;
```

Related Commands: none

RTRV-STATS-ENET

Command:

RTRV-STATS-ENET: Retrieve Statistics ENET Facility

Description:

RTRV-STATS-ENET lets the user retrieve statistics for an Ethernet port. Use this command to retrieve the number of packets and bytes transmitted and received.

Category: Facility

Security: View

Input Format:

RTRV-STATS-ENET : [TID] : <enetId> : [CTAG] ;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<enetId>:[MACADDR=<macaddr>],
    [SUCCESSFUL-PKT-TX=<successfulPktTx>],
    [SUCCESSFUL-PKT-RX=<successfulPktRx>],
    [ERROR-PKT-TX=<errorPktTx>],
    [ERROR-PKT-RX=<errorPktRx>],
    [NUM-PAUSE-FRM-TX=<numPauseFrmTx>],
    [NUM-PAUSE-FRM-RX=<numPauseFrmRx>],
    [TOTAL-BYTES-TX=<totalBytesTx>],
    [TOTAL-BYTES-RX=<totalBytesRx>],
    [TOTAL-ERR-BYTES-TX=<totalErrBytesTx>],
    [TOTAL-ERR-BYTES-RX=<totalErrBytesRx>]"
;
```

Parameters:

enetId Identifies the AID (for RTRV input) as an Ethernet port on an I/O module. A null value for the second part of the AID is equivalent to "ALL"; that is, by leaving the field blank, statistics will be returned for all Ethernet ports configured on the specified I/O module.

Type: IOMorENET
Range: IOM-{8}[-ENET-{1-4}]
Default value: none

- enetId** Identifies the AID (for RTRV output) as an Ethernet port on an I/O Module in the Plexus 9000.
Type: ENET
Range: IOM-{8,10}-ENET-{1-4}
Default value: none
- macaddr** Identifies the MAC (Medium Access Control) address for the Ethernet port.
Type: string
Range: six hex bytes separated by spaces
Default value: none
- successfulPktTx** Identifies the total number of packets successfully transmitted.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- successfulPktRx** Identifies the total number of packets successfully received.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- errorPktTx** Identifies the total number of packets transmitted with errors.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- errorPktRx** Identifies the total number of packets received with errors.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- numPauseFrmTx** Identifies the total number of paused frames transmitted.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- numPauseFrmRx** Identifies the total number of paused frames received.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none

totalBytesTx Identifies the total number of bytes transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

totalBytesRx Identifies the total number of bytes received.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

totalErrBytesTx Identifies the total number of bytes transmitted with errors.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

totalErrBytesRx Identifies the total number of bytes received with errors.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

Input Example:

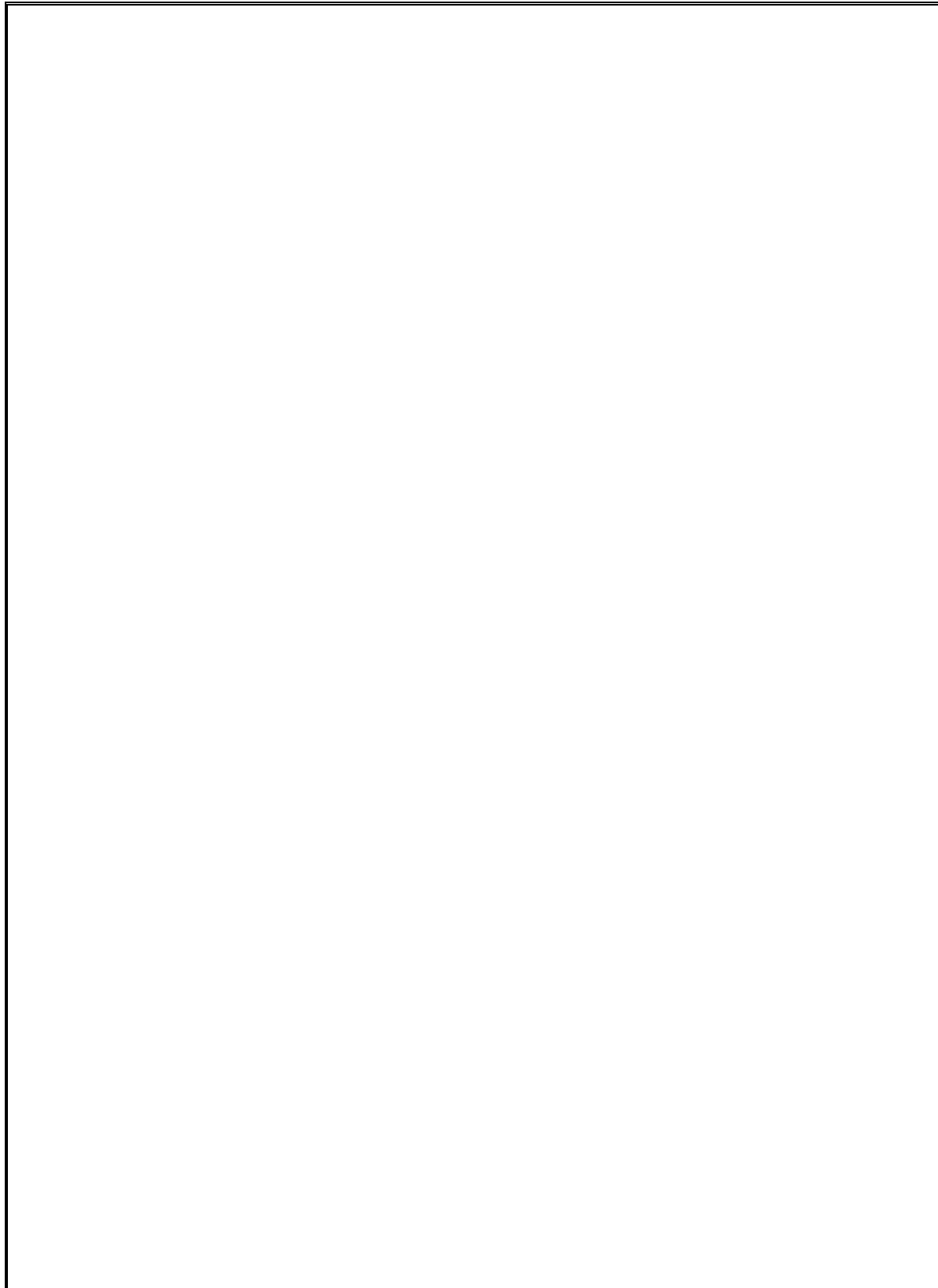
```
RTRV-STATS-ENET::IOM-8-ENET-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"IOM-8-ENET-1:MACADDR=0 30 fa 0 12 35,
  SUCCESSFUL-PKT-TX=0, SUCCESSFUL-PKT-RX=0,
  ERROR-PKT-TX=0, ERROR-PKT-RX=0,
  NUM-PAUSE-FRM-TX=0, NUM-PAUSE-FRM-RX=0,
  TOTAL-BYTES-TX=0, TOTAL-BYTES-RX=0,
  TOTAL-ERR-BYTES-TX=0, TOTAL-ERR-BYTES-RX=0"
;
```

Related Commands: none

NOTES

A large, empty rectangular box with a thin black border, occupying the majority of the page below the 'NOTES' header. It is intended for handwritten or typed notes.

DLT/ENT/RTRV-IPROUTE

Commands:

DLT-IPROUTE: Delete IPROUTE

ENT-IPROUTE: Enter IPROUTE

RTRV-IPROUTE: Retrieve IPROUTE

Descriptions:

DLT-IPROUTE lets the user delete an established route.

ENT-IPROUTE lets the user establish an IP route from a gateway on the local subnet to a specified destination network.

RTRV-IPROUTE lets the user retrieve the IP address of the gateway on the local subnet used to reach a specified destination network.

Category: Equipment

Security: SA for all commands

Input Formats:

DLT-IPROUTE: [TID]:<srcid>:[CTAG];

ENT-IPROUTE: [TID]:<srcid>:[CTAG]::GATEWAY=<gateway>;

RTRV-IPROUTE: [TID]:<srcid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<srcid>:GATEWAY=<gateway>"
;
```

Parameters:

srcid Identifies the AID as a configured route by defining the affected module, the destination IP address, and the subnet mask in CIDR (Classless Inter-Domain Routing) notation. You can add a default gateway to an SP by specifying destination IP address "0.0.0.0" with subnet mask "0" (and the mandatory subnet gateway parameter). The subnet mask must be "0" when the IP address is "0.0.0.0". You cannot use IP address "127.0.0.1" (reserved for loopback) or "255.255.255.255" (reserved for broadcast).

Type: string

Range: <spOrIom>-<destIpAddr>-<subnetMask>, where
spOrIom = IOM-{8,10} or SP
destIpAddr = {0-255}.{0-255}.{0-255}.{0-255}
subnetMask = {0-32}

Default value: none

gateway Identifies the IP address of the gateway on the local subnet used to reach the specified destination network. You cannot use IP addresses "0.0.0.0" (reserved for loopback), "127.0.0.1" (reserved for loopback), and "255.255.255.255" (reserved for broadcast).

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

Input Examples:

```
DLT-IPROUTE::IOM-10-192.168.0.1-8;  
ENT-IPROUTE::IOM-10-192.168.0.1-8:::GATEWAY=10.0.0.90;  
RTRV-IPROUTE::IOM-10-192.168.0.1-8;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"IOM-10-192.168.0.1-8:GATEWAY=10.0.0.90"  
;
```

Related Commands: none

ED/RTRV-CHASSIS-EQPT

Commands:

ED-CHASSIS-EQPT: Edit CHASSIS Equipment

RTRV-CHASSIS-EQPT: Retrieve CHASSIS Equipment

Descriptions:

ED-CHASSIS-EQPT lets the user edit the properties of a Plexus 9000 chassis. Use ED-CHASSIS-EQPT to set the system's CLI code and IP addresses. The IP addresses for the element manager, craft, and signaling ports must be on different networks.

RTRV-CHASSIS-EQPT lets the user retrieve the properties of a Plexus 9000 chassis. Retrieved properties include the system's shelf number, gateway function, CLI code, location, and IP addresses.

Category: Equipment

Security: SA for ED, View for RTRV

Input Formats:

```
ED-CHASSIS-EQPT:[TID]:[<com>]:[CTAG]::
[SHELFID=<shelfId>],[CHASSISTYPE=<chassisType>],
[CLLI=<clli>],[LOC=<loc>],[EMIPSPA=<emIPSPA>],
[CRAFTIPSPA=<craftIPSPA>],
[SIGNALINGIPSPA=<signalingIPSPA>],
[EMIPSPB=<emIPSPB>],[CRAFTIPSPB=<craftIPSPB>],
[SIGNALINGIPSPB=<signalingIPSPB>],
[EMIPMASK=<emIPMask>],[CRAFTIPMASK=<craftIPMask>],
[SIGNALINGIPMASK=<signalingIPMask>],
[SIGNALINGIPCHASSIS=<signalingIPChassis>],
[DNSIP1=<dnsIP1>],[DNSIP2=<dnsIP2>],
[NTPSERVIP1=<ntpserveIP1>],
[NTPSERVIP2=<ntpserveIP2>],[DNSNAME=<dnsName>];

RTRV-CHASSIS-EQPT:[TID]:[<com>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<com>:SHELFID=<shelfId>,CHASSISTYPE=<chassisType>,
 [CLLI=<clli>],[LOC=<loc>],EMIPSPA=<emIPSPA>,
 CRAFTIPSPA=<craftIPSPA>,
 SIGNALINGIPSPA=<signalingIPSPA>,
 EMIPSPB=<emIPSPB>,CRAFTIPSPB=<craftIPSPB>,
 SIGNALINGIPSPB=<signalingIPSPB>,
 EMIPMASK=<emIPMask>,CRAFTIPMASK=<craftIPMask>,
 SIGNALINGIPMASK=<signalingIPMask>,
 SIGNALINGIPCHASSIS=<signalingIPChassis>,
 DEFAULTGATEWAY=<defaultGateway>,
 DNSIP1=<dnsIP1>],[DNSIP2=<dnsIP2>,
 NTPSERVIP1=<ntp servIP1>,
 NTPSERVIP2=<ntp servIP2>,DNSNAME=<dnsName>"
;
```

Parameters:

- com** Identifies the AID as a Plexus 9000.
Type: COM
Range: COM
Default value: COM
- shelfId** Identifies the shelf containing the Plexus 9000; the factory default "NULL" indicates "not applicable." This parameter has meaning only for installations containing more than one Plexus 9000.
Type: enum
Range: 1-64
Default value: not applicable
- chassisType** Identifies the gateway function for the Plexus 9000.
Type: enum
Range: MG = Media gateway
MGC = Media gateway controller
MGM = Media gateway with MEGACO
SG = Signaling gateway
BOTH = Both media and signaling gateway
Default value: not applicable

- cli** Identifies the CLI code for the Plexus 9000.
Type: string
Range: up to 20 alphanumeric characters
Default value: not applicable
- loc** Identifies the location of the Plexus 9000.
Type: string
Range: up to 63 alphanumeric characters
Default value: not applicable
- emIPSPA** Identifies the IP address of the element manager port on SP A.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: not applicable
- craftIPSPA** Identifies the IP address of the craft port on SP A.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: not applicable
- signalingIPSPA** Identifies the IP address of the signaling port on SP A.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: not applicable
- emIPSPB** Identifies the IP address of the element manager port on SP B.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: not applicable
- craftIPSPB** Identifies the IP address of the craft port on SP B.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: not applicable
- signalingIPSPB** Identifies the IP address of the signaling port on SP B.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: not applicable

emIPMask Identifies the element manager interface subnet mask.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

craftIPMask Identifies the craft interface subnet mask.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

signalingIPMask Identifies the signaling interface subnet mask.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

signalingIPChassis Identifies the signaling interface IP address, maintained regardless of the state of either the working or protection SP.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

dnsIP1 Identifies the IP address of the primary Domain Name Server.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

dnsIP2 Identifies the IP address of the secondary Domain Name Server.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

ntpservIP1 Identifies the IP address of the primary Network Time Protocol server. If neither NTP server is provisioned, the Plexus 9000 internal clock derives the time from either the internal UNIX clock, the BITS interface, or an IOM.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

ntpserVIP2 Identifies the IP address of the secondary Network Time Protocol server.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

dnsName Identifies the domain name for the Plexus 9000.

Type: string

Range: up to 64 alphanumeric characters

Default value: not applicable

Input Examples:

```
ED-CHASSIS-EQPT::::SHELFID=NULL,CHASSISTYPE=BOTH,  
  CLI=alpha2telica,LOC=alphalab,EMIPSPA=10.7.25.26,  
  CRAFTIPSPA=0.0.0.0,SIGNALINGIPSPA=10.6.25.26,  
  EMIPSPB=10.7.25.27,CRAFTIPSPB=0.0.0.0,  
  SIGNALINGIPSPB=10.6.25.27,EMIPMASK=255.255.0.0,  
  CRAFTIPMASK=255.255.0.0,  
  SIGNALINGIPMASK=255.255.0.0,  
  SIGNALINGIPCHASSIS=10.6.25.28,DNSIP1=0.0.0.0,  
  DNSIP2=0.0.0.0,NTPSERVIP1=0.0.0.0,  
  NTPSERVIP2=0.0.0.0,DNSNAME=NULL;  
  
RTRV-CHASSIS-EQPT;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:SHELFID=0,CHASSISTYPE=BOTH,CLI=alpha2telica,  
  LOC=alphalab,EMIPSPA=10.7.25.26,  
  CRAFTIPSPA=0.0.0.0,  
  SIGNALINGIPSPA=10.6.25.26,EMIPSPB=10.7.25.27,  
  CRAFTIPSPB=0.0.0.0,SIGNALINGIPSPB=10.6.25.27,  
  EMIPMASK=255.255.0.0,CRAFTIPMASK=255.255.0.0,  
  SIGNALINGIPMASK=255.255.0.0,  
  SIGNALINGIPCHASSIS=10.6.25.28,DNSIP1=0.0.0.0,  
  DNSIP2=0.0.0.0,NTPSERVIP1=0.0.0.0,  
  NTPSERVIP2=0.0.0.0,DNSNAME=NULL"  
;
```

Related Commands:

RTRV-INFO-CHASSIS

ED/RTRV-TMGREF

Commands:

ED-TMGREF: Edit Timing Reference

RTRV-TMGREF: Retrieve Timing Reference

Descriptions:

ED-TMGREF lets the user change the port to use for the timing reference on a Plexus 9000.

RTRV-TMGREF lets the user retrieve the properties associated with the timing reference source(s) on a Plexus 9000.

Category: Equipment

Security: NSA for ED, View for RTRV

Input Formats:

ED-TMGREF: [TID]: [<src>]: [CTAG]::<primarySrcType>;

RTRV-TMGREF: [TID]: [<src>]: [CTAG]::<prisrc>;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:<prisrc>,<ref>,<lockState>"
;
```

Parameters:

src Identifies the AID as the Plexus 9000.

Type: COM

Range: COM

Default value: COM

primarySrcType Identifies (for ED) the primary source for the timing reference.

If the primary source is an IOM from one of the IOM sets in the range, the other IOM in that set is the secondary source. IOM- $\{1,2\}$ are used if the timing reference is on a T1 port, and IOM- $\{8,10\}$ are used if the timing reference is on an optical port. If the timing reference is from the BITS interface (TMG-E1/T1), select the primary source with the [ENT-T1](#) command.

Type: enum

Range: IOM- $\{1,2\}$
IOM- $\{8,10\}$
TMG-E1 (not supported)
TMG-T1

Default value: none

prisrc Identifies (for RTRV) the primary source for the timing reference. If the primary source is an IOM from one of the IOM sets in the range, the other IOM in that set is the secondary source. IOM- $\{1,2\}$ are used if the timing reference is on a T1 port, and IOM- $\{8,10\}$ are used if the timing reference is on an optical port. If the timing reference is from the BITS interface (TMG), primary source selection is accomplished with the [ENT-T1](#) command. A null value is equivalent to "ALL"; that is, by leaving the field blank, the properties of both the primary and secondary sources will be returned.

Type: enum

Range: IOM- $\{1,2\}$
IOM- $\{8,10\}$
TMG

Default value: none

ref Identifies the state of the timing reference source. If the timing reference is from the BITS interface (TMG), *ref* indicates whether the source is primary or secondary. If the timing reference is from an IOM, *ref* indicates whether the source is in service and active, in service and on standby, or out of service.

Type: enum

Range: ACTIVE
OOS
PRIMARY
SECONDARY
STANDBY

Default value: none

lockState Identifies whether the timing reference source is locked; that is, whether the source is enabled to provide the timing reference.

Type: enum

Range: FLT
FREERUN
HOLDOVER
IS
LOCKED
LOCKED_IOM1
LOCKED_IOM10
LOCKED_IOM2
LOCKED_IOM8
LOCKED_TMGA
LOCKED_TMGB
OOS
UNLOCKED

Default value: none

Input Examples:

```
ED-TMGREF:::::IOM-1;  
RTRV-TMGREF;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:TMG-A, PRIMARY, IS"  
"COM:TMG-B, SECONDARY, OOS"  
"COM:SP-A-TMGMODULE, OOS, LOCKED_TMGA"  
"COM:SP-B-TMGMODULE, ACTIVE, LOCKED_TMGA"  
;
```

Related Commands: none

RTRV-INFO-CHASSIS

Command:

RTRV-INFO-CHASSIS: Retrieve INFO CHASSIS

Description:

RTRV-INFO-CHASSIS lets the user retrieve information about a Plexus 9000 chassis. Retrieved properties include the chassis' serial number, hardware version, CLEI code, network element type, number of slots in the chassis, and number of faults.

Category: Equipment

Security: View

Input Format:

RTRV-INFO-CHASSIS: [TID]: [<com>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<com>:SERIALNUMBER=<serialNumber>,
    HWVERSION=<hwVersion>,CLEI=<clei>,
    NETYPE=<neType>,SLOTCOUNT=<slotCount>,
    CRITICALFAULTS=<criticalFaults>,
    MAJORFAULTS=<majorFaults>,
    MINORFAULTS=<minorFaults>,TEMPFAULT=<tempFault>,
    TEMPFAULTCOUNT=<tempFaultCount>,
    POWERA=<powerA>,POWERB=<powerB>"
;
```

Parameters:

com Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

serialNumber Identifies the serial number for the Plexus 9000.

Type: string

Range: ANSI characters

Default value: none

hwVersion Identifies the hardware version for the Plexus 9000.

Type: string

Range: ANSI characters

Default value: none

clei Identifies the CLEI code for the Plexus 9000.

Type: string

Range: 10 alphanumeric characters

Default value: none

neType Identifies the Plexus 9000 as a specific type of network element.

Type: enum

Range: ADM = Add drop multiplexer.

ADTS = Automated digital timing system.

APS = Automatic protection switching equipment.

CS = Circuit switch.

DCS = Digital cross-connect switch.

DLC = Digital loop carrier system.

EDSX = Electronic digital signal cross-connect.

EM = Environment monitors.

ISDN = Integrated services digital network switch.

LBRV = Low bit rate voice terminal.

LDS = Local digital switch.

LTE = Line terminating equipment.

MUX = Multiplexer.

PS = Packet switch.

REP = Repeater.

SCP = Service control point.

SS = Supervisory system.

STP = Signal transfer point.

TSG = Timing signal generator.

Default value: none

slotCount Identifies the number of slots in the chassis. The value is 21 for the Plexus 9000.

Type: integer

Range: {1-21}

Default value: none

criticalFaults Identifies the number of critical faults in the Plexus 9000.

Type: integer
Range: {1-9999}
Default value: none

majorFaults Identifies the number of major faults in the Plexus 9000.

Type: integer
Range: {1-9999}
Default value: none

minorFaults Identifies the number of minor faults in the Plexus 9000.

Type: integer
Range: {1-9999}
Default value: none

tempFault Indicates whether there is currently an outstanding temperature fault against the chassis.

Type: enum
Range: OKAY = no outstanding temperature fault
FAIL = outstanding temperature fault exists
Default value: none

tempFaultCount Identifies the number of temperature faults that have occurred in the Plexus 9000 since initialization.

Type: integer
Range: {1-9999}
Default value: none

powerA Identifies the state of power feed A.

Type: enum
Range: OKAY = power is present at power feed A
FAIL = power not present at power feed A
Default value: none

powerB Identifies the state of power feed B.

Type: enum
Range: OKAY = power is present at power feed B
FAIL = power not present at power feed B
Default value: none

Input Example:

RTRV-INFO-CHASSIS;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:SERIALNUMBER=001001,HWVERSION=0.2,
  CLEI=BA9IAA0AAA,NETYPE=ISDN,SLOTCOUNT=21,
  CRITICALFAULTS=0,MAJORFAULTS=0,MINORFAULTS=0,
  TEMPFAULT=OKAY,TEMPFAULTCOUNT=0,POWERA=OKAY,
  POWERB=OKAY"
;
```

Related Commands:

ED/RTRV-CHASSIS-EQPT

ALW/INH-EX-EQPT / RTRV-EXSCHED-EQPT / SCHED-EX-EQPT

Commands:

ALW-EX-EQPT: Allow Exercise Equipment
INH-EX-EQPT: Inhibit Exercise Equipment
RTRV-EXSCHED-EQPT: Retrieve Exercise Schedule Equipment
SCHED-EX-EQPT: Schedule Exercise Equipment

Descriptions:

ALW-EX-EQPT instructs the Plexus 9000 to allow scheduled periodic exercises for an IOM or SP card in the Plexus.

INH-EX-EQPT instructs the Plexus 9000 to inhibit scheduled periodic exercises for an IOM or SP card in the Plexus.

RTRV-EXSCHED-EQPT retrieves parameters associated with scheduled periodic exercises for an IOM or SP card in the Plexus 9000.

SCHED-EX-EQPT lets the user schedule periodic exercises for an IOM or SP card in the Plexus 9000. When SCHED-EX-EQPT is issued against an IOM that is not provisioned, the command will return a DENY “entity does not exist”. You cannot schedule periodic exercises for a protection IOM. Deleting an IOM deletes its scheduling information.

Category: Equipment

Security: NSA for ALW/INH/SCHED,
View for RTRV

Input Formats:

ALW-EX-EQPT: [TID]:<iomOrSp>:[CTAG];
INH-EX-EQPT: [TID]:<iomOrSp>:[CTAG];
RTRV-EXSCHED-EQPT: [TID]: [<iomOrSp>]: [CTAG];
SCHED-EX-EQPT: [TID]:<iomOrSp>:[CTAG]: :::[<invl>],
[<statm>], [<numinvl>], [<reptmode>];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<iomOrSp>:<invl>,<statm>,<numinvl>,<reptmode>,<inhmode>"
;
```

Parameters:

iomOrSp Identifies the AID as the SP/TMG or I/O module for which to allow or inhibit scheduled periodic exercises (for ALW/INH), the module for which scheduled periodic exercises exist (for RTRV), or the module for which to schedule periodic exercises (for SCHED). A null value (in RTRV) is equivalent to “ALL”; that is, by leaving the field blank, parameters associated with scheduled periodic exercises will be returned for all configured modules.

Type: IOMorSP

Range: IOM-{1-17}
SP-{A-B}

Default value: none

invl Identifies the interval; i.e., the frequency at which the exercise runs. The Plexus 9000 returns a value of “0-HR” for *invl* when you run RTRV-EXSCHED-EQPT the first time (that is, before you’ve ever run SCHED-EX-EQPT).

Type: enum

Range: {1-31}-DAY
{1-24}-HR

Default value: 24-HR

statm Identifies the start time; i.e., the time to begin the scheduled exercise. The format for *statm* is HOD-MOH (hour-of-day, minute-of-hour). Default is the current time of day.

Type: enum

Range: {0-23}-{0-59}

Default value: current time of day

numinvl Identifies the number of intervals; i.e., it specifies the number of times to run a particular scheduled exercise. The default value of “0” indicates that the exercise is to be stopped, or is stopped. A value of “1000” indicates that the scheduled exercise will run until *numinvl* is changed.

Type: integer

Range: {0-1000}

Default value: 0

reptmode Identifies the report mode, which indicates how to report the results of an executed scheduled event.

Type: enum

Range: ALL = Report results of all exercises
FAIL = Report results of failed exercises
NULL = On input, defaults to FAIL

Default value: FAIL

inhmode Identifies (in RTRV output) whether periodic exercises are currently allowed or inhibited on the IOM.

Type: enum

Range: ALW = periodic exercises are allowed
INH = periodic exercises are inhibited

Default value: none

Input Examples:

```
ALW-EX-EQPT::IOM-4;
```

```
INH-EX-EQPT::IOM-4;
```

```
RTRV-EXSCHED-EQPT::IOM-4;
```

```
SCHED-EX-EQPT::IOM-4:::2-0,1000;
```

The above example schedules an IOM protection switch once a day at 2 AM until the schedule is changed.

```
SCHED-EX-EQPT::SP-A:::7-DAY,4-30,8;
```

The above example schedules an SP protection switch once a week for eight weeks. An SP switch includes a SF protection switch.

```
SCHED-EX-EQPT::IOM-41;
```

The above example turns off a protection exercise, as *numinvl* is zero.

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
  "IOM-1:24-HR,2-0,1000,FAIL,ALW"
;
```

Related Commands: none

ALW/INH-SWTOPROTN-EQPT / SW-TOPROTN-EQPT

Commands:

ALW-SWTOPROTN-EQPT: Allow Switch To Protection Equipment

INH-SWTOPROTN-EQPT: Inhibit Switch To Protection Equipment

SW-TOPROTN-EQPT: Switch To Protection Equipment

Descriptions:

ALW-SWTOPROTN-EQPT instructs the Plexus 9000 to allow automatic or manual switching to protection of a previously-inhibited I/O Module. ALW-SWTOPROTN-EQPT applies only to I/O Modules configured as primary (working, protected). The AID parameter specifies the working I/O Module being allowed. This function is sometimes called release lockon or release lockout.

INH-SWTOPROTN-EQPT instructs the Plexus 9000 to inhibit automatic or manual switching to protection of an I/O Module. INH-SWTOPROTN-EQPT applies only to I/O Modules configured as primary. The AID parameter specifies the working I/O Module being inhibited. This function is sometimes called release lockon or release lockout.

SW-TOPROTN-EQPT instructs the Plexus 9000 to perform a protection switch; i.e., to switch the traffic from a specified working module to the protection module. SW-TOPROTN-EQPT cannot be issued to a module for which an INH-SWTOPROTN-EQPT command has been issued, unless an ALW-SWTOPROTN-EQPT command is issued first.

Category: Equipment

Security: SA for all commands

Input Formats:

```
ALW-SWTOPROTN-EQPT:[TID]:<sw_id>:[CTAG];  
INH-SWTOPROTN-EQPT:[TID]:<sw_id>:[CTAG]::[<dirn>;  
SW-TOPROTN-EQPT:[TID]:<iom0rSp>:[CTAG]::[<mode>],  
[<protid>],[<dirn>;
```

Output Formats: none

Parameters:

- sw_id** Identifies the AID (for ALW/INH) as an I/O module in the Plexus 9000.
Type: IOMODULE
Range: IOM-{1-17}
Default value: none
- iomOrSp** Identifies the AID (for SW-TOPROTN-EQPT) as an SP/TMG or I/O module in the Plexus 9000.
Type: IOMorSP
Range: IOM-{1-17}
SP-{A-B}
Default value: none
- mode** Identifies how the module specified by the AID will be removed from service. This parameter is not supported presently; leave it blank.
Type: string
Range: ASCII characters
Default value: none
- protid** Identifies the protection unit to be switched when there is more than one protection unit. This parameter is not supported, as there is only one protection unit; leave it blank.
Type: string
Range: ASCII characters
Default value: none
- dirn** The direction relative to the I/O module in the Plexus 9000 to which the command pertains. This parameter is not supported; leave it blank.
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: NA

Input Examples:

ALW-SWTOPROTN-EQPT::IOM-4;

INH-SWTOPROTN-EQPT::IOM-4;

SW-TOPROTN-EQPT::IOM-4;

Related Commands:

ALW/INH-SWTOWKG-EQPT

SW-TOWKG-EQPT

ALW/INH-SWTOWKG-EQPT / SW-TOWKG-EQPT

Commands:

ALW-SWTOWKG-EQPT: Allow Switch To Working Equipment

INH-SWTOWKG-EQPT: Inhibit Switch To Working Equipment

SW-TOWKG-EQPT: Switch To Working Equipment

Descriptions:

ALW-SWTOWKG-EQPT instructs the Plexus 9000 to allow automatic or manual switching to working of a previously-inhibited I/O Module.

INH-SWTOWKG-EQPT instructs the Plexus 9000 to inhibit automatic or manual switching back to working of an I/O Module.

SW-TOWKG-EQPT instructs the Plexus 9000 to switch a protected working unit back to working; i.e., to switch traffic from the protection module back to a specified working module. SW-TOWKG-EQPT cannot be issued to a module for which an INH-SWTOWKG-EQPT command has been issued, unless an ALW-SWTOWKG-EQPT command is issued first.

Category: Equipment

Security: SA for all commands

Input Formats:

ALW-SWTOWKG-EQPT: [TID]:<src>:[CTAG];

INH-SWTOWKG-EQPT: [TID]:<src>:[CTAG]::[<dirn>];

SW-TOWKG-EQPT: [TID]:<sw_id>:[CTAG]::[<mode>],[<dirn>];

Output Formats: none

Parameters:

src Identifies the AID (for ALW/INH) as an I/O module in the Plexus 9000.

Type: IOMODULE

Range: IOM-{1-17}

Default value: none

- sw_id** Identifies the AID (for SW-TOWKG-EQPT) as an SP/TMG or I/O module in the Plexus 9000.
Type: IOMorSP
Range: IOM-{1-17}
SP-{A-B}
Default value: none
- mode** Identifies how the module specified by the AID will be restored to service. This parameter is not supported presently; leave it blank.
Type: string
Range: ASCII characters
Default value: none
- dirn** The direction relative to the I/O module in the Plexus 9000 to which the command pertains. This parameter is not supported; leave it blank.
Type: enum
Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
Default value: NA

Input Examples:

ALW-SWTOWKG-EQPT::IOM-4;
INH-SWTOWKG-EQPT::IOM-4;
SW-TOWKG-EQPT::IOM-4;

Input Example:

ALW-SWTOWKG-EQPT::IOM-4;

Related Commands:

ALW/INH-SWTOPROT-EQPT SW-TOPROTN-EQPT

CPY-MEM

Command:

CPY-MEM: Copy Memory

Description:

CPY-MEM instructs a Plexus 9000 to copy data from a specified memory storage device (internal or external) to another. This command is used to upgrade the firmware on I/O and System Processor Modules.

Category: Equipment

Security: SW

Input Format:

CPY-MEM: [TID] : <src> : [CTAG] ;

Output Format: none

Parameters:

src Identifies the AID as an SP/TMG or I/O module in the Plexus 9000.

Type: IOMorSP

Range: IOM-{1-17}

SP-{A-B}

Default value: none

Input Example:

CPY-MEM: : IOM-4 ;

Related Commands: None

DLT/ED/ENT/RTRV-EQPT

Commands:

DLT-EQPT: Delete Equipment

ED-EQPT: Edit Equipment

ENT-EQPT: Enter Equipment

RTRV-EQPT: Retrieve Equipment

Descriptions:

DLT-EQPT lets the user disconnect an I/O Module; that is, it allows removing an IOM from the recognized system configuration.

ED-EQPT lets the user edit the properties of a Plexus 9000 module. Use ED-EQPT to change a module's type, redundancy, memory and processor utilization thresholds, software version, and desired state.

ENT-EQPT lets the user initialize the properties of an I/O Module. Use ENT-EQPT to set a module's redundancy, memory and processor utilization thresholds, software version, and desired state.

RTRV-EQPT lets the user retrieve the properties of a Plexus 9000 module. Retrieved properties include the module's type, redundancy, memory and processor utilization thresholds, software version, and primary and secondary states.

Category: Equipment

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-EQPT: [TID]:<ioModule>:[CTAG];

ED-EQPT: [TID]:<iomOrSp>:[CTAG]::
[IOMODULETYPE=<ioModuleType>],[REDUNDANCY=<rn>],
[SPMEMTHRESHOLD=<spMemThreshold>],
[SPNVMEMTHRESHOLD=<spNVMemThreshold>],
[SPBUSYTHRESHOLD=<spBusyThreshold>],
[SWVERSION=<swVersion>]:[<pst>];

ENT-EQPT: [TID]:<ioModule>:[CTAG]:<ioModuleType>,<rn>,<spMemThreshold>,<spNVMemThreshold>,<spBusyThreshold>,<swVersion>:<pst>;

RTRV-EQPT: [TID]:[<iomOrSp>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<iomOrSp>:: [<moduleType>], [<rn>], <spMemThreshold>,
    <spNVMemThreshold>, <spBusyThreshold>,
    [<swVersion>]:<primaryState>, [<secondaryState>]"
;
```

Parameters:

ioModule Identifies the AID (for DLT and ENT) as an I/O module in the Plexus 9000.

Type: IOMODULE

Range: IOM-{1-17}

Default value: none

iomOrSp Identifies the AID (for ED and RTRV) as an SP/TMG or I/O module in the Plexus 9000.

Type: IOMorSP

Range: IOM-{1-17}
SP-{A-B}

Default value: none

ioModuleType Identifies (for ED and ENT) the type of I/O module by its CLEI code.

Type: string

Range: 10 alphanumeric characters

Default value: none

moduleType Identifies (for RTRV output) the type of module by its CLEI code.

Type: string

Range: 10 alphanumeric characters

Default value: none

rn Identifies the redundancy of the module.

Type: enum

Range: PRI = Primary unit of a pair of units. This is the protected unit.

SEC = Secondary unit in a pair of units. This is the protecting unit.

SX = This is a simplex entity.

Default value: none

spMemThreshold Identifies the memory utilization threshold percentage.

Type: integer
Range: {0-100}
Default value: none

spNVMemThreshold Identifies the disk space utilization threshold percentage.

Type: integer
Range: {0-100}
Default value: none

spBusyThreshold Identifies the CPU utilization threshold percentage.

Type: integer
Range: {0-100}
Default value: none

swVersion Identifies the software version for the IOM.

Type: string
Range: ASCII characters, typically four integers separated by periods
Default value: none

pst Identifies (for ED and ENT) the primary state of the IOM. The value indicates the desired state of the IOM.

Type: enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: none

primaryState Identifies (for RTRV output) the primary state of the module. Although this parameter is a string, its values are restricted to IS (In-Service) and OOS (Out-Of-Service), with OOS having possible qualifiers of AU (Autonomous) and MA (Management).

Type: string
Range: alphanumeric characters
Default value: none

secondaryState Identifies (for RTRV output) the secondary state of the module. Although this parameter is a string, its values are restricted to the following:

- ACT = Active
- FLT = Faulted
- INIT = Waiting for initialization
- MEA = Provisioned mismatch
- NBK = No backup
- PRI = Protection release inhibited
- PSI = Protection switch inhibited
- STBYC = Standby cold
- STBYH = Standby hot
- UAS = Unassigned
- UEQ = Unequipped
- UPDT = Update (CPY-MEM currently being performed)
- WRK = Working

Type: string

Range: alphanumeric characters

Default value: none

Input Examples:

```
DLT-EQPT::IOM-4;  
ED-EQPT::IOM-4::IOMODULETYPE=BA9IX72AAA,  
  REDUNDANCY=PRI,SPMEMTHRESHOLD=90,  
  SPNVMEMTHRESHOLD=90,SPBUSYTHRESHOLD=90,  
  SWVERSION=3.8.3.0:IS;  
ENT-EQPT::IOM-4::BA9IX72AAA,SX,90,90,90,3.8.3.0:IS;  
RTRV-EQPT::IOM-4;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
  "IOM-4:BA9IX72AAA,SX,90,90,90,3.8.3.0:IS,ACT"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-EQPT-ALL  
RMV/RST-EQPT
```

DLT/ED/ENT/RTRV-EQPT-ALL

Commands:

DLT-EQPT-ALL: Delete Equipment
ED-EQPT-ALL: Edit Equipment
ENT-EQPT-ALL: Enter Equipment
RTRV-EQPT-ALL: Retrieve Equipment

Descriptions:

DLT-EQPT-ALL lets the user disconnect an I/O Module; that is, it allows removing an IOM from the recognized system configuration.

ED-EQPT-ALL lets the user edit the properties of a Plexus 9000 module. Use ED-EQPT-ALL to change a module's type, redundancy, memory and processor utilization thresholds, software version, rear module type, and desired state.

ENT-EQPT-ALL lets the user initialize the properties of an I/O Module. Use ENT-EQPT-ALL to identify a module and set its redundancy, memory and processor utilization thresholds, software version, rear module type, and desired state.

RTRV-EQPT-ALL lets the user retrieve the properties of a Plexus 9000 module. Retrieved properties include the module's type, redundancy, memory and processor utilization thresholds, software version, and primary and secondary states.

Category: Equipment

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-EQPT-ALL:[TID]:<ioModule>:[CTAG];  
ED-EQPT-ALL:[TID]:<iomOrSp>:[CTAG]::  
  [IOMODULETYPE=<ioModuleType>],[REDUNDANCY=<rn>],  
  [SPMEMTHRESHOLD=<spMemThreshold>],  
  [SPNVMEMTHRESHOLD=<spNVMemThreshold>],  
  [SPBUSYTHRESHOLD=<spBusyThreshold>],  
  [SWVERSION=<swVersion>],  
  [REARMODULETYPE=<rearModuleType>]:<pst>;
```

```
ENT-EQPT-ALL:[TID]:<ioModule>:[CTAG]::
    IOMODULETYPE=<ioModuleType>,REDUNDANCY=<rn>,
    MEMTHRESHOLD=<spMemThreshold>,
    NVMEMTHRESHOLD=<spNVMemThreshold>,
    BUSYTHRESHOLD=<spBusyThreshold>,
    SWVERSION=<swVersion>,
    [REARMODULETYPE=<rearModuleType>]:<pst>;
RTRV-EQPT-ALL:[TID]:[<iomOrSp>]:[CTAG];
```

Output Format:

```
      SID DATE TIME
M  CTAG COMPLD
    "<iomOrSp>:[IOMODULETYPE=<moduleType>],
      [REDUNDANCY=<rn>],MEMTHRESHOLD=<spMemThreshold>,
      NVMEMTHRESHOLD=<spNVMemThreshold>,
      BUSYTHRESHOLD=<spBusyThreshold>,
      [SWVERSION=<swVersion>],
      [REARMODULETYPE=<rearModuleType>]:
      <primaryState>,[<secondaryState>]"
;
```

Parameters:

ioModule Identifies the AID (for DLT and ENT) as an I/O module in the Plexus 9000.

Type: IOMODULE
Range: IOM-{1-17}
Default value: none

iomOrSp Identifies the AID (for ED and RTRV) as an SP/TMG or I/O module in the Plexus 9000.

Type: IOMorSP
Range: IOM-{1-17}
 SP-{A-B}
Default value: none

ioModuleType Identifies (for ED and ENT) the type of I/O module by its CLEI code.

Type: string
Range: 10 alphanumeric characters
Default value: none

moduleType Identifies (for RTRV output) the type of module by its CLEI code.

Type: string

Range: 10 alphanumeric characters

Default value: none

rn Identifies the redundancy of the module.

Type: enum

Range: PRI = Primary unit of a pair of units. This is the protected unit.

SEC = Secondary unit in a pair of units. This is the protecting unit.

SX = This is a simplex entity.

Default value: none

spMemThreshold Identifies the memory utilization threshold percentage.

Type: integer

Range: {0-100}

Default value: none

spNVMemThreshold Identifies the disk space utilization threshold percentage.

Type: integer

Range: {0-100}

Default value: none

spBusyThreshold Identifies the CPU utilization threshold percentage.

Type: integer

Range: {0-100}

Default value: none

swVersion Identifies the software version for the IOM.

Type: string

Range: ASCII characters, typically four integers separated by periods

Default value: none

rearModuleType Identifies the type of rear module by its CLEI code.

Type: string

Range: 10 alphanumeric characters

Default value: none

pst Identifies (for ED and ENT) the primary state of the module. The value indicates the desired state of the module.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: none

primaryState Identifies (for RTRV output) the primary state of the module. Although this parameter is a string, its values are restricted to IS (In-Service) and OOS (Out-Of-Service), with OOS having possible qualifiers of AU (Autonomous) and MA (Management).

Type: string

Range: alphanumeric characters

Default value: none

secondaryState Identifies (for RTRV output) the secondary state of the module. Although this parameter is a string, its values are restricted to the following:

- ACT = Active
- FLT = Faulted
- INIT = Waiting for initialization
- MEA = Provisioned mismatch
- NBK = No backup
- PRI = Protection release inhibited
- PSI = Protection switch inhibited
- STBYC = Standby cold
- STBYH = Standby hot
- UAS = Unassigned
- UEQ = Unequipped
- UPDT = Update (CPY-MEM currently being performed)
- WRK = Working

Type: string

Range: alphanumeric characters

Default value: none

Input Examples:

```
DLT-EQPT-ALL::IOM-4;  
ED-EQPT-ALL::IOM-4::IOMODULETYPE=BA9IX72AAA,  
  REDUNDANCY=PRI,SPMEMTHRESHOLD=90,  
  SPNVMEMTHRESHOLD=90,SPBUSYTHRESHOLD=90,  
  SWVERSION=3.8.3.0:IS;  
ENT-EQPT-ALL::IOM-4::IOMODULETYPE=BA9IX72AAA,  
  REDUNDANCY=SX, MEMTHRESHOLD=90, NVMEMTHRESHOLD=90,  
  BUSYTHRESHOLD=90, SWVERSION=3.8.3.0:IS;  
RTRV-EQPT-ALL::IOM-4;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"IOM-4:IOMODULETYPE=BA9IX72AAA,REDUNDANCY=SX,  
  MEMTHRESHOLD=90,NVMEMTHRESHOLD=90,  
  BUSYTHRESHOLD=90,SWVERSION=3.8.3.0:IS,ACT"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-EQPT  
RMV/RST-EQPT
```


INIT-T0

Command:

INIT-T0: Initialize T0

Description:

INIT-T0 lets the user initialize a DS0 channel; that is, it resets robbed-bit signaling for CAS applications.

Category: Equipment

Security: ADMIN

Input Format:

INIT-T0: [<TID>]:<t0Id:[CTAG];

Output Format: none

Parameters:

t0Id Identifies the AID as a DS0 channel on an IOM.

Type: T0

Range: IOM-{1-17}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}

Default value: None

Input Example:

INIT-T0::IOM-1-T3-2-PORT-3-T0-24;

Related Commands: None

RMV/RST-EQPT

Commands:

RMV-EQPT: Remove Equipment

RST-EQPT: Restore Equipment

Descriptions:

RMV-EQPT lets the user remove from service an I/O module or the standby SP module. The command takes the module from an in-service state and places it in a maintenance state. You can initiate service-affecting diagnostic routines or replacement after removing a module from service. You also can remove a module from service with ED-EQPT or ED-EQPT-ALL.

RST-EQPT lets the user restore a module to service. RST-EQPT takes the entity from a maintenance state to an in-service state for which the unit is ready to provide its service functions.

Category: Equipment

Security: SA for both commands

Input Formats:

```
RMV-EQPT:[TID]:<equipmentId>:[CTAG]::[<mode>],  
[<state>;
```

```
RST-EQPT:[TID]:<equipmentId>:[CTAG]::[<mode>;
```

Output Format: none

Parameters:

equipmentId Identifies the AID as an SP/TMG or I/O module in the Plexus 9000.

Type: IOMorSP

Range: IOM-{1-17}
SP-{A-B}

Default value: none

mode Identifies (for RMV) how the module specified by the AID will be removed from service, or (for RST) whether the Plexus 9000 performs automatic testing of the module being restored to service to verify good working condition. This parameter is not supported presently as the Plexus 9000 always performs automatic testing of the equipment being restored to service; leave the field blank.

Type: string

Range: ASCII characters

Default value: none

state Identifies (for RMV) the state into which the specified entity will be moved. This parameter is not supported presently; leave it blank.

Type: string

Range: ASCII characters

Default value: none

Input Examples:

RMV-EQPT::IOM-4;

RST-EQPT::IOM-4;

Input Example:

RMV-EQPT::IOM-4;

Related Commands:

DLT/ED/ENT/RTRV-EQPT

DLT/ED/ENT/RTRV-EQPT-ALL

RTRV-FAN-EQPT

Command:

RTRV-FAN-EQPT: Retrieve FAN Equipment

Description:

RTRV-FAN-EQPT lets the user retrieve parameters associated with the fan assembly in a Plexus 9000.

Category: Equipment

Security: View

Input Format:

RTRV-FAN-EQPT:[TID]:<fan>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<fan>:<status>,<failures>"
;
```

Parameters:

fan Identifies the AID as the fan assembly in the Plexus 9000.

Type: FAN

Range: FAN

Default value: none

status Indicates whether the fan assembly is operating normally.

Type: enum

Range: OKAY

FAIL

Default value: none

failures Indicates the number of fan failures since initialization.

Type: integer

Range: {1-9999}

Default value: none

Input Example:

```
RTRV-FAN-EQPT::FAN;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"FAN:OKAY,0"  
;
```

Related Commands: None

RTRV-INFO-EQPT

Command:

RTRV-INFO-EQPT: Retrieve Information Equipment

Description:

RTRV-INFO-EQPT lets the user retrieve information about a module in the Plexus 9000. Retrieved information include the module's CLEI code, description, software and hardware versions, serial number, self-test status, type and number of ports, number of faults, operating status, amount of available and used memory and disk space, and processor utilization.

Category: Equipment

Security: View

Input Format:

RTRV-INFO-EQPT:[TID]:[<src>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<iomOrSp>:[<clei>],[<desc>],[<swVersion>],
  [<hwVersion>],[<serialNumber>],
  [<selfTestStatus>],[<portType>],[<portCount>],
  [<externalFaults>],[<internalFaults>],[<inService>]:
  [<memFree>],[<memUsed>],[<nvMemFree>],[<nvMemUsed>],
  [<spAveBusy>]:[<rearClei>],[<rearDesc>],
  [<rearHwVersion>],[<rearSerialNumber>],[<prtg>]"
;
```

Parameters:

iomOrSp Identifies the AID either as a front I/O module (by slot number), as a front SW/FAB A or B module, or as a front SP/TMG A or B module. A null value is equivalent to "ALL"; that is, by leaving the field blank, information will be returned for all configured modules.

Type: IOMorSPorSF

Range: IOM-{1-17}

SF-{A-B}

SP-{A-B}

Default value: none

- clei** Identifies the CLEI code for the front module specified by *src*.
Type: string
Range: 10 alphanumeric characters
Default value: none
- desc** Identifies a text description of the module specified by *src*.
Type: string
Range: alphanumeric characters
Default value: none
- swVersion** Identifies the software version for the module specified by *src*.
Type: string
Range: ASCII characters, typically four integers separated by periods
Default value: none
- hwVersion** Identifies the hardware version for the module specified by *src*.
Type: string
Range: ASCII characters, typically four integers separated by periods
Default value: none
- serialNumber** Identifies the serial number for the module specified by *src*.
Type: string
Range: alphanumeric characters
Default value: none
- selfTestStatus** Identifies whether the module passed or failed its self-test.
Type: enum
Range: FAIL
PASS
Default value: none
- portType** Identifies the type of port.
Type: enum
Range: T1
T3
UNKNOWN
Default value: none
- portCount** Identifies the number of ports.
Type: integer
Range: {1-9999}
Default value: none

externalFaults Identifies the number of module faults whose cause is external to the module; e.g., a loss of signal fault on an IOM.

Type: integer

Range: {1-9999}

Default value: none

internalFaults Identifies the number of module faults whose cause is internal to the module; e.g., a loss of heartbeat fault on an IOM.

Type: integer

Range: {1-9999}

Default value: none

inService Identifies whether the equipment is in service.

Type: enum

Range: N = Equipment is not in service

Y = Equipment is in service

Default value: none

memFree Identifies the amount of free memory as a percentage.

Type: integer

Range: {0-100}

Default value: none

memUsed Identifies the amount of memory used as a percentage.

Type: integer

Range: {0-100}

Default value: none

nvMemFree Identifies the amount of free disk space as a percentage.

Type: integer

Range: {0-100}

Default value: none

nvMemUsed Identifies the amount of disk space used as a percentage.

Type: integer

Range: {0-100}

Default value: none

spAveBusy Identifies CPU utilization as a percentage.

Type: integer

Range: {0-100}

Default value: none

rearClei Identifies the CLEI code for the rear module corresponding to the front module specified by *src*.

Type: string

Range: 10 alphanumeric characters

Default value: none

rearDesc Identifies a text description of the rear module corresponding to the front module specified by *src*.

Type: string

Range: alphanumeric characters

Default value: none

rearHwVersion Identifies the hardware version for the rear module corresponding to the front module specified by *src*.

Type: string

Range: ASCII characters, typically four integers separated by periods

Default value: none

rearSerialNumber Identifies the serial number for the rear module corresponding to the front module specified by *src*.

Type: string

Range: alphanumeric characters

Default value: none

prtg Identifies the faulted IOM being protected by the protection IOM.

Type: IOMODULE

Range: IOM-{1-17}

Default value: none

Input Example:

```
RTRV-INFO-EQPT::IOM-1;
```

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"IOM-1:BA9IAA0AAA,\"Telica 28-port DS1 Front
Module\",3.8.3.0.37,A-M,00000000235000134,PASS,,
0,1,0,N:0,0,0,0,0:BA9IBC0AAA,\"Telica 28-port
DS1 Rear Module\",,00000000000000066,"
;
```

Related Commands: None

NOTES

OPR/SET-ACO

Commands:

OPR-ACO: Operate Alarm Cutoff
SET-ACO: Set Alarm Cutoff

Descriptions:

OPR-ACO instructs the Plexus 9000 to cut off the office audible alarm indications without changing the local alarm indications

SET-ACO instructs the Plexus 9000 to set the alarm cutoff mode for an entity. The various modes describe the degree to which the Plexus 9000 is permitted to provide an automatic ACO function.

Category: Fault

Security: SA for both commands

Input Formats:

OPR-ACO: [TID] : [<aco_id>] : [CTAG] ;
SET-ACO: [TID] : <aco_id> : [CTAG] : : <aco> ;

Output Formats: none

Parameters:

aco_id Identifies the AID as the Plexus 9000.

Type: COM

Range: COM

Default value: COM

aco Identifies the mode of alarm cutoff operation provided by the Plexus 9000.

Type: enum

Range: DELD = ACO is delayed to allow announcement
IMED = ACO introduced automatically and immediately at the Plexus 9000
MAN = ACO introduced by OS command or manual operation

Default value: none

Input Examples:

OPR-ACO;

SET-ACO::COM:::DELD;

Related Commands: none

RTRV-ALM-<AidType>

Command:

RTRV-ALM-<AidType>: Retrieve Alarm (ALL, COM, ENET, EQPT, STS1, T1, T3)

Description:

RTRV-ALM generates a report on the current state of alarm conditions within the Plexus 9000. The RTRV-COND command generates a report on both alarms and conditions.

Category: Fault

Security: View

Input Format:

```
RTRV-ALM-<AidType>:[TID]:[<alm_id>]:[CTAG]::  
[NTFCNCDE=<ntfcncde>],[CONDTYPE=<condtype>],  
[SRVEFF=<srveff>],[OCRDAT=<ocrdat>],  
[OCRTM=<ocrtm>],[DESC=<desc>];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<alm_id>,[<entitytype>]:<ntfcncde>,<condtype>,  
<srveff>,<ocrdat>,<ocrtm>,<desc>,<tblisltd>"  
;
```

Parameters:

AidType Identifies the type of entity within the Plexus 9000 from which to retrieve alarms.

Type: ReptAid

Range: ALL = Designates the Plexus 9000 and all entities within it
COM = Common – designates the Plexus 9000 as a discreet entity
ENET = Ethernet ports
EQPT = Equipment – designates major assemblies
OC = OC3 and OC12 ports
STS1 = STS1 ports
T1 = T1 ports
T3 = T3 ports

Default value: none

- alm_id** Identifies the AID as the Plexus 9000.
Type: COM
Range: COM
Default value: COM
- ntfcncde** Identifies the notification code of the event that caused the condition to be reported. This indicates the alarm level. A null value is equivalent to "ALL"; that is, by leaving the field blank, all event notification codes configured in the system will be returned.
Type: enum
Range: CL = Cleared. Never used in provisioning requests or returned in RTRVs - only active conditions are available through the RTRV-EVT/COND/ALM messages and by definition their notification codes are never CL/CLEAR.
CR = Critical
MJ = Major
MN = Minor
NA = Not Alarmed
Default value: none
- condtype** Indicates the condition type for an alarm or a reported event.
Type: string
Range: alphanumeric characters
Default value: NULL
- srveff** Identifies the effect on service caused by the alarm condition.
Type: enum
Range: SA = Service-affecting condition.
NSA = Non-service-affecting condition
Default value: NULL
- ocrdat** Identifies the date when the specific event or violation occurred.
Type: enum
Range: <YYYY>-{1-12}-{1-31} = <year>-{month}-{day of month}
Default value: NULL
- ocrtm** Identifies the time when the specific event or violation occurred.
Type: enum
Range: {0-23}-{0-59}-{0-59} = {hour}-{minute}-{second}
{0-23}-{0-59} = {hour}-{minute}
Default value: NULL

desc Describes the alarm condition.

Type: string

Range: alphanumeric characters

Default value: NULL

tblisld Identifies (in output) an integer representing the alarm.

Type: integer

Range: up to four digits

Default value: NULL

Input Example:

```
RTRV-ALM-EQPT::::NTFCNCDE=MN;
```

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"IOM-14,EQPT:MN,PRCDRERR,NSA,2004-02-27,04-34-27,
  \"Module in Slot 14 present but not
  provisioned\",79"
"IOM-15,EQPT:MN,PROTNA,NSA,2004-02-27,04-47-52,
  \"Module in slot 15 is unprotected\",839"
"IOM-1,EQPT:MN,PROTNA,NSA,2004-02-27,04-56-20,
  \"Module in slot 1 is unprotected\",839"
"IOM-4,EQPT:MN,PROTNA,NSA,2004-02-27,05-00-15,
  \"Module in slot 4 is unprotected\",839"
;
```

Related Commands:

```
RTRV-COND-<ReptAid>
```

RTRV-COND-<ReptAid>

Command:

RTRV-COND-<ReptAid>: Retrieve Condition (ALL, COM, ENET, EQPT, STS1, T1, T3)

Description:

RTRV-COND instructs the Plexus 9000 to return the current standing condition and/or state associated with one or more specified facilities or equipment units in the Plexus 9000. The RTRV-ALM command generates a report on just alarms.

Category: Fault

Security: View

Input Format:

RTRV-COND-<ReptAid>:[TID]:[<src>]:[CTAG]:[<typereq>],
[<locn>],[<dirn>],[<tmper>];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<aid>,<aidtype>:CONDTYPE=<condtype>,
SRVEFF=<srveff>,MONDAT=<mondatt>,OCRTM=<ocrtm>,
LOCN=<locn>,CONTSTATE=<contstate>,INVL=<invl>,
DESC=<desc>"
;
```

Parameters:

ReptAid Identifies the type of entity within the Plexus 9000 from which to retrieve alarms and conditions.

Type: ReptAid

Range: ALL = Designates the Plexus 9000 and all entities within it
COM = Common – designates the Plexus 9000 as a discreet entity
ENET = Ethernet ports
EQPT = Equipment – designates major assemblies
STS1 = STS1 ports
T1 = T1 ports
T3 = T3 ports

Default value: none

src	Identifies the input AID as the Plexus 9000. Type: COM Range: COM Default value: COM
aid	Identifies the output AID as a specific entity within the Plexus 9000. Range: alphanumeric characters
aidtype	Identifies, in the output AID block, the type of entity within the Plexus 9000 from which to retrieve alarms. Range: ALL = Designates the Plexus 9000 and all entities within it COM = Common – designates the Plexus 9000 as a discreet entity ENET = Ethernet ports EQPT = Equipment – designates major assemblies STS1 = STS1 ports T1 = T1 ports T3 = T3 ports
typereq	Identifies, in input, the type of condition to be retrieved. A null value defaults to all applicable condition types. Type: string Range: alphanumeric characters Default value: none
condtype	Identifies, in output, the current standing condition and/or state associated with the equipment specified in the AID block. Range: alphanumeric characters
srveff	Identifies, in output, the effect on service caused by the condition. Range: SA = Service-affecting condition. NSA = Non-service-affecting condition
mondat	Identifies, in output, the monitored date. The value indicates the beginning date for the period defined by <i>tmper</i> . The format is MM-DD. Range: {1-12}-{1-31}
ocrtm	Identifies, in output, the time when the specific event or violation occurred. Range: {0-23}-{0-59}-{0-59} = {hour}-{minute}-{second} {0-23}-{0-59} = {hour}-{minute}

- locn** Identifies, in both input and output, the location of the Plexus 9000. A null value defaults to all applicable locations.
- Type:** enum
Range: FEND = Far end
 NEND = Near end
Default value: none
- dirn** Identifies, in input, the direction relative to the entity in the Plexus 9000. A null value defaults to all applicable directions (currently, RCV is the only valid value).
- Type:** enum
Range: AZ = Transmit
 BTH = Both directions
 NA = Not applicable
 RCV = Receive direction only
 TDTC = Transmit direction toward customer
 TDTN = Transmit direction toward network
 TRMT = Transmit direction only
 ZA = Receive
Default value: RCV
- tmper** Identifies, in input, the period of time for which to retrieve standing conditions. This parameter is presently not used.; leave it blank
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: none
- contstate** Identifies, in output, the control state of the external control.
- Range:** NA = Not applicable (duration is momentary)
 OPER = Operated
 RLS = Released

invl Identifies, in output, the interval between the next scheduled test or exercise to be executed by the Plexus 9000.

Range: {1-31}-DAY = Interval in days (up to one month)
{1-24}-HR = Interval in hours (up to one day)
{1-1440}-MIN = Interval in minutes (up to one day)
NA = Not applicable (duration is momentary)

desc Describes, in output, the alarm condition.

Range: alphanumeric characters

Input Example:

```
RTRV-COND-COM:::LOS,FEND,RCV;
```

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"COM,T1:CONDTYPE=LOS,SRVEFF=NSA,MONDAT=02-27,
OCRTM=08-45-40,LOCN=FEND,CONTSTATE=NA,
INVL=1-HR,DESC=LOSS OF SIGNAL"
;
```

Related Commands:

```
RTRV-ALM-<ReptAid>
```

NOTES

DLT/ED/ENT/RTRV-ISDN-IF

Commands:

DLT-ISDN-IF: Delete ISDN Interface

ED-ISDN-IF: Edit ISDN Interface

ENT-ISDN-IF: Enter ISDN Interface

RTRV-ISDN-IF: Retrieve ISDN Interface

Descriptions:

DLT-ISDN-IF lets the user delete an ISDN interface.

ED-ISDN-IF lets the user change the properties of an ISDN interface. Use ED-ISDN-IF to change the interface's resource allocation method, the type of remote switch, restart option, maximum frame length, LAPD retransmission counter value, timer values, the digits prefixed to the called party number, whether B-channel availability signaling is enabled, the amount of echo cancellation, whether echo cancellation processing is required due to long delay, the audio indicator, up to five general-purpose variables for custom functionality, and the primary state of the interface.

ENT-ISDN-IF lets the user initialize the properties of an ISDN interface. Use ENT-ISDN-IF to set the type of interface and the resource allocation method (hunting type). Additionally, the command can define the type of remote switch, the restart option, the maximum frame length, the LAPD retransmission counter value, timer values, the digits to attach to the beginning of incoming calls on the interface, whether to enable B-channel availability signaling, the amount of echo cancellation, whether echo cancellation processing is required due to long delay, the audio indicator, up to five general-purpose variables for custom functionality, and the primary state of the interface. ENT-ISDN-IF will not work unless the following commands have already been issued in the listed order: ENT-SS7SYS, ENT-EQPT, ENT-T1.

RTRV-ISDN-IF lets the user retrieve the properties of an ISDN interface. Use RTRV-ISDN-IF to retrieve the interface's number, type, resource allocation method (hunting type), type of remote switch, restart option, maximum frame length, LAPD retransmission counter value, timer values, prefix for incoming calls, whether to enable B-channel availability signaling, the amount of echo cancellation, whether echo cancellation processing is required due to long delay, the audio indicator, the uses and values for up to five general-purpose variables for custom functionality, the NFAS signaling links, and the primary state of the interface.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-ISDN-IF:[TID]:<ifNum>:[CTAG];

ED-ISDN-IF:[TID]:<ifNum>:[CTAG]::[ALLOC=<alloc>],
[<ISDNVARIANT>=<isdnvariant>],[SVCTYPE=<svctype>],
[RSTOPT=<rstop>],[N201=<n201>],[N200=<n200>],
[T200=<t200>],[T203=<t203>],[T301=<t301>],
[T303=<t303>],[T305=<t305>],[T306=<t306>],
[T308=<t308>],[T309=<t309>],[T310=<t310>],
[T316=<t316>],[T322=<t322>],
[PROGRESSTMR=<progresstmr>],
[PREFIXDIGITS=<prefixDigits>],
[BCHANAVAIL=<bchanAvail>],[ECHOCTRL=<echoCtrl>],
[LONGDELAY=<longDelay>],[REMARK=<remark>],
[AUDIOIND=<audioInd>],[CUSTVAR1=<custVar1>],
[CUSTVAR2=<custVar2>],[CUSTVAR3=<custVar3>],
[CUSTVAR4=<custVar4>],[CUSTVAR5=<custVar5>],
[CHRGNCND=<chrgncnd>]:[<pst>];

ENT-ISDN-IF:[TID]:<ifNum>:[CTAG]::IFTYPE=<ifType>,
[ALLOC=<alloc>],[<ISDNVARIANT>=<isdnvariant>],
[SVCTYPE=<svctype>],[RSTOPT=<rstop>],
[N201=<n201>],[N200=<n200>],[T200=<t200>],
[T203=<t203>],[T301=<t301>],[T303=<t303>],
[T305=<t305>],[T306=<t306>],[T308=<t308>],
[T309=<t309>],[T310=<t310>],[T316=<t316>],
[T322=<t322>],[PROGRESSTMR=<progresstmr>],
[PREFIXDIGITS=<prefixDigits>],
[BCHANAVAIL=<bchanAvail>],[ECHOCTRL=<echoCtrl>],
[LONGDELAY=<longDelay>],[REMARK=<remark>],
[AUDIOIND=<audioInd>],[CUSTVAR1=<custVar1>],
[CUSTVAR2=<custVar2>],[CUSTVAR3=<custVar3>],
[CUSTVAR4=<custVar4>],[CUSTVAR5=<custVar5>],
[CHRGNCND=<chrgncnd>]:[<pst>];

RTRV-ISDN-IF:[TID]:[<ifNum>]:[CTAG];

Output Format:

```

      SID DATE TIME
M   CTAG COMPLD
    "<ifNum>:<ifType>,<alloc>:
      ISDNVARIANT=<isdnvariant>,SVCTYPE=<svctype>,
      RSTOPT=<rstop>,N201=<n201>,N200=<n200>,
      T200=<t200>,T203=<t203>,T301=<t301>,T303=<t303>,
      T305=<t305>,T306=<t306>,T308=<t308>,T309=<t309>,
      T310=<t310>,T316=<t316>,T322=<t322>,
      PROGRESSTMR=<progresstmr>,
      PREFIXDIGITS=<prefixDigits>,
      BCHANAVAIL=<bchanAvail>,ECHOCTRL=<echoCtrl>,
      LONGDELAY=<longDelay>,REMARK=<remark>,
      AUDIOIND=<audioInd>,NFASLNK=<nfaslnk>,
      NFASBACKUPLNK=<nfasbackuplnk>,
      CUSTUSE1=<custUse1>,CUSTVAR1=<custVar1>,
      CUSTUSE2=<custUse2>,CUSTVAR2=<custVar2>,
      CUSTUSE3=<custUse3>,CUSTVAR3=<custVar3>,
      CUSTUSE4=<custUse4>,CUSTVAR4=<custVar4>,
      CUSTUSE5=<custUse5>,CUSTVAR5=<custVar5>,
      CHRGNCND=<chrgncnd>:<pst>,[<sst>]"
    ;

```

Parameters:

ifNum Identifies the AID as an ISDN interface. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, information for all ISDN interfaces configured in the system will be returned. A range of interfaces is shown by the beginning and ending numbers separated by two ampersands and a hyphen ("&&-").

Type: IsdnIfNum

Range: {1-32767}

Default value: none

ifType Identifies the type of interface.

Type: enum

Range: NFAS = Non-facility-associated signaling.

NFASBACKUP = Non-facility-associated signaling with a backup D channel on a different T1.

PRI = Primary rate ISDN.

Default value: none

- alloc** Identifies the resource allocation method (hunting type) for selecting channels within links on the interface.
- Type:** enum
- Range:** ASCENDING = Allocates the lowest numbered available channel in a numbered list of channels on the lowest numbered available link in a numbered list of links.
CIRCULAR = Allocates the next free channel, in ascending order, following the last channel selected.
DESCENDING = Allocates the highest numbered available channel in a numbered list of channels on the highest numbered available link in a numbered list of links.
RANDOM = Allocates the next free channel, in ascending order, based on a random entry into a numbered list of resources. After the first allocation from that numbered list of resources, subsequent attempts to find a free resource use the circular method.
- Default value:** CIRCULAR
- isdnvariant** Identifies the type of switch at the remote end of the interface. Note that 4ESS and 5ESS switches do not support NFAS interfaces (The value of *ifType* cannot be “NFAS” or “NFASBACKUP” when the value of *isdnvariant* is “4ESS” or “5ESS”).
- Type:** enum
- Range:** 4ESS = Lucent 4ESS switch
5ESS = Lucent 5ESS switch
DMS100 = Nortel DMS100 switch
NI2 = National ISDN 2-compliant generic switch
- Default value:** NI2
- svctype** Identifies the service type; that is, whether the subject interface is on the network or user side.
- Type:** enum
- Range:** NETWORK = network side
USER = user side
- Default value:** NETWORK
- rstopt** Identifies the restart option; i.e., whether a restart message is issued on a link start up.
- Type:** enum
- Range:** ALL = restart enabled for all channels
BCHANONLY = restart enabled for B-channel only
NONE = restart not enabled
- Default value:** BCHANONLY

- n201** Identifies the maximum frame length. Q.931 messages that do not fit into one LAPD frame are fragmented.
Type: integer
Range: {0-4095}
Default value: 260
- n200** Identifies the LAPD retransmission counter value.
Type: integer
Range: {0-1023}
Default value: 3
- t200** Identifies the LAPD T200 acknowledgement timer value (in increments of 0.1 second), which represents the maximum time allowed to receive an acknowledge message after transmission of a command frame.
Type: integer
Range: {0.5-5}
Default value: 1
- t203** Identifies the T203 idle link timer value (in increments of 10 seconds), which represents the maximum time allowed for periods of inactivity on a link during multiple frame operations. For D-channel backup, it relates to the time it takes to declare a D-channel as failed.
Type: integer
Range: {10-300}
Default value: 30
- t301** Identifies the T301 timer value (in minutes), which Identifies the maximum time from switch receipt of an ALERTing message from the called party until CONNect message is received from the called party.
Type: integer
Range: {0-600}
Default value: 300
- t303** Identifies the T303 timer value (in seconds), which specifies the maximum time from switch transmission of an initial SETUP message to the called party until receipt of the CALL PROCEEDing message from the called party.
Type: integer
Range: {1-4}
Default value: 4

- t305** Identifies the T305 timer value (in seconds), which specifies the maximum time from transmittal of a DISConnect message to the calling or called party until a DISConnect, RELease, or RELease COMplete message is received from that party.
- Type:** integer
Range: {2-60}
Default value: 30
- t306** Identifies the T306 timer value (in seconds), which specifies the maximum time from transmittal of a PROGress message to the calling party until a DISConnect message is received from the calling party.
- Type:** integer
Range: {30-150}
Default value: 60
- t308** Identifies the T308 timer value (in seconds), which specifies the maximum time from transmittal of a RELease message to the calling or called party until a RELease or RELease COMplete message is received from that party.
- Type:** integer
Range: {2-10}
Default value: 4
- t309** Identifies the T309 timer value (in seconds), which specifies the time from switch detection of a data link malfunction during an active call until receipt of a STATus, DISConnect, RELease, or RELease COMplete message from the customer equipment.
- Type:** integer
Range: {10-90}
Default value: 90
- t310** Identifies the T310 timer value (in seconds), which specifies the maximum time from transmittal of a PROCeeding message from the called party until ALERTing, PROGress, CONNect message, or DISConnect is received from the called party.
- Type:** integer
Range: {3-10}
Default value: 10

- t316** Identifies the T316 timer value (in seconds), which specifies the maximum time from switch transmittal of a REStart message to the calling or called party until a REStart ACKnowledge message is received from that party.
Type: integer
Range: {10-120}
Default value: 30
- t322** Identifies the T322 timer value (in seconds), which specifies the maximum time from transmittal of a STATus ENQuiry message to the calling or called party until a STATus, DISConnect, RELease, or RELease COMplete message is received from that party.
Type: integer
Range: {2-10}
Default value: 4
- progresstmr** Identifies the progress timer value in minutes.
Type: integer
Range: {0-600}
Default value: 300
- prefixDigits** Identifies the digits prefixed to the called party number for each incoming call on the interface.
Type: string
Range: up to 10 digits
Default value: NULL
- bchanAvail** Identifies whether B-channel availability signaling is enabled for National ISDN 2-compliant generic switches (*isdnvariant* = NI2). B-channel availability signaling lets an NI2 switch notify and negotiate B-channel status changes with the far end.
Type: BoolYN
Range: N = B-channel availability signaling is disabled
Y = B-channel availability signaling is enabled
Default value: N
- echoCtrl** Identifies the amount, in milliseconds, of echo cancellation for outgoing calls.
Type: integer
Range: {0-128}
Default value: 32

longDelay Identifies whether echo cancellation processing is required because of a long delay (echo tail).

Type: BoolYN

Range: N = echo processing is off (for short-haul; i.e., less than 15 msec propagation delay)

Y = echo processing is on (for long-haul)

Default value: N

remark Identifies optional notes or remarks for use by the carrier.

Type: string

Range: up to 16 characters

Default value: NULL

audioInd Identifies the value sent in the infotransfer indicator of the User Service Information parameter in the IAM for calls on ISUP trunks.

Type: enum

Range: 3.1KHZ = infotransfer default value is overridden to indicate 3.1KHz audio in BearerCap/UserServiceInformation of IAM message

DEFAULT = infotransfer indicator is determined by the ISDN interworking functionality and is not overridden by provisioning

SPEECH = infotransfer default value is overridden to indicate speech in the BearerCap/UserServiceInformation of IAM message

Default value: DEFAULT

nfaslnk Identifies (in RTRV output) the signaling link used for an NFAS interface, which uses the D-channel of this link for signaling.

Type: integer

Range: {0-32767}

Default value: none

nfasbackuplnk Identifies (in RTRV output) the backup signaling link used for an NFAS interface.

Type: integer

Range: {0-32767}

Default value: none

custUse1 Identifies (in RTRV output) the use for custom variable 1.

Type: string

Range: up to 32 characters

Default value: NULL

custVar1 Identifies the value of custom variable 1.

Type: string

Range: up to 16 characters

Default value: NULL

custUse2 Identifies (in RTRV output) the use for custom variable 2.

Type: string

Range: up to 32 characters

Default value: NULL

custVar2 Identifies the value of custom variable 2.

Type: string

Range: up to 16 characters

Default value: NULL

custUse3 Identifies (in RTRV output) the use for custom variable 3.

Type: string

Range: up to 32 characters

Default value: NULL

custVar3 Identifies the value of custom variable 3.

Type: string

Range: up to 16 characters

Default value: NULL

custUse4 Identifies (in RTRV output) the use for custom variable 4.

Type: string

Range: up to 32 characters

Default value: NULL

custVar4 Identifies the value of custom variable 4.

Type: string

Range: up to 16 characters

Default value: NULL

custUse5 Identifies (in RTRV output) the use for custom variable 5.

Type: string

Range: up to 32 characters

Default value: NULL

custVar5 Identifies the value of custom variable 5.

Type: string

Range: up to 16 characters

Default value: NULL

chrgncnd Identifies whether the charge number can be used for calling number delivery on interworking calls or PRIs when the calling party number is not available and MF-SS7 interworking is indicated.

Type: BoolYN

Range: N = charge number cannot be used for calling number delivery

Y = charge number can be used for calling number delivery

Default value: Y

pst Identifies (for ED and ENT) the desired primary state of the interface.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: none

pst Identifies (for RTRV output) the primary state of the interface.

Type: enum

Range: IS-NR = In-Service, Normal

OOS = Out-Of-Service

OOS-AU = Out-Of-Service, Autonomous

OOS-MA = Out-Of-Service, Managed

OOS-AUMA = Out-Of-Service, Autonomous and Managed

Default value: none

sst Identifies (for RTRV output) the secondary state of the interface.

Type: enum

Range: ACT = Active, D channel is in service. In combination with IS, it's used only for interface type PRI or NFAS without backup D channel

DCHL = D-channel. In combination with OOS-AU, Identifies that the interface is OOS because the D-channel is OOS

DSBLD = Disabled. In combination with OOS-MA, Identifies that the interface has had maintenance blocked by management, although the IOM is IS.

SGEO = Supporting Entity Outage. In combination with OOS-AU, Identifies that the interface is OOS because the IOM port is OOS. In combination with OOS-AUMA, Identifies that the interface has been put OOS and the IOM port is OOS.

RSTRQD = Reset Required. In combination with OOS, Identifies an inconsistent or unexpected state that may require resetting the interface at either end, or locally resetting the IOM ports.

PRIACT = Primary D-channel Active. In combination with IS, Identifies that both D channels are up, with the primary D-channel (D1) in service and D2 in a standby state. This state is valid only when the value of *ifType* is "NFASBACKUP".

SECACT = Secondary D-channel Active. In combination with IS, Identifies that both D channels are up, with the backup D-channel (D2) in service and D1 in a standby state. This state is valid only when the value of *ifType* is "NFASBACKUP".

PRIOOS = Primary D-channel Out-Of-Service. In combination with IS, Identifies D1 is OOS, D2 is IS. This state is valid only when the value of *ifType* is "NFASBACKUP".

SECOOS = Secondary D-channel Out-Of-Service. In combination with IS, Identifies D1 is IS, D2 is OOS. This state is valid only when the value of *ifType* is "NFASBACKUP".

Default value: none

Input Examples:

```
DLT-ISDN-IF::14;
```

```
ED-ISDN-IF::14:::ALLOC=CIRCULAR, ISDNVARIANT=NI2,  
SVCTYPE=NETWORK, RSTOPT=BCHANONLY, N201=260, N200=3,  
T200=1, T203=10, T301=5, T303=4, T305=30, T306=60,  
T308=4, T309=90, T310=10, T316=30, T322=4,  
PROGRESSTMR=5, PREFIXDIGITS=508, BCHANAVAIL=N,  
ECHOCTRL=32, LONGDELAY=N, REMARK=NULL,  
AUDIOIND=DEFAULT, CUSTVAR1=NULL, CUSTVAR2=NULL,  
CUSTVAR3=NULL, CUSTVAR4=NULL, CUSTVAR5=NULL,  
CHRGNCND=Y:IS;
```

ENT-ISDN-IF examples interrelated with input examples given in
[ENT-ISDN-LNK](#):

(Without NFAS)

```
ENT-ISDN-IF::1:::IFTYPE=PRI, ALLOC=ASCENDING:IS;  
ENT-ISDN-IF::2:::IFTYPE=PRI, ALLOC=ASCENDING;  
ENT-ISDN-IF::3:::IFTYPE=PRI, ALLOC=ASCENDING;  
ENT-ISDN-IF::4:::IFTYPE=PRI, ALLOC=ASCENDING;
```

(With NFAS, no backup)

```
ENT-ISDN-IF::1:::IFTYPE=NFAS, ALLOC=ASCENDING;  
ENT-ISDN-IF::2:::IFTYPE=PRI, ALLOC=ASCENDING;
```

(With NFAS Backup)

```
ENT-ISDN-IF::1:::IFTYPE=NFASBACKUP, ALLOC=ASCENDING;  
ENT-ISDN-IF::2:::IFTYPE=PRI, ALLOC=ASCENDING;
```

```
RTRV-ISDN-IF::14&&-16;
```


Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"14: IFTYPE=PRI, ALLOC=ASCENDING, ISDNVARIANT=NI2,
  SVCTYPE=NETWORK, RSTOPT=BCHANONLY, N201=260,
  N200=3, T200=1, T203=10, T301=5, T303=4, T305=30,
  T306=60, T308=4, T309=90, T310=10, T316=30, T322=4,
  PROGRESSTMR=5, PREFIXDIGITS=508, BCHANAVAIL=N,
  ECHOCTRL=32, LONGDELAY=N, REMARK=NULL,
  AUDIOIND=DEFAULT, NFASLNK=0, NFASBACKUPLNK=0,
  CUSTUSE1=NULL, CUSTVAR1=NULL, CUSTUSE2=NULL,
  CUSTVAR2=NULL, CUSTUSE3=NULL, CUSTVAR3=NULL,
  CUSTUSE4=NULL, CUSTVAR4=NULL, CUSTUSE5=NULL,
  CUSTVAR5=NULL, CHRGNCND=Y: IS-NR, ACT"

"15: IFTYPE=PRI, ALLOC=ASCENDING, ISDNVARIANT=NI2,
  SVCTYPE=NETWORK, RSTOPT=BCHANONLY, N201=260,
  N200=3, T200=1, T203=10, T301=5, T303=4, T305=30,
  T306=60, T308=4, T309=90, T310=10, T316=30, T322=4,
  PROGRESSTMR=5, PREFIXDIGITS=508, BCHANAVAIL=N,
  ECHOCTRL=32, LONGDELAY=N, REMARK=NULL,
  CUSTUSE1=NULL, CUSTVAR1=NULL, CUSTUSE2=NULL,
  CUSTVAR2=NULL, CUSTUSE3=NULL, CUSTVAR3=NULL,
  CUSTUSE4=NULL, CUSTVAR4=NULL, CUSTUSE5=NULL,
  CUSTVAR5=NULL, CHRGNCND=Y: IS-NR, ACT"

"16: IFTYPE=PRI, ALLOC=ASCENDING, ISDNVARIANT=NI2,
  SVCTYPE=NETWORK, RSTOPT=BCHANONLY, N201=260,
  N200=3, T200=1, T203=10, T301=5, T303=4, T305=30,
  T306=60, T308=4, T309=90, T310=10, T316=30, T322=4,
  PROGRESSTMR=5, PREFIXDIGITS=508, BCHANAVAIL=N,
  ECHOCTRL=32, LONGDELAY=N, REMARK=NULL,
  CUSTUSE1=NULL, CUSTVAR1=NULL, CUSTUSE2=NULL,
  CUSTVAR2=NULL, CUSTUSE3=NULL, CUSTVAR3=NULL,
  CUSTUSE4=NULL, CUSTVAR4=NULL, CUSTUSE5=NULL,
  CUSTVAR5=NULL, CHRGNCND=Y: IS-NR, ACT"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-ISDN-LNK

Commands:

DLT-ISDN-LNK: Delete ISDN Link
ED-ISDN-LNK: Edit ISDN Link
ENT-ISDN-LNK: Enter ISDN Link
RTRV-ISDN-LNK: Retrieve ISDN Link

Descriptions:

DLT-ISDN-LNK lets the user delete an ISDN link.

ED-ISDN-LNK lets the user change the carrier's remarks for an ISDN link.

ENT-ISDN-LNK lets the user initialize the properties of an ISDN link. Use ENT-ISDN-LNK to set the link's associated port, B channel number range, and the link ID within an NFAS interface. The command assigns an interface number to a T1 link, assigns a link number to an IOM and port, configures PRI B-channel usage, and assigns an NFAS group ID if the interface is part of an NFAS group. ENT-ISDN-LNK will not work correctly unless the following commands have already been issued in the listed order: ENT-SS7SYS, ENT-EQPT, ENT-T1, and ENT-ISDN-IF.

RTRV-ISDN-LNK lets the user retrieve the properties of an ISDN link. Use RTRV-ISDN-LNK to retrieve the link's associated IOM, port, B channel number range, and the link ID within an NFAS interface.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-ISDN-LNK: [TID]:<src>:[CTAG];  
ED-ISDN-LNK: [TID]:<src>:[CTAG]::REMARK=<remark>;  
ENT-ISDN-LNK: [TID]:<src>:[CTAG]::IOMPORT=<port>,  
LNKTYPE=<lnkType>,[STARTCHAN=<startChanNum>],  
[ENDCHAN=<endChanNum>],[NFASLNKID=<nfasLnkId>],  
[REMARK=<remark>;  
RTRV-ISDN-LNK: [TID]: [<src>]: [CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<isdnLnkId>:IOMPORT=<port>,LNKTYPE=<lnkType>,
    STARTCHAN=<startChanNum>,ENDCHAN=<endChanNum>,
    NFASLNKID=<nfasLnkId>,REMARK=<remark>,
    LNKSTATE=<lnkState>"
;
```

Parameters:

src Identifies the AID as an ISDN link on an interface. The first number in the range identifies the interface; the second identifies the link. The interface ID has global significance in comparison to the link number. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the AID field blank, information for all ISDN links configured in the system will be returned. A null value for the second field in the AID (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, information for all ISDN links on the specified interface will be returned. Show a range of links on an interface by separating the beginning and ending link numbers with two ampersands and a hyphen ("&&-"). Show a range of links spanning interfaces by separating the beginning and ending interface numbers (each followed by a link) with two ampersands ("&&").

Type: IsdnLink

Range: {1-32767}-{1-32767}

Default value: none

isdnLnkId Identifies the AID (in RTRV output) as an ISDN link on an interface. The first number in the range identifies the interface; the second identifies the link. The interface ID has global significance in comparison to the link number.

Type: IsdnLink

Range: {1-32767}-{1-32767}

Default value: none

port Identifies the port on the I/O module that pertains to the link being configured.

Type: enum

Range: IOM-{1-17}-PORT-{1-28}

IOM-{1-17}-STS1-{1-8}-PORT-{1-28}

IOM-{1-17}-T3-{1-8}-PORT-{1-28}

Default value: none

lnkType Identifies the type of link.

Type: enum

Range: B_LNK = B-link

D_LNK= D-link for PRI ISDN

D_PRI = Primary NFAS D-Link

D_SEC = Secondary NFAS D-Link

Default value: none

startChanNum Identifies the beginning of the B-channel number range.

Type: integer

Range: {1}

Default value: 1

endChanNum Identifies the end of the B-channel number range.

Type: integer

Range: {23, 24}

Default value: 23

nfasLnkId Identifies a particular link within an NFAS interface and must be unique for every link in an NFAS interface. The range is one less than the number of links in the NFAS group.

Type: integer

Range: {0-27}

Default value: 0

remark Identifies optional notes or remarks for use by the carrier.

Type: string

Range: up to 16 characters

Default value: NULL

lnkState Identifies (in RTRV output) the link state of an ISDN signaling channel.

Type: enum

Range: CONNECT = Link is connecting

DOWN = Link is down

RESTART = Link is restarting

UP = Link is up

Default value: none

Input Examples:

DLT-ISDN-LNK::14-3;

ED-ISDN-LNK::4-4::REMARK=8202MB;

ENT-ISDN-LNK examples interrelated with input examples given in

ENT-ISDN-IF:

(Without NFAS)

ENT-ISDN-LNK::1-1:::IOMPORT=IOM-4-PORT-1,
LNKTYPE=D_LNK, STARTCHAN=1, ENDCHAN=23, NFASLNKID=0;

ENT-ISDN-LNK::2-2:::IOMPORT=IOM-4-PORT-2,
LNKTYPE=D_LNK, STARTCHAN=1, ENDCHAN=23, NFASLNKID=0;

ENT-ISDN-LNK::3-3:::IOMPORT=IOM-4-PORT-3,
LNKTYPE=D_LNK, STARTCHAN=1, ENDCHAN=23, NFASLNKID=0;

ENT-ISDN-LNK::4-4:::IOMPORT=IOM-4-PORT-4,
LNKTYPE=D_LNK, STARTCHAN=1, ENDCHAN=23, NFASLNKID=0;

(With NFAS, no backup)

ENT-ISDN-LNK::1-1:::IOMPORT=IOM-4-PORT-1,
LNKTYPE=D_LNK, STARTCHAN=1, ENDCHAN=23, NFASLNKID=0;

ENT-ISDN-LNK::1-2:::IOMPORT=IOM-4-PORT-2,
LNKTYPE=B_LNK, STARTCHAN=1, ENDCHAN=24, NFASLNKID=1;

ENT-ISDN-LNK::1-3:::IOMPORT=IOM-4-PORT-3,
LNKTYPE=B_LNK, STARTCHAN=1, ENDCHAN=24, NFASLNKID=2;

ENT-ISDN-LNK::2-4:::IOMPORT=IOM-4-PORT-4,
LNKTYPE=B_LNK, STARTCHAN=1, ENDCHAN=23, NFASLNKID=0;

(With NFAS Backup)

ENT-ISDN-LNK::1-1:::IOMPORT=IOM-4-PORT-1,
LNKTYPE=D_PRI, STARTCHAN=1, ENDCHAN=23, NFASLNKID=0;

ENT-ISDN-LNK::1-2:::IOMPORT=IOM-4-PORT-2,
LNKTYPE=B_LNK, STARTCHAN=1, ENDCHAN=23, NFASLNKID=1;

ENT-ISDN-LNK::1-3:::IOMPORT=IOM-4-PORT-3,
LNKTYPE=B_LNK, STARTCHAN=1, ENDCHAN=24, NFASLNKID=2;

ENT-ISDN-LNK::2-4:::IOMPORT=IOM-4-PORT-4,
LNKTYPE=D_SEC, STARTCHAN=1, ENDCHAN=23, NFASLNKID=0;

RTRV-ISDN-LNK::14-1;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"14-1:IOMPORT=IOM-1-PORT-1, LNKTYPE=D_LNK,
  STARTCHAN=1, ENDCHAN=23, NFASLNKID=0, REMARK=NULL,
  LNKSTATE=CONNECT"
;
```

Related Commands: none

ED-STATE-ISDNBCHAN

Command:

ED-STATE-ISDNBCHAN: Edit State ISDN B-Channel

Description:

ED-STATE-ISDNBCHAN lets the user edit the properties of an ISDN B channel.

Category: Signaling

Security: SA

Input Format:

```
ED-STATE-ISDNBCHAN:[TID]:<isdnChanId>:[CTAG]::  
<endChanNum>,<chanAction>;
```

Output Format: none

Parameters:

isdnChanId Identifies the ISDN B channel. The range is {interface}-{link}-{channel}.

Type: IsdnChanAid

Range: {1-32767}-{1-32767}-{1-24}

Default value: none

endChanNum Identifies the end of the B channel number range.

Type: integer

Range: {1-24}

Default value: none

chanAction Identifies the action to take for the ISDN B channel.

Type: enum

Range: CHAN-ENB = Enable the channel

CHAN-RESET = Reset the channel

CHANFORCE-DIS = Forcefully disconnect from the
channel

Default value: none

Input Example:

```
ED-STATE-ISDNBCHAN::14-12-1:::1,CHAN-ENB;
```

Related Commands: none

INIT-REG-ISDNMSG / RTRV-PM-ISDNMSG

Commands:

INIT-REG-ISDNMSG: Initialize Register ISDN Message

RTRV-PM-ISDNMSG: Retrieve Performance Monitors ISDN Message

Descriptions:

INIT-REG-ISDNMSG lets the user clear the counters for ISDN message statistics.

RTRV-PM-ISDNMSG lets the user retrieve current and historical performance data for ISDN messages in the Plexus 9000.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-ISDNMSG: [TID]:<isdnIfNum>:[CTAG]::<montype>,
[<monval>],[<locn>],[<dirn>];

RTRV-PM-ISDNMSG: [TID]:<isdnIfNum>:[CTAG]::[<montype>],
[<monlev>],[<locn>],[<dirn>];

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
    "<isdnIfNum>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

isdnIfNum Identifies the AID as an ISDN interface

Type: IsdnIfNum

Range: {1-32767}

Default value: none

montype Identifies the type of monitored call control parameter. “ALL” is the only valid input value.

Type: enum

Range: ALERTINGRX = Number of alerting messages received
ALERTINGTX = Number of alerting messages transmitted
ALL = All types
AVECALLS = Average number of open calls
CALLPROCX = Number of call proceeding messages received
CALLPROCTX = Number of call proceeding messages transmitted
CONGCNTRLRX = Number of congestion control messages received
CONGLTX = Number of congestion control messages transmitted
CONNACKRX = Number of connect acknowledge messages received
CONNACKTX = Number of connect acknowledge messages transmitted
CONNRX = Number of connect messages received
CONNTX = Number of connect messages transmitted
CONS = Total number of connect messages
DISCRX = Number of disconnect messages received
DISCS = Total number of disconnect messages
DISCTX = Number of disconnect messages transmitted
FACILACKRX = Number of facility acknowledge messages received
FACILACKTX = Number of facility acknowledge messages transmitted
FACILREJRX = Number of facility reject messages received
FACILREJTX = Number of facility reject messages transmitted
FACILRX = Number of facility messages received
FACILTX = Number of facility messages transmitted
HOLDACKRX = Number of hold acknowledge messages received
HOLDACKTX = Number of hold acknowledge messages transmitted
HOLDREJRX = Number of hold reject messages received
HOLDREJTX = Number of hold reject messages transmitted
HOLDRX = Number of hold messages received
HOLDTX = Number of hold messages transmitted
INFORX = Number of information messages received
INFOTX = Number of information messages transmitted

LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (neither RCV nor TRMT)

LASTINITRCV = Number of minutes since initialization of all RCV (receive) counters

LASTINITTRMT = Number of minutes since initialization of all TRMT (transmit) counters

LSTRXCAUSE = Last received cause code

LSTRXDGN = Last received diagnostic code

LSTTXCAUSE = Last transmitted cause code

LSTTXDGN = Last transmitted diagnostic code

NOTIFYRX = Number of notify messages received

NOTIFYTX = Number of notify messages transmitted

PROGRESSRX = Number of progress messages received

PROGRESSTX = Number of progress messages transmitted

REGRX = Number of register messages received

REGTX = Number of register messages transmitted

RELCMPLTRX = Number of release complete messages received

RELCMPLTTX = Number of release complete messages transmitted

RELRX = Number of release messages received

RELTX = Number of release messages transmitted

RETACKRX = Number of retrieve acknowledge messages received

RETACKTX = Number of retrieve acknowledge messages transmitted

RETREJRX = Number of retrieve reject messages received

RETREJTX = Number of retrieve reject messages transmitted

RETRX = Number of retrieve messages received

RETTX = Number of retrieve messages transmitted

RSMACKRX = Number of resume acknowledge messages received

RSMACKTX = Number of resume acknowledge messages transmitted

RSMREJRX = Number of resume reject messages received

RSMREJTX = Number of resume reject messages transmitted

RSMRX = Number of resume messages received

RSMTX = Number of resume messages transmitted

RSTACKRX = Number of restart acknowledge messages received

RSTACKTX = Number of restart acknowledge messages transmitted

RSTRX = Number of restart messages received

RSTTX = Number of restart messages transmitted
SEGMENTRX = Number of segment messages received
SEGMENTTX = Number of segment messages transmitted
SERVACKRX = Number of service acknowledge messages received
SERVACKTX = Number of service acknowledge messages transmitted
SERVRX = Number of service messages received
SERVTX = Number of service messages transmitted
SETUPACKRX = Number of setup acknowledge messages received
SETUPACKTX = Number of setup acknowledge messages transmitted
SETUPRX = Number of setup messages received
SETUPTX = Number of setup messages transmitted
STATENQRX = Number of status enquiry messages received
STATENQTX = Number of status enquiry messages transmitted
STATRX = Number of status messages received
STATTX = Number of status messages transmitted
SUSPACKRX = Number of suspend acknowledge messages received
SUSPACKTX = Number of suspend acknowledge messages transmitted
SUSPREJRX = Number of suspend reject messages received
SUSPREJTX = Number of suspend messages reject transmitted
SUSPRX = Number of suspend messages received
SUSPTX = Number of suspend messages transmitted
USRINFORX = Number of user information messages received
USRINFOTX = Number of user information messages transmitted

Default value: none

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* is to be initialized. The value is in the form of numeric counts or rates. The value is “0” if the value of *montype* is “ALL”.

Type: integer

Range: {0-9999}

Default value: 0

- monlev** Identifies (in RTRV-PM) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- locn** Identifies the location of the storage counters to be initialized or from which to retrieve performance data. Currently only NEND is supported.
Type: enum
Range: NEND = near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters.
Type: enum
Range: ALL = All directions
NA = Direction not applicable
RCV = Receive direction only
TRMT = Transmit direction only
Default value: ALL

Input Examples:

```
INIT-REG-ISDNMSG;  
RTRV-PM-ISDNMSG;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:ALERTINGTX,0,0-UP,NEND,ALL"  
":CALLPROCTX,0,0-UP,NEND,ALL"  
":CONNTX,0,0-UP,NEND,ALL"  
":CONNTX,4,0-UP,NEND,ALL"  
":PROGRESSTX,0,0-UP,NEND,ALL"  
":SETUPTX,4,0-UP,NEND,ALL"  
":SETUPACKTX,0,0-UP,NEND,ALL"  
":RSMTX,0,0-UP,NEND,ALL"  
":RSMACKTX,0,0-UP,NEND,ALL"  
"1:RSMREJTX,0,0-UP,NEND,ALL"  
"1:SUSPTX,0,0-UP,NEND,ALL"  
"1:SUSPACKTX,0,0-UP,NEND,ALL"  
"1:SUSPREJTX,0,0-UP,NEND,ALL"  
"1:USRINFOTX,0,0-UP,NEND,ALL"  
"1:HOLDTX,0,0-UP,NEND,ALL"
```

"1:HOLDACKTX,0,0-UP,NEND,ALL"
"1:HOLDREJTX,0,0-UP,NEND,ALL"
"1:RETTX,0,0-UP,NEND,ALL"
"1:RETACKTX,0,0-UP,NEND,ALL"
"1:RETREJTX,0,0-UP,NEND,ALL"
"1:DISCTX,3,0-UP,NEND,ALL"
"1:RELTx,0,0-UP,NEND,ALL"
"1:RELCMPLTTX,3,0-UP,NEND,ALL"
"1:RSTTX,0,0-UP,NEND,ALL"
"1:RSTACKTX,0,0-UP,NEND,ALL"
"1:SEGMENTX,0,0-UP,NEND,ALL"
"1:CONGLTX,0,0-UP,NEND,ALL"
"1:INFOTX,0,0-UP,NEND,ALL"
"1:NOTIFYTX,0,0-UP,NEND,ALL"
"1:STATTX,0,0-UP,NEND,ALL"
"1:STATENQTX,0,0-UP,NEND,ALL"
"1:SERVTX,0,0-UP,NEND,ALL"
"1:SERVACKTX,0,0-UP,NEND,ALL"
"1:FACILTX,0,0-UP,NEND,ALL"
"1:FACILACKTX,0,0-UP,NEND,ALL"
"1:FACILREJTX,0,0-UP,NEND,ALL"
"1:REGTX,0,0-UP,NEND,ALL"
"1:LASTINITRMT,1123,0-UP,NEND,ALL"
"1:ALERTINGRX,4,0-UP,NEND,ALL"
"1:CALLPROCX,4,0-UP,NEND,ALL"
"1:CONNRX,4,0-UP,NEND,ALL"
"1:CONNACKRX,0,0-UP,NEND,ALL"
"1:PROGRESSRX,0,0-UP,NEND,ALL"
"1:SETUPRX,0,0-UP,NEND,ALL"
"1:SETUPACKRX,0,0-UP,NEND,ALL"
"1:RSMRX,0,0-UP,NEND,ALL"
"1:RSMACKRX,0,0-UP,NEND,ALL"
"1:RSMREJRX,0,0-UP,NEND,ALL"
"1:SUSPRX,0,0-UP,NEND,ALL"
"1:SUSPACKRX,0,0-UP,NEND,ALL"
"1:SUSPREJRX,0,0-UP,NEND,ALL"
"1:USRINFORX,0,0-UP,NEND,ALL"
"1:HOLDRX,0,0-UP,NEND,ALL"
"1:HOLDACKRX,0,0-UP,NEND,ALL"
"1:HOLDREJRX,0,0-UP,NEND,ALL"
"1:RETRX,0,0-UP,NEND,ALL"
"1:RETACKRX,0,0-UP,NEND,ALL"
"1:RETREJRX,0,0-UP,NEND,ALL"
"1:DISCRX,0,0-UP,NEND,ALL"
"1:RELTX,3,0-UP,NEND,ALL"
"1:RELCMPLTRX,0,0-UP,NEND,ALL"
"1:RSTRX,0,0-UP,NEND,ALL"

```
"1:RSTACKRX,0,0-UP,NEND,ALL"  
"1:SEGMENTRX,0,0-UP,NEND,ALL"  
"1:CONGCNTRLRX,0,0-UP,NEND,ALL"  
"1:INFORX,0,0-UP,NEND,ALL"  
"1:NOTIFYRX,0,0-UP,NEND,ALL"  
"1:STATRX,0,0-UP,NEND,ALL"  
"1:STATENQRX,0,0-UP,NEND,ALL"  
"1:SERVRX,0,0-UP,NEND,ALL"  
"1:SERVACKRX,0,0-UP,NEND,ALL"  
"1:FACILRX,0,0-UP,NEND,ALL"  
"1:FACILACKRX,0,0-UP,NEND,ALL"  
"1:FACILREJRX,0,0-UP,NEND,ALL"  
"1:REGRX,0,0-UP,NEND,ALL"  
"1:LASTINITRCV,1123,0-UP,NEND,ALL"  
"1:CONS,4,0-UP,NEND,ALL"  
"1:DISCS,3,0-UP,NEND,ALL"  
"1:AVECALLS,1,0-UP,NEND,ALL"  
"1:LASTINITNA,1123,0-UP,NEND,ALL"  
;
```

Related Commands:

RTRV-STATS-ISDNMSG

INIT-REG-LAPD / RTRV-PM-LAPD

Commands:

INIT-REG-LAPD: Initialize Register LAPD

RTRV-PM-ISDNMSG: Retrieve Performance Monitors LAPD

Descriptions:

INIT-REG-LAPD lets the user clear the counters for LAPD (Link Access Protocol – D channel) message statistics.

RTRV-PM-LAPD lets the user retrieve the number of times LAPD (Link Access Protocol – D channel) message types have been transmitted or received since the counters were last initialized.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-LAPD:[TID]:<lapdAid>:[CTAG]::[<montype>],  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

```
RTRV-PM-LAPD:[TID]:<lapdAid>:[CTAG]::[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<lapdAid>:<montype>,<monval>,[<vldty>],[<locn>],  
      [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```


Parameters:

lapdAid Identifies the AID as an LAPD interface and link.

Type: lapdAid

Range: GR303EOC-{1-32767}-{1-28}
GR303TMC-{1-32767}-{1-32767}
ISDN-{1-32767}-{1-32767}
IUA-IOM-{1-17}-PORT-{1-28}
IUA-IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IUA-IOM-{1-17}-T3-{1-8}-PORT-{1-28}

Default value: none

montype Identifies the type of monitored LAPD parameter.

Type: enum

Range: ALL = All types
DISCRX = Number of disconnect frames received
DISCTX = Number of disconnect frames transmitted
DMRX = Number of disconnect mode frames received
DMTX = Number of disconnect mode frames transmitted
FRMR = Number of frame reject errors
FRMRRX = Number of frame reject errors received
FRMRTX = Number of frame reject frames transmitted
INVRX = Number of invalid frames received
IRX = Number of information frames received
ITX = Number of information frames transmitted
REJRX = Number of reject frames received
REJTX = Number of reject frames transmitted
RNRRX = Number of receive not ready frames received
RNRTX = Number of receive not ready frames transmitted
RRRX = Number of receive ready frames received
RRTX = Number of receive ready frames transmitted
SABMERR = Number of set asynchronous balanced mode errors
SABMRX = Number of set asynchronous balanced mode frames received
SABMTX = Number of set asynch balanced mode frames transmitted
UARX = Number of unnumbered acknowledge frames received
UATX = Number of unnumbered acknowledge frames transmitted
UIRX = Number of unnumbered information frames received
UITX = Number of unnumbered information frames transmitted
XIDRX = Number of exchange ID frames received
XIDTX = Number of exchange ID frames transmitted

Default value: ALL

- monnval** Identifies the value to which the counters identified by *montype* are to be initialized or the measured value of the monitored parameter. The value is in the form of numeric counts or rates. The value is "0" if the value of *montype* is "ALL". This parameter is presently not supported; leave it blank.
- Type:** integer
Range: {0-2147483647}
Default value: 0
- monlev** Identifies (in RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
- Type:** enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (in RTRV-PM output) the validity of the monitored interval. This parameter is presently not supported; its value will always be "NULL".
- Type:** enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: 1-UP
- locn** Identifies the location of the storage counters to be initialized or from which to retrieve performance data. Currently only NEND is supported.
- Type:** enum
Range: NEND = near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. This parameter is presently not supported; leave it blank.

Type: enum

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: 15-MIN

mondatt Identifies the monitored date. The value Identifies the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value Identifies the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

INIT-REG-LAPD::ISDN-1-1;

RTRV-PM-LAPD::ISDN-1-1;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"ISDN-1-1:ITX,187363"
"ISDN-1-1:RRTX,140547"
"ISDN-1-1:RNRTX,0"
"ISDN-1-1:REJTX,23"
"ISDN-1-1:SABMTX,2"
"ISDN-1-1:DISCTX,0"
"ISDN-1-1:UATX,1"
"ISDN-1-1:DMTX,0"
"ISDN-1-1:FRMRTX,0"
"ISDN-1-1:XIDTX,0"
"ISDN-1-1:UITX,0"
"ISDN-1-1:IRX,140554"
"ISDN-1-1:RRRX,187357"
"ISDN-1-1:RNRRX,0"
"ISDN-1-1:REJRX,6"
"ISDN-1-1:SABMRX,1"
"ISDN-1-1:DISCRX,0"
"ISDN-1-1:UARX,1"
"ISDN-1-1:DMRX,0"
"ISDN-1-1:FRMRRX,0"
"ISDN-1-1:XIDRX,0"
"ISDN-1-1:UIRX,0"
"ISDN-1-1:INVRX,0"
"ISDN-1-1:SABMERR,0"
"ISDN-1-1:FRMRERR,0"
;
```

Related Commands: none

RTRV-STATS-ISDNMSG

Command:

RTRV-STATS-ISDNMSG: Retrieve Statistics ISDN Message

Description:

RTRV-STATS-ISDNMSG lets the user retrieve ISDN message statistics. Use this command to retrieve the total number of the various ISDN messages transmitted and received, and the last transmitted and received cause and diagnostic codes.

Category: Signaling

Security: View

Input Format:

RTRV-STATS-ISDNMSG:[TID]:<isdnIfNum>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<isdnIfNum>:ALRTGMSGTX=<alrtgMsgTx>,
  CALLPROCMSGTX=<callProcMsgTx>,
  CNTMSGTX=<cntMsgTx>,CNTACKMSGTTX=<cntAckMsgTx>,
  PROGMSGTTX=<progMsgTx>,SETUPMSGTTX=<setupMsgTx>,
  SETUPACKMSGTX=<setupAckMsgTx>,
  RESMSGTTX=<resmMsgTx>,
  RESACKMSGTTX=<resmAckMsgTx>,
  RESREJMSGTTX=<resmRejMsgTx>,SUSMSGTX=<susMsgTx>,
  SUSPACKMSGTX=<susAckMsgTx>,
  SUSPREJMSGTX=<susRejMsgTx>,
  USRINFOMSGTX=<usrInfoMsgTx>,HLDMSGTX=<hldMsgTx>,
  HLDACKMSGTX=<hldAckMsgTx>,
  HLDREJMSGTX=<hldRejMsgTx>,RTRVMSGTX=<rtrvMsgTx>,
  RTRVACKMSGTX=<rtrvAckMsgTx>,
  RTRVREJMSGTX=<rtrvRejMsgTx>,
  DSCNTMSGTX=<dscntMsgTx>,RELMSGTX=<relMsgTx>,
  RELCMPLMSGTX=<relCmplMsgTx>,
  RESTRMSGTX=<restrtMsgTx>,
  RESTRACKMSGTX=<restrtAckMsgTx>,
  SGMTMSGTX=<sgmtMsgTx>,
  CNGSTNCTRLMSGTX=<cngstnCtrlMsgTx>,
  INFOMSGTX=<infoMsgTx>,NTFYMSGTX=<ntfyMsgTx>,
  STATUSMSGTX=<statusMsgTx>,"
```

```
STATUSENQMSGTX=<statusEnqMsgTx>,  
SRVMSGTX=<srvMsgTx>, SRVACKMSGTX=<srvAckMsgTx>,  
FACMSGTX=<facMsgTx>, FACACKMSGTX=<facAckMsgTx>,  
FACREJMSGTX=<facRejMsgTx>, REGMSGTX=<regMsgTx>,  
ALRTGMSGRX=<alrtgMsgRx>,  
CALLPROCMSGRX=<callProcMsgRx>,  
CNTMSGRX=<cntMsgRx>, CNTACKMSGRX=<cntAckMsgRx>,  
PROGMSGRX=<progMsgRx>, SETUPMSGRX=<setupMsgRx>,  
SETUPACKMSGRX=<setupAckMsgRx>,  
RESMSGRX=<resMsgRx>, RESACKMSGRX=<resAckMsgRx>,  
RESREJMSGRX=<resRejMsgRx>, SUSMSGRX=<susMsgRx>,  
SUSPACKMSGRX=<susAckMsgRx>,  
SUSPREJMSGRX=<susRejMsgRx>,  
USRINFOMSGRX=<usrInfoMsgRx>, HLDMSGRX=<hldMsgRx>,  
HLDACKMSGRX=<hldAckMsgRx>,  
HLDREJMSGRX=<hldRejMsgRx>, RTRVMSGRX=<rtrvMsgRx>,  
RTRVACKMSGRX=<rtrvAckMsgRx>,  
RTRVREJMSGRX=<rtrvRejMsgRx>,  
DSCNTMSGRX=<dscntMsgRx>, RELMSGRX=<relMsgRx>,  
RELCMPLMSGRX=<relCmplMsgRx>,  
RESTRTMSGRX=<restrtMsgRx>,  
RESTRTACKMSGRX=<restrtAckMsgRx>,  
SGMTMSGRX=<sgmtMsgRx>,  
CNGSTNCTRLMSGRX=<cngstnCtrlMsgRx>,  
INFOMSGRX=<infoMsgRx>, NTFYMSGRX=<ntfyMsgRx>,  
STATUSMSGRX=<statusMsgRx>,  
STATUSENQMSGRX=<statusEnqMsgRx>,  
SRVMSGRX=<srvMsgRx>, SRVACKMSGRX=<srvAckMsgRx>,  
FACMSGRX=<facMsgRx>, FACACKMSGRX=<facAckMsgRx>,  
FACREJMSGRX=<facRejMsgRx>, REGMSGRX=<regMsgRx>,  
CNTS=<cnts>, DISCNTS=<discnts>,  
AVGNUMOPENCLS=<avgNumOpenCls>,  
LSTTXCAUSECDE=<lstTxCauseCd>,  
LSTSDIAGCDE=<lstTxDiagCd>,  
LSTRXCAUSECDE=<lstRxCauseCd>,  
LSTRXDIAGCDE=<lstRxDiagCd>"
```

;

Parameters:

isdnIfNum Identifies the AID as an ISDN interface. *isdnIfNum* must not be null.

Type: IsdnIfNum

Range: {1-32767}

Default value: none

alrtgMsgTx Identifies the total number of alerting messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

callProcMsgTx Identifies the total number of call proceeding messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

cntMsgTx Identifies the total number of connect messages transmitted.

Range: {0 – 4,294,967,295}

cntAckMsgTx Identifies the total number of connect acknowledge messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

progMsgTx Identifies the total number of progress messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

setupMsgTx Identifies the total number of setup messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

setupAckMsgTx Identifies the total number of setup acknowledge messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

resMsgTx Identifies the total number of resume messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

resAckMsgTx Identifies the total number of resume acknowledge messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

resRejMsgTx Identifies the total number of resume reject messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

suspMsgTx Identifies the total number of suspend messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

suspAckMsgTx Identifies the total number of suspend acknowledge messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

suspRejMsgTx Identifies the total number of suspend reject messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

usrInfoMsgTx Identifies the total number of user information messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

hldMsgTx Identifies the total number of hold messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

hldAckMsgTx Identifies the total number of hold acknowledge messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

hldRejMsgTx Identifies the total number of hold reject messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

rtrvMsgTx Identifies the total number of retrieve messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

rtrvAckMsgTx Identifies the total number of retrieve acknowledge messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

rtrvRejMsgTx Identifies the total number of retrieve reject messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

dscntMsgTx Identifies the total number of disconnect messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

relMsgTx Identifies the total number of release messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

relCmplMsgTx Identifies the total number of release complete messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

restrtMsgTx Identifies the total number of restart messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

restrtAckMsgTx Identifies the total number of restart acknowledge messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

sgmtMsgTx Identifies the total number of segment messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

cngstnCtrlMsgTx Identifies the total number of congestion control messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

infoMsgTx Identifies the total number of information messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

ntfyMsgTx Identifies the total number of notify messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

statusMsgTx Identifies the total number of status messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

statusEnqMsgTx Identifies the total number of status enquiry messages transmitted.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

srvMsgTx Identifies the total number of service messages transmitted.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

srvAckMsgTx Identifies the total number of service acknowledge messages transmitted.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

facMsgTx Identifies the total number of facility messages transmitted.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

facAckMsgTx Identifies the total number of facility acknowledge messages transmitted.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

facRejMsgTx Identifies the total number of facility reject messages transmitted.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

regMsgTx Identifies the total number of register messages transmitted.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

alrtgMsgRx Identifies the total number of alerting messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

callProcMsgRx Identifies the total number of call proceeding messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

cntMsgRx Identifies the total number of connect messages received.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

cntAckMsgRx Identifies the total number of connect acknowledge messages received.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

progMsgRx Identifies the total number of progress messages received.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

setupMsgRx Identifies the total number of setup messages received.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

setupAckMsgRx Identifies the total number of setup acknowledge messages received.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

resMsgRx Identifies the total number of resume messages received.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

resAckMsgRx Identifies the total number of resume acknowledge messages received.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

resRejMsgRx Identifies the total number of resume reject messages received.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

suspMsgRx Identifies the total number of suspend messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

suspAckMsgRx Identifies the total number of suspend acknowledge messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

suspRejMsgRx Identifies the total number of suspend reject messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

usrInfoMsgRx Identifies the total number of user information messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

hldMsgRx Identifies the total number of hold messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

hldAckMsgRx Identifies the total number of hold acknowledge messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

hldRejMsgRx Identifies the total number of hold reject messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

rtrvMsgRx Identifies the total number of retrieve messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

rtrvAckMsgRx Identifies the total number of retrieve acknowledge messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

rtrvRejMsgRx Identifies the total number of retrieve reject messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

dscntMsgRx Identifies the total number of disconnect messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

relMsgRx Identifies the total number of release messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

relCmplMsgRx Identifies the total number of release complete messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

restrtMsgRx Identifies the total number of restart messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

restrtAckMsgRx Identifies the total number of restart acknowledge messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

sgmtMsgRx Identifies the total number of segment messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

cngstnCtrlMsgRx Identifies the total number of congestion control messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

infoMsgRx Identifies the total number of information messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

ntfyMsgRx Identifies the total number of notify messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

statusMsgRx Identifies the total number of status messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

statusEnqMsgRx Identifies the total number of status enquiry messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

srvMsgRx Identifies the total number of service messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

srvAckMsgRx Identifies the total number of service acknowledge messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

facMsgRx Identifies the total number of facility messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

facAckMsgRx Identifies the total number of facility acknowledge messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

facRejMsgRx Identifies the total number of facility reject messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

regMsgRx Identifies the total number of register messages received.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

cnts Identifies the total number of connects.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

discnts Identifies the total number of disconnects.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

avgNumOpenCalls Identifies the average number of open calls.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

lstTxCauseCde Identifies the last transmitted cause code.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

lstTxDiagCde Identifies the last transmitted diagnostic code.

Type: integer
Range: {0 – 4,294,967,295}
Default value: none

lstRxCauseCde Identifies the last received cause code.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

lstRxDiagCde Identifies the last received diagnostic code.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

Input Example:

```
RTRV-STATS-ISDNMSG::14;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"14:ALRTGMSGTX=0,CALLPROCMSGTX=0,CNTMSGTX=0,
CNTACKMSGTTX=0,PROGMSGTTX=0,SETUPMSGTTX=0,
SETUPACKMSGTX=0,RESMSGTTX=0,RESACKMSGTTX=0,
RESREJMSGTTX=0,SUSMSGTX=0,SUSPACKMSGTX=0,
SUSPREJMSGTX=0,USRINFOMSGTX=0,HLDMSGTX=0,
HLDACKMSGTX=0,HLDREJMSGTX=0,RTRVMSGTX=0,
RTRVACKMSGTX=0,RTRVREJMSGTX=0,DSCNTMSGTX=0,
RELMSGTX=0,RELCMPLMSGTX=0,RESTRMSGTX=0,
RESTRACKMSGTX=0,SGMTMSGTX=0,CNGSTNCTRLMSGTX=0,
INFOMSGTX=0,NTFYMSGTX=0,STATUSMSGTX=0,
STATUSENQMSGTX=0,SRVMSGTX=0,SRVACKMSGTX=0,
FACMSGTX=0,FACACKMSGTX=0,FACREJMSGTX=0,
REGMSGTX=0,ALRTGMSGRX=0,CALLPROCMSGRX=0,
CNTMSGRX=0,CNTACKMSGRX=0,PROGMSGRX=0,
SETUPMSGRX=0,SETUPACKMSGRX=0,RESMSGRX=0,
RESACKMSGRX=0,RESREJMSGRX=0,SUSMSGRX=0,
SUSPACKMSGRX=0,SUSPREJMSGRX=0,USRINFOMSGRX=0,
HLDMSGRX=0,HLDACKMSGRX=0,HLDREJMSGRX=0,
RTRVMSGRX=0,RTRVACKMSGRX=0,RTRVREJMSGRX=0,
DSCNTMSGRX=0,RELMSGRX=0,RELCMPLMSGRX=0,
RESTRMSGRX=0,RESTRACKMSGRX=0,SGMTMSGRX=0,
CNGSTNCTRLMSGRX=0,INFOMSGRX=0,NTFYMSGRX=0,
STATUSMSGRX=0,STATUSENQMSGRX=0,SRVMSGRX=0,
SRVACKMSGRX=0,FACMSGRX=0,FACACKMSGRX=0,
FACREJMSGRX=0,REGMSGRX=0,CNTS=0,DISCNTS=0,
AVGNUMOPENCLS=0,LSTTXCAUSECDE=0,LSTTSDIAGCDE=0,
LSTRXCAUSECDE=0,LSTRXDIAGCDE=0"
;
```

Related Commands:

INIT-REG-ISDNMSG

RTRV-PM-ISDNMSG

RTRV-STATUS-ISDNBCHAN

Command:

RTRV-STATUS-ISDNBCHAN: Retrieve Status ISDN B-Channel

Description:

RTRV-STATUS-ISDNBCHAN retrieves the current state of specified ISDN B channels on a link.

Category: Signaling

Security: View

Input Format:

```
RTRV-STATUS-ISDNBCHAN:[TID]:<isdnBcStaChanId>:[CTAG]::
    [<numChans>];
```

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<isdnBcStaChanId>:<primaryState>,
      [<secondaryState>]"
;
```

Parameters:

isdnBcStaChanId Identifies the first in the range of ISDN B channels for which to retrieve the current state. The first field in the range represents the ISDN interface, the second field represents the ISDN link, and the third represents the channel. A null value for the second field in the AID is equivalent to "ALL"; that is, by leaving the field blank, information for all ISDN B channels on all links on the specified interface will be returned. A null value for the third field in the AID is equivalent to "ALL"; that is, by leaving the field blank, information for all ISDN B channels on the specified link on the specified interface will be returned.

Type: isdnBcStaChannelStateAid

Range: {1-32767}[-{1-32767}][-{1-24}]]

Default value: none

numChans Identifies the number of ISDN B channels on the link following, and including, the channel defined by *isdnBcStaChanId*, for which to retrieve the current state.

Type: integer

Range: {1-24}

Default value: 1

primaryState Identifies the primary state of the ISDN B channel in the Telcordia standard form of “primary state – primary state qualifier”.

Type: enum

Range: IS-NR = In Service, Normal

OOS = Out of Service

OOS-AU = Out of Service, Autonomous

OOS-MA = Out of Service, Management

OOS-AUMA = Out of Service, Autonomous and
Management

Default value: none

secondaryState Identifies the secondary state of the ISDN B channel.

Type: enum

Range: BLKD = Blocked. In combination with OOS-AU, Identifies that the B-channel is OOS at the far end. In combination with OOS-MA, Identifies that the B-channel has been put OOS, although the IOM is IS.
BUSY = Bearer channel carrying traffic.
DCHL = D-channel. In combination with OOS-AU, Identifies that the B-channel is OOS because the D-channel is OOS.
DSBLD = Disabled. In combination with OOS-MA, Identifies that the B-channel has been disabled by management, although the IOM is IS.
IDLE = Bearer channel available to carry traffic.
NOTBCHAN = Not a B-channel. In combination with OOS-MA, Identifies that the specified B-channel is not recognized as a B-channel, although the IOM is IS.
RSTRQD = Reset Required. In combination with OOS, Identifies an inconsistent or unexpected state that may require resetting the channel at either end, or locally resetting the IOM port.
SGEO = Supporting Entity Out of Service. In combination with OOS-AU, Identifies that the B-channel is OOS because the IOM port is OOS. In combination with OOS-AUMA, Identifies that the B-channel has been put OOS and the IOM port is OOS.
UAS = Unassigned. In combination with OOS-MA, Identifies that the B-channel is unprovisioned and unequipped, and the IOM is OOS.

Default value: none

Input Example:

```
RTRV-STATUS-ISDNBCHAN::14-12-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"14-12-1:IS-NR,ACT"
;
```

Related Commands: none

SW-TOPROTN-ISDN

Command:

SW-TOPROTN-ISDN: Switch To Protection ISDN

Description:

SW-TOPROTN-ISDN instructs the Plexus 9000 to perform a protection switch; i.e., to initiate a fail-over of the D-channel on an NFAS interface to the backup signaling link used for the NFAS interface. This command is only valid for NFAS interfaces with backup D-channels, and will succeed if both the primary and secondary D-channels on the specified interface are in the “UP” state (i.e., the command is valid only when the value of *sst* in the RTRV-ISDN-IF output is either “PRIACT” or “SECACT”).

Category: Signaling

Security: SA

Input Format:

SW-TOPROTN-ISDN: [TID]:<ifNum>:[CTAG];

Output Format: none

Parameters:

ifNum Identifies the AID as an ISDN interface.
Type: IsdnIfNum
Range: {1-32767}
Default value: none

Input Example:

SW-TOPROTN-ISDN::1;

Related Commands: none

RTRV-ATTR-LOG / SET-ATTR-LOG

Commands:

RTRV-ATTR-LOG: Retrieve Attribute Log

SET-ATTR-LOG: Set Attribute Log

Descriptions:

RTRV-ATTR-LOG lets the user retrieve the current attributes for an existing log in the Plexus 9000. Use it to review these attributes prior to making changes with the SET-ATTR-LOG command. These attributes govern how many, how long, and what kinds of messages are logged.

SET-ATTR-LOG lets the user set the attributes associated with a message log in the Plexus 9000. If an associated log already exists, the new values specified by the command replace the previous values. The Plexus 9000 also logs execution of this command.

Category: Log

Security: NSA for SET, View for RTRV

Input Formats:

```
RTRV-ATTR-LOG:[TID]:[<log_id>]:[CTAG]:[<lognm>];  
SET-ATTR-LOG:[TID]:[<log_id>]:[CTAG]:[<lognm>],  
[<clr log>],[<maxmsg>];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
 "<lognm>,[<maxmsg>]"  
;
```

Parameters:

log_id Identifies the AID as the Plexus 9000.

Type: COM

Range: COM

Default value: COM

lognm Identifies the name of a log for which to set or retrieve log attributes. The call capture (CALLCAPT) and call capture verbose (CALLCAPTV) logs are not included in the set of values for RTRV as they have no retrievable attributes. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the maximum number of messages for all logs will be returned.

Type: enum

Range: AO = autonomous output log – All autonomous message output (a subset of the system log)
BKUP = backup log – All output from running backup scripts (success/failure messages, error messages, etc.)
BULK = bulk download log – All output from EXEC-BULK-DOWNLOAD
CALLCAPT = call capture log – All records of in-progress calls for which capture sessions have been initiated with the ENT-CALL-CAPT command
CALLCAPTV = call capture verbose log – All records of in-progress calls for which capture sessions have been initiated with the ENT-CALL-CAPTVERBOSE command
FRAUD = fraud calls log – All records of calls designated as fraudulent
MSG = messages log – All TL1 commands entered into the system
SEC = security log – All logins, logouts, failed login attempt messages, etc.
SECBKUP = security backup log – All logins, logouts, failed login attempt messages, etc.
SYS = system log – All system messages (processes started, alarms, events, informational messages, etc.)

Default value: none

clrlog Controls the clearing of the log. There is no implementation difference between the values "CLR" and "DLT" to the TL1 user; both values delete the entire log file.

Type: enum

Range: CLR = Clear log
DLT = Delete log
NOCLR = Don't clear log

Default value: NOCLR

maxmsg Identifies the maximum number of messages to be logged. The patch (PATCH), bulk download (BULK), and call capture (CALLCAPT) logs can each have only a single message that contains the contents of the log file for the most recent patch install attempt or capture session.

Type: integer

Range: {1-9999}

Default value: 1000 for autonomous output log (AO)
1000 for messages log (MSG)
400 for security log (SEC)
1000 for system log (SYS)

Input Examples:

```
RTRV-ATTR-LOG;  
SET-ATTR-LOG::COM::MSG,NOCLR,1000;
```

Output Example:

```
TELICA 2004-05-14 14:37:49  
M 0 COMPLD  
"SYS,500"  
"MSG,1000"  
"AO,1000"  
"SEC,400"  
;
```

Related Commands:

RTRV-LOG

RTRV-LOG

Command:

RTRV-LOG: Retrieve Log

Description:

RTRV-LOG lets the user retrieve the contents of one of the logs.

Category: Log

Security: View

Input Format:

RTRV-LOG:[TID]:[<log_id>]:[CTAG]::<lognm>;

Output Format:

```
SID DATE TIME
M  CTAG COMPLD
/*
"<free-format-text log message 1>"
"<free-format-text log message 2>"
"<free-format-text log message 3>"
.
.
.
"<free-format-text log message n>"
*/
;
```

Parameters:

log_id Identifies the AID as the Plexus 9000.
 Type: COM
 Range: COM
 Default value: COM

lognm Identifies the name of a log for which to retrieve the contents.

Type: enum

Range: AO = autonomous output log – All autonomous message output (a subset of the system log)
BKUP = backup log – All output from running backup scripts (success/failure messages, error messages, etc.)
BULK = bulk download log – All output from EXEC-BULK-DOWNLOAD
CALLCAPT = call capture log – All records of in-progress calls for which capture sessions have been initiated with the ENT-CALL-CAPT command
CALLCAPTV = call capture verbose log – All records of in-progress calls for which capture sessions have been initiated with the ENT-CALL-CAPTVERBOSE command
FRAUD = fraud calls log – All records of calls designated as fraudulent
MSG = messages log – All TL1 commands entered into the system
SEC = security log – All logins, logouts, failed login attempt messages, etc.
SECBKUP = security backup log – All logins, logouts, failed login attempt messages, etc.
SYS = system log – All system messages (processes started, alarms, events, informational messages, etc.)

Default value: none

Note: There are no output parameters – The normal response is the standard response block and the contents of the specified log.

Input Example:

```
RTRV-LOG::::MSG;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
/*
"2004-05-14 11:49:01:telica:rtrv-eqpt"
"2004-05-14 11:49:28:telica:rtrv-ss7-trk::1"
"2004-05-14 11:54:22::act-user::telica::*****"
"2004-05-14 11:54:35:telica:rtrv-log::::sec"
*/
;
```

Related Commands:

RTRV/SET-ATTR-LOG

CANC/DLT/ED/ENT/RTRV-USER-SECU

Commands:

CANC-USER-SECU: Cancel User Security

DLT-USER-SECU: Delete User Security

ED-USER-SECU: Edit User Security

ENT-USER-SECU: Enter User Security

RTRV-USER-SECU: Retrieve User Security

Descriptions:

CANC-USER-SECU lets an administrator terminate a user's existing TL1 session. The AID block contains the user identifier.

DLT-USER-SECU lets an administrator remove a user. The AID block contains the user identifier.

ED-USER-SECU allows an administrator to edit a user's access privileges, password, or password properties. The AID block contains the user identifier. Use this command to change the user's password, access privilege, password aging interval, password update grace period, time out interval, and whether the user is allowed to execute commands related to CALEA.

ENT-USER-SECU allows an administrator to add a user account. The AID block contains the user identifier. Use this command to set the user's password, access privilege, password aging interval, password update grace period, time out interval, and whether the user is allowed to execute commands related to CALEA.

RTRV-USER-SECU lets an administrator retrieve the privilege/security parameters of one or more users. It does not return users' passwords. Only an administrator may invoke the general version of this command.

Category: Security

Security: ADMIN for all commands

Input Formats:

```
CANC-USER-SECU: [TID]:<uid>:[CTAG];  
DLT-USER-SECU: [TID]:<uid>:[CTAG];  
ED-USER-SECU: [TID]:<uid>:[CTAG]: [<pid>], [<cid>],  
    [<uap>]: [PAGE=<page>], [PCND=<pcnd>],  
    [TMOUT=<tmout>], [CALEA=<calea>];  
ENT-USER-SECU: [TID]:<uid>:[CTAG]:<pid>,<cid>,<uap>:  
    [PAGE=<page>], [PCND=<pcnd>], [TMOUT=<tmout>],  
    [CALEA=<calea>];  
RTRV-USER-SECU: [TID]: [<uid>]: [CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
  "<uid>:<uap>:[PAGE=<page>], [PCND=<pcnd>],  
    [TMOUT=<tmout>], [CALEA=<calea>]"  
;
```

Parameters:

uid	Identifies the user. The UID is the user ID or login name. Type: string Range: 8 – 16 alphanumeric characters Default value: none
pid	Identifies the user's initial password, which should contain at least one number and one letter. Type: string Range: 8 – 16 alphanumeric characters Default value: none
cid	Identifies the channel. This parameter is presently not supported; leave it blank for ED. For ENT, however, you must enter a value of any alphanumeric string up to 20 characters or the command will fail. Type: string Range: up to 20 alphanumeric characters Default value: none

uap Identifies the user's access privilege. The values in the range are defined in descending order of security. Higher levels include lower levels.

Type: enum

Range: ADMIN = Administrative permits the user to perform all TL1 commands including managing user accounts or profiles and downloading new software.

SW = SoftWare, in addition to all commands with security levels SA, NSA, and VIEW, allows the user to issue commands to download software. This level of access security applies to the System command CPY-MEM and all OS Access System commands.

SA = Service-Affecting, in addition to all commands with security levels NSA and VIEW, allows the user to issue service-affecting commands. This level applies to DSFacility, Equipment, Signalling, and Test commands, and System command ED-DAT.

NSA = Non-Service-Affecting, in addition to all commands with security level VIEW, allows the user to issue non-service-affecting commands. This level applies to Log commands, System commands (excepting CPY-MEM and ED-DAT), and Facility commands INIT-REG, ALW/INH/SCHED-PMREPT, and SET-TH.

VIEW = VIEW allows the user to issue RTRV commands (except RTRV-IPHOST-SECU and RTRV-USER-SECU, which are ADMIN level) to view the Plexus 9000's status and statistics information. This lowest level of access security also applies to ACT-USER (to log on), CANC-USER (to log off), ED-PID (with which users can change their passwords), and to REPT autonomous messages.

Default value: none

page Indicates the password aging interval, in days. At the end of the interval the password expires and the user receives a prompt to replace the existing password. When greater than zero, *page* forces users to change their passwords. This limits the time in which an intruder who has learned a username/password pair can use that account. Setting the value of *page* to "0" makes the password perpetual. For typical long-term users, *page* is generally set to a value much greater than *passwdChgFreq* (set in ED-SYS-SECU). However, temporary users, who will have access for a period less than the value of *passwdChgFreq* and who must change passwords only on first use, can have values of *page* smaller than that set for *passwdChgFreq*.

Type: enum

Range: {0-999}, typically 45 to 60

Default value: 90

- pcnd** Indicates the number of days that a user can use the existing password after the password aging interval has elapsed before an update is mandatory.
Type: enum
Range: {0-999}, typically 7
Default value: 7
- tmout** Identifies the time out interval in minutes. If there are no messages between the user and the Plexus 9000 over the *tmout* interval, the session is logged off.
Type: enum
Range: {0-99}
Default value: 30
- calea** Identifies whether the user is allowed to execute commands related to CALEA (Communications Assistance to Law Enforcement Act). The user must already have an access privilege level of "SA" or higher.
Type: BoolYN
Range: Y = Enabled
N = Disabled
Default value: N

Input Examples:

```
CANC-USER-SECU: : JOHNUSER;  
DLT-USER-SECU: : JOHNUSER;  
ED-USER-SECU: : JOHNUSER: : TELICA, , VIEW:PAGE=90, PCND=7,  
  TMOUT=30, CALEA=N;  
ENT-USER-SECU: : JOHNUSER: : TELICA, NULL, VIEW:PAGE=90,  
  PCND=7, TMOUT=30, CALEA=N;  
RTRV-USER-SECU: : JOHNUSER;
```

Output Example:

```
telica 2003-08-04 14:37:49  
M 0 COMPLD  
"JOHNUSER:VIEW:PAGE=45, PCND=7, TMOUT=30, CALEA=N"  
;
```

Related Commands:

ED-PID

DLT-ALMQ

Command:

DLT-ALMQ: Delete Alarm Queue

Description:

DLT-ALMQ allows an administrator to remove the alarm queuing session identified by the AID from the list of active alarm queuing sessions. Alarm queuing for the session is immediately disabled and alarm queuing resources are discarded.

Category: Security

Security: ADMIN

Input Format:

DLT-ALMQ: [TID]:<almqSessionId>:[CTAG];

Output Format: none

Parameters:

almqSessionId Identifies the AID as the alarm queuing session to delete from the list of active alarm queuing sessions. *almqSessionId* is the hexadecimal representation of the IP address of the machine connecting to the alarm queue port, and can be determined by issuing the RTRV-STATUS-ALMQ command.

Type: AlmqSessionId

Range: up to eight hexadecimal characters

Default value: none

Input Example:

DLT-ALMQ: :a0a0002;

Related Commands:

ED/RTRV-SYS-SECU

RTRV-STATUS-ALMQ

DLT/ENT/RTRV-IPHOST-SECU

Commands:

DLT-IPHOST-SECU: Delete IPHOST Security

ENT-IPHOST-SECU: Enter IPHOST Security

RTRV-IPHOST-SECU: Retrieve IPHOST Security

Descriptions:

DLT-IPHOST-SECU allows an administrator to remove IP addresses from the list of addresses representing trusted hosts; that is, hosts that may connect to the Plexus 9000.

ENT-IPHOST-SECU allows an administrator to create a list of IP addresses representing trusted hosts; that is, hosts that may connect to the Plexus 9000.

RTRV-IPHOST-SECU allows an administrator to retrieve a list of IP addresses representing trusted hosts; that is, hosts that may connect to the Plexus 9000.

Category: Security

Security: ADMIN for all commands

Input Formats:

DLT-IPHOST-SECU:[TID]:[<com>]:[CTAG]::<ipHosts>;

ENT-IPHOST-SECU:[TID]:[<com>]:[CTAG]::<ipHosts>;

RTRV-IPHOST-SECU:[TID]:[<com>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<com>:[<ipHosts>]"
;
```

Parameters:

com Identifies the AID as the Plexus 9000.

Type: COM

Range: COM

Default value: COM

iphosts Identifies the trusted hosts (up to 250) to connect to or disconnect from the Plexus 9000. Multiple trusted host addresses are separated by ampersands.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}&
{0-255}.{0-255}.{0-255}.{0-255}&...&
{0-255}.{0-255}.{0-255}.{0-255}

Default value: none

Input Examples:

```
DLT-IPHOST-SECU:::::  
192.168.0.204&192.168.0.207&192.168.0.208;  
ENT-IPHOST-SECU:::::  
192.168.0.204&192.168.0.207&192.168.0.208;  
RTRV-IPHOST-SECU;
```

Output Example:

```
telica 2003-08-04 14:37:49  
M 0 COMPLD  
"COM:192.168.0.204&192.168.0.207&192.168.0.208"  
;
```

Related Commands:

ED/RTRV-SYS-SECU

ED-PID

Command:

ED-PID: Edit Password

Description:

ED-PID allows users to change their passwords. Users must issue ED-PID after their initial log-ins to create encrypted passwords known only to them. Only users with Admin privilege can enter another user's identification and access changes.

Category: Security

Security: View

Input Format:

ED-PID: [TID]:<uid>:[CTAG]::<oldpid>,<newpid>;

Output Format: none

Parameters:

uid	Identifies the user. The UID is the user ID or login name. Type: string Range: 8 – 16 characters Default value: none
oldpid	Identifies the user's old password, which should contain at least one number and one letter. Type: string Range: 8 – 16 characters Default value: none
newpid	Identifies the user's new password, which should contain at least one number and one letter. The system prevents the user from reusing the most recently used five passwords (or the current password) when selecting a new password. Type: string Range: 8 – 16 characters Default value: none

Input Example:

```
ED-PID::JOHNUSER:::10LDPASSWORD,1NEWPASSWORD;
```

Related Commands:

```
DLT/ED/ENT/RTRV-USER-SECU
```

ED/RTRV-SYS-SECU

Commands:

ED-SYS-SECU: Edit System Security

RTRV-SYS-SECU: Retrieve System Security

Descriptions:

ED-SYS-SECU allows an administrator to edit security parameters associated with a Plexus 9000. Use this command to set the maximum allowable number of invalid session setup attempts, the alert condition duration, the time out intervals, the period in which to generate a password expiration alert message, the lower limit for the password aging interval, the heartbeat interval, whether the TCP connection and trusted hosts are enabled, the assigned ports for alarm queue sessions and the Element Manager, the maximum elapsed time for a user to reconnect to the TL1 agent after an alarm queue session disconnect, the IP address for the Element Manager, whether secure shell is enabled, and the allowed interval between reported TL1 events or alarms.

RTRV-SYS-SECU allows a user to retrieve security parameters associated with a Plexus 9000. Use this command to retrieve the maximum allowable number of invalid session setup attempts, the alert condition duration, the time out intervals, the period in which to generate a password expiration alert message, the lower limit for the password aging interval, whether the TCP connection and trusted hosts are enabled, the assigned port for alarm queue sessions and the Element Manager, the maximum elapsed time for a user to reconnect to the TL1 agent after an alarm queue session disconnect, the IP address for the Element Manager, whether secure shell is enabled, and the allowed interval between reported TL1 events or alarms.

Category: Security

Security: ADMIN for all commands

Input Formats:

```
ED-SYS-SECU:[TID]:[<src>]:[CTAG]:[MAXINV=<maxInv>],  
[DURAL=<dural>],[TMOUT=<tmout>],  
[PRELOGINTIMEOUT=<preLoginTimeOut>],  
[PASSWDEXPALERT=<passwdExpAlert>],  
[PASSWDCHGFREQ=<passwdChgFreq>],  
[HEARTBEAT=<heartbeat>],  
[TCPCONNENABLED=<tcpConnEnabled>],  
[TRUSTEDHOSTENABLED=<trustedHostEnabled>],  
[ALMQPORT=<almqPort>],[ALMQTMO=<almqTmo>],  
[EMPORT=<emPort>],[EM1IP=<em1Ip>],[EM2IP=<em2Ip>],  
[SSHENABLED=<sshEnabled>],  
[EVENTINTERVAL=<eventInterval>];  
RTRV-SYS-SECU:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
" <src>:MAXINV=<maxInv>,DURAL=<dural>,  
TMOUT=<tmout>,PRELOGINTIMEOUT=<preLoginTimeOut>,  
PASSWDEXPALERT=<passwdExpAlert>,  
PASSWDCHGFREQ=<passwdChgFreq>,  
HEARTBEAT=<heartbeat>,  
TCPCONNENABLED=<tcpConnEnabled>,  
TRUSTEDHOSTENABLED=<trustedHostEnabled>,  
ALMQPORT=<almqPort>,ALMQTMO=<almqTmo>  
EMPORT=<emPort>,EM1IP=<em1Ip>,EM2IP=<em2Ip>,  
SSHENABLED=<sshEnabled>,  
EVENTINTERVAL=<eventInterval>"  
;
```

Parameters:

src Identifies the AID as a Plexus 9000.
Type: COM
Range: COM
Default value: COM

- maxInv** Identifies the maximum number of invalid session setup attempts allowed (such as illegal user IDs or passwords) before an intrusion attempt is suspected and alert messages are generated. The factory default is “3”.
- Type:** enum
Range: {0-9}
Default value: not applicable
- dural** Identifies the duration of an alert condition in hours, minutes, and seconds during which the channel suspected of an intrusion attempt is locked out. This impedes the efficiency of an automated password cracker. It is not longer than one minute typically, because a longer duration could cause service deterioration. The factory default is “0-0-30”.
- Type:** enum
Range: {0-99}-{0-59}-{0-59}
Default value: not applicable
- tmout** Identifies the time out interval in minutes. If there are no messages between the user and the Plexus 9000 over the *tmout* interval, the session is logged off. The factory default is “30”.
- Type:** enum
Range: {0-99}
Default value: not applicable
- preLoginTimeOut** Identifies the time out interval in minutes for the period between the initialization of the login process and the first entry by the user. If there are no messages between the user and the Plexus 9000 over the *preLoginTimeOut* interval, the session is logged off. Setting the value to 0 allows a user to receive autonomous messages from the Plexus 9000 without logging on (ACT-USER) and without being disconnected automatically. The factory default is “2”.
- Type:** enum
Range: {0-99}
Default value: not applicable
- passwdExpAlert** Indicates the number of days, after the password aging interval has elapsed, that a password expiration alert message is generated for the user before the existing password can no longer be used. The factory default is “2”.
- Type:** enum
Range: {0-30}
Default value: not applicable

passwdChgFreq Indicates the minimum number of days a password exists before a user can change it. Generally, *passwdChgFreq* is the lower limit for the password aging interval, for which *page* (in ED/ENT-USER-SECU) is the upper limit. When greater than zero, *passwdChgFreq* prohibits frequent password changing. The system stores the most recently used five passwords and prevents the user from reusing them (or the current password) when selecting a new password. Restricting password "flipping" and reuse makes the system more secure against intruders. A *passwdChgFreq* value of 20 days (the default) ideally prevents reuse of a password for a minimum of 120 days. In reality, this waiting period may not be achieved; for instance, when an Administrator using ENT-USER-SECU or ED-USER-SECU sets a password, the user must change the password immediately. Passwords assigned by the Administrator are remembered in the user's recent password list; but as they do not have a *passwdChgFreq* waiting period, they can be reused in less than (6 * *passwdChgFreq*) days. (Note: the Administrator may reuse recent passwords in ED-USER-SECU.) Set *passwdChgFreq* to be considerably less than the smallest value of *page* assigned to typical long-term users. Temporary users, who will have access for a period less than the value of *passwdChgFreq* and who must change passwords only on first use, can have values of *page* smaller than that set for *passwdChgFreq*. The factory default is "20".

Type: enum

Range: {0-99}

Default value: not applicable

heartbeat Indicates the number of minutes that can pass without a REPT-COND automatic message being sent to the system administrators indicating the standing conditions on the Plexus 9000. The REPT-COND automatic message is generated when no activity occurs within the heartbeat timeframe. Setting the value to the default of 0 deactivates the function. The factory default is "0".

Type: enum

Range: {0-120}

Default value: not applicable

tcpConnEnabled Indicates whether the TCP connection is enabled. The factory default is "Y".

Type: BoolYN

Range: Y = Enabled

N = Disabled (serial connections only)

Default value: not applicable

trustedHostEnabled Indicates whether the trusted host function is enabled; i.e., whether the system can connect only to trusted hosts or is open to any connection. The factory default is “N”.

Type: BoolYN

Range: Y = Enabled (only trusted hosts can connect)
N = Disabled

Default value: not applicable

almqPort Identifies the port used for alarm queue sessions. The allowed range for *almqPort* precludes the use of any well-known TCP ports or ports already used by the Plexus. At present, the only value allowed is the factory default of “2363”.

Type: enum

Range: {1025-1109}
{1111-1198}
{1200-1982}
{1986-2048}
{2050-2359}
{2362-5999}
{6010-6666}
{6668-6999}
{7001-65535}

Default value: not applicable

almqTmo Identifies the maximum elapsed time, in minutes, for a user to reconnect to the TL1 agent after a session disconnect or anomalous condition is detected; i.e., the maximum elapsed time during which alarm queuing can occur. If reconnection doesn’t occur within the time specified by *almqTmo*, the alarm queue session is removed from the list of active alarm queue sessions and the alarms in the affected queue are discarded. Setting *almqTmo* to “0” globally disables alarm queuing and flushes queued events. The factory default is 0 (alarm queuing disabled).

Type: enum

Range: {0-4320}

Default value: not applicable

emPort Identifies the port used to connect to the Element Manager. At present, the only value allowed is the factory default of “2362”.

Type: integer

Range: {1025-65535}

Default value: not applicable

em1Ip Identifies the IP address for the primary Element Manager. This address is required for interaction between the Element Manager and a Plexus 9000 running in secure mode; that is, when secure shell (SSH) is enabled. The factory default is “0.0.0.0”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

em2Ip Identifies the IP address for an optional secondary Element Manager. This address is required for interaction between the Element Manager and a Plexus 9000 running in secure mode; that is, when secure shell (SSH) is enabled. The factory default is “0.0.0.0”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

sshEnabled Identifies whether secure shell (SSH) is enabled. Setting the value to “Y” enables IP filtering, thus placing the box in secure mode by requiring the use of SSH for network access in place of common facilities such as telnet, rlogin and FTP. The factory default is “N”.

Type: BoolYN

Range: Y = SSH enabled

N = SSH disabled

Default value: not applicable

eventInterval Identifies the interval between TL1 events or alarms in milliseconds. The factory default is “150”.

Type: integer

Range: {50-500}

Default value: not applicable

Input Examples:

```
ED-SYS-SECU::COM:::MAXINV=3,DURAL=0-0-30,
  TMOUT=30,PRELOGINTIMEOUT=2,PASSWDEXPALERT=7,
  PASSWDCHGFREQ=20,HEARTBEAT=0,TCPCONNENABLED=Y,
  TRUSTEDHOSTENABLED=N,ALMQPORT=2363,ALMQTMO=0,
  EMPORT=2362,EM1IP=10.2.11.86,EM21P=0.0.0.0,
  SSHENABLED=N,EVENTINTERVAL=150;

RTRV-SYS-SECU;
```

Output Example:

```
telica 2003-08-04 14:37:49
M 0 COMPLD
"COM:MAXINV=3,DURAL=0-0-30,TMOUT=30,
  PRELOGINTIMEOUT=2,PASSWDEXPALERT=7,
  PASSWDCHGFREQ=20,HEARTBEAT=0,TCPCONNENABLED=Y,
  TRUSTEDHOSTENABLED=N,ALMQPORT=2363,ALMQTMO=0,
  EMPORT=2362,EM1IP=10.2.11.86,EM2IP=0.0.0.0,
  SSHENABLED=N,EVENTINTERVAL=150"
;
```

Related Commands:

DLT-ALMQ	ENT/RTRV-IPHOST-SECU
RTRV-STATUS-ALMQ	

RTRV/SET-ATTR-SECULOG

Commands:

RTRV-ATTR-SECULOG: Retrieve Attributes Security Log

SET-ATTR-SECULOG: Set Attributes Security Log

Descriptions:

RTRV-ATTR-SECULOG lets the user retrieve the security banner (that is, the free-format text warning, before access is granted, regarding unauthorized entry/use and possible consequences) for the Plexus 9000.

SET-ATTR-SECULOG lets the user generate the security banner for the Plexus 9000; that is, the free-format text warning, before access is granted, regarding unauthorized entry/use and possible consequences.

Description: RTRV-ATTR-SECULOG lets the user retrieve the security banner (that is, the free-format text warning, before access is granted, regarding unauthorized entry/use and possible consequences) for the Plexus 9000.

Category: Security

Security: ADMIN for SET, View for RTRV

Input Formats:

```
RTRV-ATTR-SECULOG:[TID]:[<src>]:[CTAG]::
[WRNLN=<wrnLn>];
SET-ATTR-SECULOG:[TID]:[<src>]:[CTAG]::WRNLN=<wrnLn>,
[WRNTX=<wrnTx>];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:WRNLN=<wrnLn>,WRNTX=<wrnTx>"
;
```

Input Parameters:

src Identifies the AID as the Plexus 9000.
Type: COM
Range: COM
Default value: COM

wrnLn Identifies, within the warning message, the line number that receives the new text specified by *wrnTx*. The Plexus supports up to 20 lines of text. A null value (in RTRV) is equivalent to “ALL”; that is, by leaving the field blank, the entire security banner will be returned.

Type: integer

Range: {1-20}

Default value: none

wrnTx Identifies the free-format text warning on the line identified by *wrnLn*. A null value (not entering a value) results in a blank line.

Type: string

Range: up to 61 ASCII characters

Default value: none

Input Examples:

```
RTRV-ATTR-SECULOG;
```

```
SET-ATTR-SECULOG:::::WRNLN=1,WRNTX=This is a private  
computer system. Unauthorized access or use ;
```

```
SET-ATTR-SECULOG:::::WRNLN=2,WRNTX= may lead to prosec  
ution.;
```

```
SET-ATTR-SECULOG:::::WRNLN=3;
```

Output Example:

```
TELICA 2003-08-04 14:37:49
M 0 COMPLD
"COM:WRNLN=1,WRNTX=This is a private computer sys
    tem. Unauthorized access or use "
"COM:WRNLN=2,WRNTX= may lead to prosecution."
"COM:WRNLN=3,WRNTX="
"COM:WRNLN=4,WRNTX="
"COM:WRNLN=5,WRNTX="
"COM:WRNLN=6,WRNTX="
"COM:WRNLN=7,WRNTX="
"COM:WRNLN=8,WRNTX="
"COM:WRNLN=9,WRNTX="
"COM:WRNLN=10,WRNTX="
"COM:WRNLN=11,WRNTX="
"COM:WRNLN=12,WRNTX="
"COM:WRNLN=13,WRNTX="
"COM:WRNLN=14,WRNTX="
"COM:WRNLN=15,WRNTX="
"COM:WRNLN=16,WRNTX="
"COM:WRNLN=17,WRNTX="
"COM:WRNLN=18,WRNTX="
"COM:WRNLN=19,WRNTX="
"COM:WRNLN=20,WRNTX="
;
```

Related Commands: none

RTRV-STATUS-ALMQ

Command:

RTRV-STATUS-ALMQ: Retrieve Status Alarm Queue

Description:

RTRV-STATUS-ALMQ allows a user to retrieve parameters associated with alarm queuing sessions established for alarm queuing TCP ports defined with ED-SYS-SECU. Use this command to retrieve the affected alarm queuing session(s), the IP address for the Plexus, the date and time the session was established, the date and time alarm queuing began, the date and time of reconnection to the TL1 agent, and the current state of the alarm queue.

Category: Security

Security: View

Input Format:

RTRV-STATUS-ALMQ: [TID]: [<almqSessionId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<almqSessionId>:SRCIPADDR=<srcIpAddr>,
    CONNECTTIMESTAMP=<connectTimestamp>,
    QUEUEINGTIMESTAMP=<queueingTimestamp>,
    REPLAYTIMESTAMP=<replayTimestamp>,
    ALMQSTATE=<almqState>"
;
```

Parameters:

almqSessionId Identifies the alarm queuing session for which to return status from the list of active alarm queuing sessions. *almqSessionID* is the hexadecimal representation of the IP address of the machine connecting to the alarm queue port. A null value is equivalent to "ALL"; that is, if the optional AID is omitted, the Plexus returns status for all sessions having alarm queuing enabled.

Type: AlmqSessionId

Range: up to eight hexadecimal characters

Default value: none

srcIpAddr Identifies the IP address for the client (i.e., the user's computer) used to access the alarm queue session port on the Plexus (defined by the parameter *almqPort* in the command ED-SYS-SECU).

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

connectTimestamp Identifies the date and time that the alarm queuing session was established.

Type: string

Range: {MM-DD-YYYY-HH-MM-SS}

Default value: none

queueingTimestamp Identifies the date and time alarm queuing began due to an anomalous or error condition.

Type: string

Range: {MM-DD-YYYY-HH-MM-SS}

Default value: none

replayTimestamp Identifies the date and time the user reconnects to the TL1 agent after a session disconnect or anomalous condition is detected, and replay of queued alarms begins.

Type: string

Range: {MM-DD-YYYY-HH-MM-SS}

Default value: none

almqState Identifies the current state of an alarm queue established on disconnection with the Plexus of a specific session on a client.

Type: enum

Range: CONNECTED = the client session is not disconnected from the Plexus; alarms do not queue.

QUEUEING = the client session is disconnected from the Plexus; alarms queue for subsequent replay.

REPLAYING = the client session has reconnected to the Plexus, which outputs the queued autonomous messages to the client.

Default value: none

Input Example:

RTRV-STATUS-ALMQ;

Output Example:

```
telica 2003-08-04 14:37:49
M 0 COMPLD
  "a0a0002:SRCIPADDR=199.190.180.1,
    CONNECTTIMESTAMP=08-02-2003-08-35-00,
    QUEUEINGTIMESTAMP=08-03-2003-16-42-55,
    REPLAYTIMESTAMP=08-03-2003-16-55-27,
    ALMQSTATE=CONNECTED"
;
```

Related Commands:

DLT-ALMQ

ED/RTRV-SYS-SECU

DLT/ED/ENT/RTRV-LSET

Commands:

DLT-LSET: Delete Link Set

ED-LSET: Edit Link Set

ENT-LSET: Enter Link Set

RTRV-LSET: Retrieve Link Set

Descriptions:

DLT-LSET lets the user delete a link set.

ED-LSET lets the user change the maximum number of links that can be active for an SS7 link set.

ENT-LSET lets the user add a link set. ENT-LSET will not work correctly unless the following commands have already been issued in the listed order: ENT-SS7SYS, ENT-PRFL-PC, ENT-PC.

RTRV-LSET lets the user retrieve parameters associated with a link set.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-LSET:[TID]:<lsetId>:[CTAG];  
ED-LSET:[TID]:<lsetId>:[CTAG]::  
    ACTLNKREQD=<actLnkReqd>;  
ENT-LSET:[TID]:<lsetId>:[CTAG]::[ADJDPC=<lsetAdjDpc>,  
    [ACTLNKREQD=<actLnkReqd>]];  
RTRV-LSET:[TID]:[<lsetId>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<lsetAid>:ADJDPC=<lsetAdjDpc>,  
    ACTLNKREQD=<actLnkReqd>"  
;
```

Parameters:

lsetId Identifies the AID as an SS7 link set. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, parameters for all SS7 link sets configured in the system will be returned.

Type: LsetAid

Range: {1-20}

Default value: none

lsetAdjDpc Identifies the adjacent DPC to which the link set connects.

Type: enum

Range: {0-255}-{0-255}-{0-255}

Default value: none

actLnkReqd Identifies the maximum number of links that can be active at any given time.

Type: integer

Range: {1-16}

Default value: 16

Input Examples:

DLT-LSET::1;

ED-LSET::1:::ACTLNKREQD=16;

ENT-LSET::1:::ADJDPC=192-43-156,ACTLNKREQD=16;

RTRV-LSET::1;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:ADJDPC=192-43-156,ACTLNKREQD=16"
;
```

Related Commands:

ED-STATE-LSET

RTRV-PM-LSET

INIT-REG-LSET

RTRV-STATUS-LSET

DLT/ED/ENT/RTRV-PC

Commands:

DLT-PC: Delete Point Code
ED-PC: Edit Point Code
ENT-PC: Enter Point Code
RTRV-PC: Retrieve Point Code

Descriptions:

DLT-PC lets the user delete a point code for an adjacent or a remote device, but not for the Plexus 9000 (OWN).

ED-PC lets the user change the properties associated with an adjacent or a remote device, but not for the Plexus 9000 (OWN).

ENT-PC lets the user add a point code for the Plexus 9000 (OWN), an adjacent device (ADJ), or a remote device (REM). The Plexus 9000 supports a maximum of 1024 point codes. ENT-PC will not work unless the following commands have already been issued in the listed order: ENT-SS7SYS and ENT-PRFL-PC.

RTRV-PC lets the user retrieve parameters associated with a point code.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PC: [TID]:<pcId>:[CTAG];
ED-PC: [TID]:<pcId>:[CTAG]::[PCPRFL=<pcPrflId>],
[MINDGT2SEIZE=<minDgt2Seize>],
[ISUPTPAUSE=<isupTPause>],
[PCPAUSEACTN=<pcPauseActn>],[PCSSF=<pcSsf>],
[RSTREQ=<rstReq>],[ANSIVARIANT=<ansiVariant>];
ENT-PC: [TID]:<pcId>:[CTAG]::<pcDir>,<pcPrflId>:
[PCSTARTMODE=<pcStartMode>],
[MINDGT2SEIZE=<minDgt2Seize>],
[ISUPTPAUSE=<isupTPause>],
[PCPAUSEACTN=<pcPauseActn>],[PCSSF=<pcSsf>],
[RSTREQ=<rstReq>],[ANSIVARIANT=<ansiVariant>];
RTRV-PC: [TID]: [<pcId>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<pcId>:<pcDir>,<pcPrflId>:
    PCSTARTMODE=<pcStartMode>,
    MINDGT2SEIZE=<minDgt2Seize>,
    ISUPTPAUSE=<isupTPause>,
    PCPAUSEACTN=<pcPauseActn>, PCSSF=<pcSsf>,
    RSTREQ=<rstReq>,ANSIVARIANT=<ansiVariant>"
;
```

Parameters:

pcId Identifies the AID as a point code. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, parameters for all point codes configured in the system will be returned.

Type: PcAid

Range: {0-255}-{0-255}-{0-255}

Default value: none

pcDir Identifies the type of point code.

Type: enum

Range: ADJ = adjacent point code

OWN = own point code

REM = remote point code

Default value: none

pcPrflId Identifies the point code profile.

Type: enum

Range: {1-128}

Default value: none

pcStartMode Identifies the action the Plexus 9000 takes on startup for all circuit groups towards the DPC to ensure a known state for the circuits.

Type: enum

Range: STARTNOACTION = no action on startup

STARTRESET = reset point code on startup

STARTUNBLOCK = unblock point code on startup

Default value: STARTNOACTION

minDgt2Seize Identifies the minimum number of digits that must be present in the Called Party Number before the router issues a connect request.

Type: integer
Range: {1-20}
Default value: 3

isupTPause Identifies the value (in seconds) for the Pause Validation timer. Typical values are 15 to 20 seconds.

Type: integer
Range: {0-3267}
Default value: 0

pcPauseActn Identifies the action to be taken when MTP level 3 sends a pause status primitive to indicate that the DPC is unavailable.

Type: enum
Range: CLRDFLT = (Clear: Default) clear all calls on receipt of the pause status primitive
CLRTMOUT = (Clear: Timeout) clear calls only when the pause timer (tPAUSE) expires
CLRTRAN = (Clear: Transient) clear transient calls on receipt of the pause status primitive and start the timer tPAUSE
Default value: CLRTMOUT

pcSsf Identifies the sub-service field to be used.

Type: enum
Range: SSFINTL= international sub-service field
SSFNAT= national sub-service field
SSFRES = reserved sub-service field
SSFSPARE = spare sub-service field
Default value: SSFNAT

rstReq Specifies the type of restart procedure required. If this field is not 0, the MTP Level 3 restart procedure is started by MTP Level 3 as soon as the first link becomes in-service.

Type: enum
Range: ANSI = ANSI restart protocol
NORST = restart not required
Default value: NORST

ansiVariant Identifies the format for Group Reset messages and acknowledgements used by the equipment at the point code.

Type: AnsiVariant

Range: 92 = 1992 ANSI format
96 = 1996 ANSI format

Default value: 92

Input Examples:

DLT-PC::1-1-1;

ED-PC::1-1-1:::PCPRFL=1,MINDGT2SEIZE=7,ISUPTPAUSE=10,
PCPAUSEACTN=CLRTMOUT,PCSSF=SSFNAT,RSTREQ=NORST,
ANSIVARIANT=92;

ENT-PC::1-1-1:::ADJ,1:PCSTARTMODE=STARTNOACTION,
MINDGT2SEIZE=7,ISUPTPAUSE=10,PCPAUSEACTN=CLRTMOUT,
PCSSF=SSFNAT,RSTREQ=NORST,ANSIVARIANT=92;

RTRV-PC::192-43-156;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"192-43-156:ADJ,1:PCSTARTMODE=STARTNOACTION,
  MINDGT2SEIZE=7,ISUPTPAUSE=10,
  PCPAUSEACTN=CLRTMOUT,PCSSF=SSFNAT,RSTREQ=NORST,
  ANSIVARIANT=92"
;
```

Related Commands:

DLT/ED/ENT/RTRV-PRFL-PC	INIT-REG-DPC
RTRV-PM-DPC	RTRV-STATUS-PC

DLT/ED/ENT/RTRV-PRFL-PC

Commands:

DLT-PRFL-PC: Delete Profile Point Code

ED-PRFL-PC: Edit Profile Point Code

ENT-PRFL-PC: Enter Profile Point Code

RTRV-PRFL-PC: Retrieve Profile Point Code

Descriptions:

DLT-PRFL-PC lets the user delete a profile for a point code.

ED-PRFL-PC lets the user edit a profile for a point code. Use this command to change the values of MTP3 timers for a point code.

ENT-PRFL-PC lets the user add a profile for a point code. ENT-PRFL-PC is dependent on ENT-SS7SYS; that is, ENT-PRFL-PC will not work unless ENT-SS7SYS has already been issued.

RTRV-PRFL-PC lets the user retrieve a profile for a point code.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-PC: [TID]:<pcPrflId>:[CTAG];

ED-PRFL-PC: [TID]:<pcPrflId>:[CTAG]::
[MTP3T6=<mtp3T6>],[MTP3T8=<mtp3T8>],
[MTP3T10=<mtp3T10>],[MTP3T11=<mtp3T11>],
[MTP3T18=<mtp3T18>],[MTP3T25=<mtp3T25>];
[MTP3T28=<mtp3T28>],[MTP3T29=<mtp3T29>];

ENT-PRFL-PC: [TID]:<pcPrflId>:[CTAG]::
[MTP3T6=<mtp3T6>],[MTP3T8=<mtp3T8>],
[MTP3T10=<mtp3T10>],[MTP3T11=<mtp3T11>],
[MTP3T18=<mtp3T18>],[MTP3T25=<mtp3T25>];
[MTP3T28=<mtp3T28>],[MTP3T29=<mtp3T29>];

RTRV-PRFL-PC: [TID]: [<pcPrflId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<pcPrflId>:MTP3T6=<mtp3T6>,MTP3T8=<mtp3T8>,
  MTP3T10=<mtp3T10>,MTP3T11=<mtp3T11>,
  MTP3T18=<mtp3T18>,MTP3T25=<mtp3T25>,
  MTP3T28=<mtp3T28>,MTP3T29=<mtp3T29>"
;
```

Parameters:

- pcPrflId** Identifies the AID as a point code profile.
Type: PcPrflId
Range: {1-128}
Default value: none
- mtp3T6** Identifies the Timer T6 value (in seconds) for the MTP3 layer. Timer T6 specifies the delay to avoid mis-sequencing on rerouting.
Type: integer
Range: {0-200}
Default value: 0.5
- mtp3T8** Identifies the Timer T8 value (in seconds) for the MTP3 layer. Timer T8 is the transfer prohibited inhibition timer.
Type: integer
Range: {0-500}
Default value: 0.8
- mtp3T10** Identifies the Timer T10 value (in seconds) for the MTP3 layer. Timer T10 is the route set test timer.
Type: integer
Range: {0-100}
Default value: 30
- mtp3T11** Identifies the Timer T11 value (in seconds) for the MTP3 layer. Timer T11 is the transfer restrict timer.
Type: integer
Range: {0-100}
Default value: 65

mtp3T18 Identifies the Timer T18 value (in seconds) for the MTP3 layer. Timer T18 is the transfer restricted inhibition timer.

Type: integer
Range: {0-6553.5}
Default value: 10

mtp3T25 Identifies the Timer T25 value (in seconds) for the MTP3 layer. Timer T25 specifies the period to wait for a TRAFFIC RESTART ALLOWED message.

Type: integer
Range: {0-6553.5}
Default value: 10

mtp3T28 Identifies the Timer T28 value (in seconds) for the MTP3 layer. Timer T28 specifies the period to wait for a TRAFFIC RESTART WAITING message from an adjacent restarting signaling point.

Type: integer
Range: {0-100}
Default value: 5

mtp3T29 Identifies the Timer T29 value (in seconds) for the MTP3 layer. Timer T29 is started when a TRA is sent in response to an unexpected TRA or TRW.

Type: integer
Range: {0-100}
Default value: 60

Input Examples:

DLT-PRFL-PC::1;

ED-PRFL-PC::1:::MTP3T6=0.5,MTP3T8=0.8,MTP3T10=30,
MTP3T11=65,MTP3T18=10,MTP3T25=30,MTP3T28=5,
MTP3T29=60;

ENT-PRFL-PC::1:::MTP3T6=0.5,MTP3T8=0.8,MTP3T10=30,
MTP3T11=65,MTP3T18=10,MTP3T25=30,MTP3T28=5,
MTP3T29=60;

RTRV-PRFL-PC::1;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:MTP3T6=0.5,MTP3T8=0.8,MTP3T10=30,MTP3T11=65,
MTP3T18=10,MTP3T25=30,MTP3T28=5,MTP3T29=60"
;
```

Related Commands:

DLT/ED/ENT/RTRV-PC

DLT/ED/ENT/RTRV-PRFL-SLKL2

Commands:

DLT-PRFL-SLKL2: Delete Profile Signaling Link Layer 2

ED-PRFL-SLKL2: Edit Profile Signaling Link Layer 2

ENT-PRFL-SLKL2: Enter Profile Signaling Link Layer 2

RTRV-PRFL-SLKL2: Retrieve Profile Signaling Link Layer 2

Descriptions:

DLT-PRFL-SLKL2 lets the user delete a signaling link MTP layer 2 profile.

ED-PRFL-SLKL2 lets the user edit a signaling link MTP layer 2 profile.

ENT-PRFL-SLKL2 lets the user add a signaling link MTP layer 2 profile. ENT-PRFL-SLKL2 is dependent on ENT-SS7SYS; that is, ENT-PRFL-SLKL2 will not work unless ENT-SS7SYS has already been issued.

RTRV-PRFL-SLKL2 lets the user retrieve a signaling link MTP layer 2 profile.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-SLKL2: [TID]:<mtp2PrflId>:[CTAG];

ED-PRFL-SLKL2: [TID]:<mtp2PrflId>:[CTAG]::
[MTP2T1=<mtp2T1>],[MTP2T2=<mtp2T2>],
[MTP2T3=<mtp2T3>],[MTP2T5=<mtp2T5>],
[MTP2T6=<mtp2T6>],[MTP2T7=<mtp2T7>],
[MTP2PROVEMRGCY=<mtp2ProvEmrgcy>],
[MTP2PROVNORMAL=<mtp2ProvNormal>],
[MTP2AA=<mtp2AA>];

ENT-PRFL-SLKL2: [TID]:<mtp2PrflId>:[CTAG]::
[MTP2T1=<mtp2T1>],[MTP2T2=<mtp2T2>],
[MTP2T3=<mtp2T3>],[MTP2T5=<mtp2T5>],
[MTP2T6=<mtp2T6>],[MTP2T7=<mtp2T7>],
[MTP2PROVEMRGCY=<mtp2ProvEmrgcy>],
[MTP2PROVNORMAL=<mtp2ProvNormal>],
[MTP2AA=<mtp2AA>];

RTRV-PRFL-SLKL2: [TID]: [<mtp2PrflId>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<mtp2PrfId>:MTP2T1=<mtp2T1>,MTP2T2=<mtp2T2>,
    MTP2T3=<mtp2T3>,MTP2T5=<mtp2T5>,MTP2T6=<mtp2T6>,
    MTP2T7=<mtp2T7>,MTP2PROVEMRGCY=<mtp2ProvEmrgcy>,
    MTP2PROVNORMAL=<mtp2ProvNormal>,MTP2AA=<mtp2AA>"
;
```

Parameters:

- mtp2PrfId** Identifies the AID as an MTP layer 2 profile. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, parameters for all MTP2 signaling link profiles configured in the system will be returned.
- Type:** Mtp2PrfId
Range: {1-40}
Default value: none
- mtp2T1** Identifies the Timer T1 value (in seconds) for the MTP2 layer. This is the ALIGNMENT READY timer.
- Type:** integer
Range: {0-20}
Default value: 13
- mtp2T2** Identifies the Timer T2 value (in seconds) for the MTP2 layer. This is the NOT ALIGNED timer.
- Type:** integer
Range: {0-30}
Default value: 11.5
- mtp2T3** Identifies the Timer T3 value (in seconds) for the MTP2 layer. This is the ALIGNED timer.
- Type:** integer
Range: {0-15}
Default value: 11.5
- mtp2T5** Identifies the Timer T5 value (in seconds) for the MTP2 layer. This is the SENDING SIB timer.
- Type:** integer
Range: {0-0.3}
Default value: 0.1

mtp2T6 Identifies the Timer T6 value (in seconds) for the MTP2 layer. This is the remote congestion timer.

Type: integer

Range: {0-6}

Default value: 3

mtp2T7 Identifies the Timer T7 value (in seconds) for the MTP2 layer. This is the excessive delay of acknowledgement timer.

Type: integer

Range: {0-2}

Default value: 0.5

mtp2ProvEmrgcy Identifies the emergency proving period timer value in seconds.

Type: integer

Range: {0-2}

Default value: 0.6

mtp2ProvNormal Identifies the normal proving period timer value in seconds.

Type: integer

Range: {0-5}

Default value: 2.3

mtp2AA Identifies the maximum number of alignment attempts allowed.

Type: integer

Range: {0-15}

Default value: 5

Input Examples:

```
DLT-PRFL-SLKL2::1;
```

```
ED-PRFL-SLKL2::1::MTP2T1=13,MTP2T2=11.5,  
MTP2T3=11.5,MTP2T5=0.1,MTP2T6=3,MTP2T7=0.5,  
MTP2PROVEMRGCY=0.6,MTP2PROVNORMAL=2.3,MTP2AA=1;
```

```
ENT-PRFL-SLKL2::1::MTP2T1=13,MTP2T2=11.5,  
MTP2T3=11.5,MTP2T5=0.1,MTP2T6=3,MTP2T7=0.5,  
MTP2PROVEMRGCY=0.6,MTP2PROVNORMAL=2.3,MTP2AA=1;
```

```
RTRV-PRFL-SLKL2::1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:MTP2T1=13,MTP2T2=11.5,MTP2T3=11.5,MTP2T5=0.1,
  MTP2T6=3,MTP2T7=0.5,MTP2PROVEMRGCY=0.6,
  MTP2PROVNORMAL=2.3,MTP2AA=1"
;
```

Related Commands:

INIT-REG-SLKL2

RTRV-PM-SLKL2

DLT/ED/ENT/RTRV-PRFL-SLKL3

Commands:

DLT-PRFL-SLKL3: Delete Profile Signaling Link Layer 3

ED-PRFL-SLKL3: Edit Profile Signaling Link Layer 3

ENT-PRFL-SLKL3: Enter Profile Signaling Link Layer 3

RTRV-PRFL-SLKL3: Retrieve Profile Signaling Link Layer 3

Descriptions:

DLT-PRFL-SLKL3 lets the user delete a signaling link MTP layer 3 profile.

ED-PRFL-SLKL3 lets the user edit a signaling link MTP layer 3 profile.

ENT-PRFL-SLKL2 lets the user add a signaling link MTP layer 3 profile. ENT-PRFL-SLKL3 is dependent on ENT-SS7SYS; that is, ENT-PRFL-SLKL3 will not work unless ENT-SS7SYS has already been issued.

RTRV-PRFL-SLKL3 lets the user retrieve a signaling link MTP layer 2 profile.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-SLKL3: [TID]:<mtp3PrflId>:[CTAG];

ED-PRFL-SLKL3: [TID]:<mtp3PrflId>:[CTAG]::
[MTP3T1=<mtp3T1>],[MTP3T2=<mtp3T2>],
[MTP3T3=<mtp3T3>],[MTP3T4=<mtp3T4>],
[MTP3T5=<mtp3T5>],[MTP3T7=<mtp3T7>],
[MTP3T12=<mtp3T12>],[MTP3T13=<mtp3T13>],
[MTP3T14=<mtp3T14>],[MTP3T17=<mtp3T17>],
[MTP3T20=<mtp3T20>],[MTP3T21=<mtp3T21>],
[MTP3TSTT1=<mtp3TstT1>],[MTP3TSTT2=<mtp3TstT2>],
[MTP3T31=<mtp3T31>],[MTP3T33=<mtp3T33>],
[MTP3T34=<mtp3T34>];

```
ENT-PRFL-SLKL3:[TID]:<mtp3PrflId>:[CTAG]::
[MTP3T1=<mtp3T1>],[MTP3T2=<mtp3T2>],
[MTP3T3=<mtp3T3>],[MTP3T4=<mtp3T4>],
[MTP3T5=<mtp3T5>],[MTP3T7=<mtp3T7>],
[MTP3T12=<mtp3T12>],[MTP3T13=<mtp3T13>],
[MTP3T14=<mtp3T14>],[MTP3T17=<mtp3T17>],
[MTP3T20=<mtp3T20>],[MTP3T21=<mtp3T21>],
[MTP3STT1=<mtp3TstT1>],[MTP3STT2=<mtp3TstT2>],
[MTP3T31=<mtp3T31>],[MTP3T33=<mtp3T33>],
[MTP3T34=<mtp3T34>];

RTRV-PRFL-SLKL3:[TID]:[<mtp3PrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<mtp3PrflId>:MTP3T1=<mtp3T1>,MTP3T2=<mtp3T2>,
MTP3T3=<mtp3T3>,MTP3T4=<mtp3T4>,MTP3T5=<mtp3T5>,
MTP3T7=<mtp3T7>,MTP3T12=<mtp3T12>,
MTP3T13=<mtp3T13>,MTP3T14=<mtp3T14>,
MTP3T17=<mtp3T17>,MTP3T20=<mtp3T20>,
MTP3T21=<mtp3T21>,MTP3STT1=<mtp3TstT1>,
MTP3STT2=<mtp3TstT2>,MTP3T31=<mtp3T31>,
MTP3T33=<mtp3T33>,MTP3T34=<mtp3T34>"
;
```

Parameters:

mtp3PrflId Identifies the AID as an MTP layer 3 profile. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, parameters for all MTP3 signaling link profiles configured in the system will be returned.

Type: Mtp3PrflId

Range: {1-20}

Default value: none

mtp3T1 Identifies the Timer T1 value (in seconds) for the MTP3 layer. Timer T1 specifies the delay to avoid mis-sequencing on changeover.

Type: integer

Range: {0-150}

Default value: 0.8

- mtp3T2** Identifies the Timer T2 value (in seconds) for the MTP3 layer. Timer T2 specifies the period to wait for changeover acknowledgement.
Type: integer
Range: {0-500}
Default value: 1.4
- mtp3T3** Identifies the Timer T3 value (in seconds) for the MTP3 layer. Timer T3 specifies the delay to avoid mis-sequencing on changeback.
Type: integer
Range: {0-200}
Default value: 0.8
- mtp3T4** Identifies the Timer T4 value (in seconds) for the MTP3 layer. Timer T4 specifies the period to wait for the first changeback acknowledgement.
Type: integer
Range: {0-200}
Default value: 0.8
- mtp3T5** Identifies the Timer T5 value (in seconds) for the MTP3 layer. Timer T5 specifies the period to wait for the second changeback acknowledgement.
Type: integer
Range: {0-200}
Default value: 0.8
- mtp3T7** Identifies the Timer T7 value (in seconds) for the MTP3 layer. Timer T7 specifies the period to wait for a link connection acknowledgement.
Type: integer
Range: {0-5}
Default value: 1
- mtp3T12** Identifies the Timer T12 value (in seconds) for the MTP3 layer. Timer T12 specifies the period to wait for an uninhibit acknowledgement.
Type: integer
Range: {0-200}
Default value: 1
- mtp3T13** Identifies the Timer T13 value (in seconds) for the MTP3 layer. Timer T13 specifies the period to wait for a force uninhibit message.
Type: integer
Range: {0-200}
Default value: 0.8

mtp3T14 Identifies the Timer T14 value (in seconds) for the MTP3 layer. Timer T14 specifies the period to wait for an inhibition acknowledgement.

Type: integer

Range: {0-5}

Default value: 2

mtp3T17 Identifies the Timer T17 value (in seconds) for the MTP3 layer. Timer T17 specifies the delay to avoid oscillation of initial alignment failure and link restart.

Type: integer

Range: {0-200}

Default value: 1.5

mtp3T20 Identifies the Timer T20 value (in seconds) for the MTP3 layer. Timer T20 is the local inhibit test timer.

Type: integer

Range: {0-200}

Default value: 90

mtp3T21 Identifies the Timer T21 value (in seconds) for the MTP3 layer. Timer T21 is the remote inhibit test timer.

Type: integer

Range: {0-200}

Default value: 90

mtp3TstT1 Identifies the Test Timer T1 value (in seconds) for the MTP3 layer. Test Timer T1 is the Signaling Link Test message Acknowledgement (SLTA) timer described in GR-246-CORE, chapter T1.111.7.

Type: integer

Range: {0-100}

Default value: 8

mtp3TstT2 Identifies the Test Timer T2 value (in seconds) for the MTP3 layer. Test Timer T2 is the periodic Signaling Link Test Message (SLTM) timer described in GR-246-CORE, chapter T1.111.7.

Type: integer

Range: {0-100}

Default value: 60

mtp3T31 Identifies the Timer T31 value (in seconds) for the MTP3 layer. Timer T31 is the false link congestion detection timer.

Type: integer

Range: {0-6553.5}

Default value: 30

mtp3T33 Identifies the Timer T33 value (in seconds) for the MTP3 layer. Timer T33 is the probation timer for link oscillation.

Type: integer
Range: {0-6553.5}
Default value: 100

mtp3T34 Identifies the Timer T34 value (in seconds) for the MTP3 layer. Timer T34 is the suspension timer for link oscillation.

Type: integer
Range: {0-6553.5}
Default value: 10

Input Examples:

```
DLT-PRFL-SLKL3::1;  
ED-PRFL-SLKL3::1::MTP3T1=0.8,MTP3T2=1.4,MTP3T3=0.8,  
MTP3T4=0.8,MTP3T5=0.8,MTP3T7=1,MTP3T12=1,  
MTP3T13=0.8,MTP3T14=2,MTP3T17=1.5,MTP3T20=90,  
MTP3T21=90,MTP3TSTT1=8,MTP3TSTT2=60,MTP3T31=30,  
MTP3T33=100,MTP3T34=10;  
ENT-PRFL-SLKL3::1::MTP3T1=0.8,MTP3T2=1.4,MTP3T3=0.8,  
MTP3T4=0.8,MTP3T5=0.8,MTP3T7=1,MTP3T12=1,  
MTP3T13=0.8,MTP3T14=2,MTP3T17=1.5,MTP3T20=90,  
MTP3T21=90,MTP3TSTT1=8,MTP3TSTT2=60,MTP3T31=30,  
MTP3T33=100,MTP3T34=10;  
RTRV-PRFL-SLKL3::1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:MTP3T1=0.8,MTP3T2=1.4,MTP3T3=0.8,MTP3T4=0.8,  
MTP3T5=0.8,MTP3T7=1,MTP3T12=1,MTP3T13=0.8,  
MTP3T14=2,MTP3T17=1.5,MTP3T20=90,MTP3T21=90,  
MTP3TSTT1=8,MTP3TSTT2=60,MTP3T31=30,MTP3T33=100,  
MTP3T34=10"  
;
```

Related Commands:

INIT-REG-SLKL2 RTRV-PM-SLKL2

DLT/ENT/RTRV-ROUTE-SS7

Commands:

DLT-ROUTE-SS7: Delete SS7 Route

ENT-ROUTE-SS7: Enter SS7 Route

RTRV-ROUTE-SS7: Retrieve SS7 Route

Descriptions:

DLT-ROUTE-SS7 lets the user delete an SS7 route.

ENT-ROUTE-SS7 lets the user establish an SS7 route. Use ENT-ROUTE-SS7 to establish the point code, the link set identity, and the link set priority. ENT-ROUTE-SS7 will not work correctly unless the following commands have already been issued in the listed order: ENT-SS7SYS, ENT-PRFL-PC, ENT-PC, and ENT-LSET.

RTRV-ROUTE-SS7 lets the user retrieve the link set priority associated with a link set in an SS7 route.

Category: Signaling

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-ROUTE-SS7:[TID]:<routeSs7>:[CTAG];

ENT-ROUTE-SS7:[TID]:<routeSs7>:[CTAG]::
[<lsetPriority>];

RTRV-ROUTE-SS7:[TID]:[<routeSs7>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<routeSs7>:<lsetPriority>"
;
```

Parameters:

routeSs7 Identifies the AID as an SS7 route. The pattern is a combination of the destination point code and the link set connecting to it. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, parameters for all SS7 routes configured in the system will be returned.

Type: RouteSs7Aid

Range: <PCAID>-<LSETAID>, where

PCAID = {0-255}-{0-255}-{0-255} and

LSETAID = {1-20}

Default value: none

lsetPriority Identifies the priority for the link set, with lower numbers indicating higher priority. Priorities must be assigned contiguously for a given point code; for example, for a single point code, you cannot have multiple link sets, some with priority "1" and the rest with priority "3".

Type: enum

Range: {0-3}

Default value: 0

Input Examples:

DLT-ROUTE-SS7::3-4-5-16;

ENT-ROUTE-SS7::3-4-5-16:::0;

RTRV-ROUTE-SS7::3-4-5-16;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"3-4-5-16:0"
;
```

Related Commands:

INIT-REG-SS7ROUTE
RTRV-STATUS-ROUTESS7

RTRV-PM-SS7ROUTE

DLT/ED/ENT/RTRV-SLK

Commands:

DLT-SLK: Delete Signaling Link

ED-SLK: Edit Signaling Link

ENT-SLK: Enter Signaling Link

RTRV-SLK: Retrieve Signaling Link

Descriptions:

DLT-SLK lets the user delete a signaling link.

ED-SLK lets the user edit a signaling link. Use this command to assign profiles to signaling links.

ENT-SLK lets the user add a signaling link. Use ENT-SLK to assign profiles to signaling links. The three *congestionThreshold* parameters define the onset thresholds for the three congestion levels. Each onset threshold (*congestionThreshold*) is the discard threshold for the immediately preceding congestion level; i.e., once the congestion level reaches *n*, MTP3 discards the congestion level *n-1* messages. The abatement threshold for each congestion level is the average of the onset thresholds for the concerned congestion level and the immediately preceding congestion level; for example, the abatement threshold for congestion level 2 is the average of *congestionThreshold1* and *congestionThreshold2*. ENT-SLK will not work correctly unless the following commands have already been issued: ENT-T1, ENT-PRFL-SLKL2, ENT-PRFL-SLKL3, and ENT-LSET.

RTRV-SLK lets the user retrieve parameters associated with a signaling link. Use RTRV-SLK to retrieve the link's location (slot/port/channel), MTP2 profile, link set identity, link selection code, MTP3 profile, speed, priority level, and congestion thresholds.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-SLK: [TID]:<ss7LnkId>: [CTAG];  
ED-SLK: [TID]:<ss7LnkId>: [CTAG]:: [SLC=<slc>],  
    [MTP2PRFLID=<mtp2PrflId>],  
    [MTP3PRFLID=<mtp3PrflId>], [CONGLVL1=<congLv1>],  
    [CONGLVL2=<congLv2>], [CONGLVL3=<congLv3>],  
    [ENABLEMTP3T31=<enableMtp3T31>],  
    [RESETMTP3T31=<resetMtp3T31>];  
ENT-SLK: [TID]:<ss7LnkId>: [CTAG]:: IOMPORT=<iomPort>,  
    CHAN=<chan>, LSETID=<lsetId>, SLC=<slc>,  
    MTP2PRFLID=<mtp2PrflId>, MTP3PRFLID=<mtp3PrflId>,  
    [LNKSPEED=<lnkSpeed>], [LNKPRIORITY=<lnkPriority>],  
    [CONGLVL1=<congLv1>], [CONGLVL2=<congLv2>],  
    [CONGLVL3=<congLv3>],  
    [ENABLEMTP3T31=<enableMtp3T31>],  
    [RESETMTP3T31=<resetMtp3T31>];  
RTRV-SLK: [TID]: [<ss7LnkId>]: [CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<ss7LnkId>: IOMPORT=<iomPort>, CHAN=<chan>,  
    LSETID=<lsetId>, SLC=<slc>,  
    MTP2PRFLID=<mtp2PrflId>, MTP3PRFLID=<mtp3PrflId>,  
    LNKSPEED=<lnkSpeed>, LNKPRIORITY=<lnkPriority>,  
    CONGLVL1=<congLv1>, CONGLVL2=<congLv2>,  
    CONGLVL3=<congLv3>,  
    ENABLEMTP3T31=<enableMtp3T31>,  
    RESETMTP3T31=<resetMtp3T31>"  
;
```

Parameters:

ss7LnkId Identifies the AID as a signaling link. There can be no more than 16 signaling links in a link set. A null value (in RTRV input) is equivalent to "ALL"; that is, by leaving the field blank, parameters for all signaling links configured in the system will be returned.

Type: Ss7LnkAid

Range: {1-40}

Default value: none

- iomPort** Identifies the DS1 port on the I/O module.
Type: enum
Range: IOM-{1-17}-PORT-{1-28}
IOM-{1-17}- T3-{1-8}-PORT-{1-28}
IOM-{1-17}- STS1-{1-8}-PORT-{1-28}
Default value: none
- chan** Identifies the DS0 channel on the port.
Type: integer
Range: {1-24}
Default value: none
- lsetId** Identifies the link set.
Type: enum
Range: {1-20}
Default value: none
- slc** Identifies the link selection code, which represents a single link in a specific link set.
Type: integer
Range: {0-15}
Default value: none
- mtp2PrflId** Identifies the MTP layer 2 profile.
Type: enum
Range: {1-40}
Default value: none
- mtp3PrflId** Identifies the MTP layer 3 profile.
Type: enum
Range: {1-20}
Default value: none
- lnkSpeed** Identifies the link speed.
Type: enum
Range: 56K
64K
Default value: 64K

lnkPriority Identifies the link priority level for the link within its link set, with lower numbers indicating higher priority. At least one link in a link set must have priority 0 to enable call routing over the link set. Multiple priorities within a link set must be contiguous.

Type: enum
Range: {0-3}
Default value: 0

congLvl1 Identifies the onset threshold for congestion level 1 in MTP3. It is not activated until the number of messages queued at MTP2 reaches 250.

Type: integer
Range: {1-65536}
Default value: 250

congLvl2 Identifies the onset threshold for congestion level 2 in MTP3. It is not activated until the number of messages queued at MTP2 reaches 250 and the number of messages queued at MTP3 reaches the value specified for *congestionThreshold1*.

Type: integer
Range: {1-65536}
Default value: 500

congLvl3 Identifies the onset threshold for congestion level 3 in MTP3. It is not activated until the number of messages queued at MTP2 reaches 250 and the number of messages queued at MTP3 reaches the value specified for *congestionThreshold2*.

Type: integer
Range: {1-65536}
Default value: 750

enableMtp3T31 Identifies whether congestion timer T31 is enabled for congestion level 1.

Type: BoolYN
Range: N = T31 not enabled
Y = T31 enabled
Default value: Y

resetMTP3T31 Identifies whether congestion timer T31 is reset when the congestion level increases.

Type: BoolYN
Range: N = T31 not reset
Y = T31 reset
Default value: Y

Input Examples:

```
DLT-SLK::1;  
ED-SLK::1:::MTP2PRFLID=1,SLC=1,MTP3PRFLID=1,  
  CONGLVL1=250,CONGLVL2=500,CONGLVL3=750,  
  ENABLEMTPT31=Y,RESETMTP3T31=Y;  
ENT-SLK::1:::IOMPORT=IOM-1-PORT-1,CHAN=24,LSETID=1,  
  SLC=0,MTP2PRFLID=1,MTP3PRFLID=1,LNKSPEED=64K,  
  LNKPRIORITY=0,CONGLVL1=250,CONGLVL2=500,  
  CONGLVL3=750,ENABLEMTPT31=Y,RESETMTP3T31=Y;  
RTRV-SLK::1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:IOMPORT=IOM-1-PORT-1,CHAN=24,LSETID=1,SLC=0,  
  MTP2PRFLID=1,MTP3PRFLID=1,LNKSPEED=64K,  
  LNKPRIORITY=0,CONGLVL1=250,CONGLVL2=500,  
  CONGLVL3=750,ENABLEMTPT31=Y,RESETMTP3T31=Y"  
;
```

Related Commands:

ED-STATE-SLK
RTRV-PM-SLK

INIT-REG-SLK
RTRV-STATUS-SLK

ED-STATE-LSET

Command:

ED-STATE-LSET: Edit State Link Set

Description:

ED-STATE-LSET lets the user change the state of a link set.

Category: Signaling

Security: SA

Input Format:

ED-STATE-LSET:[TID]:<lsetId>:[CTAG]::<pst>;

Output Format: none

Parameters:

lsetId Identifies the link set.

Type: LsetAid

Range: {1-20}

Default value: none

pst Identifies the primary state of a signaling link.

Type: enum

Range: IS = In-service

OOS = Out-of-service

Default value: none

Input Example:

ED-STATE-LSET::1::IS;

Related Messages:

RTRV-STATUS-LSET

ED-STATE-SLK

Command:

ED-STATE-SLK: Edit State Signaling Link

Description:

ED-STATE-SLK lets the user change the state of a signaling link.

Category: Signaling

Security: SA

Input Format:

ED-STATE-SLK: [TID]:<lsetId>:[CTAG]::<pst>;

Output Format: none

Input Parameters:

lsetId Identifies the signaling link.

Type: LsetAid

Range: {1-40}

Default value: none

pst Identifies the state of the signaling link.

Type: enum

Range: INH = Inhibited

IS = In service

OOS = Out of service

UNINH = Uninhibited

Default value: none

Input Example:

ED-STATE-SLK::1:::IS;

Related Messages:

RTRV-STATUS-SLK

INIT-REG-DPC / RTRV-PM-DPC

Commands:

INIT-REG-DPC: Initialize Register Destination Point Code

RTRV-PM-DPC: Retrieve Performance Monitors Destination Point Code

Descriptions:

INIT-REG-DPC lets the user clear the counters for statistics gathered from a destination point code.

RTRV-PM-DPC lets the user retrieve current and historical performance data gathered from a destination point code.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-DPC: [TID]:<ss7Pc>:[CTAG]::<montype>,
[<monval>],[<locn>],[<dirn>;

RTRV-PM-DPC: [TID]:<ss7Pc>:[CTAG]::[<montype>],
[<monlev>],[<locn>],[<dirn>;

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
    "<ss7Pc>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

ss7Pc Identifies the AID as a destination point code.

Type: Ss7PcAid

Range: {0-255}-{0-255}-{0-255}

Default value: none

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: ALL = All types

DURRTEUNAV = Duration in minutes of route unavailability

LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (neither RCV nor TRMT)

LASTINITRCV = Number of minutes since initialization of all RCV (receive) counters

LASTINITTRMT = Number of minutes since initialization of all TRMT (transmit) counters

RTECONGTSTRX = Number of route set congestion test messages received

RTECONGTSTTX = Number of route set congestion test messages transmitted

RTETSTRX = Number of route set test messages received

RTETSTTX = Number of route set test messages transmitted

RTEUNAV = Number of times route became unavailable

SIFOCTPRTEX = Number of SIF (Service Information Field) octets transmitted per route

SIOOCTPRTEX = Number of SIO (Service Indicator Octet) octets transmitted per route

TXALLWRX = Number of transfer allowed messages received

TXALLWTX = Number of transfer allowed messages transmitted

TXPROHIBRX = Number of transfer prohibited messages received

TXPROHIBTX = Number of transfer prohibited messages transmitted

TXRESTRICRX = Number of transfer restricted messages received

TXRESTRICTX = Number of transfer restricted messages transmitted

Default value: none

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value “0” is currently the only acceptable input value.

Type: integer

Range: {0 – 4294967295}

Default value: 0

- monlev** Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.
Type: enum
Range: NEND = near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
Type: enum
Range: ALL = All directions
NA = Direction not applicable
RCV = Receive direction only
TRMT = Transmit direction only
Default value: ALL

Input Examples:

```
INIT-REG-DPC::3-4-5::ALL;  
RTRV-PM-DPC;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"001-001-001:RTETSTTX,0,1-UP,NEND,ALL"  
"001-001-001:RTECONGTSTTX,0,1-UP,NEND,ALL"  
"001-001-001:TXPROHIBTX,0,1-UP,NEND,ALL"  
"001-001-001:TXRESTRICTTX,0,1-UP,NEND,ALL"  
"001-001-001:TXALLWTX,0,1-UP,NEND,ALL"  
"001-001-001:SIFOCTPRTEX,0,1-UP,NEND,ALL"  
"001-001-001:SIOOCTPRTEX,0,1-UP,NEND,ALL"  
"001-001-001:LASTINITTRMT,33,1-UP,NEND,ALL"  
"001-001-001:RTETSTRX,0,1-UP,NEND,ALL"  
"001-001-001:RTECONGTSTRX,0,1-UP,NEND,ALL"  
;
```

Related Commands: none

INIT-REG-ISUPMSG / RTRV-PM-ISUPMSG

Commands:

INIT-REG-ISUPMSG: Initialize Register ISUP Messages

RTRV-PM-ISUPMSG: Retrieve Performance Monitors ISUP Messages

Descriptions:

INIT-REG-ISUPMSG lets the user clear the counters for ISUP message statistics received from a destination point code.

RTRV-PM-ISUPMSG lets the user retrieve current and historical performance data for ISUP messages received from a destination point code.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-ISUPMSG: [TID]:<ss7Pc>:[CTAG]::<montype>,
[<monval>],[<locn>],[<dirn>;

RTRV-PM-ISUPMSG: [TID]:<ss7Pc>:[CTAG]::[<montype>],
[<monlev>],[<locn>],[<dirn>;

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
  "<ss7Pc>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

ss7Pc Identifies the AID as a destination point code.

Type: PcAid

Range: {0-255}-{0-255}-{0-255}

Default value: none

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: ACMRX = Number of address complete messages received

ACMTX = Number of address complete messages
transmitted

ALL = All types

ANMRX = Number of answer messages received

ANMTX = Number of address complete messages
transmitted

BLARX = Number of blocking acknowledgement messages
received

BLATX = Number of blocking acknowledgement messages
transmitted

BLORX = Number of blocking messages received

BLOTX = Number of blocking messages transmitted

CCRRX = Number of continuity check request messages
received

CCRTX = Number of continuity check request messages
transmitted

CFNRX = Number of confusion messages received

CFNTX = Number of confusion messages transmitted

CGBARX = Number of circuit group blocking
acknowledgement messages received

CGBATX = Number of circuit group blocking
acknowledgement messages transmitted

CGBRX = Number of circuit group blocking messages
received

CGBTX = Number of circuit group blocking messages
transmitted

CGUARX = Number of circuit group unblocking
acknowledgement messages received

CGUATX = Number of circuit group unblocking
acknowledgement messages transmitted

CGURX = Number of circuit group unblocking messages
received

CGUTX = Number of circuit group unblocking messages
transmitted

CONRX = Number of connect messages received

CONTX = Number of connect messages transmitted

COTRX = Number of continuity messages received

COTTX = Number of continuity messages transmitted

CPGRX = Number of call progress messages received

CPGTX = Number of call progress messages transmitted

CQMRX = Number of circuit query messages transmitted

CQMTX = Number of circuit query messages transmitted
CQRRX = Number of circuit query acknowledgement
 messages received
CQRTX = Number of circuit query acknowledgement
 messages transmitted
CRARX = Number of circuit reservation acknowledgement
 messages received
CRATX = Number of circuit reservation acknowledgement
 messages transmitted
CRGRX = Number of charging messages received
CRGTX = Number of charging messages transmitted
CRM RX = Number of circuit reservation messages received
CRMTX = Number of circuit reservation messages
 transmitted
CVRRX = Number of circuit validation response messages
 received
CVRTX = Number of circuit validation response messages
 transmitted
CVTRX = Number of circuit validation messages received
CVTTX = Number of circuit validation messages transmitted
EXMRX = Number of exit messages received
EXMTX = Number of exit messages transmitted
FAARX = Number of facility accepted messages received
FAATX = Number of facility accepted messages transmitted
FACRX = Number of facility messages received
FACTX = Number of facility messages transmitted
FARMSGRX = Number of facility request messages
 received
FARMSGTX = Number of facility request messages
 transmitted
FOTRX = Number of forward transfer messages received
FOTTX = Number of forward transfer messages transmitted
FRJRX = Number of facility rejected messages received
FRJTX = Number of facility rejected messages transmitted
GRARX = Number of circuit group reset acknowledgement
 messages received
GRATX = Number of circuit group reset acknowledgement
 messages transmitted
GRSRX = Number of circuit group reset messages received
GRSTX = Number of circuit group reset messages
 transmitted
IAMRX = Number of initial address messages received
IAMTX = Number of initial address messages transmitted
IDRRX = Number of identification request messages
 received

IDRTX = Number of identification request messages transmitted
INFRX = Number of information messages received
INFTX = Number of information messages transmitted
INRRX = Number of information request messages received
INRTX = Number of information request messages transmitted
IRSRX = Number of identification response messages received
IRSTX = Number of identification response messages transmitted
LASTINITRCV = Number of minutes since initialization of all RCV (receive) counters
LASTINITTRMT = Number of minutes since initialization of all TRMT (transmit) counters
LOPRX = Number of loop prevention messages received
LOPTX = Number of loop prevention messages transmitted
LPARX = Number of loopback acknowledgement messages received
LPATX = Number of loopback acknowledgement messages transmitted
NRMRX = Number of network resource management messages received
NRMTX = Number of network resource management messages transmitted
OLMRX = Number of overload messages received
OLMTX = Number of overload messages transmitted
PAMRX = Number of pass-along messages received
PAMTX = Number of pass-along messages transmitted
RELRX = Number of release messages received
RELTX = Number of release messages transmitted
RESRX = Number of resume messages received
RESTX = Number of resume messages transmitted
RLCRX = Number of release complete messages received
RLCTX = Number of release complete messages transmitted
RSCRX = Number of reset messages received
RSCTX = Number of reset messages transmitted
SAMRX = Number of subsequent address messages received
SAMTX = Number of subsequent address messages transmitted
SGMRX = Number of segmentation messages received
SGMTX = Number of segmentation messages transmitted
SUSRX = Number of suspend messages received
SUSTX = Number of suspend messages transmitted
TOTALRX = Total number of messages received
TOTALTX = Total number of messages transmitted

UBARX = Number of unblocking acknowledgement
messages received
UBATX = Number of unblocking acknowledgement
messages transmitted
UBLRX = Number of unblocking messages received
UBLTX = Number of unblocking messages transmitted
UCICRX = Number of unequipped CIC messages received
UCICTX = Number of unequipped CIC messages
transmitted
UPARX = Number of user part available messages received
UPATX = Number of user part available messages
transmitted
UPTRX = Number of user part test messages received
UPTTX = Number of user part test messages transmitted
USRXX = Number of user-to-user messages received
USRTX = Number of user-to-user messages transmitted

Default value: none

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value “0” is currently the only acceptable input value.

Type: integer

Range: {0 – 4294967295}

Default value: 0

monlev Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

locn Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.

Type: enum

Range: NEND = near end

Default value: NEND

dirn Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.

Type: enum

Range: ALL = All directions

NA = Direction not applicable

RCV = Receive direction only

TRMT = Transmit direction only

Default value: ALL

Input Examples:

```
INIT-REG-ISUPMSG::1-1-1:::ALL;
```

```
RTRV-PM-ISUPMSG;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"001-001-001:CGUATX,0,1-UP,NEND,ALL"
"001-001-001:CONTX,0,1-UP,NEND,ALL"
"001-001-001:COTTX,0,1-UP,NEND,ALL"
"001-001-001:CPGTX,0,1-UP,NEND,ALL"
"001-001-001:CQMTX,0,1-UP,NEND,ALL"
"001-001-001:CQRTX,0,1-UP,NEND,ALL"
"001-001-001:CRGTX,0,1-UP,NEND,ALL"
"001-001-001:FAATX,0,1-UP,NEND,ALL"
"001-001-001:FACTX,0,1-UP,NEND,ALL"
"001-001-001:FARMSGTX,0,1-UP,NEND,ALL"
"001-001-001:FOTTX,0,1-UP,NEND,ALL"
"001-001-001:FRJTX,0,1-UP,NEND,ALL"
"001-001-001:GRATX,0,1-UP,NEND,ALL"
"001-001-001:GRSTX,0,1-UP,NEND,ALL"
"001-001-001:IAMTX,0,1-UP,NEND,ALL"
"001-001-001:IDRTX,0,1-UP,NEND,ALL"
"001-001-001:INFTX,0,1-UP,NEND,ALL"
"001-001-001:INRTX,0,1-UP,NEND,ALL"
"001-001-001:IRSTX,0,1-UP,NEND,ALL"
"001-001-001:LOPTX,0,1-UP,NEND,ALL"
"001-001-001:LPATX,0,1-UP,NEND,ALL"
"001-001-001:NRMTX,0,1-UP,NEND,ALL"
"001-001-001:OLMTX,0,1-UP,NEND,ALL"
"001-001-001:PAMTX,0,1-UP,NEND,ALL"
"001-001-001:RELTX,0,1-UP,NEND,ALL"
"001-001-001:RESTX,0,1-UP,NEND,ALL"
"001-001-001:RLCTX,0,1-UP,NEND,ALL"
"001-001-001:RSCTX,0,1-UP,NEND,ALL"
```

"001-001-001:SAMTX,0,1-UP,NEND,ALL"
"001-001-001:SGMTX,0,1-UP,NEND,ALL"
"001-001-001:SUSTX,0,1-UP,NEND,ALL"
"001-001-001:UBATX,0,1-UP,NEND,ALL"
"001-001-001:UBLTX,0,1-UP,NEND,ALL"
"001-001-001:UCICTX,0,1-UP,NEND,ALL"
"001-001-001:UPATX,0,1-UP,NEND,ALL"
"001-001-001:UPTTX,0,1-UP,NEND,ALL"
"001-001-001:USRTX,0,1-UP,NEND,ALL"
"001-001-001:CRATX,0,1-UP,NEND,ALL"
"001-001-001:CRMTX,0,1-UP,NEND,ALL"
"001-001-001:CVRTX,0,1-UP,NEND,ALL"
"001-001-001:CVTTX,0,1-UP,NEND,ALL"
"001-001-001:EXMTX,0,1-UP,NEND,ALL"
"001-001-001:LASTINITRMT,27,1-UP,NEND,ALL"
"001-001-001:TOTALRX,0,1-UP,NEND,ALL"
"001-001-001:ACMRX,0,1-UP,NEND,ALL"
"001-001-001:ANMRX,0,1-UP,NEND,ALL"
"001-001-001:BLARX,0,1-UP,NEND,ALL"
"001-001-001:BLORX,0,1-UP,NEND,ALL"
"001-001-001:CCRXX,0,1-UP,NEND,ALL"
"001-001-001:CFNRX,0,1-UP,NEND,ALL"
"001-001-001:CGBRX,0,1-UP,NEND,ALL"
"001-001-001:CGBARX,0,1-UP,NEND,ALL"
"001-001-001:CGURX,0,1-UP,NEND,ALL"
"001-001-001:CGUARX,0,1-UP,NEND,ALL"
"001-001-001:CONRX,0,1-UP,NEND,ALL"
"001-001-001:COTRX,0,1-UP,NEND,ALL"
"001-001-001:CPGRX,0,1-UP,NEND,ALL"
"001-001-001:CQMRX,0,1-UP,NEND,ALL"
"001-001-001:CQRRX,0,1-UP,NEND,ALL"
"001-001-001:CRGRX,0,1-UP,NEND,ALL"
"001-001-001:FAARX,0,1-UP,NEND,ALL"
"001-001-001:FACRX,0,1-UP,NEND,ALL"
"001-001-001:FARMSGRX,0,1-UP,NEND,ALL"
"001-001-001:FOTRX,0,1-UP,NEND,ALL"
"001-001-001:FRJRX,0,1-UP,NEND,ALL"
"001-001-001:GRARX,0,1-UP,NEND,ALL"
"001-001-001:GRSRX,0,1-UP,NEND,ALL"
"001-001-001:IAMRX,0,1-UP,NEND,ALL"
"001-001-001:IDRRX,0,1-UP,NEND,ALL"
"001-001-001:INFRX,0,1-UP,NEND,ALL"
"001-001-001:INRRX,0,1-UP,NEND,ALL"
"001-001-001:IRSRX,0,1-UP,NEND,ALL"
"001-001-001:LOPRX,0,1-UP,NEND,ALL"
"001-001-001:LPARX,0,1-UP,NEND,ALL"
"001-001-001:NRMRX,0,1-UP,NEND,ALL"


```
"001-001-001:OLMRX,0,1-UP,NEND,ALL"  
"001-001-001:PAMRX,0,1-UP,NEND,ALL"  
"001-001-001:RELRX,0,1-UP,NEND,ALL"  
"001-001-001:RESRX,0,1-UP,NEND,ALL"  
"001-001-001:RLCRX,0,1-UP,NEND,ALL"  
"001-001-001:RSCRX,0,1-UP,NEND,ALL"  
"001-001-001:SAMRX,0,1-UP,NEND,ALL"  
"001-001-001:SGMRX,0,1-UP,NEND,ALL"  
"001-001-001:SUSRX,0,1-UP,NEND,ALL"  
"001-001-001:UBARX,0,1-UP,NEND,ALL"  
"001-001-001:UBLRX,0,1-UP,NEND,ALL"  
"001-001-001:UCICRX,0,1-UP,NEND,ALL"  
"001-001-001:UPARX,0,1-UP,NEND,ALL"  
"001-001-001:UPTRX,0,1-UP,NEND,ALL"  
"001-001-001:USRRX,0,1-UP,NEND,ALL"  
"001-001-001:CRARX,0,1-UP,NEND,ALL"  
"001-001-001:CRM RX,0,1-UP,NEND,ALL"  
"001-001-001:CVRRX,0,1-UP,NEND,ALL"  
"001-001-001:CVTRX,0,1-UP,NEND,ALL"  
"001-001-001:EXMRX,0,1-UP,NEND,ALL"  
"001-001-001:LASTINITRCV,27,1-UP,NEND,ALL"  
;
```

Related Commands:

RTRV-STATS-ISUPMSG

INIT-REG-LSET / RTRV-PM-LSET

Commands:

INIT-REG-LSET: Initialize Register Link Set

RTRV-PM-LSET: Retrieve Performance Monitors Link Set

Descriptions:

INIT-REG-LSET lets the user clear the counters for statistics gathered from a link set.

RTRV-PM-LSET lets the user retrieve current and historical performance data gathered from a link set.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-LSET:[TID]:<lsetId>:[CTAG]::<montype>,
[<monval>],[<locn>],[<dirn>;

RTRV-PM-LSET:[TID]:<lsetId>:[CTAG]::[<montype>],
[<monlev>],[<locn>],[<dirn>;

Output Format:

```
      SID DATE TIME
M  CTAG COMPLD
  "<lsetId>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

lsetId Identifies the AID as a link set.

Type: LsetId

Range: {1-20}

Default value: none

- montype** Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. "ALL" is the only valid input value.
- Type:** enum
Range: ALL = All types
DURLSETUNAV = Duration in minutes of link set unavailability
LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (neither RCV nor TRMT)
STARTLSETFAIL = Number of times the link set has failed since initialization of all counters
STOPLSETFAIL = Number of times the link set has become active (after failure) since initialization of all counters
Default value: none
- monval** Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value "0" is currently the only acceptable input value.
- Type:** integer
Range: {0 – 4294967295}
Default value: 0
- monlev** Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
- Type:** enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.
- Type:** enum
Range: NEND = near end
Default value: NEND

dirn Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.

Type: enum

Range: ALL = All directions

NA = Direction not applicable

RCV = Receive direction only

TRMT = Transmit direction only

Default value: ALL

Input Examples:

```
INIT-REG-LSET::1::ALL;
```

```
RTRV-PM-LSET;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:STARTLSETFAIL,1,1-UP,NEND,ALL"
"1:STOPLSETFAIL,2,1-UP,NEND,ALL"
"1:LASTINITNA,101,1-UP,NEND,ALL"
"1:DURLSETUNAV,7,1-UP,NEND,ALL"
;
```

Related Commands:

```
RTRV-STATUS-LSET
```

INIT-REG-MTP3 / RTRV-PM-MTP3

Commands:

INIT-REG-MTP3: Initialize Register MTP3

RTRV-PM-MTP3: Retrieve Performance Monitors MTP3

Descriptions:

INIT-REG-MTP3 lets the user clear the counters for statistics concerning MTP3 signaling links.

RTRV-PM-MTP3 lets the user retrieve current and historical performance data gathered from MTP3 signaling links.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-MTP3:[TID]:[<src>]:[CTAG]::<montype>,
[<monval>],[<locn>],[<dirn>;

RTRV-PM-MTP3:[TID]:[<src>]:[CTAG]::<montype>],
[<monlev>],[<locn>],[<dirn>;

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
   "<src>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: ALL = All types

LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (neither RCV nor TRMT)

LASTINITRCV = Number of minutes since initialization of all RCV (receive) counters

LASTINITTRMT = Number of minutes since initialization of all TRMT (transmit) counters

MSUDROPRTERR = Number of message signaling units dropped due to a routing data error

MTPRESTARTS = Number of MTP3 restarts

TRARSTRTALLWRX = Number of traffic restart allowed messages received

TRARSTRTALLWTX = Number of traffic restart allowed messages transmitted

TRARSTRTWAITRX = Number of traffic restart waiting messages received

TRARSTRTWAITTX = Number of traffic restart waiting messages transmitted

USRUNAVRX = Number of user part unavailable messages received

USRUNAVTX = Number of user part unavailable messages transmitted

Default value: none

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value “0” is currently the only acceptable input value.

Type: integer

Range: {0 – 4294967295}

Default value: 0

monlev Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.
Type: enum
Range: NEND = near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
Type: enum
Range: ALL = All directions
NA = Direction not applicable
RCV = Receive direction only
TRMT = Transmit direction only
Default value: ALL

Input Examples:

```
INIT-REG-MTP3::::ALL;  
RTRV-PM-MTP3;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:USRUNAVTX,0,1-UP,NEND,ALL"  
"COM:TRARSTRALLWTX,0,1-UP,NEND,ALL"  
"COM:TRARSTRWAITTX,0,1-UP,NEND,ALL"  
"COM:LASTINITTRMT,16,1-UP,NEND,ALL"  
"COM:USRUNAVRX,0,1-UP,NEND,ALL"  
"COM:TRARSTRALLWRX,0,1-UP,NEND,ALL"  
"COM:TRARSTRWAITRX,0,1-UP,NEND,ALL"  
"COM:LASTINITRCV,16,1-UP,NEND,ALL"  
"COM:MSUDROPRTERR,0,1-UP,NEND,ALL"  
"COM:MTPPRESTARTS,0,1-UP,NEND,ALL"  
"COM:LASTINITNA,16,1-UP,NEND,ALL"  
;
```

Related Commands: none

INIT-REG-SLK / RTRV-PM-SLK

Commands:

INIT-REG-SLK: Initialize Register Signaling Link

RTRV-PM-SLK: Retrieve Performance Monitors Signaling Link

Descriptions:

INIT-REG-SLK lets the user clear the counters for statistics gathered from a signaling link.

RTRV-PM-SLK lets the user retrieve current and historical performance data gathered from a signaling link. MTP Layer 3 packet traffic statistics are captured and stored based on the maximum value reached (High Water Mark or HWM) for 100 one-minute, 50 five-minute and 20 15-minute periods.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-SLK: [TID]:<ss7LnkId>:[CTAG]::<montype>,
<monval>;

RTRV-PM-SLK: [TID]:<ss7LnkId>:[CTAG]::[<montype>];

Output Format:

```
      SID DATE TIME
M  CTAG COMPLD
    "<ss7LnkId>:<montype>,<monval>"
;
```

Parameters:

ss7LnkId Identifies the AID as a signaling link.

Type: Ss7LnkAid

Range: {1-40}

Default value: none

montype Identifies (in INIT-REG) the registers (for a type of monitored parameter) to initialize for the specified signaling link.

Type: enum

Range: HWM15MINCFG = Identifies whether maximum-value-reached (HWM) calculations for 15-minute periods are done. A value of “0” means “no” and a value of “1” means “yes”.

HWM1MINCFG = Identifies whether maximum-value-reached (HWM) calculations for one-minute periods are done. A value of “0” means “no” and a value of “1” means “yes”.

HWM5MINCFG = Identifies whether maximum-value-reached (HWM) calculations for five-minute periods are done. A value of “0” means “no” and a value of “1” means “yes”.

Default value: none

montype Identifies (in RTRV-PM) the registers (for a type of monitored parameter) from which to retrieve performance data for the specified signaling link.

Type: enum

Range: HWM = All high water marks

HWM15MINCFG = Identifies whether HWM calculations for 15-minute periods are done. A value of “0” means “no” and a value of “1” means “yes”.

HWM15MINLINKUTIL = HWM for link utilization reached in 20 15-minute periods (calculated as a percentage using total MSU octets received and transmitted)

HWM15MINLINKUTILAGE = The 15-minute period in which the HWM for link utilization occurred (“1” indicates the most recent period, “20” the least).

HWM15MINMSURX = Maximum number of message signal units received for 15-minute periods.

HWM15MINMSURXAGE = The 15-minute period in which the HWM for message signal units received occurred (“1” indicates the most recent period, “20” the least).

HWM15MINMSUTX = Maximum number of message signal units transmitted for 15-minute periods.

HWM15MINMSUTXAGE = The 15-minute period in which the HWM for message signal units transmitted occurred (“1” indicates the most recent period, “20” the least).

HWM15MINOCTRX = Maximum number of octets received for 15-minute periods.

HWM15MINOCTRXAGE = The 15-minute period in which the HWM for octets received occurred (“1” indicates the most recent period, “20” the least).

HWM15MINOCTTX = Maximum number of octets transmitted for 15-minute periods.

HWM15MINOCTTXAGE = The 15-minute period in which the HWM for octets transmitted occurred ("1" indicates the most recent period, "20" the least).

HWM1MINCFG = Identifies whether HWM calculations for one-minute periods are done. A value of "0" means "no" and a value of "1" means "yes".

HWM1MINLINKUTIL = HWM for link utilization reached in 100 one-minute periods (calculated as a percentage using total MSU octets received and transmitted)

HWM1MINLINKUTILAGE = The one-minute period in which the HWM for link utilization occurred ("1" indicates the most recent period, "100" the least).

HWM1MINMSURX = Maximum number of message signal units received for one-minute periods.

HWM1MINMSURXAGE = The one-minute period in which the HWM for message signal units received occurred ("1" indicates the most recent period, "100" the least).

HWM1MINMSUTX = Maximum number of message signal units transmitted for one-minute periods.

HWM1MINMSUTXAGE = The one-minute period in which the HWM for message signal units transmitted occurred ("1" indicates the most recent period, "100" the least).

HWM1MINOCTRX = Maximum number of octets received for one-minute periods.

HWM1MINOCTRXAGE = The one-minute period in which the HWM for octets received occurred ("1" indicates the most recent period, "100" the least).

HWM1MINOCTTX = Maximum number of octets transmitted for one-minute periods.

HWM1MINOCTTXAGE = The one-minute period in which the HWM for octets transmitted occurred ("1" indicates the most recent period, "100" the least).

HWM5MINCFG = Identifies whether HWM calculations for five-minute periods are done. A value of "0" means "no" and a value of "1" means "yes".

HWM5MINLINKUTIL = HWM for link utilization reached in 50 five-minute periods (calculated as a percentage using total MSU octets received and transmitted).

HWM5MINLINKUTILAGE = The five-minute period in which the HWM for link utilization occurred ("1" indicates the most recent period, "50" the least).

HWM5MINMSURX = Maximum number of message signal units received for five-minute periods.

HWM5MINMSURXAGE = The five-minute period in which the HWM for message signal units received occurred ("1" indicates the most recent period, "50" the least).

HWM5MINMSUTX = Maximum number of message signal units transmitted for five-minute periods.

HWM5MINMSUTXAGE = The five-minute period in which the HWM for message signal units transmitted occurred ("1" indicates the most recent period, "50" the least).

HWM5MINOCTR = Maximum number of octets received for five-minute periods.

HWM5MINOCTRAGE = The five-minute period in which the HWM for octets received occurred ("1" indicates the most recent period, "50" the least).

HWM5MINOCTTX = Maximum number of octets transmitted for five-minute periods.

HWM5MINOCTTXAGE = The five-minute period in which the HWM for octets transmitted occurred ("1" indicates the most recent period, "50" the least).

Default value: HWM

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized.

Type: enum

Range: {0,1}

Default value: none

Input Examples:

```
INIT-REG-SLK::1:::HWM15MIN,0;  
RTRV-PM-SLK::1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:HWM15MINCFG,0"  
"1:HWM1MINCFG,0"  
"1:HWM5MINCFG,0"  
;
```

Related Commands: none

INIT-REG-SLKL2 / RTRV-PM-SLKL2

Commands:

INIT-REG-SLKL2: Initialize Register SLKL2

RTRV-PM-SLKL2: Retrieve Performance Monitors SLKL2

Descriptions:

INIT-REG-SLKL2 lets the user clear the counters for statistics gathered from a MTP2 signaling link.

RTRV-PM-SLKL2 lets the user retrieve current and historical performance data gathered from an MTP2 signaling link.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-SLKL2: [TID]:<ss7LnkId>:[CTAG]::<montype>,
[<monval>],[<locn>],[<dirn>;

RTRV-PM-SLKL2: [TID]:<ss7LnkId>:[CTAG]::[<montype>],
[<monlev>],[<locn>],[<dirn>;

Output Format:

```
      SID DATE TIME
M  CTAG COMPLD
    "<ss7LnkId>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

ss7LnkId Identifies the AID as an MTP Layer 2 signaling link.

Type: Ss7LnkAid

Range: {1-40}

Default value: none

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: ALL = All types

DURLNKINSRV = Number of minutes the link has been in-service

DURLNKLOCCONG = Number of minutes the link has been locally congested

FISURX = Number of FISUs received on the link

FISUTX = Number of FISUs transmitted on the link

LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (RCV or TRMT)

LASTINITRCV = Number of minutes since initialization of all RCV (receive) counters

LASTINITTRMT = Number of minutes since initialization of all TRMT (transmit) counters

LNKFAILABNRML = Number of times link has failed due to abnormal FIBR/BSNR

LNKFAILALIGN = Number of times link has failed due to inability to complete alignment procedure

LNKFAILCONG = Number of times link has failed due to excessive congestion

LNKFAILDLYACK = Number of times link has failed due to delay of acknowledgement messages

LNKFAILERR = Number of times link has failed due to excessive error rate

LNKFAILFORALL = Number of times link has failed for any reason

LSSURX = Number of LSSUs received on the link

LSSUTX = Number of LSSUs transmitted on the link

MSURX = Number of message signal units received on the link

MSUTX = Number of message signal units transmitted on the link

NEGACKRX = Number of times negative acknowledgment messages received on the link

OCTRETX = Number of octets retransmitted on the link

SIFSIOOCTR = Number of SIF/SIO (Service Information Field / Service Indicator Octet) octets received on the link

SIFSIOOCTTX = Number of SIF/SIO (Service Information Field / Service Indicator Octet) octets transmitted on the link

SIGUNITRXERR = Number of signaling units received in error on the link

Default value: none

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value "0" is currently the only acceptable input value.

Type: integer

Range: {0 – 4294967295}

Default value: 0

monlev Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

locn Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.

Type: enum

Range: NEND = near end

Default value: NEND

dirn Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.

Type: enum

Range: ALL = All directions

NA = Direction not applicable

RCV = Receive direction only

TRMT = Transmit direction only

Default value: ALL

Input Examples:

```
INIT-REG-SLKL2::1:::ALL;
```

```
RTRV-PM-SLKL2::1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:IFSI00CTTX,1,1-UP,NEND,ALL"
"1:OCTRETX,0,1-UP,NEND,ALL"
"1:MSUTX,130,1-UP,NEND,ALL"
"1:LSSUTX,3,1-UP,NEND,ALL"
"1:FISUTX,130,1-UP,NEND,ALL"
"1:LASTINITRMT,71,1-UP,NEND,ALL"
"1:SIGUNITRXERR,0,1-UP,NEND,ALL"
"1:NEGACKRX,0,1-UP,NEND,ALL"
"1:SIFSI00CTRX,3,1-UP,NEND,ALL"
"1:MSURX,129,1-UP,NEND,ALL"

telica 2004-05-14 14:37:49
M 0 COMPLD
"1:LSSURX,7,1-UP,NEND,ALL"
"1:FISURX,516,1-UP,NEND,ALL"
"1:LASTINITTRCV,71,1-UP,NEND,ALL"
"1:LNKFAILFORALL,0,1-UP,NEND,ALL"
"1:LNKFAILABNRML,0,1-UP,NEND,ALL"
"1:LNKFAILDLYACK,0,1-UP,NEND,ALL"
"1:LNKFAILERR,0,1-UP,NEND,ALL"
"1:LNKFAILCONG,0,1-UP,NEND,ALL"
"1:LNKFAILALIGN,0,1-UP,NEND,ALL"
"1:LASTINITNA,71,1-UP,NEND,ALL"

telica 2004-05-14 14:37:49
M 0 COMPLD
"1:DURLNKINSRV,42,1-UP,NEND,ALL"
"1:DURLNKLOCCONG,0,1-UP,NEND,ALL"
;
```

Related Commands: none

INIT-REG-SLKL3 / RTRV-PM-SLKL3

Commands:

INIT-REG-SLKL3: Initialize Register SLKL3

RTRV-PM-SLKL3: Retrieve Performance Monitors SLKL3

Name: INIT-REG-SLKL3: Initialize Register Call Control

Descriptions:

INIT-REG-SLKL3 lets the user clear the counters for statistics gathered from a MTP3 signaling link.

RTRV-PM-SLKL3 lets the user retrieve current and historical performance data gathered from an MTP3 signaling link.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-SLKL3: [TID]:<ss7LnkId>:[CTAG]::<montype>,
[<monval>],[<locn>],[<dirn>;

RTRV-PM-SLKL3: [TID]:<ss7LnkId>:[CTAG]::[<montype>],
[<monlev>],[<locn>],[<dirn>;

Output Format:

```
      SID DATE TIME
M  CTAG COMPLD
  "<ss7LnkId>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

ss7LnkId Identifies the AID as an MTP 3 signaling link.

Type: Ss7LnkAid

Range: {1-40}

Default value: none

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: ALL = All types

CHNGBCKACKRX = Number of changeback
acknowledgement messages received

CHNGBCKACKTX = Number of changeback
acknowledgement messages transmitted

CHNGBCKRX = Number of changeback messages received

CHNGBCKTX = Number of changeback messages
transmitted

CHNGOVERACKRX = Number of changeover
acknowledgement messages received

CHNGOVERACKTX = Number of changeover
acknowledgement messages transmitted

CHNGOVERRX = Number of changeover messages
received

CHNGOVERTX = Number of changeover messages
transmitted

DUROFLNKCONG = Duration of last link congestion in
minutes

DUROFLNKUNAV = Duration of last link unavailability in
minutes

EMERGCHNGOVERACKRX = Number of emergency
changeover acknowledgement messages received

EMERGCHNGOVERACKTX = Number of emergency
changeover acknowledgement messages transmitted

EMERGCHNGOVERRX = Number of emergency
changeover messages received

EMERGCHNGOVERTX = Number of emergency
changeover messages transmitted

INVPDURX = Number of invalid protocol data units
(protocol messages) received

LASTINITNA = Number of minutes since initialization of all
counters for which there is no direction (neither RCV nor
TRMT)

LASTINITRCV = Number of minutes since initialization of
all RCV (receive) counters

LASTINITTRMT = Number of minutes since initialization
of all TRMT (transmit) counters

LNKCONACKRX = Number of link connection
acknowledgement messages received

LNKCONACKTX = Number of link connection
acknowledgement messages transmitted

LNKCONGATTHRSHLD0 = Number of links at congestion level 0
LNKCONGATTHRSHLD1 = Number of links at congestion level 1
LNKCONGATTHRSHLD2 = Number of links at congestion level 2
LNKCONGATTHRSHLD3 = Number of links at congestion level 3
LNKCONORDRX = Number of link connection order messages received
LNKCONORDTX = Number of link connection order messages transmitted
LNKFORCEUNINHRX = Number of link forced uninhibit messages received
LNKFORCEUNINHTX = Number of link forced uninhibit acknowledgement messages transmitted
LNKINHACKRX = Number of link inhibit acknowledgement messages received
LNKINHACKTX = Number of link inhibit acknowledgement messages transmitted
LNKINHDENYRX = Number of link inhibit denied messages received
LNKINHDENYTX = Number of link inhibit denied messages transmitted
LNKINHRX = Number of link inhibit messages received
LNKINHTX = Number of link inhibit messages transmitted
LNKLOCINHTSTRX = Number of link locally inhibited test messages received
LNKLOCINHTSTTX = Number of link locally inhibited test messages transmitted
LNKRMTINHTSTRX = Number of link remotely inhibited test messages received
LNKRMTINHTSTTX = Number of link remotely inhibited test messages transmitted
LNKTSTACKRX = Number of link test acknowledgement messages received
LNKTSTACKTX = Number of link test acknowledgement messages transmitted
LNKTSTRX = Number of link test messages received
LNKTSTTX = Number of link test messages transmitted
LNKUNINHACKRX = Number of link uninhibit acknowledgement messages received
LNKUNINHACKTX = Number of link uninhibit acknowledgement messages transmitted
LNKUNINHRX = Number of link uninhibit messages received

LNKUNINH TX = Number of link uninhibit messages transmitted
MSURX = Number of message signal units received on the link
MSUTX = Number of message signal units transmitted on the link
PRI0DROP = Number of messages with priority 0 dropped
PRI1DROP = Number of messages with priority 1 dropped
PRI2DROP = Number of messages with priority 2 dropped
PRI3DROP = Number of messages with priority 3 dropped
SIFOCTRX = Number of SIF (Service Information Field) octets received on the link
SIFOCTTX = Number of SIF (Service Information Field) octets transmitted on the link
SIOOCTRX = Number of SIO (Service Indicator Octet) octets received on the link
SIOOCTTX = Number of SIO (Service Indicator Octet) octets transmitted on the link
TXCONGDROP = Number of message signal units dropped due to link congestion
TXCTRLRX = Number of transfer controlled messages received
TXCTRLTX = Number of transfer controlled messages transmitted
TXMSGDROP = Number of transmit messages dropped

Default value: none

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value "0" is currently the only acceptable input value.

Type: integer

Range: {0 – 4294967295}

Default value: 0

monlev Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.
- Type:** enum
Range: NEND = near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: ALL = All directions
NA = Direction not applicable
RCV = Receive direction only
TRMT = Transmit direction only
Default value: ALL

Input Examples:

```
INIT-REG-SLKL3::1:::ALL;  
RTRV-PM-SLKL3::1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:CHNGOVERTX,0,1-UP,NEND,ALL"  
"1:CHNGOVERACKTX,0,1-UP,NEND,ALL"  
"1:CHNGBCKTX,0,1-UP,NEND,ALL"  
"1:CHNGBCKACKTX,0,1-UP,NEND,ALL"  
"1:EMERGCHNGOVERTX,0,1-UP,NEND,ALL"  
"1:EMERGCHNGOVERACKTX,0,1-UP,NEND,ALL"  
"1:LNKINHTX,0,1-UP,NEND,ALL"  
"1:LNKUNINHTX,0,1-UP,NEND,ALL"  
"1:LNKINHACKTX,0,1-UP,NEND,ALL"  
"1:LNKUNINHACKTX,0,1-UP,NEND,ALL"  
  
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:LNKINHDENYTX,0,1-UP,NEND,ALL"  
"1:LNKFORCEUNINHTX,0,1-UP,NEND,ALL"  
"1:LNKLOCINHTSTTX,0,1-UP,NEND,ALL"  
"1:LNKRMTINHTSTTX,0,1-UP,NEND,ALL"  
"1:LNKCONORDTX,0,1-UP,NEND,ALL"  
"1:LNKCONACKTX,0,1-UP,NEND,ALL"  
"1:LNKTSTTX,76,1-UP,NEND,ALL"  
"1:LNKTSTACKTX,154,1-UP,NEND,ALL"
```

```
"1:TXMSGDROP,0,1-UP,NEND,ALL"  
"1:TXCONGDROP,0,1-UP,NEND,ALL"
```

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:SIFOCTTX,4456,1-UP,NEND,ALL"  
"1:SIOOCTTX,230,1-UP,NEND,ALL"  
"1:MSUTX,230,1-UP,NEND,ALL"  
"1:LASTINITRMT,74,1-UP,NEND,ALL"  
"1:CHNGOVERRX,0,1-UP,NEND,ALL"  
"1:CHNGOVERACKRX,0,1-UP,NEND,ALL"  
"1:CHNGBCKRX,0,1-UP,NEND,ALL"  
"1:CHNGBCKACKRX,0,1-UP,NEND,ALL"  
"1:EMERGCHNGOVERRX,0,1-UP,NEND,ALL"  
"1:EMERGCHNGOVERACKRX,0,1-UP,NEND,ALL"
```

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:LNKINHRX,0,1-UP,NEND,ALL"  
"1:LNKUNINHRX,0,1-UP,NEND,ALL"  
"1:LNKINHACKRX,0,1-UP,NEND,ALL"  
"1:LNKUNINHACKRX,0,1-UP,NEND,ALL"  
"1:LNKINHDENYRX,0,1-UP,NEND,ALL"  
"1:LNKFORCEUNINHRX,0,1-UP,NEND,ALL"  
"1:LNKLOCINHTSTRX,0,1-UP,NEND,ALL"  
"1:LNKRMTINHTSTRX,0,1-UP,NEND,ALL"  
"1:LNKCONORDRX,0,1-UP,NEND,ALL"  
"1:LNKCONACKRX,0,1-UP,NEND,ALL"
```

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:LNKTSTRX,154,1-UP,NEND,ALL"  
"1:LNKTSTACKRX,76,1-UP,NEND,ALL"  
"1:INVPDURX,0,1-UP,NEND,ALL"  
"1:SIFOCTRX,4456,1-UP,NEND,ALL"  
"1:SIOOCTRX,230,1-UP,NEND,ALL"  
"1:MSURX,230,1-UP,NEND,ALL"  
"1:LASTINITRCV,74,1-UP,NEND,ALL"  
"1:LNKCONGATTHRSHLD1,0,1-UP,NEND,ALL"  
"1:LNKCONGATTHRSHLD2,0,1-UP,NEND,ALL"  
"1:LNKCONGATTHRSHLD3,0,1-UP,NEND,ALL"
```

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:PRI0DROP,0,1-UP,NEND,ALL"  
"1:PRI1DROP,0,1-UP,NEND,ALL"  
"1:PRI2DROP,0,1-UP,NEND,ALL"
```

```
"1:PRI3DROP,0,1-UP,NEND,ALL"  
"1:LASTINITNA,74,1-UP,NEND,ALL"  
"1:DUROFLNKUNAV,0,1-UP,NEND,ALL"  
"1:DUROFLNKCONG,0,1-UP,NEND,ALL"  
;
```

Related Commands: none

INIT-REG-SS7ROUTE / RTRV-PM-SS7ROUTE

Commands:

INIT-REG-SS7ROUTE: Initialize Register SS7 Route

RTRV-PM-SS7ROUTE: Retrieve Performance Monitors SS7 Route

Descriptions:

INIT-REG-SS7ROUTE lets the user clear the counters for statistics concerning an SS7 route.

RTRV-PM-SS7ROUTE lets the user retrieve current and historical performance data gathered from an SS7 route.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-SS7ROUTE: [TID]:<routeSs7>:[CTAG]::<montype>,
[<monval>],[<locn>],[<dirn>];

RTRV-PM-SS7ROUTE: [TID]:<routeSs7>:[CTAG]::<montype>],
[<monlev>],[<locn>],[<dirn>];

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
    "<routeSs7>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

routeSs7 Identifies the AID as an SS7 Route. The pattern is a combination of the destination point code and the link set connecting to it.

Type: RouteSs7Aid

Range: <PCAID>-<LSETAID>, where

PCAID = {0-255}-{0-255}-{0-255} and

LSETAID = {1-20}

Default value: none

- montype** Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. "ALL" is the only valid input value.
- Type:** enum
Range: ALL = All types
DURLSETDIVER = Duration in minutes that traffic on the link set is diverted on low priority route
LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (neither RCV nor TRMT)
TRFDIVER = Number of times traffic on the link set has been diverted on low priority route
Default value: none
- monval** Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value "0" is currently the only acceptable input value.
- Type:** integer
Range: {0 – 4294967295}
Default value: 0
- monlev** Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
- Type:** enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.
- Type:** enum
Range: NEND = near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: ALL = All directions
NA = Direction not applicable
RCV = Receive direction only
TRMT = Transmit direction only
Default value: ALL

Input Examples:

```
INIT-REG-SS7ROUTE::3-4-5-16:::ALL;  
RTRV-PM-SS7ROUTE::3-4-5-16;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"3-4-5-16:DURLSETDIVER,1,1-UP,NEND,ALL"  
"3-4-5-16:LASTINITNA,101,1-UP,NEND,ALL"  
"3-4-5-16:TRFDIVER,2,1-UP,NEND,ALL"  
;
```

Related Commands: none

RTRV-STATS-ISUPMSG

Command:

RTRV-STATS-ISUPMSG: Retrieve Statistics ISUPMSG

Description:

RTRV-STATS-ISUPMSG lets the user retrieve statistics for ISUP messages. Use this command to retrieve the total number of protocol messages and the various ISUP messages transmitted and received.

Description: RTRV-STATS-ISUPMSG lets the user retrieve statistics for ISUP messages. Use this command to retrieve the total number of protocol messages and the various ISUP messages transmitted and received.

Category: Signaling

Security: View

Input Format:

RTRV-STATS-ISUPMSG: [TID]:<ss7Pc>:[CTAG];

Output Format:

```

SID DATE TIME
M CTAG COMPLD
"<ss7Pc>:PDUSTX=<pdusTx>,PDUSRX=<pdusRx>,
  ACMRX=<acmRx>,ANMRX=<anmRx>,BLARX=<blaRx>,
  BLORX=<b loRx>,CCRRX=<ccrRx>,CFNRX=<cfnRx>,
  CGBRX=<cgbRx>,CGBARX=<cgbaRx>,CGURX=<cguRx>,
  CGUARX=<cguaRx>,CONRX=<conRx>,COTRX=<cotRx>,
  CPGRX=<cpgrRx>,CQMRX=<cqmRx>,CQRRX=<cqrRx>,
  CRGRX=<crgRx>,FAARX=<faaRx>,FACRX=<facRx>,
  FARMSGRX=<farMsgRx>,FOTRX=<fotRx>,FRJRX=<frjRx>,
  GRARX=<graRx>,GRSRX=<grsRx>,IAMRX=<iamRx>,
  IDRRX=<idrRx>,INFRX=<infrRx>,INRRX=<inrRx>,
  IRSRX=<irsRx>,LOPRX=<lopRx>,LPARX=<lpaRx>,
  NRM RX=<nrmRx>,OLMRX=<olmRx>,PAMRX=<pamRx>,
  RELRX=<relRx>,RESRX=<resRx>,RLCRX=<r lcRx>,
  RSCRX=<rscRx>,SAMRX=<samRx>,SGMRX=<sgmRx>,
  SUSRX=<susRx>,UBARX=<ubaRx>,UBLRX=<ublRx>,
  UCICRX=<ucicRx>,UPARX=<upaRx>,UPTRX=<uptRx>,
  USRRX=<usrRx>,CRARX=<craRx>,CRM RX=<crmRx>,
  CVRRX=<cvrRx>,CVTRX=<cvtRx>,EXMRX=<exmRx>,
  ACMTX=<acmTx>,ANMTX=<anmTx>,BLATX=<blaTx>,
  BLOTX=<b loTx>,CCRTX=<ccrTx>,CFNTX=<cfnTx>,
  CGBTX=<cgbTx>,CGBATX=<cgbaTx>,CGUTX=<cguTx>,
  CGUATX=<cguaTx>,CONTX=<conTx>,COTTX=<cotTx>,
  CPGTX=<cpgrTx>,CQMTX=<cqmTx>,CQRTX=<cqrTx>,
  CRGTX=<crgTx>,FAATX=<faaTx>,FACTX=<facTx>,
  FARMSGTX=<farMsgTx>,FOTTX=<fotTx>,FRJTX=<frjTx>,
  GRATX=<graTx>,GRSTX=<grsTx>,IAMTX=<iamTx>,
  IDRTX=<idrTx>,INFTX=<inftTx>,INRTX=<inrTx>,
 IRSTX=<irsTx>,LOPTX=<lopTx>,LPATX=<lpaTx>,
  NRMTX=<nrmTx>,OLMTX=<olmTx>,PAMTX=<pamTx>,
  RELTX=<relTx>,RESTX=<resTx>,RLCTX=<r lcTx>,
  RSCTX=<rscTx>,SAMTX=<samTx>,SGMTX=<sgmTx>,
  SUSTX=<susTx>,UBATX=<ubaTx>,UBLTX=<ublTx>,
  UCICTX=<ucicTx>,UPATX=<upaTx>,UPTTX=<uptTx>,
  USRTX=<usrTx>,CRATX=<craTx>,CRMTX=<crmTx>,
  CVRTX=<cvrTx>,CVTTX=<cvtTx>,EXMTX=<exmTx>,
  ACMDROPPED=<acmDropped>,
  CALLDROPPED2=<callDropped2>,
  CALLDROPPED3=<callDropped3>,
  IAMDROPPED=<iamDropped>,RELDROPPED=<relDropped>,
  RSCDROPPED=<rscDropped>"
;
```

Parameters:

ss7Pc	Identifies the AID as an SS7 point code. Type: PcAid Range: {0-255}-{0-255}-{0-255} Default value: none
pdusTx	Identifies the total number of protocol data units (protocol messages) transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
pdusRx	Identifies the total number of protocol data units (protocol messages) received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
acmRx	Identifies the total number of address complete messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
anmRx	Identifies the total number of answer messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
blaRx	Identifies the total number of blocking acknowledgement messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
bloRx	Identifies the total number of blocking messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none

ccrRx	Identifies the total number of continuity check request messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cfnRx	Identifies the total number of confusion messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cgbRx	Identifies the total number of circuit group blocking messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cgbaRx	Identifies the total number of circuit group blocking acknowledgement messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cguRx	Identifies the total number of circuit group unblocking messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cguaRx	Identifies the total number of circuit group unblocking acknowledgement messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
conRx	Identifies the total number of connect messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none

cotRx	Identifies the total number of continuity messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cpgRx	Identifies the total number of call progress messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cqmRx	Identifies the total number of circuit query messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cqrRx	Identifies the total number of circuit query acknowledgement messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
crgRx	Identifies the total number of charging messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
faaRx	Identifies the total number of facility accepted messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
facRx	Identifies the total number of facility messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none

- farMsgRx** Identifies the total number of facility request messages received from the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- fotRx** Identifies the total number of forward transfer messages received from the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- frjRx** Identifies the total number of facility rejected messages received from the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- graRx** Identifies the total number of circuit group reset acknowledgement messages received from the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- grsRx** Identifies the total number of circuit group reset messages received from the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- iamRx** Identifies the total number of initial address messages received from the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- idrRx** Identifies the total number of identification request messages received from the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none

infRx	Identifies the total number of information messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
inrRx	Identifies the total number of information request messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
irsRx	Identifies the total number of identification response messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
lopRx	Identifies the total number of loop prevention messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
lpaRx	Identifies the total number of loopback acknowledgement messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
nrmRx	Identifies the total number of network resource management messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
olmRx	Identifies the total number of overload messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none

pamRx	Identifies the total number of pass-along messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
relRx	Identifies the total number of release messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
resRx	Identifies the total number of resume messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
rlcRx	Identifies the total number of release complete messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
rscRx	Identifies the total number of reset messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
samRx	Identifies the total number of subsequent address messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
sgmRx	Identifies the total number of segmentation messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none

susRx	Identifies the total number of suspend messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
ubaRx	Identifies the total number of unblocking acknowledgement messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
ublRx	Identifies the total number of unblocking messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
ucicRx	Identifies the total number of unequipped CIC messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
upaRx	Identifies the total number of user part available messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
uptRx	Identifies the total number of user part test messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
usrRx	Identifies the total number of user-to-user messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none

craRx	Identifies the total number of circuit reservation acknowledgement messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
crmRx	Identifies the total number of circuit reservation messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cvrRx	Identifies the total number of circuit validation response messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cvtRx	Identifies the total number of circuit validation messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
exmRx	Identifies the total number of exit messages received from the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
acmTx	Identifies the total number of address complete messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
anmTx	Identifies the total number of answer messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none

blaTx	Identifies the total number of blocking acknowledgement messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
bloTx	Identifies the total number of blocking messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
ccrTx	Identifies the total number of continuity check request messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cfnTx	Identifies the total number of confusion messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cgbTx	Identifies the total number of circuit group blocking messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cgbaTx	Identifies the total number of circuit group blocking acknowledgement messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cguTx	Identifies the total number of circuit group unblocking messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none

- cguaTx** Identifies the total number of circuit group unblocking acknowledgement messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- conTx** Identifies the total number of connect messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- cotTx** Identifies the total number of continuity messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- cpgTx** Identifies the total number of call progress messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- cqmTx** Identifies the total number of circuit query messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- cqrTx** Identifies the total number of circuit query acknowledgement messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- crgTx** Identifies the total number of charging messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none

- faaTx** Identifies the total number of facility accepted messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- facTx** Identifies the total number of facility messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- farMsgTx** Identifies the total number of facility request messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- forTx** Identifies the total number of forward transfer messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- frjTx** Identifies the total number of facility rejected messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- graTx** Identifies the total number of circuit group reset acknowledgement messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- grsTx** Identifies the total number of circuit group reset messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none

iamTx	Identifies the total number of initial address messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
idrTx	Identifies the total number of identification request messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
infTx	Identifies the total number of information messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
inrTx	Identifies the total number of information request messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
irsTx	Identifies the total number of identification response messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
lopTx	Identifies the total number of loop prevention messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
lpaTx	Identifies the total number of loopback acknowledgement messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none

nrmTx	Identifies the total number of network resource management messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
olmTx	Identifies the total number of overload messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
pamTx	Identifies the total number of pass-along messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
relTx	Identifies the total number of release messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
resTx	Identifies the total number of resume messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
rlcTx	Identifies the total number of release complete messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
rscTx	Identifies the total number of reset messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none

- samTx** Identifies the total number of subsequent address messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- sgmTx** Identifies the total number of segmentation messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- susTx** Identifies the total number of suspend messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- ubaTx** Identifies the total number of unblocking acknowledgement messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- ublTx** Identifies the total number of unblocking messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- ucicTx** Identifies the total number of unequipped CIC messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- upaTx** Identifies the total number of user part available messages transmitted toward the point code.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none

uptTx	Identifies the total number of user part test messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
usrTx	Identifies the total number of user-to-user messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
craTx	Identifies the total number of circuit reservation acknowledgement messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
crmTx	Identifies the total number of circuit reservation messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cvrTx	Identifies the total number of circuit validation response messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
cvtTx	Identifies the total number of circuit validation messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none
exmTx	Identifies the total number of exit messages transmitted toward the point code. Type: integer Range: {0 – 4,294,967,295} Default value: none

acmDropped Identifies the total number of ADDRESS COMPLETE messages (ACM) dropped because of congestion.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

callDropped2 Identifies the total number of calls dropped after expiry of *isupTCONG* (defined in ENT-SS7SYS) due to level 2 congestion in MTP3.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

callDropped3 Identifies the total number of calls dropped due to level 3 congestion in MTP3.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

iamDropped Identifies the total number of INITIAL ADDRESS messages (IAM) dropped because of congestion.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

relDropped Identifies the total number of RELEASE messages (REL) dropped because of congestion.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

rscDropped Identifies the total number of RESET CIRCUIT messages (RSC) dropped because of congestion.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

Input Example:

RTRV-STATS-ISUPMSG::1-1-1;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1-1-1:PDUSTX=0,PDUSRX=0,ACMRX=0,ANMRX=0,BLARX=0,
BLORX=0,CCRXX=0,CFNRX=0,CGBRX=0,CGBARX=0,
CGURX=0,CGUARX=0,CONRX=0,COTRX=0,CPGRX=0,
CQMRX=0,CQRRX=0,CRGRX=0,FAARX=0,FACRX=0,
FARMSGRX=0,FOTRX=0,FRJRX=0,GRARX=0,GRSRX=0,
IAMRX=0,IDRRX=0,INFRX=0,INRRX=0,IRSRX=0,LOPRX=0,
LPARX=0,NRMRX=0,OLMRX=0,PAMRX=0,RELTX=0,RESRX=0,
RLCRX=0,RSCRX=0,SAMRX=0,SGMRX=0,SUSRX=0,UBARX=0,
UBLRX=0,UCICRX=0,UPARX=0,UPTRX=0,USRRX=0,
CRARX=0,CRMXX=0,CVRRX=0,CVTRX=0,EXMRX=0,ACMTX=0,
ANMTX=0,BLATX=0,BLOTX=0,CCRTX=0,CFNTX=0,CGBTX=0,
CGBATX=0,CGUTX=0,CGUATX=0,CONTX=0,COTTX=0,
CPGTX=0,CQMTX=0,CQRTX=0,CRGTX=0,FAATX=0,FACTX=0,
FARMSGTX=0,FOTTX=0,FRJTX=0,GRATX=0,GRSTX=0,
IAMTX=0,IDRTX=0,INFTX=0,INRTX=0,IRSTX=0,LOPTX=0,
LPATX=0,NRMTX=0,OLMTX=0,PAMTX=0,RELTX=0,RESTX=0,
RLCTX=0,RSCTX=0,SAMTX=0,SGMTX=0,SUSTX=0,UBATX=0,
UBLTX=0,UCICTX=0,UPATX=0,UPTTX=0,USRTX=0,
CRATX=0,CRMTX=0,CVRTX=0,CVTTX=0,EXMTX=0,
ACMDROPPED=0,CALLDROPPED2=0,CALLDROPPED3=0,
IAMDROPPED=0,RELDROPPED=0,RSCDROPPED=0"
;
```

Related Commands:

INIT-REG-ISUPMSG

RTRV-PM-ISUPMSG

RTRV-STATUS-LSET

Command:

RTRV-STATUS-LSET: Retrieve Status Link Set

Description:

RTRV-STATUS-LSET lets the user retrieve information indicating the status of a link set.

Category: Signaling

Security: View

Input Format:

RTRV-STATUS-LSET:[TID]:<LsetId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<LsetId>:LSETSTARSLT=<lsetStaRslt>,
  SS7LSETSTANMBACTLNKS=<ss7LsetStaNmbActLnks>,
  SS7LSETSTASTATE=<ss7LsetStaState>"
;
```

Parameters:

LsetId Identifies the AID as a link set.

Type: LsetAid

Range: {1-20}

Default value: none

lsetStaRslt Identifies the result of MTP layer 3 test on the link set.

Type: enum

Range: FAILINGLYR3 = Failed

SUCCESS = Passed

Default value: none

ss7LsetStaNmbActLnks Identifies the total number of active links in the link set.

Type: integer

Range: {1-40}

Default value: none

ss7LsetStaState Identifies the current state of a link set.

Type: enum

Range: ACTIVE = Link set is active

INACTIVE = Link set is inactive

Default value: none

Input Example:

```
RTRV-STATUS-LSET::1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"12:LSETSTARSLT=SUCCESS,SS7LSETSTANMBACTLNKS=2,
  SS7LSETSTASTATE=ACTIVE"
;
```

Related Commands:

```
ED-STATE-LSET
```

RTRV-STATUS-PC

Command:

RTRV-STATUS-PC: Retrieve Status Point Code

Description:

RTRV-STATUS-PC lets the user retrieve information indicating the status of a point code.

Category: Signaling

Security: View

Input Format:

RTRV-STATUS-PC: [TID]: [<ss7Pc>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ss7Pc>:SS7PCSTARSLT=<ss7PcStaRslt>,
  SS7PCSTANMBACTVLNKSETS=<ss7PcStaNmbActvLnkSets>,
  SS7PCSTASTATE=<ss7PcStaState>,
  SS7PCSTACONG=<ss7PcStaCong>,
  SS7PCSTARSTFLG=<ss7PcStaRstFlg>,
  SS7PCSTAISUPSTAT=<ss7PcStaIsupStat>"
;
```

Parameters:

ss7Pc Identifies the AID as a point code. A null value is equivalent to "ALL"; that is, by leaving the field blank, status information for all point codes configured in the system will be returned.

Type: PcAid

Range: {0-255}-{0-255}-{0-255}

Default value: none

ss7PcStaRslt Identifies the result of MTP layer 3 test on the point code.

Type: enum

Range: FAILINGLYR3 = Failed
SUCCESS = Passed

Default value: none

ss7PcStaNmbActvLnkSets Identifies the total number of active link sets in the point code.

Type: integer

Range: {1-20}

Default value: none

ss7PcStaState Identifies whether the point code is active.

Type: BoolYN

Range: Y = Point code is active

N = Point code is inactive

Default value: none

ss7PcStaCong Identifies the priority assigned to a point code, depending on the congestion level. A value of "PRIORITY0" indicates that the point code is uncongested.

Type: enum

Range: PRIORITY0

PRIORITY1

PRIORITY2

PRIORITY3

Default value: none

ss7PcStaRstFlg Specifies the signaling point restart indication.

Type: BoolYN

Range: N = signaling point not restarted

Y = signaling point restarted

Default value: none

ss7PcStaIsupStat Identifies the status of the ISUP layer for the point code.

Type: enum

Range: AVAILABLE = Point code available

CONG1= Point code at ISUP congestion level 1

CONG2 = Point code at ISUP congestion level 2

CONG3 = Point code at ISUP congestion level 3

UNAVAILABLE = Point code unavailable

Default value: none

Input Example:

RTRV-STATUS-PC::1-2-3;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1-2-3:SS7PCSTARSLT=SUCCESS,
  SS7PCSTANMBACTVLNKSETS=2,
  SS7PCSTASTATE=Y,SS7PCSTACONG=PRIORITY0,
  SS7PCSTARSTFLG=N,SS7PCSTAISUPSTAT=CONG1"
;
```

Related Commands: None

RTRV-STATUS-ROUTE SS7

Command:

RTRV-STATUS-ROUTE SS7: Retrieve Status Route SS7

Description:

RTRV-STATUS-ROUTE SS7 lets the user retrieve information indicating the status of an SS7 route.

Category: Signaling

Security: View

Input Format:

RTRV-STATUS-ROUTE SS7:[TID]:<routeSs7Aid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<routeSs7Aid>:ROUTE STARSLT=<routeStaRslt>,
  SS7ROUTE STATE=<ss7RouteStaState>"
;
```

Parameters:

routeSs7Aid Identifies the AID as an SS7 Route. The pattern is a combination of the destination point code and the link set connecting to it. A null value for the second part of the AID lets the user retrieve information for all link sets (and, thus, all SS7 routes) associated with a specific point code.

Type: RouteSs7Aid

Range: <PCAID>[-<LSETAID>], where
PCAID = {0-255}-{0-255}-{0-255} and
LSETAID = {1-20}

Default value: none

routeStaRslt Identifies the result of MTP layer 3 test on the SS7 route.

Type: enum

Range: FAILINGLYR3 = Failed
SUCCESS = Passed

Default value: none

ss7RouteStaState Identifies the current state of an SS7 route.

Type: enum

Range: ALLOWED = signaling route available

PROHIBITED = signaling route unavailable

RESTRICTED = signaling traffic towards a particular
destination is being transferred with some difficulty via
the signaling transfer point sending the concerned
message

Default value: none

Input Example:

```
RTRV-STATUS-ROUTESS7::3-4-5-16;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"3-4-5-16:ROUTESTARSLT=SUCCESS,
SS7ROUTESTASTATE=ALLOWED"
;
```

Related Commands:

```
DLT/ENT/RTRV-ROUTE-SS7
```

RTRV-STATUS-SLK

Command:

RTRV-STATUS-SLK: Retrieve Status Signaling Link

Description:

RTRV-STATUS-SLK lets the user retrieve information indicating the status of a signaling link.

Category: Signaling

Security: View

Input Format:

RTRV-STATUS-SLK: [TID]:<ss7LnkId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ss7LnkId>:SS7LNKSTARSLT=<ss7LnkStaRslt>,
  LOCALBUSY=<localBusy>,REMOTEBUSY=<remoteBusy>,
  SS7LNKSTASTATE=<ss7LnkStaState>,
  SS7LNKSTALOCBLKD=<ss7LnkStaLocBlkd>,
  SS7LNKSTAREMBLKD=<ss7LnkStaRemBlkd>,
  SS7LNKSTALOCINHBT=<ss7LnkStaLocInhbt>,
  SS7LNKSTARM TINHBT=<ss7LnkStaRmtInhbt>,
  SS7LNKSTAUNINHBT=<ss7LnkStaUninhbt>,
  SS7LNKSTACONG=<ss7LnkStaCong>,
  SS7LNKSTAEMRG=<ss7LnkStaEmrg>"
;
```

Parameters:

ss7LnkId Identifies the AID as a signaling link.

Type: Ss7LnkAid

Range: {1-40}

Default value: none

ss7LnkStaRslt Identifies the result of the status request operation.

Type: enum

Range: FAILCFGLYR2 = Status request failed: configuration not
done at layer 2
FAILINVCFLYR2 = Status request failed: invalid
configuration at layer 2
FAILINVLNKLYR3 = Status request failed: invalid
configuration at layer 3
SUCCESS = Status request successful

Default value: none

localBusy Identifies whether the signaling link is busy at the local end.

Type: enum

Range: BUSY
NOTBUSY

Default value: none

remoteBusy Identifies whether the signaling link is busy at the remote end.

Type: enum

Range: BUSY
NOTBUSY

Default value: none

ss7LnkStaState Identifies the current state of a signaling link at MTP layer 3.

Type: enum

Range: ACTIVE = Link is active
CON = Link is connecting
FAILED = Link has failed
INACTIVE = Link is inactive
SUSPEND = Link is suspended
WAITCON = Link is waiting to connect

Default value: none

ss7LnkStaLocBlkd Identifies whether the signaling link is blocked at the local end.

Type: BoolYN

Range: N = Link not blocked at local end
Y = Link blocked at local end

Default value: none

ss7LnkStaRemBlkd Identifies whether the signaling link is blocked at the remote end.

Type: BoolYN

Range: N = Link not blocked at remote end
Y = Link blocked at remote end

Default value: none

ss7LnkStaLocInhbt Identifies whether the signaling link is inhibited at the local end.

Type: BoolYN

Range: N = Link not inhibited at local end
Y = Link inhibited at local end

Default value: none

ss7LnkStaRmtInhbt Identifies whether the signaling link is inhibited at the remote end.

Type: BoolYN

Range: N = Link not inhibited at remote end
Y = Link inhibited at remote end

Default value: none

ss7LnkStaUninhbt Identifies whether the signaling link is uninhibited.

Type: BoolYN

Range: N = Link not uninhibited
Y = Link uninhibited

Default value: none

ss7LnkStaCong Identifies the priority assigned to a signaling link, depending on the congestion level. A value of "PRIORITY0" indicates that the signaling link is not congested.

Type: enum

Range: PRIORITY0
PRIORITY1
PRIORITY2
PRIORITY3

Default value: none

ss7LnkStaEmrg Specifies the signaling link's emergency alignment indication.

Type: BoolYN

Range: N = no emergency alignment indicated
Y = emergency alignment indicated

Default value: none

Input Example:

```
RTRV-STATUS-SLK::1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:SS7LNKSTARSLT=SUCCESS, LOCALBUSY=NOTBUSY,
  REMOTEBUSY=NOTBUSY, SS7LNKSTASTATE=ACTIVE,
  SS7LNKSTALOCBLKD=N, SS7LNKSTAREMBLKD=N,
  SS7LNKSTALOCINHBT=N, SS7LNKSTARM TINHBT=N,
  SS7LNKSTAUNINHBT=N, SS7LNKSTACONG=PRIORITY0,
  SS7LNKSTAEMRG=N"
;
```

Related Commands:

```
ED-STATE-SLK
```

RTRV-TH-SLK / SET-TH-SLK

Commands:

RTRV-TH-SLK: Retrieve Threshold Signaling Link

SET-TH-SLK: Set Threshold Signaling Link

Descriptions:

RTRV-TH-SLK lets the user retrieve the current threshold level of one or more monitored performance counts associated with a specific signaling link in the Plexus 9000. The violation of these thresholds will trigger a condition. Provision thresholds with SET-TH.

SET-TH-SLK lets the user set the performance monitoring parameter threshold levels for a specific signaling link in the Plexus 9000. This command cannot be used to turn off threshold crossing alerts; i.e., the threshold level may not be set to some "non-applicable" value. Retrieve thresholds with RTRV-TH. The Plexus 9000 sends a REPT ALM or REPT EVT message when thresholds are exceeded, depending on the notification code associated with the threshold condition. Threshold setting for multiple monitored parameters requires multiple invocations of this command – wildcarding is not permitted.

Category: Signaling

Security: NSA for SET-TH, View for RTRV-TH

Category: Signaling

Security: View

Input Formats:

RTRV-TH-SLK: [TID]:<ss7LnkId>:[CTAG]:[:<montype>];

SET-TH-SLK: [TID]:<ss7LnkId>:[CTAG]:[:<montype>,<thlev>;

Input Format:

RTRV-TH-SLK: [TID]:<ss7LnkId>:[CTAG]:[:<montype>];

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
  "<ss7LnkId>:<montype>,<thlev>"
;
```


Parameters:

ss7LnkId Identifies the AID as a signaling link.

Type: Ss7LnkAid

Range: {1-40}

Default value: none

montype Identifies the type of monitored parameter for which to set, or from which to retrieve, the current threshold level for the specified signaling link.

Type: enum

Range: ALL = All types

UTIL-HT = Alarm Threshold Level (link UTILization-High
Threshold: the percentage of link utilization that, when
exceeded, generates an alarm for the link)

UTIL-LT = Alarm Clear Level (link UTILization-Low
Threshold: the percentage of link utilization that, when
reached, clears any standing alarm for the link)

Default value: ALL

thlev Identifies the threshold level, as a percentage of link utilization, for the monitored parameter identified by *montype*.

Type: integer

Range: {0-100}

Default value: none

Input Examples:

```
RTRV-TH-SLK::1;
```

```
SET-TH-SLK::1::UTIL-HT,90;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:UTIL-HT,90 "
"1:UTIL-LT,80"
;
```

Related Commands:

INIT-REG-SLK

RTRV-PM-SLK

NOTES

ACT/CANC-USER

Commands:

ACT-USER: Activate User (Log in)

CANC-USER: Cancel User (Log out)

Descriptions:

ACT-USER lets the user initiate (log on) a session with the Plexus 9000 by entering a user name and password.

CANC-USER lets the user terminate (log off) a session with the Plexus 9000.

Category: System

Security: View for both commands

Input Formats:

ACT-USER: [TID]:<uid>:[CTAG]::<pid>;

CANC-USER: [TID]:[<uid>]:[CTAG];

Output Format: none

Parameters:

uid Identifies the user. The UID is the user ID or login name. The factory default is “telica”.

Type: string

Range: 8 – 16 characters

Default value: None

pid Specifies the user's password, which must contain at least one number and one letter. The entered password displays as a series of asterisks. The factory default is “telica”.

Type: string

Range: 8 – 16 characters

Default value: None

Input Examples:

ACT-USER::telica:::*****;

CANC-USER;

Related Commands: none

ALW/INH/RTRV-MSG-USER

Commands:

ALW-MSG-USER: Allow Message User

INH-MSG-USER: Inhibit Message User

RTRV-MSG-USER: Retrieve Message User

Descriptions:

ALW-MSG-USER lets the user resume receipt of inhibited automatic messages. Unreported alarms in existence at the time of restoration are transmitted with the REPT ALM message.

INH-MSG-USER allows a user to inhibit receipt of autonomous messages. During the entire period of message inhibition, the Plexus 9000 continues to respond fully to RTRV-ALM and RTRV-COND commands. Restore receipt of autonomous messages with the ALW-MSG-USER command.

RTRV-MSG-USER instructs the Plexus 9000 to retrieve the status of automatic messaging for the user issuing the command.

Category: System

Security: NSA for ALW and INH, View for RTRV

Input Formats:

```
ALW-MSG-USER:[TID]:<uid>:[CTAG]:[:<ntfcncde>],  
    [<condtype>],[<tmper>];  
INH-MSG-USER:[TID]:<uid>:[CTAG];  
RTRV-MSG-USER:[TID]:[:<uid>]:[CTAG];
```

Output Format:

```
    SID DATE TIME  
M    CTAG COMPLD  
    "<uid>:<status>"  
    ;
```

Parameters:

uid Identifies the user. The UID is the user ID or login name. The factory default is "telica". A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns the status of automatic messaging for all current users.

Type: string

Range: 8 – 16 characters

Default value: none (Factory default is "telica")

ntfcncde Identifies the condition notification code for which receipt of autonomous messages will be allowed. A null value is equivalent to "ALL"; that is, by leaving the field blank, receipt of autonomous messages will be allowed for all notification codes. This parameter is presently not supported; leave it blank.

Type: enum

Range: CL = Cleared. Never used in provisioning requests or returned in RTRVs - only active conditions are available through the RTRV-EVT/COND/ALM messages and by definition their notification codes are never CL/CLEAR.

CR = Critical

MJ = Major

MN = Minor

NA = Not Alarmed

Default value: none

condtype Indicates the condition type for an alarm or a reported event as defined in GR-833-CORE, Appendix C. A null value is equivalent to "ALL"; that is, by leaving the field blank, receipt of autonomous messages will be allowed for all condition types. This parameter is presently not supported; leave it blank.

Type: enum

Range: alphanumeric characters

Default value: none

tmper Identifies the period of time for which receipt of autonomous messages is allowed. A null value is equivalent to "ALL"; that is, by leaving the field blank, receipt of autonomous messages will be allowed until subsequently inhibited. This parameter is presently not supported; leave it blank.

Type: string

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: none

status Identifies (in RTRV output) whether messages are allowed or inhibited.

Type: enum

Range: ALW = Allowed

INH = Inhibited

Default value: none

Input Examples:

ALW-MSG-USER::telica;

INH-MSG-USER::telica;

RTRV-MSG-USER::telica;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"telica:ALW"
;
```

Related Commands: none

ALW/INH-TL1-CMD / RTRV-TL1-INH

Commands:

ALW-TL1-CMD: Allow TL1 Command
INH-LPBK-OC12: Inhibit TL1 Command
RTRV-TL1-INH: Retrieve TL1 Inhibited

Descriptions:

ALW-TL1-CMD lets the user allow the execution of an inhibited TL1 command.
INH-TL1-CMD lets a user inhibit the execution of a TL1 command.
RTRV-TL1-INH lets the user retrieve the list of inhibited TL1 commands.

Category: System

Security: ADMIN for ALW/INH, View for RTRV

Input Formats:

ALW-TL1-CMD: [TID]:<tl1cmd>:[CTAG];
INH-TL1-CMD: [TID]:<tl1cmd>:[CTAG];
RTRV-TL1-INH: [TID]: [<tl1cmd>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<tl1cmd>"
;
```

Parameters:

tl1cmd Identifies the AID (in ALW and INH) as the TL1 command for which execution is allowed or inhibited. Certain commands cannot be inhibited (e.g., ACT-USER, ALW-TL1-CMD, CANC-USER, etc.).

Type: string

Range: 1 – 32 alphanumeric characters

Default value: None

Input Examples:

```
ALW-TL1-CMD : TRC-CALL-EQPT;  
INH-TL1-CMD : TRC-CALL-EQPT;  
RTRV-TL1-INH;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"OPR-CVT"  
"TRC-CALL-EQPT"  
;
```

Related Commands: none

DLT/ENT/RTRV-BACKUP-SYS

Commands:

DLT-BACKUP-SYS: Delete Backup System
ENT-BACKUP-SYS: Enter Backup System
RTRV-BACKUP-SYS: Retrieve Backup System

Descriptions:

DLT-BACKUP-SYS lets the user delete the destination host and directory for copying the configuration data for the Plexus, including the TimesTen database.

ENT-BACKUP-SYS lets the user establish a destination host and directory for copying the configuration data for the Plexus, including the TimesTen database in the Plexus, to another location in the network.

RTRV-BACKUP-SYS lets the user retrieve the destination host and directory, as well as the user's name and password, used for copying the configuration data for the Plexus, including the TimesTen database in the Plexus, to another location in the network.

Category: System

Security: NSA for DLT and ENT, View for RTRV

Input Formats:

DLT-BACKUP-SYS: [TID]: [<src>]: [CTAG];
ENT-BACKUP-SYS: [TID]: [<src>]: [CTAG]::<desthost>,
 <username>,<password>,<destdir>;
RTRV-BACKUP-SYS: [TID]: [<src>]: [CTAG];

Output Format:

```
SID DATE TIME
M  CTAG COMPLD
  "<src>:<desthost>,<username>,<password>,<destdir>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000.
Type: COM
Range: COM
Default value: COM

desthost Identifies the remote host, containing the destination directory identified by *destdir*, for backing up the Plexus configuration data.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

username Identifies a valid user name for the host identified by *desthost*.

Type: string

Range: alphanumeric characters

Default value: none

password Identifies a valid password for the host identified by *desthost*.

Type: string

Range: alphanumeric characters

Default value: none

destdir Identifies the destination directory for the Plexus configuration data. The value of *destdir* starts with a "/" unless the destination directory is within the current working directory.

Type: string

Range: ANSI characters

Default value: none

Input Examples:

```
DLT-BACKUP-SYS;
```

```
ENT-BACKUP-SYS:::::192.2.24.234, USERNAME, PASSWORD,  
DESTDIR;
```

```
RTRV-BACKUP-SYS;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:192.2.24.234, USERNAME, PASSWORD, DESTDIR"  
;
```

Related Commands:

```
EXEC-BACKUP-PLEXUS  
SCHED-BKUP-EQPT
```

```
RTRV-BKUPSCHEDEQPT
```

ED-DAT

Command:

ED-DAT: Edit date and time

Description:

ED-DAT lets the user set the system date and/or time in the Plexus 9000.

Category: System

Security: SA

Input Format:

ED-DAT: [TID]::[CTAG]::[<date>],[<time>;

Output Format: none

Parameters:

date DATE is the current date in a format of: YY-MM-DD, where YY is the last two digits of the year, MM is the month of the year, and DD is the day of the month.

Type: enum

Range: {00-37}-{01-12}-{01-31}

Default value: not applicable

time TIME is the current time in a format of: HH-MM-SS, where HH is the hour in a 24-hour format, MM is the minute, and SS is the second.

Type: enum

Range: {00-23}-{00-59}-{00-59}

Default value: not applicable

Input Example:

ED-DAT:::04-05-14,08-45-40;

Related Commands: none

ED/RTRV-SYS-TL1

Commands:

ED-SYS-TL1: Edit System TL1

RTRV-SYS-TL1: Retrieve System TL1

Descriptions:

ED-SYS-TL1 lets the user set the behavior of telnet connections; i.e., whether to send telnet control options and how to invoke the system prompt. The TL1 agent supports both line mode and character mode telnet connections. In character mode the telnet client sends one character at a time to the TL1 agent. In line mode the client (e.g., the serial TL1 Craft port on the rear of the Plexus 9000) sends data to the TL1 agent a line at a time. The two parameters in ED-SYS-TL1 control the interface between telnet clients and the TL1 agent.

RTRV-SYS-TL1 instructs the Plexus 9000 to retrieve the settings for telnet connections.

Description: ED-SYS-TL1 lets the user set the behavior of telnet connections; i.e., whether to send telnet control options and how to invoke the system prompt. The TL1 agent supports both line mode and character mode telnet connections. In character mode the telnet client sends one character at a time to the TL1 agent. In line mode the client (e.g., the serial TL1 Craft port on the rear of the Plexus 9000) sends data to the TL1 agent a line at a time. The two parameters in ED-SYS-TL1 control the interface between telnet clients and the TL1 agent.

Category: System

Security: NSA for ED, View for RTRV

Input Formats:

```
ED-SYS-TL1:[TID]:[<src>]:[CTAG]::
[TLNLCNTRLOPT=<tlntcntrlopt>],
[PROMPTMODE=<promptmode>];

RTRV-SYS-TL1:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<com>:TLNLCNTRLOPT=<tlntcntrlopt>,
  PROMPTMODE=<promptmode>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

com Identifies the AID (in RTRV output) as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

tlntcntrlopt Indicates whether to send telnet control options. When the value of the parameter is the factory default of "Y" (Yes), the TL1 agent sends two commands to a telnet client when the client establishes a connection with the TL1 agent. The first command puts the client into character mode. The second command tells the client that the TL1 agent will echo characters back to the client (Many telnet clients support a mode where user input is echoed locally from the keyboard to the console output.).

Type: BoolYN

Range: Y = send telnet control options

N = don't send telnet control options

Default value: not applicable

promptmode Indicates whether pressing the "Escape" key is required to invoke the telnet session system prompt. When the value of the parameter is the factory default of "Y" (Yes), the user must press the "Escape" key for the TL1 agent to go into prompt mode (in which the TL1 agent displays the Telica prompt and echoes characters back to telnet clients). If the value of *promptmode* is "Y" and the user does not press the "Escape" key, then the prompt will not be displayed and characters will not be echoed to the client. When the value is "N" (No), the TL1 agent automatically enters local echo mode and displays the Telica prompt when a connection is established with a telnet client.

Type: BoolYN

Range: Y = entering "Escape" required to invoke system prompt

N = prompt invoked automatically on connect

Default value: not applicable

Input Examples:

```
ED-SYS-TL1:::::TLNTCNRLOPT=Y,PROMPTMODE=Y;  
RTRV-SYS-TL1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:TLNTCNRLOPT=Y,PROMPTMODE=Y"  
;
```

Related Commands: none

INIT-SYS

Command:

INIT-SYS: Initialize System

Description:

INIT-SYS lets the user initialize the Plexus 9000 as a whole either to its TL1 interface default values or to the existing values in the TimesTen database. It also initializes general parameters like Date and Time. As a security feature, the TID (target identifier; i.e., the network name of the Plexus) is mandatory – use RTRV-HDR to obtain the name if unknown. The AID block is not included so that the command cannot be used to reset subsystems.

Category: System

Security: ADMIN

Input Format:

INIT-SYS:<TID>:::[CTAG]:::<ph>;

Output Format: none

Parameters:

ph Identifies the degree of thoroughness of the system initialization.

Type: enum

Range: 10 = Normal shutdown and reboot

20 = Shutdown and halt (no reboot)

30 = Shutdown and clean persistent databases (factory default)

Default value: None

Input Example:

INIT-SYS:telica:::10;

Related Commands: none

RTRV-BKUPSCHEDEQPT / SCHED-BKUP-EQPT

Commands:

RTRV-BKUPSCHEDEQPT: Retrieve Backup Schedule Equipment

SCHED-BKUP-EQPT: Schedule Backup Equipment

Descriptions:

RTRV-BKUPSCHEDEQPT lets the user retrieve the scheduling interval, starting date, and starting time for autonomous backups of the configuration data for the Plexus, including the TimesTen database in the Plexus, to another location in the network.

SCHED-BKUP-EQPT lets the user schedule autonomous backups of the configuration data for the Plexus, including the TimesTen database in the Plexus, to another location in the network. SCHED-BKUP-EQPT is dependent on ENT-BACKUP-SYS; that is, the user cannot schedule a backup unless the backup system is configured first.

Category: System

Security: NSA for SCHED, View for RTRV

Input Formats:

RTRV-BKUPSCHEDEQPT:[TID]:[<src>]:[CTAG];

SCHED-BKUP-EQPT:[TID]:[<src>]:[CTAG]:::<invl>,
<stadat>,<statm>,<tmout>;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:<invl>,<stadat>,<statm>,<tmout>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

- invl** Identifies the interval; i.e., the frequency at which the backup runs. The format for interval is VAL-UN, where VAL is a numeric value and UN stands for a unit of time.
Type: ScheduleInterval
Range: {1-31}-DAY
 {1-24}-HR
Default value: None
- stadat** Identifies the start date; i.e., the date to begin the scheduled backup. The format for *stadat* is MOY-DOM (month-of-year, day-of-month). Setting the month to “0” turns off backup scheduling so no scheduled backups will be performed.
Type: StartDate
Range: {0-12}-{1-31}
Default value: None
- statm** Identifies the start time; i.e., the time to begin the scheduled backup. The format for *statm* is H HOD-MOH (hour-of-day, minute-of-hour). Valid values are 0-24 and 0-59 respectively. Default is the current time of day.
Type: StartTime
Range: {0-23}-{0-59}
Default value: None
- tmout** Identifies the time out interval in minutes. The command execution terminates if the command has not executed within the *tmout* interval (due to a stalled FTP process).
Type: Tmout
Range: {1-120}
Default value: 30

Input Examples:

```
RTRV-BKUPSCHEDEQPT;  
SCHED-BKUP-EQPT:::24-HR,05-14,22-30,30;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:24-HR,05-14,22-30,30"  
;
```

Related Commands:

DLT/ENT/RTRV-BACKUP-SYS

EXEC-BACKUP-PLEXUS

RTRV-HDR

Command:

RTRV-HDR: Retrieve header

Description:

RTRV-HDR returns the current date, time, and TID of the Plexus 9000. If you do not specify a TID then you can find out the TID in the response to RTRV-HDR. This is the most basic message.

Category: System

Security: View

Input Format:

RTRV-HDR: [TID] : : [CTAG] ;

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
;
```

Parameters: none

Input Example:

RTRV-HDR;

Output Example:

```
      telica 2004-05-14 14:37:49
M    0 COMPLD
;
```

Related Commands: none

RTRV-NETYPE

Command:

RTRV-NETYPE: Retrieve Network Element Type

Description:

RTRV-NETYPE lets the user retrieve the vendor, model, network role, and software release for the Plexus 9000.

Category: System

Security: View

Input Format:

RTRV-NETYPE: [TID] :: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<vendor>,<model>,<neType>,<swIssue>"
;
```

Parameters:

vendor Identifies the name of the equipment vendor.

Type: string

Range: up to 40 alphanumeric characters

Default value: none

model Identifies the name of the equipment model.

Type: string

Range: up to 40 alphanumeric characters

Default value: none

neType Identifies the equipment as a specific type of network element.

Type: enum

Range: ADM = Add drop multiplexer

ADTS = Automated digital timing system

APS = Automatic protection switching equipment

CS = Circuit switch

DCS = Digital cross-connect switch

DLC = Digital loop carrier system

EDSX = Electronic digital signal cross-connect

EM = Environment monitors

ISDN = Integrated services digital network switch

LBRV = Low bit rate voice terminal

LDS = Local digital switch

LTE = Line terminating equipment

MUX = Multiplexer

PS = Packet switch

REP = Repeater

SCP = Service control point

SS = Supervisory system

STP = Signal transfer point

TSG = Timing signal generator

Default value: none

swIssue Identifies the software release issue.

Type: string

Range: alphanumeric characters

Default value: none

Input Example:

```
RTRV-NETYPE;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"Telica,Plexus 9000,ISDN,3.10"
;
```

Related Commands: none

RTRV/SET-PMDAY

Commands:

RTRV-PMDAY: Retrieve Performance Monitoring Day

SET-PMDAY: Set Performance Monitoring Day

Descriptions:

RTRV-PMDAY allows retrieval of the start time for the daily performance monitoring data collection period for a Plexus 9000. Use the SET-PMDAY command to set the current start time of the daily data collection.

SET-PMDAY allows the user to set the current start time of the daily performance monitoring data collection period for a Plexus 9000. Use the RTRV-PMDAY command to retrieve the start time.

Category: System

Security: NSA for SET, View for RTRV

Input Formats:

RTRV-PMDAY: [TID]::[CTAG];

SET-PMDAY: [TID]::[CTAG]::<HourOfDay>;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<HourOfDay>"
;
```

Parameters:

HourOfDay Identifies the start time of the daily data collection period.

Type: integer

Range: {0-23}

Default value: None

Input Examples:

RTRV-PMDAY;

SET-PMDAY:::::0;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"0"
;
```

Related Commands: none

RTRV-SESSIONS

Command:

RTRV-SESSIONS: Retrieve Sessions

Description:

RTRV-SESSIONS lets the user retrieve the identification and associated parameters for currently connected users of the Plexus.

Category: System

Security: View

Input Format:

RTRV-SESSIONS: [TID]: [<UID>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<UID>: SLOT=<slot>, PORT=<port>,
    IPADDRESS=<IpAddress>, IDLEMIN=<IdleMin>,
    CONNECTTIME=<connecttime>, HANDLE=<Handle>,
    INH=<Inh>"
;
```

Parameters:

UID Identifies the AID as a user. The UID is the user ID or login name. A null value is equivalent to "ALL"; that is, by leaving the field blank, all values configured in the system for the command will be returned.

Type: string

Range: 8 – 16 characters

Default value: none

slot Identifies whether the user is logged into the Plexus 9000 through the active or standby System Processor module.

Type: enum

Range: SP-{A-B}

Default value: none

port Identifies whether the user is connected to the Plexus 9000 through the Ethernet or a craft port.

Type: enum

Range: LAN = Ethernet port
SERIAL = Craft port

Default value: none

IpAddress Identifies the IP address for the port through which the user connects.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

IdleMin Identifies the time in minutes the connection has been idle.

Type: integer

Range: {0-32767}

Default value: none

connecttime Identifies the date and time the user connected to the system.

Type: string

Range: {Day MM DD YYYY} {HH.MM.DD}

Default value: none

Handle Identifies a TL1 session internally to the TL1 agent.

Type: integer

Range: {0-32767}

Default value: none

Inh Identifies whether the session is inhibited.

Type: BoolYN

Range: N = session is not inhibited
Y = session is inhibited

Default value: none

Input Example:

RTRV-SESSIONS;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"telica:SLOT=SP-B,PORT=LAN,IP=10.0.100.108,
  IDLEMIN=0,CONNECTTIME=Fri 05 14 2004 11.12.44,
  HANDLE=13,INH=Y"
;
```

Related Commands: none

SET-SID

Command:

SET-SID: Set System ID

Description:

SET-SID lets the user set the system identification code for the Plexus 9000. Telica recommends setting the value of the SID parameter to the CLLI code for the system.

Category: System

Security: NSA

Input Format:

SET-SID: [TID] :: [CTAG] :: <sid>;

Output Format: none

Parameters:

sid Identifies the system identification code assigned to the Plexus 9000. The value of SID may be any text string. The recommended value for this parameter is the CLLI code.

Type: string

Range: limited to 20 characters

Default value: none

Input Example:

SET-SID: :: :: CLLI_CODE;

Related Commands: none

NOTES

EXEC-BACKUP/RESTORE-PLEXUS

Commands:

EXEC-BACKUP-PLEXUS: Execute Backup Plexus

EXEC-RESTORE-PLEXUS: Execute Restore Plexus

Descriptions:

EXEC-BACKUP-PLEXUS allows the user to copy the configuration data for the Plexus 9000, including the TimesTen database in the Plexus 9000, to both another location in the network as well as locally to SP-A and SP-B. The command first copies the configuration data to a file in the *dbCurrent* directory. It then changes the working directory to *dbCurrent*, backs up the content of *dbCurrent* locally to a compressed tar file (the tar file name is the host's <TID>_<date>_<time>), sends the tar file to the specified destination host and directory (via ftp), and lastly saves the tar file to */localbackup* on SP-A and SP-B.

EXEC-RESTORE-PLEXUS allows the user to copy the configuration data for the Plexus 9000, including the TimesTen database, to the Plexus 9000 either from another location in the network, or from SP-A and SP-B. The command first creates the directory */Telica/backups* when restoring from another location in the network; it deletes the contents if the directory already exists. It then copies the backup configuration data tar file (via ftp for a remote source) from the specified source host and directory to */Telica/backups*. The configuration data for the Plexus 9000 is restored at the next system initialization (re-boot). Note that the TID (target identifier; i.e., the network name of the Plexus) is mandatory – use RTRV-HDR to obtain the name if unknown.

Category: System

Security: SW for both commands

Input Formats:

```
EXEC-BACKUP-PLEXUS:[TID]:[<src>]:[CTAG]::<desthost>,  
                <username>,<password>,<destdir>,[<suppressoutput>],  
                [<tmout>];
```

```
EXEC-RESTORE-PLEXUS:<TID>:[<src>]:[CTAG]::<srchost>,  
                <username>,<password>,<srcpath>,[<suppressoutput>],  
                [<tmout>];
```

Output Formats (both commands):

```
SID DATE TIME
M CTAG COMPLD
<text>
;
```

Parameters:

- src** Identifies the AID as a Plexus 9000.
Type: COM
Range: COM
Default value: COM
- desthost** Identifies (for BACKUP) the remote host, containing the destination directory identified by *destdir*, for backing up the Plexus configuration data .
Type: string
Range: ANSI characters
Default value: none
- srchost** Identifies (for RESTORE) the remote host (or the local host or IP address), containing the source file identified in *srcpath*, for retrieving the Plexus configuration data. Entering the value “0.0.0.0” designates the local host.
Type: string
Range: ANSI characters
Default value: none
- username** Identifies a valid user name for the host identified by *desthost*.
Type: string
Range: alphanumeric characters
Default value: none
- password** Identifies a valid password for the host identified by *desthost*.
Type: string
Range: alphanumeric characters
Default value: none

- destdir** Identifies (for BACKUP) the destination directory for the Plexus configuration data. The value of *destdir* must start with a “/” unless the destination directory is relative to (within) the current working directory (set with the EXEC-CD command).
- Type:** string
Range: ANSI characters
Default value: none
- srcpath** Identifies (for RESTORE) the path to the source file for the Plexus configuration data on the remote host specified by *srchost*.
- Type:** string
Range: ANSI characters
Default value: none
- suppressoutput** Identifies whether to suppress the output for the command.
- Type:** BoolYN
Range: N = do not suppress output
Y = suppress output
Default value: N
- tmout** Identifies the time out interval in minutes. The command execution terminates if the command has not executed within the *tmout* interval (due to a stalled FTP process).
- Type:** integer
Range: {1-120}
Default value: 30
- text** Identifies (in output) the shell commands as they execute, as well as any error messages.
- Type:** string
Range: ANSI characters
Default value: none

Input Examples:

```
EXEC-BACKUP-PLEXUS:::::remote_host,johnuser,*****,  
/remote_server/backup_dir;
```

(Restore from a remote host)

```
EXEC-RESTORE-PLEXUS:::::remote_host,johnuser,*****,  
/remote_server/backup_dir/backup_rel_date_time;
```

(Restore from the local host)

```
EXEC-RESTORE-PLEXUS:::::0.0.0.0,johnuser,*****,  
/localbackup;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
Shell command 1  
Shell command 2  
.  
.  
.  
Shell command n  
;
```

Related Commands:

DLT/ENT/RTRV-BACKUP-SYS
SCHED-BKUP-EQPT

RTRV-BKUPSCHED-EQPT

EXEC-BULK-DOWNLOAD

Command:

EXEC-BULK-DOWNLOAD: Execute Bulk Download

Description:

EXEC-BULK-DOWNLOAD lets the user efficiently provision large-scale configurations, such as Class 4 subscribers, on the Plexus 9000. The bulk download mechanism allows more efficient provisioning of massive configurations, compared to TL1 scripting, by processing provisioning operations in bulk. Bulk processing eliminates much of the cumulative overhead and latency incurred by processing multiple TL1 commands from a TL1 session. The Plexus 9000 uses a subset of TL1 commands to implement the individual *provisioning operations* required by the bulk download feature. A file containing one or more of these commands defines a bulk download script, for which blank lines and comment lines (which start with the “#” character) are allowed.

Category: System

Security: SW

Input Format:

```
EXEC-BULK-DOWNLOAD:[TID]:[<src>]:[CTAG]::<srchost>,  
    <username>,<password>,<srcpath>,[<tmout>];
```

Output Format:

```
    SID DATE TIME  
M    CTAG COMPLD  
    <text>  
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

- srchost** Identifies the host (or its IP address), containing the bulk download script identified in *srcpath*, for retrieving the Plexus configuration data. Entering the value “0.0.0.0” designates the local host.
- Type:** string
Range: ANSI characters
Default value: none
- username** Identifies a valid user name for the host identified by *srchost*.
- Type:** string
Range: alphanumeric characters
Default value: none
- password** Identifies a valid password for the host identified by *srchost*. The entered password displays as a series of asterisks.
- Type:** string
Range: alphanumeric characters
Default value: none
- srcpath** Identifies the path to the bulk download script for the Plexus configuration data on the remote host specified by *srchost*.
- Type:** string
Range: ANSI characters
Default value: none
- tmout** Identifies the time out interval in minutes. The command execution terminates if the bulk file specified by *srcpath* has not been transferred to the Plexus 9000 within the *tmout* interval (due to processing problems or a stalled FTP process). The *tmout* interval does not apply to the execution of the commands in the bulk file.
- Type:** integer
Range: {1-120}
Default value: 30
- text** Identifies (in output) the cumulative status of the bulk download operation. A status of failed is returned if one or more commands within the specified bulk download file fails on execution. You can examine the bulk log file for detailed status for each command executed during the bulk download operation. A summary report is at the end of the log file.
- Type:** string
Range: ANSI characters
Default value: none

Input Examples:

```
EXEC-BULK-DOWNLOAD:::::128.64.32.16,johnuser,*****,  
/home/scripts/bulk.txt;
```

or

```
EXEC-BULK-DOWNLOAD:::::telicahost,johnuser,*****,  
/home/scripts/bulk.txt;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
BULK download operation succeeded  
;
```

Related Commands: none

EXEC-CAT

Command:

EXEC-CAT: Execute CAT

Description:

EXEC-CAT lets the user retrieve the contents of a file.

Category: System

Security: View

Input Format:

```
EXEC-CAT:[TID]:[<src>]:[CTAG]::<file>,  
[<suppressoutput>;
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
<text>  
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

file Identifies a single file from which to retrieve text. The value of *file* must start with a “/” unless the file is relative to (within) the current working directory (set with the EXEC-CD command).

Type: string

Range: ANSI characters

Default value: none

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

text Identifies (in output) the shell commands as they execute, as well as any error messages.

Type: string

Range: ANSI characters

Default value: none

Input Example:

```
EXEC-CAT:::::/tmp/shopping.txt;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
    milk
    bread
    fruit
    cat food
;
```

Related Commands: none

EXEC-CD

Command:

EXEC-CD: Execute Current Directory

Description:

EXEC-CD lets the user, for the current session, set the working directory used for subsequent “EXEC” commands.

Category: System

Security: View

Input Format:

```
EXEC-CD:[TID]:[<src>]:[CTAG]::[<dir>],  
[<suppressoutput>;
```

Output Format:

```
      SID DATE TIME  
M    CTAG COMPLD  
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

dir Identifies the new current directory. This parameter defaults to the root directory, identified by a slash (“/”). The new current directory is a subdirectory of the old current directory if the value of *dir* does not start with “/”.

Type: string

Range: ANSI characters

Default value: /

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

Input Example:

```
EXEC-CD:::::/tmp;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
;
```

Related Commands: none

EXEC-CP / EXEC-CP-FROMSTBY/TOSTBY

Commands:

EXEC-CP: Execute Copy

EXEC-CP-FROMSTBY: Execute Copy From Standby

EXEC-CP-TOSTBY: Execute Copy To Standby

Descriptions:

EXEC-CP lets the user copy and/or rename files or directories.

EXEC-CP-FROMSTBY lets the user copy files or directories from the standby processor to the active. If *source* represents a single file, *dest* can be a directory or a file (which allows renaming the file). If *source* represents a directory, *dest* must be a directory and the “-r” switch is mandatory.

EXEC-CP-TOSTBY lets the user copy files or directories from the active processor to the standby. If *source* represents a single file, *dest* can be a directory or a file (which allows renaming the file). If *source* represents a directory, *dest* must be a directory and the “-r” switch must be used.

Category: System

Security: SW for all commands

Input Formats:

```
EXEC-CP: [TID]: [<src>]: [CTAG]: [<switches>], <source>,  
        [<dest>], [<suppressoutput>];  
EXEC-CP-FROMSTBY: [TID]: [<src>]: [CTAG]: [<switches>],  
        <source>, [<dest>], [<suppressoutput>];  
EXEC-CP-TOSTBY: [TID]: [<src>]: [CTAG]: [<switches>],  
        <source>, <dest>, [<suppressoutput>];
```

Output Formats (all commands):

```
SID DATE TIME  
M CTAG COMPLD  
<text>  
;
```


Parameters:

- src** Identifies the AID as a Plexus 9000.
Type: COM
Range: COM
Default value: COM
- switches** Identifies (for EXEX-CP) options affecting the copying process (can be one or more values separated by a space).
Type: string
Range: -p = Preserve (preserve file attributes if possible)
-r = copy recursively, non-directories as files
-v = Verbose (explain what is being done)
Default value: null
- switches** Identifies (for EXEX-CP-FROMSTBY/TOSTBY) options affecting the copying process (can be one or more values separated by a space).
Type: string
Range: -p = Preserve (preserve file attributes if possible)
-r = Copy recursively, non-directories as files
Default value: null
- source** Identifies a file specification to copy; by using wildcards (e.g., “*”), it can represent one or more files or directories. Wildcard characters cannot be used in EXEC-CP-TOSTBY. The value of *source* must start with a “/” unless the source file/directory is relative to (within) the current working directory (set with the EXEC-CD command).
Type: string
Range: ANSI characters
Default value: none
- dest** Identifies the destination file/directory for the copied file/directory. For EXEC-CP-TOSTBY, it identifies the destination file/directory on the standby processor for the copied file/directory. The value of *dest* must start with a “/” unless the destination file/directory is relative to (within) the current working directory (set with the EXEC-CD command). For EXEC-CP and EXEC-CP-FROMSTBY, *dest* defaults to the current working directory.
Type: string
Range: ANSI characters
Default value: null

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output
Y = suppress output

Default value: N

text Identifies (in output) the shell commands as they execute, as well as any error messages.

Type: string

Range: ANSI characters

Default value: none

Input Examples:

```
EXEC-CP::::-r,emf.log,emf.log2;
```

```
EXEC-CP-FROMSTBY::::-r,/tmp/f*,/tmp/foo;
```

```
EXEC-CP-TOSTBY::::-p,/tmp/myfiles.tar,/tmp/testdir;
```

Output Examples:

(For EXEC-CP)

```
telica 2004-05-14 14:37:49
M 0 COMPLD
/bin/cp -r emf.log emf.log2
;
```

(For EXEC-CP-FROMSTBY)

```
telica 2004-05-14 14:37:49
M 0 COMPLD
cd /tmp/foo; /bin/rcp -r 192.168.253.27:tmp/f* /tmp/foo
;
```

(For EXEC-CP-TOSTBY)

```
telica 2004-05-14 14:37:49
M 0 COMPLD
/bin/rcp -p /tmp/myfiles.tar 192.168.253.26:/tmp/testdir
;
```

Related Commands: none

EXEC-FTP-GET/PUT

Commands:

EXEC-FTP-GET: Execute FTP Get

EXEC-FTP-PUT: Execute FTP Put

Descriptions:

EXEC-FTP-GET lets the user get a file from a remote host and copy it to a destination directory on the active processor via binary-mode file transfer protocol.

EXEC-FTP-PUT lets the user copy a local file to a destination directory on a remote host via binary-mode file transfer protocol.

Category: System

Security: SW for both commands

Input Formats:

```
EXEC-FTP-GET:[TID]:[<src>]:[CTAG]::<srchost>,  
    <username>,<password>,<srcfile>,[<destdir>],  
    [<suppressoutput>],[<tmout>];  
EXEC-FTP-PUT:[TID]:[<src>]:[CTAG]::<desthost>,  
    <username>,<password>,<srcfile>,<destdir>,  
    [<suppressoutput>],[<tmout>];
```

Output Formats (both commands):

```
    SID DATE TIME  
M   CTAG COMPLD  
    <text>  
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

- srchost** Identifies (in FTP-GET) the host for the source file identified by *srcfile*.
Type: string
Range: ANSI characters
Default value: none
- desthost** Identifies (in FTP-PUT) the remote host containing the destination directory identified by *destdir*.
Type: string
Range: ANSI characters
Default value: none
- username** Identifies a valid user name for the host identified by *srchost* or *desthost*.
Type: string
Range: alphanumeric characters
Default value: none
- password** Identifies a valid password for the host identified by *srchost* or *desthost*. The password will not display when entered.
Type: string
Range: alphanumeric characters
Default value: none
- srcfile** Identifies a file (or, by using wildcards, files) to get and copy, or to copy to the destination directory. The value of *srcfile* must start with a “/” unless the source file(s)/directory(ies) is relative to (within) the current working directory (set with the EXEC-CD command).
Type: string
Range: ANSI characters
Default value: none
- destdir** Identifies the destination directory for the copied file. The value of *destdir* must start with a “/” unless the destination directory is relative to (within) the current working directory (set with the EXEC-CD command). For FTP-GET, *destdir* defaults to the current working directory.
Type: string
Range: ANSI characters
Default value: null

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

tmout Identifies the time out interval in minutes. The command execution terminates if the command has not executed within the *tmout* interval (due to a stalled FTP process).

Type: integer

Range: {1-120}

Default value: 30

text Identifies (in output) the shell commands as they execute, as well as any error messages.

Type: string

Range: ANSI characters

Default value: none

Input Examples:

```
EXEC-FTP-GET:::::192.168.253.27, JOHNUSER, *****,  
/tmp/myfiles.tar, /tmp;  
EXEC-FTP-PUT:::::192.168.253.27, JOHNUSER, *****,  
/tmp/myfiles.tar, /tmp;
```

Output Examples:

(For EXEC-FTP-GET)

Note: Ignore the warning in lines 12 and 13 of the following example; it is due to a bug in the LYNX operating system that generates it when getting multiple files.

```
telica 2004-05-14 14:37:49
M 0 COMPLD
/bin/ftp -inv
Connected to 192.168.253.27.
220 malt FTP server (Version 4.162 Mon Nov 10 9:50:37 PST 1988) ready.
331 Password required for root.
230 User root logged in.
200 Type set to I.
Local directory now /tmp
250 CWD command successful.
257 "/tmp" is current directory.
WARNING! 536934952 bare linefeeds received in ASCII mode
File may not have transferred correctly.
local: myfiles.tar remote: myfiles.tar
200 PORT command successful.
150 Opening BINARY mode data connection for myfiles.tar (1264 bytes).
226 Transfer complete.
1264 bytes received in 0.023 seconds (53 Kbytes/s)
221 Goodbye.
/* EXEC-FTP-GET */
;
```

(For EXEC-FTP-PUT)

```
telica 2004-05-14 14:37:49
M 0 COMPLD
/bin/ftp -inv
Connected to 192.168.253.27.
220 malt FTP server (Version 4.162 Mon Nov 10 9:50:37 PST 1988) ready.
331 Password required for root.
230 User root logged in.
200 Type set to I.
Local directory now /tmp
250 CWD command successful.
257 "/tmp" is current directory.
local: myfiles.tar remote: myfiles.tar
200 PORT command successful.
150 Opening BINARY mode data connection for myfiles.tar.
226 Transfer complete.
1264 bytes sent in 0.02 seconds (62 Kbytes/s)
221 Goodbye.
/* EXEC-FTP-PUT */
;
```

Related Commands: none

EXEC-LS

Command:

EXEC-LS: Execute List

Description:

EXEC-LS lets the user list directory contents and file information.

Category: System

Security: View

Input Format:

```
EXEC-LS: [TID]: [<src>]: [CTAG]: [<switches>], [<files>],  
        [<suppressoutput>];
```

Output Format:

```
        SID DATE TIME  
M      CTAG COMPLD  
        <text>  
        ;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

switches Identifies options affecting the listing process (can be one or more values separated by a space).

Type: string

Range: -1 = One line of output is generated for each file. This option is assumed when standard output is not to a terminal.

-A = When listing directory contents, all files are included, including those whose names begin with "." but excluding "." and "..".

-C = ls will list as many files per output line as possible. This option is assumed when standard output is a terminal.

-F = ls appends markers to file names in the listing to indicate file type, as follows:

- / = Directory.
- & = Named pipe (FIFO).
- = = Socket (not implemented in LynxOS).
- @ = Symbolic link.
- * = Executable regular file.
- | = IPC special file.
- L = For each argument or directory element which is a symbolic link, information about the file or directory referenced by the link (instead of the link itself) is used for printing, sorting, and / or marking the output.
- R = Each subdirectory encountered while scanning a directory is itself examined.
- T types = Only files whose type is one of those specified by types will be shown. The types list should be a string of one or more of -, b, c, d, f, l, p, r, s, i, I, and +, as described below.
- a = When listing directory contents, all files are printed, including files which begin with ".".
- c = The time value examined for printing (-l) and sorting (-u) will be the inode change time instead of the modification time.
- d = Instructs ls to give information about directory arguments themselves instead of listing the contents of the directories.
- f = Each argument is interpreted as a directory, and contents are listed in the order encountered (no sort is performed). The -f option disables -l, -t, -s, and -r, and enables -a.
- g = Group ID of each file is printed (only effective when -l is also given).
- i = The inode number of each file is printed.
- l = Extended information is given for each file, including file mode, number of links, owner, size in bytes, and time (usually modification time, but optionally access or inode change time). If a file is a special file, the major and minor numbers are given in place of file size. If a file is a symbolic link, then the target of the link is given after the file name.
- n = Restricts listing to files created on the current system date.
- q = Forces non-printable characters in file names to be printed as "?". This option is assumed when standard output is a terminal.
- r = Reverses sort order.

- s = Lists size of each file, in 512-byte blocks.
- t = Sorts by time rather than by name.
- u = Uses time of last access rather than modification time for printing (-l) and sorting (-t).

Default value: null

files Identifies the target directory or file for the command. The value of *files* must start with a "/" unless the target directory/file is relative to (within) the current working directory (set with the EXEC-CD command). *files* defaults to the current working directory and can contain wildcard characters (e.g., "*").

Type: string

Range: ANSI characters

Default value: null

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

text Identifies (in output) the directories and files within the present working directory.

Type: string

Range: ANSI characters

Default value: none

Input Example:

```
EXEC-LS:::::/TMP;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
cd /tmp; /bin/ls
emf.log
pmiFileList
telnetlog
;
```

Related Commands: none

EXEC-MKDIR

Command:

EXEC-MKDIR: Execute Make Directory

Description:

EXEC-MKDIR lets the user create a new directory.

Category: System

Security: SW

Input Format:

```
EXEC-MKDIR: [TID]: [<src>]: [CTAG]::<dir>,  
[<suppressoutput>];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
<text>  
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

dir Identifies the new directory. The new directory is a subdirectory of the current working directory if the value of *dir* does not start with “/” or “./”.

Type: string

Range: ANSI characters

Default value: none

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

text Echoes the entered command in output.
Type: string
Range: ANSI characters
Default value: none

Input Example:

```
EXEC-MKDIR:::::newdir;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
cd /; /bin/mkdir newdir  
;
```

Related Commands: none

EXEC-MV

Command:

EXEC-MV: Execute Move

Description:

EXEC-MV lets the user move a single file or directory.

Category: System

Security: SW

Input Format:

```
EXEC-MV: [TID]: [<src>]: [CTAG]:: [<switches>], <source>,  
        <dest>, [<suppressoutput>];
```

Output Format:

```
        SID DATE TIME  
M      CTAG COMPLD  
        <text>  
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

switches Identifies options affecting the copying process (can be one or more values separated by a space).

Type: string

Range: -f = Force writing over existing files without prompting

Default value: null

source Identifies a single file/directory to move. The value of *source* must start with a "/" unless the source file/directory is relative to (within) the current working directory (set with the EXEC-CD command). *source* can contain wildcard characters (e.g., "*").

Type: string

Range: ANSI characters

Default value: none

dest Identifies the destination file/directory for the moved file/directory. The value of *dest* must start with a “/” unless the destination file/directory is relative to (within) the current working directory (set with the EXEC-CD command). If *dest* is a file, then the command changes the name (value) of *source* to that of *dest*. If *dest* is a directory, then the command moves the file/directory identified by *source* to *dest*.

Type: string

Range: ANSI characters

Default value: none

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

text Echoes the entered command in output.

Type: string

Range: ANSI characters

Default value: none

Input Example:

```
EXEC-MV:::::-f,emf.log2,/TMP;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
/bin/mv -f emf.log2 /tmp/emf.log2
;
```

Related Commands: none

EXEC-NETSTAT

Command:

EXEC- NETSTAT: Execute Network Status

Description:

EXEC-NETSTAT lets the user check the status of Ethernet interfaces and routing tables. It symbolically displays the contents of various network-related data structures. There are a number of output formats, depending on the options for the information presented. The first form of the command displays a list of active sockets for each protocol. The second form presents the contents of one of the other network data structures according to the option selected. Using the third form, with a wait interval specified, netstat will continuously display the information regarding packet traffic on the configured network interfaces. The fourth form displays statistics about the named protocol.

Category: System

Security: SW

Output Format:

```
      SID DATE TIME
M  CTAG COMPLD
<text>
;
```

Input Format:

```
EXEC-NETSTAT:[TID]:[<spOrIom>]:[CTAG]::[<switches>],
[<suppressoutput>;
```

Parameters:

spOrIom Identifies the AID as a module in the Plexus 9000. A null value is equivalent to "ALL"; that is, by leaving the field blank, the status of Ethernet interfaces and routing tables for all system modules will be returned.

Type: SPorIOM

Range: IOM-{8,10}
SP-{A-B}

Default value: none

switches Identifies options affecting the listing process (can be one or more values separated by a space). This parameter is not supported presently; switches are ignored.

Type: string

Range: -A = With the default display, show the address of any protocol control blocks associated with sockets; used for debugging.

-a = With the default display, show the state of all sockets; normally sockets used by server processes are not shown.

-d = With either interface display (option -i or an interval, as described below), show the number of dropped packets

-f = Limit statistics or address control block reports to those of the specified address family (currently INET only).

-g = Show information related to multicast (group address) routing. By default, show the IP Multicast virtual-interface and routing tables. If the -s option is also present, show multicast routing statistics.

-I = Show information about the specified interface; used with a wait interval as described below.

-i = Show the state of interfaces which have been auto-configured (interfaces statically configured into a system, but not located at boot time are not shown). If the -a option is also present, multicast addresses currently in use are shown for each Ethernet interface and for each IP interface address. Multicast addresses are shown on separate lines following the interface address with which they are associated.

-N = Extract the name list from the specified system instead of the default /vmunix.

-n = Show network addresses as numbers (normally netstat interprets addresses and attempts to display them symbolically). This option may be used with any of the display formats.

-p = Show statistics about protocol, which is either a well-known name for a protocol or an alias for it. Some protocol names and aliases are listed in the file /etc/protocols. A null response typically means that there are no interesting numbers to report. The program will complain if protocol is unknown or if there is no statistics routine for it.

-r = Show the routing tables. When -s is also present, show routing statistics instead.

-s = Show per-protocol statistics. If this option is repeated, counters with a value of zero are suppressed.

-w = Show network interface statistics at intervals of wait seconds.

Default value: NULL

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output
Y = suppress output

Default value: N

text Identifies the output for the command. The default display, for active sockets, shows the local and remote addresses, send and receive queue sizes (in bytes), protocol, and the internal state of the protocol. Address formats are of the form "host.port" or "network.port" if a socket's address specifies a network but no specific host address. When known the host and network addresses are displayed symbolically according to the data bases /etc/hosts and /etc/networks, respectively. If a symbolic name for an address is unknown, or if the -n option is specified, the address is printed numerically, according to the address family. Unspecified, or "wildcard", addresses and ports appear as "*".

The interface display provides a table of cumulative statistics regarding packets transferred, errors, and collisions. The network addresses of the interface and the maximum transmission unit ("mtu") are also displayed.

The routing table display indicates the available routes and their status. Each route consists of a destination host or network and a gateway to use in forwarding packets. The flags field shows a collection of information about the route stored as binary choices.

Direct routes are created for each interface attached to the local host; the gateway field for such entries shows the address of the outgoing interface. The refcnt field gives the current number of active uses of the route. Connection oriented protocols normally hold on to a single route for the duration of a connection while connectionless protocols obtain a route while sending to the same destination. The use field provides a count of the number of packets sent using that route. The interface entry indicates the network interface utilized for the route.

Type: string

Range: ANSI characters

Default value: none

Input Example:

```
EXEC-NETSTAT;
```


Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
```

```
Internet:
Destination      Gateway          Flags           Refs      Use
Interface
default          10.7.0.1        UGS             4         66700  mgt0
10.7             link#12         UC              0          0  mgt0
10.7.0.1         0:d0:bc:f5:2:f8 UHL             1          0  mgt0
10.7.48.26       0:30:fa:0:2:94  UHL             1          4  lo0
10.7.48.27       0:30:fa:0:3:60  UHL             1         1049  mgt0
10.7.206.206     link#12         UHL             1        178613  mgt0
127.0.0.1        127.0.0.1      UH             105      9171348  lo0
192.168.251      link#15         UC              0          0  dbg0
192.168.252      192.168.252.26 U              16      4614526  sar0
192.168.253      link#13         UC              0          0  rep0
192.168.253.27  0:30:fa:0:3:61 UHL             7       2703922  rep0
;
```

Related Commands: none

EXEC-PWD

Command:

EXEC-PWD: Execute Present Working Directory

Description:

EXEC-PWD lets the user retrieve the path name of the current working directory. The user's current working directory is the default directory for other EXEC commands.

Category: System

Security: View

Input Format:

EXEC-PWD: [TID]: [<src>]: [CTAG]: [<suppressoutput>];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<com>:<dir>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

com Identifies the AID (in output) as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

dir Identifies (in output) the path name for current working directory.

Type: string

Range: ANSI characters

Default value: none

Input Example:

```
EXEC-PWD;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
COM:/tmp
;
```

Related Commands: none

EXEC-RM/RMDIR

Commands:

EXEC-RM: Execute Remove

EXEC-RMDIR: Execute Remove Directory

Descriptions:

EXEC-RM lets the user remove (delete) a single file or, by using wildcards, files

EXEC-RMDIR lets the user remove (delete) a single directory or, by using wildcards, directories.

Category: System

Security: SW for both commands

Input Formats:

EXEC-RM: [TID]: [<src>]: [CTAG]: [<switches>], <file>,
[<suppressoutput>];

EXEC-RMDIR: [TID]: [<src>]: [CTAG]: <dir>,
[<suppressoutput>];

Output Formats (both commands):

```
SID DATE TIME
M CTAG COMPLD
<text>
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

switches Identifies (for EXEC-RM) options affecting the file removal process (can be one or more values separated by a space).

Type: string

Range: -f = Force removal of unwritable files without prompting

-r = Recursively remove a directory subtree

-v = Generates verbose output

Default value: null

- file** Identifies (for EXEC-RM) the file(s) to remove. The value of *file* must start with a "/" unless the source file/directory is relative to (within) the current working directory (set with the EXEC-CD command). *file* can contain wildcard characters (e.g., "*").
Type: string
Range: ANSI characters
Default value: none
- dir** Identifies (for EXEC-RMDIR) the directories to remove. The value of *dir* must start with a "/" unless the affected directory is relative to (within) the current working directory (set with the EXEC-CD command). *dir* can contain wildcard characters (e.g., "*").
Type: string
Range: ANSI characters
Default value: none
- suppressoutput** Identifies whether to suppress the output for the command.
Type: BoolYN
Range: N = do not suppress output
Y = suppress output
Default value: N
- text** Identifies (in output) the shell commands as they execute, as well as any error messages.
Type: string
Range: ANSI characters
Default value: none

Input Examples:

EXEC-RM:::::-f,emf.log2;

EXEC-RMDIR:::::/TMP;

Output Examples:

(For EXEC-RM)

```
telica 2004-05-14 14:37:49
M 0 COMPLD
/bin/rm -f emf.log2
;
```

(For EXEC-RMDIR)

```
telica 2004-05-14 14:37:49
M 0 COMPLD
/bin/rmdir tmp
;
```

Related Commands: none

EXEC-RUN-UPGRADE

Command:

EXEC-RUN-UPGRADE: Execute Run Upgrade

Description:

EXEC-RUN-UPGRADE lets the user run a script on an active or standby System Processor module to install the TimesTen database. Note that, as a security feature, the TID (target identifier; i.e., the network name of the Plexus) is mandatory – use RTRV-HDR to obtain the name if unknown.

Category: System

Security: SW

Input Format:

```
EXEC-RUN-UPGRADE:<TID>:<sp>:[CTAG]::  
[<suppressoutput>];
```

Output Format:

```
      SID DATE TIME  
M    CTAG COMPLD  
      <text>  
;
```

Parameters:

sp Identifies the AID as an active or standby System Processor module in a Plexus 9000.

Type: SP

Range: SP-{A-B}

Default value: none

suppressoutput Identifies whether to suppress the output for the command.

Type: BoolYN

Range: N = do not suppress output

Y = suppress output

Default value: N

text Echoes the entered command in output.
Type: string
Range: ANSI characters
Default value: none

Input Example:

```
EXEC-RUN-UPGRADE:telica:SP-A;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
/bin/rsh 192.168.253.26 "cd /Telica/swCPU/CurrRel/  
system/scripts/;" ./uprev  
.sh -justinstall  
;
```

Related Commands: none

EXEC-TAR-CREATE/EXTRACT/EXTRACTSTBY

Commands:

EXEC-TAR-CREATE: Execute Tar Create

EXEC-TAR-EXTRACT: Execute Tar Extract

EXEC-TAR-EXTRACTSTBY: Execute Tar Extract Standby

Descriptions:

EXEC-TAR-CREATE lets the user create an archive file (compressed tarfile).

EXEC-TAR-EXTRACT lets the user extract files from an archive file (compressed tarfile) into the current working directory.

EXEC-TAR-EXTRACTSTBY lets the user extract files from an archive file (tarfile) on the standby System Processor module into the current working directory.

Category: System

Security: SW for all commands

Input Formats:

```
EXEC-TAR-CREATE:[TID]:[<src>]:[CTAG]::<tarfile>,  
  <files>,[<suppressoutput>];  
EXEC-TAR-EXTRACT:[TID]:[<src>]:[CTAG]::<tarfile>,  
  [<suppressoutput>];  
EXEC-TAR-EXTRACTSTBY:[TID]:[<src>]:[CTAG]::<tarfile>,  
  <path>,[<suppressoutput>];
```

Output Formats (all commands):

```
      SID DATE TIME  
M    CTAG COMPLD  
      <text>  
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

- tarfile** Identifies the complete file path to the tarfile to either create, or from which to extract files (the tarfile must be on the standby System Processor for EXEC-TAR-EXTRACTSTBY). The value of *tarfile* must start with a “/” unless the affected file/directory is relative to (within) the current working directory (set with the EXEC-CD command). *tarfile* cannot contain wildcard characters (e.g., “*”).
Type: string
Range: ANSI characters
Default value: null
- files** Identifies (for EXEC-TAR-CREATE) the file or directory to archive. The value of *files* must start with a “/” unless the affected file/directory is relative to (within) the current working directory (set with the EXEC-CD command). *files* can contain wildcard characters (e.g., “*”).
Type: string
Range: ANSI characters
Default value: none
- path** Identifies (for EXEC-TAR-EXTRACTSTBY) the directory on the standby System Processor module into which the files are extracted.
Type: string
Range: ANSI characters
Default value: none
- suppressoutput** Identifies whether to suppress the output for the command.
Type: BoolYN
Range: N = do not suppress output
Y = suppress output
Default value: N
- text** Echoes the entered command in output.
Type: string
Range: ANSI characters
Default value: none

Input Examples:

```
EXEC-TAR-CREATE:::::/tmp/myfiles.tar,file*;  
EXEC-TAR-EXTRACT:::::/tmp/myfiles.tar;  
EXEC-TAR-EXTRACTSTBY:::::/tmp/testdir/myfiles.tar,  
/tmp/newfiledir;
```

Output Examples:

(For EXEC-TAR-CREATE)

```
telica 2004-05-14 14:37:49
M 0 COMPLD
/bin/tar -czvf /tmp/myfiles.tar file*
file1
file2
file3
;
```

(For EXEC-TAR-EXTRACT)

```
telica 2004-05-14 14:37:49
M 0 COMPLD
/bin/tar -xzvf /tmp/myfiles.tar
file1
file2
file3
;
```

(For EXEC-TAR-EXTRACTSTBY)

```
telica 2004-05-14 14:37:49
M 0 COMPLD
/bin/tar -xzvf /tmp/testdir/myfiles.tar
file1
file2
file3
;
```

Related Commands: none

NOTES

DLT/ENT/RTRV-CALL-CAPT/CAPTVERBOSE

Commands:

DLT-CALL-CAPT: Delete Call Capture

DLT-CALL-CAPTVERBOSE: Delete Call Capture Verbose

ENT-CALL-CAPT: Enter Call Capture

ENT-CALL-CAPTVERBOSE: Enter Call Capture Verbose

RTRV-CALL-CAPT: Retrieve Call Capture

RTRV-CALL-CAPTVERBOSE: Retrieve Call Capture Verbose

Descriptions:

DLT-CALL-CAPT and DLT-CALL-CAPTVERBOSE let the user turn off a call trace observation (capture) session for a specific calling party and/or called party number.

ENT-CALL-CAPT lets the user establish a call trace observation (capture) session for a specific calling party and/or called party number. At least one number must be entered, even though both the calling party and called party numbers are optional parameters.

ENT-CALL-CAPTVERBOSE lets the user establish a call trace observation (capture) session for a specific calling party and/or called party number, whether autonomous messages are displayed during the session, and the duration for the session. At least one number must be entered, even though both the calling party and called party numbers are optional parameters.

RTRV-CALL-CAPT lets the user retrieve the calling party and/or called party number(s) for (a) call trace observation (capture) session(s). At least one number will be returned, even though both the calling party and called party numbers are optional parameters in the response.

RTRV-CALL-CAPTVERBOSE lets the user retrieve the calling party and/or called party number(s) for (a) call trace observation (capture) session(s), whether autonomous messages are displayed during the session(s), and the duration for the session(s). At least one number will be returned, even though both the calling party and called party numbers are optional parameters in the response.

Category: Diagnosis

Security: NSA for all commands

Input Formats:

```
DLT-CALL-CAPT:[TID]:<trcId>:[CTAG];
DLT-CALL-CAPTVERBOSE:[TID]:<trcId>:[CTAG];
ENT-CALL-CAPT:[TID]:<trcId>:[CTAG]::[CGPN=<cgpn>],
[CDPN=<cdpn>];
ENT-CALL-CAPTVERBOSE:[TID]:<trcId>:[CTAG]::
[CGPN=<cgpn>],[CDPN=<cdpn>],[SENDTL1=<sendTl1>],
[CAPTDUR=<captDur>];
RTRV-CALL-CAPT:[TID]:[<trcId>]:[CTAG];
RTRV-CALL-CAPTVERBOSE:[TID]:[<trcId>]:[CTAG];
```

Output Formats:

(For RTRV-CALL-CAPT)

```
SID DATE TIME
M CTAG COMPLD
"<trcId>:[CGPN=<cgpn>],[CDPN=<cdpn>]"
;
```

(For RTRV-CALL-CAPTVERBOSE)

```
SID DATE TIME
M CTAG COMPLD
"<trcId>:[CGPN=<cgpn>],[CDPN=<cdpn>],
SENDTL1=<sendTl1>,CAPTDUR=<captDur>"
;
```

Parameters:

trcId	Identifies the AID as the call trace observation session to establish. Type: integer Range: {1-20} Default value: none
cgpn	Identifies the affected calling party number for the call trace observation session. Type: string Range: up to 21 digits Default value: none

- cdpn** Identifies the affected called party number for the call trace observation session.
Type: string
Range: up to 21 digits
Default value: none
- sendTl1** Identifies whether to display autonomous messages received during the call trace observation session, in addition to recording them in the CALLCAPT log.
Type: BoolYN
Range: N = only log autonomous messages, no display
Y = log and display autonomous messages
Default value: N
- captDur** Identifies the duration, in hours, for the call trace observation session. The default value "0" indicates that the session lasts indefinitely.
Type: integer
Range: {0-24}
Default value: 0

Input Examples:

```
DLT-CALL-CAPT::1;  
DLT-CALL-CAPTVERBOSE::1;  
ENT-CALL-CAPT::1:::CGPN=5088048202,CDPN=6177273600;  
ENT-CALL-CAPTVERBOSE::1:::CGPN=5088048202,  
    CDPN=6177273600,SENDTL1=N,CAPTDUR=0;  
RTRV-CALL-CAPT::1;  
RTRV-CALL-CAPTVERBOSE::1;
```

Output Examples:

(For RTRV-CALL-CAPT)

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "1:CGPN=5088048202,CDPN=6177273600"
;
```

(For RTRV-CALL-CAPTVERBOSE)

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "1:CGPN=5088048202,CDPN=6177273600,SENDTL1=N,
    CAPTDUR=0"
;
```

Related Commands: none

DLT/ENT/RTRV-CAPT-SYS

Commands:

DLT-CAPT-SYS: Delete Capture System

ENT-CAPT-SYS: Enter Capture System

RTRV-CAPT-SYS: [TID]: [<captSysId>]: [CTAG];

Descriptions:

DLT-CAPT-SYS lets the user delete a server from the list of systems that can receive protocol capture session records.

ENT-CAPT-SYS lets the user add a server to the list of systems that can receive protocol capture session records.

RTRV-CAPT-SYS lets the user retrieve the IP address and receiving port number for a server that can receive protocol capture session records.

Category: Diagnosis

Security: NSA for all commands

Input Formats:

DLT-CAPT-SYS: [TID]:<captSysId>: [CTAG];

ENT-CAPT-SYS: [TID]:<captSysId>: [CTAG]::<IPAddr>,
[<port>];

RTRV-CAPT-SYS: [TID]: [<captSysId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<captSysId>:<IPAddr>,<port>"
;
```

Parameters:

captSysId Identifies the server to delete from or to add to the list of systems that can receive protocol capture session records, or (for RTRV) a server that receives protocol capture session records. The value of *captSysId* must be set to “1” as there currently can be only one server that can receive protocol capture session records.

Type: CaptSysId

Range: {1}

Default value: none

IPAddr Identifies the IP address of the capture system.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

port Identifies the port used for receiving protocol capture session records.

Type: integer

Range: {1025-65535}

Default value: 9004

Input Examples:

```
DLT-CAPT-SYS::1;
```

```
ENT-CAPT-SYS::1:::192.2.24.234,9004;
```

```
RTRV-CAPT-SYS;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:192.2.24.234,9004"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-CRS-T0

Commands:

DLT-CRS-T0: Delete Cross Connect DS0 Facility

ED-CRS-T0: Edit Cross Connect DS0 Facility

ENT-CRS-T0: Enter Cross Connect DS0 Facility

RTRV-CRS-T0: Retrieve Cross Connect DS0 Facility

Descriptions:

DLT-CRS-T0 lets the user remove “nailed-up” DS0 cross connections. It does not apply to cross connections between a DS0 and the test port. Ranges for multiple deletions cannot span multiple IOMs or T3 ports and must be contiguous on both sides of the cross connect. The number of channels in a range must be the same for *t0From* and *t0To*.

ED-CRS-T0 lets the user configure the T0 cross-connect for the test port. The command establishes the effected DS0 channel for both the IOM (specified in ED-TESTPORT) and the test port, and can specify the connection type and state. ED-CRS-T0 will not work unless you have already issued ED-TESTPORT. Setting the test port out of service with ED-TESTPORT deletes the configuration of the T0 cross-connect.

ENT-CRS-T0 lets the user establish the T0 cross connections associated with the AID or AID range. It applies only to “nailed-up” cross connections between DS0s; use ED-CRS-T0 to configure the T0 cross-connect for the test port. Ranges for multiple cross connections cannot span multiple IOMs or T3 ports (Therefore, you can configure a maximum of 672 “nailed-up” DS0s at a time.) and must be contiguous on both sides of the cross connect. The number of channels in a range must be the same for *t0From* and *t0To*. The command establishes the effected DS0 channel for both IOMs, and can specify the connection type and state. ENT-CRS-T0 will not work unless the following commands have already been issued in the listed order: ENT-EQPT, ENT-T3/STS1 (if needed), and ENT-T1.

RTRV-CRS-T0 lets the user retrieve the configuration for cross connections in the Plexus 9000. It applies to both “nailed-up” DS0s and cross connections to the test port. Specify either or both AIDs to return information about the “nailed-up” DS0 cross connections. Leave the AID block blank to return information about the test port cross connection.

Category: Diagnosis

Security: NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-CRS-T0:[TID]:<t0From>,[<t0To>]:[CTAG];  
ED-CRS-T0:[TID]:<t0From>,<t0To>:[CTAG]::[<crsBlk>]:  
[<specBlk>]:[<pst>];  
ENT-CRS-T0:[TID]:<t0From>,<t0To>:[CTAG]::[<crsBlk>]:  
[<specBlk>]:[<pst>];  
RTRV-CRS-T0:[TID]:[<t0From>],[<t0To>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
 "<t0From>,<t0To>:<pst>"  
;
```

Parameters:

t0From Identifies the first AID in the AID block as a DS0 channel on an IOM which connects to another channel (in ED, the test port). A range of channels (only applies to DLT, ENT, and RTRV) is shown by the beginning and ending fully-specified (IOM + port + channel) channel numbers separated by two ampersands and a hyphen (“&&-”).

Type: T0

Range: IOM-{1-17}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24}

Default value: none

t0To Identifies (for DLT, ENT, and RTRV) the second AID in the AID block as a DS0 channel on an IOM which connects to another channel. A range of channels is shown by the beginning and ending fully-specified (IOM + port + channel) channel numbers separated by two ampersands and a hyphen (“&&-”).

Type: T0

Range: IOM-{1-17}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24}

Default value: none

- t0To** Identifies (for ED) the second AID in the AID block as the number of the DS0 channel on the test port.
Type: TestPortNum
Range: TP-{1-24}
Default value: none
- crsBlk** Identifies the type of connection to the cross-connect. Currently the Plexus 9000 does not use this parameter; leave it blank.
Type: enum
Range: ONE-WAY = cross-connect allows transmission in one direction only
TWO-WAY = cross-connect allows transmission in both directions
Default value: none
- specBlk** Identifies the Specific Block, per Section 4 of Telcordia GR-199-CORE. The Plexus 9000 does not use this parameter; leave it blank.
Type: string
Range: alphanumeric characters
Default value: none
- pst** Identifies (for ENT) the primary state, per Section 4 of Telcordia GR-199-CORE. However, the concept “state” does not apply as ENT-CRS-T0 only establishes connections between DS0s; leave it blank.
Type: enum
Range: IS = In-service
OOS = Out-of-service
Default value: none
- pst** Identifies (for ED) the primary state for the connection through the test port. Setting the state to OOS disables the connection for the channel. The factory default is “IS”.
Type: enum
Range: IS = In-service
OOS = Out-of-service
Default value: not applicable

pst Identifies (for RTRV output) the primary state for the cross connection. For “nailed-up” DS0 cross connections the state reflects the states of the channels comprising the connection; that is, the state is “OOS” when either or both of the connected DS0s is out of service.

Type: enum

Range: IS = In-service
OOS = Out-of-service

Default value: none

Input Examples:

```
DLT-CRS-T0::  
    IOM-1-T3-2-PORT-3-T0-1&&-IOM-1-T3-2-PORT-3-T0-3;  
ED-CRS-T0::IOM-1-T3-2-PORT-3-T0-24,TP-1::::IS;  
ENT-CRS-T0::  
    IOM-1-T3-2-PORT-3-T0-1&&-IOM-1-T3-2-PORT-3-T0-3,  
    IOM-1-T3-3-PORT-3-T0-1&&-IOM-1-T3-3-PORT-3-T0-3;
```

(for “nailed-up” DS0 cross connections)

```
RTRV-CRS-T0::  
    IOM-1-T3-2-PORT-3-T0-1&&-IOM-1-T3-2-PORT-3-T0-3;
```

(for the test port cross connection)

```
RTRV-CRS-T0;
```

Output Examples:

(for “nailed-up” DS0 cross connections)

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
    "IOM-1-T3-2-PORT-3-T0-1,IOM-1-T3-3-PORT-1-T0-1:IS"  
    "IOM-1-T3-2-PORT-3-T0-2,IOM-1-T3-3-PORT-1-T0-2:IS"  
    "IOM-1-T3-2-PORT-3-T0-3,IOM-1-T3-3-PORT-1-T0-3:IS"  
    ;
```

(for the test port cross connection)

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
    "IOM-1-T3-2-PORT-3-T0-24,TP-1:IS"  
    ;
```

Related Commands:

ED/RTRV-TESTPORT

ED/RTRV-TESTPORT

Commands:

ED-TESTPORT: Edit Testport

RTRV-TESTPORT: Retrieve Testport

Descriptions:

ED-TESTPORT configures the mode of operation for the test port, which provides a non-invasive method of connecting test equipment to diagnose system and network problems.

RTRV-TESTPORT lets the user retrieve the configuration information for the test port.

Category: Test

Security: NSA for ED, View for RTRV

Input Formats:

ED-TESTPORT:[TID]:[<src>]:[CTAG]::<iom>,<tpmonitor>:
[<pst>];

RTRV-TESTPORT:[TID]:[<src>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:<iom>,<tpMonitor>:<pst>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

iom Identifies the sole IOM to which the test equipment connects through the test port.

Type: enum

Range: IOM-{1-17}

Default value: none

tpmonitor Identifies the function of the test port.

Type: enum

Range: INSERT = test equipment transmits signals through the test port to the IOM
MONITOR = test equipment receives signals through the test port from the IOM

Default value: none

pst Identifies the primary state of the test port. Setting the state to OOS disables alarming for the test port and deletes the configuration of the T0 cross-connect established with ED-CRS-T0.

Type: enum

Range: IS = In-service
OOS = Out-of-service

Default value: none

Input Examples:

```
ED-TESTPORT::COM::IOM-1,MONITOR:IS;  
RTRV-TESTPORT;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:IOM-1,MONITOR:IS"  
;
```

Related Commands:

ED/RTRV-CRS-T0

INIT-REG-CC / RTRV-PM-CC

Commands:

INIT-REG-CC: Initialize Register Call Control

RTRV-PM-CC: Retrieve Performance Monitors Call Control

Descriptions:

INIT-REG-CC lets the user clear the counters for call control statistics.

RTRV-PM-CC lets the user retrieve current and historical performance data for call control in the Plexus 9000.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

INIT-REG-CC:[TID]:[<src>]:[CTAG]::<montype>,
[<monval>],[<locn>],[<dirn>;

RTRV-PM-CC:[TID]:[<src>]:[CTAG]::<montype>,
[<monlev>],[<locn>],[<dirn>;

Output Format:

```
          SID DATE TIME
M  CTAG COMPLD
    "<src>:<montype>,<monval>,<monlev>,<locn>,<dirn>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

montype Identifies the type of monitored call control parameter. “ALL” is the only valid input value.

Type: enum

Range: ALL = All types

ANSCALL = Number of answered calls

FDPCPAUSED = Number of call failures due to paused DPC

FRES = Number of calls processed since initiation that failed due to resource unavailability

FROUTE = Number of calls processed since initiation that failed due to route unavailability

INBICC = Number of incoming BICC calls

INCAS = Number of incoming CAS calls

INGR3 = Number of incoming GR303 calls

INISDN = Number of incoming ISDN calls

INMGCP = Number of incoming MGCP calls

INSIP = Number of incoming SIP calls

INSS7 = Number of incoming SS7 calls

LASTINITNA = Number of minutes since initialization of all counters for which there is no direction (neither RCV nor TRMT)

LASTINITRCV = Number of minutes since initialization of all RCV (receive) counters

LASTINITTRMT = Number of minutes since initialization of all TRMT (transmit) counters

LNP_CALLS_REL_BY_DONSWTCH = Number of calls released by other switch

LNP_CALLS_REL_BY_THISSWTCH = Number of calls released by the Plexus 9000

LNPFAILURES = Number of LNP failures

LNPMISRTDCALLS = Number of misrouted calls

LNPQUERIES = Number of LNP queries

LNPVALID_RESP = Number of valid LNP responses

OUTBICC = Number of outgoing BICC calls

OUTCAS = Number of outgoing CAS calls

OUTGR3 = Number of outgoing GR303 calls

OUTISDN = Number of outgoing ISDN calls

OUTMGCP = Number of outgoing MGCP calls

OUTSIP = Number of outgoing SIP calls

OUTSS7 = Number of outgoing SS7 calls

RMTXFERIN = Number of incoming requests to transfer a call to a remote location

RMTXFEROUT = Number of outgoing requests by the Plexus 9000 to transfer a call to a remote location on a release link trunk

TBXFEROUT = Number of outgoing “trombone” (“bridge”) calls by the Plexus 9000 sent in response to incoming

requests to transfer a call to a remote location
(RMTXFERIN)
STNDGCALL = Number of established (standing) calls
TOTCALL = Number of processed calls
UNANSCALL = Number of unanswered calls

Default value: none

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value "0" is currently the only acceptable input value.

Type: integer

Range: {0 – 4294967295}

Default value: 0

monlev Identifies the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

locn Identifies the location of the storage counters to initialize or from which to retrieve performance data. Currently only NEND is supported.

Type: enum

Range: FEND = Far end
NEND = Near end

Default value: NEND

dirn Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.

Type: enum

Range: ALL = All directions
NA = Direction not applicable
RCV = Receive direction only
TRMT = Transmit direction only

Default value: ALL

Input Examples:

INIT-REG-CC:::::ALL;

RTRV-PM-CC;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:TOTCALL,17"
"COM:ANSCALL,12"
"COM:FROUTE,0"
"COM:FDPCPAUSED,0"
"COM:FRES,0"
"COM:UNANSCALL,5"
"COM:STNDGCALL,0"
"COM:LNPQUERIES,0"
"COM:LNPFAILURES,0"
"COM:LNPVALID_RESP,0"
"COM:LNPISRTRDCALLS,0"
"COM:LNP_CALLS_REL_BY_DONSWTCH,0"
"COM:LNP_CALLS_REL_BY_THISSWTCH,0"
"COM:LASTINITNA,5774"
"COM:LASTINITRCV,5774"
"COM:LASTINITTRMT,5774"
"COM:RMTXFERIN,4"
"COM:RMTXFEROUT,0"
"COM:TBXFEROUT,4"
"COM:OUTSS7,8"
"COM:INSS7,2"
"COM:OUTGR3,0"
"COM:INGR3,0"
"COM:OUTSIP,1"
"COM:INSIP,2"
"COM:OUTBICC,0"
"COM:INBICC,0"
"COM:OUTMGCP,0"
"COM:INMGCP,0"
"COM:OUTCAS,6"
"COM:INCAS,9"
"COM:OUTISDN,0"
"COM:INISDN,0"
;
```

Related Commands:

RTRV-STATS-CC

INIT-REG-RC / RTRV-PM-RC

Commands:

INIT-REG-RC: Initialize Register Release Cause

RTRV-PM-RC: Retrieve Performance Monitors Release Cause

Descriptions:

INIT-REG-RC lets the user reset the counters for transmitted or received release cause types.

RTRV-PM-RC lets the user retrieve the number of times release cause types have been transmitted or received since the counters were last initialized.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-RC:[TID]:[<com>]:[CTAG]::[<montype>],  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

```
RTRV-PM-RC:[TID]:[<com>]:[CTAG]::[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<com>:<montype>,<monval>,[<vldty>],[<locn>],  
      [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

com Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

montype Identifies the registers (for a type of monitored parameter) to initialize or from which to retrieve performance data. “ALL” is the only valid input value.

Type: enum

Range: ALL = All release causes

BCAPNOTAUTH = Bearer Capability Not Authorized

BCAPNOTIMPL = Bearer Capability Not Implemented

BCAPUNAVAIL = Bearer Capability Not Available

CALLREJ = Call Rejected

CHATYPNOTIMPL = Channel Type Not Implemented

DESTNOTCOMP = Destination Not Compatible

DESTOUTORD = Destination Out of Order

INFOELNOTIMPL = Information Element Not Implemented

INVCALLREF = Invalid Call Reference

INVCAUSEVAL = Invalid Cause Value (proprietary)

INVINFOELEM = Invalid Information Element

INVMSG = Invalid Message, unspecified

INVNMBFORM = Invalid Number Format

IVRCASE = Interactive Voice Response case

MISROUTLNP = Misrouted LNP Call

MSGTYPNOTIMPL = Message Type Not Implemented

NETOUTORD = Network Out of Order

NMBCHANGED = Number Changed

NOCKTAVAIL = No Circuit Available

NOROUTDEST = No Route to Destination

NOROUTTRANSNET = No Route to Transit Network

NORRELEASE = Normal Release

NOUSERRESP = No User Response

NRMLUNSPEC = Normal Unspecified

ONLYRDIGBCAVL = Only Restricted Digital Information
Bearer Capability Available

OPTELEMERR = Optional Information Element Content
Error (non-std)

PROTOCOLERR = Protocol Error, unspecified

PRXONEERR = Prefix “1” Dialed Erroneously

PRXONENOTDLD = Prefix “1” Not Dialed

PRXZEROERR = Prefix “0” Dialed Erroneously

RESUNAVAIL = Resources Unavailable, unspecified

SNDSITTONE = Send SIT Tone

SRVUNAVAIL = Service or option Unavailable

SWTCHCONGN = Switch Congestion

TMPFAIL = Temporary Failure

UNALLOCNMB = Unallocated (unassigned) Number

USERBUSY = User Busy

VACANTCODE = Vacant Code

Default value: ALL

- monval** Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* has been initialized. The value is in the form of numeric counts or rates. The value “0” is currently the only acceptable input value.
Type: integer
Range: {0 – 2147483647}
Default value: 0
- monlev** Identifies (in RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (in RTRV-PM output) the validity of the monitored interval. This parameter is not supported presently; its value will always be “NULL”.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: NULL
- locn** Identifies the location of the storage counters to initialize or from which to retrieve performance data. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
Type: enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH

- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are "15-MIN" and "24-HR". This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: 15-MIN
- mondatt** Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1-12}-{1-31}
Default value: current date
- monttm** Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {0-23}-{0-59}
Default value: current time

Input Examples:

```
INIT-REG-RC;  
RTRV-PM-RC;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:RELCOND TICKS,97"  
"COM:INVCONDVAL,0"  
"COM:UNALLOCNMB,0"  
"COM:NOROUTTRANSNET,0"  
"COM:NOROUTDST,0"  
"COM:SNDSIT TONE,0"  
"COM:NORRELEASE,0"  
"COM:USRBUSY,0"  
"COM:NOUSRRSP,0"  
"COM:CALLREJ,0"  
"COM:NMBCHNG,0"
```



```
"COM:MISROUNLP,0"  
"COM:DSTOUTORD,0"  
"COM:INVNMBFORM,0"  
"COM:NORMUNSPEC,0"  
"COM:NOCRTAVAIL,0"  
"COM:NETOUTORD,0"  
"COM:TMPFAIL,0"  
"COM:SWCONGN,0"  
"COM:RESUNAVAIL,0"  
"COM:BCAPNOTAUTH,0"  
"COM:BCAPUNAVAIL,0"  
"COM:SRVUNAVAIL,0"  
"COM:BCAPNOTIMPL,0"
```

```
telica 2004-05-14 14:37:49
```

```
M 0 COMPLD  
"COM:CHATYPNOTIMPL,0"  
"COM:ONLYRDIGBCAVL,0"  
"COM:INVCALLREF,0"  
"COM:DSTNOTCOMP,0"  
"COM:INVMSG,0"  
"COM:MSGTYPNOTIMPL,0"  
"COM:INFOELNOTIMPL,0"  
"COM:INVINFOEL,0"  
"COM:PROTERR,0"  
"COM:OPTELMERR,0"  
"COM:VACNTCODE,0"  
"COM:PRXZINERR,0"  
"COM:PRX0INERR,0"  
"COM:PRXONOTDLD,0"  
"COM:IVRCASE,0"  
;
```

Related Commands: none

RTRV-STATS-CC

Command:

RTRV-STATS-CC: Retrieve Statistics CC

Description:

RTRV-STATS-CC lets the user retrieve statistics for call control. Use RTRV-STATS-CC to retrieve the total number of calls, answered calls, unanswered calls, calls that failed due to route or resource unavailability, LNP calls released due to temporary failure, and incoming and outgoing SS7, ISDN, CAS, GR303, SIP, BICC, and MGCP calls.

Category: Signaling

Security: View

Input Format:

RTRV-STATS-CC : [TID] : [<ccId>] : [CTAG] ;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"TOTCLS=<totCalls>,ANSCLS=<ansrCalls>,
  UNANSCLS=<unansrCalls>,STNDGCLS=<stndgCalls>,
  CFRTEUN=<callsFailedRteUnavail>,
  CFRSRUN=<callsFailedRsrUnavail>,
  INSS7CLS=<inSS7Calls>,OUTSS7CLS=<outSS7Calls>,
  INISDNCLS=<inISDNCalls>,
  OUTISDNCLS=<outISDNCalls>,
  LNPCALLSREL41=<lnpCallsRel41>,
  INCASCLS=<inCASCalls>,OUTCASCLS=<outCASCalls>,
  INGR3CLS=<inGR3Calls>,OUTGR3CLS=<outGR3Calls>,
  INSIPCLS=<inSIPCalls>,OUTSIPCLS=<outSIPCalls>,
  INBICCCCLS=<inBICCCCalls>,
  OUTBICCCCLS=<outBICCCCalls>,
  INMGCPCLS=<inMGCPCalls>,
  OUTMGCPCLS=<outMGCPCalls>"
;
```

Parameters:

- ccId** Identifies the AID as a Plexus 9000.
Type: COM
Range: COM
Default value: COM
- totCalls** Identifies the total number of calls processed by a Plexus 9000 since initialization.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- ansrCalls** Identifies the total number of answered calls processed by a Plexus 9000 since initialization.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- unansrCalls** Identifies the total number of unanswered calls processed by a Plexus 9000 since initialization.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- stndgCalls** Identifies the total number of established calls currently being processed by a Plexus 9000.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- callsFailedRteUnavail** Identifies the total number of calls processed by a Plexus 9000 since initialization that failed due to route unavailability.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none
- callsFailedRsrUnavail** Identifies the total number of calls processed by a Plexus 9000 since initialization that failed due to resource unavailability.
Type: integer
Range: {0 – 4,294,967,295}
Default value: none

inSS7Calls Identifies the total number of incoming SS7 calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

outSS7Calls Identifies the total number of outgoing SS7 calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

inISDNCalls Identifies the total number of incoming ISDN calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

outISDNCalls Identifies the total number of outgoing ISDN calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

lnpCallsRel41 Identifies the total number of LNP calls released with cause code 41 (temporary failure) since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

inCASCalls Identifies the total number of incoming CAS calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

outCASCalls Identifies the total number of outgoing CAS calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

inGR3Calls Identifies the total number of incoming GR303 calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

outGR3Calls Identifies the total number of outgoing GR303 calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

inSIPCalls Identifies the total number of incoming SIP calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

outSIPCalls Identifies the total number of outgoing SIP calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

inBICCCalls Identifies the total number of incoming BICC calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

outBICCCalls Identifies the total number of outgoing BICC calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

inMGCPCalls Identifies the total number of incoming MGCP calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

outMGCPCalls Identifies the total number of outgoing MGCP calls processed by a Plexus 9000 since initialization.

Type: integer

Range: {0 – 4,294,967,295}

Default value: none

Input Example:

```
RTRV-STATS-CC;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"TOTCLS=0, ANSCLS=0, UNANSCLS=0, CFRTEUN=0, STNDGCLS=0,
  CFRSRUN=0, INSS7CLS=0, OUTSS7CLS=0, INISDNCLS=0,
  OUTISDNCLS=0, LNPCALLSREL41=10, INCASCLS=0,
  OUTCASCLS=0, INGR3CLS=0, OUTGR3CLS=0, INSIPCLS=0,
  OUTSIPCLS=0, INBICCCCLS=0, OUTBICCCCLS=0,
  INMGCPCLS=0, OUTMGCPCLS=0"
;
```

Related Commands:

```
INIT-REG-CC
```

```
RTRV-PM-CC
```

RTRV-STATUS-CAPT

Command:

RTRV-STATUS-CAPT: Retrieve Status Capture

Description:

RTRV-STATUS-CAPT lets the user retrieve the status of (a) protocol capture session(s).

Category: Diagnosis

Security: NSA

Input Format:

RTRV-STATUS-CAPT:[TID]:<captAid>:[CTAG]:[:<pcsn>];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<captAid>:<pcsn>:<sigCaptStatus>"
;
```

Parameters:

captAid Identifies the access line; that is, the BICC trunk, CAS channel, ISDN interface, or SS7 link set for which to retrieve capture session status. Not specifying a particular BICC trunk, ISDN interface, SS7 link set, or CAS channel returns the status of the capture sessions for all BICC trunks, ISDN interfaces, SS7 link sets, or CAS channels (on a specific port) configured in the Plexus 9000. Not specifying a particular CAS IOM and port returns the status of all CAS capture sessions configured in the Plexus 9000. A range of CAS channels on a specific port is shown by the beginning and ending channel numbers separated by two ampersands and a hyphen (“&&-”).

Type: CaptAid

Range: BICC = all BICC trunks

CAS-IOM-{1-17}-PORT-{1-28}[-T0-{1-24}]

CAS-IOM-{1-17}-T3-{1-8}-PORT-{1-28}[-T0-{1-24}]

ISDNIF[-{1-32767}] = ISDN interface

LSET[-{1-20}] = SS7 link set

Default value: none

pcsn Identifies the protocol capture session number. The value of *pcsn* is always “1” as the Plexus 9000 does not currently support multiple sessions per interface.

Type: integer

Range: {1}

Default value: 1

sigCaptStatus Identifies (in RTRV output) whether a signaling trace capture session for an access line currently exists.

Type: enum

Range: SIGCAPTOFF = no current signaling trace capture session
SIGCAPTON = signaling trace capture session started

Default value: none

Input Example:

```
RTRV-STATUS-CAPT::CAS;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"IOM-16-T3-1-PORT-2-T0-1:1:SIGCAPTON"
"IOM-16-T3-1-PORT-2-T0-2:1:SIGCAPTON"
"IOM-16-T3-1-PORT-3-T0-1:1:SIGCAPTON"
"IOM-16-T3-1-PORT-3-T0-2:1:SIGCAPTON"
;
```

Related Commands:

STA-CAPT

STP-CAPT

STA/STP-CAPT

Commands:

STA-CAPT: Start Capture

STP-CAPT: Stop Capture

Descriptions:

STA-CAPT lets the user selectively capture and store protocol activity concerning an access line. STA-CAPT is dependent on ENT-CAPT-SYS; that is, if the captured data will be sent to a server, that server first must be configured with ENT-CAPT-SYS. Do not configure the server if you want the captured data to be logged locally on the Plexus 9000.

STP-CAPT lets the user stop the selective capture and store of a protocol activity concerning an access line.

Category: Diagnosis

Security: NSA for both commands

Input Formats:

STA-CAPT: [TID]:<captAid>:[CTAG]:: [<chn>], <lyr>, [<md>],
[<bc>], [<sapi>], [<tei>], [<lcN>], [<dn>]: [<prcaptm>],
[<trig>], [<mot>], [<stp>];

STP-CAPT: [TID]:<captAid>:[CTAG]::<pcsn>;

Output Format: none

Parameters:

captAid Identifies the AID as an access line; that is, the BICC trunk, CAS channel, ISDN interface, or SS7 link set on which to start a capture session. Not specifying a particular CAS channel starts or stops the capture sessions on all CAS channels (on a specific port) configured in the Plexus 9000. A range of CAS channels on a specific port is shown by the beginning and ending channel numbers separated by two ampersands and a hyphen (“&&-”).

Type: CaptAid

Range: BICC = all BICC trunks

CAS-IOM-{1-17}-PORT-{1-28}[-T0-{1-24}]

CAS-IOM-{1-17}-T3-{1-8}-PORT-{1-28}[-T0-{1-24}]

ISDNIF-{1-32767} = ISDN interface

LSET-{1-20} = SS7 link set

Default value: none

chn Identifies the particular ISDN channel of an access line (D or B) for which the protocol activity will be monitored for the duration of the session. This parameter is not currently used by the Plexus 9000 and should be left blank.

Type: enum

Range: null

Default value: null

lyr Identifies the protocol layer for which activity is captured.

Type: enum

Range: L3 = MTP layer 3 for SS7, Q.931 for ISDN

Default value: none

md Identifies the entity for which protocol activity will be monitored for the duration of the protocol capture session. This parameter is used when differentiating the capture entity as either packet data or signaling data; currently only signaling is supported. A null value is equivalent to “SIG” and is the only value presently selectable.

Type: enum

Range: SIG = protocol capture of Signaling Data on the D channel

Default value: null

bc	Identifies the bearer capability, such as speech or audio. This parameter is not currently used by the Plexus 9000 and should be left blank. Type: integer Range: null Default value: null
sapi	Identifies the service access point in MTP layer 2. This parameter is not currently used by the Plexus 9000 and should be left blank. Type: enum Range: null Default value: null
tei	Identifies the terminal endpoint ID in MTP layer 2. This parameter is not currently used by the Plexus 9000 and should be left blank. Type: enum Range: null Default value: null
lcn	Identifies the logical channel number. This parameter is not currently used by the Plexus 9000 and should be left blank. Type: integer Range: null Default value: null
dn	Identifies the directory number. This parameter is not currently used by the Plexus 9000 and should be left blank. Type: string Range: null Default value: null
prcaptm	Identifies the date and time to start the protocol capture session. A null value is equivalent to the current date and time, and is the only value currently supported. Type: string Range: YY-MM-DD-HH-MM-SS Default value: null

- trig** Identifies the triggering event that starts the protocol capture session. This parameter is not currently used by the Plexus 9000 and should be left blank.
Type: enum
Range: null
Default value: null
- mot** Identifies the maximum time, in hours, that the protocol capture session will look for the first occurrence of the defined trigger event before automatically terminating the protocol capture session. This parameter is not currently used by the Plexus 9000 and should be left blank.
Type: integer
Range: {1-72}
Default value: 4
- stp** Identifies the condition after the trigger is observed that signals stopping the protocol capture session. This parameter is not currently used by the Plexus 9000 and should be left blank.
Type: enum
Range: {0-40}-{0-40}
Default value: null
- pcsn** Identifies (in RTRV) the protocol capture session number. The value of *pcsn* is always “1” as the Plexus 9000 does not currently support multiple sessions per interface.
Type: integer
Range: {1}
Default value: 1

Input Examples:

```
STA-CAPT::ISDNIF-96:::,L3;  
STP-CAPT::ISDNIF-96:::1;
```

Related Commands:

ENT-CAPT-SYS

RTRV-STATUS-CAPT

STA/STP-DGN-IPING

Commands:

STA-DGN-IPING: Start Diagnostic IP Ping

STA-DGN-IPING: Stop Diagnostic IP Ping

Descriptions:

STA-DGN-IPING lets the user execute an Internet Control Message Protocol (ICMP) echo request (ping) command to determine network connectivity for either an SP or a network IOM.

STP-DGN-IPING lets the user stop an in-process Internet Control Message Protocol (ICMP) echo request (ping) command.

Category: Diagnosis

Security: NSA for both commands

Input Formats:

STA-DGN-IPING: [TID]:<aid>:CTAG::[COUNT=<count>],
[SIZE=<size>], [WAITTIME=<waittime>];

STP-DGN-IPING: [TID]:<aid>:CTAG;

Output Format: none

Parameters:

aid Identifies the AID as either a network IOM or an SP, both with an associated address.

Type: string

Range: IOM-{8, 10}-ADDRESS, where

ADDRESS is either an IP address in dot format ({0-255}.{0-255}.{0-255}.{0-255}) or a fully-qualified domain (host) name

SP-{A, B}-ADDRESS, where

ADDRESS is either an IP address in dot format ({0-255}.{0-255}.{0-255}.{0-255}) or a fully-qualified domain (host) name

Default value: none

- count** Identifies the number of times to issue an echo request.
Type: integer
Range: {1-20}
Default value: 1
- size** Identifies the number of bytes in the echo request.
Type: integer
Range: {56-8192}
Default value: 56
- waittime** Identifies the interval, in seconds, between each echo request.
Type: integer
Range: {1-20}
Default value: 1

Input Examples:

```
STA-DGN-IPING::IOM-10-192.2.24.234;  
STP-DGN-IPING::IOM-10-192.2.24.234;
```

Related Commands: none

STA/STP-DGN-IPTRACEROUTE

Commands:

STA-DGN-IPTRACEROUTE: Start Diagnostic IP Traceroute

STA-DGN-IPTRACEROUTE: Stop Diagnostic IP Traceroute

Descriptions:

STA-DGN-IPTRACEROUTE lets the user execute an Internet Control Message Protocol (ICMP) traceroute command to determine the number of hops taken in achieving network connectivity for either an SP or a network IOM.

STP-DGN-IPTRACEROUTE lets the user stop an in-process Internet Control Message Protocol (ICMP) traceroute command.

Category: Diagnosis

Security: NSA for both commands

Input Formats:

```
STA-DGN-IPTRACEROUTE:[TID]:<aid>:CTAG::[SIZE=<size>],  
[MAXTTL=<maxttl>],[WAITTIME=<waittime>],  
[TOS=<tos>],[PORT=<port>];  
STP-DGN-IPTRACEROUTE:[TID]:<aid>:CTAG;
```

Output Format: none

Parameters:

aid Identifies the AID as either a network IOM or an SP, both with an associated address.

Type: string

Range: IOM-{8, 10}-ADDRESS, where

ADDRESS is either an IP address in dot format ({0-255}.{0-255}.{0-255}.{0-255}) or a fully-qualified domain (host) name

SP-{A, B}-ADDRESS, where

ADDRESS is either an IP address in dot format ({0-255}.{0-255}.{0-255}.{0-255}) or a fully-qualified domain (host) name

Default value: none

size	Identifies the number of bytes in the traceroute packet. Type: integer Range: {40-32767} Default value: 40
maxttl	Identifies the maximum time-to-live (number of hops) in the outgoing traceroute packet. Type: integer Range: {1-255} Default value: 30
waittime	Identifies the interval, in seconds, allowed between each hop before the command times out. Type: integer Range: {5-20} Default value: 5
tos	Identifies the type of service designated in the IP header for the traceroute packet. Type: integer Range: {0-255} Default value: 0
port	Identifies the UDP port for the traceroute packet. Type: string Range: {33434-33689} Default value: NONE

Input Examples:

STA-DGN-IPTRACEROUTE::IOM-10-192.2.24.234;

STP-DGN-IPTRACEROUTE::IOM-10-192.2.24.234;

Related Commands: none

TRC-CALL-EQPT/LNK/TRK

Commands:

TRC-CALL-EQPT: Trace Call Equipment

TRC-CALL-LNK: Trace Call Link

TRC-CALL-TRK: Trace Call Trunk

Descriptions:

TRC-CALL-EQPT lets the user identify the resources used by both sides of an in-progress call on a channel on a Plexus 9000 module. The Plexus 9000 returns information for just one side when there is no standing call on the channel.

Retrieved properties can include the dialing and dialed numbers; protocol used; incoming and outgoing trunk interfaces (channel), trunk group and trunk numbers; destination point code for SS7 or BICC; ISDN link and B channel for the interface; GR303 interface group; GR303 call reference value or BICC call instance code; SIP feature server IP address; local and remote IP addresses and communications ports for BICC, MGCP, or SIP; and the MGCP gateway and endpoint.

TRC-CALL-LNK lets the user identify the resources used by both sides of an in-progress call on an ISDN link on a Plexus 9000 module. The Plexus 9000 returns information for just one side when there is no standing call on the link. Retrieved properties can include the dialing and dialed numbers; protocol used; incoming and outgoing trunk interfaces (channel), trunk group and trunk numbers; destination point code for SS7 or BICC; ISDN link and B channel for the interface; GR303 interface group; GR303 call reference value or BICC call instance code; SIP feature server IP address; local and remote IP addresses and communications ports for BICC, MGCP, or SIP; and the MGCP gateway and endpoint.

TRC-CALL-TRK lets the user identify the resources used by an in-progress call on an SS7 trunk on a Plexus 9000 module. The Plexus 9000 returns information for just one side when there is no standing call on the trunk. Retrieved properties can include the dialing and dialed numbers; protocol used; incoming and outgoing trunk interfaces (channel), trunk group and trunk numbers; destination point code for SS7 or BICC; ISDN link and B channel for the interface; GR303 interface group; GR303 call reference value or BICC call instance code; SIP feature server IP address; local and remote IP addresses and communications ports for BICC, MGCP, or SIP; and the MGCP gateway and endpoint.

Category: Diagnosis

Security: View for all commands

Input Formats:

```
TRC-CALL-EQPT:[TID]:<iomports0>:[CTAG];
TRC-CALL-LNK:[TID]:<linkid>:[CTAG]::<channum>;
TRC-CALL-TRK:[TID]:<trkAid>:[CTAG];
```

Output Format (all commands):

```
SID DATE TIME
M CTAG COMPLD
  [DN=<dn>],PROTOHDLR=<protoHdlr>,[OE=<oe>],
    [TGN=<tgn>],[TRKMBR=<trkMbr>],[BCHL=<bchl>],
    [IF=<if>],[LNG=<lng>],[CRV=<crv>],[FSIP=<fsip>],
    [LOCIP=<locip>],[LOCPORT=<locport>],
    [REMIP=<remip>],[REMPORT=<remport>],
    [GWID=<gwid>],[LNID=<lnid>]"
  [DN=<dn>],PROTOHDLR=<protoHdlr>,[OE=<oe>],
    [TGN=<tgn>],[TRKMBR=<trkMbr>],[BCHL=<bchl>],
    [IF=<if>],[LNG=<lng>],[CRV=<crv>],[FSIP=<fsip>],
    [LOCIP=<locip>],[LOCPORT=<locport>],
    [REMIP=<remip>],[REMPORT=<remport>],
    [GWID=<gwid>],[LNID=<lnid>]"
;
```

Parameters:

iomports0 Identifies (in TRC-CALL-EQPT) the AID as the I/O module, the DS1 port on the IOM, and the DS0 channel on the port for which to log all incoming and outgoing calls.

Type: T0

Range: IOM-{1-17}-PORT-{1-28}-T0-{1-24} = a channel on a T1 port on a DS1 I/O module
 IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24} = a channel on a T1 port on an STS1 I/O module
 IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24} = a channel on a T1 port on a DS3 I/O module

Default value: none

- linkid** Identifies (in TRC-CALL-LNK) the AID as an ISDN link on an interface. The first number in the range identifies the interface; the second identifies the link.
Type: LinkId
Range: {1-32767}-{1-32767}
Default value: none
- trkAid** Identifies (in TRC-CALL-TRK) the AID as a unique trunk associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk.
Type: TrkAid
Range: {1-9999}-{1-32767}
Default value: none
- channum** Identifies (in TRC-CALL-LNK input) the B channel for the ISDN link.
Type: string
Range: {1-24}
Default value: none
- dn** Identifies the dialed or dialing number on the channel.
Type: string
Range: up to 20 digits
Default value: none
- protoHdlr** Identifies the protocol handler for the dialed or dialing number.
Type: enum
Range: BICC = Bearer Independent Call Control
CASLN = Channel-Associated Signaling by interface
CASTK = Channel-Associated Signaling by trunk
GR303 = GR303 protocol
ISUP = ISDN User Part (SS7)
MGCP = Media Gateway Controller Protocol
MS = Media Server
NFAS = Non-Facility-Associated Signaling
PRI = Primary Rate Interface
SIP = Session Initiation Protocol
Default value: none

- oe** Identifies (when the value of *protoHdlr* is “CASLN”, “CASTK”, “GR303”, “NFAS”, “PRI”, or “ISUP”) the trunk interface for the dialed or dialing number; i.e., the DS0 channel that is being used for the in-progress call.
- Type:** enum
Range: IOM-{1-17}-PORT-{1-28}-T0-{1-24} = a channel on a T1 port on a DS1 I/O module
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24} = a channel on a T1 port on an STS1 I/O module
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24} = a channel on a T1 port on a DS3 I/O module
Default value: none
- tn** Identifies a unique BICC, CAS, SIP, or ISUP trunk group number, or interface.
- Type:** integer
Range: {1-9999}
Default value: none
- trkMbr** Identifies the trunk group member – that is, a unique trunk (cic) associated with the trunk group number – for CAS, ISUP, SIP, and external BICC trunks.
- Type:** integer
Range: {1-16384} for ISUP
{1-4294967295} for CAS, SIP, and BICC
Default value: none
- bchl** Identifies, when the value of *protoHdlr* is “NFAS” or “PRI”, the B channel on the interface for ISDN calls. The first number in the range identifies the interface; the second identifies the link.
- Type:** integer
Range: {1-32767}-{1-32}
Default value: none
- if** Identifies the interface when the value of *protoHdlr* is “CASLN”, “GR303”, “MGCP”, “NFAS”, or “PRI”.
- Type:** integer
Range: {1-32767}
Default value: none

lng	Identifies the line group when the value of <i>protoHdlr</i> is “GR303” or “MGCP”. Type: integer Range: {1-32767} Default value: none
crv	Identifies the call reference value when the value of <i>protoHdlr</i> is “GR303”, or the call instance code when the value of <i>protoHdlr</i> is “BICC”. Type: integer Range: {1-16383} for BICC {1-2048} for GR303 Default value: none
fsip	Identifies the feature server IP address when the value of <i>protoHdlr</i> is “SIP”. Type: string Range: {0-255}.{0-255}.{0-255}.{0-255} Default value: none
locip	Identifies the IP address for the Plexus 9000 when the value of <i>protoHdlr</i> is “BICC”, “MGCP”, or “SIP”. Type: string Range: {0-255}.{0-255}.{0-255}.{0-255} Default value: none
locport	Identifies the communications port for the Plexus 9000 when the value of <i>protoHdlr</i> is “BICC”, “MGCP”, or “SIP”. Type: integer Range: {1025-65535} Default value: none
remip	Identifies the IP address for the remote switch when the value of <i>protoHdlr</i> is “BICC”, “MGCP”, or “SIP”. Type: string Range: {0-255}.{0-255}.{0-255}.{0-255} Default value: none
remport	Identifies the communications port for the remote switch when the value of <i>protoHdlr</i> is “BICC”, “MGCP”, or “SIP”. Type: integer Range: {1025-65535} Default value: none

gwid Identifies the gateway when the value of *protoHdlr* is “MGCP”.

Type: integer

Range: {1-65536}

Default value: none

lnid Identifies the line (i.e., endpoint) when the value of *protoHdlr* is “MGCP”.

Type: integer

Range: {1-65536}

Default value: none

Input Examples:

TRC-CALL-EQPT::IOM-1-T3-1-PORT-1-T0-1;

TRC-CALL-LNK::1-2::23;

TRC-CALL-TRK::4-504;

Output Example (all commands):

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"DN=5088048202,PROTOHDLR=ISUP,
  OE=IOM-1-T3-1-PORT-1-T0-1,TGN=4,TRKMBR=504"
"DN=5084800909,PROTOHDLR=NFAS,
  OE=IOM-1-T3-1-PORT-1-T0-1,BCHL=1-23"
;
```

Related Commands: none

DLT/ENT/RTRV-BICC-TRK

Commands:

DLT-BICC-TRK: Delete BICC trunk

ENT-BICC-TRK: Enter BICC trunk

RTRV-BICC-TRK: Retrieve BICC trunk

Descriptions:

DLT-BICC-TRK lets the user delete a Bearer Independent Call Control trunk (a BICC CIC; i.e., a Call Instance Code).

ENT-BICC-TRK lets the user establish a Bearer Independent Call Control trunk (a BICC CIC; i.e., a Call Instance Code) in a trunk group. ENT-BICC-TRK will not work correctly unless ENT-TRKGRP has already been issued.

RTRV-BICC-TRK lets the user retrieve parameters associated with a Bearer Independent Call Control trunk (a BICC CIC; i.e., a Call Instance Code).

Category: Signaling

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-BICC-TRK:[TID]:<biccTrkAid>:[CTAG];

ENT-BICC-TRK:[TID]:<biccTrkAid>:[CTAG];

RTRV-BICC-TRK:[TID]:<biccTrkAid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<biccTrkAid>:<pst>"
;
```

Parameters:

biccTrkAid Identifies the AID as a unique trunk (or range of trunks) associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk(s). A range of trunks is shown by the beginning and ending numbers separated by two ampersands and a hyphen ("&&-").

Type: BiccTrkAid

Range: {1-9999}-{0-16382}

Default value: none

pst Identifies the primary and secondary states for the BICC trunk.

Type: string

Range: alphanumeric characters

Default value: none

Input Examples:

DLT-BICC-TRK: :2-25&&-99;

ENT-BICC-TRK: :2-25&&-99;

RTRV-BICC-TRK: :2-33;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"2-33:IS-ACT&IDLE"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-CAS-TRK

Commands:

DLT-CAS-TRK: Delete CAS trunk
ED-CAS-TRK: Edit CAS trunk
ENT-CAS-TRK: Enter CAS trunk
RTRV-CAS-TRK: Retrieve CAS trunk

Descriptions:

DLT-CAS-TRK lets the user delete a CAS (Channel-Associated Signaling) trunk.

ED-CAS-TRK lets the user change the name and state associated with a CAS (Channel-Associated Signaling) trunk.

ENT-CAS-TRK lets the user establish a CAS (Channel-Associated Signaling) trunk. ENT-CAS-TRK will not work correctly unless the following commands have already been issued in the listed order: ENT-EQPT, ENT-SS7SYS, ENT-T3/STS1 (if needed), and ENT-T1.

RTRV-CAS-TRK lets the user retrieve the trunk group, trunk name, and states for a CAS (Channel-Associated Signaling) trunk.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-CAS-TRK: [TID]:<casTrkAid>:[CTAG];
ED-CAS-TRK: [TID]:<casTrkAid>:[CTAG]::[NAME=<name>]:
[<pst>];
ENT-CAS-TRK: [TID]:<casTrkAid>:[CTAG]::<tgn>:
[NAME=<name>]: [<pst>];
RTRV-CAS-TRK: [TID]: [<casTrkAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<casTrkAid>:TGN=<tgn>:NAME=<name>:<pst>,<sst>"
;
```

Parameters:

casTrkAid Identifies the AID as a CAS trunk on a DS0 channel. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all CAS trunks configured in the system will be returned. A null value for the second, third, or fourth parts of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving a field blank, parameters will be returned for all channels on a port or all ports on an IOM.

Type: T0

Range: IOM- $\{1-17\}$ [-STS1- $\{1-8\}$ [-PORT- $\{1-28\}$ [-T0- $\{1-24\}$]]] = a channel on a T1 port on an STS1 I/O module
IOM- $\{1-17\}$ [-T3- $\{1-8\}$ [-PORT- $\{1-28\}$ [-T0- $\{1-24\}$]]] = a channel on a T1 port on a DS3 I/O module

Default value: none

tn Identifies a trunk group to associate with the DS0 channel.

Type: enum

Range: $\{1-9999\}$

Default value: none

name Identifies the name of the CAS trunk.

Type: string

Range: up to eight ASCII characters

Default value: null

pst Identifies the desired primary state of the CAS trunk.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: IS

sst Identifies (in RTRV output) the secondary state of the CAS trunk.

Type: enum

Range: ACT = Active
BLKD = Blocked
BUSY = Busy
FAF = Facilities Failure
IDLE = Idle
INBUSY=Incoming Busy
INHIP = Inhibit in Progress
OUTBUSY=Outgoing Busy
SGEO = Supporting Entity Outage
TRANS=Transient
UAS = Unassigned

Default value: none

Input Examples:

```
DLT-CAS-TRK::IOM-1-T3-1-PORT-2-T0-24;  
ED-CAS-TRK::IOM-1-T3-1-PORT-2-T0-24:::NAME=CASTRK1:IS;  
ENT-CAS-TRK::IOM-1-T3-1-PORT-2-T0-24:::1:NAME=CASTRK1:  
IS;  
RTRV-CAS-TRK::IOM-1-T3-1-PORT-2-T0-24;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"IOM-1-T3-1-PORT-2-T0-24:TGN=1:NAME=CASTRK1:IS,ACT"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-CIC

Commands:

DLT-PRFL-CIC: Delete Profile CIC

ED-PRFL-CIC: Edit Profile CIC

ENT-PRFL-CIC: Enter Profile CIC

RTRV-PRFL-CIC: Retrieve Profile CIC

Descriptions:

DLT-PRFL-CIC lets the user delete a circuit identification code profile.

ED-PRFL-CIC lets the user edit a profile for a circuit identification code. Use this command to change the values of the ISUP timers for the CIC.

ENT-PRFL-CIC lets the user establish a profile for a circuit identification code. ENT-PRFL-CIC is dependent on ENT-SS7SYS; that is, ENT-PRFL-CIC will not work unless ENT-SS7SYS has already been issued.

RTRV-PRFL-CIC lets the user retrieve a profile for a circuit identification code.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-CIC: [TID]:<cicPrflId>:[CTAG];

ED-PRFL-CIC: [TID]:<cicPrflId>:[CTAG]::
[ISUPT12=<isupT12>],[ISUPT13=<isupT13>],
[ISUPT14=<isupT14>],[ISUPT15=<isupT15>],
[ISUPT16=<isupT16>],[ISUPT17=<isupT17>],
[ISUPTCVT=<isupTCVT>],[ISUPT24=<isupT24>],
[ISUPT25=<isupT25>],[ISUPT26=<isupT26>],
[ISUPTCOTD=<isupTCOTD>],[ISUPTTBLOM=<isupTTBLOM>],
[GUARDTMR=<guardTmr>],[OLIFLAG=<oliFlag>],
[HOPCOUNTER=<hopCntr>];

```
ENT-PRFL-CIC:[TID]:<cicPrflId>:[CTAG]::
[ISUPT12=<isupT12>],[ISUPT13=<isupT13>],
[ISUPT14=<isupT14>],[ISUPT15=<isupT15>],
[ISUPT16=<isupT16>],[ISUPT17=<isupT17>],
[ISUPTCVT=<isupTCVT>],[ISUPT24=<isupT24>],
[ISUPT25=<isupT25>],[ISUPT26=<isupT26>],
[ISUPTCOTD=<isupTCOTD>],[ISUPTTBLOM=<isupTTBLOM>],
[GUARDTMR=<guardTmr>],[OLIFLAG=<oliFlag>],
[HOPCOUNTER=<hopCntr>];

RTRV-PRFL-CIC:[TID]:[<cicPrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<cicPrflId>:ISUPT12=<isupT12>,ISUPT13=<isupT13>,
ISUPT14=<isupT14>,ISUPT15=<isupT15>,
ISUPT16=<isupT16>,ISUPT17=<isupT17>,
ISUPTCVT=<isupTCVT>,ISUPT24=<isupT24>,
ISUPT25=<isupT25>,ISUPT26=<isupT26>,
ISUPTCOTD=<isupTCOTD>,ISUPTTBLOM=<isupTTBLOM>,
GUARDTMR=<gaurdTmr>,OLIFLAG=<oliFlag>,
HOPCOUNTER=<hopCntr >"
;
```

Parameters:

cicPrflId Identifies the AID as a CIC profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all CIC profiles configured in the system will be returned.

Type: CicPrflId

Range: {1-128}

Default value: none

isupT12 Identifies the Timer T12 value (in seconds) for the ISUP layer. Timer T12 starts when a BLOCKING message is sent. It stops on receipt of a BLOCKING ACKNOWLEDGEMENT message.

Type: integer

Range: {0-15}

Default value: 7

- isupT13** Identifies the Timer T13 value (in seconds) for the ISUP layer. Timer T13 starts when an INITIAL BLOCKING message is sent. It stops on receipt of a BLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {0-100}
Default value: 60
- isupT14** Identifies the Timer T14 value (in seconds) for the ISUP layer. Timer T14 starts when an UNBLOCKING message is sent. It stops on receipt of an UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {0-15}
Default value: 7
- isupT15** Identifies the Timer T15 value (in seconds) for the ISUP layer. Timer T15 starts when an INITIAL UNBLOCKING message is sent. It stops on receipt of an UNBLOCKING ACKNOWLEDGEMENT message.
- Type:** integer
Range: {0-100}
Default value: 60
- isupT16** Identifies the Timer T16 value (in seconds) for the ISUP layer. Timer T16 starts when a RESET CIRCUIT message is sent. It stops on receipt of a RELEASE COMPLETE message.
- Type:** integer
Range: {0-15}
Default value: 7
- isupT17** Identifies the Timer T17 value (in seconds) for the ISUP layer. Timer T17 starts when an INITIAL RESET message is sent. It stops on receipt of a RELEASE COMPLETE message.
- Type:** integer
Range: {0-100}
Default value: 60
- isupTCVT** Identifies the ANSI circuit validation timer value (in seconds).
- Type:** integer
Range: {0-50}
Default value: 10

isupT24 Identifies the Timer T24 value (in seconds) for the ISUP layer. Timer T24 starts when a check tone is sent to the remote switch. This occurs (possibly after a short delay established by *isupTCOTD*) either when an IAM with a CONTINUITY CHECK message is sent to the remote switch, or after receiving a LOOPBACK ACKNOWLEDGEMENT (LPA) from the remote switch in response to a CONTINUITY CHECK REQUEST (CCR) message. T24 stops after detecting the 60-millisecond backward tone indicating continuity. If the timer expires without detecting the backward tone, a continuity message (COT) with failure is sent to the remote switch and Timer T25 (if an IAM was sent) or Timer T26 (if a CCR was sent) is started to repeat automatic attempts at detecting continuity.

Type: integer

Range: {0-2}

Default value: 1

isupT25 Identifies the Timer T25 value (in seconds) for the ISUP layer. Timer T25 starts after an initial continuity failure on sending an IAM (i.e., after expiry of T24), and, as with T24, stops when continuity is detected. If T25 expires without detecting continuity, it sends a CCR message.

Type: integer

Range: {0-10}

Default value: 5

isupT26 Identifies the Timer T26 value (in seconds) for the ISUP layer. Timer T26 starts either after a subsequent continuity failure if the continuity test resulted from an IAM, or after an initial continuity failure if the continuity test resulted from a CCR. T26 runs until expiry, then sends a CCR message to the remote switch.

Type: integer

Range: {0-180}

Default value: 120

isupTCOTD Identifies the check tone delay timer value (in milliseconds) for the ISUP layer. Timer TCOTD starts when an IAM with a CONTINUITY CHECK message is sent to the remote switch and runs until expiry, at which time the check tone is sent. A value of "0" indicates that the parameter is not applicable.

Type: integer

Range: {0, 50-500}

Default value: 0

isupTTBLOM Identifies the BLOCK (BLO) message timer value (in seconds) for the ISUP layer. Timer TTBLOM starts on receipt from the remote switch of either a BLO or a BLOCK ACKNOWLEDGEMENT (BLA) (after the Plexus 9000 sends a BLO). TTBLOM runs until expiry, then reports (REPT COND) that the circuit has been blocked for the specified period.

Type: integer
Range: {0-900}
Default value: 300

guardTmr Identifies the guard timer value T_a (in 100 millisecond increments). The Plexus sets the guard timer for a circuit on which it sends an RLC, and will not seize the circuit for subsequent calls until after guard timer expiry.

Type: integer
Range: {5-10}
Default value: 5

oliFlag Identifies whether the Plexus sends a REL message in response to a received IAM not containing OLI (Originating Line Information).

Type: BoolYN
Range: N = REL not sent when no OLI in IAM
Y = REL sent when no OLI in IAM
Default value: none

hopCntr Identifies the number of hops allowed (i.e., the number of switches traversed in the call route) before the call is released. A value of "0" indicates that the parameter is not applicable.

Type: enum
Range: {0, 10-20}
Default value: 15

Input Examples:

```
DLT-PRFL-CIC::1;  
ED-PRFL-CIC::1::ISUPT12=7, ISUPT13=1, ISUPT14=7,  
ISUPT15=1, ISUPT16=7, ISUPT17=1, ISUPTCVT=10,  
ISUPT24=1, ISUPT25=5, ISUPT26=120, ISUPTCOTD=0,  
ISUPTTBLOM=300, GUARDTMR=5, OLIFLAG=Y, HOPCOUNTER=15;  
ENT-PRFL-CIC::1::ISUPT12=7, ISUPT13=1, ISUPT14=7,  
ISUPT15=1, ISUPT16=7, ISUPT17=1, ISUPTCVT=10,  
ISUPT24=1, ISUPT25=5, ISUPT26=120, ISUPTCOTD=0,  
ISUPTTBLOM=300, GUARDTMR=5, OLIFLAG=Y, HOPCOUNTER=15;  
RTRV-PRFL-CIC::1;
```


Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:ISUPT12=7,ISUPT13=1,ISUPT14=7,ISUPT15=1,
  ISUPT16=7,ISUPT17=1,ISUPTCVT=10,ISUPT24=1,
  ISUPT25=5,ISUPT26=120,ISUPTCOTD=0,
  ISUPTTBLOM=300,GUARDTMR=5,OLIFLAG=Y,
  HOPCOUNTER=15"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-SDP

Commands:

DLT-PRFL-SDP: Delete Profile SDP
ED-PRFL-SDP: Edit Profile SDP
ENT-PRFL-SDP: Enter Profile SDP
RTRV-PRFL-SDP: Retrieve Profile SDP

Descriptions:

DLT-PRFL-SDP lets the user delete an SDP (Session Description Protocol) profile.

ED-PRFL-SDP lets the user edit an SDP (Session Description Protocol) profile applicable to a BICC (Bearer-Independent Call Control) or SIP (Session Initiation Protocol) trunk. An SDP profile must have at least one codec specified. Specified codecs must be contiguous and must start with *codec1*.

ENT-PRFL-SDP lets the user establish an SDP (Session Description Protocol) profile applicable to a BICC (Bearer-Independent Call Control) or SIP (Session Initiation Protocol) trunk. An SDP profile must have at least one codec specified. Specified codecs must be contiguous and must start with *codec1*.

RTRV-PRFL-SDP lets the user retrieve the attributes of an SDP (Session Description Protocol) profile applicable to a BICC (Bearer-Independent Call Control) or SIP (Session Initiation Protocol) trunk.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-PRFL-SDP:[TID]:<sdpPrflId>:[CTAG];  
ED-PRFL-SDP:[TID]:<sdpPrflId>:[CTAG]::  
[CODEC1=<codec1>],[CODEC2=<codec2>],  
[CODEC3=<codec3>],[CODEC4=<codec4>],  
[CODEC5=<codec5>],[PTYPE1=<ptype1>],  
[PTYPE2=<ptype2>],[PTYPE3=<ptype3>],  
[PTYPE4=<ptype4>],[PTYPE5=<ptype5>],  
[PTIME=<pTime>],[SILSUP=<silSup>],  
[TONERELAY=<toneRelay>],[RELAYPTYPE=<relayPtype>],  
[G726ENC=<g726enc>],[FAXPROTOCOL=<faxProtocol>],  
[G723BITRATE=<g723Bitrate>];
```

```
ENT-PRFL-SDP:[TID]:<sdpPrflId>:[CTAG]::
CODEC1=<codec1>,[CODEC2=<codec2>],
[CODEC3=<codec3>],[CODEC4=<codec4>],
[CODEC5=<codec5>],[PTYPE1=<ptype1>],
[PTYPE2=<ptype2>],[PTYPE3=<ptype3>],
[PTYPE4=<ptype4>],[PTYPE5=<ptype5>],
[PTIME=<pTime>],[SILSUP=<silSup>],
[TONERELAY=<toneRelay>],[RELAYPTYPE=<relayPtype>],
[G726ENC=<g726enc>],[FAXPROTOCOL=<faxProtocol>],
[G723BITRATE=<g723Bitrate>];

RTRV-PRFL-SDP:[TID]:[<sdpPrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<sdpPrflId>:CODEC1=<codec1>,CODEC2=<codec2>,
CODEC3=<codec3>,CODEC4=<codec4>,CODEC5=<codec5>,
PTYPE1=<ptype1>,PTYPE2=<ptype2>,PTYPE3=<ptype3>,
PTYPE4=<ptype4>,PTYPE5=<ptype5>,PTIME=<pTime>,
SILSUP=<silSup>,TONERELAY=<toneRelay>,
RELAYPTYPE=<relayPtype>,G726ENC=<g726enc>,
FAXPROTOCOL=<faxProtocol>,
G723BITRATE=<g723Bitrate>"
;
```

Parameters:

sdpPrflId Identifies the AID as an SDP profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all SDP profiles configured in the system will be returned.

Type: integer

Range: {1-255}

Default value: none

codec1 Identifies the first in a list of audio codecs (coding/decoding algorithm types) in SDP format, that apply to the profile.

Type: enum

Range: CISCO-CLEAR-CHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
G723 = G.723 encoding
G726 = G.726 encoding
G729 = G.729 encoding
NULL = no value specified
PCMA = G.711 for a-law PCM encoding (Europe)
PCMU = G.711 for mu-law PCM encoding (North America)
X-CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream

Default value: none

codec2 Identifies the second in a list of audio codecs (coding/decoding algorithm types) in SDP format, that apply to the profile.

Type: enum

Range: CISCO-CLEAR-CHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
G723 = G.723 encoding
G726 = G.726 encoding
G729 = G.729 encoding
NULL = no value specified
PCMA = G.711 for a-law PCM encoding (Europe)
PCMU = G.711 for mu-law PCM encoding (North America)
X-CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream

Default value: NULL

codec3 Identifies the third in a list of audio codecs (coding/decoding algorithm types) in SDP format, that apply to the profile.

Type: enum

Range: CISCO-CLEAR-CHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
G723 = G.723 encoding
G726 = G.726 encoding
G729 = G.729 encoding
NULL = no value specified
PCMA = G.711 for a-law PCM encoding (Europe)
PCMU = G.711 for mu-law PCM encoding (North America)
X-CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream

Default value: NULL

codec4 Identifies the fourth in a list of audio codecs (coding/decoding algorithm types) in SDP format, that apply to the profile.

Type: enum

Range: CISCO-CLEAR-CHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
G723 = G.723 encoding
G726 = G.726 encoding
G729 = G.729 encoding
NULL = no value specified
PCMA = G.711 for a-law PCM encoding (Europe)
PCMU = G.711 for mu-law PCM encoding (North America)
X-CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream

Default value: NULL

codec5 Identifies the fifth in a list of audio codecs (coding/decoding algorithm types) in SDP format, that apply to the profile.

Type: enum

Range: CISCO-CLEAR-CHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
G723 = G.723 encoding
G726 = G.726 encoding
G729 = G.729 encoding
NULL = no value specified
PCMA = G.711 for a-law PCM encoding (Europe)
PCMU = G.711 for mu-law PCM encoding (North America)
X-CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream

Default value: NULL

ptype1 Identifies the dynamic range of the RTP payload type for *codec1* when the *codec1* value is “CISCO-CLEAR-CHANNEL”, “CLEARMODE”, or “X-CCD”. Payload types are not assigned for the other values of *codec1*. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: NULL

ptype2 Identifies the dynamic range of the RTP payload type for *codec2* when the *codec2* value is “CISCO-CLEAR-CHANNEL”, “CLEARMODE”, or “X-CCD”. Payload types are not assigned for the other values of *codec2*. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: NULL

ptype3 Identifies the dynamic range of the RTP payload type for *codec3* when the *codec3* value is “CISCO-CLEAR-CHANNEL”, “CLEARMODE”, or “X-CCD”. Payload types are not assigned for the other values of *codec3*. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: NULL

ptype4 Identifies the dynamic range of the RTP payload type for *codec4* when the *codec4* value is “CISCO-CLEAR-CHANNEL”, “CLEARMODE”, or “X-CCD”. Payload types are not assigned for the other values of *codec4*. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: NULL

ptype5 Identifies the dynamic range of the RTP payload type for *codec5* when the *codec5* value is “CISCO-CLEAR-CHANNEL”, “CLEARMODE”, or “X-CCD”. Payload types are not assigned for the other values of *codec5*. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: NULL

pTime Identifies the size in milliseconds of the packet containing the audio sample; i.e., the time over which data is accumulated before it is assembled into a packet.

Type: enum

Range: {10, 20, 30, 40}

Default value: 20

silSup Identifies whether silence suppression is enabled.

Type: BoolYN

Range: N = silence suppression is disabled

Y = silence suppression is enabled

Default value: N

toneRelay Identifies whether to carry tone signals in RTP packets.

Type: BoolYN

Range: DTMF = carry dual-tone multi-frequency signals

NULL = do not carry tone signals in RTP packets

Default value: NULL

relayPtype Identifies the dynamic range of the RTP payload type for tone-carrying packets. Each payload type is mapped to a single codec and cannot be co-assigned to another codec in the same SDP profile.

Type: integer

Range: {96-127}

Default value: 101

g726enc Identifies the encoding scheme for the G.726 protocol; that is, whether G.726 words are packed most or least significant bit first.

Type: enum

Range: LSB = least significant bit first; complies with RFC-3551

MSB = most significant bit first; complies with early deployments of G.726 over IP and follows ITU 366.2, conforming to transmission over ATM networks using AAL2

Default value: MSB

faxProtocol Identifies the protocol used to service fax streams.

Type: enum

Range: NOFALLBACK = When the value of *codec{1-5}* is

“NULL”, the Plexus 9000 does not renegotiate with the far end to switch codecs (from G.711 to T.38) for the current call. The fax may or may not go through.

PASSTHRU = When the value of *codec{1-5}* is “PCMA” (G.711 a-law) or “PCMU” (G.711 mu-law), the Plexus 9000 renegotiates with the far end using only the PCM entries in the SDP profile and rejects attempts by the far end to negotiate a T.38 connection. When there are no PCM entries “PASSTHRU” = “NOFALLBACK”.

T38FALLBACK = The Plexus 9000 tries to set up a T38 call to service the fax stream. If negotiation with the far end fails or if local T38 resources are not available, the Plexus 9000 tries to set up a PASSTHRU call.

T38STRICT = The Plexus 9000 tries to set up a T38 call to service the fax stream. If negotiation with the far end fails or if local T38 resources are not available, the call is terminated.

Default value: PASSTHRU

g723Bitrate Identifies the rate, in Kbps, at which the DSP encodes the G.723 audio stream.

Type: enum

Range: 5.3K = 5300 bits/second
6.3K = 6300 bits/second

Default value: 6.3K

Input Examples:

```
DLT-PRFL-SDP::1;
```

```
ED-PRFL-SDP::1::CODEC1=PCMU,  
CODEC2=CISCO-CLEAR-CHANNEL, CODEC3=X-CCD,  
CODEC4=CLEARMODE, CODEC5=NULL, PTYPE1=NULL, PTYPE2=96,  
PTYPE3=97, PTYPE4=98, PTYPE5=NULL, PTIME=20, SILSUP=N,  
TONERELAY=NULL, RELAYPTYPE=101, G726ENC=MSB,  
FAXPROTOCOL=PASSTHRU, G723BITRATE=6.3K;
```

```
ENT-PRFL-SDP::1::CODEC1=PCMU,  
CODEC2=CISCO-CLEAR-CHANNEL, CODEC3=X-CCD,  
CODEC4=CLEARMODE, CODEC5=NULL, PTYPE1=NULL, PTYPE2=96,  
PTYPE3=97, PTYPE4=98, PTYPE5=NULL, PTIME=20, SILSUP=N,  
TONERELAY=NULL, RELAYPTYPE=101, G726ENC=MSB,  
FAXPROTOCOL=PASSTHRU, G723BITRATE=6.3K;
```

```
RTRV-PRFL-SDP::1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:CODEC1=PCMU, CODEC2=CISCO-CLEAR-CHANNEL,  
CODEC3=X-CCD, CODEC4=CLEARMODE, CODEC5=NULL,  
PTYPE1=NULL, PTYPE2=96, PTYPE3=97, PTYPE4=98,  
PTYPE5=NULL, PTIME=20, SILSUP=N, TONERELAY=NULL,  
RELAYPTYPE=101, G726ENC=MSB, FAXPROTOCOL=PASSTHRU,  
G723BITRATE=6.3K"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-TGBILLING

Commands:

DLT-PRFL-TGBILLING: Delete Trunk Group Billing Profile

ED-PRFL-TGBILLING: Edit Trunk Group Billing Profile

ENT-PRFL-TGBILLING: Enter Trunk Group Billing Profile

RTRV-PRFL-TGBILLING: Retrieve Trunk Group Billing Profile

Descriptions:

DLT-PRFL-TGBILLING lets the user delete a trunk group profile established for billing purposes.

ED-PRFL-TGBILLING lets the user edit a trunk group profile used for billing purposes.

ENT-PRFL-TGBILLING lets the user establish a trunk group profile for billing purposes. ENT-PRFL-TGBILLING will not work unless ENT-TRKGRP has already been issued.

RTRV-PRFL-TGBILLING lets the user retrieve a trunk group profile used for billing purposes.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-TGBILLING:[TID]:<billPrflId>:[CTAG];

ED-PRFL-TGBILLING:[TID]:<billPrflId>:[CTAG]::
[INCOMINGREC=<incomingRec>],
[OUTGOINGREC=<outgoingRec>],[CNAREC=<cnaRec>],
[ICNID=<icnId>],[BNREC=<bnRec>],
[APPEND164CN=<append164CHN>],
[APPEND164CPN=<append164CPN>],
[APPENDLNPTERM=<appendLNPTerm>],
[APPENDLNPPBX=<appendLNPPBX>];

```
ENT-PRFL-TGBILLING:[TID]:<billPrflId>:[CTAG]::
[INCOMINGREC=<incomingRec>],
[OUTGOINGREC=<outgoingRec>],[CNAREC=<cnaRec>],
[ICNID=<icnId>],[BNREC=<bnRec>],
[APPEND164CN=<append164CHN>],
[APPEND164CPN=<append164CPN>],
[APPENDLNPTERM=<appendLNPTerm>],
[APPENDLNPPBX=<appendLNPPBX>];

RTRV-PRFL-TGBILLING:[TID]:[<billPrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<billPrflId>:INCOMINGREC=<incomingRec>,
  OUTGOINGREC=<outgoingRec>,CNAREC=<cnaRec>,
  ICNID=<icnId>,RECBN=<recBN>,
  APPEND164CN=<append164CHN>,
  APPEND164CPN=<append164CPN>,
  APPENDLNPTERM=<appendLNPTerm>,
  APPENDLNPPBX=<appendLNPPBX>"
;
```

Parameters:

billPrflId Identifies the AID as a billing profile for trunk groups. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all trunk group billing profiles configured in the system will be returned.

Type: integer
Range: {1-9999}
Default value: none

incomingRec Identifies whether to include billing records for incoming calls.

Type: BoolYN
Range: N = do not include billing records for incoming calls
Y = include billing records for incoming calls
Default value: Y

outgoingRec Identifies whether to include billing records for outgoing calls.

Type: BoolYN
Range: N = do not include billing records for outgoing calls
Y = include billing records for outgoing calls
Default value: Y

- cnaRec** Identifies whether to enable Connecting Network Access (CNA) or Limited Connecting Network Access AMA recording.
Type: enum
Range: LIMITED = enable Limited Connecting Network Access AMA recording
OFF = disable Connecting Network Access AMA recording
ON = enable Connecting Network Access AMA recording
Default value: OFF
- icnId** Identifies the Interconnecting Network Code, which must be specified when the value of *cnaRec* is “ON” or “LIMITED”.
Type: integer
Range: {0-9999}
Default value: 0
- bnRec** Identifies whether to record the trunk group billing number in CNA AMA records.
Type: BoolYN
Range: N = do not record the billing number in CNA AMA records
Y = record the billing number in CNA AMA records
Default value: N
- append164CHN** Identifies whether to append module 164 containing the Chargeable Account Number to CNA AMA records.
Type: BoolYN
Range: N = do not append module 164 containing the Chargeable Account Number to CNA AMA records
Y = append module 164 containing the Chargeable Account Number to CNA AMA records
Default value: N
- append164CPN** Identifies whether to append module 164 containing the Calling Party Number to CNA AMA records.
Type: BoolYN
Range: N = do not append module 164 containing the Calling Party Number to CNA AMA records
Y = append module 164 containing the Calling Party Number to CNA AMA records
Default value: N

appendLNPTerm Identifies whether to append an originating party LNP module to terminating access AMA records.

Type: BoolYN

Range: N = do not append an originating party LNP module to terminating access AMA records

Y = append an originating party LNP module to terminating access AMA records

Default value: N

appendLNPPBX Identifies whether to append an originating party LNP module to AMA records for calls originating from a PBX.

Type: BoolYN

Range: N = do not append an originating party LNP module to AMA records for calls originating from a PBX

Y = append an originating party LNP module to AMA records for calls originating from a PBX

Default value: N

Input Examples:

```
DLT-PRFL-TGBILLING::1;  
ED-PRFL-TGBILLING::1:::INCOMINGREC=Y, OUTGOINGREC=Y,  
  CNAREC=OFF, ICNID=0, RECBN=N, APPEND164CN=N,  
  APPEND164CPN=N, APPENDLNPTERM=N, APPENDLNPPBX=N;  
ENT-PRFL-TGBILLING::1:::INCOMINGREC=Y, OUTGOINGREC=Y,  
  CNAREC=OFF, ICNID=0, RECBN=N, APPEND164CN=N,  
  APPEND164CPN=N, APPENDLNPTERM=N, APPENDLNPPBX=N;  
RTRV-PRFL-TGBILLING::1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
  "1:INCOMINGREC=Y, OUTGOINGREC=Y, CNAREC=OFF, ICNID=0,  
    BNREC=N, APPEND164CN=N, APPEND164CPN=N,  
    APPENDLNPTERM=N, APPENDLNPPBX=N"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SS7-TRK

Commands:

DLT-SS7-TRK: Delete SS7 Trunk
ED-SS7-TRK: Edit SS7 Trunk
ENT-SS7-TRK: Enter SS7 Trunk
RTRV-SS7-TRK: Retrieve SS7 Trunk

Descriptions:

DLT-SS7-TRK lets the user delete a trunk (ISUP tcic) or range of trunks.

ED-SS7-TRK lets the user change the name, availability, and primary state for a trunk (ISUP tcic) or range of trunks in a trunk group.

ENT-SS7-TRK lets the user establish a trunk (ISUP tcic) or range of trunks in a trunk group, associate it with a channel on a port on an I/O module, and, optionally, name it, establish its availability, and assign it a primary state. ENT-SS7-TRK will not work unless the following commands have already been issued in the listed order: ENT-SS7SYS, ENT-EQPT, ENT-T1, ENT-PRFL-PC, ENT-PC, ENT-PRFL-CIC, and ENT-TRKGRP.

RTRV-SS7-TRK lets the user retrieve the associated channel on a port on an I/O module, the name, availability, and state information for a trunk (ISUP tcic) or range of trunks in a trunk group.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SS7-TRK: [TID]:<ss7TrkAid>:[CTAG];
ED-SS7-TRK: [TID]:<ss7TrkAid>:[CTAG]::[NAME=<trkName>],
[PRECUT=<preCut>]: [<pst>];
ENT-SS7-TRK: [TID]:<ss7TrkAid>:[CTAG]::
IOMPORTDS0=<iomPortDs0>,[NAME=<trkName>],
[PRECUT=<preCut>]: [<pst>];
RTRV-SS7-TRK: [TID]:<ss7TrkAid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<ss7TrkAid>:IOMPORTDS0=<iomPortDs0>,
    NAME=<trkName>,PRECUT=<preCut>:<pst>,[<sst>]"
;
```

Parameters:

ss7TrkAid Identifies the AID as a unique trunk (ISUP tcic) or range of trunks associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk(s). A range of trunks is shown by the beginning and ending numbers separated by two ampersands and a hyphen ("&&-"). In the RTRV input, specifying only the trunk group number, but not the trunk, returns parameters for all configured trunks in the trunk group.

Type: Ss7TrkAid

Range: {1-9999}-{0-16382}
{1-9999}[-{0-16382}] (RTRV input only)

Default value: none

iomPortDs0 Identifies the I/O module, the DS1 port on the IOM, and the DS0 channel on the port.

Type: enum

Range: IOM-{1-17}-PORT-{1-28}-T0-{1-24} = a channel on a T1 port on a DS1 I/O module

IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24} = a channel on a T1 port on an STS1 I/O module

IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24} = a channel on a T1 port on a DS3 I/O module

Default value: none

trkName Identifies the name of the trunk.

Type: string

Range: up to 20 alphanumeric characters

Default value: none

- preCut** Identifies whether the trunk has not yet been turned up for service (“pre-cut”), or is available (“cut” – regardless of whether trunk is in-service or out-of-service).
- Type:** BoolYN
Range: N = trunk is cut (available, regardless of service state)
Y = trunk is pre-cut (has not yet been turned up for service)
Default value: N
- pst** Identifies (in ED and ENT) the primary state of the trunk(s).
- Type:** enum
Range: IS = In service
OOS = Out of service
RESET = Reset CIC
Default value: IS
- pst** Identifies (in RTRV output) the primary state of the trunk(s).
- Type:** enum
Range: IS = In service
IS-NR = In-Service, Normal
OOS = Out-Of-Service
OOS-AU = Out-Of-Service, Autonomous
OOS-MA = Out-Of-Service, Managed
OOS-AUMA = Out-Of-Service, Autonomous and Managed
Default value: none
- sst** Identifies (in RTRV output) the secondary state(s) for the trunk(s), with ampersands (“&”) to separate multiple secondary states.
- Type:** enum
Range: ACT = Active
IDLE = Idle
INBUSY=Incoming Busy
LBLK = Locally Blocked
OUTBUSY=Outgoing Busy
RBLK = Remotely Blocked
RUEQ = Remote Unequipped
TRANS=Transient
Default value: none

Input Examples:

```
DLT-SS7-TRK::9999-1;  
DLT-SS7-TRK::9999-25&&-99;  
  
ED-SS7-TRK::9999-1:::NAME=SS7TRUNK1,PRECUT=N:IS;  
ED-SS7-TRK::9999-25&&-99:::IS;  
  
ENT-SS7-TRK::9999-1:::  
    IOMPORTDS0=IOM-2-T3-2-PORT-28-T0-24,NAME=SS7TRUNK1,  
    PRECUT=N:IS;  
  
ENT-SS7-TRK::9999-25&&-99:::  
    IOMPORTDS0=IOM-2-T3-2-PORT-28-T0-24:IS;  
  
RTRV-SS7-TRK::9999-1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
    "9999-1:IOMPORTDS0=IOM-2-T3-2-PORT-28-T0-24,  
    NAME=SS7TRUNK1,PRECUT=N:IS,ACT&IDLE"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-TRKGRP

Commands:

DLT-TRKGRP: Delete Trunk Group

ED-TRKGRP: Edit Trunk Group

ENT-TRKGRP: Enter Trunk Group

RTRV-TRKGRP: Retrieve Trunk Group

Descriptions:

DLT-TRKGRP lets the user delete a trunk group.

ED-TRKGRP lets the user change the parameters associated with a trunk group. Use this command to change any of the parameters listed in the description for ENT-TRKGRP, except for *sigType*, *dpc*, and *ipAddress*.

ENT-TRKGRP lets the user establish a trunk group. Use ENT-TRKGRP to identify the trunk group and its signaling type and, optionally, the trunk group class (for both the remote and local switch) and name, the destination point code, the method by which CICs are allocated, the direction of call flow for the trunk group, the initial state of the trunk group, the frequency at which continuity tests are performed on outgoing calls, the amount of echo cancellation for outgoing calls and whether echo cancellation processing is required because of a long delay, the far end CLLI code, the secondary local routing number, the CIC or CAS profile for the trunk group, the billing profile, whether to enable Generic Address Parameter validation, the class of service for the trunk group, the LATA used by the tollfree service, the Special Billing Number for the trunk group, the services to apply to the trunk group, the IP address and the maximum number of active calls allowed for SIP calling, the SDP profile, the remote port configuration for continuity testing, whether to send ISUP confusion messages or the Access Transport Parameter, the value sent in the infotransfer indicator of the User Service Information parameter in the IAM for calls on ISUP trunks, the list of AIN subscriber triggers applied to the trunk group, whether CNAM service is enabled for outgoing SIP trunk groups, the translation plan, the cost of the trunk group, the outgoing trunk group screening table name, the action to take after the trunk group has been chosen as an outgoing interface for the call, the bearer capabilities, the profiles with the incoming and outgoing parameter defaults, the incoming and outgoing profiles defining which parameters to suppress as the call leaves the switch, the fraud trap profile, whether to enable DMS switch identification routing/transport, whether to enable echo control non-linear processing, the standard specifying how the echo canceller behaves, and up to five general-purpose variables for custom functionality. ENT-TRKGRP will not work unless the following commands have already been issued: ENT-PRFL-CIC and

ENT-PC for BICC or ISUP trunks, ENT-PRFL-CAS for CAS trunks.
Additionally, establish the affected billing profile for all trunks and the affected SDP profile for BICC and SIP trunks.

RTRV-TRKGRP lets the user retrieve the properties of a trunk group, as listed in the description for ENT-TRKGRP.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-TRKGRP:[TID]:<tn>:[CTAG];  
ED-TRKGRP:[TID]:<tn>:[CTAG]::[CLASS=<trkGrpClass>],  
[OWNCLASS=<ownClass>],[NAME=<trkgrpName>],  
[HUNTING=<hunting>],[HUNTPRIORITY=<huntpriority>],  
[DIRECTION=<direction>],[INITSTATE=<initState>],  
[COTFREQ=<cotFreq>],[ECHOCTRL=<echoCntrl>],  
[LONGDELAY=<longDelay>],[FARCLLI=<farEndClli>],  
[SECONDARYLRN=<secondaryOwnLrn>],  
[TGPROFILE=<tgPrfl>],[BILLPRFL=<billPrfl>],  
[VALIDATEGAP=<validateGap>],  
[CLASSOFSERVICE=<classOfSvc>],[LATAID=<lataId>],  
[SBLN=<sbLn>],[TGSERVICE=<tgService>],  
[MAXIPCALLS=<maxIpCalls>],[SDPPRFL=<sdpPrfl>],  
[REMOTECONTTYPE=<remoteCotType>],  
[ISUPCONFUSIONMSG=<isupConfusionMsg>],[ATP=<atp>],  
[AUDIOIND=<audioInd>],[AINTRIGLIST=<aintriglist>],  
[CNAM=<cnam>],[TRANSPLAN=<transPlan>],  
[ROUTECAST=<routeCost>],[DGTSCRN=<dgtScrn>],  
[ACTNTERMATTMPT=<actnTermAttmpt>],  
[BEARERCAP=<bearerCap>],  
[ICPARAMDLFTPRFL=<icParamDlftPrfl>],  
[OGPARAMDLFTPRFL=<ogParamDfltPrfl>],  
[ICPARAMSUPPRESSPRFL=<icParamSuppressPrfl>],  
[OGPARAMSUPPRESSPRFL=<ogParamSuppressPrfl>],  
[FRAUDTRAPPRFL=<fraudTrapPrfl>],  
[USESWITCHID=<useSwitchId>],  
[ECHOCTRLNLP=<echoCtrlNLP>],  
[ECHOCTRLTYPE=<echoCtrlType>],  
[CUSTVAR1=<custVar1>],[CUSTVAR2=<custVar2>],  
[CUSTVAR3=<custVar3>],[CUSTVAR4=<custVar4>],  
[CUSTVAR5=<custVar5>],[REMOTEXFER=<remoteXfer>],  
[TXPAD=<txPad>],[RXPAD=<rxPad>],  
[SIPPLUS=<sipPlus>],[SIPHRTBTMR=<sipHrtBtTmr>];
```

```
ENT-TRKGRP:[TID]:<tgn>:[CTAG]:<sigType>:  
[CLASS=<trkGrpClass>],[OWNCLASS=<ownClass>],  
[NAME=<trkGrpName>],[DPC=<dpc>],  
[HUNTING=<hunting>],[HUNTPRIORITY=<huntpriority>],  
[DIRECTION=<direction>],[INITSTATE=<initState>],  
[COTFREQ=<cotFreq>],[ECHOCTRL=<echoCntrl>],  
[LONGDELAY=<longDelay>],[FARCLLI=<farEndClli>],  
[SECONDARYLRN=<secondaryOwnLrn>],  
[TGPROFILE=<tgPrfl>],[BILLPRFL=<billPrfl>],  
[VALIDATEGAP=<validateGap>],  
[CLASSOFSERVICE=<classOfSvc>],[LATAID=<lataId>],  
[SBLN=<sbln>],[TGSERVICE=<tgService>],  
[IPADDR=<ipAddr>],[MAXIPCALLS=<maxIpCalls>],  
[SDPPRFL=<sdpPrfl>],  
[REMOtecOTTYPE=<remoteCotType>],  
[ISUPCONFUSIONMSG=<isupConfusionMsg>],[ATP=<atp>],  
[AUDIOIND=<audioInd>],[AINTRIGLIST=<aintriglist>],  
[CNAM=<cnam>],[TRANSPLAN=<transPlan>],  
[ROUTEcost=<routeCost>],[DGTSCRN=<dgtScrn>],  
[ACTNTERMATTMPT=<actnTermAttmpt>],  
[BEARERCAP=<bearerCap>],  
[ICPARAMDLFTPRFL=<icParamDlftPrfl>],  
[OGPARAMDFLT=<ogParamDflt>],  
[ICPARAMSUPRESSPRFL=<icParamSupressPrfl>],  
[OGSUPRESSPRFL=<ogSupressPrfl>],  
[FRAUDTRAPPRFL=<fraudTrapPrfl>],  
[USESWITCHID=<useSwitchId>],  
[ECHOCTRLNLP=<echoCtrlNLP>],  
[ECHOCTRLTYPE=<echoCtrlType>],  
[CUSTVAR1=<custVar1>],[CUSTVAR2=<custVar2>],  
[CUSTVAR3=<custVar3>],[CUSTVAR4=<custVar4>],  
[CUSTVAR5=<custVar5>],[REMOTEXFER=<remoteXfer>],  
[TXPAD=<txPad>],[RXPAD=<rxPad>],  
[SIPPLUS=<sipPlus>],[SIPHRTBTMR=<sipHrtBtTmr>];  
  
RTRV-TRKGRP:[TID]:<tgn>:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<tn>:<sigType>:CLASS=<TrkGrpClass>,
  OWNCLASS=<ownClass>,NAME=<trkGrpName>,DPC=<dpc>,
  HUNTING=<hunting>,HUNTPRIORITY=<huntpriority>,
  DIRECTION=<direction>,INITSTATE=<initState>,
  COTFREQ=<cotFreq>,ECHOCTRL=<echoCntrl>,
  LONGDELAY=<longDelay>,FARCLLI=<farEndClli>,
  SECONDARYLRN=<secondaryOwnLrn>,
  TGPROFILE=<tgPrfl>,BILLPRFL=<billPrfl>,
  VALIDATEGAP=<validateGap>,
  CLASSOFSERVICE=<classOfSvc>,[LATAID=<lataId>],
  SBLN=<sbln>,TGSERVICE=<tgService>,
  IPADDR=<ipAddr>,MAXIPCALLS=<maxIpCalls>,
  SDPPRFL=<sdpPrfl>,REMOSECOTTYPE=<remoteCotType>,
  ISUPCONFUSIONMSG=<isupConfusionMsg>,ATP=<atp>,
  AUDIOIND=<audioInd>,AINTRIGLIST=<aintriglist>,
  CNAM=<cnam>,TRANSPLAN=<transPlan>,
  ROUTECOST=<routeCost>,DGTSCRN=<dgtScrn>,
  ACTNTERMATTMPT=<actnTermAttmpt>,
  BEARERCAP=<bearerCap>,
  ICPARAMDLFTPRFL=<icParamDlftPrfl>,
  OGPARAMDFLT=<ogParamDflt>,
  ICPARAMSUPRESSPRFL=<icParamSupressPrfl>,
  OGSUPRESSPRFL=<ogSupressPrfl>,
  FRAUDTRAPPRFL=<fraudTrapPrfl>,
  USESWITCHID=<useSwitchId>,
  ECHOCTRLNLP=<echoCtrlNLP>,
  ECHOCTRLTYPE=<echoCtrlType>,CUSTUSE1=<custUse1>,
  CUSTVAR1=<custVar1>,CUSTUSE2=<custUse2>,
  CUSTVAR2=<custVar2>,CUSTUSE3=<custUse3>,
  CUSTVAR3=<custVar3>,CUSTUSE4=<custUse4>,
  CUSTVAR4=<custVar4>,CUSTUSE5=<custUse5>,
  CUSTVAR5=<custVar5>,REMOTEXFER=<remoteXfer>,
  TXPAD=<txPad>,RXPAD=<rxPad>,SIPPLUS=<sipPlus>,
  SIPHRTBTMR=<sipHrtBtTmr>"
;
```

Parameters:

- tn** Identifies the AID as a trunk group. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all trunk groups configured in the system will be returned.
- Type:** TgnAid
Range: {1-9999}
Default value: none
- sigType** Identifies the signaling type for the trunk group.
- Type:** enum
Range: BICC = Bearer Independent Call Control
CAS = Channel-Associated Signaling
ISUP = ISDN Services User Part
SIP = Session Initiation Protocol
SIPT = Session Initiation Protocol for Telephones
Default value: none
- trkGrpClass** Identifies the trunk group class for the remote switch on which the trunk group terminates. When the value of *classOfSvc* is "FGD", *trkGrpClass* and *ownClass* cannot have the same value.
- Type:** enum
Range: AT = Access Tandem
EO = End Office
INC = InterNational Carrier (applicable when the value of *sigType* is "CAS" and the value of *classOfSvc* is "FGD")
IXC = Inter-eXchange Carrier
LT = Local Tandem
TT = Toll Tandem
Default value: AT
- ownClass** Identifies the trunk group class for the local switch when the value of *sigType* is "CAS" and the value of *classOfSvc* is "FGD". When the value of *classOfSvc* is "FGD", *trkGrpClass* and *ownClass* cannot have the same value.
- Type:** enum
Range: AT = Access Tandem
EO = End Office
IXC = Inter-eXchange Carrier
Default value: EO

trkGrpName Identifies the name of the trunk group.

Type: string

Range: up to 20 characters

Default value: NULL

dpc Identifies the destination point code for an ISUP or BICC trunk group. The value of *dpc* is “null” for CAS trunk groups.

Type: enum

Range: {0-255}-{0-255}-{0-255}

Default value: NULL

hunting Identifies the method by which CICs are allocated.

Type: enum

Range: CIRCULAR = Allocates the next free CIC, in ascending order, following the last CIC selected.

HIGHEST_AVAIL = Selects the highest available CIC

LIDLHI = Selects the least idle and highest available CIC (CAS and ISUP trunks only)

LIDLLO = Selects the least idle and lowest available CIC (CAS and ISUP trunks only)

LOWEST_AVAIL = Selects the lowest available CIC

MIDLHI = Selects the most idle and highest available CIC (CAS and ISUP trunks only)

MIDLLO = Selects the most idle and lowest available CIC (CAS and ISUP trunks only)

RANDOM = Allocates the next free channel, in ascending order, based on a random entry into a numbered list of resources. After the first allocation from that numbered list of resources, subsequent attempts to find a free resource use the circular method.

Default value: CIRCULAR

huntPriority Identifies whether hunting searches even, odd, or both numbered channels (for CAS) or CICs (for ISUP), but only when the value of hunting is “LIDLHI”, “LIDLLO”, “MIDLHI”, or “MIDLLO”.

Type: enum

Range: BOTH

EVEN

ODD

Default value: BOTH

direction Identifies whether the Plexus 9000 originates outgoing calls and/or accepts incoming calls on a trunk group.

Type: enum

Range: CICBOTHWAY = On these circuits, the Plexus 9000 both accepts incoming calls from the adjacent switch and originates outgoing call legs. The switch with the larger point code controls glare on even-numbered trunks and the switch with the smaller point code controls glare on odd-numbered trunks.

CICCONTROLLED = On these circuits, the Plexus 9000 both accepts incoming calls from the adjacent switch and originates outgoing call legs. The adjacent switch controls glare and the Plexus 9000 has a glare setting of "NONE". Valid only when the value of *sigType* is "BICC" or "ISUP".

CICCONTROLLING = On these circuits, the Plexus 9000 both accepts incoming calls from the adjacent switch and originates outgoing call legs. The Plexus 9000 controls glare and has a glare setting of "ALL". Valid only when the value of *sigType* is "BICC" or "ISUP".

CICINCOMING = On these circuits, the Plexus 9000 accepts incoming calls from the adjacent switch but does not originate outgoing call legs. The adjacent switch controls glare and the Plexus 9000 has a glare setting of "NONE". Valid only when the value of *sigType* is "BICC" or "ISUP".

CICOUTGOING = On these circuits, the Plexus 9000 originates outgoing call legs but does not accept incoming calls from the adjacent switch. The Plexus 9000 controls glare and has a glare setting of "ALL". Valid only when the value of *sigType* is "BICC" or "ISUP".

Default value: CICBOTHWAY

initState Identifies the initial state of the trunk group.

Type: enum

Range: IDLE = Trunk group idle

Default value: IDLE

cotFreq Identifies the frequency at which continuity tests are performed on outgoing calls when the value of *sigType* is "BICC" or "ISUP". This parameter is not applicable for CAS and SIP trunk groups.

Type: integer

Range: {0-32}

Default value: 8 for BICC/ISUP, 0 for CAS/SIP

echoCntrl Identifies the amount, in milliseconds, of echo cancellation for outgoing calls (i.e., the length of the echo tail).

Type: integer
Range: {0-128}
Default value: 0

longDelay Identifies whether echo cancellation processing is required because of a long delay (echo tail).

Type: BoolYN
Range: N = echo processing is off (for short-haul; i.e., less than 15 msec propagation delay)
Y = echo processing is on (for long-haul)
Default value: N for ISUP/CAS
Y for SIP/BICC

farEndClli Identifies the Common Language Location Identification code at the far end. This parameter is used for circuit maintenance, to allow the remote switch operator to get the information configured for the trunk group. The parameter may be entered either as 15 characters, the first four being the trunk number and the next 11 being the far end CLLI, or as just the 11-character CLLI. The parameter may not be entered unless a value has already been assigned to the parameter *cli* in the command [ED-CHASSIS-EQPT](#).

Type: string
Range: 11 or 15 alphanumeric characters
Default value: NULL

secondaryOwnLrn Identifies a secondary local routing number associated with outgoing calls for the trunk group.

Type: string
Range: exactly 10 digits
Default value: NULL

tgPrfl Identifies the profile for the trunk group. The value of *tgPrfl* must match a value either of *cicPrflId* established with ENT-PRFL-CIC when the value of *sigType* is “BICC” or “ISUP”, or of *casPrflId* established with ENT-PRFL-CAS when the value of *sigType* is “CAS”.

Type: string
Range: {1-128}
Default value: NULL

- billPrfl** Identifies the billing profile for the trunk group, previously defined with [ENT-PRFL-TGBILLING](#). Billing profile “1” is pre-loaded on the system.
- Type:** integer
Range: {1-128}
Default value: 1
- validateGap** Identifies whether to enable Generic Address Parameter validation against the subscribers for the trunk group. Set the value of *validateGap* to “N” if the Plexus 9000 hosts local routing numbers (LRNs) but does not support Class 5 subscribers.
- Type:** BoolYN
Range: N = do not perform GAP validation
Y = perform GAP validation
Default value: Y
- classOfSvc** Identifies how to route incoming messages on the trunk group. When the value of *classOfSvc* is “FGD”, *trkGrpClass* and *ownClass* cannot have the same value.
- Type:** enum
Range: 911 = 911 CAS
AIS = Automatic Intercept Signal
BLV = Busy Line Verification (currently unimplemented)
FGD = Feature Group D (ISUP and CAS only)
MDP = Maintenance Dial Plan
NULL = no value
Default value: NULL
- lataId** Identifies the LATA used by the tollfree service for incoming calls on the trunk.
- Type:** enum
Range: {200-99999}
NULL = no value
Default value: NULL
- sbIn** Identifies the Special Billing Number, to which incoming calls without a specific number are to be billed.
- Type:** string
Range: six, seven, or 10 digits
Default value: NULL

tgService Identifies a service to apply to the trunk group. Use an ampersand (“&”) to select both services.

Type: string

Range: PORTEDIN = Ported number service applied to outbound calls on an ISUP trunk group or when the terminating switch can't handle pre-dipped LNP calls. When set to “PORTEDIN”, outbound calls associated with this trunk group that have been dipped for LNP (with the Called Party Number set to the LRN) will have the CDPN set to the original called number (in the GAP parameter), will remove the GAP parameter (containing the original called number), and will set the M-bit of the Forward Call Indicator to indicate a non-dipped call.

NOLNP = do not perform LNP queries for incoming calls on the trunk group

Default value: NULL

ipAddr Identifies the IP address when the value of *sigType* is “SIP”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: NULL

maxIpCalls Identifies the maximum number of active calls allowed on the trunk group when the value of *sigType* is “SIP”.

Type: integer

Range: {0-21504}

Default value: 0 (21504 for SIP calls)

sdpPrfl Identifies the SDP (Session Description Protocol) profile for the trunk group when the value of *sigType* is “BICC” or “SIP”. An SDP profile defines the codec and packet interval applicable to a BICC or SIP trunk group, and whether silence suppression is enabled. SDP profile 1 is pre-loaded; establish other profiles with [ENT-PRFL-SDP](#).

Type: integer

Range: {1-255}

Default value: 1, when the value of *sigType* is “BICC” or “SIP”
NULL, when the value of *sigType* is “CAS” or “ISUP”

remoteCotType Identifies whether the remote switch port used for continuity testing with the Plexus 9000 is a two-wire or four-wire port.

Type: enum

Range: 2WIRE
4WIRE

Default value: 4WIRE

isupConfusionMsg Identifies whether to send an ISUP confusion message when ISUP receives an unrecognized message.

Type: BoolYN

Range: N = do not send ISUP confusion message
Y = send ISUP confusion message

Default value: Y (for ISUP)
N (for BICC, CAS, or SIP)

atp Identifies whether to send the Access Transport Parameter (ATP).

Type: BoolYN

Range: N = do not send ATP
Y = send ATP

Default value: Y (for ISUP)
N (for BICC, CAS, or SIP)

audioInd Identifies the value that overrides the default value sent in the infotransfer indicator of the User Service Information parameter in the IAM for calls on ISUP trunks.

Type: enum

Range: 3.1KHZ = infotransfer default value is overridden to indicate 3.1KHz audio in BearerCap/UserServiceInformation of IAM message

DEFAULT = infotransfer indicator is determined by the ISDN interworking functionality and is not overridden by provisioning

SPEECH = infotransfer default value is overridden to indicate speech in the BearerCap/UserServiceInformation of IAM message

Default value: DEFAULT

aintriglist Identifies a list of AIN triggers. Define AIN trigger lists with ENT-LIST-AINTRIGGER. The list entries must have a category of SUBSCRIBER and can only use the OPERATOR_SEVICES, SPECIFIC_DIGIT_STRING, and INTERNATIONAL trigger types. Don't assign office category triggers to the trunk group.

Type: string

Range: up to 20 alphanumeric characters

Default value: NULL

cnam Identifies whether CNAM service is enabled for outgoing SIP or SIP-T trunk groups. When enabled, the Plexus 9000 issues CNAM queries for SIP trunk groups.

Type: BoolYN

Range: N = the Plexus 9000 does not issue CNAM queries

Y = the Plexus 9000 issues CNAM queries

Default value: N

transPlan Identifies the translation plan, previously defined with ENT-TRANS-PLAN or ENT-TRANS-SCHED.

Type: string

Range: up to 10 alphanumeric characters

Default value: DEFAULT

routeCost Identifies the cost of the trunk group. The value "101" indicates that the trunk group is not available for routing.

Type: integer

Range: {0-101}

Default value: 0

dgtScrn Identifies the outgoing trunk group screening table name, previously defined with ENT-DIGIT-SCREEN and which contains a list of restricted trunk groups. This parameter prevents incoming/outgoing trunk combinations.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

actnTermAttmpt Identifies the action to take after the trunk group has been chosen as an outgoing interface for the call.

Type: string

Range: up to 10 alphanumeric characters for each part of either of the following forms:

DGTMODKEY-<dmLbl>-<primKey>, where

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

DGTSCRNKEY-<dgtScrnLbl>-<primKey>, where

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

JIP = Jurisdiction Information Parameter
(NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
SUBSTATUS = Subscriber status (valid only
when the value "SUB" is the first listed for
the parameter *actnInfoAnlz* in TRANS-
PLAN)
TNS = Transit Network Selection

Default value: NULL

bearerCap Identifies the bearer capabilities for the trunk group, with ampersands ("&") to separate multiple bearer capabilities.

Type: string

Range: 3.1KHZ
DIGITALWITHTONES
RESDIGITAL
SPEECH
UNRESDIGITAL
VIDEO

Default values: SPEECH&UNRESDIGITAL& RESDIGITAL&
VIDEO&DIGITALWITHTONES
(for BICC/ISUP/SIP)
SPEECH&3.1KHZ (for CAS)

icParamDfltPrfl Identifies the incoming parameter default profile, previously defined with ENT-PRFL-PARAMDEFAULTS.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

ogParamDfltPrfl Identifies the outgoing parameter default profile, previously defined with ENT-PRFL-PARAMDEFAULTS.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

icParamSuppressPrfl Identifies the profile defining which parameters to suppress as the call leaves the switch based on the incoming trunk group, previously defined with ENT-PRFL-PARAMSUPPRESS.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

ogParamSuppressPrfl Identifies the profile defining which parameters to suppress as the call leaves the switch, previously defined with ENT-PRFL-PARAMSUPPRESS.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

fraudTrapPrfl Identifies the fraud trap profile, previously defined with ENT-PRFL-FRAUDTRAP.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

useSwitchId Identifies whether to enable DMS switch identification routing/transport.

Type: BoolYN

Range: N = do not enable DMS switch identification routing/transport

Y = enable DMS switch identification routing/transport

Default value: N

echoCtrlNLP Identifies whether to enable echo control non-linear processing.

Type: BoolYN

Range: N = do not enable echo control non-linear processing

Y = enable echo control non-linear processing

Default value: Y

echoCtrlType Identifies the standard specifying how the echo canceller behaves; that is, the conditions under which to disable echo cancellation when a modem/FAX call is received

Type: enum

Range: G164 = G.164: disable echo canceller only on receipt of a 2100 Hz answer tone without a phase reversal.

G165 = G.165: disable echo canceller only on receipt of a 2100 Hz answer tone with a phase reversal.

G168 = G.168: disable just the NLP (Non-linear Processor) portion of the echo canceller only on receipt of a 2100 Hz answer tone without a phase reversal. Disable the entire echo canceller on receipt of a 2100 Hz answer tone with a phase reversal.

Default value: G168

custUse1 Identifies (in RTRV output) the use of custom variable 1.

Type: string

Range: up to 32 alphanumeric characters

Default value: NULL

custVar1 Identifies custom variable 1.

Type: string

Range: up to 16 alphanumeric characters

Default value: NULL

custUse2 Identifies (in RTRV output) the use of custom variable 2.

Type: string

Range: up to 32 alphanumeric characters

Default value: NULL

custVar2 Identifies custom variable 2.

Type: string

Range: up to 16 alphanumeric characters

Default value: NULL

custUse3 Identifies (in RTRV output) the use of custom variable 3.

Type: string

Range: up to 32 alphanumeric characters

Default value: NULL

custVar3 Identifies custom variable 3.

Type: string

Range: up to 16 alphanumeric characters

Default value: NULL

custUse4 Identifies (in RTRV output) the use of custom variable 4.

Type: string

Range: up to 32 alphanumeric characters

Default value: NULL

custVar4 Identifies custom variable 4.

Type: string

Range: up to 16 alphanumeric characters

Default value: NULL

custUse5 Identifies (in RTRV output) the use of custom variable 5.

Type: string

Range: up to 32 alphanumeric characters

Default value: NULL

custVar5 Identifies custom variable 5.

Type: string

Range: up to 16 alphanumeric characters

Default value: NULL

remoteXfer Identifies whether to accept requests to transfer legs of a call on ISUP, SIP or SIP-T trunk groups. When set to the default “N” (call leg transfer disabled, the Plexus 9000 sends an FRJ (FAR Reject) message in response to a received FAR (Facility Request) message on ISUP trunk groups, or a 405 (Method not allowed) message in response to a received REFER message on SIP trunk groups. On REFER/RLT (Release Link Trunk) calls to a trunk with call leg transfer disabled, the Plexus 9000 establishes a “tromboning” call using the outgoing protocol (IAM, INVITE, SETUP) instead of sending a FAC (for ISUP) or a REFER (for SIP).

Type: BoolYN

Range: N = do not enable call leg transfer

Y = enable call leg transfer

Default value: N

txPad Identifies, for BICC, CAS, and ISUP trunk groups, the amount of gain or loss (in decibels) the Plexus 9000 applies to transmitted signals. Positive values amplify the signal; negative values attenuate the signal.

Type: enum

Range: -15DB, -12DB, -10DB, -9DB, -8 DB, -6DB, -4DB, -3DB, -2DB, [0DB], 2DB, 3DB, 4DB, 6DB

Default value: 0DB

rxPad Identifies, for BICC, CAS, and ISUP trunk groups, the amount of gain or loss (in decibels) the Plexus 9000 applies to received signals. Positive values amplify the signal; negative values attenuate the signal.

Type: enum

Range: -15DB, -12DB, -10DB, -9DB, -8 DB, -6DB, -4DB, -3DB, -2DB, [0DB], 2DB, 3DB, 4DB, 6DB

Default value: 0DB

sipPlus Identifies, for SIP and SIP-T trunk groups, whether to interpret a leading “+” character in the address field of the “To”, “From”, “Remote-Party-ID” or “Request-URI” headers of a SIP request, as meaning that a fully-qualified E.164 address follows.

Type: BoolYN

Range: N = For incoming SIP requests, ignore the leading “+” character in all SIP address fields. For outgoing SIP requests, never insert a leading “+” character to an address field.

Y = Follow RFC 3398 recommendations for treatment of a leading “+” character: For incoming SIP requests, treat a leading “+” character in a SIP address as an indication that a fully-qualified E.164 address follows. For outgoing SIP requests, add a leading “+” character to address fields when an E.164 address is included.

Default value: N

sipHrtBtTmr Identifies the duration, in seconds, of the heartbeat interval for SIP and SIP-T trunk groups. The value “0” disables the heartbeat for the trunk group.

Type: integer

Range: {0-3600}

Default value: 0

Input Examples:

```
DLT - TRKGRP : : 1 ;
```

```
ED - TRKGRP : : 1 : : : CLASS=AT, OWNCLASS=EO, NAME=TRUNKGROUP1,  
    HUNTING=CIRCULAR, HUNTPRIORITY=BOTH,  
    DIRECTION=CICBOTHWAY, INITSTATE=IDLE, COTFREQ=8,  
    ECHOCNTRL=0, LONGDELAY=N, FARCLLI=NULL,  
    SECONDARYLRN=NULL, TGPROFILE=1, BILLPRFL=1,  
    VALIDATEGAP=Y, CLASSOFSERVICE=NULL, LATAID=NULL,  
    SBLN=NULL, TGSERVICE=NULL, MAXIPCALLS=0,  
    SDPPRFL=NULL, REMOTECOTTYPE=4WIRE,  
    ISUPCONFUSIONMSG=Y, ATP=Y, AUDIOIND=DEFAULT,  
    AINTRIGLIST=NULL, CNAM=N, TRANSPLAN=DEFAULT,  
    ROUTECOST=0, DGTSCRN=NULL, ACTNTERMATTMPT=NULL,  
    BEARERCAP=SPEECH&UNRESDIGITAL&RESDIGITAL& \VIDEO&  
    DIGITALWITHTONES, ICPARAMDLFTPRFL=NULL,  
    OGPARAMDLFT=NULL, ICPARAMSUPRESSPRFL=NULL,  
    OGSUPRESSPRFL=NULL, FRAUDTRAPPRFL=NULL,  
    USESWITCHID=N, ECHOCTRLNLP=Y, ECHOCRTLTYPE=G168,  
    CUSTVAR1=NULL, CUSTVAR2=NULL, CUSTVAR3=NULL,  
    CUSTVAR4=NULL, CUSTVAR5=NULL, TXPAD=0DB, RXPAD=0DB,  
    SIPPLUS=N, SIPHRTBTMR=0 ;
```

```
ENT-TRKGRP::1:::ISUP:CLASS=AT,OWNCLASS=E0,  
NAME=TRUNKGROUP1,DPC=31-42-55,HUNTING=CIRCULAR,  
HUNTPRIORITY=BOTH,DIRECTION=CICBOTHWAY,  
INITSTATE=IDLE,COTFREQ=8,ECHOCNTRL=0,LONGDELAY=N,  
FARCLLI=NULL,SECONDARYLRN=NULL,TGPROFILE=1,  
BILLPRFL=1,VALIDATEGAP=Y,CLASSOFSERVICE=NULL,  
LATAID=NULL,SBLN=NULL,TGSERVICE=NULL,IPADDR=NULL,  
MAXIPCALLS=0,SDPPRFL=NULL,REMOTECOTTYPE=4WIRE,  
ISUPCONFUSIONMSG=Y,ATP=Y,AUDIOIND=DEFAULT,  
AINTRIGLIST=NULL,CNAM=N,TRANSPLAN=DEFAULT,  
ROUTECD=0,DGTSCRN=NULL,ACTNTERMATTMPT=NULL,  
BEARERCAP=SPEECH&UNRESDIGITAL&RESDIGITAL&VIDEO&  
DIGITALWITHTONES,ICPARAMDLFTPRFL=NULL,  
OGPARAMDFLT=NULL,ICPARAMSUPRESSPRFL=NULL,  
OGSUPRESSPRFL=NULL,FRAUDTRAPPRFL=NULL,  
USESWITCHID=N,ECHOCTRLNLP=Y,EHOCRTLTTYPE=G168,  
CUSTVAR1=NULL,CUSTVAR2=NULL,CUSTVAR3=NULL,  
CUSTVAR4=NULL,CUSTVAR5=NULL,TXPAD=0DB,RXPAD=0DB,  
SIPPLUS=N,SIPHRTBTMR=0;  
  
RTRV-TRKGRP::1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:ISUP:CLASS=AT,OWNCLASS=E0,NAME=TRUNKGROUP1,  
DPC=31-42-55,HUNTING=CIRCULAR,HUNTPRIORITY=BOTH,  
DIRECTION=CICBOTHWAY,INITSTATE=IDLE,COTFREQ=0,  
ECHOCNTRL=0,LONGDELAY=N,FARCLLI=0005MARLBOROUGH,  
SECONDARYLRN=5084800909,TGPROFILE=1,BILLPRFL=1,  
VALIDATEGAP=Y,CLASSOFSERVICE=NULL,LATAID=1,  
SBLN=5084800909,TGSERVICE=NULL,IPADDR=NULL,  
MAXIPCALLS=0,SDPPRFL=NULL,REMOTECOTTYPE=4WIRE,  
ISUPCONFUSIONMSG=Y,ATP=Y,AUDIOIND=DEFAULT,  
AINTRIGLIST=NULL,CNAM=N,TRANSPLAN=DEFAULT,  
ROUTECD=0,DGTSCRN=NULL,ACTNTERMATTMPT=NULL,  
BEARERCAP=SPEECH&UNRESDIGITAL&RESDIGITAL&VIDEO&  
DIGITALWITHTONES,ICPARAMDLFTPRFL=NULL,  
OGPARAMDFLT=NULL,ICPARAMSUPRESSPRFL=NULL,  
OGSUPRESSPRFL=NULL,FRAUDTRAPPRFL=NULL,  
USESWITCHID=N,ECHOCTRLNLP=Y,EHOCRTLTTYPE=G168,  
CUSTUSE1=NULL,CUSTVAR1=NULL,CUSTUSE2=NULL,  
CUSTVAR2=NULL,CUSTUSE3=NULL,CUSTVAR3=NULL,  
CUSTUSE4=NULL,CUSTVAR4=NULL,CUSTUSE5=NULL,  
CUSTVAR5=NULL,TXPAD=0DB,RXPAD=0DB,SIPPLUS=N,  
SIPHRTBTMR=0"
```

```
"3:BICC:CLASS=AT,OWNCLASS=E0,NAME=BREAD_TO_HANZ,  
DPC=006-009-096,HUNTING=CIRCULAR,  
HUNTPRIORITY=BOTH,DIRECTION=CICBOTHWAY,  
INITSTATE=IDLE,COTFREQ=0,ECHOCTRL=32,  
LONGDELAY=Y,FARCLLI=NULL,SECONDARYLRN=NULL,  
TGPROFILE=1,BILLPRFL=1,VALIDATEGAP=Y,  
CLASSOFSERVICE=NULL,LATAID=NULL,SBLN=NULL,  
TGSERVICE=NULL,IPADDR=NULL,MAXIPCALLS=0,  
SDPPRFL=3,REMOTECOTTYPE=4WIRE,  
ISUPCONFUSIONMSG=N,ATP=N,AUDIOIND=DEFAULT,  
AINTRIGLIST=NULL,CNAM=N,TRANSPLAN=NULL,  
ROUTECAST=0,DGTSCRN=NULL,ACTNTERMATTMPT=NULL,  
BEARERCAP=SPEECH&UNRESDIGITAL&RESDIGITAL&3.1KHZ&  
DIGITALWITHTONES&VIDEO,ICPARAMDFTLPRFL=NULL,  
OGPARAMDFTLPRFL=NULL,ICPARAMSUPPRESSPRFL=NULL,  
OGPARAMSUPPRESSPRFL=NULL,FRAUDTRAPPRFL=NULL,  
USESWITCHID=N,ECHOCTRLNLP=Y,ECHOCTRLTYPE=G168,  
CUSTUSE1=NULL,CUSTVAR1=NULL,CUSTUSE2=NULL,  
CUSTVAR2=NULL,CUSTUSE3=NULL,CUSTVAR3=NULL,  
CUSTUSE4=NULL,CUSTVAR4=NULL,CUSTUSE5=NULL,  
CUSTVAR5=NULL,REMOTEXFER=N,TXPAD=0DB,RXPAD=0DB,  
SIPPLUS=N,SIPHRTBTMR=0"
```

```
"11:SIP:CLASS=AT,OWNCLASS=E0,NAME=NULL,DPC=NULL,  
HUNTING=CIRCULAR,HUNTPRIORITY=BOTH,  
DIRECTION=CICBOTHWAY,INITSTATE=IDLE,COTFREQ=0,  
ECHOCTRL=32,LONGDELAY=Y,FARCLLI=NULL,  
SECONDARYLRN=NULL,TGPROFILE=NULL,BILLPRFL=1,  
VALIDATEGAP=Y,CLASSOFSERVICE=NULL,LATAID=NULL,  
SBLN=NULL,TGSERVICE=NULL,IPADDR=10.18.202.45,  
MAXIPCALLS=21504,SDPPRFL=1,REMOTECOTTYPE=4WIRE,  
ISUPCONFUSIONMSG=N,ATP=N,AUDIOIND=DEFAULT,  
AINTRIGLIST=NULL,CNAM=N,TRANSPLAN=NULL,  
ROUTECAST=0,DGTSCRN=NULL,ACTNTERMATTMPT=NULL,  
BEARERCAP=SPEECH&UNRESDIGITAL&RESDIGITAL&3.1KHZ&  
DIGITALWITHTONES&VIDEO,ICPARAMDFTLPRFL=NULL,  
OGPARAMDFTLPRFL=NULL,ICPARAMSUPPRESSPRFL=NULL,  
OGPARAMSUPPRESSPRFL=NULL,FRAUDTRAPPRFL=NULL,  
USESWITCHID=N,ECHOCTRLNLP=Y,ECHOCTRLTYPE=G168,  
CUSTUSE1=NULL,CUSTVAR1=NULL,CUSTUSE2=NULL,  
CUSTVAR2=NULL,CUSTUSE3=NULL,CUSTVAR3=NULL,  
CUSTUSE4=NULL,CUSTVAR4=NULL,CUSTUSE5=NULL,  
CUSTVAR5=NULL,REMOTEXFER=N,TXPAD=0DB,RXPAD=0DB,  
SIPPLUS=N,SIPHRTBTMR=0"
```

;

Related Commands: none

OPR-CCR

Command:

OPR-CCR: Operate Continuity Check Request

Description:

OPR-CCR lets the user conduct an outgoing continuity test on a specified trunk (cic) in a trunk group to return the test results and the cause if the test failed.

Category: Signaling

Security: NSA

Input Format:

OPR-CCR: [TID]:<ss7TrkAid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ss7TrkAid>:<status>,[<cause>]"
;
```

Parameters:

ss7TrkAid Identifies the AID as a unique trunk associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk.

Type: Ss7TrkAid

Range: {1-9999}-{0-16382}

Default value: none

status Identifies the result of the outgoing continuity test.

Type: enum

Range: FAILURE = The continuity test failed for the reason defined by the parameter *cause*.

SUCCESS = The test was successful both locally and remotely.

Default value: none

cause Identifies the reason that the continuity test failed when the value of *status* is “FAILURE”.

Type: enum

Range: “NO LPA RESPONSE FROM REMOTE SWITCH”
“LOCAL RESOURCE ALLOCATION FAILURE”
“TIMED OUT WAITING FOR RETURN TONE”
“CIRCUIT MUST BE MAINTENANCE BLOCKED AND
IDLE”

Default value: none

Input Example:

```
OPR-CCR::1-4;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "1-4:FAILURE,TIMED OUT WAITING FOR RETURN TONE"
;
```

Related Commands: none

OPR-CQM

Command:

OPR-CQM: Operate Circuit Query Message

Description:

OPR-CQM lets the user conduct a circuit query on a trunk group to show the state of the specified trunk(s) at the far end (i.e., the remote switch).

Category: Signaling

Security: NSA

Input Format:

OPR-CQM: [TID]:<ss7TrkAid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ss7TrkAid>:<statusInfo>"
;
```

Parameters:

ss7TrkAid Identifies the AID as a unique trunk (or range of trunks) associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk(s). A range of trunks is shown by the beginning and ending numbers separated by two ampersands and a hyphen (“&&-”). A range of up to 24 trunks can be retrieved using the range syntax.

Type: Ss7TrkAid

Range: {1-9999}-{0-16382}

Default value: none

statusInfo Identifies the state of the trunk.

Type: enum

Range: ACT = Active; no maintenance procedure on the trunk
LBLK = Locally blocked
LBLK&RBLK = Locally blocked and remotely blocked
RBLK = Remotely blocked
TRANS = Transient state
UEQ = Unequipped

Default value: none

Input Example:

```
OPR-CQM::1-2&&-4;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "1-2:ACT"
  "1-3:ACT"
  "1-4:RBLK"
;
```

Related Commands: none

OPR-CVT

Command:

OPR-CVT: Operate Circuit Validation Test

Description:

OPR-CVT lets the user conduct an ISUP circuit validation test on a specified trunk (cic) in a trunk group to return the information contained in the response message (CVR) and validate the consistency of the returned information.

Category: Signaling

Security: NSA

Input Format:

OPR-CVT: [TID]:<ss7TrkAid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<ss7TrkAid>:<Status>,<cgCarrier>,<dblSeizeCtl>,
    <almCarrier>,<cotChkReq>,[<trunkNum>],
    [<CLLIoffA>],[<CLLIoffZ>],[<CLLI>],<cause>"
;
```

Parameters:

ss7TrkAid Identifies the AID as a unique trunk associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk.

Type: Ss7TrkAid

Range: {1-9999}-{0-16382}

Default value: none

Status Identifies the result of the circuit validation test, which may not be the same as the value returned in the Circuit Validation Response Indicator parameter in the CVR. The CVR can indicate a successful test on the remote switch, but the test can still fail locally if either the dual seizure indicator or the trunk number returned in the CVR are inconsistent with the information stored for the cic in the Plexus 9000 database.

Type: enum

Range: FAILURE = The validity test failed for the reason defined by the parameter *cause*.

SUCCESS = The test was successful both locally and remotely

Default value: none

cgCarrier Identifies the value returned in the circuit group carrier indicator field of the Circuit Group Characteristics Indicator parameter in the CVR message.

Type: enum

Range: ANALOG = analog carrier

ANA_DIG = analog and digital carrier

DIGITAL = digital carrier

UNKNOWN = unknown carrier

Default value: none

dblSeizeCtl Identifies the value returned in the double seizing control indicator field of the Circuit Group Characteristics Indicator parameter in the CVR message.

Type: enum

Range: ALL

EVEN

ODD

NONE

Default value: none

almCarrier Identifies the value returned in the alarm carrier indicator field of the Circuit Group Characteristics Indicator parameter in the CVR message.

Type: enum

Range: HARDWARE

SOFTWARE

UNKNOWN

Default value: none

cotChkReq Identifies the value returned in the continuity check requirements indicator field of the Circuit Group Characteristics Indicator parameter in the CVR message.

Type: enum

Range: NONE
PERCALL
STATISTICAL
UNKNOWN

Default value: none

trunkNum Identifies the value returned in the trunk number field of the Circuit Identification Name parameter in the CVR message, but only when the CVR indicates a successful test on the remote switch.

Type: enum

Range: exactly four digits

Default value: none

CLLIoffA Identifies the value returned in the “CLLI code – office A” field of the Circuit Identification Name parameter in the CVR message, but only when the CVR indicates a successful test on the remote switch.

Type: enum

Range: exactly 11 ASCII characters

Default value: none

CLLIoffZ Identifies the value returned in the “CLLI code – office Z” field of the Circuit Identification Name parameter in the CVR message, but only when the CVR indicates a successful test on the remote switch.

Type: enum

Range: exactly 11 ASCII characters

Default value: none

CLLI Identifies the value returned in the CLLI Code parameter in the CVR message, but only when the CVR indicates a failed test on the remote switch.

Type: enum

Range: exactly 11 ASCII characters

Default value: none

cause Identifies the reason that the CVT test failed when the value of *Status* is "FAILURE".

Type: enum

Range: "No response from remote switch."
"Failure status received from remote switch"
"Inconsistent dual seizure indicator"
"Inconsistent trunk number"

Default value: none

Input Example:

```
OPR-CQM: :1-4;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1-4:SUCCESS,ALLOC=ASCENDING,ALL,UNKNOWN,UNKNOWN,
0001,0005MARLBOROUGH,0006MARLBOROUGH,, "
;
```

Related Commands: none

NOTES

DLT/ED/ENT/RTRV-DIGIT-SCREEN

Commands:

DLT-DIGIT-SCREEN: Delete Digit Screen

ED-DIGIT-SCREEN: Edit Digit Screen

ENT-DIGIT-SCREEN: Enter Digit Screen

RTRV-DIGIT-SCREEN: Retrieve Digit Screen

Descriptions:

Use screening for the following:

- Selectively authorizing calls, depending on call parameters
- Choosing translation plans based on call parameters
- Blocking calls and allowing calls to proceed
- Marking calls as fraud calls, for fraud processing
- Applying treatments to calls, as a step in call processing.

Screening can be a part of any action – at the InfoCollected or InfoAnalyzed PICs as part of a translation plan, during routing from route digits, or at a termination attempt from a trunk group. You can also use screening to prevent or allow calls originating on certain trunk groups from terminating to other trunk groups by applying a digit screen to the terminating trunk group (via the parameter *dgtScrn* in TRKGRP).

DLT-DIGIT-SCREEN lets the user delete a screening method.

ED-DIGIT-SCREEN lets the user change a screening method. Use this command to change the name of the digit screening database table; the parameter (primary key) to which the digit screening applies; the primary, secondary, and tertiary values applicable to the specified parameter; the action taken as a result of screening; the fraud trap profile; the treatment; the next screening operation performed; the authorization code prompt; the authorization code mode of operation; the length of the account code; the list containing the authorization code; and the translation plan used on a screening match.

ENT-DIGIT-SCREEN lets the user establish a screening method. Use this command to define the name of the digit screening database table; the parameter (primary key) to which the digit screening applies; the primary, secondary, and tertiary values applicable to the specified parameter; the action taken as a result of screening; the fraud trap profile; the treatment; the next screening operation performed; the authorization code prompt; the authorization code mode of operation; the length of the account code; the list containing the authorization code; and the translation plan used on a screening match.

RTRV-DIGIT-SCREEN lets the user retrieve the attributes of a screening method.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-DIGIT-SCREEN:[TID]:<digitScrnAid>:[CTAG];
ED-DIGIT-SCREEN:[TID]:<digitScrnAid>:[CTAG]::
  [RESULTTYPE=<resultType>],
  [FRAUDTRAPPRFL=<fraudTrapPrfl>],
  [TREATMENT=<treatment>], [DGTSCRNKEY=<dgtScrnKey>],
  [AUTHPROMPT=<authPrompt>], [AUTHMODE=<authMode>],
  [ACNTCODELEN=<acctCodeLen>], [AUTHLIST=<authList>],
  [TRANSPLAN=<transPlan>];
ENT-DIGIT-SCREEN:[TID]:<digitScrnAid>:[CTAG]::
  [RESULTTYPE=<resultType>],
  [FRAUDTRAPPRFL=<fraudTrapPrfl>],
  [TREATMENT=<treatment>], [DGTSCRNKEY=<dgtScrnKey>],
  [AUTHPROMPT=<authPrompt>], [AUTHMODE=<authMode>],
  [ACNTCODELEN=<acctCodeLen>], [AUTHLIST=<authList>],
  [TRANSPLAN=<transPlan>];
RTRV-DIGIT-SCREEN:[TID]: [<digitScrnAid>]: [CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<digitScrnAid>:[CTAG]::RESULTTYPE=<resultType>,
  FRAUDTRAPPRFL=<fraudTrapPrfl>,
  TREATMENT=<treatment>, DGTSCRNKEY=<dgtScrnKey>,
  AUTHPROMPT=<authPrompt>, AUTHMODE=<authMode>,
  ACNTCODELEN=<acctCodeLen>, AUTHLIST=<authList>,
  TRANSPLAN=<transPlan>"
;
```


Parameters:

digitScrnAid Identifies the AID as a digit screening method. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all digit screening methods configured in the system will be returned.

Type: DgtScrnAid

Range: <dgtScrnLbl>[-<primKey>[-<primKeyValue>
[-<secKeyValue>[-<terKeyValue>]]]], where:

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 alphanumeric characters;

primKey (optional only in RTRV) identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)
CALLTYPE = Type of call (Class 5)
CDPN = Called party number
CGPN = Calling party number
CHRGN = Charge number
CIP = Carrier Information Parameter (for ISUP only)
CPC = Calling Party Category
CSI = Carrier Selection Information
GAP = Generic Address Parameter
GENDGTS = Generic Digits
JIP = Jurisdiction Information Parameter (NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
SUBSTATUS = Subscriber status (valid only when the value "SUB" is the first listed for the parameter *actnInfoAnlz* in TRANS-PLAN)
TNS = Transit Network Selection

primKeyValue identifies the primary value applicable to the specified primary key parameter, with values of:

BGN:

CASIF
DEFAULT
GR303
ISDNIF
MGCP
TGN

CALLTYPE:

CUTTHRU
DEFAULT
DIR_ASSISTANCE
EMERGENCY
INTERLATA

INTERLATAOPREQ
INTNATNUM
INTNATOPREQ
INTRALATA
LOCALNUMBER
LOCALOPREQ
N11
NATNUM
NONUMOPREQ
NOTPRSNT
TOLLFREE

CDPN:

ABBREVPVT = abbreviated private
CAINVPN = Carrier AIN Virtual Private
Network
DEFAULT = matches all numbers
INTNATNUM = international number
INTNATOPREQ = international operator request
NATNUM = national significant number
NATOPREQ = national (long-distance) operator
request
NONUMCUTTHRU = no number provided, cut
through to carrier
NONUMOPREQ = no number provided, operator
request
NOTPRSNT = matches calls without a CDPN
SUBOPREQ = subscriber (local) operator request
SUBSNUM = subscriber number
TESTLINE = test line test code
UNKNOWN = unknown (default value);

CGPN:

ABBREVPVT = abbreviated private
DEFAULT = matches all numbers
NOTPRSNT = matches calls without a CGPN
NUNIINTNATNUM = non-unique international
number
NUNINATNUM = non-unique national number
(only for CGPN)
NUNISUBSNUM = non-unique subscriber
number
TESTLINE = test line test code
UNIINTNATNUM = unique international number
UNINATNUM = unique national number
UNISUBSNUM = unique subscriber number

CHRGN:

CDPNATNUM = ANI of the called party;
national number

CDPSUBSNUM = ANI of the called party;
subscriber number

CDPUNAVAIL = ANI of the called party; no
number present

CGPNATNUM = ANI of the calling party;
national number

CGPSUBSNUM = ANI of the calling party;
subscriber number

DEFAULT = matches all numbers

NOTPRSNT = matches calls without a CHRGN

UNAVAIL = ANI not available or not provided

CIP: 0-9999, DEFAULT, NOTPRSNT

CPC: 00-FF (hexadecimal) , DEFAULT,
NOTPRSNT

CSI:

DEFAULT = matches all numbers

NOTPRESUB = not presubscribed and input by
calling party

NOTPRSNT = matches calls without CSI

PRESUBDIAL = presubscribed and input by
calling party

PRESUBNOTDIAL = presubscribed and not
input by calling party

PRESUBUNKNOWN = presubscribed, input by
calling party undetermined

UNKNOWN = no indication

GAP: 0-255 (mandatory)

GENDGTS: 0-31 (mandatory)

JIP: 200000-999999, DEFAULT, NOTPRSNT

LATA: 200-99999, DEFAULT, NOTPRSNT

OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT

SUBSTATUS:

ACTIVE = In Service (subscriber is present in the
CL4SUB table and active)

DEFAULT = matches all numbers

INACTIVE = Out Of Service (subscriber is
present in the CL4SUB table and inactive)

NOTINDB = Not in database (subscriber is not in
the CL4SUB table)

NOTPRSNT = matches calls without
SUBSTATUS

TNS: 0-9999 (the carrier ID), DEFAULT,
NOTPRSNT

secKeyValue identifies the secondary value applicable to the specified primary key parameter, with values of:

BGN: 1-31 digits, DEFAULT

CALLTYPE: No secondary value

CDPN: 1-31 digits, DEFAULT (set *secKeyValue* to DEFAULT if *primKeyValue* is DEFAULT or NOTPRSNT)

CGPN: 1-31 digits, DEFAULT (set *secKeyValue* to DEFAULT if *primKeyValue* is DEFAULT or NOTPRSNT)

CHRGN: 1-31 digits, DEFAULT (set *secKeyValue* to DEFAULT if *primKeyValue* is DEFAULT or NOTPRSNT)

CIP: No secondary value

CPC: No secondary value

CSI: No secondary value

GAP: 1-31 digits, DEFAULT, NOTPRSNT

GENDGTS: 1-31 digits, DEFAULT, NOTPRSNT

JIP: No secondary value

LATA: No secondary value

OLI: No secondary value

SUBSTATUS: No secondary value

TNS: 0-199 (the CAS 0ZZ/1NX code or the ISUP circuit code), DEFAULT (set *secKeyValue* to DEFAULT if *primKeyValue* is DEFAULT or NOTPRSNT)

terKeyValue identifies the tertiary value (representing the protocol type) applicable only when the value of *primKey* is TNS, with values of:

CAS

ISUP (default – set *terKeyValue* to ISUP if *secKeyValue* is DEFAULT)

Default value: none

resultType Identifies the action taken as a result of screening.

Type: enum

Range: AUTHCODE = Call must be authorized – can only be used if called from InfoAnalyze

FAIL= Call failed screening, will be disconnected

PASS = Call passed screening

SCREEN = More screening required

TRANS = Change translation plans during a screening step – only valid if the screening is called as an InfoCollected action

TREAT = Specified treatment will be performed

Default value: FAIL

fraudTrapPrfl Identifies the fraud trap profile used when screening encounters a fraud scenario.

Type: string

Range: 1-10 alphanumeric characters

Default value: NULL

treatment Identifies the treatment performed when the value of *resultType* is "TREAT".

Type: string

Range: 1-10 alphanumeric characters

Default value: NULL

dgtScrnKey Identifies the next screening operation performed by defining the applicable digit screening table and associated primary key. The parameter applies only when the value of *resultType* is “SCREEN”.

Type: string

Range: <dgtScrnLbl>-<primKey>, where:

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

SUBSTATUS = Subscriber status (valid only when the value “SUB” is the first listed for the parameter *actnInfoAnlz* in TRANS-PLAN)

TNS = Transit Network Selection

Default value: NULL

authPrompt Identifies the tone or announcement that prompts the caller to enter an authorization code. This parameter is not implemented presently; leave it blank.

Type: enum

Range: 350

400

ANNC = Announcement

Default value: ANNC

authMode Identifies the mode of operation for an authorization code required as a result of screening. The parameter applies only when the value of *resultType* is "AUTH".

Type: enum

Range: ACNTAUTH = account codes and authorization codes
NONE = authorization code not required
ONEPIN = one PIN code per authorization code
ONLYACNT = only account codes
ONLYAUTH = only authorization codes
ONLYPIN = only PIN codes

Default value: NONE

acctCodeLen Identifies the account code length. The default value "0" disables the option; however, the value cannot be "0" when the value of *authMode* is "ACNTAUTH" or "ONLYACNT".

Type: integer

Range: {0-8}

Default value: 0

authList Identifies the name of the authorization list, previously established via ENT-LIST-AUTHCODE. The value cannot be "NULL" when the value of *authMode* is "ACNTAUTH", "ONEPIN", "ONLYACNT", or "ONLYPIN".

Type: string

Range: up to 20 characters

Default value: NULL

transPlan Identifies the name of the translation plan, previously established via ENT-TRANS-PLAN, used on a screening match. The parameter applies only when the value of *resultType* is "TRANS".

Type: string

Range: up to 10 characters

Default value: NULL

Input Examples:

```
DLT-DIGIT-SCREEN::TelicaPbx-CGPN;
```

```
ED-DIGIT-SCREEN::TelicaPbx-CGPN-ABBREVPVT-DEFAULT:::  
    RESULTTYPE=SCREEN, FRAUDTRAPPRFL=INTNL;
```

Authorization required on all international calls from TelicaPbx except to country code 92, which is considered fraud:

Step 1:

```
ENT-DIGIT-SCREEN::TelicaPbx-CGPN-DEFAULT-508804:::  
    RESULTTYPE=SCREEN, DGTSCRNKEY=TelicaPbx-CDPN;
```

Step 2:

```
ENT-DIGIT-SCREEN::TelicaPbx-CGPN-DEFAULT-5088040909:::  
    RESULTTYPE=SCREEN, DGTSCRNKEY=TelicaPbx-CDPN;
```

Step 3:

```
ENT-DIGIT-SCREEN::TelicaPbx-CDPN-INTNATNUM-DEFAULT:::  
    RESULTTYPE=AUTHCODE, AUTHMODE=ONLYPIN,  
    AUTHLIST=TelicaAuth;
```

Or

```
ENT-DIGIT-SCREEN::TelicaPbx-CDPN-INTNATNUM:::  
    RESULTTYPE=AUTHCODE, AUTHMODE=ONLYPIN,  
    AUTHLIST=TelicaAuth;
```

Step 4:

```
ENT-DIGIT-SCREEN::TelicaPbx-CDPN-INTNATNUM-92:::  
    RESULTTYPE=FAIL, FRAUDTRAPPRFL=intnl,  
    TREATMENT=CALLREJECT;
```

```
RTRV-DIGIT-SCREEN::TelicaPbx-CGPN;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"TelicaPbx-CGPN-DEFAULT-5088040909:  
    RESULTTYPE=FAIL, FRAUDTRAPPRFL=intnl,  
    TREATMENT=CALLREJECT, DGTSCRNKEY=TelicaPbx-CDPN,  
    AUTHPROMPT=ANNC, AUTHMODE=ONLYPIN, ACNTCODELEN=0,  
    AUTHLIST=TelicaAuth, TRANSPAN=NULL"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-DIGITMOD-DN

Commands:

DLT-DIGITMOD-DN: Delete Digit Modification DN

ED-DIGITMOD-DN: Edit Digit Modification DN

ENT-DIGITMOD-DN: Enter Digit Modification DN

RTRV-DIGITMOD-DN: Retrieve Digit Modification DN

Descriptions:

DLT-DIGITMOD-DN lets the user delete a digit modification object keyed for any of the DNs (Directory Numbers) that are part of the call parameters (called party number, calling party number, charge number).

ED-DIGITMOD-DN lets the user change a digit modification object keyed for any of the DNs (Directory Numbers) that are part of the call parameters (called party number, calling party number, charge number). Use this command to change the digits to modify; the nature of address indicator applicable to the specified digit string; the type of modification; how to strip or insert digits, an alternate parameter to modify, and the digit modification to call next.

ENT-DIGITMOD-DN lets the user establish a digit modification object keyed for any of the DNs (Directory Numbers) that are part of the call parameters (called party number, calling party number, charge number). Use this command to define the name of the digit modification; whether the digit modification applies to called party, calling party or charge numbers; the digits to modify; the nature of address indicator applicable to the specified digit string; the type of modification; how to strip or insert digits, an alternate parameter to modify, and the digit modification to call next.

RTRV-DIGITMOD-DN lets the user retrieve the attributes of a digit modification object keyed for any of the DNs (Directory Numbers) that are part of the call parameters (called party number, calling party number, charge number).

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-DIGITMOD-DN:[TID]:<digitModDnAid>:[CTAG];  
ED-DIGITMOD-DN:[TID]:<digitModDnAid>:[CTAG]::  
[MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
[MAXDGTS=<maxdgts>],[STRIPDIRN=<stripdirn>],  
[STRIPPOS=<strippos>],[STRIPDGTS=<stripdgts>],  
[STRIPDEST=<stripdest>],[INSERTDIRN=<insertdirn>],  
[INSERTPOS=<insertpos>],[INSERTDGTS=<insertdgts>],  
[INSERTSRC=<insertsrc>],[NEWNAI=<newnai>],  
[ALTPARAMVALUE=<altparamvalue>],  
[NEXTDGTMODKEY=<nextdgtmodkey>];  
ENT-DIGITMOD-DN:[TID]:<digitModDnAid>:[CTAG]::  
[MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
[MAXDGTS=<maxdgts>],[STRIPDIRN=<stripdirn>],  
[STRIPPOS=<strippos>],[STRIPDGTS=<stripdgts>],  
[STRIPDEST=<stripdest>],[INSERTDIRN=<insertdirn>],  
[INSERTPOS=<insertpos>],[INSERTDGTS=<insertdgts>],  
[INSERTSRC=<insertsrc>],[NEWNAI=<newnai>],  
[ALTPARAMVALUE=<altparamvalue>],  
[NEXTDGTMODKEY=<nextdgtmodkey>];  
RTRV-DIGITMOD-DN:[TID]:[<digitModDnAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<digitModDnAid>:MODTYPE=<modtype>,  
ALTMODTYPE=<altmodtype>,MAXDGTS=<maxdgts>,  
STRIPDIRN=<stripdirn>,STRIPPOS=<strippos>,  
STRIPDGTS=<stripdgts>,STRIPDEST=<stripdest>,  
INSERTDIRN=<insertdirn>,INSERTPOS=<insertpos>,  
INSERTDGTS=<insertdgts>,INSERTSRC=<insertsrc>,  
NEWNAI=<newnai>,ALTPARAMVALUE=<altparamvalue>,  
NEXTDGTMODKEY=<nextdgtmodkey>"  
;
```

Parameters:

digitModDnAid Identifies the AID as a digit modification object keyed for a DN. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all DN-keyed digit modification objects configured in the system will be returned.

Type: DigitModDnAid

Range: <dmLbl>[-<dnType>[-<nai>[-<digits>[-<minDgts>]]]],
where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

dnType (optional only in RTRV) identifies the primary key as the type of DN applicable to the specified digit modification table, with values of:

CDPN = called party number
CGPN = calling party number
CHRGN = charge number

nai identifies the nature of address indicator applicable to the specified type of DN, with a default of "DEFAULT" and values of:

ABBREVPVT = abbreviated private (only for CDPN and CGPN)
CAINVPN = Carrier AIN Virtual Private Network (only for CDPN)
CDPNATNUM = ANI of the called party; national number (only for CHRGN)
CDPSUBSNUM = ANI of the called party; subscriber number (only for CHRGN)
CDPUNAVAIL = ANI of the called party; no number present (only for CHRGN)
CGPNATNUM = ANI of the calling party; national number (only for CHRGN)
CGPSUBSNUM = ANI of the calling party; subscriber number (only for CHRGN)
DEFAULT = matches all numbers
INTNATNUM = international number (only for CDPN)
INTNATOPREQ = international operator request (only for CDPN)
NATNUM = national significant number (only for CDPN)
NATOPREQ = national (long-distance) operator request (only for CDPN)

NONUMCUTTHRU = no number provided, cut through to carrier (only for CDPN)
NONUMOPREQ = no number provided, operator request (only for CDPN)
NOTPRSNT = matches calls without a CGPN, CDPN, or CHRGN
NUNIINTNATNUM = non-unique international number (only for CGPN)
NUNINATNUM = non-unique national number (only for CGPN)
NUNISUBSNUM = non-unique subscriber number (only for CGPN)
SUBOPREQ = subscriber (local) operator request (only for CDPN)
SUBSNUM = subscriber number (only for CDPN)
TESTLINE = test line test code (only for CGPN and CDPN)
UNAVAIL = ANI not available or not provided (only for CHRGN)
UNIINTNATNUM = unique international number (only for CGPN)
UNINATNUM = unique national number (only for CGPN)
UNISUBSNUM = unique subscriber number (only for CGPN)
UNKNOWN = unknown (only for CDPN);

digits identifies the leading digits of the number to be matched as a string of up to 31 digits with a default of "DEFAULT";

minDgts identifies the minimum allowable length of the incoming addressing digits as an integer from 0-30 with a default of 0.

Default value: none

modtype Identifies the type of digit modification.

Type: enum

Range: DELETE = removes the parameter
INSERTDGTS = insert the digits specified by *insertDgts*
INSERTSRC = insert digits from the specified source
NOACTION = no action taken
REPLACEDGTS = replaces digits with those specified by the *insertDgts* parameter
REPLACENAI = replaces NAI with that specified by the *newNai* parameter
STRIPINSERTDGTS = removes the number of digits specified by *stripDgts* and inserts the digits specified by *insertDgts*
STRIPINSERTSRC = removes the number of digits specified by *stripDgts* and inserts the digits from the specified source
STRIPONLY = removes the number of digits specified by the *stripDgts* parameter

Default value: NOACTION

altmodtype Identifies the type of digit modification for the alternate parameter.

Type: enum

Range: DELETE = removes the alternate parameter
NOACTION = no action taken
REPLACE = assigns a value, specified by *altParamValue*, to the alternate parameter

Default value: NOACTION

maxdgts Identifies the maximum allowable length of the incoming addressing digits.

Type: integer

Range: {1-31}

Default value: 31

stripdirn Identifies the direction, relative to the first or last digit in the string, of the position in the digit string where stripping begins.

Type: enum

Range: LEFT = starts at the first digit in the string, moves right
RIGHT = starts at the last digit in the string, moves left

Default value: LEFT

- strippos** Identifies the position in the digit string where stripping begins. The value cannot be “0” when the modification involves digit stripping.
Type: integer
Range: {0-31}
Default value: 1
- stripdgts** Identifies the number of digits to strip. The value cannot be “0” when the modification involves digit stripping.
Type: integer
Range: {0-31}
Default value: 0
- stripdest** Identifies a parameter or register for storing the stripped digits. REG-{1-6} are scratchpad registers for holding digits during a translation. These registers are only valid during one call translation; that is, they cannot be passed from one call to another.
Type: enum
Range: CPC = Calling Party Category parameter
 OLI = Originating Line Information parameter
 REG-1 = scratchpad register 1
 REG-2 = scratchpad register 2
 REG-3 = scratchpad register 3
 REG-4 = scratchpad register 4
 REG-5 = scratchpad register 5
 REG-6 = scratchpad register 6
Default value: NULL
- insertdirn** Identifies the direction, relative to the first or last digit in the string, of the position in the digit string where digit insertion begins.
Type: enum
Range: LEFT = starts at the first digit in the string, moves right
 RIGHT = starts at the last digit in the string, moves left
Default value: LEFT
- insertpos** Identifies the position in the digit string where digit insertion begins. The value cannot be “0” when the modification involves digit insertion.
Type: integer
Range: {0-31}
Default value: 1

insertdgts Identifies the digits to insert. The value cannot be “NULL” when the modification involves digit insertion.

Type: string

Range: 1-31 digits

Default value: NULL

insertsrc Identifies a parameter or register as the source of the inserted digits. REG-{1-6} are scratchpad registers for holding digits during a translation. These registers are only valid during one call translation; that is, they cannot be passed from one call to another.

Type: enum

Range: COUNTRY = Country code

CPC = Calling Party Category parameter

OLI = Originating Line Information parameter

REG-1 = scratchpad register 1

REG-2 = scratchpad register 2

REG-3 = scratchpad register 3

REG-4 = scratchpad register 4

REG-5 = scratchpad register 5

REG-6 = scratchpad register 6

Default value: NULL

newnai Identifies a new nature of address indicator replacing the nature of address indicator applicable to the digit string specified in the AID.

Type: enum

Range: ABBREVPVT = abbreviated private numbering plan (only for CDPN and CGPN)

CDPNATNUM = ANI of the called party; national number (only for CHRGN)

CDPSUBSNUM = ANI of the called party; subscriber number (only for CHRGN)

CDPUNAVAIL = ANI of the called party; no number present (only for CHRGN)

CGPNATNUM = ANI of the calling party; national number (only for CHRGN)

CGPSUBSNUM = ANI of the calling party; subscriber number (only for CHRGN)

DEFAULT = matches all numbers

INTNATNUM = international number (only for CDPN)

INTNATOPREQ = international operator request (only for CDPN)

NATNUM = national significant number (only for CDPN)

NATOPREQ = national (long-distance) operator request (only for CDPN)

NONUMCUTTHRU = no number provided, cut through to carrier (only for CDPN)
NONUMOPREQ = no number provided, operator request (only for CDPN)
NOTPRSNT = matches calls without a CGPN, CDPN, or CHRGN
NUNIINTNATNUM = non-unique international number (only for CGPN)
NUNINATNUM = non-unique national number (only for CGPN)
NUNISUBSNUM = non-unique subscriber number (only for CGPN)
SUBOPREQ = subscriber (local) operator request (only for CDPN)
SUBSNUM = subscriber number (only for CDPN)
TESTLINE = test line test code (only for CGPN and CDPN)
UNAVAIL = ANI not available or not provided (only for CHRGN)
UNIINTNATNUM = unique international number (only for CGPN)
UNINATNUM = unique national number (only for CGPN)
UNISUBSNUM = unique subscriber number (only for CGPN)
UNKNOWN = unknown numbering plan (only for CDPN)

Default value: NULL

altparamvalue Identifies a parameter and associated value that act as an alternate key. This is a way of changing a non-key parameter on a match on the key field (*dnType* in the AID).

Type: string

Range: <altParam>[-<altValue>], where:

altParam identifies the name of the applicable non-key parameter, with values of:

- CIP = Carrier Information Parameter
- CPC = Calling Party Category
- CSI = Carrier Selection Information
- OLI = Originating Line Information
- TNS = Transit Network Selection

altValue identifies, when the value of *altModType* is “NOACTION” or “REPLACE” (leave blank when *altModType* is “DELETE”), the new value applicable to the specified non-key parameter, with values of:

CIP: 0-9999

CPC: 00-FF (hexadecimal)

CSI:

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not input by calling party

PRESUBUNKNOWN = presubscribed, input by calling party undetermined

NOTPRESUB = not presubscribed and input by calling party

UNKNOWN = no indication

OLI: 00-FF (hexadecimal)

TNS: {0-9999}-{0-255} (denotes a carrier and either a CAS 0ZZ/1NX code or an ISUP circuit code)

Default value: NULL

nextdgtmodkey Identifies the digit modification table and associated primary key to call next. This is a way of changing a non-key parameter on a match on the key field (*dnType* in the AID).

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

Input Examples:

```
DLT-DIGITMOD-DN::TelicaPbx-CGPN;
```

```
ED-DIGITMOD-DN::TelicaPbx-CGPN-ABBREVPVT-DEFAULT:::  
  MODTYPE=INSERTDGTS,ALTMODTYPE=REPLACE,  
  INSERTDIRN=LEFT,INSERTPOS=1,INSERTDGTS=508804,  
  NEWNAI=UNINATNUM,ALTPARAMVALUE=CPC-00;
```

Incoming DM, remove 011 and mark numbers international:

```
ENT-DIGITMOD-DN::MkIntnl-CDPN-unknown-011-10:::  
  MODTYPE=STRIPONLY,STRIPDIRN=LEFT,STRIPPOS=1,  
  STRIPDGTS=3,NEWNAI=INTNATNUM;
```

Incoming DM, add six digits to TELICA calling numbers, set CPC:

```
ENT-DIGITMOD-DN::TelicaPbx-CGPN-ABBREVPVT-DEFAULT:::  
  MODTYPE=INSERTDGTS,ALTMODTYPE=REPLACE,  
  INSERTDIRN=LEFT,INSERTPOS=1,INSERTDGTS=508804,  
  NEWNAI=UNINATNUM,ALTPARAMVALUE=CPC-00;
```

```
RTRV-DIGITMOD-DN::MkIntnl-CDPN-unknown-011-10;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"MkIntnl-CDPN-unknown-011-10:MODTYPE=STRIPONLY,  
  ALTMODTYPE=NOACTION,MAXDGTS=31,STRIPDIRN=LEFT,  
  STRIPPOS=1,STRIPDGTS=3,STRIPDEST=NULL,  
  INSERTDIRN=LEFT,INSERTPOS=0,INSERTDGTS=NULL,  
  INSERTSRC=NULL,NEWNAI=INTNATNUM,  
  ALTPARAMVALUE=NULL,NEXTDGTMODKEY=NULL"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-DIGITMOD-GEN

Commands:

DLT-DIGITMOD-GEN: Delete Digit Modification Generic

ED-DIGITMOD-GEN: Edit Digit Modification Generic

ENT-DIGITMOD-GEN: Enter Digit Modification Generic

RTRV-DIGITMOD-GEN: Retrieve Digit Modification Generic

Descriptions:

DLT-DIGITMOD-GEN lets the user delete a digit modification object keyed for generic digits or generic address parameters.

ED-DIGITMOD-GEN lets the user change a digit modification object keyed for generic digits or generic address parameters. Use this command to change the numeric value representing the type of generic digits or generic address parameters, the leading digits of the number to match, the type of modification, the type of modification for an alternate parameter, how to strip or insert digits, an alternate parameter to modify, and the digit modification to call next.

ENT-DIGITMOD-GEN lets the user establish a digit modification object keyed for generic digits or generic address parameters. Generic digits are digit strings that represent various Advanced Intelligent Network (AIN) functions; for example, the value "01" means "Authorization Code". Generic address parameters are digit strings that represent various network entities; for example, the value "00" means "Directory Number". Use this command to define the name of the digit modification, whether the digit modification applies to generic digits or generic address parameters, the numeric value representing the type of generic digits or generic address parameters, the leading digits of the number to match, the type of modification, the type of modification for an alternate parameter, how to strip or insert digits, an alternate parameter to modify, and the digit modification to call next.

RTRV-DIGITMOD-GEN lets the user retrieve the attributes of a digit modification object keyed for generic digits or generic address parameters.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-DIGITMOD-GEN:[TID]:<digitModGenAid>:[CTAG];  
ED-DIGITMOD-GEN:[TID]:<digitModGenAid>:[CTAG]::  
    [MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
    [STRIPDIRN=<stripdirn>],[STRIPPOS=<strippos>],  
    [STRIPDGTS=<stripdgts>][STRIPDEST=<stripdest>],  
    [INSERTDIRN=<insertdirn>],[INSERTPOS=<insertpos>],  
    [INSERTDGTS=<insertdgts>],[INSERTSRC=<insertsrc>],  
    [ALTPARAMVALUE=<altparamvalue>],  
    [NEXTDGTMODKEY=<nextdgtmodkey>];  
ENT-DIGITMOD-GEN:[TID]:<digitModGenAid>:[CTAG]::  
    [MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
    [STRIPDIRN=<stripdirn>],[STRIPPOS=<strippos>],  
    [STRIPDGTS=<stripdgts>][STRIPDEST=<stripdest>],  
    [INSERTDIRN=<insertdirn>],[INSERTPOS=<insertpos>],  
    [INSERTDGTS=<insertdgts>],[INSERTSRC=<insertsrc>],  
    [ALTPARAMVALUE=<altparamvalue>],  
    [NEXTDGTMODKEY=<nextdgtmodkey>];  
RTRV-DIGITMOD-GEN:[TID]:[<digitModGenAid>]:[CTAG];
```

Output Format:

```
    SID DATE TIME  
M   CTAG COMPLD  
    "<digitModGenAid>:MODTYPE=<modtype>,  
    ALTMODTYPE=<altmodtype> ,STRIPDIRN=<stripdirn>,  
    STRIPPOS=<strippos> ,STRIPDGTS=<stripdgts> ,  
    STRIPDEST=<stripdest> ,INSERTDIRN=<insertdirn> ,  
    INSERTPOS=<insertpos> ,INSERTDGTS=<insertdgts> ,  
    INSERTSRC=<insertsrc> ,  
    ALTPARAMVALUE=<altparamvalue> ,  
    NEXTDGTMODKEY=<nextdgtmodkey>"  
;
```

Parameters:

digitModGenAid Identifies the AID as a digit modification object keyed for generic digits or generic address parameters. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all digit modification objects keyed to generic digits or generic address parameters will be returned.

Type: DigitModGenAid

Range: <dmLbl>[-<genType>[-<nbrType>[-<digits>]]],

where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 characters;

genType (optional only in RTRV) identifies the primary key that applies to the specified digit modification table as either a generic address parameter or generic digits or a (user-defined) generic parameter, with values of:

GAP = generic address parameter

GENDGTS = generic digits

GP = generic parameter

nbrType (optional only in RTRV) identifies the numeric value representing the type of generic digits or generic address parameters, with values of:

0-255 for GAP

0-31 for GENDGTS

0-255 for GP

digits identifies the leading digits of the number to be matched as a string of 1-31 digits with a default of "DEFAULT". When the value of *genType-nbrType* is "GENDGTS-9", the value of *digits* is a string of either three or eight digits. When the value is three digits, the range is {000-127}. When the value is eight digits, the range for the first three digits is {000-127} and the range for the last five digits is {00000-16383}. When the value of *genType-nbrType* is "GP-195", the value of *digits* is a string of eight digits.

Default value: none

modtype Identifies the type of digit modification.

Type: enum

Range: DELETE = removes the parameter
INSERTDGTS = insert the digits specified by *insertDgts*
INSERTSRC = insert digits from the specified source
NOACTION = no action taken
REPLACEDGTS = replaces digits with those specified by
the *insertDgts* parameter
STRIPINSERTDGTS = removes the number of digits
specified by *stripDgts* and inserts the digits specified by
insertDgts
STRIPINSERTSRC = removes the number of digits
specified by *stripDgts* and inserts the digits from the
specified source
STRIPONLY = removes the number of digits specified by
the *stripDgts* parameter

Default value: NOACTION

altmodtype Identifies the type of digit modification for the alternate parameter.

Type: enum

Range: DELETE = removes the alternate parameter
NOACTION = no action taken
REPLACE = assigns a value, specified by *altParamValue*, to
the alternate parameter

Default value: NOACTION

stripdirn Identifies the direction, relative to the first or last digit in the string, of
the position in the digit string where stripping begins.

Type: enum

Range: LEFT = starts at the first digit in the string, moves right
RIGHT = starts at the last digit in the string, moves left

Default value: LEFT

strippos Identifies the position in the digit string where stripping begins. The
value cannot be “0” when the modification involves digit stripping.

Type: integer

Range: {0-31}

Default value: 1

stripdgt Identifies the number of digits to strip. The value cannot be “0” when
the modification involves digit stripping.

Type: integer

Range: {0-31}

Default value: 0

stripdest Identifies a parameter or register for storing the stripped digits. REG-{1-6} are scratchpad registers for holding digits during a translation. These registers are only valid during one call translation; that is, they cannot be passed from one call to another.

Type: enum

Range: CPC = Calling Party Category parameter
OLI = Originating Line Information parameter
REG-1 = scratchpad register 1
REG-2 = scratchpad register 2
REG-3 = scratchpad register 3
REG-4 = scratchpad register 4
REG-5 = scratchpad register 5
REG-6 = scratchpad register 6

Default value: NULL

insertdirn Identifies the direction, relative to the first or last digit in the string, of the position in the digit string where digit insertion begins.

Type: enum

Range: LEFT = starts at the first digit in the string, moves right
RIGHT = starts at the last digit in the string, moves left

Default value: LEFT

insertpos Identifies the position in the digit string where digit insertion begins. The value cannot be "0" when the modification involves digit insertion.

Type: integer

Range: {0-31}

Default value: 1

insertdgts Identifies the digits to insert. The value cannot be "NULL" when the modification involves digit insertion.

Type: string

Range: 1-31 digits

Default value: NULL

insertsrc Identifies a parameter or register as the source of the inserted digits. REG-{1-6} are scratchpad registers for holding digits during a translation. These registers are only valid during one call translation; that is, they cannot be passed from one call to another.

Type: enum

Range: COUNTRY = country code
CPC = Calling Party Category parameter
OLI = Originating Line Information parameter
REG-1 = scratchpad register 1
REG-2 = scratchpad register 2
REG-3 = scratchpad register 3
REG-4 = scratchpad register 4
REG-5 = scratchpad register 5
REG-6 = scratchpad register 6

Default value: NULL

altparamvalue Identifies a parameter and associated value that act as an alternate key. This is a way of changing a non-key parameter on a match on the key field (*dnType* in the AID).

Type: string

Range: <altParam>-<altValue>, where:

altParam identifies the name of the applicable non-key parameter, with values of:

CIP = Carrier Information Parameter
CPC = Calling Party Category
CSI = Carrier Selection Information
OLI = Originating Line Information
TNS = Transit Network Selection

altValue identifies, when the value of *altModType* is “NOACTION” or “REPLACE” (leave blank when the value of *altModType* is “DELETE”), the new value applicable to the specified non-key parameter, with values of:

CIP: 0-9999

CPC: 00-FF (hexadecimal)

CSI:

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not input by calling party

PRESUBUNKNOWN = presubscribed, input by calling party undetermined

NOTPRESUB = not presubscribed and input by calling party

UNKNOWN = no indication

OLI: 00-FF (hexadecimal)

TNS: {0-9999}-{0-255} (denotes a carrier and either a CAS 0ZZ/1NX code or an ISUP circuit code)

Default value: NULL

nextdgtmodkey Identifies the digit modification table and associated primary key to call next. This is a way of changing a non-key parameter on a match on the key field (*genType* in the AID).

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

Input Examples:

```
DLT-DIGITMOD-GEN::TelicaPbx-GENDGTS-01-1234;
```

```
ED-DIGITMOD-GEN::TelicaPbx-GENDGTS-01-1234:::  
  MODTYPE=INSERTDGTS,ALTMODTYPE=REPLACE,  
  INSERTDIRN=LEFT,INSERTPOS=1,INSERTDGTS=508804,  
  ALTPARAMVALUE=CPC-00;
```

```
ENT-DIGITMOD-GEN::TelicaPbx-GENDGTS-01-1234:::  
  MODTYPE=INSERTDGTS,ALTMODTYPE=REPLACE,  
  INSERTDIRN=LEFT,INSERTPOS=1,INSERTDGTS=508804,  
  ALTPARAMVALUE=CPC-00;
```

```
RTRV-DIGITMOD-GEN::TelicaPbx-GENDGTS-01-1234;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"TelicaPbx-GENDGTS-01-1234:MODTYPE=INSERTDGTS,
  ALTMODTYPE=REPLACE,STRIPDIRN=LEFT,STRIPPOS=1,
  STRIPDGTS=3,STRIPDEST=NULL,INSERTDIRN=LEFT,
  INSERTPOS=0,INSERTDGTS=NULL,INSERTSRC=NULL,
  NEWNAI=INTNATNUM,ALTPARAMVALUE=NULL,
  NEXTDGTMODKEY=NULL"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-DIGITMOD-PARAM

Commands:

DLT-DIGITMOD-PARAM: Delete Digit Modification Parameter

ED-DIGITMOD-PARAM: Edit Digit Modification Parameter

ENT-DIGITMOD-PARAM: Enter Digit Modification Parameter

RTRV-DIGITMOD-PARAM: Retrieve Digit Modification Parameter

Descriptions:

DLT-DIGITMOD-PARAM lets the user delete a digit modification object keyed to a call parameter.

ED-DIGITMOD-PARAM lets the user change a digit modification object keyed to a call parameter. Use this command to change the value applicable to the specified parameter, the type of modification, the type of modification for an alternate parameter, the new value for the parameter, the alternate parameter to modify, and the digit modification to call next.

ENT-DIGITMOD-PARAM lets the user establish a digit modification object keyed to a call parameter. Use this command to define the digit modification name, the parameter to which the digit modification applies, the value applicable to the specified parameter, the type of modification, the type of modification for an alternate parameter, the new value for the parameter, an alternate parameter to modify, and the digit modification to call next.

RTRV-DIGITMOD-PARAM lets the user retrieve the attributes of a digit modification object keyed to a call parameter.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-DIGITMOD-PARAM:[TID]:<digitModParamAid>:[CTAG];  
ED-DIGITMOD-PARAM:[TID]:<digitModParamAid>:[CTAG]::  
[MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
[NEWVALUE=<newvalue>],  
[ALTPARAMVALUE=<altparamvalue>],  
[NEXTDGTMODKEY=<nextdgtmodkey>];  
ENT-DIGITMOD-PARAM:[TID]:<digitModParamAid>:[CTAG]::  
[MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
[NEWVALUE=<newvalue>],  
[ALTPARAMVALUE=<altparamvalue>],  
[NEXTDGTMODKEY=<nextdgtmodkey>];  
RTRV-DIGITMOD-PARAM:[TID]:[<digitModParamAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
  "<digitModParamAid>:MODTYPE=<modtype>,  
    ALTMODTYPE=<altmodtype>,NEWVALUE=<newvalue>,  
    ALTPARAMVALUE=<altparamvalue>,  
    NEXTDGTMODKEY=<nextdgtmodkey>"  
;
```

Parameters:

digitModParamAid Identifies the AID as a digit modification object keyed to a call parameter. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all digit modification objects keyed to a call parameter will be returned.

Type: DigitModParamAid

Range: <dmLbl>[-<primKey>[-<value>]],
where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey (optional only in RTRV) identifies the primary key applicable to the specified digit modification table as a type of call parameter, with values of:

CALLTYPE = type of call (Class 5)

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

value identifies the value applicable to the specified parameter, with values of:

CALLTYPE:

CUTTHRU

DEFAULT

DIR_ASSISTANCE

EMERGENCY

INTERLATA

INTERLATAOPREQ

INTNATNUM

INTNATOPREQ

INTRALATA

LOCALNUMBER

LOCALOPREQ

N11

NATNUM

NONUMOPREQ

NOTPRSNT

TOLLFREE

CIP: 0-9999, DEFAULT, NOTPRSNT

CPC: 00-FF (hexadecimal) , DEFAULT,
NOTPRSNT

CSI:

DEFAULT = matches all numbers

NOTPRESUB = not presubscribed and input by
calling party

NOTPRSNT = matches calls without CSI

PRESUBDIAL = presubscribed and input by
calling party

PRESUBNOTDIAL = presubscribed and not
input by calling party

PRESUBUNKNOWN = presubscribed, input by
calling party undetermined

UNKNOWN = no indication

JIP: 200000-999999, DEFAULT, NOTPRSNT

LATA: 200-99999, DEFAULT, NOTPRSNT

OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT

Default value: none

modtype Identifies the type of digit modification.

Type: enum

Range: DELETE = removes the parameter

NOACTION = no action taken

REPLACE = assigns a value, specified by *altParamValue*, to
the parameter

Default value: NOACTION

altmodtype Identifies the type of digit modification for the alternate parameter.

Type: enum

Range: DELETE = removes the alternate parameter

NOACTION = no action taken

REPLACE = assigns a value, specified by *altParamValue*, to
the alternate parameter

Default value: NOACTION

newvalue Identifies the new value applicable to the specified parameter. The value cannot be specified when the value of *primKey* is CALLTYPE. The value cannot be NULL when the value of *modType* is REPLACE.

Type: string

Range: CIP: 0-9999, DEFAULT, NOTPRSNT

CPC: 00-FF (hexadecimal) , DEFAULT, NOTPRSNT

JIP: 200000-999999, DEFAULT, NOTPRSNT

LATA: 200-99999, DEFAULT, NOTPRSNT

OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT

Default value: NULL

altparamvalue Identifies a parameter and associated value that act as an alternate key. This is a way of changing a non-key parameter (that is, the alternate key cannot be the same as the AID's primary key) on a match on the key field (*dnType* in the AID).

Type: string

Range: <altParam>-<altValue>, where:

altParam identifies the name of the applicable non-key parameter, with values of:

CIP = Carrier Information Parameter

CPC = Calling Party Category

CSI = Carrier Selection Information

OLI = Originating Line Information

TNS = Transit Network Selection

altValue identifies, when the value of *altModType* is "NOACTION" or "REPLACE" (leave blank when the value of *altModType* is "DELETE"), the new value applicable to the specified non-key parameter, with values of:

CIP: 0-9999

CPC: 00-FF (hexadecimal)

CSI:

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not input by calling party

PRESUBUNKNOWN = presubscribed, input by calling party undetermined

NOTPRESUB = not presubscribed and input by calling party

UNKNOWN = no indication

OLI: 00-FF (hexadecimal)

TNS: {0-9999}-{0-255} (denotes a carrier and either a CAS 0ZZ/1NX code or an ISUP circuit code)

Default value: NULL

nextdgtmodkey Identifies the digit modification table and associated primary key to call next. This is a way of changing a non-key parameter on a match on the key field (*primKey* in the AID).

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

Input Examples:

```
DLT-DIGITMOD-PARAM::TelicaPbx-LATA-128;  
ED-DIGITMOD-PARAM::TelicaPbx-LATA-128:::  
    MODTYPE=REPLACE,NEWVALUE=126;  
ENT-DIGITMOD-PARAM::TelicaPbx-LATA-128:::  
    MODTYPE=REPLACE,NEWVALUE=126;  
RTRV-DIGITMOD-PARAM::TelicaPbx-LATA-128;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"TelicaPbx-LATA-128:MODTYPE=REPLACE,  
    ALTMODTYPE=NOACTION,NEWVALUE=126,  
    ALTPARAMVALUE=NULL,NEXTDGTMODKEY=NULL"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-DIGITMOD-TNS

Commands:

DLT-DIGITMOD-TNS: Delete Digit Modification TNS

ED-DIGITMOD-TNS: Edit Digit Modification TNS

ENT-DIGITMOD-TNS: Enter Digit Modification TNS

RTRV-DIGITMOD-TNS: Retrieve Digit Modification TNS

Descriptions:

DLT-DIGITMOD-TNS lets the user delete a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, and the Carrier or 0ZZ codes for CAS Feature Group D.

ED-DIGITMOD-TNS lets the user change a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, and the Carrier or 0ZZ codes for CAS Feature Group D. Use this command to change the carrier code, the ISUP circuit code or the CAS 0ZZ or 1NX codes, the incoming trunk group protocol, the type of modification, the type of modification for an alternate parameter, the new value for the carrier code, the new value for the ISUP circuit code or the CAS 0ZZ or 1NX codes, an alternate parameter to modify, and the digit modification to call next.

ENT-DIGITMOD-TNS lets the user establish a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, or the Carrier or 0ZZ codes for CAS Feature group D. Use this command to define the name of the digit modification, the carrier code, the ISUP circuit code or the CAS 0ZZ or 1NX codes, the incoming trunk group protocol, the type of modification, the type of modification for an alternate parameter, the new value for the carrier code, the new value for the ISUP circuit code or the CAS 0ZZ or 1NX codes, an alternate parameter to modify, and the digit modification to call next.

RTRV-DIGITMOD-TNS lets the user retrieve the attributes of a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, and the Carrier or 0ZZ codes for CAS Feature group D.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-DIGITMOD-TNS:[TID]:<digitModTnsAid>:[CTAG];  
ED-DIGITMOD-TNS:[TID]:<digitModTnsAid>:[CTAG]::  
    [MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
    [NEWCARRIER=<newcarrier>],  
    [NEWCALLTYPECODE=<newcalltypecode>],  
    [ALTPARAMVALUE=<altparamvalue>],  
    [NEXTDGTMODKEY=<nextdgtmodkey>];  
ENT-DIGITMOD-TNS:[TID]:<digitModTnsAid>:[CTAG]::  
    [MODTYPE=<modtype>],[ALTMODTYPE=<altmodtype>],  
    [NEWCARRIER=<newcarrier>],  
    [NEWCALLTYPECODE=<newcalltypecode>],  
    [ALTPARAMVALUE=<altparamvalue>],  
    [NEXTDGTMODKEY=<nextdgtmodkey>];  
RTRV-DIGITMOD-TNS:[TID]:[<digitModTnsAid>]:[CTAG];
```

Output Format:

```
      SID DATE TIME  
M    CTAG COMPLD  
      "<digitModTnsAid>:MODTYPE=<modtype>,  
      ALTMODTYPE=<altmodtype>,NEWCARRIER=<newcarrier>,  
      NEWCALLTYPECODE=<newcalltypecode>,  
      ALTPARAMVALUE=<altparamvalue>,  
      NEXTDGTMODKEY=<nextdgtmodkey>"  
;
```

Parameters:

digitModTnsAid Identifies the AID as a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, or the Carrier or OZZ codes for CAS Feature group D. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all TNS-keyed digit modification objects configured in the system will be returned.

Type: DigitModTnsAid

Range: <dmLbl>[-<TNS>[-<carrier>[-<callTypeCode >[-<prtcl>]]]],
where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

TNS (optional only in RTRV) identifies the primary key that applies to the specified digit modification table with "TNS" as the sole value;

carrier identifies the carrier code as a string of 1-4 digits, "NOTPRSNT", or the default value "DEFAULT";

callTypeCode identifies the ISUP circuit code or the CAS OZZ or 1NX codes as a string of 1-3 digits with a default of "DEFAULT" (set *callTypeCode* to DEFAULT if *carrier* is DEFAULT or NOTPRSNT);

prtcl identifies the incoming trunk group protocol with values of CAS or ISUP (the default value – set *prtcl* to ISUP if *callTypeCode* is DEFAULT).

Default value: none

modtype Identifies the type of digit modification.

Type: enum

Range: DELETE = removes the parameter
NOACTION = no action taken
REPLACECALLTYPE = replaces the call type code with that specified by the *newCallTypeCode* parameter
REPLACECARRIER = replaces the carrier with that specified by the *newCarrier* parameter
REPLACETNS= replaces both the carrier and the call type code with those specified by the *newCarrier* and *newCallTypeCode* parameters

Default value: NOACTION

altmodtype Identifies the type of digit modification for the alternate parameter.

Type: enum

Range: DELETE = removes the alternate parameter

NOACTION = no action taken

REPLACE = assigns a value, specified by *altParamValue*, to
the alternate parameter

Default value: NOACTION

newcarrier Identifies the new value for the carrier code. The value cannot be
“NULL” when the value of *modType* is “REPLACETNS” or
“REPLACECARRIER”

Type: string

Range: {0-9999}

Default value: NULL

newcalltypecode Identifies the new value for the call type code. The value
cannot be “NULL” when the value of *modType* is “REPLACETNS” or
“REPLACECALLTYPE”

Type: string

Range: {0-255}

Default value: NULL

altparamvalue Identifies a parameter and associated value that act as an alternate key. This is a way of changing a non-key parameter on a match on the key field (*dnType* in the AID).

Type: string

Range: <altParam>-<altValue>, where:

altParam identifies the name of the applicable non-key parameter, with values of:

CIP = Carrier Information Parameter

CPC = Calling Party Category

CSI = Carrier Selection Information

OLI = Originating Line Information

altValue identifies, when the value of *altModType* is “NOACTION” or “REPLACE” (leave blank when the value of *altModType* is “DELETE”), the new value applicable to the specified non-key parameter, with values of:

CIP: 0-9999

CPC: 00-FF (hexadecimal)

CSI:

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not input by calling party

PRESUBUNKNOWN = presubscribed, input by calling party undetermined

NOTPRESUB = not presubscribed and input by calling party

UNKNOWN = no indication

OLI: 00-FF (hexadecimal)

Default value: NULL

nextdgtmodkey Identifies the digit modification table and associated primary key to call next. This is a way of changing a non-key parameter on a match on the key field (*TNS* in the AID).

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

Input Examples:

```
DLT-DIGITMOD-TNS::TelicaPbx-TNS-1-DEFAULT-ISUP;  
ED-DIGITMOD-TNS::TelicaPbx-TNS-1-DEFAULT-ISUP::  
  MODTYPE=REPLACECARRIER,NEWCARRIER=2;  
ENT-DIGITMOD-TNS::TelicaPbx-TNS-1-DEFAULT-ISUP::  
  MODTYPE=REPLACECARRIER,NEWCARRIER=2;  
RTRV-DIGITMOD-TNS::TelicaPbx-TNS-1-DEFAULT-ISUP;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"TelicaPbx-TNS-1-DEFAULT-ISUP:  
  MODTYPE=REPLACECARRIER,ALTMODTYPE=NOACTION,  
  NEWCARRIER=2,NEWCALLTYPECODE=NULL,  
  ALTPARAMVALUE=NULL,NEXTDGTMODKEY=NULL"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-FAILCND

Commands:

DLT-PRFL-FAILCND: Delete Profile Failure Condition

ED-PRFL-FAILCND: Edit Profile Failure Condition

ENT-PRFL-FAILCND: Enter Profile Failure Condition

RTRV-PRFL-FAILCND: Retrieve Profile Failure Condition

Descriptions:

DLT-PRFL-FAILCND lets the user delete a failure condition profile from the system.

ED-PRFL-FAILCND lets the user change a failure condition profile. Use ED-PRFL-FAILCND to change the action taken on encountering a specific failure condition, and either the treatment or the release cause identifier.

ENT-PRFL-FAILCND lets the user establish a failure condition profile that determines the action taken (release the call with an error message or provide some sort of treatment) on encountering a specific failure condition. The Plexus 9000 supports up to 10 failure condition profiles.

RTRV-PRFL-FAILCND lets the user retrieve the properties of a failure condition profile.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-FAILCND: [TID]:<failCndAid>:[CTAG];

ED-PRFL-FAILCND: [TID]:<failCndAid>:[CTAG]::
[FAILTYPE=<failtype>],[TREATMENT=<treatment>],
[RELEASE=<release>];

ENT-PRFL-FAILCND: [TID]:<failCndAid>:[CTAG]::
FAILTYPE=<failtype>,[TREATMENT=<treatment>],
[RELEASE=<release>];

RTRV-PRFL-FAILCND: [TID]: [<failCndAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<failCndAid>:FAILTYPE=<failtype>,
    TREATMENT=<treatment>,RELEASE=<release>"
;
```

Parameters:

failCndAid Identifies the AID as a failure condition profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all failure condition profiles configured in the system will be returned. Specifying just the first part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the subsequent fields blank, the system returns all configured failure conditions and associated protocols for the designated profile.

Type: string

Range: <failCndPrfl>[-<cnd>[-<prtcl>]], where

failCndPrfl identifies the name of the failure condition profile with a string of up to 10 alphanumeric characters. The DEFAULT profile shows the factory default settings and cannot be edited or deleted.

cnd identifies the name of the failure condition with a string of up to 21 alphanumeric characters.

prtcl identifies the incoming protocol type, with values of:

BICC = BICC trunk
CASIF = CAS interface
CASTRK = CAS trunk
GR303 = GR303 interface
ISDNIF = ISDN interface
ISUP = ISUP trunk
MGCP = MGCP interface
SIP = SIP trunk

Default value: none

failType Identifies whether the failure condition yields a release cause or a treatment.

Type: enum

Range: RELEASE
TREAT

Default value: RELEASE

treatment Identifies the name of the previously-defined treatment, but only when the value of *failType* is “TREAT”. The value cannot be “NULL” when the value of *failType* is “TREAT”.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

release Identifies the name of the release cause, but only when the value of *failType* is “RELEASE”. The value cannot be “NULL” when the value of *failType* is “RELEASE”.

Type: string

Range: <rlsCause>-<rlsLoc>-<rlsStd>, where

rlsCause identifies the protocol-dependent release cause value with an integer from 1-127

rlsLoc identifies the location value to set in the cause value, with values of:

INTNET = International network

LOCALIF = Local interface

NETINTER = Network beyond interworking point

NOINFOAV = No information available

PRIVNETLU = Private network serving the local user

PRIVNETRU = Private network serving the remote user

PUBNETLU = Public network serving the local user

PUBNETRU = Public network serving the remote user

TRANNET = Transit network

USER = User

rlsStd identifies the reference standard to use when generating the release cause code. Refer to GR246 for definitions of these codes. Values are ANSI and CCITT.

Default value: NULL

Input Examples:

```
DLT-PRFL-FAILCND::DEFAULT-NORMAL_CLRG-ISUP;  
ED-PRFL-FAILCND::DEFAULT-NORMAL_CLRG-ISUP:::  
    FAILTYPE=RELEASE, RELEASE=16-CCITT;  
ENT-PRFL-FAILCND::DEFAULT-NORMAL_CLRG-ISUP:::  
    FAILTYPE=RELEASE, RELEASE=16-CCITT;  
RTRV-PRFL-FAILCND::DEFAULT;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"DEFAULT-REQ_CHAN_NAVAIL-SIP:FAILTYPE=RELEASE,
  TREATMENT=NULL,RELEASE=44-CCITT"
"DEFAULT-REQ_CHAN_NAVAIL-BICC:FAILTYPE=RELEASE,
  TREATMENT=NULL,RELEASE=44-CCITT"
"DEFAULT-NORMAL_CLRG-ISUP:FAILTYPE=RELEASE,
  TREATMENT=NULL,RELEASE=16-CCITT"
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-TREATMENT
RTRV-FAILCND
```

DLT/ED/ENT/RTRV-PRFL-FRAUDTRAP

Commands:

DLT-PRFL-FRAUDTRAP: Delete Profile Fraud Trap

ED-PRFL-FRAUDTRAP: Edit Profile Fraud Trap

ENT-PRFL-FRAUDTRAP: Enter Profile Fraud Trap

RTRV-PRFL-FRAUDTRAP: Retrieve Profile Fraud Trap

Descriptions:

DLT-PRFL-FRAUDTRAP lets the user delete a fraud trap profile from the system.

ED-PRFL-FRAUDTRAP lets the user change a fraud trap profile that defines how the Plexus 9000 behaves when encountering a fraud scenario. Use ED-PRFL-FRAUDTRAP to change the action taken on encountering a specific failure condition, and either the treatment or the release cause identifier.

ENT-PRFL-FRAUDTRAP lets the user establish a fraud trap profile that defines how the Plexus 9000 behaves when encountering a fraud scenario. The Plexus 9000 can release the call and generate an informational log after a specified duration; it can also create a zero length CDR to track the existence of the call.

RTRV-PRFL-FRAUDTRAP lets the user retrieve the properties of a fraud trap profile.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-PRFL-FRAUDTRAP:[TID]:<fraudTrapPrfl>:[CTAG];  
ED-PRFL-FRAUDTRAP:[TID]:<fraudTrapPrfl>:[CTAG]::  
    [DURATION=<duration>],[LOG=<log>],  
    [ZERODURCDR=<zeroDurCdr>],[RLSCALL=<rlsCall>];  
ENT-PRFL-FRAUDTRAP:[TID]:<fraudTrapPrfl>:[CTAG]::  
    [DURATION=<duration>],[LOG=<log>],  
    [ZERODURCDR=<zeroDurCdr>],[RLSCALL=<rlsCall>];  
RTRV-PRFL-FRAUDTRAP:[TID]:[<fraudTrapPrfl>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<fraudTrapPrfl>:[CTAG]::DURATION=<duration>,
    LOG=<log>,ZERODURCDR=<zeroDurCdr>,
    RLSCALL=<rlsCall>"
;
```

Parameters:

fraudTrapPrfl Identifies the AID as a fraud trap profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all fraud trap profiles configured in the system will be returned.

Type: string

Range: up to 10 alphanumeric characters

Default value: none

duration Identifies the duration for the fraud trap.

Type: string

Range: <durationVal>-<units>, where

durationVal identifies the duration value for the fraud trap as an integer from 1-3600

units identifies unit of time for the duration value, with values of DAY, HR, MIN, or SEC

Default value: NULL

log Identifies whether to generate an informational log when the duration timer expires.

Type: BoolYN

Range: N = do not generate an informational log on timer expiry

Y = generate an informational log on timer expiry

Default value: N

zeroDurCdr Identifies whether to generate a zero duration CDR with appropriate flag when the duration timer expires.

Type: BoolYN

Range: N = do not generate a zero duration CDR with appropriate flag on timer expiry

Y = generate a zero duration CDR with appropriate flag on timer expiry

Default value: N

rlsCall Identifies whether to automatically release the call when the duration timer expires.

Type: BoolYN

Range: N = do not automatically release the call on timer expiry
Y = automatically release the call on timer expiry

Default value: N

Input Examples:

```
DLT-PRFL-FRAUDTRAP::TRAPPRFL1;  
ED-PRFL-FRAUDTRAP::TRAPPRFL1:::DURATION=30-MIN,  
LOG=N,ZERODURCDR=N,RLSCALL=N;  
ENT-PRFL-FRAUDTRAP::TRAPPRFL1:::DURATION=30-MIN,  
LOG=N,ZERODURCDR=N,RLSCALL=N;  
RTRV-PRFL-FRAUDTRAP::TRAPPRFL1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"TRAPPRFL1:DURATION=30-MIN,LOG=N,ZERODURCDR=N,  
RLSCALL=N"  
;
```

Related Commands:

RTRV-FRAUDCALLS

DLT/ED/ENT/RTRV-PRFL-PARAMDEFAULTS

Commands:

DLT-PRFL-PARAMDEFAULTS: Delete Profile Failure Condition

ED-PRFL-PARAMDEFAULTS: Edit Profile Parameter Defaults

ENT-PRFL-PARAMDEFAULTS: Enter Profile Parameter Defaults

RTRV-PRFL-PARAMDEFAULTS: Retrieve Profile Parameter Defaults

Descriptions:

DLT-PRFL-PARAMDEFAULTS lets the user delete a parameter defaults profile from the system.

ED-PRFL-PARAMDEFAULTS lets the user change a parameter defaults profile. Use ED-PRFL-PARAMDEFAULTS to change the default values for message blocks when different protocols affect a trunk group.

ENT-PRFL-PARAMDEFAULTS lets the user establish a parameter defaults profile that provides default values for all message blocks when different protocols affect a trunk group.

RTRV-PRFL-PARAMDEFAULTS lets the user retrieve the properties of a parameter defaults profile.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-PARAMDEFAULTS: [TID]:<paramDefaultsAid>:
[CTAG];

ED-PRFL-PARAMDEFAULTS: [TID]:<paramDefaultsAid>:
[CTAG]: : [CHRGN=<chrgn>], [CDPN=<cdpn>],
[CGPN=<cgpn>], [OLI=<oli>], [TNS=<tns>], [CIP=<cip>],
[JIP=<jip>], [CALLTYPE=<calltype>], [CSI=<csi>];

ENT-PRFL-PARAMDEFAULTS: [TID]:<paramDefaultsAid>:
[CTAG]: : [CHRGN=<chrgn>], [CDPN=<cdpn>],
[CGPN=<cgpn>], [OLI=<oli>], [TNS=<tns>], [CIP=<cip>],
[JIP=<jip>], [CALLTYPE=<calltype>], [CSI=<csi>];

RTRV-PRFL-PARAMDEFAULTS: [TID]: [<paramDefaultsAid>]:
[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<paramDefaultsAid>:CHRGN=<chrgn>,CDPN=<cdpn>,
    CGPN=<cgpn>,OLI=<oli>,TNS=<tns>,CIP=<cip>,
    JIP=<jip>,CALLTYPE=<calltype>,CSI=<csi>"
;
```

Parameters:

paramDefaultsAid Identifies the AID as a parameter defaults profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all parameter defaults profiles configured in the system will be returned.

Type: string

Range: up to 10 alphanumeric characters

Default value: none

chrgn Identifies the default values for the charge number parameter.

Type: string

Range: <action>-<chrgnai>-<nمبر>, where

action identifies whether to use the value entered by this command, with values of:

DEFAULT = when the parameter is not present,
create it and use entered value

OVERRIDE = use entered value only when the
parameter is present

chrgnai identifies the charge number nature of address
indicator, with values of:

CDPNATNUM = ANI of the called party;
national number

CDPSUBSNUM = ANI of the called party;
subscriber number

CDPUNAVAIL = ANI of the called party; no
number present

CGPNATNUM = ANI of the calling party;
national number

CGPSUBSNUM = ANI of the calling party;
subscriber number

UNAVAIL = ANI not available or not provided

nمبر identifies the DN for the charge number with a string of
1-31 digits.

Default value: NULL

cdpn Identifies the default values for the called party number parameter.

Type: string

Range: <action>-<cdnai>-<nbr>, where

action identifies whether to use the value entered by this command, with values of:

DEFAULT = use entered value only when the parameter is not present

OVERRIDE = use entered value regardless of parameter presence

cdnai identifies the called party number nature of address indicator, with values of:

ABBREVPVT = abbreviated private

INTNATNUM = international number

INTNATOPREQ = international operator request

NATNUM = national significant number

NATOPREQ = national (long-distance) operator request

NONUMCUTTHRU = no number provided, cut through to carrier

NONUMOPREQ = no number provided, operator request

SUBOPREQ = subscriber (local) operator request

SUBSNUM = subscriber number

TESTLINE = test line test code

UNKNOWN = unknown

nbr identifies the DN for the called party number with a string of 1-31 digits.

Default value: NULL

- cgpn** Identifies the default values for the calling party number parameter.
- Type:** string
- Range:** <action>-<cgnai>-<pres>-<nubr>, where
- action* identifies whether to use the value entered by this command, with values of:
 - DEFAULT = use entered value only when the parameter is not present
 - OVERRIDE = use entered value regardless of parameter presence
 - cgnai* identifies the called party number nature of address indicator, with values of:
 - ABBREVPVT = abbreviated private
 - NUNIINTNATNUM = non-unique international number
 - NUNINATNUM = non-unique national number
 - NUNISUBSNUM = non-unique subscriber number
 - TESTLINE = test line test code
 - UNIINTNATNUM = unique international number
 - UNINATNUM = unique national number
 - UNISUBSNUM = unique subscriber number
 - pres* identifies whether address presentation is allowed, with values of:
 - ALLOWED = address presentation is allowed
 - RESTRICTED = address presentation is not allowed
 - nubr* identifies the DN for the calling party number with a string of 1-31 digits.
- Default value:** NULL
-
- oli** Identifies the default values for the Originating Line Information parameter.
- Type:** string
- Range:** <action>-<oliVal>, where
- action* identifies whether to use the value entered by this command, with values of:
 - DEFAULT = use entered value only when the parameter is not present
 - OVERRIDE = use entered value regardless of parameter presence
 - oliVal* identifies the value for the Originating Line Information parameter with a hexadecimal string from 00-FF
- Default value:** NULL

- tns** Identifies the default values for the Transit Network Selection parameter.
- Type:** string
- Range:** <action>-<carrierCode>-<callTypeCode>, where
- action* identifies whether to use the value entered by this command, with values of:
 - DEFAULT = use entered value only when the parameter is not present
 - OVERRIDE = use entered value regardless of parameter presence
 - carrierCode* identifies the value for the inserted carrier portion of the TNS parameter with an integer from 0-9999
 - callTypeCode* identifies the value for the inserted circuit code portion of the TNS parameter with an integer from 0-255
- Default value:** NULL
-
- cip** Identifies the default values for the Carrier Information Parameter.
- Type:** string
- Range:** <action>-<cipVal>, where
- action* identifies whether to use the value entered by this command, with values of:
 - DEFAULT = use entered value only when the parameter is not present
 - OVERRIDE = use entered value regardless of parameter presence
 - cipVal* identifies the value for the Carrier Information Parameter with an integer from 0-9999
- Default value:** NULL
-
- jip** Identifies the default values for the Jurisdiction Information Parameter.
- Type:** string
- Range:** <action>-<jipVal>, where
- action* identifies whether to use the value entered by this command, with values of:
 - DEFAULT = use entered value only when the parameter is not present
 - OVERRIDE = use entered value regardless of parameter presence
 - jipVal* identifies the value for the Jurisdiction Information Parameter with an integer from 200000-999999
- Default value:** NULL

callType Identifies the type of call (Class 5).

Type: enum

Range: CUTTHRU
DIR_ASSISTANCE
EMERGENCY
INTERLATA
INTERLATAOPREQ
INTNATNUM
INTNATOPREQ
INTRALATA
LOCALNUMBER
LOCALOPREQ
N11
NATNUM
NONUMOPREQ
TOLLFREE

Default value: NULL

csi Identifies the default values for the Carrier Selection Information parameter.

Type: string

Range: <action>-<csiVal>, where

action identifies whether to use the value entered by this command, with values of:

DEFAULT = use entered value only when the parameter is not present

OVERRIDE = use entered value regardless of parameter presence

csiVal identifies the value for the Carrier Selection Information parameter with values of:

PRESUBDIAL = presubscribed and input by calling party

PRESUBNOTDIAL = presubscribed and not input by calling party

PRESUBUNKNOWN = presubscribed, input by calling party undetermined

NOTPRESUB = not presubscribed and input by calling party

UNKNOWN = no indication

Default value: NULL

Input Examples:

```
DLT-PRFL-PARAMDEFAULTS::DFLTPRFL1;

ED-PRFL-PARAMDEFAULTS::DFLTPRFL1:::
  CHRGN=DEFAULT-CDPNATNUM-5084800909,
  CDPN=DEFAULT-NATNUM-5084800909,
  CGPN=DEFAULT-NUNINATNUM-ALLOWED-5088048202,
  OLI=DEFAULT-2F, TNS=DEFAULT-1-1, CIP=DEFAULT-1,
  JIP=DEFAULT-508804, CALLTYPE=LOCALNUMBER,
  CSI=DEFAULT-PRESUBDIAL;

ENT-PRFL-PARAMDEFAULTS::DFLTPRFL1:::
  CHRGN=DEFAULT-CDPNATNUM-5084800909,
  CDPN=DEFAULT-NATNUM-5084800909,
  CGPN=DEFAULT-NUNINATNUM-ALLOWED-5088048202,
  OLI=DEFAULT-2F, TNS=DEFAULT-1-1, CIP=DEFAULT-1,
  JIP=DEFAULT-508804, CALLTYPE=LOCALNUMBER,
  CSI=DEFAULT-PRESUBDIAL;

RTRV-PRFL-PARAMDEFAULTS::DFLTPRFL1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"DFLTPRFL1:CHRGN=DEFAULT-CDPNATNUM-5084800909,
  CDPN=DEFAULT-NATNUM-5084800909,
  CGPN=DEFAULT-NUNINATNUM-ALLOWED-5088048202,
  OLI=DEFAULT-2F, TNS=DEFAULT-1-1, CIP=DEFAULT-1,
  JIP=DEFAULT-508804, CALLTYPE=LOCALNUMBER,
  CSI=DEFAULT-PRESUBDIAL, REG=NULL "
;
```

Related Commands:

DLT/ED/ENT/RTRV-PRFL-PARAMSUPPRESS

DLT/ED/ENT/RTRV-PRFL-PARAMSUPPRESS

Commands:

DLT-PRFL-PARAMSUPPRESS: Delete Profile Parameter Suppression

ED-PRFL-PARAMSUPPRESS: Edit Profile Parameter Suppression

ENT-PRFL-PARAMSUPPRESS: Enter Profile Parameter Suppression

RTRV-PRFL-PARAMSUPPRESS: Retrieve Profile Parameter Suppression

Descriptions:

DLT-PRFL-PARAMSUPPRESS lets the user delete a parameter suppression profile from the system. You cannot delete a parameter suppression profile specified as the value for *icParamSuppressPrfl* or *ogParamSuppressPrfl* in ENT-TRKGRP.

ED-PRFL-PARAMSUPPRESS lets the user change a parameter suppression profile. Use ED-PRFL-PARAMSUPPRESS to change which of the various call parameters are suppressed (that is, not sent) in an outgoing IAM.

ENT-PRFL-PARAMSUPPRESS lets the user establish a parameter suppression profile that determines the combination of parameters suppressed (that is, not sent) in an outgoing IAM. IAM parameters apply to signaling protocols as designated in the following table:

	ISUP	BICC	SIP	CAS
chrgn	X	X	X	X
cgpn	X	X	X	
oli	X	X	X	X
tns	X	X	X	X
cip	X	X	X	
jip	X	X	X	
gap	X	X		
gendgts	X	X		
hopCntr	X	X		
redirInfo	X	X	X	
redirNmbr	X	X	X	
ocn	X	X	X	

RTRV-PRFL-PARAMSUPPRESS lets the user retrieve the properties of a parameter suppression profile.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-PRFL-PARAMSUPPRESS:[TID]:<suppressPrflId>:[CTAG];  
ED-PRFL-PARAMSUPPRESS:[TID]:<suppressPrflId>:[CTAG]::  
    [CHRGN=<chrgn>],[CGPN=<cgpn>],[OLI=<oli>],  
    [TNS=<tns>],[CIP=<cip>],[JIP=<jip>],[GAP=<gap>],  
    [GENDGTS=<gendgts>],[HOPCNTR=<hopCntr>],  
    [REDIRINFO=<redirInfo>],[REDIRNMBR=<redirNmbr>],  
    [OCN=<ocn>];  
ENT-PRFL-PARAMSUPPRESS:[TID]:<suppressPrflId>:[CTAG]::  
    [CHRGN=<chrgn>],[CGPN=<cgpn>],[OLI=<oli>],  
    [TNS=<tns>],[CIP=<cip>],[JIP=<jip>],[GAP=<gap>],  
    [GENDGTS=<gendgts>],[HOPCNTR=<hopCntr>],  
    [REDIRINFO=<redirInfo>],[REDIRNMBR=<redirNmbr>],  
    [OCN=<ocn>];  
RTRV-PRFL-PARAMSUPPRESS:[TID]:[<suppressPrflId>]:  
    [CTAG];
```

Output Format:

```
    SID DATE TIME  
M    CTAG COMPLD  
    "<suppressPrflId>:CHRGN=<chrgn>,CGPN=<cgpn>,  
    OLI=<oli>,TNS=<tns>,CIP=<cip>,JIP=<jip>,  
    GAP=<gap>,GENDGTS=<gendgts>,HOPCNTR=<hopcntr>,  
    REDIRINFO=<redirinfo>,REDIRNMBR=<redirnmbr>,  
    OCN=<ocn>"  
    ;
```

Parameters:

suppressPrflId Identifies the AID as a parameter suppression profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all parameter suppression profiles configured in the system will be returned.

Type: string

Range: up to 10 alphanumeric characters

Default value: none

chrgn	Identifies whether the charge number parameter is suppressed (not sent) in outgoing IAMs. Type: BoolYN Range: Y = suppress (do not send) parameter N = do not suppress parameter Default value: N
cgpn	Identifies whether the calling party number parameter is suppressed (not sent) in outgoing IAMs. Type: BoolYN Range: Y = suppress (do not send) parameter N = do not suppress parameter Default value: N
oli	Identifies whether the Originating Line Information parameter is suppressed (not sent) in outgoing IAMs. Type: BoolYN Range: Y = suppress (do not send) parameter N = do not suppress parameter Default value: N
tns	Identifies whether the Transit Network Selection parameter is suppressed (not sent) in outgoing IAMs. Type: BoolYN Range: Y = suppress (do not send) parameter N = do not suppress parameter Default value: N
cip	Identifies whether the Carrier Information Parameter is suppressed (not sent) in outgoing IAMs. Type: BoolYN Range: Y = suppress (do not send) parameter N = do not suppress parameter Default value: N
jip	Identifies whether the Jurisdiction Information Parameter is suppressed (not sent) in outgoing IAMs. Type: BoolYN Range: Y = suppress (do not send) parameter N = do not suppress parameter Default value: N

- gap** Identifies the type of generic address parameter suppressed (not sent) in outgoing IAMs. You can specify up to 10 generic addresses, separated by ampersands (&). Use “DEFAULT” to specify all generic addresses.
- Type:** string
Range: {0-255}
DEFAULT
NULL
Default value: NULL
- genDgts** Identifies the type of generic digits parameter suppressed (not sent) in outgoing IAMs. You can specify up to 10 generic digits, separated by ampersands (&). Use “DEFAULT” to specify all generic addresses.
- Type:** string
Range: {0-31}
DEFAULT
NULL
Default value: NULL
- hopCntr** Identifies whether the hop counter value (that is, the allowable number of switches traversed in the call route is suppressed (not sent) in outgoing IAMs.
- Type:** BoolYN
Range: Y = suppress (do not send) value
N = do not suppress value
Default value: N
- redirInfo** Identifies whether the redirecting information (the redirecting subaddress for ISDN interfaces) is suppressed (not sent) in outgoing IAMs.
- Type:** BoolYN
Range: Y = suppress (do not send) redirecting information
N = do not suppress redirecting information
Default value: N
- redirNmbr** Identifies whether the redirecting number for ISDN interfaces is suppressed (not sent) in outgoing IAMs.
- Type:** BoolYN
Range: Y = suppress (do not send) redirecting number
N = do not suppress redirecting number
Default value: N

ocn Identifies whether the Originating Called party Number parameter is suppressed (not sent) in outgoing IAMs.

Type: BoolYN

Range: Y = suppress (do not send) parameter
N = do not suppress parameter

Default value: N

Input Examples:

```
DLT-PRFL-PARAMSUPPRESS::PRFL1;
```

```
ED-PRFL-PARAMSUPPRESS::PRFL1:::CHRG=N,CGPN=N,OLI=N,  
TNS=N,CIP=N,JIP=N,GAP=NULL,GENDGTS=NULL,HOPCNTR=N,  
REDIRINFO=N,REDIRNMBR=N,OCN=N;
```

```
ENT-PRFL-PARAMSUPPRESS::PRFL1:::CHRG=N,CGPN=N,OLI=N,  
TNS=N,CIP=N,JIP=N,GAP=NULL,GENDGTS=NULL,HOPCNTR=N,  
REDIRINFO=N,REDIRNMBR=N,OCN=N;
```

```
RTRV-PRFL-PARAMSUPPRESS::PRFL1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"PRFL1:CHRG=N,CGPN=N,OLI=N,TNS=N,CIP=N,JIP=N,  
GAP=NULL,GENDGTS=NULL,HOPCNTR=N,REDIRINFO=N,  
REDIRNMBR=N,OCN=N"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-PRFL-PARAMDEFAULTS
```

DLT/ED/ENT/RTRV-PRFL-SCHED

Commands:

DLT-PRFL-SCHED: Delete Profile Schedule

ED-PRFL-SCHED: Edit Profile Schedule

ENT-PRFL-SCHED: Enter Profile Schedule

RTRV-PRFL-SCHED: Retrieve Profile Schedule

Descriptions:

DLT-PRFL-SCHED lets the user delete a profile for a routing schedule from the system.

ED-PRFL-SCHED lets the user change the days, dates, and times applicable to a profile for a routing schedule. The edit command fails when the edit results in two conflicting schedules for the same profile.

ENT-PRFL-SCHED lets the user establish the days, dates, and times for which a profile applies to a routing schedule.

RTRV-PRFL-SCHED lets the user retrieve the days, dates, and times applicable to a profile for a routing schedule.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-SCHED: [TID]:<prflName>:[CTAG];

ED-PRFL-SCHED: [TID]:<prflName>:[CTAG]::[SUN=<sun>],
[MON=<mon>], [TUE=<tue>], [WED=<wed>], [THU=<thu>],
[FRI=<fri>], [SAT=<sat>], [DATE1=<date1>],
[DATE2=<date2>], [DATE3=<date3>], [DATE4=<date4>],
[DATE5=<date5>], [DATE6=<date6>], [DATE7=<date7>],
[DATE8=<date8>], [DATE9=<date9>], [DATE10=<date10>],
[DATE11=<date11>], [DATE12=<date12>], [TIME=<time>];

ENT-PRFL-SCHED: [TID]:<prflName>:[CTAG]::[SUN=<sun>],
[MON=<mon>], [TUE=<tue>], [WED=<wed>], [THU=<thu>],
[FRI=<fri>], [SAT=<sat>], [DATE1=<date1>],
[DATE2=<date2>], [DATE3=<date3>], [DATE4=<date4>],
[DATE5=<date5>], [DATE6=<date6>], [DATE7=<date7>],
[DATE8=<date8>], [DATE9=<date9>], [DATE10=<date10>],
[DATE11=<date11>], [DATE12=<date12>], [TIME=<time>];

RTRV-PRFL-SCHED:[TID]:[<prflName>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<prflName>:[SUN=<sun>],[MON=<mon>],[TUE=<tue>],
[WED=<wed>],[THU=<thu>],[FRI=<fri>],[SAT=<sat>],
[DATE1=<date1>],[DATE2=<date2>],[DATE3=<date3>],
[DATE4=<date4>],[DATE4=<date5>],[DATE5=<date6>],
[DATE6=<date7>],[DATE8=<date8>],[DATE9=<date9>],
[DATE10=<date10>],[DATE11=<date11>],
[DATE12=<date12>],[TIME=<time>]"
;
```

Parameters:

prflName Identifies the AID as a profile for a routing schedule. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all routing schedule profiles configured in the system will be returned.

Type: string

Range: up to 20 alphanumeric characters

Default value: none

sun Identifies the time period on Sundays during which the routing schedule is active. Multiple time periods are separated by ampersands ("&"). Time periods are currently represented by whole hours only; the only valid number for minutes is "00". Enter the default "NULL" to remove the day from the profile.

Type: enum

Range: {00-23}{00-59}-{00-23}{00-59}

Default value: NULL

mon Identifies the time period on Mondays during which the routing schedule is active. Multiple time periods are separated by ampersands ("&"). Time periods are currently represented by whole hours only; the only valid number for minutes is "00". Enter the default "NULL" to remove the day from the profile.

Type: enum

Range: {00-23}{00-59}-{00-23}{00-59}

Default value: NULL

- tue** Identifies the time period on Tuesdays during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by whole hours only; the only valid number for minutes is “00”. Enter the default “NULL” to remove the day from the profile.
- Type:** enum
Range: {00-23}{00-59}-{00-23}{00-59}
Default value: NULL
- wed** Identifies the time period on Wednesdays during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by whole hours only; the only valid number for minutes is “00”. Enter the default “NULL” to remove the day from the profile.
- Type:** enum
Range: {00-23}{00-59}-{00-23}{00-59}
Default value: NULL
- thu** Identifies the time period on Thursdays during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by whole hours only; the only valid number for minutes is “00”. Enter the default “NULL” to remove the day from the profile.
- Type:** enum
Range: {00-23}{00-59}-{00-23}{00-59}
Default value: NULL
- fri** Identifies the time period on Fridays during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by whole hours only; the only valid number for minutes is “00”. Enter the default “NULL” to remove the day from the profile.
- Type:** enum
Range: {00-23}{00-59}-{00-23}{00-59}
Default value: NULL
- sat** Identifies the time period on Saturdays during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by whole hours only; the only valid number for minutes is “00”. Enter the default “NULL” to remove the day from the profile.
- Type:** enum
Range: {00-23}{00-59}-{00-23}{00-59}
Default value: NULL

- date1** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date2** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date3** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date4** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date5** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date6** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL

- date7** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date8** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date9** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date10** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date11** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL
- date12** Identifies a date, by month and day of month (two digits each), on which the routing schedule is active. Enter the default “NULL” to remove the date from the profile.
Type: enum
Range: {01-12}-{01-31}
Default value: NULL

time Identifies a time period, on the dates represented by *date1* through *date12*, during which the routing schedule is active. Multiple time periods are separated by ampersands (“&”). Time periods are currently represented by whole hours only; the only valid number for minutes is “00”.

Type: enum

Range: {00-23}{00-59}-{00-23}{00-59}

Default value: NULL

Input Examples:

```
DLT-ROUTE-N11::PROFILE1;
```

```
ED-PRFL-SCHED::PROFILE1::MON=0800-1900,TUE=0800-1900,  
WED=0800-1900,THU=0800-1900,FRI=0800-1900,  
SAT=0900-1200&1300-1700;
```

```
ED-PRFL-SCHED::PROFILE2::DATE1=01-01,DATE2=07-04,  
DATE3=10-31,TIME=0900-1200&1300-1700;
```

```
ENT-PRFL-SCHED::PROFILE1::MON=0800-1900,  
TUE=0800-1900,WED=0800-1900,THU=0800-1900,  
FRI=0800-1900,SAT=0900-1200&1300-1700;
```

```
ENT-PRFL-SCHED::PROFILE2::DATE1=01-01,DATE2=07-04,  
DATE3=10-31,TIME=0900-1200&1300-1700;
```

```
RTRV-PRFL-SCHED;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"PROFILE1:MON=0800-1900,TUE=0800-1900,  
WED=0800-1900,THU=0800-1900,FRI=0800-1900,  
SAT=0900-1200&1300-1700"  
"PROFILE2:DATE1=01-01,DATE2=07-04,DATE3=10-31,  
TIME=0900-1200&1300-1700"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-ROUTE

Commands:

DLT-ROUTE: Delete Route

ED-ROUTE: Edit Route

ENT-ROUTE: Enter Route

RTRV-ROUTE: Retrieve Route

Descriptions:

DLT-ROUTE lets the user delete a route from the system.

ED-ROUTE lets the user change the properties of a route; that is, a member of a named list of trunk groups or interfaces. Each route is a member of a route list, and this command enables adding trunk groups, line interfaces or other route lists to the parent route list. There is no limit on the number of times a trunk group can appear in different routes. Use ED-ROUTE to change either the interface type for the route or the route list to which the route points, the digit modification used to change parameters that reach this route, and the relative priority for the route.

ENT-ROUTE lets the user establish an outgoing route; that is, a member of a named list of trunk groups or interfaces. Each route is a member of a route list, and this command enables adding trunk groups, line interfaces or other route lists to the parent route list. There is no limit on the number of times a trunk group can appear in different routes. ENT-ROUTE will not work unless ENT-ROUTE-LIST has already been issued.

RTRV-ROUTE lets the user retrieve the properties of a route; that is, a member of a named list of trunk groups or interfaces.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-ROUTE: [TID]:<rtId>:[CTAG];

ED-ROUTE: [TID]:<rtId>:[CTAG]::[BGN=<bgn>],
[RTLST=<rtList>],[DGTMODKEY=<dgtModKey>],
[WEIGHT=<weight>];

ENT-ROUTE: [TID]:<rtId>:[CTAG]::[BGN=<bgn>],
[RTLST=<rtList>],[DGTMODKEY=<dgtModKey>],
[WEIGHT=<weight>];

RTRV-ROUTE: [TID]:[<rtId>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<rtId>:BGN=<bgn>,RTLST=<rtList>,
    DGTMODKEY=<dgtModKey>,WEIGHT=<weight>"
;
```

Parameters:

rtId Identifies the AID as a route with a string of up to 20 characters indicating the name of a route list in which the route is listed, and an associated index. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all routes configured in the system will be returned. A null value for the associated index (in RTRV) will return all routes for the given route list name.

Type: RtId

Range: <rtList>[-<index>], where

rtList identifies the name of the applicable route list with a string of 1-20 characters;

index identifies the particular route in the applicable route list as an integer between zero and 32767.

Default value: none

bgn Identifies a previously defined bearer group, and its type, to associate with the route. You can enter a value for this parameter only when the value for the parameter *rtList* is "NULL". A bearer group can be entered more than once in a route list, and can exist in multiple route lists.

Type: string

Range: <bgnType>-<bgnNum>, where

bgnType identifies the type of bearer group, a previously provisioned interface, with values of:

CASIF = CAS interface

GR303 = GR303 interface

ISDNIF = ISDN interface

MGCP = MGCP interface

TGN = BICC, CAS, ISUP, or SIP trunk

bgnNum identifies the bearer group, with values of:

CASIF: 1-2147483645

GR303: 1-32767

ISDNIF: 1-32767

MGCP: 1-100000

TGN: 1-9999

Default value: NULL

rtList Identifies a previously defined route list (for which the value of the parameter *alloc* is not “TIMEOFDAY”) to associate with the route. You can enter a value for this parameter only when the value for the parameter *bgn* is “NULL”.

Type: string

Range: 1-20 alphanumeric characters

Default value: NULL

dgtModKey Identifies, when the value of *treatType* is “REROUTE”, the previously defined digit modification table and associated primary key used to change parameters for the route.

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

weight Identifies the relative priority for the route, with a higher number indicating a greater priority, when the hunting method assigned to the route list (through *alloc* in ROUTE-LIST) is “DISTRIBUTION”.

Type: integer

Range: {0-100}

Default value: 10

Input Examples:

```
DLT-ROUTE::RTL1ST1-1;  
ED-ROUTE::RTL1ST1-1:::BGN=TGN-1;  
ENT-ROUTE::RTL1ST1-1:::BGN=TGN-1;  
RTRV-ROUTE::RTL1ST1-1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"RTL1ST1-1:BGN=TGN-1,RTL1ST=NULL,DGTMODKEY=NULL,  
WEIGHT=NULL"  
;
```

Related Commands:

DLT/ED/ENT/RTRV-ROUTE-LIST

DLT/ED/ENT/RTRV-ROUTE-DIGITS

Commands:

DLT-ROUTE-DIGITS: Delete Route Digits

ED-ROUTE-DIGITS: Edit Route Digits

ENT-ROUTE-DIGITS: Enter Route Digits

RTRV-ROUTE-DIGITS: Retrieve Route Digits

Descriptions:

ROUTE-DIGITS determined the method for routing. It specifies a matching criterion for routing and what actions or destinations to use once a match is found. The following terminations are supported:

- A route list, in which case the call is offered to the routes in the route list according to the allocation method specified on the route list
- A treatment
- A new partition and key (digit modification), in which case routing with the designated call parameters starts on the specified partition and key
- A new translation plan, in which case only the routing portions of the translation plan take effect

Multiple screening and digit modification operations can be specified as part of the ROUTE-DIGITS command. These can be used to either change the parameters on termination, or to change the parameters before going to a new partition or translation plan.

DLT-ROUTE-DIGITS lets the user delete a routing method.

ED-ROUTE-DIGITS lets the user change a routing method. Use ED-ROUTE-DIGITS to modify the primary, secondary, and tertiary values applicable to the specified parameter (primary key) in the routing database table to which the routing method applies; the routing destination, the action taken as a result of routing; the minimum and maximum costs of the outgoing trunk group; and whether calls getting to this route are re-routed on call setup failure on a downstream switch.

ENT-ROUTE-DIGITS lets the user establish a routing method. Use this command to define the name of the routing database table; the parameter (primary key) to which the routing method applies; the primary, secondary, and tertiary values applicable to the specified parameter; the routing destination, the action taken as a result of routing; the minimum and maximum costs of the outgoing trunk group; and whether calls getting to this route are re-routed on call setup failure on a downstream switch.

RTRV-ROUTE-DIGITS lets the user retrieve the properties associated with a routing method. Use RTRV-ROUTE-DIGITS to retrieve the name of the routing database table; the parameter (primary key) to which the routing method applies; the primary, secondary, and tertiary values applicable to the specified parameter; the routing destination, the action taken as a result of routing; the minimum and maximum costs of the outgoing trunk group; and whether calls getting to this route are re-routed on call setup failure on a downstream switch.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-ROUTE-DIGITS:[TID]:<rtDigitsAid>:[CTAG];
ED-ROUTE-DIGITS:[TID]:<rtDigitsAid>:[CTAG]::
    [RTDEST=<rtDest>],[ACTN=<actn>],
    [MINCOST=<mincost>],[MAXCOST=<maxcost>],
    [REROUTE=<reRoute>];
ENT-ROUTE-DIGITS:[TID]:<rtDigitsAid>:[CTAG]::
    RTDEST=<rtDest>,[ACTN=<actn>],[MINCOST=<mincost>],
    [MAXCOST=<maxcost>],[REROUTE=<reRoute>];
RTRV-ROUTE-DIGITS:[TID]:[<rtDigitsAid>]:[CTAG];
```

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<rtDigitsAid>:RTDEST=<rtDest>,ACTN=<actn>,
      MINCOST=<minCost>,MAXCOST=<maxcost>,
      REROUTE=<reroute>"
;
```

Parameters:

rtDigitsAid Identifies the AID as a routing method. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all routing methods configured in the system will be returned.

Type: DgtScrnAid

Range: <rtLbl>[-<primKey>[-<primKeyValue>
[-<secKeyValue>[-<terKeyValue>]]]], where:

rtLbl identifies the name of the applicable routing table with a string of 1-10 alphanumeric characters;

primKey (optional only in RTRV) identifies the primary key applicable to the specified routing table, with values of:

BGN = Bearer Group Number (interface type)
CALLTYPE = Type of call (Class 5)
CDPN = Called party number
CGPN = Calling party number
CHRGN = Charge number
CIP = Carrier Information Parameter (for ISUP only)
CPC = Calling Party Category
CSI = Carrier Selection Information
GAP = Generic Address Parameter
GENDGTS = Generic Digits
JIP = Jurisdiction Information Parameter (NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
REG = Register index
SUBSTATUS = Subscriber status (valid only when the value "SUB" is the first listed for *actnInfoAnlz* in TRANS-PLAN)
TNS = Transit Network Selection

primKeyValue identifies the primary value applicable to the specified primary key parameter, with values of:

BGN:

CASIF
GR303
ISDNIF
MGCP
TGN

CALLTYPE:

CUTTHRU
DEFAULT
DIR_ASSISTANCE
EMERGENCY
INTERLATA

INTERLATAOPREQ
INTNATNUM
INTNATOPREQ
INTRALATA
LOCALNUMBER
LOCALOPREQ
N11
NATNUM
NONUMOPREQ
NOTPRSNT
TOLLFREE

CDPN:

ABBREVPVT = abbreviated private
CAINVPN = Carrier AIN Virtual Private
Network
DEFAULT = matches all numbers
INTNATNUM = international number
INTNATOPREQ = international operator request
NATNUM = national significant number
NATOPREQ = national (long-distance) operator
request
NONUMCUTTHRU = no number provided, cut
through to carrier
NONUMOPREQ = no number provided, operator
request
NOTPRSNT = matches calls without a CDPN
SUBOPREQ = subscriber (local) operator request
SUBSNUM = subscriber number
TESTLINE = test line test code
UNKNOWN = unknown (default value);

CGPN:

ABBREVPVT = abbreviated private
DEFAULT = matches all numbers
NOTPRSNT = matches calls without a CGPN
NUNIINTNATNUM = non-unique international
number
NUNINATNUM = non-unique national number
(only for CGPN)
NUNISUBSNUM = non-unique subscriber
number
TESTLINE = test line test code
UNIINTNATNUM = unique international number
UNINATNUM = unique national number
UNISUBSNUM = unique subscriber number

CHRGN:

CDPNATNUM = ANI of the called party;
national number
CDPSUBSNUM = ANI of the called party;
subscriber number
CDPUNAVAIL = ANI of the called party; no
number present
CGPNATNUM = ANI of the calling party;
national number
CGPSUBSNUM = ANI of the calling party;
subscriber number
DEFAULT = matches all numbers
NOTPRSNT = matches calls without a CHRGN
UNAVAIL = ANI not available or not provided
CIP: 0-9999, DEFAULT, NOTPRSNT
CPC: 00-FF (hexadecimal) , DEFAULT,
NOTPRSNT
CSI:
PRESUBDIAL = presubscribed and input by
calling party
PRESUBNOTDIAL = presubscribed and not
input by calling party
PRESUBUNKNOWN = presubscribed, input by
calling party undetermined
NOTPRESUB = not presubscribed and input by
calling party
UNKNOWN = no indication
GAP: 0-255
GENDGTS: 0-31
JIP: 200000-999999, DEFAULT, NOTPRSNT
LATA: 200-99999, DEFAULT, NOTPRSNT
OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT
REG: 1-6
TNS: 0-9999 (the carrier ID), DEFAULT,
NOTPRSNT

secKeyValue identifies the secondary value applicable to the
specified primary key parameter, with values of:

BGN: 1-31 digits, DEFAULT
CALLTYPE: No secondary value
CDPN: 1-31 digits, DEFAULT (set *secKeyValue* to
DEFAULT if *primKeyValue* is DEFAULT or
NOTPRSNT)

CGPN: 1-31 digits, DEFAULT (set *secKeyValue* to DEFAULT if *primKeyValue* is DEFAULT or NOTPRSNT)

CHRGN: 1-31 digits, DEFAULT (set *secKeyValue* to DEFAULT if *primKeyValue* is DEFAULT or NOTPRSNT)

CIP: No secondary value

CPC: No secondary value

CSI: No secondary value

GAP: 1-31 digits, DEFAULT, NOTPRSNT

GENDGTS: 1-31 digits, DEFAULT, NOTPRSNT

JIP: No secondary value

LATA: No secondary value

OLI: No secondary value

REG: 1-31 digits, DEFAULT, NOTPRSNT

TNS: 0-255 (the CAS 0ZZ/1NX code or the ISUP circuit code), DEFAULT (set *secKeyValue* to DEFAULT if *primKeyValue* is DEFAULT or NOTPRSNT)

terKeyValue identifies the tertiary value (representing the protocol type) applicable only when the value of *primKey* is TNS, with values of:

CAS

ISUP (default – set *terKeyValue* to ISUP if *secKeyValue* is DEFAULT)

Default value: none

rtDest Identifies the destination for routes using the routing method specified by the AID. The parameter is a combination of the type of destination and its name.

Type: string

Range: RTLIST-<rtList>, where *rtList* identifies the name of a route list with a string of 1-20 characters
RTKEY-<rtKey>, where *rtKey* has the form <rtLbl>-<primKey>, which identifies the name of the next partition with a string of 1-10 alphanumeric characters and the primary key applicable to it, as listed in the AID
TRANS-<transPlan>, where *transPlan* identifies the name of a translation plan with a string of 1-10 characters
TREAT-<treatment>, where *treatment* identifies the name of a treatment with a string of 1-10 characters

Default value: none

actn Identifies the actions performed that define the various manipulations on values that match this route. You can specify up to six actions, separated by ampersands (&).

Type: string

Range: <actn>[&<actn>[&<actn>[&<actn>[&<actn>[&<actn>]]]]], where *actn* can have one of the following forms:

DGTMODKEY-<dmLbl>-<primKey>, where

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

DGTSCRNKEY-<dgtScrnLbl>-<primKey>, where

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits
JIP = Jurisdiction Information Parameter
(NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
SUBSTATUS = Subscriber status (valid only
when the value "SUB" is the first listed for
the parameter *actnInfoAnlz* in TRANS-
PLAN)
TNS = Transit Network Selection

Default value: NULL

minCost Identifies the minimum cost of the outgoing trunk group.

Type: integer
Range: {0-100}
Default value: 0

maxCost Identifies the maximum cost of the outgoing trunk group.

Type: integer
Range: {0-100}
Default value: 100

reRoute Identifies whether calls getting to this route are re-routed on call setup failure on a downstream switch.

Type: BoolYN
Range: N = calls are not rerouted
Y = calls are rerouted
Default value: N

Input Examples:

```
DLT-ROUTE-DIGITS::321RtTable-CSI;
```

```
ED-ROUTE-DIGITS::321RtTable-CSI::  
RTDEST=RTLST-IntNatRouteList;
```

In the following example for ENT-ROUTE-DIGITS:

1. Calls with CPC of Emergency are routed to the 911RouteList. Carrier is inspected for other calls.

```
ENT-ROUTE-DIGITS::Global-CPC-06::  
RtDest=RTLST-911RouteList;
```

```
ENT-ROUTE-DIGITS::Global-CPC::  
RtDest=RTKEY-Carrier-TNS;
```

```
ENT-ROUTE-DIGITS::Global-CPC-NOTPRSNT::  
RtDest=RTKEY-Carrier-TNS;
```

2. Calls to carrier 0321 are routed to 0321RouteList
ENT-ROUTE-DIGITS::Carrier-TNS-0321:::
RouteList=0321RouteList;
ENT-ROUTE-DIGITS::Carrier-TNS-9898:::
RtDest=RTKEY-321RtTable-CDPN;
 3. Domestic calls to carrier 9898 are routed according to Called Party Number.
ENT-ROUTE-DIGITS::321RtTable-TNS-9898-1-ISUP:::
RtDest=RTKEY-321RtTable-COI;
ENT-ROUTE-DIGITS::321RtTable-TNS-9898-0-ISUP:::
RtDest=RTKEY-321RtTable-COI;
ENT-ROUTE-DIGITS::321RtTable-TNS-9898-138-CAS:::
RtDest=RTKEY-321RtTable-COI;
ENT-ROUTE-DIGITS::321RtTable-TNS-9898-158-CAS:::
RtDest=RTKEY-321RtTable-COI;
 4. Casually dialed calls to 9898 are given treatment 666.
ENT-ROUTE-DIGITS::321RtTable-COI-NOTPRESUBDIAL:::
RtDest=TREAT-Treat666;
 5. International calls to carrier 9898 are routed to IntNatRouteList, except if it is casually dialed.
ENT-ROUTE-DIGITS::321RtTable-COI:::
RtDest=RTLST-IntNatRouteList;
- RTRV-ROUTE-DIGITS::321RtTable-COI;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"321RtTable-COI:RTDEST=RTLST-IntNatRouteList,
ACTN=NULL,MINCOST=0,MAXCOST=0,REROUTE=N"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-ROUTE-LIST

Commands:

DLT-ROUTE-LIST: Delete Route List
ED-ROUTE-LIST: Edit Route List
ENT-ROUTE-LIST: Enter Route List
RTRV-ROUTE-LIST: Retrieve Route List

Descriptions:

DLT-ROUTE-LIST lets the user delete a route list.

ED-ROUTE-LIST lets the user change the properties associated with a route list. Use ED-ROUTE-LIST to modify the route list's allocation algorithm used when hunting for a route in this route list, and the treatment to use if the call setup on this route fails because no bearers are available.

ENT-ROUTE-LIST lets the user establish a list of routes with the hunting method for selecting a route on the list and the treatment to use if the call setup on this route fails because no bearers are available. Use ENT-ROUTE-LIST to define the route list's name, allocation algorithm used when hunting for a route in this route list, and the treatment to use if the call setup on this route fails because no bearers are available.

RTRV-ROUTE-LIST lets the user retrieve the properties associated with a route list. Use RTRV-ROUTE-LIST to retrieve the route list's allocation algorithm used when hunting for a route in this route list, and the treatment to use if the call setup on this route fails because no bearers are available.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-ROUTE-LIST:[TID]:<rtListAid>:[CTAG];  
ED-ROUTE-LIST:[TID]:<rtListAid>:[CTAG]::  
    [ALLOC=<alloc>],[OVRFLOWTREAT=<ovrFlowTreat>];  
ENT-ROUTE-LIST:[TID]:<rtListAid>:[CTAG]::  
    [ALLOC=<alloc>],[OVRFLOWTREAT=<ovrFlowTreat>];  
RTRV-ROUTE-LIST:[TID]:[<rtListAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<rtListAid>:ALLOC=<alloc>,
    OVRFLOWTREAT=<ovrFlowTreat>"
;
```

Parameters:

rtListAid Identifies the AID as a route list. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all route lists configured in the system will be returned.

Type: string

Range: 1-20 alphanumeric characters

Default value: none

alloc Identifies the resource allocation method (hunting type) used when hunting for a route in this route list.

Type: enum

Range: ASCENDING = Allocates the lowest numbered available route in the route list

CIRCULAR = Allocates the next free route, in ascending order, following the last route selected

DESCENDING = Allocates the highest numbered available route in the route list

DISTRIBUTION = Allocates routes based on the value of the parameter *weight* for each route in the route list

LEASTCOST = Allocates the least cost route available, based on parameters configured against the trunk group

RANDOM = Allocates the next free route, in ascending order, based on a random entry into the list of resources. After the first allocation from that numbered list of resources, subsequent attempts to find a free resource use the circular method.

TIMEOFDAY = This hunting type lets you enter route schedules, rather than routes, into the route list

Default value: CIRCULAR

ovrFlowTreat Identifies the treatment to use if the call setup on a route on this route list fails because no bearers are available.

Type: string

Range: up to 10 alphanumeric characters

Default value: NULL

Input Examples:

```
DLT-ROUTE-LIST::S7tgrp1Bt ls;  
ED-ROUTE-LIST::S7tgrp1Bt ls::HUNTING=CIRCULAR,  
    OVRFLOWTREAT=NULL;  
ENT-ROUTE-LIST::S7tgrp1Bt ls::HUNTING=CIRCULAR,  
    OVRFLOWTREAT=NULL;  
RTRV-ROUTE-LIST::S7tgrp1Bt ls;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
    "S7tgrp1Bt ls:ALLOC=CIRCULAR,OVRFLOWTREAT=NULL "  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-ROUTE  
DLT/ED/ENT/RTRV-ROUTE-SCHED
```

DLT/ED/ENT/RTRV-ROUTE-SCHED

Commands:

DLT-ROUTE-SCHED: Delete Route Schedule

ED-ROUTE-SCHED: Edit Route Schedule

ENT-ROUTE-SCHED: Enter Route Schedule

RTRV-ROUTE-SCHED: Retrieve Route Schedule

Descriptions:

The Route Schedule command lets you add a schedule to a route. The route will be in a particular schedule only after you've enabled the schedule profile. Date-specific profiles are applied to a schedule first, day specific profiles second, weekend weekday profiles third, and lastly the default profile that is enabled at all times.

DLT-ROUTE-SCHED lets the user delete a route schedule from the system.

ED-ROUTE-SCHED lets the user change the route list associated with a route schedule.

ENT-ROUTE-SCHED lets the user establish a route schedule associated with a schedule profile, and apply it to a route list. ENT-ROUTE-SCHED will not work unless ENT-PRFL-SCHED and ENT-ROUTE-LIST have already been issued.

RTRV-ROUTE-SCHED lets the user retrieve the name of the route list associated with a route schedule.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-ROUTE-SCHED: [TID]:<rtSchedAid>:[CTAG];

ED-ROUTE-SCHED: [TID]:<rtSchedAid>:[CTAG]::
RTLIST=<rtListName>;

ENT-ROUTE-SCHED: [TID]:<rtSchedAid>:[CTAG]::
RTLIST=<rtListName>;

RTRV-ROUTE-SCHED: [TID]: [<rtSchedAid>]: [CTAG];

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<rtSchedAid>:RTLIST=<rtListName>"
;
```

Parameters:

rtSchedAid Identifies the AID as the name of the route schedule (previously defined by ROUTE-LIST and in which the value of *alloc* is TIMEOFDAY), and the name of the schedule profile applied to it. The schedule profile, previously defined by PRFL-SCHED, specifies the dates and times to use the route list. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all route schedules configured in the system, their associated schedule profiles and the route lists to which they belong, will be returned.

Type: RouteSchedAid

Range: <schedNameString>-<prflNameString>, where
 schedNameString = up to 20 alphanumeric characters,
 and
 prflNameString = up to 20 alphanumeric characters,
 including "DEFAULT" (which must be entered prior
 to any user-defined schedule profile names).

Default value: none

rtListName Identifies the name of the route list, previously defined by ROUTE-LIST and in which the value of *alloc* cannot be TIMEOFDAY, to which the schedule applies.

Type: string

Range: up to 20 alphanumeric characters

Default value: none

Input Examples:

```
DLT-ROUTE-SCHED::schedlist-MON_PRFL;  
ED-ROUTE-SCHED::schedlist-MON_PRFL::  
    RTLIST=rtlist_mon;  
  
ENT-PRFL-SCHED::MON_PRFL::MON=1200-2400;  
ENT-ROUTE-LIST::rtlist_def::ALLOC=ascending;  
ENT-ROUTE-LIST::rtlist_mon::ALLOC=ascending;  
ENT-ROUTE-LIST::schedlist::ALLOC=TIMEOFDAY;  
ENT-ROUTE-SCHED::schedlist-DEFAULT::  
    RTLIST=rtlist_def;  
ENT-ROUTE-SCHED::schedlist-MON_PRFL::  
    RTLIST=rtlist_mon;  
  
RTRV-ROUTE-SCHED::schedlist-MON_PRFL;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"schedlist-MON_PRFL:RTLIST=rtlist_mon "  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-PRFL-SCHED  
DLT/ED/ENT/RTRV-ROUTE-LIST
```

DLT/ED/ENT/RTRV-SUBSCRIBER-CL4

Commands:

DLT-SUBSCRIBER-CL4: Delete Subscriber Class 4

ED-SUBSCRIBER-CL4: Edit Subscriber Class 4

ENT-SUBSCRIBER-CL4: Enter Subscriber Class 4

RTRV-SUBSCRIBER-CL4: Retrieve Subscriber Class 4

Descriptions:

DLT-SUBSCRIBER-CL4 lets the user delete an association between a subscriber and a carrier or a call type.

ED-SUBSCRIBER-CL4 lets the user change the association between a subscriber and a carrier or a call type. Use this command to change the new or pseudo carrier assigned for the subscriber's call type, an alternative number for billing records, the authorization code mode of operation, the length of the account code, the authorization code or the list containing the authorization code, the minimum and maximum trunk group costs allowed for routing a call from the subscriber, the screening operation to perform, and the status of the subscriber.

ENT-SUBSCRIBER-CL4 lets the user establish an association between a subscriber and a carrier or a call type. Use this command to define the subscriber and the call type or carrier to which the subscriber assignment parameters apply, the new or pseudo carrier assigned for the subscriber's call type, an alternative number for billing records, the authorization code mode of operation, the length of the account code, the authorization code or the list containing the authorization code, the minimum and maximum trunk group costs allowed for routing a call from the subscriber, the screening operation to perform, and the status of the subscriber.

RTRV-SUBSCRIBER-CL4 lets the user retrieve the attributes of an association between a subscriber and a carrier or a call type.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-SUBSCRIBER-CL4:[TID]:<cl4SubId>:[CTAG];  
ED-SUBSCRIBER-CL4:[TID]:<cl4SubId>:[CTAG]::  
  [DFLTCAR=<dfltCar>],[BILLINGNUM=<billingNum>],  
  [AUTHMODE=<authMode>],[ACNTCODELEN=<acctCodeLen>],  
  [AUTHCODE=<authCode>],[AUTHLIST=<authList>],  
  [MINCOST=<minCost>],[MAXCOST=<maxCost>],  
  [DGTSCRNKEY=<dgtScrnKey>],[SUBSTATUS=<subStatus>];  
ENT-SUBSCRIBER-CL4:[TID]:<cl4SubId>:[CTAG]::  
  [DFLTCAR=<dfltCar>],[BILLINGNUM=<billingNum>],  
  [AUTHMODE=<authMode>],[ACNTCODELEN=<acctCodeLen>],  
  [AUTHCODE=<authCode>],[AUTHLIST=<authList>],  
  [MINCOST=<minCost>],[MAXCOST=<maxCost>],  
  [DGTSCRNKEY=<dgtScrnKey>],[SUBSTATUS=<subStatus>];  
RTRV-SUBSCRIBER-CL4:[TID]:<cl4SubId>:[CTAG]::;
```

Output Format:

```
      SID DATE TIME  
M    CTAG COMPLD  
      "<cl4SubId>:DFLTCAR=<dfltcAR>,  
        BILLINGNUM=<billingNum>,AUTHMODE=<authMode>,  
        ACNTCODELEN=<acctCodeLen>,AUTHCODE=<authCode>,  
        AUTHLIST=<authList>,MINCOST=<minCost>,  
        MAXCOST=<maxCost>,DGTSCRNKEY=<dgtScrnKey>,  
        SUBSTATUS=<subStatus>"  
;
```

Parameters:

cl4SubId Identifies the AID as the association between a subscriber and a carrier or a call type. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all such associations configured in the system will be returned.

Type: cl4SubId

Range: <subscriberId>[-<callType>] or <subscriberId>[-<carrier>],
where:

subscriberId identifies the subscriber with a string of exactly 10 digits;

callType (optional only in RTRV) identifies the call type for which the subscriber assignment parameters apply, with values of:

DEFAULT = all call types (default value)

INTERLATA

INTERNATIONAL

INTRALATA

carrier identifies the carrier for which the subscriber assignment parameters apply as a string of 1-4 digits with a default of "DEFAULT"

Default value: none

dfltCar Identifies the new (or pseudo) carrier assigned when a call type is associated with the subscriber.

Type: string

Range: {0-9999}

Default value: NULL

billingNum Identifies an alternative telephone number for billing records, optionally provided when the subscriber prefers charges to be applied to another number.

Type: string

Range: exactly 10 digits

Default value: value of *subscriberid*

authMode Identifies the mode of operation for an authorization code.

Type: enum

Range: ACNTAUTH = account codes and authorization codes
NONE = authorization code not required
ONEPIN = one PIN code per authorization code
ONLYACNT = only account codes
ONLYAUTH = only authorization codes
ONLYPIN = only PIN codes

Default value: NONE

acctCodeLen Identifies the account code length. The default value “0” disables the option; however, the value cannot be “0” when the value of *authMode* is “ACNTAUTH” or “ONLYACNT”.

Type: integer

Range: {0-8}

Default value: 0

authCode Identifies the name of the authorization code when there is only one valid code. The value must be “NULL” when *authList* has a valid non-null value.

Type: string

Range: up to eight digits (including “*”, but not as the first digit)

Default value: NULL

authList Identifies the name of the authorization list, previously established via ENT-LIST-AUTHCODE. The value must be “NULL” when *authCode* has a valid non-null value.

Type: string

Range: up to 20 characters

Default value: NULL

minCost Identifies the minimum cost of the outgoing trunk group for routing a call from the subscriber.

Type: integer

Range: {0-100}

Default value: 0

maxCost Identifies the maximum cost of the outgoing trunk group for routing a call from the subscriber.

Type: integer

Range: {0-100}

Default value: 100

dgtScrnKey Identifies the screening operation to apply to the subscriber by defining the applicable digit screening table and associated primary key. You must refer to a valid screening table (established with ENT-DIGIT-SCREEN) with the applicable primary key “SUBSTATUS” when the value of the parameter *subStatus* requires an action (for example, providing a treatment when the value of *subStatus* is “INACTIVE”). The parameter *resultType* in DIGIT-SCREEN defines the possible actions resulting from screening.

Type: string

Range: <dgtScrnLbl>-<primKey>, where:

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

SUBSTATUS = Subscriber status (valid only when the value “SUB” is the first listed for the parameter *actnInfoAnlz* in TRANS-PLAN)

TNS = Transit Network Selection

Default value: NULL

subStatus Identifies the status of the telephone number representing the subscriber.

Type: string

Range: ACTIVE = In Service (subscriber is present in the CL4SUB table and active)

INACTIVE = Out Of Service (subscriber is present in the CL4SUB table and inactive)

Default value: NULL

Input Examples:

```
DLT-SUBSCRIBER-CL4::5088048202-INTERNATIONAL;
```

```
ED-SUBSCRIBER-CL4::5088048202-INTERNATIONAL:::  
  DFLTCAR=2, SUBSTATUS=INACTIVE;
```

```
ENT-SUBSCRIBER-CL4::5088048202-INTERNATIONAL:::  
  DFLTCAR=1, BILLINGNUM=5084800909;
```

```
RTRV-SUBSCRIBER-CL4::5088048202-INTERNATIONAL;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
  "5088048202-INTERNATIONAL:DFLTCAR=1,  
    BILLINGNUM=5084800909, AUTHMODE=NONE,  
    ACNTCODELEN=0, AUTHCODE=NULL, AUTHLIST=AUTHLIST4,  
    MINCOST=0, MAXCOST=100, DGTSCRNKEY=NULL,  
    SUBSTATUS=ACTIVE"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-TRANS-PLAN

Commands:

DLT-TRANS-PLAN: Delete Translation Plan

ED-TRANS-PLAN: Edit Translation Plan

ENT-TRANS-PLAN: Enter Translation Plan

RTRV-TRANS-PLAN: Retrieve Translation Plan

Descriptions:

A translation plan specifies the following:

- A set of routing partitions or labels used for calls using this translation plan. If routing fails on the first <routing label>-<routing key> combination, the next <routing label>-<routing key> combination is used.
- The dial plan used for calls using this translation plan. The dial plan specifies the valid called party numbers. Having a NULL dial plan allows all calls to pass validation.
- Various screening and digit modification operations to perform at the InfoCollected PIC and the InfoAnalyzed PIC. The actions at the InfoCollected PIC allow the processing of authorization codes, call screening, and normalizing parameters before dial plan analysis is done. These actions also allow for changing the translation plan depending on incoming call parameters. Actions at the InfoAnalyzed PIC allow for screening out and normalizing parameters before doing SCP lookups or routing.
- The failure condition table to use for treating far side release of calls.

Translation plans can be attached to trunk groups. Line interfaces currently always use the DEFAULT translation plan. Trunk groups that have similar translation requirements can use the same translation plan.

DLT-TRANS-PLAN lets the user delete a translation plan that associates a list of route tables with a dial (numbering) plan.

ED-TRANS-PLAN lets the user change a translation plan that associates a list of route tables with a dial (numbering) plan. Use this command to change the list(s) of route tables, the dialing plan applied before call is set up, the actions performed at the InfoCollected and InfoAnalyzed PICs, the release failure condition profile name, and the alternate translation plan to use for emergency procedures.

ENT-TRANS-PLAN lets the user establish a translation plan that associates a list of route tables with a dial (numbering) plan. Use this command to define the translation plan name, the list(s) of route tables, the dialing plan applied before call is set up, the actions performed at the InfoCollected and InfoAnalyzed PICs, the release failure condition profile name, and the alternate translation plan to use for emergency procedures.

RTRV-TRANS-PLAN lets the user retrieve the attributes of a translation plan that associates a list of route tables with a dial (numbering) plan.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-TRANS-PLAN:[TID]:<transPlan>:[CTAG];  
ED-TRANS-PLAN:[TID]:<transPlan>:[CTAG]::  
  [RTKEYLIST=<rtKeyList>],[DIALPLAN=<dialPlan>],  
  [ACTNINFOCOL=<actninfocol>],  
  [ACTNINFOANLZ=<actninfoanlz>],  
  [RLSFAILCNDPRFL=<rlsFailCndPrfl>],  
  [ALTPLAN=<altPlan>];  
ENT-TRANS-PLAN:[TID]:<transPlan>:[CTAG]::  
  RTKEYLIST=<rtKeyList>,[DIALPLAN=<dialPlan>],  
  [ACTNINFOCOL=<actnInfoCol>],  
  [ACTNINFOANLZ=<actnInfoAnlz>],  
  [RLSFAILCNDPRFL=<rlsFailCndPrfl>],  
  [ALTPLAN=<altPlan>];  
RTRV-TRANS-PLAN:[TID]:[<transPlan>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
  "<transPlan>:RTKEYLIST=<rtKeyList>,  
    DIALPLAN=<dialPlan>,ACTNINFOCOL=<actninfocol>,  
    ACTNINFOANLZ=<actninfoanlz>,  
    RLSFAILCNDPRFL=<rlsFailCndPrfl>,  
    ALTPLAN=<altPlan>"  
;
```

Parameters:

transPlan Identifies the AID as a translation plan. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all translation plans configured in the system will be returned.

Type: string

Range: 1-10 alphanumeric characters

Default value: none

rtKeyList Identifies the list of route tables applicable to the translation plan. You can specify up to three route tables, separated by ampersands (&), which are accessed in the order listed until the given key is matched.

Type: TransPlanAid

Range: <rtKey>[&<rtKey>[&<rtKey>]], where *rtKey* has the form <rtLbl>-<primKey>):

rtLbl identifies the name of the applicable route table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified route table as a type of call parameter, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CSI = Carrier Selection Information

CPC = Calling Party Category

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

TNS = Transit Network Selection

Default value: none

dialPlan Identifies the dial, or numbering, plan applied before the call is set up.

Type: enum

Range: NANP = North American Numbering Plan

NONE = no dial plan

Default value: NANP

actnInfoCol Identifies the actions performed at the InfoCollected PIC prior to number or dial plan analysis, and which define the various manipulations to perform on this partition. You can specify up to six actions, separated by ampersands (&).

Type: string

Range: <actn>[&<actn>[&<actn>[&<actn>[&<actn>[&<actn>]]]], where *actn* can have one of the following forms:

DGTMODKEY-<dmLbl>-<primKey>, where

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)
CDPN = called party number
CGPN = calling party number
CHRGN = charge number
CIP = Carrier Information Parameter (for ISUP only)
CPC = Calling Party Category
CSI = Carrier Selection Information
GAP-{0-255} = Generic Address Parameter
GENDGTS-{0-31} = Generic Digits
GP-{0-255} = Generic Parameter
JIP = Jurisdiction Information Parameter (NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
REG-{1-6} = Register index
TNS = Transit Network Selection

DGTSCRNKEY-<dgtScrnLbl>-<primKey>, where

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)
CALLTYPE = type of call (Class 5)
CDPN = called party number
CGPN = calling party number
CHRGN = charge number
CIP = Carrier Information Parameter (for ISUP only)
CPC = Calling Party Category
CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter
GENDGTS-{0-31} = Generic Digits
JIP = Jurisdiction Information Parameter
(NPANXX)
LATA = Local Access & Transport Area
OLI = Originating Line Information
SUBSTATUS = Subscriber status (valid only
when the value "SUB" is the first listed for
the parameter *actnInfoAnlz* in TRANS-
PLAN)
TNS = Transit Network Selection

Default value: NULL

actnInfoAnlz Identifies the actions performed at the InfoAnalyzed PIC prior to AIN trigger analysis, and which define the various manipulations to perform on this partition. You can specify up to six actions, separated by ampersands (&).

Type: string

Range: <actn>[&<actn>[&<actn>[&<actn>[&<actn>[&<actn>]]]]],
where *actn* has the form
[SUB] & [DGTSCRNKEY-<dgtScrnLbl>-<primKey>]
[&][DGTMODKEY-<dgtModLbl>-<primKey>],
where:

SUB causes the collection of subscriber information for subsequent screening or routing

DGTSCRNKEY-<dgtScrnLbl>-<primKey>, in which

dgtScrnLbl identifies the name of the applicable screening table with a string of 1-10 characters;

primKey identifies the primary key applicable to the specified screening table, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for
ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

JIP = Jurisdiction Information Parameter
(NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

SUBSTATUS = Subscriber status (valid only when the value "SUB" is the first listed for *actnInfoAnlz* in TRANS-PLAN)

TNS = Transit Network Selection

DGTMODKEY-<dmLbl>-<primKey>, in which

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

GP-{0-255} = Generic Parameter

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

rlsFailCndPrfl Identifies the release failure condition profile, which overrides the default failure condition profile for this translation plan.

Type: string

Range: 1-10 alphanumeric characters

Default value: NULL

altPlan Identifies the alternate translation plan to use for emergency procedures, the parameters for which override those for the translation plan defined by the AID.

Type: string

Range: 1-10 alphanumeric characters

Default value: NULL

Input Examples:

```
DLT-TRANS-PLAN: :TRANSPLAN1;  
ED-TRANS-PLAN: :TRANSPLAN1:::  
    RTKEYLIST=CDPNRT-CDPN&NEWRT-OLI, DIALPLAN=NANP;  
ENT-TRANS-PLAN: :TRANSPLAN1:::  
    RTKEYLIST=CDPNRT-CDPN&NEWRT-OLI, DIALPLAN=NANP;  
RTRV-TRANS-PLAN: :TRANSPLAN1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
    "TRANSPLAN1:RTKEYLIST=CDPNRT-CDPN&NEWRT-OLI,  
      DIALPLAN=NANP,ACTINFOCOL=NULL,ACTINFOANLZ=NULL,  
      RLSFAILCNDPRFL=NULL,ALTPLAN=NULL"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-ROUTE-DIGITS  
TEST-TRANS
```

DLT/ED/ENT/RTRV-TRANS-SCHED

Commands:

DLT-TRANS-SCHED: Delete Translation Schedule

ED-TRANS-SCHED: Edit Translation Schedule

ENT-TRANS-SCHED: Enter Translation Schedule

RTRV-TRANS-SCHED: Retrieve Translation Schedule

Descriptions:

A translation schedule, through its associated schedule profile, determines the dates and times to use a translation plan. Like translation plans, you can attach translation schedules to trunk groups.

DLT-TRANS-SCHED lets the user delete a translation plan schedule that chooses translations based on the time of day.

ED-TRANS-SCHED lets the user change a translation plan schedule that chooses translations based on the time of day. Use this command to change the schedule profile applied to the translation plan schedule, and the translation plan to which the schedule applies.

ENT-TRANS-SCHED lets the user establish a translation plan schedule that chooses translations based on the time of day. Use this command to define the translation plan schedule name, the schedule profile applied to the translation plan schedule, and the translation plan to which the schedule applies.

RTRV-TRANS-SCHED lets the user retrieve the attributes of a translation plan schedule that chooses translations based on the time of day.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-TRANS-SCHED:[TID]:<transSchedAid>:[CTAG];

ED-TRANS-SCHED:[TID]:<transSchedAid>:[CTAG]::
TRANSPLAN=<transPlan>;

ENT-TRANS-SCHED:[TID]:<transSchedAid>:[CTAG]::
TRANSPLAN=<transPlan>;

RTRV-TRANS-SCHED:[TID]:[<transSchedAid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<transSchedAid>:TRANSPLAN=<transPlan>"
;
```

Parameters:

transSchedAid Identifies the AID as a translation plan schedule that chooses translations based on the time of day. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all translation plan schedules configured in the system will be returned.

Type: TransSchedAid

Range: <transSched>[-<prflName>], where:

transSched identifies the name of the translation plan schedule with a string of 1-10 alphanumeric characters (Translation plan schedules and translation plans cannot have the same names.);

prflName (optional only in RTRV) identifies, with a string of 1-20 alphanumeric characters or the value "DEFAULT", the name of the routing schedule profile, previously defined by PRFL-SCHED, that determines the times and dates to use the listed translation plan.

Default value: none

transPlan Identifies the translation plan to which the schedule applies.

Type: string

Range: 1-10 alphanumeric characters

Default value: none

Input Examples:

```
DLT-TRANS-SCHED::XSCHED1-PROFILE1;
ED-TRANS-SCHED:XSCHED1-PROFILE1:::
  TRANSPLAN=TRANSPLAN1;
ENT-TRANS-SCHED::XSCHED1-PROFILE1:::
  TRANSPLAN=TRANSPLAN1;
RTRV-TRANS-SCHED::XSCHED1-PROFILE1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"XSCHED1-PROFILE1:TRANSPLAN=TRANSPLAN1;"
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-PRFL-SCHED
DLT/ED/ENT/RTRV-ROUTE-SCHED
```

DLT/ED/ENT/RTRV-TREATMENT

Commands:

DLT-TREATMENT: Delete Treatment

ED-TREATMENT: Edit Treatment

ENT-TREATMENT: Enter Treatment

RTRV-TREATMENT: Retrieve Treatment

Descriptions:

Treatments allow special handling, including exception handling. For example, a treatment can play the time of day announcement, which is special handling, or it can release a call with a specific release cause, which is exception handling.

Telica supports three types of treatments:

- **Announcement:** This type of treatment requires the announcement be configured using the ENT-AUDIO-ANNC command, can provide answer indication to a preceding switch, and allows associating a set of arguments with the announcement.
- **Release:** This type of treatment either maps an internal condition to another treatment, or it releases the call with a specific cause code.
- **Reroute:** This type of treatment uses digit modifications to change parameters of the call, and optionally, can restart routing from another partition with another key.

There are currently three supported sources from which a call may go to a treatment:

- **From ROUTE-DIGITS:** Any specified combination of call parameters can be routed to a treatment; for example, if a specified number is for the time of day service, the number can be routed to a treatment.
- **From DIGIT-SCREEN:** Screening can point to a treatment. The advantage of doing treatment from screening, as opposed to treatment from routing, is that from screening, you can execute a treatment with the next treatment being "CONTINUE", which then terminates the call normally.
- **From PRFL-FAILCND:** You can use a treatment to provide special handling on call failure. Use this feature to tailor customer-specific announcements and tones.

DLT-TREATMENT lets the user delete a treatment.

ED-TREATMENT lets the user change the attributes of a treatment. Use this command to change the type of treatment, the announcement to play (when required) and its associated arguments, whether to send an ansInd message to the originating switch when the announcement starts, the failure condition that triggers the treatment, the digit modification table name and primary key used to change parameters for a reroute, the routing table name and primary key used for rerouting, and the treatment to call next.

ENT-TREATMENT lets the user establish a treatment. Use this command to define the treatment name, the type of treatment, the announcement to play (when required) and its associated arguments, whether to send an ansInd message to the originating switch when the announcement starts, the failure condition that triggers the treatment, the digit modification table name and primary key used to change parameters for a reroute, the routing table name and primary key used for rerouting, and the treatment to call next.

RTRV-TREATMENT lets the user retrieve the attributes of a treatment.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-TREATMENT:[TID]:<treatmentId>:[CTAG];  
ED-TREATMENT:[TID]:<treatmentId>:[CTAG]::  
  [TREATTYPE=<treatType>],[ANNCID=<anncId>],  
  [ANNCARGS=<anncArgs>],[ANSIND=<ansInd>],  
  [FAILCND=<failCnd>],[DGTMODKEY=<dgtModKey>],  
  [RTKEY=<rtKey>],[NEXTTREAT=<nextTreat>];  
ENT-TREATMENT:[TID]:<treatmentId>:[CTAG]::  
  TREATTYPE=<treatType>,[ANNCID=<anncId>],  
  [ANNCARGS=<anncArgs>],[ANSIND=<ansInd>],  
  [FAILCND=<failCnd>],[DGTMODKEY=<dgtModKey>],  
  [RTKEY=<rtKey>],[NEXTTREAT=<nextTreat>];  
RTRV-TREATMENT:[TID]:[<treatmentId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<treatmentId>:TREATTYPE=<treatType>,
  ANNCID=<anncId>, [ANNCARGS=<anncArgs>],
  [ANSIND=<ansInd>], [FAILCND=<failCnd>],
  [DGTMODKEY=<dgtModKey>], [RTKEY=<rtKey>],
  [NEXTTREAT=<nextTreat>"
;
```

Parameters:

treatmentId Identifies the AID as a treatment. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all treatments configured in the system will be returned.

Type: string

Range: 1-10 alphanumeric characters

Default value: none

treatType Identifies the type of treatment.

Type: enum

Range: ANNC = play an announcement

FAILCND = provide special handling on call failure

REROUTE = use digit modifications to change parameters of
the call to restart routing

Default value: none

anncId Identifies the internal designator for an audio announcement. Use RTRV-AUDIO-ANNC to determine the configured audio announcements. If an audio announcement requires variable arguments (determined with RTRV-AUDIO-VMSG) such as TIME (TME_12) or PhoneNumber (DIG_NDN), provide the source of the variable fields in *anncArgs*.

Type: integer

Range: {1-32766}

Default value: NULL

anncArgs Identifies a list of arguments applicable to the announcement. You can specify up to six arguments, separated by ampersands (&).

Type: string

Range: <arg>[&<arg>[&<arg>[&<arg>[&<arg>[&<arg>]]]]], where *arg* has the form <argKey>-<argValue>):

argKey identifies the primary key applicable to the specified announcement, with values of:

- CDPN = called party number
- CGPN = calling party number
- CHRGN = charge number
- DATE = date
- DIG = digits
- DUR = duration
- MTH = month
- NUMCARD = cardinal number
- NUMORD = ordinal number
- TIME = time

argValue identifies the value applicable to the specified primary key, with values of:

- CDPN (optional): digit modification table name (1-10 alphanumeric characters), previously defined by ENT-DIGITMOD-DN
- CGPN (optional): digit modification table name (1-10 alphanumeric characters), previously defined by ENT-DIGITMOD-DN
- CHRGN (optional): digit modification table name (1-10 alphanumeric characters), previously defined by ENT-DIGITMOD-DN
- DATE (mandatory): YYYYMMDD, MMDD, or "CURRDATE"
- DIG (mandatory): string of 1-10 digits (presently not implemented)
- DUR (mandatory): 0-35999999 seconds (played as hours, minutes, and seconds)
- MTH (mandatory): {1-12}
- NUMCARD (mandatory): {0-9999}
- NUMORD (mandatory): {1-31} (played as 1st through 31st)
- TIME (mandatory): HHMM or "CURRTIME"

Default value: NULL

ansInd Identifies, when the value of *treatType* is “ANNC”, whether to send an ansInd message to the previous switch when the announcement starts.

Type: BoolYN

Range: Y = send ansInd message
N = do not send ansInd message

Default value: N

failCnd Identifies, when the value of *treatType* is “FAILCND”, the previously defined failure condition that triggers the treatment. Use RTRV-FAILCND to determine the existing conditions. This parameter usually applies to routing to a treatment, which then uses a condition.

Type: string

Range: 1-21 alphanumeric characters

Default value: NULL

dgtModKey Identifies, when the value of *treatType* is “REROUTE”, the digit modification table and associated primary key used to change parameters for a reroute.

Type: string

Range: <dmLbl>-<primKey>, where:

dmLbl identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters;

primKey identifies the primary key applicable to the specified digit modification table, with values of:

CALLTYPE = type of call (Class 5)

CDPN = called party number

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

REG-{1-6} = Register index

TNS = Transit Network Selection

Default value: NULL

rtKey Identifies, when the value of *treatType* is “REROUTE”, the routing table and associated primary key used to change parameters for a reroute.

Type: string

Range: <rtLbl>-<primKey>, where:

rtLbl identifies the name of the applicable routing table with a string of 1-10 alphanumeric characters (or “NULL” to reroute in the current partition);

primKey identifies the primary key applicable to the specified routing table, with values of:

BGN = Bearer Group Number (interface type)

CALLTYPE = type of call (Class 5)

CDPN = called party number (Default value)

CGPN = calling party number

CHRGN = charge number

CIP = Carrier Information Parameter (for ISUP only)

CPC = Calling Party Category

CSI = Carrier Selection Information

GAP-{0-255} = Generic Address Parameter

GENDGTS-{0-31} = Generic Digits

JIP = Jurisdiction Information Parameter (NPANXX)

LATA = Local Access & Transport Area

OLI = Originating Line Information

TNS = Transit Network Selection

Default value: NULL

nextTreat Identifies, when the value of *treatType* is “ANNC”, the digit modification table and associated primary key used to change parameters for a reroute.

Type: string

Range: 1-10 alphanumeric characters, CONTINUE

Default value: NULL

Input Examples:

```
DLT-TREATMENT::TREATMENT1;
```

```
ED-TREATMENT::TREATMENT1::TREATTYPE=ANNC,ANNCID=3002,  
NEWVALUE=126;
```

```
ENT-TREATMENT::TREATMENT1::TREATTYPE=ANNC,  
ANNCID=3002,NEWVALUE=126;
```

```
RTRV-TREATMENT::TREATMENT1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "TREATMENT1:TREATTYPE=ANNC,ANNCID=3002,
    ANNCARGS=NULL,ANSIND=N,FAICND=NULL,
    DGTMODKEY=NULL,RTKEY=NULL,
    NEXTTREAT=NULL"
;
```

Related Commands: none

RLS-CALL

Command:

RLS-CALL: Release Call

Description:

RLS-CALL lets you manually force the release of a call. It is usually used to release fraudulent calls. The call is identified by the AID retrieved from the fraud CDR generated for calls that meet the fraud screening parameters or from the RTRV-FRAUDCALLS command.

Category: Call Control

Security: NSA

Input Format:

RLS-CALL : [TID] : <callAid> : CTAG;

Output Format: none

Parameters:

callAid Identifies the AID as the name of a fraud call record in the CDR.

Type: string

Range: 1-FFFFFF (hexadecimal)

Default value: none

Input Example:

RLS-CALL : : 3F;

Related Commands:

RTRV-FRAUDCALLS

RTRV-FAILCND

Command:

RTRV-FAILCND: Retrieve Failure Condition

Description:

RTRV-FAILCND lets you retrieve the failure condition enumerations and descriptions available in the Times10 database for use by PRFL-FAILCND.

Category: Call Control

Security: View

Input Format:

RTRV-FAILCND: [TID]: [<cnd>]:CTAG;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<cnd>:DESC=<desc>"
;
```

Parameters:

cnd Identifies the AID as the name of a failure condition. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, descriptions for all failure conditions configured in the system will be returned.

Type: string

Range: up to 21 alphanumeric characters

Default value: none

desc Identifies the description of the failure condition.

Type: string

Range: up to 100 alphanumeric characters

Default value: none

Input Example:

RTRV-FAILCND;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"SCP_OPR_FAILED:DESC=\"All SCP related operations \""
"PROTERR:DESC=\"Protocol Error used by all protocol \""
"RESUNAVAIL:DESC=\"resources unavailable, unspecified \""
"CKTCONG:DESC=\"Circuit/channel congestion \""
"TMRRCVRY:DESC=\"recovery on timer expiry \""
"USRBUSY:DESC=\"user busy \""
"CALL_BLOCK:DESC=\"call blocked \""
"BCAPNOTIMPL:DESC=\"bearer capability not implemented \""
"SUBIF_NOT_PROV:DESC=\"sub if not provisioned \""
"NOCKTAVAIL:DESC=\"NoCircuit available\""
"LM_INITIATED_REL:DESC=\"Layer Mgr initiated release\""
"ANS_SUPER_REL:DESC=\"Answer supervision timer expiry\""
"AUTH_FAILURE:DESC=\"Auth/Account code entry failure\""
"FC_SCR_FRAUD_REL:DESC=\"call screened to be fraud\""
"NODSPRESOURCES:DESC=\"DSP resources are not available\""
"CODECFAILURE:DESC=\"Codec not acceptable\""
"UNALLOC_NUMBER:DESC=\"unallocated numbers \""
"NOROUTTRANSNET:DESC=\"no route to transit network \""
"VACANT_CODE:DESC=\"Invalid Carrier Access Code \""
"INV0PREFIX:DESC=\"Invalid 0 Prefix \""
"INV1PREFIX:DESC=\"Invalid 1 Prefix \""
"HAVE1PREFIX:DESC=\"Prefix 1 not Dialed when Required\""
"INVALID_CARRIER:DESC=\"invalid carrier specified \""
"NMBCHNG:DESC=\"number changed \""
"DSTOUTORD:DESC=\"destination out of order \""
"INVNMBFORM:DESC=\"invalid number format \""
"CGOOS:DESC=\"cgprty oos unallocatedi changed\""
"EQUIPMENT_TROUBLE:DESC=\"equipment trouble \""
"RT_FAILED:DESC=\"routing failed \""
"INTFC_UNAVAIL:DESC=\"interface unavailable \""
"INTFC_UNAVAIL_COST:DESC=\"no circuit/channel available \""
"INTFC_UNAVAIL_BCAP:DESC=\"bearer cap not presently avail\""
"NOROUTDST:DESC=\"no route to destination \""
"EXCG_RT_ERROR:DESC=\"Exchange Routing error \""
"REQ_CHAN_NAVAIL:DESC=\"Requested Channel not available \""
```

Related Commands:

DLT/ED/ENT/RTRV-PRFL-FAILCND

RTRV-FRAUDCALLS

Command:

RTRV-FRAUDCALLS: Retrieve Fraud Calls

Description:

RTRV-FRAUDCALLS lets you retrieve details about calls that have been marked as potentially fraudulent by a fraud trap profile.

Category: Call Control

Security: View

Input Format:

```
RTRV-FRAUDCALLS:[TID]:[<callAid>]:CTAG:::  
[COUNT=<count>];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<com>:FRAUDCALLINFO=<fraudCallInfo>,  
CFINFO=<cfinfo>,ASSOCCALLINFO=<assocCallInfo>,  
NMBRREC=<nmbrRec>"  
;
```

Parameters:

callAid Identifies the AID as the name of a fraud call record in the CDR. A null value is equivalent to "ALL"; that is, by leaving the field blank, information for all fraud calls will be returned.

Type: string

Range: 1-FFFFFF (hexadecimal)

Default value: none

com Identifies the AID (in output) as the Plexus 90000.

Type: COM

Range: COM

Default value: none

count Identifies the number of entries to display in output.

Type: integer

Range: {1-100}

Default value: 1

fraudCallInfo Identifies the fraud call detail information (the recorded call leg details).

Type: string

Range: <callAid>-<iIfType>-<iIfId>-<oIfType>-<oIfId>-<cgpn>-<cdpn>, where:

callAid identifies the name of a fraud call record in the CDR with a hexadecimal string from 2-FFFFFF

iIfType identifies the incoming interface type, with values of:

BICC = BICC trunk

CASIF = CAS interface

CASTRK = CAS trunk

GR303 = GR303 interface

ISDNIF = ISDN interface

ISUP = ISUP trunk

MGCP = MGCP interface

SIP = SIP trunk

iIfId identifies the incoming interface with an integer from 0-65535

oIfType identifies the outgoing interface type, with values of:

BICC = BICC trunk

CASIF = CAS interface

CASTRK = CAS trunk

GR303 = GR303 interface

ISDNIF = ISDN interface

ISUP = ISUP trunk

MGCP = MGCP interface

SIP = SIP trunk

oIfId identifies the outgoing interface with an integer from 0-65535

cgpn identifies the calling party number to be matched as a string of 1-31 digits;

cdpn identifies the called party number to be matched as a string of 1-31 digits;

Default value: none

cfInfo Identifies the call forwarding detail associated with the fraud call record.

Type: string

Range: <OCN>-<ORR>-<RN>-<RR>-<RC>, where:

OCN identifies the Originating Called party Number in the CDR with a string of 1-31 digits and a default of "NULL"

ORR identifies the Originating Redirecting Reason in the CDR with a string of alphanumeric characters and a default of "NULL"

RN identifies the Redirecting Number in the CDR with a string of 1-31 digits and a default of "NULL"

RR identifies the Redirecting Reason in the CDR with a string of alphanumeric characters and a default of "NULL"

RC identifies the Redirecting Counter in the CDR with an integer from 0-65535

Default value: none

assocCallInfo Identifies the fraud call detail information (the recorded call leg details) for third party involvement in the call .

Type: string

Range: <callAid>-<icIfType>-<icIfId>-<ogIfType>-<ogIfId>-<cgpn>-<cdpn>, where:

callAid identifies the name of a fraud call record in the CDR with a hexadecimal string from 2-FFFFFF

icIfType identifies the incoming interface type, with values of:

- BICC = BICC trunk
- CASIF = CAS interface
- CASTRK = CAS trunk
- GR303 = GR303 interface
- ISDNIF = ISDN interface
- ISUP = ISUP trunk
- MGCP = MGCP interface
- SIP = SIP trunk

icIfId identifies the incoming interface with an integer from 0-65535

ogIfType identifies the outgoing interface type, with values of:

- BICC = BICC trunk
- CASIF = CAS interface
- CASTRK = CAS trunk
- GR303 = GR303 interface
- ISDNIF = ISDN interface

ISUP = ISUP trunk
MGCP = MGCP interface
SIP = SIP trunk

ogIfId identifies the outgoing interface with an integer from 0-65535

cgpn identifies the calling party number to be matched as a string of 1-31 digits with a default of "NULL";

cdpn identifies the called party number to be matched as a string of 1-31 digits with a default of "NULL";

Default value: none

nmbrRec Identifies the total number of fraud call records in the database..

Type: integer

Range: {1-65535}

Default value: none

Input Example:

```
RTRV-FRAUDCALLS;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"com:FRAUDCALLINFO=3F-ISUP-1-ISUP-2-5088048202-
5084900909,CFINFO=5088048202-1,
ASSOCCALLINFO=NULL,NMBREC=1"
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-PRFL-FRAUDCALLS
```

TEST-TRANS

Command:

TEST-TRANS: Test Translation

Description:

TEST-TRANS lets you verify translation plans in the call router and check the routing decision and modifications to the keys. You must first configure the router to run this command. TEST-TRANS has the following limitations:

- SCP interactions (tollfree, LNP, other general AIN triggers) are not validated (or even detected).
- No simulation occurs when the value of the first part of *actnInfoAnlz* in TRANS-PLAN is “SUB”; that is, the primary digit-screening key “SUBSTATUS” for an action performed at the InfoAnalyzed PIC prior to AIN trigger analysis is not validated.
- Limited support for the digit-modification/screening primary key CALLTYPE in DIGIT-SCREEN, DIGITMOD-DN/GEN/PARAM/TNS, and ROUTE, unless a call type associated with a trunk group is specified in PRFL-PARAMDEFAULTS or is specified by the parameter *callType* in this command. The actual call type associated with the simulated call based on number analysis of calling and called party number is not available to this feature.
- Announcements resulting from a treatment specified in a failure condition profile required by a translation plan are denoted in the TEST-TRANS output solely by their ID numbers, without reporting their applicable arguments.

Category: Call Control

Security: NSA

Input Format:

```
TEST-TRANS:[TID]:[<src>]:CTAG:[BGN=<bgn>],  
[CDPN=<cdpn>],[CGPN=<cgpn>],[CHRGN=<chrgn>],  
[GAP=<gap>],[GENDGTS=<gendgts>],[TNS=<tns>],  
[LATAID=<lataId>],[OLI=<oli>],[CPC=<cpc>],  
[CIP=<cip>],[JIP=<jip>],[CSI=<csi>],  
[CALLTYPE=<callType>],[AUTHCODE=<authCode>],  
[TOD=<tod>],[SUBSTATUS=<substatus>],  
[FMTOPT=<fmtopt>];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<COM>:<text>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

bgn Identifies the bearer group.

Type: string

Range: <intfcType>-<idx>, where

intfcType identifies the type of interface applicable to the bearer group, with values of:

CASIF = CAS interface

GR303 = GR303 interface

ISDNIF = ISDN interface

MGCP = MGCP interface

TGN = BICC, CAS, ISUP, or SIP trunk

idx identifies the trunk group or interface index, with values of:

CASIF: 1-2147483645

GR303: 1-32767

ISDNIF: 1-32767

MGCP: 1-100000

TGN: 1-9999

Default value: NULL

cdpn Identifies the called party number.

Type: string

Range: <cdnai>-<nmb>, where

cdnai identifies the called party number nature of address indicator, with values of:

ABBREVPVT = abbreviated private

INTNATNUM = international number

INTNATOPREQ = international operator request

NATNUM = national significant number

NATOPREQ = national (long-distance) operator request

NONUMCUTTHRU = no number provided, cut through to carrier

NONUMOPREQ = no number provided, operator request

SUBOPREQ = subscriber (local) operator request

SUBSNUM = subscriber number

TESTLINE = test line test code

UNKNOWN = unknown number;

nmb identifies the called party number with a numeric string of up to 31 digits

Default value: NULL

cgpn Identifies the calling party number.

Type: string

Range: <cgnai>-<nmb>, where

cgnai identifies the calling party number nature of address indicator, with values of:

ABBREVPVT = abbreviated private

NUNIINTNATNUM = non-unique international number

NUNINATNUM = non-unique national number (only for CGPN)

NUNISUBSNUM = non-unique subscriber number

TESTLINE = test line test code

UNIINTNATNUM = unique international number

UNINATNUM = unique national number

UNISUBSNUM = unique subscriber number

nmb identifies the calling party number with a numeric string of up to 31 digits

Default value: NULL

- chrgn** Identifies the charge number.
- Type:** string
- Range:** <chrgnnai>-<nmb>, where
- chrgnai* identifies the charge number nature of address indicator, with values of:
 - CDPNATNUM = ANI of the called party; national number
 - CDPSUBSNUM = ANI of the called party; subscriber number
 - CDPUNAVAIL = ANI of the called party; no number present
 - CGPNATNUM = ANI of the calling party; national number
 - CGPSUBSNUM = ANI of the calling party; subscriber number
 - UNAVAIL = ANI not available or not provided
 - nmb* identifies the charge number with a numeric string of up to 31 digits
- Default value:** NULL
-
- gap** Identifies up to five Generic Address Parameters, separated by ampersands (&).
- Type:** string
- Range:** <gap>[&<gap>[&<gap>[&<gap>[&<gap>]]]], where *gap* has the form <primKey>-<secKey>, *primKey* identifying the type of generic address parameter with an integer from 0-255, and *secKey* identifying the starting digits with a string of one to 31 digits or “DEFAULT” or “NOTPRSNT”
- Default value:** NULL
-
- gendgts** Identifies up to five Generic Digits Parameters, separated by ampersands (&).
- Type:** string
- Range:** <genDgts>[&<genDgts>[&<genDgts>[&<genDgts>[&<genDgts>]]]], where *gendgts* has the form <primKey>-<secKey>, *primKey* identifying the type of generic digits with an integer from 1-31, and *secKey* identifying the starting digits with a string of up to 31 digits or “DEFAULT” or “NOTPRSNT”
- Default value:** NULL

tns	Identifies the Transit Network Selection (TNS) parameter. Type: string Range: <tnsVal>-<0ZZcode>, where <i>tnsVal</i> identifies the carrier code as a string of 1-4 digits (Range = {0-9999}) <i>0ZZcode</i> identifies the ISUP circuit code or the CAS 0ZZ or 1NX codes as a string of 1-3 digits (Range = {0-255}) Default value: NULL
lataId	Identifies the Local Access & Transport Area. Type: integer Range: {200-99999} Default value: NULL
oli	Identifies the Originating Line Information parameter. Type: string Range: {00-FF} (hexadecimal) Default value: NULL
cpc	Identifies the Calling Party Category parameter. Type: string Range: {00-FF} (hexadecimal) Default value: NULL
cip	Identifies the Carrier Information Parameter (for ISUP only). Type: integer Range: {0-9999} Default value: NULL
jip	Identifies the Jurisdiction Information Parameter (NPANXX). Type: integer Range: {200000-999999} Default value: NULL

- csi** Identifies the Carrier Selection Information parameter.
- Type:** enum
- Range:** PRESUBDIAL = presubscribed and input by calling party
PRESUBNOTDIAL = presubscribed and not input by calling party
PRESUBUNKNOWN = presubscribed, input by calling party undetermined
NOTPRESUB = not presubscribed and input by calling party
UNKNOWN = no indication
- Default value:** NULL
- callType** Identifies the type of call (Class 5).
- Type:** enum
- Range:** CUTTHRU
DIR_ASSISTANCE
EMERGENCY
INTERLATA
INTERLATAOPREQ
INTNATNUM
INTNATOPREQ
INTRALATA
INTRALATAOPREQ
LOCALNUMBER
LOCALOPREQ
N11
NATNUM
NONUMOPREQ
TOLLFREE
- Default value:** NULL
- authCode** Identifies the authorization code provided by the caller.
- Type:** string
- Range:** up to eight digits
- Default value:** NULL
- tod** Identifies the time of day in month-day-hour format.
- Type:** integer
- Range:** MM-DD-HH
- Default value:** NULL

substatus Identifies the status of the subscriber.

Type: enum

Range: ACTIVE = In Service (subscriber is present in the CL4SUB table and active)

INACTIVE = Out Of Service (subscriber is present in the CL4SUB table and inactive)

NOTINDB = Not in database (subscriber is not in the CL4SUB table)

Default value: NULL

fmtopt Identifies whether to use alternate output formatting for decoding in the Plexview® EMS. This parameter is for use by Telica personnel; leave it blank.

Type: BoolYN

Range: N = In Service (subscriber is present in the CL4SUB table and active)

Y = Out Of Service (subscriber is present in the CL4SUB table and inactive)

Default value: N

text Identifies, as the output, descriptions of translation plans, routing decisions, and key modifications in the call router,.

Type: string

Range: ASCII characters

Default value: none

Input Example:

```
TEST-TRANS::::BGN=TGN-1,CDPN=NATNUM-908,TNS=111;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:0:TrkGrp-1::TransPlan-TP1"
"COM:1:type=Transplan,label=TP1,type=Normal,
  action=infoColl,type=Screen,label=DS1"
"COM:2:type=Screen,label=DS1,key=TNS,rule=TNS-0111,
  match=0111,action=Pass"
"COM:3:type=Transplan,label=TP1,type=Normal,
  type=Router,label=RD1"
"COM:4:type=Router,label=RD1,key=CDPN,
  rule=CDPN-NATIONAL-DEFAULT,match=NATIONAL-908,
  action=RtList,label=RL1"
"COM:5:type=Routelist,label=RL1,hunt=Circ,index=1,
  intf=TrkGrp-1001"
"COM:6:type=Intfc,label=TrkGrp-1001"
;
```

Related Commands:

DLT/ED/ENT/RTRV-TRANS-PLAN

DLT/ENT/RTRV-DN-RAF

Commands:

DLT-DN-RAF: Delete DN RAF
ENT-DN-RAF: Enter DN RAF
RTRV-DN-RAF: Retrieve DN RAF

Descriptions:

DLT-DN-RAF lets the user delete the directory number (DN) that the carrier provides for remote access to features (RAF); that is, remote service access.

ENT-DN-RAF lets the user establish the directory number (DN) the carrier provides for remote access to features (RAF); that is, remote service access.

RTRV-DN-RAF lets the user retrieve the directory number (DN) the carrier provides for remote access to features (RAF); that is, remote service access.

Category: Call Control

Security: SA for DLT/ENT, View for RTRV

Input Formats:

DLT-DN-RAF : [TID] : <dn> : [CTAG] ;
ENT-DN-RAF : [TID] : <dn> : [CTAG] ;
RTRV-DN-RAF : [TID] : [<dn>] : [CTAG] ;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<dn>"
;
```

Parameters:

dn Identifies the AID as the DN the carrier provides for remote service access. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the remote service access DN configured in the system will be returned.

Type: string

Range: up to 21 digits

Default value: none

Input Examples:

DLT-DN-RAF : : 5088048202 ;

ENT-DN-RAF : : 5088048202 ;

RTRV-DN-RAF ;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"5088048202"
;
```

Related Commands: none

DLT/ENT/RTRV-LNPSCREEN-DIGITS

Commands:

DLT-LNPSCREEN-DIGITS: Delete LNPSCREEN Digits

ENT-LNPSCREEN-DIGITS: Enter LNPSCREEN Digits

RTRV-LNPSCREEN-DIGITS: Retrieve LNPSCREEN Digits

Descriptions:

DLT-LNPSCREEN-DIGITS lets the user delete a telephone number from the list of called numbers for which LNP queries can be issued. Entries can be either three digits to represent an entire NPA, six digits to represent an NXX within an NPA, or ten digits for an individual telephone number.

ENT-LNPSCREEN-DIGITS lets the user add telephone numbers to the list of called numbers for which LNP queries can be issued. Entries can be either three digits to represent an entire NPA, six digits to represent an NXX within an NPA, or ten digits for an individual telephone number.

RTRV-LNPSCREEN-DIGITS lets the user either retrieve the list of called numbers for which LNP queries can be issued, or determine if a specific number is listed.

Category: Call Control

Security: SA for DLT/ENT, View for RTRV

Input Formats:

DLT-LNPSCREEN-DIGITS:[TID]:<screenDigits>:[CTAG];

ENT-LNPSCREEN-DIGITS:[TID]:<screenDigits>:[CTAG];

RTRV-LNPSCREEN-DIGITS:[TID]:[<screenDigits>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<screenDigits>"
;
```

Parameters:

screenDigits Identifies the AID as an NPA, an NXX within an NPA, or an individual telephone number. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all telephone numbers in the system for which LNP queries can be issued will be returned.

Type: string

Range: 3 or 6-10 digits

Default value: none

Input Examples:

DLT-LNPSCREEN-DIGITS::508480;

ENT-LNPSCREEN-DIGITS::508480;

RTRV-LNPSCREEN-DIGITS;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "508480"
  "508804"
  "978"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-MGC

Commands:

DLT-MGC: Delete Media Gateway Controller

ED-MGC: Edit Media Gateway Controller

ENT-MGC: Enter Media Gateway Controller

RTRV-MGC: Retrieve Media Gateway Controller

Descriptions:

DLT-MGC lets the user delete a remote Plexus 9000 acting as a media gateway controller.

ED-MGC lets the user change the primary state of a remote Plexus 9000 acting as a media gateway controller that interfaces with the local Plexus 9000 in a point-to-point SS7-over-IP network.

ENT-MGC lets the user establish the primary state of a remote Plexus 9000 acting as a media gateway controller, and the IP addresses for the MGC's SP Modules that interface with the local Plexus 9000 in a point-to-point SS7-over-IP network.

RTRV-MGC lets the user retrieve the state of a remote Plexus 9000 acting as a media gateway controller and the IP addresses for the MGC's SP Modules that interface with the local Plexus 9000 in a point-to-point SS7-over-IP network.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-MGC: [TID]:<mgcId>:[CTAG];

ED-MGC: [TID]:<mgcId>:[CTAG]:<pst>;

ENT-MGC: [TID]:<mgcId>:[CTAG]::MGCSPAIP=<mgcSPAIP>,
MGCSPBIP=<mgcSPBIP>:<pst>;

RTRV-MGC: [TID]: [<mgcId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "[<mgcId>]:[MGCSPAIP=<mgcSPAIP>],
    [MGCSPBIP=<mgcSPBIP>]:<pst>"
;
```

Parameters:

mgcId Identifies the AID as the point code of the processor pair in the remote media gateway controller. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all media gateway controllers configured in the system will be returned.

Type: PcAid

Range: {0-255}-{0-255}-{0-255}

Default value: none

mgcSPAIP Identifies the IP address for the SP-A Module of the media gateway controller. A value of "127.0.0.1" puts the module in loopback.

Type: string

Range: {0-254}.{0-254}.{0-255}.{1-255}

Default value: none

mgcSPBIP Identifies the IP address for the SP-B Module of the media gateway controller. A value of "127.0.0.1" puts the module in loopback.

Type: string

Range: {0-254}.{0-254}.{0-255}.{1-255}

Default value: none

pst Identifies the primary state of the media gateway controller. Call processing stops on the media gateway controller when the state is "OOS".

Type: enum

Range: IS = In-service

OOS = Out-of-service

Default value: none

Input Examples:

DLT-MGC::23-186-5;

ED-MGC::23-186-5:::OOS;

ENT-MGC::23-186-5:::MGCSPAIP=192.168.252.4,
MGCSPBIP=192.168.254.22:IS;

RTRV-MGC;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"23-186-5:MGCSPAIP=192.168.252.4,
  MGCSPBIP=192.168.254.22:IS"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-NP-POOLED

Commands:

DLT-NP-POOLED: Delete NP (Number Portability) Pooled

ED-NP-POOLED: Edit NP (Number Portability) Pooled

ENT-NP-POOLED: Enter NP (Number Portability) Pooled

RTRV-NP-POOLED: Retrieve NP (Number Portability) Pooled

Descriptions:

DLT-NP-POOLED lets the user delete a block of numbers assignable to alternative carriers.

ED-NP-POOLED lets the user change the ending number for a block of numbers assignable to alternative carriers. The Plexus 9000 performs an LNP query to the SCP when a called party number is within a block of pooled numbers.

ENT-NP-POOLED lets the user create a block of numbers that can be assigned to alternative carriers. The Plexus 9000 performs an LNP query to the SCP when a called party number is within a block of pooled numbers.

RTRV-NP-POOLED lets the user retrieve the ending number for a block of numbers assignable to alternative carriers. The Plexus 9000 performs an LNP query to the SCP when a called party number is within a block of pooled numbers.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-NP-POOLED: [TID]:<ccNpaNxxStart>:[CTAG];

ED-NP-POOLED: [TID]:<ccNpaNxxStart>:[CTAG]::
ENDINGXXXX=<endingXxxx>;

ENT-NP-POOLED: [TID]:<ccNpaNxxStart>:[CTAG]::
[ENDINGXXXX=<endingXxxx>];

RTRV-NP-POOLED: [TID]:<ccNpaNxxStart>:[CTAG];

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<ccNpaNxxStart>:ENDINGXXXX=<endingXxxx>"
;
```

Parameters:

ccNpaNxxStart Identifies the starting number for the block of pooled numbers. The first set of numbers in the range represents the country code, the second set represents the area code, the third represents the local exchange, and the fourth (which must be exactly four digits) represents the starting number for the block. A null value for the fourth set in the range (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns all starting numbers for blocks of pooled numbers in the specified local exchange.

Type: CcNpaNxxStart

Range: {1-99999}-{1-99999}-{1-99999}[-{0-9999}]

Default value: none

endingXxxx Identifies the ending number (which will be exactly four digits) for the block of pooled numbers.

Type: enum

Range: {0-9999}

Default value: none

Input Examples:

```
DLT-NP-POOLED::01-508-480-1000;
ED-NP-POOLED::01-508-480-1000:::ENDINGXXXX=1999;
ENT-NP-POOLED::01-508-480-1000:::ENDINGXXXX=1999;
RTRV-NP-POOLED::01-508-480-1000;
```

Output Example:

```
telica 2004-05-14 14:37:49
M    0 COMPLD
      "01-508-480-1000:ENDINGXXXX=1999"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-NP-PORTEDOUT

Commands:

DLT-NP-PORTEDOUT: Delete NP (Number Portability) Ported Out

ED-NP-PORTEDOUT: Edit NP (Number Portability) Ported Out

ENT-NP-PORTEDOUT: Enter NP (Number Portability) Ported Out

RTRV-NP-PORTEDOUT: Retrieve NP (Number Portability) Ported Out

Descriptions:

DLT-NP-PORTEDOUT lets the user delete a block of numbers ported out from the Plexus 9000.

ED-NP-PORTEDOUT lets the user change the ending number for a block of numbers ported out from the Plexus 9000.

ENT-NP-PORTEDOUT lets the user create a block of numbers that are ported out from the Plexus 9000.

RTRV-NP-PORTEDOUT lets the user retrieve the ending number for a block of numbers that are ported out from the Plexus 9000.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-NP-PORTEDOUT:[TID]:<ccNpaNxxStart>:[CTAG];

ED-NP-PORTEDOUT:[TID]:<ccNpaNxxStart>:[CTAG]::
ENDINGXXXX=<endingXxxx>;

ENT-NP-PORTEDOUT:[TID]:<ccNpaNxxStart>:[CTAG]::
[ENDINGXXXX=<endingXxxx>];

RTRV-NP-PORTEDOUT:[TID]:<ccNpaNxxStart>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ccNpaNxxStart>:ENDINGXXXX=<endingXxxx>"
;
```

Parameters:

ccNpaNxxStart Identifies the starting number for the block of ported-out numbers. The first set of numbers in the range represents the country code, the second set represents the area code, the third represents the local exchange, and the fourth (which must be exactly four digits) represents the starting number for the block. A null value for the fourth set in the range (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns all starting numbers for blocks of ported-out numbers in the specified local exchange.

Type: CcNpaNxxStart

Range: {1-999999}-{1-999999}-{1-999999}[-{0-9999}]

Default value: none

endingXxxx Identifies the ending number (which will be exactly four digits) for the block of ported-out numbers.

Type: enum

Range: {0-9999}

Default value: none

Input Examples:

```
DLT-NP-PORTEDOUT::01-508-480-1000;  
ED-NP-PORTEDOUT::01-508-480-1000:::ENDINGXXXX=1999;  
ENT-NP-PORTEDOUT::01-508-480-1000:::ENDINGXXXX=1999;  
RTRV-NP-PORTEDOUT::01-508-480-1000;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"01-508-480-1000:ENDINGXXXX=1999"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-NP-RESERVED

Commands:

DLT-NP-RESERVED: Delete NP (Number Portability) Reserved

ED-NP-RESERVED: Edit NP (Number Portability) Reserved

ENT-NP-RESERVED: Enter NP (Number Portability) Reserved

RTRV-NP-RESERVED: Retrieve NP (Number Portability) Reserved

Descriptions:

DLT-NP-RESERVED lets the user delete a block of numbers reserved for number portability in the Plexus 9000.

ED-NP-RESERVED lets the user change the ending number for a block of numbers reserved for number portability in the Plexus 9000.

ENT-NP-RESERVED lets the user create a block of numbers that are reserved for number portability in the Plexus 9000.

RTRV-NP-RESERVED lets the user retrieve the ending number for a block of numbers that are reserved for number portability in the Plexus 9000.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-NP-RESERVED: [TID]:<ccNpaNxxStart>:[CTAG];

ED-NP-RESERVED: [TID]:<ccNpaNxxStart>:[CTAG]::
ENDINGXXXX=<endingXxxx>;

ENT-NP-RESERVED: [TID]:<ccNpaNxxStart>:[CTAG]::
[ENDINGXXXX=<endingXxxx>];

RTRV-NP-RESERVED: [TID]:<ccNpaNxxStart>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ccNpaNxxStart>:ENDINGXXXX=<endingXxxx>"
;
```

Parameters:

ccNpaNxxStart Identifies the starting number for the block of reserved numbers. The first set of numbers in the range represents the country code, the second set represents the area code, the third represents the local exchange, and the fourth (which must be exactly four digits) represents the starting number for the block. A null value for the fourth set in the range (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns all starting numbers for blocks of reserved numbers in the specified local exchange.

Type: CcNpaNxxStart

Range: {1-999999}-{1-999999}-{1-999999}[-{0-9999}]

Default value: none

endingXxxx Identifies the ending number (which will be exactly four digits) for the block of reserved numbers.

Type: enum

Range: {0-9999}

Default value: none

Input Examples:

```
DLT-NP-RESERVED::01-508-480-1000;  
ED-NP-RESERVED::01-508-480-1000:::ENDINGXXXX=1999;  
ENT-NP-RESERVED::01-508-480-1000:::ENDINGXXXX=1999;  
RTRV-NP-RESERVED::01-508-480-1000;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"01-508-480-1000:ENDINGXXXX=1999"  
;
```

Related Commands: none

DLT/ENT/RTRV-TOLLFREE-NPA

Commands:

DLT-TOLLFREE-NPA: Delete Tollfree NPA

ENT-TOLLFREE-NPA: Enter Tollfree NPA

RTRV-TOLLFREE-NPA: Retrieve Tollfree NPA

Descriptions:

DLT-TOLLFREE-NPA lets the user delete a tollfree NPA (Numbering Plan Area) within a country from the system.

ENT-TOLLFREE-NPA lets the user add a tollfree NPA (Numbering Plan Area) within a country to the system. ENT-TOLLFREE-NPA will not work unless ENT-COUNTRY has already been issued.

RTRV-TOLLFREE-NPA lets the user retrieve all tollfree NPAs (Numbering Plan Areas) within a country from the system. The command also can be used to determine the existence of a specific tollfree NPA.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-TOLLFREE-NPA: [TID]:<CcNpa>:[CTAG];

ENT-TOLLFREE-NPA: [TID]:<CcNpa>:[CTAG];

RTRV-TOLLFREE-NPA: [TID]:<CcNpa>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<CcNpa>"
;
```


Parameters:

CcNpa Identifies the AID as a tollfree NPA within a country. The first number in the range identifies the country code; the second identifies the tollfree NPA and is optional in DLT and RTRV. A null value for the second number in the range (in DLT and RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system deletes or returns all tollfree NPAs for the country specified by the first number in the range. If you specify a nonexistent tollfree NPA for the second number in the range, the system will return a "DENY – SROF" message.

Type: ccNpa

Range: {1-999999}-{200-999}

Default value: none

Input Examples:

DLT-TOLLFREE-NPA: :01-888;

ENT-TOLLFREE-NPA: :01-888;

RTRV-TOLLFREE-NPA: :01;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "01-800"
  "01-877"
  "01-888"
;
```

Related Commands: none

ED/ENT/RTRV-ACBAR-SYS

Commands:

ED-ACBAR-SYS: Edit ACBAR System

ENT-ACBAR-SYS: Enter ACBAR System

RTRV-ACBAR-SYS: Retrieve ACBAR System

Descriptions:

ED-ACBAR-SYS lets the user change the values for the timers and counters for the ACB (Automatic Call-Back) and AR (Automatic Redial) features.

ENT-ACBAR-SYS lets the user provision the timers and counters for the ACB (Automatic Call-Back) and AR (Automatic Redial) features. ENT-ACBAR-SYS will not work unless ENT-SLHR-SCP has already been issued.

RTRV-ACBAR-SYS lets the user retrieve the values for the timers and counters for the ACB (Automatic Call-Back) and AR (Automatic Redial) features.

Category: Call Control

Security: SA for ED and ENT, View for RTRV

Input Formats:

```
ED-ACBAR-SYS:[TID]:[<src>]:[CTAG]:[SLHRID=<slhrid>],  
[MAXACT=<maxact>],[MAXQ=<maxq>],  
[CGSCANRATE=<cgscanrate>],  
[ORIGSCANRATE=<origscanrate>],  
[TERMSCANRATE=<termscanrate>],  
[REQTERMSCAN=<reqtermscan>],  
[RCVTERMSCAN=<rcvtermscan>],  
[DENYNUNQDN=<denynunqdn>],  
[DENYANONDN=<denyanondn>],[ACTLVL=<actlvl>],  
[VOICEBACK=<voiceback>],[RINGCYCLE=<ringcycle>],  
[MAXUNANSRING=<maxunansring>],  
[MAXANNTMOUT=<maxanntmout>],  
[INVDGTCNT=<invdgtcnt>],[T2=<t2>],[T5=<t5>],  
[T6=<t6>],[T9=<t9>],[TTHR=<tthr>],  
[ORIGT10=<origt10>],[TERMT10=<termt10>;
```

```
ENT-ACBAR-SYS:[TID]:[<src>]:[CTAG]:[SLHRID=<slhrid>],
[MAxACT=<maxact>],[MAxQ=<maxq>],
[CGSCANRATE=<cgscanrate>],
[ORIGSCANRATE=<origscanrate>],
[TERMSCANRATE=<termscanrate>],
[REQTERMSCAN=<reqtermscan>],
[RCVTERMSCAN=<rcvtermscan>],
[DENYNUNQDN=<denynunqdn>],
[DENYANONDN=<denyanondn>],[ACTLVL=<actlvl>],
[VOICEBACK=<voiceback>],[RINGCYCLE=<ringcycle>],
[MAxUNANSRING=<maxunansring>],
[MAxANNTMOUT=<maxanntmout>],
[INVDGTCNT=<invdgtcnt>],[T2=<t2>],[T5=<t5>],
[T6=<t6>],[T9=<t9>],[TTHR=<tthr>],
[ORIGT10=<origt10>],[TERMT10=<termt10>];

RTRV-ACBAR-SYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:SLHRID=<slhrid>,MAxACT=<maxact>,MAxQ=<maxq>,
CGSCANRATE=<cgscanrate>,
ORIGSCANRATE=<origscanrate>,
TERMSCANRATE=<termscanrate>,
REQTERMSCAN=<reqtermscan>,
RCVTERMSCAN=<rcvtermscan>,
DENYNUNQDN=<denynunqdn>,DENYANONDN=<denyanondn>,
ACTLVL=<actlvl>,VOICEBACK=<voiceback>,
RINGCYCLE=<ringcycle>,
MAxUNANSRING=<maxunansring>,
MAxANNTMOUT=<maxanntmout>,INVDGTCNT=<invdgtcnt>,
T2=<t2>,T5=<t5>,T6=<t6>,T9=<t9>,TTHR=<tthr>,
ORIGT10=<origt10>,TERMT10=<termt10>"
;
```

Parameters:

src Identifies the AID as the Plexus 9000.

Type: COM
Range: COM
Default value: COM

- slhrId** Identifies the AID as a service logic host route to a Service Control Point.
Type: integer
Range: {NULL, 0-31}
Default value: NULL
- maxact** Identifies the maximum number of concurrent ACB/AR activations allowed per subscriber.
Type: integer
Range: {10-30}
Default value: 20
- maxq** Identifies the maximum number of ACB/AR requests that can be queued per subscriber.
Type: integer
Range: {10-20}
Default value: 15
- cgscanrate** Identifies the calling party scan rate in seconds; i.e., the rate at which the busy/idle status of an ACB/AR subscriber will be checked when the called party is idle but the ACB/AR subscriber is busy.
Type: enum
Range: {5, 10, 15, 20, 25, 30}
Default value: 20
- origscanrate** Identifies the originating scan rate in seconds; i.e., the rate at which the busy/idle status of an ACB/AR subscriber will be checked when the called party is idle but the ACB/AR subscriber is busy.
Type: enum
Range: {30, 45, 60, 75, 90}
Default value: 60
- termscanrate** Identifies the terminating scan rate in seconds; that is, the rate at which the Plexus 9000 performs periodic scanning of the called party's line.
Type: enum
Range: {5, 10, 15, 20, 25, 30}
Default value: 20

reqscanrate Identifies whether the Plexus 9000 can request terminating scanning when originating an ACB/AR request.

Type: BoolYN

Range: Y = the Plexus 9000 can request terminating scanning
N = the Plexus 9000 cannot request terminating scanning

Default value: N

rcvscanrate Identifies whether the Plexus 9000 can receive and process a terminating scanning request from an originating switch.

Type: BoolYN

Range: Y = the Plexus 9000 can receive and process a terminating scanning request
N = the Plexus 9000 cannot receive and process a terminating scanning request

Default value: N

denynunqdn Identifies whether the Plexus 9000 denies AR activation to non-unique DNs (directory numbers).

Type: BoolYN

Range: Y = AR activation to non-unique DNs denied
N = AR activation to non-unique DNs allowed

Default value: Y

denyanondn Identifies whether the Plexus 9000 denies AR activation to anonymous DNs (directory numbers).

Type: BoolYN

Range: Y = AR activation to anonymous DNs denied
N = AR activation to anonymous DNs allowed

Default value: Y

actlvl Identifies the activation level. ACB always has one-level activation; AR can have two-level activation.

Type: enum

Range: ONE = one-level activation
TWO = two-level activation

Default value: ONE

voiceback Identifies the voice back option, applicable only for two-level AR activation.

Type: enum

Range: DN = entire 10-digit DN
NPA = three-digit NPA
NPANXX = six-digit NPA and NXX

Default value: DN

ringcycle Identifies the maximum number of six-second ringing cycles allowed for each instance of special ringing.

Type: integer

Range: {2-5}

Default value: 4

maxunansring Identifies the maximum number of unanswered special ring backs allowed. It limits the number of times special ringing, applied to an ACB/AR subscriber, is unanswered.

Type: integer

Range: {1-12}

Default value: 6

maxanntmout Identifies the number of times an AR subscriber can fail to respond to a dialing instructions announcement before a timeout occurs. It only applies to two-level AR activation.

Type: integer

Range: {1-3}

Default value: 2

invdgtcnt Identifies the number of times an AR subscriber can specify invalid action, after dialing instructions are provided. It only applies to two-level AR activation.

Type: integer

Range: {1-3}

Default value: 2

t2 Identifies the Timer T2 value in minutes. Timer T2 is the Resume Scanning timer, which specifies the number of minutes the Plexus 9000 waits to resume scanning after the ACB/AR subscriber does not answer special ringing.

Type: integer

Range: {3-12}

Default value: 5

t5 Identifies the Timer T5 value in seconds. Timer T5 is the Initial Query Response timer, which specifies the number of seconds the Plexus 9000 waits for a response to the initial query.

Type: integer

Range: {1-5}

Default value: 3

- t6** Identifies the Timer T6 value in minutes. Timer T6 is the Monitoring timer, which specifies the number of minutes that the called party is monitored for an idle notification.
- Type:** integer
Range: {25-35}
Default value: 30
- t9** Identifies the Timer T9 value in seconds. Timer T9 is the Subsequent Query Response timer, which specifies the number of seconds that the Plexus 9000 waits for a response from the terminating switch to any query other than the initial query.
- Type:** integer
Range: {1-5}
Default value: 3
- tthr** Identifies the Resume Scanning Threshold timer value in minutes, which is compared with the Monitoring Timer (T6) to determine if scanning should be resumed.
- Type:** integer
Range: {0-7}
Default value: 5
- origt10** Identifies the Originating Overall Monitoring timer value in minutes, which determines the maximum continuous time a particular ACB/AR request can be in effect for a subscriber.
- Type:** integer
Range: {120-240}
Default value: 180
- termt10** Identifies the Terminating Overall Monitoring timer value in minutes, which determines the maximum time an ACB/AR request can remain in the subscriber's queue.
- Type:** integer
Range: {120-240}
Default value: 180

Input Examples:

```
ED-ACBAR-SYS::::SLHRID=1,MAXACT=20,MAXQ=15,  
CGSCANRATE=20,ORIGSCANRATE=60,TERMSCANRATE=20,  
REQTERMSCAN=N,RCVTERMSCAN=N,DENYNUNQDN=Y,  
DENYANONDN=Y,ACTLVL=ONE,VOICEBACK=DN,RINGCYCLE=4,  
MAXUNANSRING=6,MAXANNTMOUT=2,INVDGTCNT=2,T2=5,T5=3,  
T6=30,T9=t9,TTHR=5,ORIGT10=180,TERMT10=180;  
  
ENT-ACBAR-SYS::::SLHRID=1,MAXACT=20,MAXQ=15,  
CGSCANRATE=20,ORIGSCANRATE=60,TERMSCANRATE=20,  
REQTERMSCAN=N,RCVTERMSCAN=N,DENYNUNQDN=Y,  
DENYANONDN=Y,ACTLVL=ONE,VOICEBACK=DN,RINGCYCLE=4,  
MAXUNANSRING=6,MAXANNTMOUT=2,INVDGTCNT=2,T2=5,T5=3,  
T6=30,T9=t9,TTHR=5,ORIGT10=180,TERMT10=180;  
  
RTRV-ACBAR-SYS;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:SLHRID=1,MAXACT=20,MAXQ=15,CGSCANRATE=20,  
ORIGSCANRATE=60,TERMSCANRATE=20,REQTERMSCAN=N,  
REQTERMSCAN=N,RCVTERMSCAN=N,DENYNUNQDN=Y,  
DENYANONDN=Y,ACTLVL=ONE,VOICEBACK=DN,  
RINGCYCLE=4,MAXUNANSRING=6,MAXANNTMOUT=2,  
INVDGTCNT=2,T2=5,T5=3,T6=30,T9=t9,TTHR=5,  
ORIGT10=180,TERMT10=180"  
;
```

Related Commands: none

ED/RTRV-BILLSYS

Commands:

ED-BILLSYS: Edit BILLSYS

RTRV-BILLSYS: Retrieve BILLSYS

Descriptions:

ED-BILLSYS lets the user enable writing Call Detail Records (CDRs), and define the cutoff time for calls longer than 24 hours. Note that the TID (target identifier; i.e., the network name of the Plexus) is mandatory – use RTRV-HDR to obtain the name if unknown.

RTRV-BILLSYS lets the user retrieve whether CDR writing is enabled, and the cutoff time for long-duration calls.

Category: Call Control

Security: NSA for ED, View for RTRV

Input Formats:

```
ED-BILLSYS:<TID>:[<src>]:[CTAG]::
    [AMAGEN=<amaGeneration>],
    [LONGDURTIME=<longDurationCallTime>];
RTRV-BILLSYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<src>:AMAGEN=<amaGeneration>,
      LONGDURTIME=<longDurationCallTime>"
      ;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

amaGeneration Indicates whether call detail record processing is set to be in service or out of service. The factory default is “OFF”.

Type: enum

Range: OFF = Out of service
ON = In service

Default value: not applicable

longDurationCallTime Identifies when to start the timing for the long duration call interval. The factory default is 12 midnight (00-00-00).

Type: string

Range: {HH-MM-SS}

Default value: not applicable

Input Examples:

```
ED-BILLSYS:TELICA:::AMAGEN=OFF, LONGDURTIME=00-00-00;  
RTRV-BILLSYS;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:AMAGEN=OFF, LONGDURTIME=00-00-00"  
;
```

Related Commands: none

ED/RTRV-GMSC-ANSISYS

Commands:

ED-GMSC-ANSISYS: Edit GMSC ANSI System

RTRV-GMSC-ANSISYS: Retrieve GMSC ANSI System

Descriptions:

ED-GMSC-ANSISYS lets the user configure the system wide ANSI IS41 network parameters for the Gateway Mobile Switching Center (GMSC) functionality.

RTRV-GMSC-ANSISYS lets the user retrieve the system wide ANSI network parameters for the GMSC functionality.

Category: Call Control

Security: SA for ED, View for RTRV

Input Formats:

```
ED-GMSC-ANSISYS:[TID]:[<src>]:[CTAG]::  
[MRKTID=<marketId>],[SWITCHNUM=<switchNum>],  
[SMTc=<smtc>],[SLHRID=<slhrId>],  
[GSMPREFIX=<gsmPrefix>],[CFOVERRIDE=<cfOverride>],  
[VMAILPREFIX=<vmailPrefix>],[OPRTMOUT=<oprTmout>]:  
[<pst>];
```

```
RTRV-GMSC-ANSISYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<src>:MRKTID=<marketId>,SWITCHNUM=<switchNum>,  
SMTc=<smtc>,SLHRID=<slhrId>,  
GSMPREFIX=<gsmPrefix>,CFOVERRIDE=<cfOverride>,  
VMAILPREFIX=<vmailPrefix>,OPRTMOUT=<oprTmout>:  
<pst>"  
;
```

Parameters:

- src** Identifies the AID as the Plexus 9000.
Type: COM
Range: COM
Default value: COM
- marketId** Identifies a unique market (an area of coverage; for instance, a greater metropolitan area) specified by the service provider. The factory default is “NULL”.
Type: integer
Range: {0-32767}
Default value: not applicable
- switchNum** Identifies a particular group of cell sites and switch resources associated with the specified *marketId*. The factory default is “NULL”.
Type: integer
Range: {0-255}
Default value: not applicable
- smtc** Identifies the SystemMyTypeCode that designates Telica as the vendor of the Plexus 9000. The factory default is “NULL”.
Type: integer
Range: {0-255}
Default value: not applicable
- slhrId** Identifies the ANSI Home Location Register (HLR) as a service logic host route (established by [ENT-SLHR-SCP](#)) to a Service Control Point. The factory default is “NULL”.
Type: integer
Range: {0-31}
Default value: not applicable
- gsmPrefix** Identifies the prefix used by the ANSI HLR to signify the Global System for Mobile Communication (GSM) number. The factory default is “NULL”.
Type: string
Range: up to 10 hexadecimal (0-E) characters
Default value: not applicable

cfOverride Identifies whether the Plexus 9000 overrides the forwarding information received from the ANSI HLR with the original called party information. The factory default is “N”. This parameter is not supported presently; leave it blank.

Type: BoolYN

Range: N = do not override the forwarding information received from the ANSI HLR

Y = override the forwarding information received from the ANSI HLR

Default value: not applicable

vmailPrefix Identifies the prefix used by the ANSI HLR for routing to the voicemail system, and which increments the ANSIVMAILFWDED value for *montype* in [RTRV-PM-GMSC](#). The factory default is “NULL”.

Type: string

Range: up to 21 hexadecimal (0-E) characters

Default value: not applicable

oprTmout Identifies the time (in seconds) before ANSI HLR query response expiry. The factory default is “10”.

Type: integer

Range: {1-15}

Default value: not applicable

pst Identifies the primary state of the Plexus 9000 configured as an ANSI IS41 GMSC. The factory default is “OOS”. You cannot change the value to “IS” if the value of *marketId*, *switchNum*, *smtc*, or *slhrId* is “NULL”.

Type: enum

Range: IS = In Service – the Plexus 9000 is configured as an ANSI GMSC

OOS = Out Of Service – the Plexus 9000 is not configured as an ANSI GMSC

Default value: not applicable

Input Examples:

```
ED-GMSC-ANSISYS:::::MARKETID=4, SWITCHNUM=4, SMTc=254,  
SLHRID=2, GSMPREFIX=NULL, CFOVERRIDE=N, VMAILPREFIX=3,  
OPRTMOUT=10:00S;  
  
RTRV-GMSC-ANSISYS;
```

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"COM:MRKTID=4, SWITCHNUM=4, SMTC=254, SLHRID=2,
  GSMPREFIX=NULL, CFOVERRIDE=N, VMAILPREFIX=3,
  OPRTMOUT=9:00S"
;
```

Related Commands:

ED/RTRV-GMSC-GSMSYS

ED/RTRV-GMSC-GSMSYS

Commands:

ED-GMSC-GSMSYS: Edit GMSC GSM System

RTRV-GMSC-GSMSYS: Retrieve GMSC GSM System

Descriptions:

ED-GMSC-GSMSYS lets the user configure the system wide Global System for Mobile Communication (GSM) network parameters for the Gateway Mobile Switching Center (GMSC) functionality.

RTRV-GMSC-GSMSYS lets the user retrieve the system wide GSM network parameters for the GMSC functionality.

Category: Call Control

Security: SA for ED, View for RTRV

Input Formats:

```
ED-GMSC-GSMSYS:[TID]:[<src>]:[CTAG]::  
[GMSCADDR=<gsmcAddr>],[SLHRID=<slhrId>],  
[GSMCACHE=<gsmCache>],[CACHESIZE=<cacheSize>],  
[CFOVERRIDE=<cfOverride>],  
[VMAILPREFIX=<vmailPrefix>],[OPRTMOUT=<oprTmout>],  
[SRIACN=<sriAcn>],[RCHACN=<rchAcn>],  
[OPTROUTING=<optRouting>]:[<pst>];  
  
RTRV-GMSC-GSMSYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<src>:GMSCADDR=<gsmcAddr>,SLHRID=<slhrId>,  
GSMCACHE=<gsmCache>,CACHESIZE=<cacheSize>,  
CFOVERRIDE=<cfOverride>,  
VMAILPREFIX=<vmailPrefix>,OPRTMOUT=<oprTmout>,  
SRIACN=<sriAcn>,RCHACN=<rchAcn>,  
OPTROUTING=<optRouting>:<pst>"  
;
```

Parameters:

- src** Identifies the AID as the Plexus 9000.
Type: COM
Range: COM
Default value: COM
- gmscAddr** Identifies the ITU-T Rec. E.164 address assigned to the Plexus 9000 GSM GMSC. The factory default is “NULL”.
Type: string
Range: up to 21 digits
Default value: not applicable
- slhrId** Identifies the Home Location Register (HLR) as a service logic host route (established by [ENT-SLHR-SCP](#)) to a Service Control Point. The factory default is “NULL”.
Type: integer
Range: {0-31}
Default value: not applicable
- gsmCache** Identifies whether to enter mobile subscribers into the GSM cache (an internal listing of GSM subscribers). The factory default is “N”.
Type: BoolYN
Range: N = do not enter mobile subscribers into the GSM cache
Y = enter mobile subscribers into the GSM cache
Default value: not applicable
- cacheSize** Identifies the maximum number of entries allowed in the GSM cache. The factory default is “500000”.
Type: integer
Range: {1-1000000}
Default value: not applicable
- cfOverride** Identifies whether the Plexus 9000 overrides the forwarding information received from the GSM HLR with the original called party information. The factory default is “N”. This parameter is not supported presently; leave it blank.
Type: BoolYN
Range: N = do not override the forwarding information received from the GSM HLR
Y = override the forwarding information received from the GSM HLR
Default value: not applicable

vmailPrefix Identifies the prefix used by the GSM HLR for routing to the voicemail system, and which increments the GSMVMAILFWDED value for *montype* in [RTRV-PM-GMSC](#). The factory default is “NULL”.

Type: string

Range: up to 21 hexadecimal (0-E) characters

Default value: not applicable

oprTmout Identifies the time (in seconds) before GSM HLR query response expiry. The factory default is “10”.

Type: integer

Range: {1-15}

Default value: not applicable

sriAcn Identifies the Application Context Name for the Send Routing Information (SRI) GSM MAP operation. The factory default is “3” for GSM Phase 2+.

Type: integer

Range: {1-5}

Default value: not applicable

rchAcn Identifies the Application Context Name for the Resume Call Handling (RCH) GSM MAP operation. The factory default is “3” for GSM Phase 2+.

Type: integer

Range: {1-5}

Default value: not applicable

optRouting Identifies whether to enable Optimal Routing. The factory default is “N”.

Type: BoolYN

Range: N = do not enable Optimal Routing

Y = enable Optimal Routing

Default value: not applicable

pst Identifies the primary state of the Plexus 9000 configured as a GSM GMSC. The factory default is “OOS”. You cannot change the value to “IS” if the value of *gmscAddr* or *slhrId* is “NULL”.

Type: enum

Range: IS = In Service – the Plexus 9000 is configured as a GSM GMSC

OOS = Out Of Service – the Plexus 9000 is not configured as a GSM GMSC

Default value: not applicable

Input Examples:

```
ED-GMSC-GSMSYS:::::GMSCADDR=3334445556,SLHRID=3,  
    GSMCACHE=N,CACHESIZE=500000,CFOVERRIDE=N,  
    VMAILPREFIX=NULL,OPRTMOUT=10,SRIACN=3,RCHACN=3,  
    OPTRROUTING=N:IS;  
RTRV-GMSC-GSMSYS;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"COM:GMSCADDR=3334445556,SLHRID=3,GSMCACHE=N,  
    CACHESIZE=500000,CFOVERRIDE=N,VMAILPREFIX=NULL,  
    OPRTMOUT=10,SRIACN=3,RCHACN=3,OPTRROUTING=N:IS"  
;
```

Related Commands:

```
ED/RTRV-GMSC-ANSISYS
```

ED/ENT/RTRV-SS7SYS

Commands:

ED-SS7SYS: Edit SS7 System
ENT-SS7SYS: Enter SS7 System
RTRV-SS7SYS: Retrieve SS7 System

Descriptions:

ED-SS7SYS lets the user change general system-wide ISUP parameters.

ENT-SS7SYS lets the user establish general system-wide ISUP parameters.

RTRV-SS7SYS lets the user retrieve general system-wide ISUP parameters.

Category: Call Control

Security: SA for ED and ENT, View for RTRV

Input Formats:

```
ED-SS7SYS: [TID]: [<src>]: [CTAG]: [ISUPT18=<isupT18>],  
[ISUPT19=<isupT19>], [ISUPT20=<isupT20>],  
[ISUPT21=<isupT21>], [ISUPT22=<isupT22>],  
[ISUPT23=<isupT23>], [ISUPT28=<isupT28>],  
[ISUPTFGR=<isupTFGR>], [ISUPTGRES=<isupTGRes>],  
[MTP3T15=<mtp3T15>], [MTP3T16=<mtp3T16>],  
[MTP3T22=<mtp3T22>], [MTP3T23=<mtp3T23>],  
[MTP3T26=<mtp3T26>], [SSFVALID=<ssfValid>],  
[RSTREQ=<rstReq>], [ISUPT1=<isupT1>],  
[ISUPT5=<isupT5>], [ISUPT6=<isupT6>],  
[ISUPT7=<isupT7>], [ISUPT8=<isupT8>],  
[ISUPT33=<isupT33>], [ISUPT27=<isupT27>],  
[ISUPT34=<isupT34>], [ISUPTCRM=<isupTCRM>],  
[ISUPTCRA=<isupTCRA>], [ISUPT36=<isupT36>],  
[ISUPTCCR=<isupTCCR>], [ISUPTCCRT=<isupTCCRT>],  
[ISUPTCONG=<isupTCONG>],  
[RELLOCATION=<relLocation>],  
[QSIZE=<m3uaqSize>], [CONGLVL1=<m3uacongLvl1>],  
[CONGLVL2=<m3uacongLvl2>],  
[CONGLVL3=<m3uacongLvl3>],  
[RTOINITIAL=<sctprtoInitial>], [RTO MAX=<rtoMax>],  
[INTERVALTM=<intervalTM>], [DPCFWD=<dpcFwd>];
```

```
ENT-SS7SYS:[TID]:[<src>]:[CTAG]::<ownPc>:  
[ISUPT18=<isupT18>],[ISUPT19=<isupT19>],  
[ISUPT20=<isupT20>],[ISUPT21=<isupT21>],  
[ISUPT22=<isupT22>],[ISUPT23=<isupT23>],  
[ISUPT28=<isupT28>],[ISUPTFGR=<isupTFGR>],  
[ISUPTGRES=<isupTGRes>],[MTP3T15=<mtp3T15>],  
[MTP3T16=<mtp3T16>],[MTP3T22=<mtp3T22>],  
[MTP3T23=<mtp3T23>],[MTP3T26=<mtp3T26>],  
[SSFVALID=<ssfValid>],[RSTREQ=<rstReq>],  
[ISUPT1=<isupT1>],[ISUPT5=<isupT5>],  
[ISUPT6=<isupT6>],[ISUPT7=<isupT7>],  
[ISUPT8=<isupT8>],[ISUPT33=<isupT33>],  
[ISUPT27=<isupT27>],[ISUPT34=<isupT34>],  
[ISUPTCRM=<isupTCRM>],[ISUPTCRA=<isupTCRA>],  
[ISUPT36=<isupT36>],[ISUPTCCR=<isupTCCR>],  
[ISUPTCCRT=<isupTCCRT>],[ISUPTCONG=<isupTCONG>],  
[TMRINTERDGT=<tmrInterDgt>],  
[RELLOCATION=<relLocation>],  
[BICCTransport=<biccTransport>],  
[QSIZE=<m3uaqSize>],[CONGLVL1=<m3uacongLv1>],  
[CONGLVL2=<m3uacongLv2>],  
[CONGLVL3=<m3uacongLv3>],  
[RTOINITIAL=<sctprtoInitial>],[RTO MAX=<rtoMax>],  
[INTERVALTM=<intervalTM>],[DPCFWD=<dpcFwd>];  
RTRV-SS7SYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```

SID DATE TIME
M CTAG COMPLD
"<src>:<ownPc>:ISUPT18=<isupT18>, ISUPT19=<isupT19>,
  ISUPT20=<isupT20>, ISUPT21=<isupT21>,
  ISUPT22=<isupT22>, ISUPT23=<isupT23>,
  ISUPT28=<isupT28>, ISUPTFGR=<isupTFGR>,
  ISUPTGRES=<isupTGRes>, MTP3T15=<mtp3T15>,
  MTP3T16=<mtp3T16>, MTP3T22=<mtp3T22>,
  MTP3T23=<mtp3T23>, MTP3T26=<mtp3T26>,
  SSFVALID=<ssfValid>, RSTREQ=<rstReq>,
  ISUPT1=<isupT1>, ISUPT5=<isupT5>, ISUPT6=<isupT6>,
  ISUPT7=<isupT7>, ISUPT8=<isupT8>,
  ISUPT33=<isupT33>, ISUPT27=<isupT27>,
  ISUPT34=<isupT34>, ISUPTCRM=<isupTCRM>,
  ISUPTCRA=<isupTCRA>, ISUPT36=<isupT36>,
  ISUPTCCR=<isupTCCR>, ISUPTCCRT=<isupTCCRT>,
  ISUPTCONG=<isupTCONG>, TMRINTERDGT=<tmrInterDgt>,
  RELLOCATION=<relLocation>,
  BICCTransPORT=<biccTransport>, QSIZE=<m3uaqSize>,
  CONGLVL1=<m3uacongLv1>, CONGLVL2=<m3uacongLv2>,
  CONGLVL3=<m3uacongLv3>,
  RTOINITIAL=<sctpRtoInitial>, RTOMAX=<rtoMax>,
  INTERVALTM=<intervalTM>, DPCFWD=<dpcFwd>"
;

```

Parameters:

src	Identifies the AID as a Plexus 9000. Type: COM Range: COM Default value: COM
ownPc	Identifies the own point code. Type: enum Range: {0-255}-{0-255}-{0-255} Default value: none
isupT18	Identifies the Timer T18 value (in seconds) for the ISUP layer. Timer T18 is started when a GROUP BLOCKING message is sent. This is terminated normally on receipt of a GROUP BLOCKING ACKNOWLEDGEMENT message. Type: DecimalNum Range: {0-100} Default value: 10

isupT19 Identifies the Timer T19 value (in seconds) for the ISUP layer. Timer T19 is started when an INITIAL GROUP BLOCKING message is sent. It is terminated normally on receipt of a GROUP BLOCKING ACKNOWLEDGEMENT message.

Type: DecimalNum

Range: {0-300}

Default value: 60

isupT20 Identifies the Timer T20 value (in seconds) for the ISUP layer. Timer T20 is started when a GROUP UNBLOCKING message is sent. This is terminated normally on receipt of a GROUP UNBLOCKING ACKNOWLEDGEMENT message.

Type: DecimalNum

Range: {0-100}

Default value: 10

isupT21 Identifies the Timer T21 value (in seconds) for the ISUP layer. Timer T21 is started when an INITIAL GROUP UNBLOCKING message is sent. This is terminated normally on receipt of a GROUP UNBLOCKING ACKNOWLEDGEMENT message.

Type: DecimalNum

Range: {0-300}

Default value: 60

isupT22 Identifies the Timer T22 value (in seconds) for the ISUP layer. Timer T22 is started when a GROUP RESET message is sent. It is terminated normally on receipt of the acknowledgement.

Type: DecimalNum

Range: {0-100}

Default value: 10

isupT23 Identifies the Timer T23 value (in seconds) for the ISUP layer. Timer T23 is started when a GROUP RESET message is sent. It is terminated normally on receipt of the acknowledgement.

Type: DecimalNum

Range: {0-300}

Default value: 60

isupT28 Identifies the Timer T28 value (in seconds) for the ISUP layer. Timer T28 is started when a CIRCUIT GROUP QUERY message is sent. It is terminated normally on receipt of a CIRCUIT GROUP QUERY RESPONSE message.

Type: DecimalNum

Range: {0-300}

Default value: 10

isupTFGR Identifies the value for the ANSI First Group Received timer.

Type: DecimalNum

Range: {0-50}

Default value: 5

isupTGRes Identifies the value for the Group Reset timer.

Type: DecimalNum

Range: {0-3276.8}

Default value: 5

mtp3T15 Identifies the Timer T15 value (in seconds) for the MTP3 layer. Timer T15 identifies the period to wait before starting the route set congestion test.

Type: DecimalNum

Range: {0-10}

Default value: 3

mtp3T16 Identifies the Timer T16 value (in seconds) for the MTP3 layer. Timer T16 identifies the period to wait between route set congestion status updates.

Type: DecimalNum

Range: {0-10}

Default value: 1.4

mtp3T22 Identifies the Timer T22 value (in seconds) for the MTP3 layer. Timer T22 identifies the period after restart to wait for signaling links to become available before generating a link unavailable alarm message.

Type: DecimalNum

Range: {0-100}

Default value: 40

- mtp3T23** Identifies the Timer T23 value (in seconds) for the MTP3 layer. Timer T23 identifies the period to wait after T22 to receive all traffic restart allowed messages.
- Type:** DecimalNum
Range: {0-100}
Default value: 10
- mtp3T26** Identifies the Timer T26 value (in seconds) for the MTP3 layer. Timer T26 identifies the period to wait before repeating a traffic restart waiting message.
- Type:** DecimalNum
Range: {0-50}
Default value: 13
- ssfValid** Identifies the sub-service field (SSF) validity in MTP level 3. If true, the SSF of any message received on a link by MTP Level 3 is checked against the SSF configured for that link.
- Type:** BoolYN
Range: Y = valid
N = not valid
Default value: N
- rstReq** Indicates whether restart is required. If this field is not 0, the MTP Level 3 restart procedure is started by MTP Level 3 as soon as the first link becomes in-service.
- Type:** enum
Range: ANSI = ANSI restart protocol
NORST = restart not required
Default value: NORST
- isupT1** Identifies the Timer T1 value (in seconds) for the ISUP layer. Timer T1 starts when a T1-RELEASE message is sent. It is terminated normally on receipt of an RLC message.
- Type:** DecimalNum
Range: {0-20}
Default value: 10
- isupT5** Identifies the Timer T5 value (in seconds) for the ISUP layer. Timer T5 starts when a T5-INITIAL RELEASE message is sent. It is terminated normally after receipt of an RLC message.
- Type:** DecimalNum
Range: {0-300}
Default value: 60

- isupT6** Identifies the Timer T6 value (in seconds) for the ISUP layer. Timer T6 starts when a T6-SUSPEND (network) message is sent. It is terminated normally on receipt of a RESUME (network) message or a RELEASE message.
- Type:** DecimalNum
Range: {0-100}
Default value: 21
- isupT7** Identifies the Timer T7 value (in seconds) for the ISUP layer. Timer T7 starts when a T7-LATEST ADDRESS message is sent. It is terminated normally when the condition for normal release of address and routing information is met.
- Type:** DecimalNum
Range: {0-100}
Default value: 25
- isupT8** Identifies the Timer T8 value (in seconds) for the ISUP layer. Timer T8 starts on receipt of a T8-INITIAL ADDRESS message by incoming international exchange.
- Type:** DecimalNum
Range: {0-100}
Default value: 13
- isupT33** Identifies the Timer T33 value (in seconds) for the ISUP layer. Timer T33 starts when a T33-INFORMATION REQUEST message is sent. It is terminated normally on receipt of an INFO message.
- Type:** DecimalNum
Range: {0-100}
Default value: 13
- isupT27** Identifies the Timer T27 value (in seconds) for the ISUP layer. Timer T27 starts when waiting for a continuity recheck. It is terminated normally on receipt of a CONTINUITY CHECK REQUEST message.
- Type:** DecimalNum
Range: {0-500}
Default value: 240
- isupT34** Identifies the Timer T34 value (in seconds) for the ISUP layer. Timer T34 starts when waiting for continuity after recheck. A typical value is 2-4 seconds.
- Type:** DecimalNum
Range: {0-40}
Default value: 13

isupTCRM Identifies the timer value (in seconds) for the CIRCUIT RESERVATION SENT message in the ISUP layer. It is terminated normally on receipt of a CIRCUIT RESERVATION ACKNOWLEDGE message.

Type: DecimalNum

Range: {0-40}

Default value: 3

isupTCRA Identifies the timer value (in seconds) for the CIRCUIT RESERVATION ACKNOWLEDGE SENT message in the ISUP layer. It is terminated normally on receipt of an IAM.

Type: DecimalNum

Range: {0-100}

Default value: 20

isupT36 Identifies the Timer T36 value (in seconds) for the ISUP layer. Timer T36 specifies the period to wait for an SGM message.

Type: DecimalNum

Range: {0-100}

Default value: 10

isupTCCR Identifies the timer value (in seconds) for the CONTINUITY CHECK REQUEST RECEIVED message in the ISUP layer. It is initiated on receipt of an initial continuity message indicating failure and is terminated normally on receipt of a CONTINUITY CHECK REQUEST message.

Type: DecimalNum

Range: {0-100}

Default value: 20

isupTCCRT Identifies the timer value (in seconds) for the CONTINUITY CHECK REQUEST TRANSMITTED message in the ISUP layer. It is initiated when the CONTINUITY CHECK REQUEST message is sent and is terminated normally on receipt of a LOOPBACK ACKNOWLEDGEMENT message.

Type: DecimalNum

Range: {0-20}

Default value: 2

isupTCONG Identifies the timer value (in seconds) for the CONGESTED message in the ISUP layer. The timer is set when an ACM cannot be sent because of congestion/isolation of the preceding switch and is used to prevent the call from ringing the called party after the originating SPCS would have released the call. It is terminated normally on receipt of a REL message for the incoming circuit or on receipt of answer supervision.

Type: DecimalNum

Range: {22-32}

Default value: 22

tmrInterDgt Identifies the value (in seconds) of the inter-digits timer that detects the end of the called party number.

Type: DecimalNum

Range: {0-20}

Default value: 10

relLocation Identifies the release location used in cause value when ISUP internally releases a call (for example, due to timer expiry).

Type: enum

Range: INTNET = International network

LOCALIF = Local interface

NETINTER = Network beyond interworking point

NOINFOAV = No information available

PRIVNETLU = Private network serving the local user

PRIVNETRU = Private network serving the remote user

PUBNETLU = Public network serving the local user

PUBNETRU = Public network serving the remote user

TRANNET = Transit network

USER = User

Default value: NETINTER

biccTransport Identifies the type of transport used by BICC (Bearer-Independent Call Control).

Type: enum

Range: M3UA = enables transport over an IP network

MTP3 = MTP Level 3, enables transport over TDM

Default value: M3UA

m3uaqSize Identifies the size (in bytes) of the congestion queue for M3UA that is maintained for each association, after which subsequent messages are dropped.

Type: integer
Range: {1-1500}
Default value: 1000

m3uacongLvl1 Identifies the M3UA level 1 congestion threshold (in bytes). SS7 congestion level 1 is declared when the congestion queue size reaches this level.

Type: integer
Range: {1-1500}
Default value: 250

m3uacongLvl2 Identifies the M3UA level 2 congestion threshold (in bytes). SS7 congestion level 2 is declared when the congestion queue size reaches this level.

Type: integer
Range: {1-1500}
Default value: 500

m3uacongLvl3 Identifies the M3UA level 3 congestion threshold (in bytes). SS7 congestion level 3 is declared when the congestion queue size reaches this level.

Type: integer
Range: {1-1500}
Default value: 750

sctpptoInitial Identifies the minimum value (in seconds) of the SCTP retransmission timer after recalculating RTO.

Type: DecimalNum
Range: {3-10}
Default value: 3

rtoMax Identifies the maximum value (in seconds) of the SCTP retransmission timer after recalculating RTO.

Type: DecimalNum
Range: {3-60}
Default value: 5

intervalTM Identifies the value (in seconds) of the SCTP interval timer for all heartbeat datagrams. A value of “0” disables heartbeat.

Type: DecimalNum

Range: {0-1000}

Default value: 5

dpcFwd Identifies whether to enable DPC forwarding which allows “tandem/transfer” of SS7 messages received by, but not destined for the Plexus 9000.

Type: BoolYN

Range: Y = enable DPC forwarding
N = disable DPC forwarding

Default value: N

Input Examples:

```
ED-SS7SYS:::ISUPT18=10, ISUPT19=1, ISUPT20=10,
ISUPT21=1, ISUPT22=10, ISUPT23=1, ISUPT28=10,
ISUPTFGR=1, ISUPTGRES=5, MTP3T15=3, MTP3T16=1.4,
MTP3T22=40, MTP3T23=10, MTP3T26=13, SSFVALID=N,
RSTREQ=NORST, ISUPT1=10, ISUPT5=1, ISUPT6=21,
ISUPT7=25, ISUPT8=13, ISUPT33=13, ISUPT27=4,
ISUPT34=13, ISUPTCRM=3, ISUPTCRA=20, ISUPT36=10,
ISUPTCCR=20, ISUPTCCRT=2, ISUPTCONG=22,
RELLOCATION=PUBNETLU, QSIZE=1000, CONGLVL1=250,
CONGLVL2=500, CONGLVL3=750, RT0INITIAL=3, RTOMAX=5,
INTERVALTM=5, DPCFWD=N;

ENT-SS7SYS:::245-5-18:ISUPT18=10, ISUPT19=1,
ISUPT20=10, ISUPT21=1, ISUPT22=10, ISUPT23=1,
ISUPT28=10, ISUPTFGR=1, ISUPTGRES=5, MTP3T15=3,
MTP3T16=1.4, MTP3T22=40, MTP3T23=10, MTP3T26=13,
SSFVALID=N, RSTREQ=NORST, ISUPT1=10, ISUPT5=1,
ISUPT6=21, ISUPT7=25, ISUPT8=13, ISUPT33=13, ISUPT27=4,
ISUPT34=13, ISUPTCRM=3, ISUPTCRA=20, ISUPT36=10,
ISUPTCRA=20, ISUPTCCRT=2, ISUPTCONG=22,
TMRINTERDGT=10, RELLOCATION=PUBNETLU,
BICCTransport=M3UA, QSIZE=1000, CONGLVL1=250,
CONGLVL2=500, CONGLVL3=750, RT0INITIAL=3, RTOMAX=5,
INTERVALTM=5, DPCFWD=N;

RTRV-SS7SYS;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:245-5-18:ISUPT18=10, ISUPT19=1, ISUPT20=10,
  ISUPT21=1, ISUPT22=10, ISUPT23=1, ISUPT28=10,
  ISUPTFGR=1, ISUPTGRES=5, MTP3T15=3, MTP3T16=1.4,
  MTP3T22=40, MTP3T23=10, MTP3T26=13, SSFVALID=N,
  RSTREQ=NORST, ISUPT1=10, ISUPT5=1, ISUPT6=21,
  ISUPT7=25, ISUPT8=13, ISUPT33=13, ISUPT27=4,
  ISUPT34=13, ISUPTCRM=3, ISUPTCRA=20, ISUPT36=10,
  ISUPTCCR=20, ISUPTCCRT=2, ISUPTCONG=22,
  TMRINTERDGT=10, RELLOCATION=PUBNETLU,
  BICCTransport=M3UA, QSIZE=1000, CONGLVL1=250,
  CONGLVL2=500, CONGLVL3=750, RT0INITIAL=3, RTOMAX=5,
  INTERVALTM=5, DPCFWD=N"
;
```

Related Commands: none

ED/RTRV-SWITCH-CFG

Commands:

ED-SWITCH-CFG: Edit Switch Configuration

RTRV-SWITCH-CFG: Retrieve Switch Configuration

Descriptions:

ED-SWITCH-CFG lets the user modify configuration data for the Plexus 9000. This data includes the carrier ID and name, the specified number of digits required for a local call, the number for the TRS relay center, whether to send or use the subscriber name in the IAM, whether to use the subscriber name if it is available in the IAM, whether to use the charge number for caller number display in ISDN-PRI calls, whether to allow ten-digit long-distance dialing, whether to block CNAM queries for private numbers or SCP queries for operator-assisted tollfree dialed numbers, the default LATA for the switch, whether to enable on-switch CNAM service, whether to restrict LNP queries to the homed LATA, and up to five general-purpose variables for custom functionality.

RTRV-SWITCH-CFG lets the user retrieve configuration data for the Plexus 9000.

Category: Call Control

Security: SA for ED, View for RTRV

Input Formats:

```
ED-SWITCH-CFG:[TID]:[<src>]:[CTAG]::[<OWNCID=owncid>],  
[<OWNCNAM=owncnam>],[<LOCNUMLEN=locnumlen>],  
[<DN711=dn>],[SENDIAMNAME=<sendiamname>],  
[USEIAMNAME=<useiamname>],[UCNCNDPRI=<ucncndpri>]  
[ALWTENDGTLLDDIAL=<alwtendgtlddial>],  
[BLOCKCNAMP=<blockcnamp>],  
[OPRTOLLFREE=<opr tollfree>],  
[OWNLATAID=<own lataid>],[LOCCNAM=<locCNAM>],  
[FRAUDTRAPPRFL=<fraudtrapprfl>],  
[SWITCHID=<switchid>],  
[IGNORESAMELATALNPRSTRN=<ignoreSameLataLnpRstrn>],  
[CUSTVAR1=custVar1],[CUSTVAR2=custVar2],  
[CUSTVAR3=custVar3],[CUSTVAR4=custVar4],  
[CUSTVAR5=custVar5];  
  
RTRV-SWITCH-CFG:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<src>:OWNCID=<owncid>,OWNCNAM=<owncnam>,
    LOCNUMLEN=<locnumlen>,DN711=<dn>,
    SENDIAMNAME=<sendiamname>,
    USEIAMNAME=<useiamname>,UCNCNDPRI=<ucncndpri>,
    ALWTENDGTLDIAL=<alwtendgtlddial>,
    BLOCKCNAMP=<blockcnamp>,
    OPRTOOLLFREE=<oprtoollfree>,OWNLATAID=<ownlataid>,
    LOCCNAM=<locCNAM>,FRAUDTRAPPRFL=<fraudtrapprfl>,
    SWITCHID=<switchid>,
    IGNORESAMELATALNPRSTRN=<ignoreSameLataLnpRstrn>,
    CUSTUSE1=<custUse1>,CUSTVAR1=<custVar1>,
    CUSTUSE2=<custUse2>,CUSTVAR2=<custVar2>,
    CUSTUSE3=<custUse3>,CUSTVAR3=<custVar3>,
    CUSTUSE4=<custUse4>,CUSTVAR4=<custVar4>,
    CUSTUSE5=<custUse5>,CUSTVAR5=<custVar5>"
;
```

Input Parameters:

- src** Identifies the AID as the Plexus 9000 (COM).
Type: COM
Range: COM
Default value: COM
- ownCid** Identifies the carrier for the switch. The factory default is "NULL".
Type: integer
Range: {0-9999}
Default value: not applicable
- ownCnam** Identifies the name of the carrier for the switch. The factory default is "NULL".
Type: string
Range: up to 20 alphanumeric characters
Default value: not applicable

locNumLen Identifies the number of digits required to complete a local call for the area served by the Plexus 9000. This parameter is not currently supported; leave it blank. The factory default is “10”.

Type: LocalNumLength

Range: 7 = seven digits required

10 = ten digits required

Default value: not applicable

dn Identifies the number of a Telecommunication Relay Services (TRS) relay center to which “711” calls from subscribers with hearing or speech disabilities are routed. The factory default is “NULL”.

Type: string

Range: exactly 10 digits

Default value: not applicable

sendIAMName Identifies whether to send the available subscriber name in the outgoing IAM. The factory default is “N”.

Type: BoolYN

Range: N = do not send subscriber name

Y = send subscriber name

Default value: not applicable

useIAMName Identifies whether to use the subscriber name if it is available in the IAM. The factory default is “N”.

Type: BoolYN

Range: N = do not use the subscriber name

Y = use subscriber name

Default value: not applicable

ucnCndPri Identifies whether to use the charge number for caller number display in ISDN-PRI calls. The factory default is “N”.

Type: BoolYN

Range: N = do not use charge number for caller number display

Y = use charge number for caller number display

Default value: not applicable

alwtendgtlddial Identifies whether to allow ten-digit long-distance dialing. The factory default is “N”.

Type: BoolYN

Range: N = do not allow ten-digit long-distance dialing

Y = allow ten-digit long-distance dialing

Default value: not applicable

blockcnamp Identifies whether to block CNAM queries for private numbers.
The factory default is “N”.

Type: BoolYN

Range: N = do not block CNAM queries for private numbers
Y = block CNAM queries for private numbers

Default value: not applicable

oprtollfree Identifies whether to block SCP queries for operator-assisted tollfree dialed numbers. The factory default is “Y”.

Type: BoolYN

Range: N = do not block SCP queries for operator-assisted tollfree dialed numbers
Y = block SCP queries for operator-assisted tollfree dialed numbers

Default value: not applicable

ownlataid Identifies the default LATA for the switch – used for tollfree SCP queries when incoming tollfree calls on an ISDN trunk don’t have Calling Party ID. The factory default is “NULL”.

Type: enum

Range: {100-99999}

NULL = no value

Default value: not applicable

locCNAM Identifies whether to enable on-switch CNAM service. When enabled, CNAM delivery (when both parties are homed on the Plexus 9000) uses the on-switch database – the Plexus 9000 does not query an SCP. The factory default is “N”.

Type: BoolYN

Range: N = do not enable on-switch CNAM service
Y = enable on-switch CNAM service

Default value: not applicable

fraudTrapPrfl Identifies the fraud trap profile that defines how the Plexus 9000 behaves when encountering a fraud scenario. The factory default is “NULL”.

Type: string

Range: up to 10 alphanumeric characters

Default value: not applicable

- switchid** Identifies the terminating switch for use by Carrier Advanced Intelligent Networks (CAIN). The factory default is “0”.
- Type:** integer
Range: {0-65535}
Default value: not applicable
- ignoreSameLataLnpRstrn** Identifies whether to ignore the restriction on LNP queries requiring the called party number for line-originated calls to be in the same LATA as the Plexus 9000. The factory default is “N”.
- Type:** BoolYN
Range: N = perform LNP queries only for calls in the same LATA
Y = perform LNP queries for all calls
Default value: not applicable
- custUse1** Identifies (in RTRV output) the use for custom variable 1. The factory default is “NULL”.
- Type:** string
Range: up to 32 characters
Default value: not applicable
- custVar1** Identifies the value of custom variable 1. The factory default is “NULL”.
- Type:** string
Range: up to 16 characters
Default value: not applicable
- custUse2** Identifies (in RTRV output) the use for custom variable 2. The factory default is “NULL”.
- Type:** string
Range: up to 32 characters
Default value: not applicable
- custVar2** Identifies the value of custom variable 2. The factory default is “NULL”.
- Type:** string
Range: up to 16 characters
Default value: not applicable
- custUse3** Identifies (in RTRV output) the use for custom variable 3. The factory default is “NULL”.
- Type:** string
Range: up to 32 characters
Default value: not applicable

custVar3 Identifies the value of custom variable 3. The factory default is "NULL".

Type: string

Range: up to 16 characters

Default value: not applicable

custUse4 Identifies (in RTRV output) the use for custom variable 4. The factory default is "NULL".

Type: string

Range: up to 32 characters

Default value: not applicable

custVar4 Identifies the value of custom variable 4. The factory default is "NULL".

Type: string

Range: up to 16 characters

Default value: not applicable

custUse5 Identifies (in RTRV output) the use for custom variable 5. The factory default is "NULL".

Type: string

Range: up to 32 characters

Default value: not applicable

custVar5 Identifies the value of custom variable 5. The factory default is "NULL".

Type: string

Range: up to 16 characters

Default value: not applicable

Input Examples:

```
ED-SWITCH-CFG: : : : OWNCID=1, OWNCNAM=NULL, LOCNUMLEN=10,  
DN711=NULL, SENDIAMNAME=N, USEIAMNAME=N, UCNCNDPRI=N,  
ALWTENDGTLDIAL=N, BLOCKCNAMP=N, OPRTOLLFREE=Y,  
OWNLATAID=NULL, LOCCNAM=N, FRAUDTRAPPRFL=NULL,  
SWITCHID=0, IGNORESAMELATALNPRSTRN=N, CUSTUSE1=NULL,  
CUSTVAR1=NULL, CUSTUSE2=NULL, CUSTVAR2=NULL,  
CUSTUSE3=NULL, CUSTVAR3=NULL, CUSTUSE4=NULL,  
CUSTVAR4=NULL, CUSTUSE5=NULL, CUSTVAR5=NULL;  
RTRV-SWITCH-CFG;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:OWNCID=1,OWNCNAM=VERIZON,LOCNUMLEN=10,
  DN711=NULL,SENDIAMNAME=N,USEIAMNAME=N,
  UCNCNDPRI=N,ALWTENDGTLLDDIAL=N,BLOCKCNAMP=N,
  OPRTOLLFREE=Y,OWNLATAID=NULL,LOCCNAM=N,
  FRAUDTRAPPRFL=NULL,SWITCHID=0,
  IGNORESAMELATALNPRSTRN=N,CUSTUSE1=NULL,
  CUSTVAR1=NULL,CUSTUSE2=NULL,CUSTVAR2=NULL,
  CUSTUSE3=NULL,CUSTVAR3=NULL,CUSTUSE4=NULL,
  CUSTVAR4=NULL,CUSTUSE5=NULL,CUSTVAR5=NULL"
;
```

Related Commands: none

ED/RTRV-TRAFFICSTATS

Commands:

ED-TRAFFICSTATS: Edit Traffic Statistics

RTRV-TRAFFICSTATS: Retrieve Traffic Statistics

Descriptions:

ED-TRAFFICSTATS lets the user set a system-wide flag that enables or disables sending call traffic statistics from the Plexus 9000 to a statistics data server.

RTRV-TRAFFICSTATS lets the user retrieve the value of a system-wide flag that enables or disables sending call traffic statistics from the Plexus 9000 to a statistics data server.

Category: Call Control

Security: NSA for ED, View for RTRV

Input Formats:

ED-TRAFFICSTATS:[TID]:[<src>]:[CTAG]::<isOos>;

RTRV-TRAFFICSTATS:[TID]:[<src>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<com>:<isOos>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

isOos Indicates whether call traffic statistics processing is set to be in service or out of service.

Type: enum

Range: IS = In service

OOS = Out of service

Default value: none

Input Examples:

```
ED-TRAFFICSTATS:::::IS;  
RTRV-TRAFFICSTATS;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:IS"  
;
```

Related Commands: none

INIT-REG-GMSC / RTRV-PM-GMSC

Commands:

INIT-REG-GMSC: Initialize Register GMSC

RTRV-PM-GMSC: Retrieve Performance Monitors GMSC

Descriptions:

INIT-REG-GMSC lets the user initialize one or more storage registers or event counters for GMSC (Gateway Mobile Switching Center) message statistics.

RTRV-PM-GMSC lets the user retrieve current and historical performance data related to GMSC (Gateway Mobile Switching Center) messages.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-GMSC:[TID]:[<src>]:[CTAG]:[<montype>],  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

```
RTRV-PM-GMSC:[TID]:[<src>]:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<src>:<montype>,<monval>,[<vldty>],[<locn>],  
      [<dirn>],[<tmper>],[<mondatt>],[<montm>]"  
;
```

Parameters:

src Identifies the AID as the Plexus 9000.

Type: COM

Range: COM

Default value: COM

montype Identifies a type of monitored parameter for GMSC messages.

Type: enum

Range: ALL = All monitored parameters

ANSICALLSFWDED = total number of calls forwarded by ANSI HLR

ANSICALLSREDIRECTED = total number of ANSI calls redirected by the serving MSC

ANSICALLSTRANSFERED = total number of ANSI calls forwarded after routing to a TLDN.

ANSIVMAILFWDED = total number of ANSI calls forwarded to voicemail

CACHEDCALLS = total number of calls subjected to successful GSM cache lookup

DUALDIPCALLS = total number of calls subjected to dual dips; that is, both an ANSI IS41 and a GSM HLR query

FAILEDMTCALLS = total number of mobile terminating calls failed due to unknown subscriber at HLR

GSMCALLSFWDED = total number of calls forwarded by GSM HLR

GSMCALLSREDIRECTED = total number of GSM calls redirected by the visiting MSC

GSMVMAILFWDED = total number of GSM calls forwarded to voicemail

MSRNCALLS = total number of calls routed using a GSM Mobile Subscriber Roaming Number (MSRN)

SUCCESSMTCALLS = total number of mobile terminating calls successfully handled

TLDNCALLS = total number of calls routed using an ANSI Temporary Local Directory Number (TLDN)

TOTALMTCALLS = total number of mobile terminating calls handled

Default value: ALL

monval Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. This parameter is presently not supported; leave it blank.

Type: integer

Range: {0-2147483647}

Default value: 0

- monlev** Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be "NULL".
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: not applicable for output
- locn** Identifies the location of the storage counters to be initialized. This parameter is presently not supported; leave it blank.
Type: Location
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the Plexus 9000. This parameter is presently not supported; leave it blank.
Type: Direction
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH
- tmper** Identifies the accumulation period for performance counters. The only values currently allowed for *tmper* are "15-MIN" and "24-HR". A null value defaults to both applicable accumulation periods. This parameter is presently not supported; leave it blank.
Type: TimePeriod
Range: {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: both 15-MIN and 24-HR

mondatt Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.

Type: MonitoredDate

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.

Type: MonitoredTime

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

INIT-REG-GMSC;

RTRV-PM-GMSC;

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"COM:TOTALMTCALLS,0,,,,,"
"COM:SUCCESSMTCALLS,0,,,,,"
"COM:FAILEDMTCALLS,0,,,,,"
"COM:DUALDIPCALLS,0,,,,,"
"COM:TLDNCALLS,0,,,,,"
"COM:MSRNCALLS,0,,,,,"
"COM:ANSICALLSFWDDED,0,,,,,"
"COM:GSMCALLSFWDDED,0,,,,,"
"COM:CACHEDCALLS,0,,,,,"
"COM:ANSICALLSREDIRECTED,0,,,,,"
"COM:GSMCALLSREDIRECTED,0,,,,,"
"COM:ANSIVMAILFWDDED,0,,,,,"
"COM:GSMVMAILFWDDED,0,,,,,"
"COM:ANSICALLSTRANSFERED,0,,,,,"
;
```

Related Commands: none

RTRV/SET-DATASERVER-HOSTCFG

Commands:

RTRV-DATASERVER-HOSTCFG: Retrieve DATASERVER HOSTCFG

SET-DATASERVER-HOSTCFG: Set DATASERVER HOSTCFG

Descriptions:

RTRV-DATASERVER-HOSTCFG lets the user retrieve the IP addresses and retry timer values for the UNIX systems running the billing application.

SET-DATASERVER-HOSTCFG lets the user define the IP addresses and retry timer values for the UNIX systems running the billing application.

Category: Call Control

Security: ADMIN for SET, View for RTRV

Input Formats:

RTRV-DATASERVER-HOSTCFG: [TID]: [<COM>]: [CTAG];

SET-DATASERVER-HOSTCFG: [TID]: [<COM>]: [CTAG]: :
[DATASERVERANET1=<billing_dataserver_a1>],
[DATASERVERBNET1=<billing_dataserver_b1>],
[DATASERVERANET2=<billing_dataserver_a2>],
[DATASERVERBNET2=<billing_dataserver_b2>],
[INITRETRYTMRANET1=<initRetryTmrAnet1>],
[FAILRETRYTMRANET1=<failRetryTmrAnet1>],
[INITRETRYTMRBNET1=<initRetryTmrBnet1>],
[FAILRETRYTMRBNET1=<failRetryTmrBnet1>],
[INITRETRYTMRANET2=<initRetryTmrAnet2>],
[FAILRETRYTMRANET2=<failRetryTmrAnet2>],
[INITRETRYTMRBNET2=<initRetryTmrBnet2>],
[FAILRETRYTMRBNET2=<failRetryTmrBnet2>];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<COM>:DATASERVERANET1=<billing_dataserver_a1>,
    DATASERVERBNET1=<billing_dataserver_b1>,
    DATASERVERANET2=<billing_dataserver_a2>,
    DATASERVERBNET2=<billing_dataserver_b2>,
    INITRETRYTMANET1=<initRetryTmrAnet1>,
    FAILRETRYTMANET1=<failRetryTmrAnet1>,
    INITRETRYTMRBNET1=<initRetryTmrBnet1>,
    FAILRETRYTMRBNET1=<failRetryTmrBnet1>,
    INITRETRYTMANET2=<initRetryTmrAnet2>,
    FAILRETRYTMANET2=<failRetryTmrAnet2>,
    INITRETRYTMRBNET2=<initRetryTmrBnet2>,
    FAILRETRYTMRBNET2=<failRetryTmrBnet2>,
    DATASERVERCONN=<billing_dataserver_conn>"
;
```

Parameters:

COM Identifies the AID as a Plexus 9000.

Type: COM
Range: COM
Default: COM

billing_dataserver_a1 Identifies the IP address of the primary billing data server.

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default: NULL

billing_dataserver_b1 Identifies the IP address of the first alternate billing data server.

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default: NULL

billing_dataserver_a2 Identifies the IP address of the second alternate billing data server.

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default: NULL

billing_dataserver_b2 Identifies the IP address of the third alternate billing data server.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default: NULL

initRetryTmrAnet1 Identifies the time, in seconds, that the Plexus 9000 attempts to connect to the primary data server during the initial connection process before attempting to connect to the first alternate data server.

Type: integer

Range: {0-18000}

Default: 1

failRetryTmrAnet1 Identifies the time, in seconds, that the Plexus 9000 attempts to reconnect to the primary data server after a communication failure before attempting to connect to the first alternate data server.

Type: integer

Range: {0-18000}

Default: 5

initRetryTmrBnet1 Identifies the time, in seconds, that the Plexus 9000 attempts to connect to the first alternate data server during the initial connection process before attempting to connect to the second alternate data server.

Type: integer

Range: {0-18000}

Default: 0

failRetryTmrBnet1 Identifies the time, in seconds, that the Plexus 9000 attempts to reconnect to the first alternate data server after a communication failure before attempting to connect to the second alternate data server.

Type: integer

Range: {0-18000}

Default: 1

initRetryTmrAnet2 Identifies the time, in seconds, that the Plexus 9000 attempts to connect to the second alternate data server during the initial connection process before attempting to connect to the third alternate data server.

Type: integer

Range: {0-18000}

Default: 0

failRetryTmrAnet2 Identifies the time, in seconds, that the Plexus 9000 attempts to reconnect to the second alternate data server after a communication failure before attempting to connect to the third alternate data server.

Type: integer
Range: {0-18000}
Default: 1

initRetryTmrBnet2 Identifies the time, in seconds, that the Plexus 9000 attempts to connect to the third alternate data server during the initial connection process before attempting to connect to the primary data server.

Type: integer
Range: {0-18000}
Default: 0

failRetryTmrBnet2 Identifies the time, in seconds, that the Plexus 9000 attempts to reconnect to the third alternate data server after a communication failure before attempting to connect to the primary data server.

Type: integer
Range: {0-18000}
Default: 1

billing_dataserver_conn Identifies the IP address of the currently connected billing dataserver.

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: none

Input Examples:

```
RTRV-DATASERVER-HOSTCFG;  
SET-DATASERVER-HOSTCFG::::DATASERVEANET1=10.5.0.98,  
DATASERVEBNET1=NULL,DATASERVEANET2=10.5.0.99  
DATASERVEANET1=NULL,INITRETRYTMRANET1=1,  
FAILRETRYTMRANET1=5,INITRETRYTMRBNET1=0,  
FAILRETRYTMRBNET1=1,INITRETRYTMRANET2=0,  
FAILRETRYTMRANET2=1,INITRETRYTMRBNET2=0,  
FAILRETRYTMRBNET2=1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:DATASERVERANET1=10.5.0.98,
  DATASERVERBNET1=NULL,DATASERVERANET2=10.5.0.99,
  DATASERVERBNET2=NULL,INITRETRYTMANET1=1,
  FAILRETRYTMANET1=5,INITRETRYTMRBNET1=0,
  FAILRETRYTMRBNET1=1,INITRETRYTMANET2=0,
  FAILRETRYTMANET2=1,INITRETRYTMRBNET2=0,
  FAILRETRYTMRBNET2=1,DATASERVERCONN=10.5.0.98"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-CALLING-AREA

Commands:

DLT-CALLING-AREA: Delete Calling Area
ED-CALLING-AREA: Edit Calling Area
ENT-CALLING-AREA: Enter Calling Area
RTRV-CALLING-AREA: Retrieve Calling Area

Descriptions:

DLT-CALLING-AREA lets the user delete an association between a local calling area and a rate center.

ED-CALLING-AREA lets the user change the number of digits a subscriber must dial to enable the Plexus 9000 to route a call within the local calling area.

ENT-CALLING-AREA lets the user establish an association between a local calling area and a rate center. ENT-CALLING-AREA will not work unless the following commands have already been issued in the listed order: ENT-COUNTRY, ENT-NATIONAL-NPA, ENT-HOME-NPA, and ENT-RATE-CENTER.

RTRV-CALLING-AREA lets the user retrieve all associations between a local calling area and a rate center. The command also can be used to determine the existence of a specific calling area / rate center association hosted by the Plexus.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-CALLING-AREA:[TID]:<CallingAreaCenterName>:[CTAG];  
ED-CALLING-AREA:[TID]:<CallingAreaCenterName>:[CTAG]::  
    DGTSDIAL=<dgtsDial>;  
ENT-CALLING-AREA:[TID]:<CallingAreaCenterName>:  
    [CTAG]::[DGTSDIAL=<dgtsDial>];  
RTRV-CALLING-AREA:[TID]:  
    [<CallingAreaCenterName>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<CallingAreaCenterName>:DGTSDIAL=<dgtsDial>"
;
```

Parameters:

CallingAreaCenterName Identifies the AID as an association between a local calling area and a rate center. The first part of the AID identifies the name of the calling area with an integer of 1 to 1024; the second part of the AID identifies the name of the rate center with a string of up to 31 characters. A null value for the second string in the range (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system retrieves all rate centers associated by the Plexus 9000 with the local calling area specified by the first string in the range. If you specify a nonexistent rate center for the second string in the range, the system will return a "DENY – SROF" message.

Type: CALLINGAREAID

Range: CALLINGAREAID-CENTERNAMESTRING, where
CALLINGAREAID = {1-1024}
CENTERNAMESTRING = up to 31 characters

Default value: none

dgtsDial Identifies the number of digits a subscriber must dial to enable the Plexus 9000 to route a call within the local calling area.

Type: BoolYN

Range: 7 = exactly seven digits required to route a call within the homed NPA
10 = exactly ten digits required to route a call within the homed NPA
7&10 = the Plexus 9000 accepts either seven or ten digits to route a call within the homed NPA

Default value: 7&10

Input Examples:

```
DLT-CALLING-AREA::1-RATECENTER2;
ED-CALLING-AREA::1-RATECENTER2:::
  DGTSDIAL=7&10;
ENT-CALLING-AREA::1-RATECENTER2;
RTRV-CALLING-AREA::1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
    "1-RATECENTER1:DGTS DIAL=10"
    "1-RATECENTER2:DGTS DIAL=7&10"
    "1-RATECENTER3:DGTS DIAL=10"
;
```

Related Commands: none

DLT/ENT/RTRV-COUNTRY

Commands:

DLT-COUNTRY: Delete Country

ENT-COUNTRY: Enter Country

RTRV COUNTRY: Retrieve Country

Descriptions:

DLT-COUNTRY lets the user delete a country code from the system.

ENT-COUNTRY lets the user add a country code to the system.

RTRV COUNTRY lets the user retrieve all of the country codes in the system.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-COUNTRY: [TID]:<countryCode>:[CTAG];

ENT-COUNTRY: [TID]:<countryCode>:[CTAG];

RTRV-COUNTRY: [TID]: [<countryCode>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<countryCode>"
;
```

Parameters:

countryCode Identifies the AID as a country code. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all country codes configured in the system will be returned.

Type: CCAid

Range: {1-999999}

Default value: none

Input Examples:

```
DLT-COUNTRY::52;  
ENT-COUNTRY::52;  
RTRV-COUNTRY;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1"  
"52"  
;
```

Related Commands: none

DLT/ENT/RTRV-HOME-NPA

Commands:

DLT-HOME-NPA: Delete Home NPA

ENT-HOME-NPA: Enter Home NPA

RTRV-HOME-NPA: Retrieve Home NPA

Descriptions:

DLT-HOME-NPA lets the user delete a homed NPA (Numbering Plan Area) from the list of all of the NPAs hosted on the Plexus.

ENT-HOME-NPA lets the user add a homed NPA (Numbering Plan Area) within a country to the list of the NPAs hosted by the Plexus. ENT-HOME-NPA will not work unless the following commands have already been issued in the listed order: ENT-COUNTRY and ENT-NATIONAL-NPA.

RTRV-HOME-NPA lets the user retrieve all NPAs (Numbering Plan Areas) hosted by the Plexus within a country. The command also can be used to determine the existence of a specific NPA hosted by the Plexus.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-HOME-NPA: [TID]:<CcNpa>:[CTAG];

ENT-HOME-NPA: [TID]:<CcNpa>:[CTAG];

RTRV-HOME-NPA: [TID]:<CcNpa>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<CcNpa>"
;
```

Parameters:

CcNpa Identifies the AID as a homed NPA within a country. The first number in the range identifies the country code; the second identifies the homed NPA and is optional in DLT and RTRV. A null value for the second number in the range (in DLT and RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system deletes or retrieves all NPAs hosted by the Plexus for the country specified by the first number in the range. If you specify a nonexistent NPA for the second number in the range, the system will return a "DENY – SROF" message.

Type: NNPAid

Range: {1-99999}[-{200-999}]

Default value: none

Input Examples:

DLT-HOME-NPA : :01-508;

ENT-HOME-NPA : :01-508;

RTRV-HOME-NPA : :01;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "01-508"
  "01-617"
  "01-781"
  "01-978"
;
```

Related Commands: none

DLT/ENT/RTRV-HOME-NXX

Commands:

DLT-HOME-NXX: Delete Home NXX

ENT-HOME-NXX: Enter Home NXX

RTRV-HOME-NXX: Retrieve Home NXX

Descriptions:

DLT-HOME-NXX lets the user delete a homed NXX (exchange) in an NPA (area code) from the list of all of the NXXs hosted on the Plexus.

ENT-HOME-NXX lets the user add a homed NXX (exchange) in a specific NPA (Numbering Plan Area) within a country to the list of the NXXs hosted by the Plexus. ENT-HOME-NXX will not work unless the following commands have already been issued in the listed order: ENT-COUNTRY, ENT-NATIONAL-NPA, and ENT-HOME-NPA.

RTRV-HOME-NXX lets the user retrieve all NXXs (exchanges) hosted by the Plexus for a specific NPA within a country. The command also can be used to determine the existence of a specific NXX hosted by the Plexus.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-HOME-NXX: [TID]:<CcNpaNxx>:[CTAG];

ENT-HOME-NXX: [TID]:<CcNpaNxx>:[CTAG]:
[PORTEDIN=<PortedIn>];

RTRV-HOME-NXX: [TID]:<CcNpaNxx>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<CcNpaNxx>:PORTEDIN=<PortedIn>"
;
```


Parameters:

CcNpaNxx Identifies the AID as a homed NXX in a specific NPA within a country. The first number in the range identifies the country code, the second identifies the NPA, and the third identifies the NXX and is optional in DLT and RTRV. A null value for the third number in the range (in DLT and RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system deletes or retrieves all homed NXXs for the country and NPA specified by the first and second numbers in the range. If you specify a nonexistent NXX for the third number in the range, the system will return a "DENY – SROF" message.

Type: CcNpaNxx

Range: {1-999999}-{200-999}[-{200-999}]

Default value: none

PortedIn Identifies whether the homed NXX is ported in to the Plexus.

Type: BoolYn

Range: N = homed NXX is not ported in to the Plexus

Y = homed NXX is ported in to the Plexus

Default value: N

Input Examples:

DLT-HOME-NXX: :01-508-480;

ENT-HOME-NXX: :01-508-480;

RTRV-HOME-NXX: :01-508;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"01-508-480:PORTEDIN=N"
"01-508-804:PORTEDIN=Y"
;
```

Related Commands: none

DLT/ENT/RTRV-LRN

Commands:

DLT-LRN: Delete Location Routing Number

ENT-LRN: Enter Location Routing Number

RTRV-LRN: Retrieve Location Routing Number

Descriptions:

DLT-LRN lets the user delete a location routing number supporting the service-provider type of location number portability (LNP).

ENT-LRN lets the user establish a location routing number to support the service-provider type of location number portability (LNP). Service-provider LNP allows a phone number "homed" on one service provider's switch (typically the ILEC) to be "ported" to the switch of another service provider (a CLEC) without changing the phone number. To achieve this, a phone number ported to another service provider's switch is associated in a database with the switch to which it is ported (identified by its LRN). ENT-LRN identifies that switch either as the Plexus 9000 or as a switch to which the Plexus 9000 routes.

RTRV-LRN lets the user retrieve parameters associated with a switch identified by a location routing number.

Category: Call Control

Security: ADMIN for DLT/ENT, View for RTRV

Input Formats:

DLT-LRN: [TID]:<lrn>:[CTAG];

ENT-LRN: [TID]:<lrn>:[CTAG]:<lrnType>;

RTRV-LRN: [TID]: [<lrn>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<lrn>,<lrnType>"
;
```

Parameters:

lrn Identifies the location routing number for the switch to which phone numbers are ported.

Type: string

Range: exactly 10 digits

Default value: none

lrnType Identifies the type of location routing number.

Type: enum

Range: P = Primary – identifies the location routing number as associated with the Plexus 9000

S = Secondary – identifies the location routing number as associated with a switch that routes to the Plexus 9000

Default value: none

Input Examples:

DLT-LRN::5084800000;

ENT-LRN::5084800000:::P;

RTRV-LRN::5084800000;

Output Example:

```
telica 2003-08-29 14:37:49
M 0 COMPLD
"5084800000,P"
;
```

Related Commands: none

DLT/ENT/RTRV-NATIONAL-NPA

Commands:

DLT-NATIONAL-NPA: Delete National NPA

ENT-NATIONAL-NPA: Enter National NPA

RTRV-NATIONAL-NPA: Retrieve National NPA

Descriptions:

DLT-NATIONAL-NPA lets the user delete an NPA (Numbering Plan Area) within a country from the system.

ENT-NATIONAL-NPA lets the user add an NPA (Numbering Plan Area) within a country to the system. ENT-NATIONAL-NPA will not work unless ENT-COUNTRY has already been issued.

RTRV-NATIONAL-NPA lets the user retrieve all NPAs (Numbering Plan Areas) within a country from the system. The command also can be used to determine the existence of a specific NPA within a country.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-NATIONAL-NPA: [TID]:<CcNpa>:[CTAG];

ENT-NATIONAL-NPA: [TID]:<CcNpa>:[CTAG];

RTRV-NATIONAL-NPA: [TID]:<CcNpa>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<Cc>"
;
```

Parameters:

CcNpa Identifies the AID as an NPA within a country. The first number in the range identifies the country code; the second identifies the NPA and is optional in DLT and RTRV. A null value for the second number in the range (in DLT and RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system deletes or retrieves all NPAs for the country specified by the first number in the range.

Type: NNPAid

Range: {1-99999}{-}{200-999}

Default value: none

Input Examples:

DLT-NATIONAL-NPA::01-508;

ENT-NATIONAL-NPA::01-508;

RTRV-NATIONAL-NPA::01;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
    "01-508"
    "01-617"
    "01-978"
;
```

Related Commands: none

DLT/ENT/RTRV-RATE-CENTER

Commands:

DLT-RATE-CENTER: Delete Rate Center

ENT-RATE-CENTER: Enter Rate Center

RTRV-RATE-CENTER: Retrieve Rate Center

Descriptions:

DLT-RATE-CENTER lets the user delete a rate center specified by an NXX in an NPA.

ENT-RATE-CENTER lets the user establish a rate center in a specific NXX in an NPA. ENT-RATE-CENTER will not work unless ENT-NATIONAL-NPA has already been issued.

RTRV-RATE-CENTER lets the user retrieve all rate centers in the system that are associated with specific NXXs in NPAs in LATAs. The command also can be used to determine the existence of a specific rate center association.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-RATE-CENTER: [TID]:<ratecenteraid>:[CTAG];

ENT-RATE-CENTER: [TID]:<ratecenteraid>:[CTAG]::
LATAID=<lata>,RATECENTER=<ratecenter>,
[LATANAME=<lataname>];

RTRV-RATE-CENTER: [TID]: [<ratecenteraid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ratecenteraid>:LATAID=<lata>,
[RATECENTER=<ratecenter>],[LATANAME=<lataname>]"
;
```

Parameters:

ratecenterAid Identifies the rate center with the homed NXX (exchange) in a specific NPA hosted by the Plexus 9000. The first number in the range identifies the NPA, and the second identifies the NXX. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system retrieves all rate centers configured in the system. A null value for the second number in the range (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system retrieves all NXXs for the NPA specified by the first number in the range.

Type: NpaNxx

Range: {200-999}[-{200-999}]

Default value: none

lata Identifies the LATA for the associated NPA and NXX.

Type: enum

Range: {100-99999}

Default value: none

ratecenter Identifies the name of the rate center.

Type: string

Range: up to 31 alphanumeric characters

Default value: none

lataname Identifies the name of the LATA.

Type: string

Range: up to 20 alphanumeric characters

Default value: none

Input Examples:

```
DLT-RATE-CENTER : 508-480 ;  
ENT-RATE-CENTER : 508-480 : : LATAID=128,  
    RATECENTER=MARLBORO, LATANAME=EMASS ;  
RTRV-RATE-CENTER : 508-480 ;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
    "508-480:LATAID=128,RATECENTER=MARLBORO,  
    LATANAME=EMASS"  
;
```

Related Commands: none

NOTES

DLT/ED/ENT/RTRV-CARRIER

Commands:

DLT-CARRIER: Delete Carrier
ED-CARRIER: Edit Carrier
ENT-CARRIER: Enter Carrier
RTRV-CARRIER: Retrieve Carrier

Descriptions:

DLT-CARRIER lets the user remove a carrier code from the system.

ED-CARRIER lets the user change parameters affecting a carrier. Use ED-CARRIER to change the type of call accepted, the carrier class, whether the carrier has operator support, the carrier name, and the call type circuit codes.

ENT-CARRIER lets the user add a carrier to the system and define the type of call accepted, the carrier class, whether the carrier has operator support, the carrier name, and the call type circuit codes.

RTRV-CARRIER lets the user retrieve all the carriers in the system and their associated properties.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-CARRIER:[TID]:<CarrierCode>:[CTAG];  
ED-CARRIER:[TID]:<CarrierCode>:[CTAG]::  
    [CALLTYPE=<CallType>],[CLASS=<CarrierClass>],  
    [OPERATOR=<Operator>],[NAME=<Name>],  
    [INTERLATACODE=<InterLataCode>],  
    [INTERLATAOPERATORCODE=<InterLataOpCode>],  
    [TOLLFREECODE=<TollfreeCode>],  
    [CASINTERLATA=<CasInterLata>],  
    [CASINTERLATAOP=<CasInterLataOp>],  
    [CASTOLLFREE=<CasTollFree>],  
    [CASINTERNATIONAL=<CasInternational>],  
    [CASINTERNATIONALOP=<CasInternationalOp>];
```

```
ENT-CARRIER:[TID]:<CarrierCode>:[CTAG]::
[CALLTYPE=<CallType>],[CLASS=<CarrierClass>],
[OPERATOR=<Operator>],[NAME=<Name>],
[INTERLATA CODE=<InterLataCode>],
[INTERLATA OPERATOR CODE=<InterLataOpCode>],
[TOLLFREE CODE=<TollfreeCode>],
[CASINTERLATA=<CasInterLata>],
[CASINTERLATA OP=<CasInterLataOp>],
[CASTOLLFREE=<CastollFree>],
[CASINTERNATIONAL=<CasInternational>],
[CASINTERNATIONAL OP=<CasInternationalOp>];

RTRV-CARRIER:[TID]:[<CarrierCode>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<CarrierCode>:CALLTYPE=<CallType>,
CLASS=<CarrierClass>,OPERATOR=<Operator>,
[NAME=<Name>],INTERLATA CODE=<InterLataCode>,
INTERLATA OPERATOR CODE=<InterLataOpCode>,
TOLLFREE CODE=<TollfreeCode>,
CASINTERLATA=<CasInterLata>,
CASINTERLATA OP=<CasInterLataOp>,
CASTOLLFREE=<CastollFree>,
CASINTERNATIONAL=<CasInternational>,
CASINTERNATIONAL OP=<CasInternationalOp>"
;
```

Parameters:

CarrierCode Identifies the AID as a specific carrier. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all carriers configured in the system will be returned.

Type: CarrierCode

Range: {0-9999}

Default value: none

CallType Identifies the type of calls accepted.

Type: enum

Range: PRESUBSCRIBED = the carrier accepts calls from subscribers only

CASUALDIAL = the carrier provides service on a per-use basis only

BOTH = the carrier provides service both on a subscription and a per-use basis

Default value: BOTH

CarrierClass Identifies the class of carrier

Type: enum

Range: INTERLATA = the carrier only allows calls between LATAs

INTRALATA = the carrier only allows calls within a LATA

BOTH = the carrier allows calls both within one LATA and between LATAs

Default value: BOTH

Operator Identifies whether the carrier has operator support.

Type: BoolYN

Range: Y = the carrier has operator support

N = the carrier does not have operator support

Default value: Y

Name Identifies the name of the carrier.

Type: string

Range: up to 80 ASCII characters

Default value: NULL

InterLataCode Identifies the circuit code (per GR394 B.16) associated with a direct-dial (1+) or casual-dial (10-10-xxx) long distance call.

Type: integer

Range: {0,3-15}

Default value: 0

InterLataOpCode Identifies the circuit code (per GR394 B.16) associated with an operator-assisted (0+) long distance call.

Type: integer

Range: {0,3-15}

Default value: 0

TollfreeCode Identifies the circuit code (per GR394 B.16) associated with a toll-free (800, 888, 877) long distance call.

Type: integer

Range: {0,3-15}

Default value: 0

CasInterLata Identifies the circuit code (per GR394 B.16) associated with a direct-dial (1+) or casual-dial (10-10-xxx) CAS long distance call.

Type: integer

Range: {0-199}

Default value: 0

CasInterLataOp Identifies the circuit code (per GR394 B.16) associated with an operator-assisted (0+) CAS long distance call.

Type: integer

Range: {0-199}

Default value: 0

CasTollFree Identifies the circuit code (per GR394 B.16) associated with a toll-free (800, 888, 877) CAS long distance call.

Type: integer

Range: {0-199}

Default value: 0

CasInternational Identifies the circuit code (per GR394 B.16) associated with a direct-dial (1+) or casual-dial (10-10-xxx) CAS international call.

Type: integer

Range: {0-199}

Default value: 138

CasInternationalOp Identifies the circuit code (per GR394 B.16) associated with an operator-assisted (0+) CAS international call.

Type: integer

Range: {0-199}

Default value: 158

Input Examples:

```
DLT-CARRIER::1;

ED-CARRIER::1:::CALLTYPE=BOTH, CLASS=BOTH, OPERATOR=Y,
  NAME=TELICA, INTERLATACODE=8,
  INTERLATAOPERATORCODE=9, TOLLFREECODE=10,
  CASINTERLATA=0, CASINTERLATAOP=0, CASTOLLFREE=0,
  CASINTERNATIONAL=138, CASINTERNATIONALOP=158;

ENT-CARRIER::1:::CALLTYPE=BOTH, CLASS=BOTH, OPERATOR=Y,
  NAME=TELICA, INTERLATACODE=8,
  INTERLATAOPERATORCODE=9, TOLLFREECODE=10,
  CASINTERLATA=0, CASINTERLATAOP=0, CASTOLLFREE=0,
  CASINTERNATIONAL=138, CASINTERNATIONALOP=158;

RTRV-CARRIER::1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:CALLTYPE=BOTH, CLASS=BOTH, OPERATOR=Y, NAME=TELICA,
  INTERLATACODE=8, INTERLATAOPERATORCODE=9,
  TOLLFREECODE=10, CASINTERLATA=0, CASINTERLATAOP=0,
  CASTOLLFREE=0, CASINTERNATIONAL=138,
  CASINTERNATIONALOP=158"
;
```

Related Commands: none

ED/RTRV-INSYS

Commands:

ED-INSYS: Edit IN System

RTRV-INSYS: Retrieve IN System

Descriptions:

ED-INSYS lets the user change the frequency that the Plexus sends the SST (Subsystem Status Test) message for prohibited SSNs.

RTRV-INSYS lets the user retrieve the value of the subsystem status test message timer.

Category: Call Control

Security: SA for ED, View for RTRV

Input Formats:

ED-INSYS: [TID]: [<src>]: [CTAG]: :DEFSSTTMR=<defSstTmr>;

RTRV-INSYS: [TID]: [<src>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:DEFSSTTMR=<defSstTmr>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

defSstTmr Identifies the value (in seconds) for the subsystem status test message timer. The factory default is "60".

Type: integer

Range: {1-32767}

Default value: not applicable

Input Examples:

```
ED-INSYS:::::DEFSSTTMR=60;  
RTRV-INSYS;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:DEFSSTTMR=60"  
;
```

Related Commands: none

NOTES

DLT/ED/ENT/RTRV-ANNC-EXT

Commands:

DLT-ANNC-EXT: Delete Announcement External

ED-ANNC-EXT: Edit Announcement External

ENT-ANNC-EXT: Enter Announcement External

RTRV-ANNC-EXT: Retrieve Announcement External

Descriptions:

DLT-ANNC-EXT lets the user delete the association of an internal identification for an audio announcement with an external announcement server.

ED-ANNC-EXT lets the user change the external announcement server with which an internal identification for an audio announcement is associated.

ENT-ANNC-EXT lets the user establish the association of an internal identification for an audio announcement with an external announcement server.

RTRV-ANNC-EXT lets the user retrieve the external announcement server with which an internal identification for an audio announcement is associated.

Category: Call Control

Security: NSA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-ANNC-EXT: [TID]:<anncId>:[CTAG];

ED-ANNC-EXT: [TID]:<anncId>:[CTAG]::DN=<dn>;

ENT-ANNC-EXT: [TID]:<anncId>:[CTAG]::DN=<dn>;

RTRV-ANNC-EXT: [TID]: [<anncId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<anncId>:DN=<dn>"
;
```

Parameters:

anncId Identifies the AID as an audio announcement residing on an external announcement server. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, external announcement server directory numbers for all audio announcements configured in the system will be returned.

Type: AnncId

Range: {32767-65535}

Default value: none

dn Identifies the directory number used to route to the external announcement server associated with the specified audio announcement.

Type: string

Range: up to 31 digits

Default value: NULL

Input Examples:

```
DLT-ANNC-EXT::32768;
```

```
ED-ANNC-EXT::32768::DN=5088048202;
```

```
ENT-ANNC-EXT::32768::DN=5088048202;
```

```
RTRV-ANNC-EXT::32768;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"32768:DN=5088048202"
;
```

Related Commands:

DLT/ED/ENT/RTRV-ANNC-MAP

DLT/ED/ENT/RTRV-AUDIO-ANNC

DLT/ENT/RTRV-ANNC-MAP

Commands:

DLT-ANNC-MAP: Delete Announcement Map

ENT-ANNC-MAP: Enter Announcement Map

RTRV-ANNC-MAP: Retrieve Announcement Map

Descriptions:

DLT-ANNC-MAP lets the user delete the mapping of an internal identification for an audio announcement to an announcement identification specified by an SCP.

ENT-ANNC-MAP lets the user map an internal identification for an audio announcement to an announcement identification specified by an SCP.

RTRV-ANNC-MAP lets the user retrieve the internal audio announcement that is mapped to an announcement identification specified by an SCP.

Category: Call Control

Security: NSA for DLT and ENT, View for RTRV

Input Formats:

DLT-ANNC-MAP: [TID]:<scpAnncMapAid>:[CTAG];

ENT-ANNC-MAP: [TID]:<scpAnncMapAid>:[CTAG]::
ANNCID=<anncId>;

RTRV-ANNC-MAP: [TID]: [<scpAnncMapAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<scpAnncMapAid>:ANNCID=<anncId>"
;
```

Parameters:

scpAnncMapAid Identifies the AID as an announcement specified by an SCP. The first part of the AID is a string of up to 20 characters that labels the announcement mapping; the second part is an integer identifying the announcement specified by the SCP. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all announcement mappings configured in the system will be returned. A null value for the second part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all announcement mappings with the specified announcement mapping label will be returned.

Type: ScpAnncMap

Range: <ANNCMAPLBL>-{1-65535}

Default value: none

anncId Identifies the internal designator for an audio announcement that is mapped to the announcement identification specified by the SCP. Identifiers 1-2999 are reserved for already-configured standard announcements, identifiers 3000-32766 are for user-supplied custom announcements, and identifiers 32767-65535 are reserved for future external announcements.

Type: integer

Range: {1-65535}

Default value: none

Input Examples:

```
DLT-ANNC-MAP::SCP1-1;  
ENT-ANNC-MAP::SCP1-1::ANNCID=32766;  
RTRV-ANNC-MAP::SCP1-1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"SCP-1:ANNCID=32766"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-ANNC-EXT  
DLT/ED/ENT/RTRV-AUDIO-ANNC
```

DLT/ED/ENT/RTRV-DIALPLAN

Commands:

DLT-DIALPLAN: Delete Dial Plan

ED-DIALPLAN: Edit Dial Plan

ENT-DIALPLAN: Enter Dial Plan

RTRV-DIALPLAN: Retrieve Dial Plan

Descriptions:

DLT-DIALPLAN lets the user delete a custom dial plan.

ED-DIALPLAN lets the user change a custom dial plan. Use this command to change the custom dial plan's name and nature of address indicator, the digits to match, the minimum and maximum lengths of the specified digit string, the number of digits to remove, the digits to prefix, and the new nature of address indicator applicable to the specified digit string.

ENT-DIALPLAN lets the user establish a custom dial plan. Use this command to define the custom dial plan's name and nature of address indicator, the digits to match, the minimum and maximum lengths of the specified digit string, the number of digits to remove, the digits to prefix, and the new nature of address indicator applicable to the specified digit string.

RTRV-DIALPLAN lets the user retrieve the attributes of a custom dial plan.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-DIALPLAN:[TID]:<dialPlanAid>:[CTAG];

ED-DIALPLAN:[TID]:<dialPlanAid>:[CTAG]::
[MAXLEN=<maxLen>],[STRIPDGTS=<stripDgts>],
[PREFIXDGTS=<prefixDgts>],[NEWNAI=<newNai>],
[OVERFLOWNANP=<overFlowNANP>];

ENT-DIALPLAN:[TID]:<dialPlanAid>:[CTAG]::
[MAXLEN=<maxLen>],[STRIPDGTS=<stripDgts>],
[PREFIXDGTS=<prefixDgts>],[NEWNAI=<newNai>],
[OVERFLOWNANP=<overFlowNANP>];

RTRV-DIALPLAN:[TID]: [<dialPlanAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<dialPlanAid>:MAXLEN=<maxLen>,
    STRIPDGTS=<stripDgts>,PREFIXDGTS=<prefixDgts>,
    NEWNAI=<newNai>,OVERFLOWNANP=<overFlowNANP>"
;
```

Parameters:

dialPlanAid Identifies the AID as a custom dial plan. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all custom dial plans configured in the system will be returned.

Type: DialPlanAid

Range: <dialPlanName>[-<nai>[-<digits>[-<minDgts>]]], where:

dialPlanName identifies the name of the custom dial plan with a string of up to 21 alphanumeric characters;

nai identifies the nature of address indicator applicable to the specified custom dial plan, with values of:

ABBREVPVT = abbreviated number in private dial plan

DEFAULT = any nature of address indicator

INTNATNUM = international number

INTNATOPREQ = international number, operator request

NATNUM = national significant number

NATOPREQ = national (long-distance) operator request

NONUMCUTTHRU = no number provided, cut through to carrier

NONUMOPREQ = no number provided, operator request

SUBOPREQ = subscriber (local) operator request

SUBSNUM = subscriber number

UNKNOWN = unknown (default value);

digits identifies the leading digits of the number to be matched with a string of 1-31 digits (default = "DEFAULT");

minDgts identifies the minimum length of the specified digit string as an integer from four to six with a default of four.

Default value: none

maxLen Identifies the maximum length of a digit string for the custom dial plan to apply. The value of *maxlen* must be greater than the value of *minLen* in the AID.

Type: integer

Range: {4-6}

Default value: 6

stripDgts Identifies the number of digits to remove from the calls to which the custom dial plan applies. At present, the range for this parameter is restricted to "0".

Type: integer

Range: {0}

Default value: 0

prefixDgts Identifies the digits prefixed to the calls to which the custom dial plan applies. At present, the range for this parameter is restricted to "NULL".

Type: string

Range: NULL

Default value: NULL

newNai Identifies a new nature of address indicator replacing the nature of address indicator applicable to the digit string specified in the AID.

Type: enum

Range: ABBREVPVT = abbreviated number in private dial plan

DEFAULT = any nature of address indicator

INTNATNUM = international number

INTNATOPREQ =

NATNUM = national significant number

NATOPREQ = national (long-distance) operator request

NONUMCUTTHRU = no number provided, cut through to carrier

NONUMOPREQ = no number provided, operator request

SUBOPREQ = subscriber (local) operator request

SUBSNUM = subscriber number

UNKNOWN = unknown (default value);

Default value: the value of *nai* in the AID

overFlowNANP Identifies whether number analysis, based on the North American Numbering Plan, is done after prefixing.

Type: BoolYN

Range: N = In-Service

Y = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: Y

Input Examples:

```
DLT-DIALPLAN::CUSTOM1-unknown-80-4;
```

```
ED-DIALPLAN::CUSTOM1-unknown-80-4:::MAXLEN=6,  
STRIPDIGITS=2,PREFIXDIGITS=NULL,NEWNAI=NATNUM;
```

```
ENT-DIALPLAN::CUSTOM1-unknown-80-4:::MAXLEN=6,  
STRIPDIGITS=2,PREFIXDIGITS=NULL,NEWNAI=NATNUM;
```

```
RTRV-DIALPLAN::CUSTOM1-unknown-80-4;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"CUSTOM1-unknown-80-4:MAXLEN=9,STRIPDIGITS=3,  
PREFIXDIGITS=NULL,NEWNAI=NATNUM"  
;
```

Related Commands:

DLT/ENT/RTRV-DIALPLAN-TRIGGER

DLT/ENT/RTRV-DIALPLAN-TRIGGER

Commands:

DLT-DIALPLAN-TRIGGER: Delete Dial Plan Trigger

ENT-DIALPLAN-TRIGGER: Enter Dial Plan Trigger

RTRV-DIALPLAN-TRIGGER: Retrieve Dial Plan Trigger

Descriptions:

DLT-DIALPLAN-TRIGGER lets the user delete the association of a custom dial plan with an AIN trigger list.

ENT-DIALPLAN-TRIGGER lets the user establish the association of a custom dial plan with an AIN trigger list. ENT-DIALPLAN-TRIGGER is dependent on ENT-DIALPLAN and ENT-LIST-AINTRIGGER; that is, ENT-DIALPLAN-TRIGGER will not work unless ENT-DIALPLAN and ENT-LIST-AINTRIGGER have already been issued.

RTRV-DIALPLAN-TRIGGER lets the user retrieve the association of a custom dial plan with an AIN trigger list.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-DIALPLAN-TRIGGER:[TID]:<dialPlanTrigAid>:[CTAG];  
ENT-DIALPLAN-TRIGGER:[TID]:<dialPlanTrigAid>:[CTAG];  
RTRV-DIALPLAN-TRIGGER:[TID]:[<dialPlanTrigAid>]:  
[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
 "<dialPlanTrigAid>"  
;
```

Parameters:

dialPlanTrigAid Identifies the AID as the association of a custom dial plan with an AIN trigger list. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all associations configured in the system between custom dial plans and AIN trigger lists will be returned. A null value for the second part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all AIN trigger list associations with the specified custom dial plan will be returned.

Type: DialPlanTrigAid

Range: <dialPlanName>[-<ainTrigList>], where:

dialPlanName identifies the name of the custom dial plan with a string of up to 21 alphanumeric characters;

ainTrigList identifies the AIN Trigger List applicable to the specified custom dial plan with a string of up to 20 characters. "CUSTOM_DIALPLAN" is the only trigger type allowed for entries in the specified AIN Trigger List.

Default value: none

Input Examples:

```
DLT-DIALPLAN-TRIGGER::CUSTOM1-TRIGLIST1;  
ENT-DIALPLAN-TRIGGER::CUSTOM1-TRIGLIST1;  
RTRV-DIALPLAN-TRIGGER::CUSTOM1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"CUSTOM1-TRIGLIST1"  
"CUSTOM1-TRIGLIST2"  
"CUSTOM1-TRIGLIST3"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-DIALPLAN  
DLT/ED/ENT/RTRV-LIST-AINTRIGGER
```

DLT/ED/ENT/RTRV-LIST-AINTRIGGER

Commands:

DLT-LIST-AINTRIGGER: Delete List AIN Trigger

ED-LIST-AINTRIGGER: Edit List AIN Trigger

ENT-LIST-AINTRIGGER: Enter List AIN Trigger

RTRV-LIST-AINTRIGGER: Retrieve List AIN Trigger

Descriptions:

DLT-LIST-AINTRIGGER lets the user remove a trigger from a list of AIN triggers. Removing all triggers from a list deletes the list name from the database.

ED-LIST-AINTRIGGER lets the user change a list of AIN triggers. Use this command to change the trigger type and category, the string of digits that activates the trigger, the service logic host route to an SCP, and whether the trigger is active.

ENT-LIST-AINTRIGGER lets the user establish a list of AIN triggers. Use this command to define the AIN trigger(s) on the list, the trigger type and category, the string of digits that activates the trigger, the service logic host route to an SCP, and whether the trigger is active. ENT-LIST-AINTRIGGER is dependent on ENT-SLHR-SCP; that is, ENT-LIST-AINTRIGGER will not work unless ENT-SLHR-SCP has already been issued.

RTRV-LIST-AINTRIGGER lets the user retrieve a list of AIN triggers and the attributes for the triggers in the list.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-LIST-AINTRIGGER: [TID]:<triggerAid>:[CTAG];

ED-LIST-AINTRIGGER: [TID]:<triggerAid>:[CTAG]:
[TRIGESCLIST=<trigEscList>],[SLHRID=<slhrId>]:
[<pst>];

ENT-LIST-AINTRIGGER: [TID]:<triggerAid>:[CTAG]::
TRIGTYPE=<trigType>,[CATEGORY=<category>],
[TRIGESCLIST=<trigEscList>],
[SCREENDGTS=<screenDgts>],[SLHRID=<slhrId>]:
[<pst>];

RTRV-LIST-AINTRIGGER: [TID]: [<triggerAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<triggerAid>:TRIGTYPE=<trigType>,
    CATEGORY=<category>,[TRIGESCLIST=<trigEscList>],
    SCREENDGTS=<screenDgts>,SLHRID=<slhrId>:<pst>"
;
```

Parameters:

triggerAid Identifies the AID as a list of AIN triggers. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all lists of AIN triggers configured in the system will be returned. A null value for the second part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all AIN triggers associated with the specified list of AIN triggers will be returned.

Type: TriggerAid

Range: <ainTrigListName>[-<index>], where:

ainTrigListName identifies the name of the list of AIN triggers with a string of up to 21 alphanumeric characters;

index identifies the particular trigger associated with the list as an integer with range 1-255. Each trigger has a unique combination of *trigType* and *screenDgts*.

Default value: none

trigType Identifies the triggering event; that is, an SSP User Resource-related call processing event that is of potential interest to an AIN service.

Type: enum

Range: CUSTOM_DIALPLAN = trigger encountered on receipt of a digit string that matches the criteria for a custom dial plan

INTERNATIONAL = trigger encountered on receipt of a digit string that matches the criteria for an international call. Note that there can only be one INTERNATIONAL trigger configured in the system.

MOBILE_TERMINATION = trigger encountered when the called party number is either an ANSI IS41 or a GSM mobile directory number. To select this value, first use ED-GMSC-ANSISYS/GSMSYS to set the primary state of the Plexus 9000 configured as a GMSC to "IS".

MOBILE_TERMINATION_ANSI = trigger encountered when the called party number is an ANSI IS41 mobile directory number. To select this value, first use ED-GMSC-ANSISYS to set the primary state of the Plexus 9000 configured as an ANSI IS41 GMSC to "IS".

MOBILE_TERMINATION_GSM = trigger encountered when the called party number is a GSM mobile directory number. To select this value, first use ED-GMSC-GSMSYS to set the primary state of the Plexus 9000 configured as a GSM GMSC to "IS".

ONE_PLUS_PREFIX = trigger encountered on receipt of one of the following digit strings:

- 1+NPA-NXX-XXXX
- 101XXXX 1+ NPA-NXX-XXXX

OPERATOR_SERVICES = trigger encountered on receipt of one of the following digit strings (a "-" means "no following digits", a "+" means "has following digits"):

- 0-
- 00-
- 101xxxx 0-
- 101xxxx 00-
- 0+
- 01+
- 101xxxx 0+
- 101xxxx 01+

SPECIFIC_DIGIT_STRING = trigger encountered on receipt of an appropriate sequence of dialed digits (other than escape codes) in the *CalledPartyID* of an SCP/Adjunct Response message, or in the IAM Called Party Number or (Ported Number) GAP

Default value: none

category Identifies whether the triggering event specified by *trigType* applies to office-based or to subscribed-based traffic. Office-based triggers are global; they apply to all traffic through the switch. Subscribed-based triggers apply to a specific subscriber line.

Type: enum

Range: OFFICE
SUBSCRIBED

Default value: SUBSCRIBED

trigEscList Identifies the escape (exception) list, previously defined by ENT-LIST-TRIGESC, for the specified trigger.

Type: string

Range: up to 10 characters

Default value: NULL

screenDgts Identifies the triggering digits, based on the triggering event.

Type: string

Range: one to 20 digits, for the following triggers:

- CUSTOM_DIALPLAN: one to 20 digits
- INTERNATIONAL: one to 15 digits
- ONE_PLUS_PREFIX: 11 or 18 digits
- OPERATOR_SERVICES: one to 20 digits
- SPECIFIC_DIGIT_STRING: three to 10 digits

Default value: NULL

slhrId Identifies the service logic host route to an SCP for the AIN trigger.

Type: enum

Range: {0-31}

Default value: none

pst Identifies the primary state of the AIN trigger; that is, whether the trigger is active.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service
for Management)

Default value: IS

Input Examples:

```
DLT-LIST-AINTRIGGER::TRIGLIST1-1;  
ED-LIST-AINTRIGGER::TRIGLIST1-1:::TRIGESCLIST=NULL,  
    SLHR=1:IS;  
ENT-LIST-AINTRIGGER::TRIGLIST1-1:::  
    TRIGTYPE=SPECIFIC_DIGIT_STRING,CATEGORY=SUBSCRIBER,  
    TRIGESCLIST=NULL,SCREENDGTS=508,SLHR=1:IS;  
RTRV-LIST-AINTRIGGER::TRIGLIST1-1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"TRIGLIST1-1:TRIGTYPE=SPECIFIC_DIGIT_STRING,  
    CATEGORY=SUBSCRIBER,TRIGESCLIST=NULL,  
    SCREENDGTS=508,SLHR=1:IS"  
;
```

Related Commands:

```
DLT/ENT/RTRV-DIALPLAN-TRIGGER  
DLT/ED/ENT/RTRV-LIST-TRIGESC
```

DLT/ED/ENT/RTRV-LIST-TRIGESC

Commands:

DLT-LIST-TRIGESC: Delete List Trigger Escape
ED-LIST-TRIGESC: Edit List Trigger Escape
ENT-LIST-TRIGESC: Enter List Trigger Escape
RTRV-LIST-TRIGESC: Retrieve List Trigger Escape

Descriptions:

DLT-LIST-TRIGESC lets the user remove a trigger escape list from the database.

ED-LIST-TRIGESC lets the user change the ending number for the range of DNs associated with a specified trigger escape list.

ENT-LIST-TRIGESC lets the user establish an escape (exception) list for a particular trigger type. Use this command to name the trigger escape list and associate it with a range of directory numbers.

RTRV-LIST-TRIGESC lets the user retrieve the range of DNs associated with a specified trigger escape list.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-LIST-TRIGESC:[TID]:<trigEscListAID>:[CTAG];  
ED-LIST-TRIGESC:[TID]:<trigEscListAID>:[CTAG]::  
    [ENDRANGE=<endRange>];  
ENT-LIST-TRIGESC:[TID]:<trigEscListAID>:[CTAG]::  
    [ENDRANGE=<endRange>];  
RTRV-LIST-TRIGESC:[TID]:[<trigEscListAID>]:[CTAG];
```

Output Format:

```
    SID DATE TIME  
M   CTAG COMPLD  
    "<trigEscListAID>:ENDRANGE=<endRange>"  
    ;
```


Parameters:

trigEscListAID Identifies the AID as an escape (exception) list for a particular trigger type. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all trigger type escape lists configured in the system will be returned. A null value for the second part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the range of directory numbers associated with the specified escape list will be returned.

Type: TrigEscListAID

Range: <trigEscList>[-<startRange>], where:

trigEscList identifies the name of the trigger type escape list with a string of up to 10 alphanumeric characters;

startRange identifies the first number in the range of DNs associated with the escape list with a string of exactly 10 digits.

Default value: none

endRange Identifies the last number in the range of DNs associated with the escape list with just the last four digits. The value must be greater than the value of *startRange*.

Type: string

Range: {0000-9999}

Default value: the value for *startRange*

Input Examples:

```
DLT-LIST-TRIGESC::ESCLIST1-5088041000;  
ED-LIST-TRIGESC::ESCLIST1-5088041000:::ENDRANGE=5000;  
ENT-LIST-TRIGESC::ESCLIST1-5088041000:::ENDRANGE=5000;  
RTRV-LIST-TRIGESC::ESCLIST1-5088041000;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"ESCLIST1-5088041000:ENDRANGE=5000"  
;
```

Related Commands:

DLT/ED/ENT/RTRV-LIST-AINTRIGGER

DLT/ENT/RTRV-SCCP-ROUTE

Commands:

DLT-SCCP-ROUTE: Delete SCCP Route

ENT-SCCP-ROUTE: Enter SCCP Route

RTRV-SCCP-ROUTE: Retrieve SCCP Route

Descriptions:

DLT-SCCP-ROUTE lets the user delete an SCCP (Signaling Connection Control Part) route to a remote point code.

ENT-SCCP-ROUTE lets the user establish an SCCP (Signaling Connection Control Part) route to a remote point code. ENT-SCCP-ROUTE is dependent on ENT-PC; that is, ENT-SCCP-ROUTE will not work unless ENT-PC has already been issued.

RTRV-SCCP-ROUTE lets the user retrieve the remote point code(s) to which an SCCP (Signaling Connection Control Part) route exists.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-SCCP-ROUTE: [TID]: [<src>]: [CTAG]::<Pc>;

ENT-SCCP-ROUTE: [TID]: [<src>]: [CTAG]::<Pc>;

RTRV-SCCP-ROUTE: [TID]: [<src>]: [CTAG]::<Pc>;

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:<Pc>"
;
```

Parameters:

src Identifies the AID as the Plexus 9000.

Type: COM

Range: COM

Default value: COM

Pc Identifies the remote point code for the route. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all point codes configured in the system will be returned.

Type: string

Range: {0-255}-{0-255}-{0-255}

Default value: none

Input Examples:

DLT-SCCP-ROUTE:::35-222-123;

ENT-SCCP-ROUTE:::35-222-123;

RTRV-SCCP-ROUTE;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:35-210-123"
"COM:35-223-181"
"COM:42-156-93"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SCCP-SSN

Commands:

DLT-SCCP-SSN: Delete SCCP SSN

ED-SCCP-SSN: Edit SCCP SSN

ENT-SCCP-SSN: Enter SCCP SSN

RTRV-SCCP-SSN: Retrieve SCCP SSN

Descriptions:

DLT-SCCP-SSN lets the user delete an SCCP (Signaling Connection Control Part) route to an SSN (sub-system number) on a remote point code.

ED-SCCP-SSN lets the user change the parameters affecting an SCCP (Signaling Connection Control Part) route to an SSN (sub-system number) on a remote point code.

ENT-SCCP-SSN lets the user establish an SCCP (Signaling Connection Control Part) route to an SSN (sub-system number) on a remote point code. ENT-SCCP-SSN is dependent on ENT-PC and ENT-SCCP-ROUTE; that is, ENT-SCCP-SSN will not work unless ENT-PC and ENT-SCCP-ROUTE have already been issued.

RTRV-SCCP-SSN lets the user retrieve the remote point code(s) to which an SCCP (Signaling Connection Control Part) route to an SSN (sub-system number) exists.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SCCP-SSN: [TID]:<pcSsn>:[CTAG];

ED-SCCP-SSN: [TID]:<pcSsn>:[CTAG]::
[<sccpSsnStartup>],[<bpc>];

ENT-SCCP-SSN: [TID]:<pcSsn>:[CTAG]::
[<sccpSsnStartup>],[<bpc>];

RTRV-SCCP-SSN: [TID]: [<pcSsn>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<pcSsn>:<startupStatus>,<bpc>"
;
```

Parameters:

pcSsn Identifies the AID as a combination of the remote point code that receives the query and the subsystem number of the providing service. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all point codes configured in the system will be returned.

Type: SccpSsnAid

Range: {0-255}-{0-255}-{0-255}-{1-255}

Default value: none

sccpSsnStartup Identifies the startup state of the route to the SSN.

Type: enum

Range: OFFLINE

ONLINE

Default value: ONLINE

bpc Identifies the backup point code for the SSN application.

Type: enum

Range: {0-255}-{0-255}-{0-255}

Default value: 255-255-255

Input Examples:

```
DLT-SCCP-SSN::35-222-123-18;
ED-SCCP-SSN::35-222-123-18:::ONLINE;
ENT-SCCP-SSN::35-222-123-18:::ONLINE,255-255-255;
RTRV-SCCP-SSN;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "35-222-123-18:ONLINE,255-255-255"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SLHR-SCP

Commands:

DLT-SLHR-SCP: Delete SLHR SCP

ED-SLHR-SCP: Edit SLHR SCP

ENT-SLHR-SCP: Enter SLHR SCP

RTRV-SLHR-SCP: Retrieve SLHR SCP

Descriptions:

DLT-SLHR-SCP lets the user delete a service logic host route to a Service Control Point.

ED-SLHR-SCP lets the user change the attributes of a service logic host route to a Service Control Point.

ENT-SLHR-SCP lets the user establish a service logic host route to a Service Control Point. ENT-SLHR-SCP is dependent on ENT-SCCP-ROUTE and (when the value of *routeType* is "RTE_SSN") ENT-SCCP-SSN; that is ENT-SLHR-SCP will not work unless ENT-SCCP-ROUTE and ENT-SCCP-SSN have already been issued.

RTRV-SLHR-SCP lets the user retrieve the attributes of a service logic host route to a Service Control Point.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SLHR-SCP: [TID]:<slhrId>:[CTAG];

ED-SLHR-SCP: [TID]:<slhrId>:[CTAG]::[DESC=<descr>],
[ROUTETYPE=<routeType>],[DPC=<dpc>],
[SVCREQSSN=<svcReqSsn>],[SVCPROVSSN=<svcProvSsn>],
[GTFORMATIND=<gtFormatInd>],
[GTTRANSTYPE=<gtTransType>],[TMOUT=<tmout>],
[BPC=<bpc>],[ANNCMAP=<anncMap>],
[ORIGNOANSTMR=<origNoAnsTmr>];

```
ENT-SLHR-SCP:[TID]:<slhrId>:[CTAG]::DESC=<descr>,
ROUTETYPE=<routeType>,DPC=<dpc>,
SVCREQSSN=<svcReqSsn>,[SVCPROVSSN=<svcProvSsn>],
[GTFORMATIND=<gtFormatInd>],
[GTTRANSTYPE=<gtTransType>],[TMOUT=<tmout>],
[BPC=<bpc>],[ANNCMAP=<anncMap>],
[ORIGNOANSTMR=<origNoAnsTmr>];

RTRV-SLHR-SCP:[TID]:[<slhrId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<slhrId>:DESC=<descr>,ROUTETYPE=<routeType>,
DPC=<dpc>,SVCREQSSN=<svcReqSsn>,
SVCPROVSSN=<svcProvSsn>,
GTFORMATIND=<gtFormatInd>,
GTTRANSTYPE=<gtTransType>,TMOUT=<tmout>,
BPC=<bpc>,[ANNCMAP=<anncMap>],
ORIGNOANSTMR=<origNoAnsTmr>"
;
```

Parameters:

slhrId Identifies the AID as a service logic host route to a Service Control Point. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all service logic host routes configured in the system will be returned.

Type: SlhrId

Range: {0-31}

Default value: none

descr Identifies the description of the AIN service.

Type: string

Range: up to 50 ASCII characters

Default value: none

routeType Identifies the type of routing used for services.

Type: enum

Range: RTE_GT = routing to an SCP via an STP by using global title translation

RTE_SSN = routing directly to an SCP using a point code and an SSN (Sub-Service Number)

Default value: none

- dpc** Identifies the point code that processes the TCAP query to the SCP that provides the AIN service. The point code represents the SCP that provides the AIN service when routing the request by using an SSN. The point code represents the STP that routes the query to the appropriate SCP when routing the request by using global title translation.
- Type:** string
Range: {0-255}-{0-255}-{0-255}
Default value: none
- svcReqSsn** Identifies the SSN for the service on the Plexus. It is usually the same as the providing SSN.
- Type:** integer
Range: {1-255}
Default value: none
- svcProvSsn** Identifies the SSN for the service on the SCP. It is usually the same as the requesting SSN. The value of *svcProvSsn* cannot be “0” when the value of *routeType* is “RTE_SSN”.
- Type:** integer
Range: {0-255}
Default value: the value of *svcReqSsn* (when the value of *routeType* is “RTE_SSN”)
0 (when the value of *routeType* is “RTE_GT”)
- gtFormatInd** Identifies the format of the global title and is mandatory (but cannot be “0”) when the value of *routeType* is “RTE_GT”. A value of “0” indicates no global title used (Use direct addressing.). A value of “1” indicates that global title includes translation type, numbering plan and encoding scheme. A value of “2” indicates that global title includes translation type only.
- Type:** integer
Range: {0-2}
Default value: 0
- gtTransType** Identifies the translation type of the global title. This parameter is mandatory when the value of *routeType* is “RTE_GT” (but cannot be “0”).
- Type:** integer
Range: {0-255}
Default value: 0

- tmout** Identifies the time (in seconds) before LNP or TOLLFREE query expiry.
Type: integer
Range: {1-10}
Default value: 3
- bpc** Identifies the backup point code that processes the TCAP query to the SCP that provides the IN service when the point code represented by *dpc* is unavailable.
Type: string
Range: {0-255}-{0-255}-{0-255}
Default value: NULL
- anncMap** Identifies an SCP-specified announcement applicable to the AIN service.
Type: string
Range: up to 20 characters
Default value: NULL
- origNoAnsTmr** Identifies the time (in seconds) before the Plexus 9000 reports to the SCP that the called party has not answered.
Type: integer
Range: {1-120}
Default value: 18

Input Examples:

```
DLT-SLHR-SCP::1;  
ED-SLHR-SCP::1::DESC=CFV_SERVICE,ROUTETYPE=RTE_SSN,  
DPC=3-4-5,SVCREQSSN=1,SVCPROVSSN=1,GTFORMATIND=0,  
GTTRANSTYPE=0,TMOUT=3,BPC=NULL,ANNCMAP=NULL,  
ORIGNOANSTMR=18;  
ENT-SLHR-SCP::1::DESC=CFV_SERVICE,ROUTETYPE=RTE_SSN,  
DPC=3-4-5,SVCREQSSN=1,SVCPROVSSN=1,GTFORMATIND=0,  
GTTRANSTYPE=0,TMOUT=3,BPC=NULL,ANNCMAP=NULL,  
ORIGNOANSTMR=18;  
RTRV-SLHR-SCP::1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:DESC=CFV_SERVICE,ROUTETYPE=RTE_SSN,DPC=3-4-5,
  SVCREQSSN=1,SVCPROVSSN=1,GTFORMATIND=0,
  GTTRANSTYPE=0,TMOUT=3,BPC=NULL,ANNCMAP=NULL,
  ORIGNOANSTMR=18;

;
```

Related Commands: none

DLT/ED/ENT/RTRV-LCC

Commands:

DLT-LCC: Delete LCC

ED-LCC: Edit LCC

ENT-LCC: Enter LCC

RTRV-LCC: Retrieve LCC

Descriptions:

DLT-LCC lets the user delete a line class code.

ED-LCC lets the user change the attributes of a line class code, including the charging treatment for origination, the flat rate serving area, the major line class, the message rate area, and the terminating charge treatment.

ENT-LCC lets the user establish a line class code.

RTRV-LCC lets the user retrieve the attributes of a line class code, including the charging treatment for origination, the flat rate serving area, the major line class, the message rate area, and the terminating charge treatment for a line class code.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-LCC: [TID]:<lccId>:[CTAG];

ED-LCC: [TID]:<lccId>:[CTAG]::[CHT=<cht>],[FRA=<fra>],
[MC=<mc>],[MRA=<mra>],[TCHT=<thct>];

ENT-LCC: [TID]:<lccId>:[CTAG]::[CHT=<cht>],[FRA=<fra>],
[MC=<mc>],[MRA=<mra>],[TCHT=<thct>];

RTRV-LCC: [TID]: [<lccId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<lccId>:CHT=<cht>,FRA=<fra>,MC=<mc>,MRA=<mra>,
TCHT=<tcht>"
;
```

Parameters:

- lccId** Identifies the AID as a line class code. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all line class codes configured in the system will be returned.
- Type:** string
Range: 3 or 4 characters
Default value: none
- cht** Identifies the Charging Treatment for origination.
- Type:** enum
Range: DORG = Denied Organization
FR = Flat Rate
MR = Message Rate: Used if a message-rate call is charged for the same number of message units regardless of the elapsed time and destination code
MRD = Message Rate, Detailed: Used if the call is charged for the distance between the calling and called numbers, but not for the elapsed time of the call
MRT = Message Rate, Timed: Used if calls to any destination within the customer's message-rate local calling area are to receive the same charge treatment but be charged for the elapsed time
MRTD = Message Rate, Timed/Detailed: Used if a message-rate call is charged for the elapsed time of the call and the distance between the calling and called numbers.
MRTD_NO_MBI = Message Rate, Timed/Detailed, no MBI (Message Billing Index): Used if the call is charged for the distance between the calling and called numbers and the elapsed time of the call
NOREC = No Record
OWFBD = OUTWATS Full Business Day (currently unsupported)
OWMT = OUTWATS Measured Time (currently unsupported)
Default value: FR
- fra** Identifies the Flat Rate Area; that is, a flat rate serving area (local calling area or wider area) associated with a specific tariff or tariffs.
- Type:** integer
Range: {1-1024}
Default value: 1

- mc** Identifies the major line class.
Type: enum
Range: 1P = Individual Line
DID = Direct Inward Dialed
PBX = PBX Line
Default value: PBX
- mra** Identifies the Message Rate Area; that is, the local calling (or wider) area associated with a specific tariff or tariffs.
Type: integer
Range: {1-1024}
Default value: 1
- tcht** Identifies the Terminating Charge Treatment.
Type: enum
Range: FLS = Free terminating Line Service
NONE = No termination charge treatment
Default value: NONE

Input Examples:

```
DLT-LCC::123;  
ED-LCC::123:::CHT=FR,FRA=1,MC=PBX,MRA=1,TCHT=NONE;  
ENT-LCC::123;  
RTRV-LCC::123;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"123:CHT=FR,FRA=1,MC=PBX,MRA=1,TCHT=NONE"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-LIST-AUTHCODE

Commands:

DLT-LIST-AUTHCODE: Delete List Authorization Code

ED-LIST-AUTHCODE: Edit List Authorization Code

ENT-LIST-AUTHCODE: Enter List Authorization Code

RTRV-LIST-AUTHCODE: Retrieve List Authorization Code

Descriptions:

DLT-LIST-AUTHCODE lets the user delete an authorization list containing either an authorization code, a personal identification number (PIN) code, or an authorization code with an associated PIN code.

ED-LIST-AUTHCODE lets the user change the authorization code, the personal identification number (PIN) code, or the authorization code with associated PIN code in an authorization list. Authorization lists have unique names, are limited to 500 entries, and contain only a single type of code (authorization, PIN, or authorization with associated PIN).

ENT-LIST-AUTHCODE lets the user establish an indexed list containing an authorization code, a personal identification number (PIN) code, or an authorization code with an associated PIN code. Authorization lists have unique names, are limited to 500 entries, and contain only a single type of code (authorization, PIN, or authorization with associated PIN).

RTRV-LIST-AUTHCODE lets the user retrieve an indexed list containing either an authorization code, a personal identification number (PIN) code, or an authorization code with an associated PIN code.

Category: Facility

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-LIST-AUTHCODE: [TID]:<idindex>:[CTAG];

ED-LIST-AUTHCODE: [TID]:<idindex>:[CTAG]::
[AUTHCODE=<authcode>], [PINCODE=<pincode>];

ENT-LIST-AUTHCODE: [TID]:<idindex>:[CTAG]::
[AUTHCODE=<authcode>], [PINCODE=<pincode>];

RTRV-LIST-AUTHCODE: [TID]: [<idindex>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<idindex>:[AUTHCODE=<authcode>],
    [PINCODE=<pincode>]"
;
```

Parameters:

idindex Identifies the AID as either an authorization code, a PIN code, or an authorization code with an associated PIN code in an authorization list. The first part of the AID is a string identifying the list name; the second part is an integer representing the specific code in the list. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all authorization lists in the system will be returned. A null value for the second part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the INDEX field blank, all codes assigned to the specified authorization list will be returned.

Type: ListCodeAid

Range: <LISTID>-{INDEX}, where
LISTID = up to 20 characters, and
INDEX = {1-500}

Default value: none

authcode Identifies the specific authorization code associated with INDEX in *listCodeId* when *listCodeId* represents either a list of authorization codes or a list of authorization codes with associated PIN codes.

Type: string

Range: up to eight digits (including "*", but not as the first digit)

Default value: NULL

pincode Identifies the specific PIN code associated with INDEX in *listCodeId* when *listCodeId* represents either a list of PIN codes or a list of authorization codes with associated PIN codes.

Type: string

Range: four to eight digits (including "#" and "*")

Default value: NULL

Input Examples:

```
DLT-LIST-AUTHCODE::COMBOLIST1-1;  
ED-LIST-AUTHCODE::COMBOLIST1-1:::AUTHCODE=78025,  
    PINCODE=6275;  
ENT-LIST-AUTHCODE::COMBOLIST1-1:::AUTHCODE=78025,  
    PINCODE=6275;  
RTRV-LIST-AUTHCODE::COMBOLIST1-1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COMBOLIST1-1:AUTHCODE=78025,PINCODE=6275"  
;
```

Related Commands: none

DLT/ENT/RTRV-LIST-SUBSCRNBLK

Commands:

DLT-LIST-SUBSCRNBLK: Delete List Subscriber Screenblock

ENT-LIST-SUBSCRNBLK: Enter List Subscriber Screenblock

RTRV-LIST-SUBSCRNBLK: Retrieve List Subscriber Screenblock

Descriptions:

DLT-LIST-SUBSCRNBLK lets the user remove a list containing strings of digits that a subscriber is blocked from calling.

ENT-LIST-SUBSCRNBLK lets the user create a list containing strings of digits that a subscriber is blocked from calling. ENT-LIST-SUBSCRNBLK will not work unless the ENT-SUBSCRIBER has already been issued.

RTRV-LIST-SUBSCRNBLK lets the user retrieve a list containing strings of digits that a subscriber is blocked from calling

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-LIST-SUBSCRNBLK: [TID]:<subScrnBlkAid>:[CTAG];

ENT-LIST-SUBSCRNBLK: [TID]:<subScrnBlkAid>:[CTAG];

RTRV-LIST-SUBSCRNBLK: [TID]: [<subScrnBlkAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<subScrnBlkAid>"
;
```

Parameters:

subScrnBlkAid Identifies the AID with a variable string indicating the subscriber, the type of screened number, and the string of blocked digits. A null value for the third part of the AID is equivalent to "ALL"; that is, by leaving the SCREENSTRING field blank,

- (a) for DLT, all screen blocks for the applicable type of screened number (SCREENTYPE) are removed for the designated screen block list
- (b) for ENT, the designated screen block list contains all allowable digit strings for the applicable type of screened number
- (c) for RTRV, identification of all screen blocks for the applicable type of screened number in the system for the designated screen block list will be returned.

Null values for both the second and third parts of the AID (in RTRV only) is equivalent to "ALL"; that is, by leaving the SCREENTYPE and SCREENSTRING fields blank, all screen blocks and their types for the designated screen block list will be returned

Type: BlockListAid

Range: <BLOCKNAME>-<SCREENTYPE>

[-<SCREENSTRING>], where

BLOCKNAME identifies the name of the list with a string of up to 21 characters;

SCREENTYPE can be:

CUTTHRU = Casual calling carrier (any four-digit string specifying the cic on which calls are blocked – no default)

INTERNATIONAL = Direct-dial international (any digit string up to 21 digits, but without 011 prefix)

NATIONAL = Any number in the NANP (1 or any NPA or any NPA-NXX or any complete NPA-NXX-xxxx or any digit string up to 21 digits)

OPERATOR = Local or long-distance operator request (0 or 00)

OPINTRN = Operator-assisted international ("DEFAULT" – blocks all calls prefixed by 01)

OPNAT = Operator-assisted national (0 and 411)

SCREENSTRING identifies the digits to block with a string of up to 21 digits (shown parenthetically for each value of SCREENTYPE), or "DEFAULT".

Default value: none

Input Examples:

DLT-LIST-SUBSCRNBLK: :XYZ-NATIONAL-508411;

(Deletes the specific entry in the XYZ screenblock list)

DLT-LIST-SUBSCRNBLK: :XYZ-NATIONAL;

(Deletes all NATIONAL screentype entries in the XYZ screenblock list)

ENT-LIST-SUBSCRNBLK: :XYZ-NATIONAL-508411;

(Creates the specific entry in the XYZ screenblock list)

ENT-LIST-SUBSCRNBLK: :XYZ-NATIONAL;

(Creates the XYZ screenblock list with all NATIONAL screentype entries)

RTRV-LIST-SUBSCRNBLK;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "XYZ-NATIONAL-508411"
  "XYZ-NATIONAL-978411"
  "XYZ-NATIONAL-617411"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SCREEN-LIST

Commands:

DLT-SCREEN-LIST: Delete Screen List

ED-SCREEN-LIST: Edit Screen List

ENT-SCREEN-LIST: Enter Screen List

RTRV-SCREEN-LIST: Retrieve Screen List

Descriptions:

DLT-SCREEN-LIST lets the user delete a range of subscriber numbers associated with an interface and used for screening calling or called party numbers.

ED-SCREEN-LIST lets the user change the ending number for a range of subscriber numbers associated with an interface and used for screening calling or called party numbers.

ENT-SCREEN-LIST lets the user establish a list of subscriber numbers associated with an interface, so that a calling or called party number can be screened for validity for the interface.

RTRV-SCREEN-LIST lets the user retrieve a list of subscriber numbers associated with an interface and used for screening calling or called party numbers.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SCREEN-LIST:[TID]:<screenListAid>:[CTAG];

ED-SCREEN-LIST:[TID]:<screenListAid>:[CTAG]::
ENDRANGE=<endRange>;

ENT-SCREEN-LIST:[TID]:<screenListAid>:[CTAG]::
[ENDRANGE=<endRange>;

RTRV-SCREEN-LIST:[TID]:[<screenListAid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<screenListAid>:[ENDRANGE=<endRange>]"
;
```

Parameters:

screenListAid Identifies the list of calling or called party numbers associated with an interface. The first number in the range identifies the list, and the second identifies the first subscriber number on the list by NPA, NXX, and XXXX. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all subscriber lists in the system will be returned.

Type: ScreenListAid

Range: {LISTID}-{STARTRANGE}, where
LISTID = {1-32767}, and
STARTRANGE = exactly 10 digits

Default value: none

endRange Identifies the last subscriber number on the list with just the last four digits.

Type: string

Range: {0000-9999}

Default value: none

Input Examples:

```
DLT-SCREEN-LIST::1-5088048100;  
ED-SCREEN-LIST::1-5088048100:::ENDRANGE=8999;  
ENT-SCREEN-LIST::1-5088048100:::ENDRANGE=8999;  
RTRV-SCREEN-LIST::1-5088048100;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1-5088048100:ENDRANGE=8999"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SUB-ALTDN

Commands:

DLT-SUB-ALTDN: Delete Subscriber ALTDN
ED-SUB-ALTDN: Edit Subscriber ALTDN
ENT-SUB-ALTDN: Enter Subscriber ALTDN
RTRV-SUB-ALTDN: Retrieve Subscriber ALTDN

Descriptions:

DLT-SUB-ALTDN lets the user delete the association between a subscriber and a distinct ring number; that is, an alternate directory number with a distinctive ring assigned to the same subscriber line.

ED-SUB-ALTDN lets the user change the distinctive ring associated with an alternate directory number assigned to a subscriber line

ENT-SUB-ALTDN lets the user associate a previously-configured alternate directory number with a subscriber line and assign a distinctive ring for it.

RTRV-SUB-ALTDN lets the user retrieve the type of distinctive ring associated with an alternate directory number assigned to a subscriber line.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SUB-ALTDN: [TID]:<altdnAid>:[CTAG];
ED-SUB-ALTDN: [TID]:<altdnAid>:[CTAG]::RING=<ring>;
ENT-SUB-ALTDN: [TID]:<altdnAid>:[CTAG]::RING=<ring>;
RTRV-SUB-ALTDN: [TID]:<altdnAid>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<altdnAid>:RING=<ring>"
;
```

Parameters:

altdnAid Identifies the AID with a variable string indicating the subscriber and the alternate directory number associated with the subscriber. A null value for the second part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the type of distinctive ring associated with all alternate directory numbers assigned to the specified subscriber line will be returned.

Type: AltDnAid

Range: <SUBSCRIBERID>-<SUBSCRIBERID>, where the first SUBSCRIBERID identifies the subscriber with a string of exactly 10 digits; and the second SUBSCRIBERID identifies the alternate directory number associated with the subscriber with a string of exactly 10 digits. The alternate directory number cannot be an existing subscriber number.

Default value: none

ring Identifies the distinctive ring associated with the alternate directory number for the subscriber.

Type: enum

Range: 3EKTS = Pattern 3 EKTS
4REMRING = Pattern 4 Reminder Ring
DISTINCTINT = Pattern 1 Distinctive Intergroup
DISTINCTSP = Pattern 2 Special
NORMAL = Pattern 0 Normal

Default value: none

Input Examples:

```
DLT-SUB-ALTDN::5084800909-5088048202;  
ED-SUB-ALTDN::5084800909-5088048202:::RING=NORMAL;  
ENT-SUB-ALTDN::5084800909-5088048202:::RING=NORMAL;  
RTRV-SUB-ALTDN::5084800909-5088048202;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"5084800909-5088048202:RING=NORMAL"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SUB-IF

Commands:

DLT-SUB-IF: Delete Subscriber Interface

ED-SUB-IF: Edit Subscriber Interface

ENT-SUB-IF: Enter Subscriber Interface

RTRV-SUB-IF: Retrieve Subscriber Interface

Descriptions:

DLT-SUB-IF lets the user delete the association between an interface and a subscriber from the system.

ED-SUB-IF lets the user change the properties for the identified subscriber interface.

ENT-SUB-IF lets the user establish the properties for the identified subscriber interface. The user can provision multiple subscribers on a single interface or multiple interfaces on a single subscriber. ENT-SUB-IF will not work unless ENT-SUBSCRIBER and either ENT-ISDNIF, ENT-CAS-IF, ENT-GR303-IF, or ENT-MGCP-LNGRP has already been issued.

RTRV-SUB-IF lets the user retrieve the properties for the identified subscriber interface.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SUB-IF:[TID]:<subIfAid>:[CTAG];

ED-SUB-IF:[TID]:<subIfAid>:[CTAG]::[DN=<dn>],
[CGPNPROV=<cgpnprov>],[VERIFYCDPN=<verifycdpn>],
[VERIFYCGPN=<verifycgpn>],[CGPNDC=<cgpnadc>],
[CPSXFER=<cpsxfer>],[RSXFER=<rsxfer>],
[SCREENLIST=<screenlist>],[AUTHTYPE=<authtype>],
[AUTHMODE=<authmode>],[ACNTCODELEN=<acntcode len>],
[AUTHLIST=<authlist>];


```
ENT-SUB-IF:[TID]:<subIfAid>:[CTAG]::[DN=<dn>],  
[CGPNPROV=<cgpnprov>],[VERIFYCDPN=<verifycdpn>],  
[VERIFYCGPN=<verifycgpn>],[CGPNDC=<cgpnadc>],  
[CPSXFER=<cpsxfer>],[RSXFER=<rsxfer>],  
[SCREENLIST=<screenlist>],[AUTHTYPE=<authtype>],  
[AUTHMODE=<authmode>],[ACNTCODELEN=<acntcode len>],  
[AUTHLIST=<authlist>];  
  
RTRV-SUB-IF:[TID]:[<subIfAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
  "<subifaaid>:[DN=<dn>],CGPNPROV=<cgpnprov>,  
    VERIFYCDPN=<verifycdpn>,VERIFYCGPN=<verifycgpn>,  
    CGPNDC=<cgpnadc>,CPSXFER=<cpsxfer>,  
    RSXFER=<rsxfer>,SCREENLIST=<screenlist>,  
    AUTHTYPE=<authtype>,AUTHMODE=<authmode>,  
    ACNTCODELEN=<acntcode len>,AUTHLIST=<authlist>"  
;
```

Parameters:

subIfAid Identifies the subscriber interface and whether it's a CAS , GR303, ISDN, or MGCP interface. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all subscriber interfaces in the system will be returned.

Type: SubIfAid

Range: {IFNUM}-<SUBIF>, where

IFNUM = {1-2147483647} for CAS,
 {1-32767} for GR303 or ISDN,
 {1-100000} for MGCP

SUBIF = {CAS, GR303, ISDN, MGCP}

Default value: none

dn Identifies the subscriber associated with the interface. Subscribers associated with CAS or MGCP interfaces can have voicemail service only with audio message waiting indicators (set *vmsmwitype* in SUBSCRIBER to the default value "AMWI") and without abbreviated ring (set *vmsabrring* in SUBSCRIBER to the default value "N").

Type: string

Range: exactly 10 digits

Default value: NULL

cgpnprov Identifies whether calling party number provision is required for origination. You must provide a value for *screenlist* when the interface is CAS or ISDN and calling party number provision is required. You must provide a value for *dn* when the interface is CAS or ISDN and calling party number provision is not required.

Type: enum

Range: NOTREQ = calling party number not required
REQ = calling party number is required

Default value: REQ

verifycdpn Identifies, for a termination attempt on the interface, whether to verify the status of the called party number on the switch.

Type: BoolYN

Range: N = Don't screen called party number
Y = Screen called party number

Default value: Y

verifycgpn Identifies, when the value of *cgpnprov* is "NOTREQ", whether to verify the status of the calling party number on the switch.

Type: BoolYN

Range: N = Don't screen calling party number
Y = Screen calling party number

Default value: Y

cgpn/dc Identifies, when a calling party number fails screening, whether to discard the number or transmit it on the interface.

Type: BoolYN

Range: N = Transmit calling party number on interface
Y = Discard number

Default value: Y

cpsxfer Identifies whether to send out the calling party subaddress received from the calling party interface.

Type: enum

Range: DONTTRANSFER = Don't send out the calling party subaddress
TRANSFERCOND = conditionally send out the calling party subaddress
TRANSFERUNCOND = send out the calling party subaddress without conditions

Default value: DONTTRANSFER

rsxfer Identifies whether to send out the redirecting subaddress received from the calling party interface.

Type: enum

Range: DONTTRANSFER = Don't send out the redirecting subaddress

TRANSFERCOND = Conditionally send out the redirecting subaddress

TRANSFERUNCOND = Send out the redirecting subaddress without conditions

Default value: DONTTRANSFER

screenlist Identifies a valid range of calling or called party numbers for the interface. A value of "NULL" indicates no valid screenlist.

Type: enum

Range: {1-32767}

Default value: NULL

authtype Identifies which calls on the interface require an authorization code.

Type: enum

Range: ALL = all calls require an authorization code

NONE = no calls require an authorization code

TOLL = toll calls only require an authorization code

Default value: NONE

authmode Identifies how authorization code(s) operate on the interface.

Type: enum

Range: NONE = authorization codes do not operate on the interface

ONEPIN = one PIN code per authorization code

ONLYAUTH = only authorization codes

ONLYPIN = only PIN codes

ONLYACNT = only account codes

ACNTAUTH = account codes and authorization codes

Default value: NONE

acntcodelen Identifies the account code length. The default value "0" disables the option; however, in this case the value of *authtype* must be "NONE".

Type: integer

Range: {0-8}

Default value: 0

authlist Identifies the name of the authorization list, previously established via ENT-LIST-AUTHCODE.

Type: string

Range: up to 21 characters

Default value: NULL

Input Examples:

```
DLT-SUB-IF::1-ISDN;  
ED-SUB-IF::1-ISDN::DN=5088048202,CGPNPROV=REQ,  
  VERIFYCDPN=Y,VERIFYCGPN=Y,CGPNDC=Y,  
  CPSXFER=DONTTRANSFER,RSXFER=DONTTRANSFER,  
  SCREENLIST=1,AUTHTYPE=NONE,AUTHMODE=NONE,  
  ACNTCODELEN=0,AUTHLIST=NULL;  
ENT-SUB-IF::1-ISDN::DN=5088048202,CGPNPROV=REQ,  
  VERIFYCDPN=Y,VERIFYCGPN=Y,CGPNDC=Y,  
  CPSXFER=DONTTRANSFER,RSXFER=DONTTRANSFER,  
  SCREENLIST=1,AUTHTYPE=NONE,AUTHMODE=NONE,  
  ACNTCODELEN=0,AUTHLIST=NULL;  
RTRV-SUB-IF::1-ISDN;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
  "1-ISDN:DN=5088048202,CGPNPROV=REQ,VERIFYCDPN=Y,  
    VERIFYCGPN=Y,CGPNDC=Y,CPSXFER=DONTTRANSFER,  
    RSXFER=DONTTRANSFER,SCREENLIST=1,AUTHTYPE=NONE,  
    AUTHMODE=NONE,ACNTCODELEN=0,AUTHLIST=NULL"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SUB-SCFLIST

Commands:

DLT-SUB-SCFLIST: Delete Subscriber Selective Call Feature List

ED-SUB-SCFLIST: Edit Subscriber Selective Call Feature List

ENT-SUB-SCFLIST: Enter Subscriber Selective Call Feature List

RTRV-SUB-SCFLIST: Retrieve Subscriber Selective Call Feature List

Descriptions:

DLT-SUB-SCFLIST lets the user delete the association between a subscriber and a selective call feature list from the system.

ED-SUB-SCFLIST lets the user change the calling party number, and whether it's presented to the called party, for the selective call feature list.

ENT-SUB-SCFLIST lets the user establish the association between a subscriber and a selective call feature list. ENT-SUB-SCFLIST will not work unless ENT-SUBSCRIBER has already been issued with the value of *type* set to "EO".

RTRV-SUB-SCFLIST lets the user retrieve the calling party number(s), and the presentation status, for the identified selective call feature list(s).

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SUB-SCFLIST:[TID]:<scfListAid>:[CTAG];

ED-SUB-SCFLIST:[TID]:<scfListAid>:[CTAG]::
[CGPN=<cgpn>],[CGPNPRES=<cgpnPres>];

ENT-SUB-SCFLIST:[TID]:<scfListAid>:[CTAG]::
[CGPN=<cgpn>],[CGPNPRES=<cgpnPres>];

RTRV-SUB-SCFLIST:[TID]:[<scfListAid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<scfListAid>:CGPN=<cgpn>,CGPNPRES=<cgpnPres>"
;
```

Parameters:

scfListAid Identifies the association between an end-office subscriber and a selective call feature list. The first part of the AID identifies the subscriber, the second part identifies the selective call feature, and the third part identifies an index by which a subscriber and associated feature can be related to different calling party numbers. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all selective call feature list associations in the system will be returned. By leaving just the second part of the AID blank, information for all selective call feature associations for a specific subscriber will be returned. Similarly, leaving the third part of the AID blank returns the different CGPNs for a specific selective call feature list association.

Type: ScfListAid

Range: <subscriberId>-<serviceId>-<index>, where
subscriberId = up to 21 characters
serviceId = SCA (Selective Call Acceptance)
SCF (Selective Call Forwarding)
SCR (Selective Call Rejection)
index = {1-32}

Default value: none

cgpn Identifies the calling party number for a selective call feature list association. You must first define the NPA for the CGPN with the ENT-NATIONAL-NPA command.

Type: string

Range: exactly 10 digits

Default value: none

cgpnPres Identifies whether the designated calling party number is presented to the called number.

Type: enum

Range: PRIVATE = calling party number is not presented to the
called number – Caller ID blocked
PUBLIC = calling party number is presented to the called
number – Caller ID not blocked

Default value: PUBLIC

Input Examples:

```
DLT-SUB-SCFLIST::6084808001-scf-1;  
ED-SUB-SCFLIST::6084808001-scf-1::CGPN=5084900909,  
    CGPNPRES=PUBLIC;  
ENT-SUB-SCFLIST::6084808001-scf-1::CGPN=5084900909,  
    CGPNPRES=PUBLIC;  
RTRV-SUB-SCFLIST::6084808001-scf-1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
    "6084808001-SCF-1:CGPN=5084900909,CGPNPRES=PUBLIC"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SUB-SPEED

Commands:

DLT-SUB-SPEED: Delete Subscriber Speedcode

ED-SUB-SPEED: Edit Subscriber Speedcode

ENT- SUB-SPEED: Enter Subscriber Speedcode

RTRV- SUB-SPEED: Retrieve Subscriber Speedcode

Descriptions:

DLT-SUB-SPEED lets the user delete the association between a speed-dialing code (2-9 for single-digit and 20-99 for double-digit) for a subscriber and the called directory number.

ED-SUB-SPEED lets the user change the called directory number associated with a speed-dialing code (2-9 for single-digit and 20-99 for double-digit) for a subscriber.

ENT-SUB-SPEED lets the user establish the called directory number associated with a speed-dialing code (2-9 for single-digit and 20-99 for double-digit) for a subscriber. ENT-SUB-SPEED will not work unless the ENT-SUBSCRIBER has already been issued.

RTRV-SUB-SPEED lets the user retrieve the called directory number associated with a speed-dialing code (2-9 for single-digit and 20-99 for double-digit) for a subscriber.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SUB-SPEED: [TID]:<subSpeedAid>:[CTAG];

ED-SUB-SPEED: [TID]:<subSpeedAid>:[CTAG]::DN=<dn>;

ENT-SUB-SPEED: [TID]:<subSpeedAid>:[CTAG]::DN=<dn>;

RTRV-SUB-SPEED: [TID]: [<subSpeedAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<subSpeedAid>:[DN=<dn>]"
;
```


Parameters:

subSpeedAid Identifies the AID with a variable string indicating the subscriber with a string of exactly 10 digits, and the associated speed-dialing code. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the speed-dialing codes and associated called directory numbers for all subscribers in the system will be returned. By leaving just the second part of the AID blank, the speed-dialing codes and associated called directory numbers for a particular subscriber will be returned.

Type: SubSpeedAid

Range: <SUBSCRIBERID>-{2-99}

Default value: none

dn Identifies the directory number associated with the speed-dialing code.

Type: string

Range: up to 21 digits

Default value: none

Input Examples:

DLT-SUB-SPEED::5088048202-2;

ED-SUB-SPEED::5088048202-2::DN=5084800909;

ENT-SUB-SPEED::5088048202-2::DN=5084800909;

RTRV-SUB-SPEED::5088048202-2;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"5088048202-2:DN=5084800909"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SUBSCRIBER

Commands:

DLT-SUBSCRIBER: Delete Subscriber
ED-SUBSCRIBER: Edit Subscriber
ENT-SUBSCRIBER: Enter Subscriber
RTRV-SUBSCRIBER: Retrieve Subscriber

Descriptions:

DLT-SUBSCRIBER lets the user delete a subscriber from the system. You cannot delete a subscriber until its associated SUB-SCFLIST entries are first deleted.

ED-SUBSCRIBER lets the user change the subscriber information for the identified subscriber.

ENT-SUBSCRIBER lets the user add a new subscriber to the Plexus database.

RTRV-SUBSCRIBER lets the user retrieve the information about a subscriber, if an ID is provided; otherwise, it returns information for all of the subscribers in the system.

Category: Call Control

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SUBSCRIBER: [TID]:<subscriberid>:[CTAG];

```
ED-SUBSCRIBER:[TID]:<subscriberid>:[CTAG]::
[TYPE=<type>],[INTERLATA=<interlata>],
[INTRALATA=<intralata>],
[INTERNATIONAL=<international>],
[BILLINGNUM=<billingnum>],[ALTCND=<altcnd>],
[LCC=<lcc>],[PORTEDIN=<portedin>],[CPSD=<cpsd>],
[RND=<rnd>],[RSD=<rsd>],[COB=<cob>],[SLU=<slu>],
[ACR=<acr>],[ACRAC=<acrac>],[CFBL=<cfbl>],
[CFBLAC=<cfblac>],[CFNB=<cfnb>],
[CFBLECC=<cfblecc>],[CFBCC=<cfbcc>],[CFDA=<cfda>],
[CFDAAC=<cfdaac>],[CFND=<cfnd>],
[CFDAECC=<cfdaecc>],[CFDCC=<cfdcc>],
[CFINT=<cfint>],[CFV=<cfv>],[CFVAC=<cfvac>],
[CFNV=<cfnv>],[CFVECC=<cfvecc>],[CFVCC=<cfvcc>],
[CFVRING=<cfvring>],[CFINTL=<cfintl>],
[CFTOLLFREE=<cftollfree>],[CND=<cnd>],
[CNDP=<cndp>],[CNDB=<cndb>],[CNAM=<cnam>],
[CNAMP=<cnamp>],[CNAB=<cnab>],[SUBNAME=<subname>],
[CIDS=<cids>],[CIDCW=<cidcw>],[CWT=<cwt>],
[CWC=<cwc>],[TWC=<twc>],[MWC=<mwc>],
[CRDPCL=<crdpcl>],[COT=<cot>],[RDAS=<rdas>],
[SC1=<sc1>],[SC2=<sc2>],[VMSTYPE=<vmstype>],
[VMSLNKID=<vmslnkid>],[VMSMWITYPE=<vmsmwitype>],
[VMSABRRING=<vmsabrring>],
[VMSMWIPENDING=<vmsmwipending>],[ACB=<acb>],
[AR=<ar>],[RMT=<rmt>],[RMTACSCODE=<rmtacscod>],
[AINTRIGLIST=<aintriglist>],[DIALPLAN=<dialplan>],
[SUBSCRNBLKLIST=<subscrnblklist>],
[SUBSCRNBLKLIST2=<subscrnblklist2>],
[MAXCFSES=<maxcfses>],[MAXMWCSSES=<maxmwcses>],
[SCA=<sca>],[SCAAC=<scaac>],[SCALE=<scale>],
[SCAPIN=<scapin>],[SCATT=<scatt>],
[SCARDN=<scardn>],[SCF=<scf>],[SCFAC=<scfac>],
[SCFLE=<scfle>],[SCFDN=<scfdn>],
[SCFRING=<scfring>],[MAXSCFSES=<maxscfses>],
[SCR=<scr>],[SCRAC=<scrac>],[SCRLE=<scrle>],
[SCRANS=<scrans>],[SUBSTATUS=<substatus>],
[NEWNMBR=<newnmbr>];
```

```
ENT-SUBSCRIBER:[TID]:<subscriberid>:[CTAG]::
[TYPE=<type>],[INTERLATA=<interlata>],
[INTRALATA=<intralata>],
[INTERNATIONAL=<international>],
[BILLINGNUM=<billingnum>],[ALTCND=<altcnd>],
[LCC=<lcc>],[PORTEDIN=<portedin>],[CPSD=<cpsd>],
[RND=<rnd>],[RSD=<rsd>],[COB=<cob>],[SLU=<slu>],
[ACR=<acr>],[ACRAC=<acrac>],[CFBL=<cfbl>],
[CFBLAC=<cfblac>],[CFNB=<cfnb>],
[CFBLECC=<cfblecc>],[CFBCC=<cfbcc>],[CFDA=<cfda>],
[CFDAAC=<cfdaac>],[CFND=<cfnd>],
[CFDAECC=<cfdaecc>],[CFDCC=<cfdcc>],
[CFINT=<cfint>],[CFV=<cfv>],[CFVAC=<cfvac>],
[CFNV=<cfnv>],[CFVECC=<cfvecc>],[CFVCC=<cfvcc>],
[CFVRING=<cfvring>],[CFINTL=<cfintl>],
[CFTOLLFREE=<cftollfree>],[CND=<cnd>],
[CNDP=<cndp>],[CNDB=<cndb>],[CNAM=<cnam>],
[CNAMP=<cnamp>],[CNAB=<cnab>],[SUBNAME=<subname>],
[CIDS=<cids>],[CIDCW=<cidcw>],[CWT=<cwt>],
[CWC=<cwc>],[TWC=<twc>],[MWC=<mwc>],
[CRDPCL=<crdpcl>],[COT=<cot>],[RDAS=<rdas>],
[SC1=<sc1>],[SC2=<sc2>],[VMSTYPE=<vmstype>],
[VMSLNKID=<vmslnkid>],[VMSMWITYPE=<vmsmwitype>],
[VMSABRRING=<vmsabrring>],
[VMSMWIPENDING=<vmsmwipending>],[ACB=<acb>],
[AR=<ar>],[RMT=<rmt>],[RMTACSCODE=<rmtacscod>],
[AINTRIGLIST=<aintriglist>],[DIALPLAN=<dialplan>],
[SUBSCRNBLKLIST=<subscrnblklist>],
[SUBSCRNBLKLIST2=<subscrnblklist2>],
[MAXCFSES=<maxcfses>],[MAXMWCSSES=<maxmwcses>],
[SCA=<sca>],[SCAAC=<scaac>],[SCALE=<scale>],
[SCAPIN=<scapin>],[SCATT=<scatt>],
[SCARDN=<scardn>],[SCF=<scf>],[SCFAC=<scfac>],
[SCFLE=<scfle>],[SCFDN=<scfdn>],
[SCFRING=<scfring>],[MAXSCFSES=<maxscfses>],
[SCR=<scr>],[SCRAC=<scrac>],[SCRLE=<scrle>],
[SCRANS=<scrans>],[SUBSTATUS=<substatus>];

RTRV-SUBSCRIBER:[TID]:[<subscriberid>]:[CTAG];
```

Output Format:

```

SID DATE TIME
M CTAG COMPLD
"<subscriberid>:TYPE=<type>,INTERLATA=<interlata>,
  INTRALATA=<intralata>,
  INTERNATIONAL=<international>,
  BILLINGNUM=<billingnum>,ALTCND=<altcnd>,
  LCC=<lcc>,PORTEDIN=<portedin>,CPSD=<cpsd>,
  RND=<rnd>,RSD=<rsd>,COB=<cob>,SLU=<slu>,
  ACR=<acr>,ACRAC=<acrac>,CFBL=<cfbl>,
  CFBLAC=<cfblac>,CFNB=<cfnb>,CFBLECC=<cfblecc>,
  CFBCC=<cfbcc>,CFDA=<cfda>,CFDAAC=<cfdaac>,
  CFND=<cfnd>,CFDAECC=<cfdaecc>,CFDCC=<cfdcc>,
  CFINT=<cfint>,CFV=<cfv>,CFVAC=<cfvac>,
  CFNV=<cfnv>,CFVECC=<cfvecc>,CFVCC=<cfvcc>,
  CFVRING=<cfvring>,CFINTL=<cfintl>,
  CFTOLLFREE=<cftollfree>,CND=<cnd>,CNDP=<cndp>,
  CNDB=<cndb>,CNAM=<cnam>,CNAMP=<cnamp>,
  CNAB=<cnab>,SUBNAME=<subname>,CIDS=<cids>,
  CIDCW=<cidcw>,CWT=<cwt>,CWC=<cwc>,TWC=<twc>,
  MWC=<mwc>,CRDPCL=<crdpcl>,COT=<cot>,RDAS=<rdas>,
  SC1=<sc1>,SC2=<sc2>,VMSTYPE=<vmstype>,
  VMSLNKID=<vmslnkid>,VMSMWITYPE=<vmsmwitype>,
  VMSABRRING=<vmsabrring>,
  VMSMWIPENDING=<vmsmwipending>,ACB=<acb>,
  AR=<ar>,RMT=<rmt>,RMTACSCODE=<rmtacscode>,
  AINTRIGLIST=<aintriglist>,DIALPLAN=<dialplan>,
  SUBSCRNBLKLIST=<subscrnblklist>,
  SUBSCRNBLKLIST2=<subscrnblklist2>,
  MAXCFSES=<maxcfses>,MAXMWCSES=<maxmwcses>,
  SCA=<sca>,SCAAC=<scaac>,SCALE=<scale>,
  SCAPIN=<scapin>,SCATT=<scatt>,SCARDN=<scardn>,
  SCF=<scf>,SCFAC=<scfac>,SCFLE=<scfle>,
  SCFDN=<scfdn>,SCFRING=<scfring>,
  MAXSCFSES=<maxscfses>,SCR=<scr>,SCRAC=<scrac>,
  SCRLE=<scrle>,SCRANS=<scrans>,
  SUBSTATUS=<substatus>,NEWNMBR=<newnmbr>"
;
```

Parameters:

subscriberid Identifies the subscriber. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all subscribers in the system will be returned. When the value of *type* is "EO", the NPA and NXX included in the subscriber number must be previously defined using ENT-HOME-NXX.

Type: string

Range: exactly 10 digits when the value of *type* is "EO";
up to 10 digits when the value of *type* is "IXC"

Default value: none

type Identifies the type of subscriber. Although type is shown in ED-SUBSCRIBER, it cannot be changed.

Type: enum

Range: EO = End Office subscriber

IXC = Inter-eXchange Carrier subscriber

Default value: EO

interlata Identifies the Primary Inter-exchange (long distance) Carrier for the subscriber. This parameter must first be defined with the [ENT-CARRIER](#) command, in which the value of *CallType* cannot be "CASUALDIAL".

Type: integer

Range: {0-9999, NONE}

Default value: NONE

intralata Identifies the Primary IntraLATA Carrier for the subscriber. This parameter must first be defined with the [ENT-CARRIER](#) command, in which the value of *CallType* cannot be "CASUALDIAL".

Type: integer

Range: {0-9999, NONE}

Default value: NONE

international Identifies the Primary International Carrier for the subscriber. This parameter must first be defined with the [ENT-CARRIER](#) command, in which the value of *CallType* cannot be "CASUALDIAL".

Type: integer

Range: {0-9999}

Default value: the value for *interlata*

- billingnum** Identifies an alternative telephone number for billing records, optionally provided when the subscriber prefers charges to be applied to another number. The NPA included in the billing number must be previously defined using ENT-NATIONAL-NPA when the value of *type* is “EO”.
- Type:** string
Range: up to 21 digits
Default value: value of *subscriberid* when the value of *type* is “EO”; NULL when the value of *type* is “IXC”
- altcnd** Identifies the alternate number for calling number delivery.
- Type:** string
Range: exactly 10 digits
Default value: NULL
- lcc** Identifies the Line Class Code, previously defined using ENT-LCC. Although it is an optional parameter, you must provide a value for *lcc* to effect line-side calls.
- Type:** string
Range: three or four characters
Default value: NULL
- portedin** Identifies whether the subscriber is ported in from another switch, without validating home NPA or home NXX.
- Type:** BoolYN
Range: N = subscriber is not ported in
Y = subscriber is ported in
Default value: N
- cpsd** Identifies whether to deliver the calling party subaddress for ISDN interfaces.
- Type:** enum
Range: CONDITIONAL = Deliver the calling party subaddress conditionally
UNCONDITIONAL = Deliver the calling party subaddress unconditionally
Default value: UNCONDITIONAL
- rnd** Identifies whether to deliver a redirecting number for ISDN interfaces.
- Type:** enum
Range: DELIVER = Deliver a redirecting number
DELIVERNONE = Don’t deliver a redirecting number
Default value: DELIVERNONE

- rsd** Identifies whether to deliver the redirecting subaddress for ISDN interfaces.
Type: enum
Range: CONDITIONAL = Deliver the redirecting subaddress conditionally
UNCONDITIONAL = Deliver the redirecting subaddress unconditionally
Default value: UNCONDITIONAL
- cob** Identifies whether to collect detailed AMA data generated for connected and unconnected calls for the purpose of complaint observing, typically for customers questioning their telephone bills.
Type: enum
Range: OFF = collect AMA data for complaint observing
ON = do not collect AMA data for complaint observing
Default value: OFF
- slu** Identifies whether the subscriber's line is designated for a Subscriber Line Usage Study (SLUS) requiring detailed AMA data generated for connected and unconnected calls. The SLUS generates data that portrays the calling patterns and service usage of customer lines. SLUSs are used in planning measured service tariffs and determining tariff effects.
Type: enum
Range: OFF = the subscriber's line is not designated for a SLUS
ON = the subscriber's line is designated for a SLUS
Default value: OFF
- acr** Identifies whether Anonymous Call Rejection is billed on a per-usage basis or at a flat rate.
Type: enum
Range: FR = Flat Rate billing
NONE = Subscriber cannot use feature
US = Usage billing
Default value: NONE
- acrac** Identifies whether Anonymous Call Rejection is active.
Type: BoolYN
Range: N = Anonymous Call Rejection is not active
Y = Anonymous Call Rejection is active
Default value: N

- cfbl** Identifies whether Call Forwarding Busy Line is billed on a per-usage basis or at a flat rate.
Type: enum
Range: FR = Flat Rate billing
NONE = Subscriber cannot use feature
US = Usage billing
Default value: NONE
- cfblac** Identifies whether Call Forwarding Busy Line is active.
Type: BoolYN
Range: N = Call Forwarding Busy Line is not active
Y = Call Forwarding Busy Line is active
Default value: N
- cfnb** Identifies the directory number to which the subscriber's calls are forwarded when the subscriber's line is busy.
Type: string
Range: up to 31 digits
Default value: NULL
- cfblecc** Identifies whether to establish a courtesy call to the remote directory number specified by *cfnb*, and whether an answer is required to activate the Call Forwarding Busy Line service.
Type: enum
Range: ANSRQC = Answer Required with Confirmation indication
ANSRQNC = Answer Required with No Confirmation indication
NANSR = No Answer Required
NECC = do Not Establish Courtesy Call
Default value: ANSRQC
- cfbcc** Identifies whether Call Forwarding Busy Line activation is controlled by the subscriber or solely by the service provider.
Type: BoolYN
Range: N = Call Forwarding Busy Line activation controlled solely by the service provider
Y = Call Forwarding Busy Line activation controlled by both the service provider and the subscriber
Default value: N

- cfda** Identifies whether Call Forwarding Don't Answer is billed on a per-usage basis or at a flat rate.
Type: enum
Range: FR = Flat Rate billing
NONE = Subscriber cannot use feature
US = Usage billing
Default value: NONE
- cfdaac** Identifies whether Call Forwarding Don't Answer is active.
Type: BoolYN
Range: N = Call Forwarding Don't Answer is not active
Y = Call Forwarding Don't Answer is active
Default value: N
- cfnd** Identifies the directory number to which the subscriber's calls are forwarded when the subscriber does not answer.
Type: string
Range: up to 31 digits
Default value: NULL
- cfdaecc** Identifies whether to establish a courtesy call to the remote directory number specified by *cfda*, and whether an answer is required to activate the Call Forwarding Don't Answer service.
Type: enum
Range: ANSRQC = Answer Required with Confirmation indication
ANSRQNC = Answer Required with No Confirmation indication
NANSR = No Answer Required
NECC = do Not Establish Courtesy Call
Default value: ANSRQC
- cfdcc** Identifies whether Call Forwarding Don't Answer activation is controlled by the subscriber or solely by the service provider.
Type: BoolYN
Range: N = Call Forwarding Don't Answer activation controlled solely by the service provider
Y = Call Forwarding Don't Answer activation controlled by both the service provider and the subscriber
Default value: N

- cfInt** Identifies the number of rings to be completed before the call is forwarded when the subscriber does not answer.
Type: integer
Range: {1-10}
Default value: 6
- cfv** Identifies whether Call Forwarding Variable is billed on a per-usage basis or at a flat rate.
Type: enum
Range: FR = Flat Rate billing
NONE = Subscriber cannot use feature
US = Usage billing
Default value: NONE
- cfvac** Identifies whether Call Forwarding Variable is enabled.
Type: BoolYN
Range: N = Call Forwarding Variable is not active
Y = Call Forwarding Variable is active
Default value: N
- cfnv** Identifies the directory number to which the subscriber's calls are forwarded when the subscriber activates call forwarding.
Type: string
Range: up to 31 digits
Default value: NULL
- cfvecc** Identifies whether to establish a courtesy call to the remote directory number specified by *cfnb*, and whether an answer is required to activate the Call Forwarding Variable service.
Type: enum
Range: ANSRQC = Answer Required with Confirmation indication
ANSRQNC = Answer Required with No Confirmation indication
NANSR = No Answer Required
NECC = do Not Establish Courtesy Call
Default value: ANSRQC

- cfvcc** Identifies whether Call Forwarding Variable activation is controlled by the subscriber or solely by the service provider.
Type: BoolYN
Range: N = Call Forwarding Variable activation controlled solely by the service provider
Y = Call Forwarding Variable activation controlled by both the service provider and the subscriber
Default value: N
- cfvring** Identifies whether Call Forwarding Variable Reminder Notification is suppressed or sent to the base directory number; that is, whether the Plexus 9000 suppresses notification or notifies the base directory number (via a reminder ring) that a call has been forwarded and therefore, that the CFV feature is active.
Type: BoolYN
Range: N = send notification
Y = suppress notification
Default value: N
- cfintl** Identifies whether international call forwarding is allowed.
Type: BoolYN
Range: N = international call forwarding is not allowed
Y = international call forwarding is allowed
Default value: N
- cftollfree** Identifies whether tollfree call forwarding is allowed.
Type: BoolYN
Range: N = tollfree call forwarding is not allowed
Y = tollfree call forwarding is allowed
Default value: N
- cnd** Identifies whether Caller Number Delivery is billed on a per-usage basis or at a flat rate.
Type: enum
Range: FR = Flat Rate billing
NONE = Subscriber cannot use feature
US = Usage billing
Default value: NONE

- cndp** Identifies whether the calling party number is presented to the called number.
Type: enum
Range: PRIVATE = calling party number is not presented to the called number – Caller ID blocked
PUBLIC = calling party number is presented to the called number – Caller ID not blocked
Default value: PUBLIC
- cndb** Identifies whether Caller Number Delivery Blocking is billed on a per-usage basis or at a flat rate.
Type: enum
Range: FR = Flat Rate billing
NONE = Subscriber cannot use feature
US = Usage billing
Default value: FR
- cnam** Identifies whether Calling Name Delivery is billed on a per-usage basis or at a flat rate.
Type: enum
Range: FR = Flat Rate billing
NONE = Subscriber cannot use feature
US = Usage billing
Default value: NONE
- cnamp** Identifies whether the calling party name is presented to the called number.
Type: enum
Range: PRIVATE = calling party number is not presented to the called number – Caller ID blocked
PUBLIC = calling party number is presented to the called number – Caller ID not blocked
Default value: PUBLIC
- cnab** Identifies whether Caller Name Delivery Blocking is billed on a per-usage basis or at a flat rate.
Type: enum
Range: FR = Flat Rate billing
NONE = Subscriber cannot use feature
US = Usage billing
Default value: FR

- subName** Identifies the subscriber name.
Type: string
Range: up to 15 characters
Default value: NULL
- cids** Identifies whether Calling Identity Delivery Suppression is billed on a per-usage basis or at a flat rate.
Type: enum
Range: FR = Flat Rate billing
 NONE = Subscriber cannot use feature
 US = Usage billing
Default value: FR
- cidcw** Identifies whether Calling Identity Delivery on Call Waiting is enabled; that is, whether a subscriber, while off-hook on an existing call, can receive information about a calling party on a waited call. You cannot concurrently enable *cidcw* and *cwt*.
Type: enum
Range: NONE = Subscriber cannot use feature
 STND = Standard Calling Identity Delivery on Call Waiting
Default value: NONE
- cwt** Identifies whether Call Waiting is enabled; that is, whether a subscriber, while off-hook on an existing call, can receive audio indication that another call is waiting. You cannot concurrently enable *cwt* and *cidcw*.
Type: enum
Range: NONE = Subscriber cannot use feature
 STND = Standard Call Waiting
Default value: NONE
- cwc** Identifies whether Call Waiting Cancel is enabled; that is, whether a subscriber can cancel call waiting for the duration of a call.
Type: enum
Range: NONE = Subscriber cannot use feature
 STND = Standard Call Waiting Cancel
Default value: NONE

- twc** Identifies whether Three-Way Calling (that is, whether a subscriber can add a third party to an existing conversation without operator assistance) is billed on a per-usage basis or at a flat rate.
- Type:** enum
Range: FR = Flat Rate billing
 NONE = Subscriber cannot use feature
 US = Usage billing
Default value: NONE
- mwc** Identifies whether Multi-Way Calling is enabled; that is, whether a subscriber can add a third party to a call and whether it is billed on a per-usage basis or on a flat rate.
- Type:** enum
Range: AOTC = Add-On Call Transfer billed at flat rate
 AOTCUS = Add-On Call Transfer billed on per-usage basis
 NONE = Subscriber cannot use feature
Default value: NONE
- crdpcl** Identifies whether Code Restriction/Diversion Prohibited Code List is enabled; that is, whether a subscriber can block numbers.
- Type:** enum
Range: NONE = Subscriber cannot use feature
 UNRES = Unrestricted usage
Default value: NONE
- cot** Identifies whether Customer-Originated Trace is billed on a per-usage basis or at a flat rate. Customer-Originated Trace allows a subscriber to request, by activating the feature, tracing the last call received and providing the data from the traced call to an authorized agency.
- Type:** enum
Range: FR = Flat Rate billing
 NONE = Subscriber cannot use feature
 US = Usage billing
Default value: NONE
- rdas** Identifies whether Residence Distinctive Alerting Service is enabled; that is, whether a subscriber can have an alternate directory number with an associated distinctive ring.
- Type:** enum
Range: NONE = Subscriber cannot use feature
 SCDN = RDAS feature is active – DN is assigned as the
 Secondary DN for the RDAS feature.
Default value: NONE

- sc1** Identifies whether one-digit speed-calling is enabled. Using one-digit speed-calling does not preclude using two-digit speed-calling; i.e., a subscriber can have both enabled concurrently.
- Type:** enum
Range: NONE = Subscriber cannot use feature
SC1CC = Speed Calling One Digit, customer controlled
SC1D = Speed Calling One Digit, not customer controlled
Default value: NONE
- sc2** Identifies whether two-digit speed-calling is enabled. Using two-digit speed-calling does not preclude using one-digit speed-calling; i.e., a subscriber can have both enabled concurrently.
- Type:** enum
Range: NONE = Subscriber cannot use feature
SC2CC = Speed Calling Two Digit, customer controlled
SC2D = Speed Calling Two Digit, not customer controlled
Default value: NONE
- vmstype** Identifies whether voice mail service is enabled; that is, whether a subscriber can have calls forwarded to a Voice Mail System (VMS) when the subscriber's line is busy or is not answered.
- Type:** enum
Range: BNA = Subscriber has call forwarding on Busy/No Answer (when the subscriber's line is busy or is not answered)
BUSY = Subscriber has call forwarding only when the subscriber's line is busy
NOANS = Subscriber has call forwarding only when the subscriber's line is not answered
NONE = Subscriber does not have voice mail service
Default value: NONE
- vmslnkid** Identifies the SMDI (Simplified Message Desk Interface) data link between the Plexus 9000 and a Voice Mail System when the value of *vmstype* is "BNA". The pattern is a combination of a generic Message Storage and Retrieval (MSR) system in a VMS and an SMDI data link between it and the Plexus 9000. The subscriber cannot enable voice mail without first using ENT-VMS-LNK to define the SMDI data link.
- Type:** enum
Range: <msrId>-<smdiLnkId>, where
msrId = {1-999} and
smdiLnkId = {1-8}
Default value: NULL

vmsmwitype Identifies the type of Message Waiting Indicator (MWI) used to alert a subscriber with voice mail service to new messages. Set the value to “AMWI” for subscribers associated with CAS or MGCP interfaces by means of the SUB-IF command.

Type: enum

Range: AMWI = Audio Message Waiting Indicator
BOTH = both audio and visual Message Waiting Indicators
VMWI = Visual Message Waiting Indicator

Default value: AMWI

vmsabbring Identifies whether the subscriber, as a part of the voice mail service, is provisioned with Abbreviated Ring; that is, whether a subscriber with VMWI will receive an abbreviated (500 msec) ring at the disconnection of a call as an alert that there is a waiting message received while the line was busy. Set the value to “N” for subscribers associated with CAS or MGCP interfaces by means of the SUB-IF command.

Type: BoolYN

Range: N = Subscriber will not receive an abbreviated ring
Y = Subscriber will receive an abbreviated ring

Default value: N

vmsmwipending Identifies (in ED, and RTRV output) whether the subscriber has a message waiting at the Voice Mail System. Setting the value to “N” causes the Plexus 9000 to transmit an “Indicator Off” message to the subscriber’s line to manually deactivate the subscriber’s Message Waiting Indicator. Although this parameter has two possible values, you cannot set the value to “Y”, as only the external event of receiving a message can turn on the indicator. The factory default is “N”.

Type: BoolYN

Range: N = the subscriber does not have a message waiting
Y = the subscriber has a message waiting

Default value: N

acb Identifies whether Automatic Call-Back service is billed on a per-usage basis or at a flat rate.

Type: enum

Range: FR = Subscriber billed at a flat rate
NONE = Subscriber cannot use feature
US = Subscriber billed on a per-usage basis

Default value: NONE

- ar** Identifies whether Automatic Recall service is billed on a per-usage basis or at a flat rate.
- Type:** enum
Range: FR = Subscriber billed at a flat rate
 NONE = Subscriber cannot use feature
 US = Subscriber billed on a per-usage basis
Default value: NONE
- rmt** Identifies whether the subscriber can remotely access services (specifically call forwarding) and whether the service is billed on a per-usage basis or at a flat rate. Enabling remote access to services does not enable any service. You must first enter a value for *rmtacscore* before you can select the values “FR” or “US”.
- Type:** enum
Range: FR = Subscriber billed at a flat rate
 NONE = Subscriber cannot use feature
 US = Subscriber billed on a per-usage basis
Default value: NONE
- rmtacscore** Identifies the access code the subscriber must enter to remotely access services (specifically call forwarding).
- Type:** string
Range: four to eight digits (including “#” and “*”) **Default value:** NULL
- aintriglist** Identifies the list of AIN triggers applicable to the subscriber. This parameter must first be defined with the ENT-LIST-AINTRIGGER command, in which the value of *category* must be “SUBSCRIBED”.
- Type:** string
Range: up to 21 characters
Default value: NULL
- dialplan** Identifies the dial plan, previously defined using ENT-DIALPLAN, applicable to the subscriber.
- Type:** string
Range: up to 21 characters
Default value: NULL
- subscrnblklist** Identifies the list of screen blocks, previously defined using ENT-LIST-SCREENBLOCK, applicable to the subscriber.
- Type:** string
Range: up to 21 characters
Default value: NULL

subscrnblklist2 Identifies the secondary list of screen blocks, previously defined using ENT-LIST-SCREENBLOCK, applicable to the subscriber.

Type: string

Range: up to 21 characters

Default value: NULL

maxcfses Identifies the maximum number of concurrent sessions allowed for CFV, CFBL and CFDA for this subscriber. The Plexus 9000 maintains separate counts for each call-forwarding service if more than one is active simultaneously.

Type: integer

Range: {0-255}

Default value: 8

maxmwcses Identifies the maximum number of concurrent multi-way calling sessions allowed for the subscriber.

Type: integer

Range: {0-255}

Default value: 8

sca Identifies whether Selective Call Acceptance is billed on a per-usage basis or at a flat rate.

Type: enum

Range: FR = Flat Rate billing

NONE = Subscriber cannot use feature

US = Usage billing

Default value: NONE

scaac Identifies whether Selective Call Acceptance is enabled.

Type: BoolYN

Range: N = Selective Call Acceptance is not active

Y = Selective Call Acceptance is active

Default value: N

scale Identifies whether the subscriber can edit the screening list for Selective Call Acceptance.

Type: BoolYN

Range: N = subscriber cannot edit the screening list

Y = subscriber can edit the screening list

Default value: Y

- scapin** Identifies the PIN number entered by a caller to complete a call to a subscriber with SCA activated.
Type: string
Range: four to eight digits
Default value: NULL
- scatt** Identifies the termination treatment for calls not accepted due to active SCA.
Type: enum
Range: FWD = forward unaccepted call
REJ = play rejection announcement
Default value: REJ
- scardn** Identifies the directory number to which unaccepted calls (due to SCA) are forwarded.
Type: string
Range: up to 32 digits
Default value: NULL
- scf** Identifies whether Selective Call Forwarding is billed on a per-usage basis or at a flat rate.
Type: enum
Range: FR = Flat Rate billing
NONE = Subscriber cannot use feature
US = Usage billing
Default value: NONE
- scfac** Identifies whether Selective Call Forwarding is enabled.
Type: BoolYN
Range: N = Selective Call Forwarding is not active
Y = Selective Call Forwarding is active
Default value: N
- scfle** Identifies whether the subscriber can edit the screening list for Selective Call Forwarding.
Type: BoolYN
Range: N = subscriber cannot edit the screening list
Y = subscriber can edit the screening list
Default value: Y

- scfdn** Identifies the directory number to which calls on the subscriber's SCF list are forwarded.
Type: string
Range: up to 32 digits
Default value: NULL
- scfring** Identifies whether Selective Call Forwarding Reminder Notification is suppressed or sent to the base directory number; that is, whether the Plexus 9000 suppresses notification or notifies the base directory number (via a reminder ring) that a call has been forwarded and therefore, that the SCF feature is active.
Type: BoolYN
Range: N = send notification
Y = suppress notification
Default value: N
- maxscfses** Identifies the maximum number of concurrent sessions allowed for SCF and SCA (if remote DN) for this subscriber. The Plexus 9000 maintains separate counts for SCF and SCA if both are active simultaneously.
Type: integer
Range: {0-32}
Default value: 8
- scr** Identifies whether Selective Call Rejection is billed on a per-usage basis or at a flat rate.
Type: enum
Range: FR = Flat Rate billing
NONE = Subscriber cannot use feature
US = Usage billing
Default value: NONE
- scrac** Identifies whether Selective Call Rejection is enabled.
Type: BoolYN
Range: N = Selective Call Rejection is not active
Y = Selective Call Rejection is active
Default value: N
- scrle** Identifies whether the subscriber can edit the screening list for Selective Call Rejection.
Type: BoolYN
Range: N = subscriber cannot edit the screening list
Y = subscriber can edit the screening list
Default value: Y

scrans Identifies whether answer supervision (an ANM or off-hook message) is sent to the originating office when a calling party is connected to the SCR rejection announcement.

Type: BoolYN

Range: N = answer supervision is not sent

Y = answer supervision is sent

Default value: N

substatus Identifies the status of the telephone number representing the subscriber. You cannot select the value “CHANGED” in ENT-SUBSCRIBER; it only applies to ED-SUBSCRIBER.

Type: enum

Range: ACTIVE = number in service

CHANGED = number changed

DISCONNECTED = number disconnected

OOS = number out of service

Default value: NULL

newnmbr Identifies (in ED, and RTRV output) a new number that replaces the subscriber’s original number, but only when the value of *substatus* is “CHANGED”. The factory default is “NULL”.

Type: string

Range: up to 31 digits

Default value: NULL

Input Examples:

DLT-SUBSCRIBER: :5088048202;

ED-SUBSCRIBER: :5088048202:::TYPE=EO, INTERLATA=NONE,
INTRALATA=NONE, INTERNATIONAL=NONE,
BILLINGNUM=5084800909, ALTCND=5084800909, LCC=123,
PORTEDIN=N, CPSD=UNCONDITIONAL, RND=DELIVERNONE,
RSD=UNCONDITIONAL, COB=OFF, SLU=OFF, ACR=FIXED,
ACRAC=Y, CFBL=NONE, CFNB=5088048234, CFDA=NONE,
CFND=5088048234, CFINT=6, CFV=NONE, CFVAC=N,
CFNV=5088048234, CFINTL=N, CFVECC=ANSRQC, CFVRING=N,
CFINTL=N, CND=NONE, CNDP=PUBLIC, CNDB=NONE, CNAM=NONE,
CNAMP=PUBLIC, CNAB=NONE, SUBNAME=TELICA, CIDS=NONE,
CIDCW=NONE, CWT=NONE, CWC=NONE, TWC=NONE, MWC=NONE,
CRDPCL=011, COT=NONE, RDAS=NONE, SC1=NONE, SC2=NONE,
VMSTYPE=NONE, VMSLNKID=NULL, VMSMWITYPE=AMWI,
VMSABRRING=N, VMSMWIPENDING=N, ACB=NONE, AR=NONE,
RMT=NONE, RMTACSCODE=NULL, AINTRIGLIST=NULL,
DIALPLAN=NULL, SUBSCRNBLKLIST=NULL,
SUBSCRNBLKLIST2=NULL, MAXCFSES=8, MAXMWCSSES=8,
SUBSTATUS=ACTIVE;

ENT-SUBSCRIBER: :5088048202:::TYPE=EO, INTERLATA=NONE,
INTRALATA=NONE, INTERNATIONAL=NONE,
BILLINGNUM=5084800909, ALTCND=5084800909, LCC=123,
PORTEDIN=N, CPSD=UNCONDITIONAL, RND=DELIVERNONE,
RSD=UNCONDITIONAL, COB=OFF, SLU=OFF, ACR=FIXED,
ACRAC=Y, CFBL=NONE, CFNB=5088048234, CFDA=NONE,
CFND=5088048234, CFINT=6, CFV=NONE, CFVAC=N,
CFNV=5088048234, CFINTL=N, CFVECC=ANSRQC, CFVRING=N,
CFINTL=N, CND=NONE, CNDP=PUBLIC, CNDB=NONE, CNAM=NONE,
CNAMP=PUBLIC, CNAB=NONE, SUBNAME=TELICA, CIDS=NONE,
CIDCW=NONE, CWT=NONE, CWC=NONE, TWC=NONE, MWC=NONE,
CRDPCL=011, COT=NONE, RDAS=NONE, SC1=NONE, SC2=NONE,
VMSTYPE=NONE, VMSLNKID=NULL, VMSMWITYPE=AMWI,
VMSABRRING=N, ACB=NONE, AR=NONE, RMT=NONE,
RMTACSCODE=NULL, AINTRIGLIST=NULL, DIALPLAN=NULL,
SUBSCRNBLKLIST=NULL, SUBSCRNBLKLIST2=NULL,
MAXCFSES=8, MAXMWCSSES=8, SUBSTATUS=ACTIVE;

RTRV-SUBSCRIBER: :5088048202;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"5088048202:TYPE=E0,INTERLATA=NONE,INTRALATA=NONE,
INTERNATIONAL=NONE,BILLINGNUM=5084800909,
ALTCND=5084800909,LCC=123,PORTEDIN=N,
CPSD=UNCONDITIONAL,RND=DELIVERNONE,
RSD=UNCONDITIONAL,COB=OFF,SLU=OFF,ACR=FIXED,
ACRAC=Y,CFBL=NONE,CFNB=5088048234,CFDA=NONE,
CFND=5088048234,CFINT=6,CFV=NONE,CFVAC=N,
CFNV=5088048234,CFINTL=N,CFVECC=ANSRQC,
CFVRING=N,CFINTL=N,CND=NONE,CNDP=PUBLIC,
CNDB=NONE,CNAM=NONE,CNAMP=PUBLIC,CNAB=NONE,
SUBNAME=TELICA,CIDS=NONE,CIDCW=NONE,CWT=NONE,
CWC=NONE,TWC=NONE,MWC=NONE,CRDPCL=011,COT=NONE,
RDAS=NONE,SC1=NONE,SC2=NONE,VMSTYPE=NONE,
VMSLNKID=NULL,VMSMWITYPE=AMWI,VMSABRRING=N,
VMSMWIPENDING=N,ACB=NONE,AR=NONE,RMT=NONE,
RMTACSCODE=NULL,AINTRIGLIST=NULL,DIALPLAN=NULL,
SUBSCRNBLKLIST=NULL,SUBSCRNBLKLIST2=NULL,
MAXCFSES=8,MAXMWCSSES=8,SUBSTATUS=ACTIVE,
NEWNMBR=NULL"
;
```

Related Commands: none

ED/RTRV-SERVICE-ACCESSCODE

Commands:

ED-SERVICE-ACCESSCODE: Edit Service ACCESSCODE

RTRV-SERVICE-ACCESSCODE: Retrieve Service ACCESSCODE

Descriptions:

ED-SERVICE-ACCESSCODE lets the user change the description, activation/deactivation codes, executing platform, and state for individual IN (Intelligent Network) services.

RTRV-SERVICE-ACCESSCODE lets the user retrieve the description, activation/deactivation codes, executing platform, and state associated with IN (Intelligent Network) services.

Category: Call Control

Security: SA for ED, View for RTRV

Input Formats:

```
ED-SERVICE-ACCESSCODE:[TID]:<serviceId>:[CTAG]::
    [DESC=<descr>],[ACTIVATIONCODE=<activationCode>],
    [DEACTIVATIONCODE=<deactivationCode>],
    [SLHRID=<slhrid>]:<pst>;

RTRV-SERVICE-ACCESSCODE:[TID]:<serviceId>:[CTAG];
```

Output Format:

```
      SID DATE TIME
M    CTAG COMPLD
      "<serviceId>:[DESC=<descr>],
        [ACTIVATIONCODE=<activationCode>],
        [DEACTIVATIONCODE=<deactivationCode>],
        DESTINATION=<destination>:<pst>"
      ;
```

Parameters:

serviceId Identifies the AID as a type of IN service. Standard (factory default) activation and deactivation codes are shown parenthetically. A null value (in RTRV) is equivalent to “ALL”; that is, by leaving the field blank, all services configured in the system will be returned.

Type: ServiceId

Range: ACB = Automatic Call Back (Activation Code = 66, Deactivation Code = 86)
ACR = Anonymous Call Rejection (Activation Code = 77, Deactivation Code = 87)
AIN_TOLLFREE = Advanced Intelligent Network tollfree – tollfree calls resolved in the INAP layer of SS7 (Activation Code = NULL, Deactivation Code = NULL)
AR = Automatic Recall (Activation Code = 69, Deactivation Code = 89)
AUTHCODE = outgoing calls require Authorization Code (Activation Code = NULL, Deactivation Code = NULL)
CFBL = Call Forwarding on Busy Line (Activation Code = NULL, Deactivation Code = NULL)
CFDA = Call Forwarding on No Answer (Activation Code = NULL, Deactivation Code = NULL)
CFV = Call Forwarding Variable (Activation Code = 72, Deactivation Code = 73)
CID = Calling Identity Delivery (Activation Code = 61, Deactivation Code = NULL)
CIDCW = Call ID on Call Waiting (Activation Code = NULL, Deactivation Code = NULL)
CIS = Calling Identity Suppression (Activation Code = NULL, Deactivation Code = NULL)
CNAB = Calling Name delivery Blocking (Activation Code = NULL, Deactivation Code = NULL)
CNAM = Caller Name display – Caller ID (Activation Code = NULL, Deactivation Code = NULL)
CND = Calling Number Delivery (Activation Code = NULL, Deactivation Code = NULL)
CNDB = Calling Number Delivery Blocking (Activation Code = 67, Deactivation Code = NULL)
COT = Customer Originated Trace (Activation Code = 57, Deactivation Code = NULL)
CRDPCL = Code Restriction/Diversion Prohibited Code List – block originating calls to specified screen digits (Activation Code = NULL, Deactivation Code = NULL)
CWC = Cancel Call Waiting (Activation Code = 70, Deactivation Code = NULL)

CWT = Call Waiting (Activation Code = NULL,
Deactivation Code = NULL)
GMSC_IS41 = Gateway MSC, ANSI IS41 based (Activation
Code = NULL, Deactivation Code = NULL)
GMSC_MAP = Gateway MSC, GSM MAP based
(Activation Code = NULL, Deactivation Code = NULL)
LNP = Local Number Portability (Activation Code = NULL,
Deactivation Code = NULL)
MWC = Multi-Way Calling – Call Transfer (Activation Code
= NULL, Deactivation Code = NULL)
RAF = Remote Access to Features (Activation Code =
NULL, Deactivation Code = NULL)
RDAS = Residence Distinctive Alerting Service (Activation
Code = NULL, Deactivation Code = NULL)
RLT = Release Link Trunk (Activation Code = NULL,
Deactivation Code = NULL)
SC1 = Speed-dialing with one-digit speedcode (Activation
Code = 74, Deactivation Code = NULL)
SC2 = Speed-dialing with two-digit speedcode (Activation
Code = 75, Deactivation Code = NULL)
SCA = Selective Call Acceptance (Activation Code = NULL,
Deactivation Code = NULL)
SCF = Selective Call Forwarding (Activation Code = NULL,
Deactivation Code = NULL)
SCR = Selective Call Rejection (Activation Code = NULL,
Deactivation Code = NULL)
TOLLFREE = Tollfree (Activation Code = NULL,
Deactivation Code = NULL)
TWC = Three-Way Calling (Activation Code = NULL,
Deactivation Code = NULL)
VMS = Voice Mail System (Activation Code = NULL,
Deactivation Code = NULL)

Default value: none

descr Identifies the description of the service. The factory default is
“NULL”.

Type: string

Range: up to 50 ASCII characters

Default value: not applicable

activationCode Identifies the code to dial to activate the service. The codes to
activate and deactivate a service must differ and cannot be the same as
codes for other services. The factory default is “NULL”.

Type: string

Range: {02-99, 200-999}

Default value: not applicable

deactivationCode Identifies the code to dial to deactivate the service. The codes to activate and deactivate a service must differ and cannot be the same as codes for other services. The factory default is "NULL".

Type: string

Range: {02-99, 200-999}

Default value: not applicable

slhrId Identifies the service logic host route to the Service Control Point (SCP) providing the service. The factory default is "NULL".

Type: enum

Range: {0-31}

Default value: not applicable

pst Indicates whether the service is available at the switch level. A null value means no change to the current value. The factory default is "IS".

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: not applicable

Input Examples:

```
ED-SERVICE-ACCESSCODE::CFV::DESC=CFV_SERVICE,  
ACTIVATIONCODE=72, DEACTIVATIONCODE=73, SLHRID=NULL :  
IS;  
RTRV-SERVICE-ACCESSCODE::CFV;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"CFV:DESC=CFV_SERVICE, ACTIVATIONCODE=72,  
DEACTIVATIONCODE=73, SLHRID=NULL:IS"  
;
```

Related Commands: none

RTRV-SUB-CFV

Command:

RTRV-SUB-CFV: Retrieve Subscriber CFV

Description:

RTRV-SUB-CFV lets the user retrieve the Call Forwarding – Variable (CFV) status information for the identified subscriber.

Category: Call Control

Security: View

Input Format:

RTRV-SUB-CFV:[TID]:<subscriberId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<subscriberid>:CFACTIVE=<cfactive>,[CFDN=<cfdn>],
[LASTUPDTTIME=<lastupdttime>["
;
```

Parameters:

subscriberID Identifies the subscriber.

Type: string

Range: exactly 10 digits

Default value: none

cfactive Identifies whether call forwarding is active.

Type: enum

Range: ACTIVE = call forwarding is active

INACTIVE = call forwarding is not active

TEMPACTIVE = call forwarding is temporarily active

Default value: none

cfdn Identifies the number to which calls are forwarded.

Type: string

Range: up to 21 digits

Default value: none

lastupdttime Identifies the date and time the status of call forwarding last changed for the identified subscriber.

Type: string

Range: alphanumeric characters

Default value: none

Input Example:

```
RTRV-SUB-CFV::5088048202;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"5088048202:CFACTIVE=INACTIVE,CFDN=NULL,
  LASTUPDTIME="\MON NOV 10 11 34 56 EDT 2003\"";
```

Related Commands: none

RTRV-SUB-COT

Command:

RTRV-SUB-COT: Retrieve Subscriber COT

Description:

RTRV-SUB-COT lets the user retrieve the Customer Originated Trace (COT) for the identified subscriber.

Category: Call Control

Security: View

Input Format:

RTRV-SUB-COT:[TID]:<subscriberId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<subscriberid>:ACTIVATIONTIME=<activationTime>,
    TRACEDN=<tracedN>, TRACETIME=<traceTime>"
;
```

Parameters:

subscriberID Identifies the subscriber.

Type: string

Range: exactly 10 digits

Default value: none

activationTime Identifies the date/time stamp the COT was activated.

Type: string

Range: alphanumeric characters

Default value: none

traceDN Identifies the calling party number being traced.

Type: string

Range: up to 21 digits

Default value: none

traceTime Identifies the registration time for the COT.

Type: string

Range: alphanumeric characters

Default value: none

Input Example:

```
RTRV-SUB-COT::5088048202;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"5088048202:ACTIVATIONTIME="\MON NOV 04 10 34 56
EDT 2003\","TRACEDN="\5088048788\","TRACETIME="\
MON NOV 04 11 34 56 EDT 2003\""
;
```

Related Commands: none

DLT/ED/ENT/RTRV-CAS-IF

Commands:

DLT-CAS-IF: Delete CAS Interface

ED-CAS-IF: Edit CAS Interface

ENT-CAS-IF: Enter CAS Interface

RTRV-CAS-IF: Retrieve CAS Interface

Descriptions:

DLT-CAS-IF lets the user delete a CAS (Channel-Associated Signaling) interface.

ED-CAS-IF lets the user edit the parameters associated with a CAS (Channel-Associated Signaling) interface.

ENT-CAS-IF lets the user establish a CAS (Channel-Associated Signaling) interface. ENT-CAS-IF will not work correctly unless ENT-PRFL-CAS has already been issued.

RTRV-CAS-IF lets the user retrieve parameters associated with a CAS (Channel-Associated Signaling) interface.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-CAS-IF:[TID]:<casIfId>:[CTAG];

ED-CAS-IF:[TID]:<casIfId>:[CTAG]::
[CASPRFLID=<casPrflId>],[ALLOC=<allocMethod>],
[NAME=<name>],[ECHOCTRL=<echoCtrl>],
[LONGDELAY=<longDelay>],[CUSTVAR1=<custVar1>],
[CUSTVAR2=<custVar2>],[CUSTVAR3=<custVar3>],
[CUSTVAR4=<custVar4>],[CUSTVAR5=<custVar5>]:
[<pst>];

```
ENT-CAS-IF:[TID]:<casIfId>:[CTAG]::
CASPRFLID=<casPrflId>,[ALLOC=<allocMethod>],
[NAME=<name>],[ECHOCTRL=<echoCtrl>],
[LONGDELAY=<longDelay>],[CUSTVAR1=<custVar1>],
[CUSTVAR2=<custVar2>],[CUSTVAR3=<custVar3>],
[CUSTVAR4=<custVar4>],[CUSTVAR5=<custVar5>]:
[<pst>];

RTRV-CAS-IF:[TID]:[<casIfId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<casIfId>:CASPRFLID=<casPrflId>,
  ALLOC=<allocMethod>,NAME=<name>,
  ECHOCTRL=<echoCtrl>,LONGDELAY=<longDelay>,
  CUSTUSE1=<custUse1>,CUSTVAR1=<custVar1>,
  CUSTUSE2=<custUse2>,CUSTVAR2=<custVar2>,
  CUSTUSE3=<custUse3>,CUSTVAR3=<custVar3>,
  CUSTUSE4=<custUse4>,CUSTVAR4=<custVar4>,
  CUSTUSE5=<custUse5>,CUSTVAR5=<custVar5>:<pst>,
  <sst>"
;
```

Parameters:

casIfId Identifies the AID as a CAS interface. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, parameters will be returned for all CAS interfaces configured in the system.

Type: CasIfId

Range: {1-2147483645}

Default value: none

casPrflId Identifies the CAS profile applied to the interface.

Type: integer

Range: {1-128}

Default value: none

allocMethod Indicates the resource allocation method (hunting type) for selecting trunks on the interface.

Type: enum

Range: CIRCULAR = Allocates the next free channel, in ascending order, following the last channel selected.

HIGHEST_AVAIL = Selects the highest available channel

LOWEST_AVAIL = Selects the lowest available channel

RANDOM = Allocates the next free channel, in ascending order, based on a random entry into a numbered list of resources. After the first allocation from that numbered list of resources, subsequent attempts to find a free resource use the circular method.

Default value: NULL

name Identifies the name of the CAS interface

Type: string

Range: up to 20 ASCII characters

Default value: NULL

echoCtrl Identifies the amount, in milliseconds, of echo cancellation for outgoing calls.

Type: integer

Range: {0-128}

Default value: 32

longDelay Identifies whether echo cancellation processing is required because of a long delay (echo tail).

Type: BoolYN

Range: N = echo processing is off (for short-haul; i.e., less than 15 msec propagation delay)

Y = echo processing is on (for long-haul)

Default value: N

custUse1 Identifies (in RTRV output) the use for custom variable 1.

Type: string

Range: up to 32 characters

Default value: NULL

custVar1 Identifies the value of custom variable 1.

Type: string

Range: up to 16 characters

Default value: NULL

custUse2 Identifies (in RTRV output) the use for custom variable 2.

Type: string

Range: up to 32 characters

Default value: NULL

custVar2 Identifies the value of custom variable 2.

Type: string

Range: up to 16 characters

Default value: NULL

custUse3 Identifies (in RTRV output) the use for custom variable 3.

Type: string

Range: up to 32 characters

Default value: NULL

custVar3 Identifies the value of custom variable 3.

Type: string

Range: up to 16 characters

Default value: NULL

custUse4 Identifies (in RTRV output) the use for custom variable 4.

Type: string

Range: up to 32 characters

Default value: NULL

custVar4 Identifies the value of custom variable 4.

Type: string

Range: up to 16 characters

Default value: NULL

custUse5 Identifies (in RTRV output) the use for custom variable 5.

Type: string

Range: up to 32 characters

Default value: NULL

custVar5 Identifies the value of custom variable 5.

Type: string

Range: up to 16 characters

Default value: NULL

pst Indicates the desired primary state of the CAS interface. A null value means no change to the current value.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: IS

sst Identifies (in RTRV output) the secondary state of the CAS interface.

Type: enum

Range: ACT = Active

AINS = Automatic, In-service

FAF = Facilities Failure

FLT = Faulted

INIT = Initializing

LPBK = Loopback

MEA = Mismatch of Equipment and Attributes

MON = Monitor

NBK = No Backup

PRI = Protection Release Inhibited

PSI = Protection Switch Inhibited

RWT = Remove Wait state

SGEO = Supporting Entity Outage

STBYC = Standby Cold

STBYH = Standby Hot

UAS = Unassigned

UEQ = Unequipped

WRK = Working

Default value: none

Input Examples:

```
DLT-CAS-IF::1;
```

```
ED-CAS-IF::1:::PROFILE=1,ALLOC=NULL,NAME=CASIF1,  
ECHOCTRL=32, LONGDELAY=N, CUSTVAR1=NULL,  
CUSTVAR2=NULL, CUSTVAR3=NULL, CUSTVAR4=NULL,  
CUSTVAR5=NULL:IS;
```

```
ENT-CAS-IF::1:::PROFILE=1,ALLOC=NULL,NAME=CASIF1,  
ECHOCTRL=32, LONGDELAY=N, CUSTVAR1=NULL,  
CUSTVAR2=NULL, CUSTVAR3=NULL, CUSTVAR4=NULL,  
CUSTVAR5=NULL:IS;
```

```
RTRV-CAS-IF::1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1: CASPRFLID=1, ALLOC=NULL, NAME=CASIF1, ECHOCTRL=32,
  LONGDELAY=N, CUSTUSE1=NULL, CUSTVAR1=NULL,
  CUSTUSE2=NULL, CUSTVAR2=NULL, CUSTUSE3=NULL,
  CUSTVAR3=NULL, CUSTUSE4=NULL, CUSTVAR4=NULL,
  CUSTUSE5=NULL, CUSTVAR5=NULL: IS, ACT"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-CAS-LINE

Commands:

DLT-CAS-LINE: Delete CAS Line

ED-CAS-LINE: Edit CAS Line

ENT-CAS-LINE: Enter CAS Line

RTRV-CAS-LINE: Retrieve CAS Line

Descriptions:

DLT-CAS-LINE lets the user delete a DS0 channel used for CAS (Channel-Associated Signaling).

ED-CAS-LINE lets the user change the parameters associated with a DS0 channel used for CAS (Channel-Associated Signaling).

ENT-CAS-LINE lets the user associate a DS0 channel with a CAS (Channel-Associated Signaling) interface. ENT-CAS-LINE will not work correctly unless the following commands have already been issued in the listed order: ENT-T1, ENT-PRFL-CAS, and ENT-CAS-IF.

RTRV-CAS-LINE lets the user retrieve parameters associated with a CAS (Channel-Associated Signaling) line; i.e., a DS0 channel on a CAS interface.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-CAS-LINE: [TID]:<casLineAid>:[CTAG];

ED-CAS-LINE: [TID]:<casLineAid>:[CTAG]:[NAME=<name>]:
[<pst>];

ENT-CAS-LINE: [TID]:<casLineAid>:[CTAG]:<casIfId>:
[NAME=<name>]:[<pst>];

RTRV-CAS-LINE: [TID]:[<casLineAid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<casLineAid>:CASIFID=<casIfId>:NAME=<name>:<pst>,
    <sst>"
;
```

Parameters:

casLineAid Identifies the AID as a DS0 channel used for CAS. A null value (in RTRV) is equivalent to “ALL”; that is, by leaving the field blank, parameters will be returned for all CAS lines configured in the system. A null value for the second, third, or fourth parts of the AID (in RTRV) is equivalent to “ALL”; that is, by leaving a field blank, parameters will be returned for all channels on a port or all ports on an IOM.

Type: T0

Range: IOM-**{1-17}**[-PORT-**{1-28}**[-T0-**{1-24}**]] = a channel on a T1 port on a DS1 I/O module
IOM-**{1-17}**[-STS1-**{1-8}**[-PORT-**{1-28}**[-T0-**{1-24}**]]] = a channel on a T1 port on an STS1 I/O module
IOM-**{1-17}**[-T3-**{1-8}**[-PORT-**{1-28}**[-T0-**{1-24}**]]] = a channel on a T1 port on a DS3 I/O module

Default value: none

casIfId Identifies the CAS interface to associate with the DS0 channel.

Type: integer

Range: {1-2147483645}

Default value: none

name Identifies the name of the CAS line.

Type: string

Range: up to eight ASCII characters

Default value: null

pst Indicates the desired primary state of the CAS line. A null value means no change to the current value.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: IS

sst Identifies (in RTRV output) the secondary state of the CAS line.

Type: enum

Range: ACT = Active
AINS = Automatic, In-service
FAF = Facilities Failure
FLT = Faulted
INIT = Initializing
LPBK = Loopback
MEA = Mismatch of Equipment and Attributes
MON = Monitor
NBK = No Backup
PRI = Protection Release Inhibited
PSI = Protection Switch Inhibited
RWT = Remove Wait state
SGEO = Supporting Entity Outage
STBYC = Standby Cold
STBYH = Standby Hot
UAS = Unassigned
UEQ = Unequipped
WRK = Working

Default value: none

Input Examples:

```
DLT-CAS-LINE::IOM-1-PORT-2-T0-24;  
ED-CAS-LINE::IOM-1-PORT-2-T0-24:::NAME=CAS1:IS;  
ENT-CAS-LINE::IOM-1-PORT-2-T0-24:::1:NAME=CAS1:IS;  
RTRV-CAS-LINE::IOM-1-PORT-2-T0-24;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"IOM-1-PORT-2-T0-24:CASIFID=1:NAME=CASIF1:IS,ACT"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-CAS

Commands:

DLT-PRFL-CAS: Delete Profile CAS

ED-PRFL-CAS: Edit Profile CAS

ENT-PRFL-CAS: Enter Profile CAS

RTRV-PRFL-CAS: Retrieve Profile CAS

Descriptions:

DLT-PRFL-CAS lets the user delete a CAS (Channel-Associated Signaling) profile.

ED-PRFL-CAS lets the user change the parameters associated with a CAS (Channel-Associated Signaling) profile.

ENT-PRFL-CAS lets the user establish a CAS (Channel-Associated Signaling) profile. CAS profile parameter values conform to the following matrix of allowable combinations:

<i>callModel</i>	<i>sigModel</i>	<i>cntrlng</i>	<i>toneType</i>	<i>rxAddrInfo</i>	Delimiters
SUBSCRIBER_LINE	E_M E_M_IMM_DIAL GR303_GROUND_START GR303_LOOP_START GROUND_START GS_FWD_DISC LOOP_START LS_FWD_DISC	N (default) <i>Glare handling does not apply to subscriber lines</i>	DTMF <i>DTMF and DP receivers are placed on the call for all subscriber calls</i>	CD (default) <i>Subscriber lines do not send address info</i>	NONE <i>Called and calling party number are not sent to subscribers using DTMF digits</i>
CD_TRUNK CDCG_TRUNK CGCD_TRUNK MG_TRUNK	E_M E_M_IMM_DIAL	Y, N	DTMF	CD CDCG CGCD	ASTERIK FIRST_ASTERISK NONE POUND <i>All leading and trailing delimiters are valid</i>
CD_TRUNK CDCG_TRUNK CGCD_TRUNK MG_TRUNK	E_M E_M_IMM_DIAL	Y, N	MFR1	CD CDCG CGCD	NONE <i>Assuming KP is leading delimiter and ST is trailing delimiter</i>
911_TRUNK EO_OPS_TRUNK	E_M	N (default) <i>parameter is N/A</i>	MFR1	CD (default) <i>parameter is N/A</i>	NONE
FGD	E_M	Y, N	MFR1	CD (default) <i>parameter is N/A</i>	NONE

Note that setting the value of *callModel* to “SUBSCRIBER_LINE” and the value of *sigModel* to “E_M” provides a secondary dial tone to the subscriber from the Plexus 9000 when connected to customer-premise equipment.

RTRV-PRFL-CAS lets the user retrieve a CAS (Channel-Associated Signaling) profile.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-PRFL-CAS:[TID]:<casPrflId>:[CTAG];

ED-PRFL-CAS:[TID]:<casPrflId>:[CTAG]::
  [CNTRLNG=<cntrlng>],[TONETYPE=<toneType>],
  [RXADDRINFO=<rxAddrInfo>],[TXLEADDLM=<txLeadDlm>],
  [TXTRAILDLM=<txTrailDlm>],[RXLEADDLM=<rxLeadDlm>],
  [RXTRAILDLM=<rxTrailDlm>],
  [TONEDURATION=<toneDuration>],
  [PAUSEDURATION=<pauseDuration>],
  [SEIZEWINKDELAY=<seizeWinkDelay>],
  [OUTPUTSEDELAY=<outPulseDelay>],
  [CONFONHOOK=<confOnHook>],
  [CONFOFFHOOK=<confOffhook>],[GUARDTMR=<guardTmr>],
  [WINKDURATION=<winkDuration>],
  [FWDDISCTIME=<fwdDiscTime>],[KPMODE=<kpMode>],
  [TDGTFIRST=<tDgtFirst>],[TDGTSHORT=<tDgtShort>],
  [TDGTLONG=<tDgtLong>];

ENT-PRFL-CAS:[TID]:<casPrflId>:[CTAG]::
  [CALLMODEL=<callModel>],[SIGMODEL=<sigModel>],
  [CNTRLNG=<cntrlng>],[TONETYPE=<toneType>],
  [RXADDRINFO=<rxAddrInfo>],[TXLEADDLM=<txLeadDlm>],
  [TXTRAILDLM=<txTrailDlm>],[RXLEADDLM=<rxLeadDlm>],
  [RXTRAILDLM=<rxTrailDlm>],
  [TONEDURATION=<toneDuration>],
  [PAUSEDURATION=<pauseDuration>],
  [SEIZEWINKDELAY=<seizeWinkDelay>],
  [OUTPUTSEDELAY=<outPulseDelay>],
  [CONFONHOOK=<confOnHook>],
  [CONFOFFHOOK=<confOffhook>],[GUARDTMR=<guardTmr>],
  [WINKDURATION=<winkDuration>],
  [FWDDISCTIME=<fwdDiscTime>],[KPMODE=<kpMode>],
  [TDGTFIRST=<tDgtFirst>],[TDGTSHORT=<tDgtShort>],
  [TDGTLONG=<tDgtLong>];

RTRV-PRFL-CAS:[TID]:[<casPrflId>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<casPrflId>:CALLMODEL=<callModel>,
    SIGMODEL=<sigModel>,CNTRLNG=<cntrlng>,
    TONETYPE=<toneType>,RXADDRINFO=<rxAddrInfo>,
    TXLEADDLM=<txLeadDlm>,TXTRAILDLM=<txTrailDlm>,
    RXLEADDLM=<rxLeadDlm>,RXTRAILDLM=<rxTrailDlm>,
    TONEDURATION=<toneDuration>,
    PAUSEDURATION=<pauseDuration>,
    SEIZEWINKDELAY=<seizeWinkDelay>,
    OUTPUTSEDELAY=<outPulseDelay>,
    CONFONHOOK=<confOnHook>,
    CONFOFFHOOK=<confOffHook>,
    GUARDTMR=<guardTmr>,WINKDURATION=<winkDuration>,
    FWDISCTIME=<fwdDiscTime>,KPMODE=<kpMode>,
    TDGTFIRST=<tDgtFirst>,TDGTSHORT=<tDgtShort>,
    TDGTLONG=<tDgtLong>"
;
```

Parameters:

casPrflId Identifies the AID as a CAS profile. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system returns parameter values for all configured CAS profiles.

Type: casPrflId

Range: {1-128}

Default value: none

callModel Identifies the robbed-bit CAS call model.

Type: enum

Range: 911_TRUNK = trunk model, 911 calls

CD_TRUNK = trunk model, called party

CDCG_TRUNK = trunk model, called party to calling party;
that is, the CDPN is sent before the CGPN

CGCD_TRUNK = trunk model, calling party to called party;
that is, the CGPN is sent before the CDPN

EO_OPS_TRUNK = trunk model, End Office to Operator
Services Position Trunk (N11 calls)

FGD = Feature Group D

MG_TRUNK = trunk model, media gateway

SUBSCRIBER_LINE = line model

Default value: SUBSCRIBER_LINE

sigModel Identifies the format for robbed-bit CAS signaling.

Type: enum

Range: E_M = Receive and Transmit (E & M derives from the Latin phrase “Excipere and Mittere”, or, colloquially, “Ear and Mouth”)
E_M_IMM_DIAL = Receive and Transmit – Immediate Dial address control signaling on CAS trunks
GR303_GROUND_START = GR303 ground start
GROUND_START = ground start
GR303_LOOP_START = GR303 loop start
GS_FWD_DISC = ground start when connected to a PBX
LOOP_START = loop start
LS_FWD_DISC = loop start when connected to a PBX

Default value: E_M

cntrlng Identifies whether controlling GLARE resolution for release is enabled.

Type: BoolYN

Range: N = non-controlling
Y = controlling

Default value: N

toneType Identifies the type of in-band tone used for communicating digits in channel-associated signaling.

Type: enum

Range: DP = Dial Pulse
DTMF = dual-tone multi-frequency (as used on PBXs)
MFR1 = Multi-Frequency R1 for North America

Default value: DTMF

rxAddrInfo Identifies the received address information; that is, the order and type of addressing information to be received on an incoming trunk. Primarily used with PBXs that expect to receive one set of information but send different information. PBXs need not use delimiters when the value of *rxAddrInfo* is “CD”.

Type: enum

Range: CD = called party
CDCG = called party to calling party; that is, the CDPN is received before the CGPN
CGCD = calling party to called party; that is, the CGPN is received before the CDPN

Default value: CD

txLeadDlm Identifies the transmitted leading DTMF delimiter, which indicates the beginning of each digit (or the entire set of digits) in the called or calling number sent. Although the default value is “NONE”, you must specify a value of “ASTERISK”, “FIRST_ASTERISK”, or “POUND” when the value of *callModel* is “CD_TRUNK”, “CDCG_TRUNK”, or “CGCD_TRUNK”, and the value of *toneType* is “DTMF”.

Type: enum

Range: ASTERISK = the asterisk (*) key precedes each digit
FIRST_ASTERISK = the asterisk (*) key precedes the entire called or calling number sent
NONE = no delimiter
POUND = the pound (#) key precedes each digit

Default value: NONE

txTrailDlm Identifies the transmitted trailing DTMF delimiter, which indicates the end of the called or calling number sent. Although the default value is “NONE”, you must specify a value of “ASTERISK” or “POUND” when the value of *callModel* is “CD_TRUNK”, “CDCG_TRUNK”, or “CGCD_TRUNK”, and the value of *toneType* is “DTMF”. You must specify a value of “ASTERISK” when the value of *txLeadDlm* is “FIRST_ASTERISK”.

Type: enum

Range: ASTERISK = the asterisk (*) key
NONE = no delimiter
POUND = the pound (#) key

Default value: NONE

rxLeadDlm Identifies the received leading DTMF delimiter, which indicates the beginning of each digit (or the entire set of digits) in the called or calling number received. Although the default value is “NONE”, you must specify a value of “ASTERISK”, “FIRST_ASTERISK”, or “POUND” when the value of *callModel* is “CD_TRUNK”, “CDCG_TRUNK”, or “CGCD_TRUNK”, and the value of *toneType* is “DTMF”. You cannot specify a value of “FIRST_ASTERISK” when the value of *callModel* is “CD_TRUNK” or “MG_TRUNK”. You must specify a value of “FIRST_ASTERISK” when the value of *txLeadDlm* is “FIRST_ASTERISK”.

Type: enum

Range: ASTERISK = the asterisk (*) key precedes each digit
FIRST_ASTERISK = the asterisk (*) key precedes the entire called or calling number received
NONE = no delimiter
POUND = the pound (#) key precedes each digit

Default value: NONE

rxTrailDlm Identifies the received trailing DTMF delimiter, which indicates the end of the called or calling number received. Although the default value is “NONE”, you must specify a value of “ASTERISK” or “POUND” when the value of *callModel* is “CD_TRUNK”, “CDCG_TRUNK”, or “CGCD_TRUNK”, and the value of *toneType* is “DTMF”. You must specify a value of “ASTERISK” when the value of *rxLeadDlm* is “FIRST_ASTERISK”.

Type: enum

Range: ASTERISK = the asterisk (*) key

NONE = no delimiter

POUND = the pound (#) key

Default value: NONE

toneDuration Identifies the duration, in milliseconds, for an out-pulsed digit.

Type: integer

Range: {0-120}

Default value: 65

pauseDuration Identifies the duration, in milliseconds, for the time allowed between dialed digits for outgoing interfaces.

Type: integer

Range: {0-120}

Default value: 65

seizeWinkDelay Identifies the duration, in milliseconds, that the Plexus 9000 waits for a WINK signal after seizing an outbound trunk.

Type: integer

Range: {0-4000}

Default value: 4000

outPulseDelay Identifies the delay, in milliseconds, before out-pulsing digits (MF/DTMF) after seizing an outbound trunk. When the value of *sigModel* is “E_M_IMM_DIAL”, set *outPulseDelay* higher than the default value so that the far end switch has time to enable its digit-collecting process.

Type: integer

Range: {0-6000}

Default value: 50

confOnHook Identifies the duration, in milliseconds, that a trunk with this profile must be on-hook before it can be declared on-hook.

Type: integer

Range: {0-6000}

Default value: 1100

confOffHook Identifies the duration, in milliseconds, that a trunk with this profile must be off-hook before it can be declared as answered.

Type: integer
Range: {210-6000}
Default value: 350

guardTmr Identifies the guard timer value in milliseconds; that is, the duration after a disconnect or on-hook before the trunk is available for next use.

Type: integer
Range: {100-6000}, in 100 msec increments
Default value: 1000

winkDuration Identifies the duration, in milliseconds, for a WINK signal. This parameter only applies when the value for *sigModel* is “E_M”.

Type: integer
Range: {0-300}
Default value: 100

fwdDiscTime Identifies the duration, in milliseconds, that the Plexus 9000 maintains LCFO on a disconnecting line/trunk. This parameter only applies when the value for *sigModel* is “LS_FWD_DISC”.

Type: integer
Range: {0-6000}
Default value: 1500

kpMode Identifies, for Feature Group D calls (that is, when the value of *callModel* is “FGD”) and per GR-690, R3-50, the type of information sent to the remote switch that determines how to interpret the variations of the Key Pulse signal (KP, KP’, KP’’, KP’’’) in the second stage of MF outpulsing when ANI is not provided.

Type: enum

Range: BOTH = Remote switch requests both dialing method information and presubscription information; that is, whether the call is effected via the subscriber’s chosen carrier or via casual (10-10-) dialing (KP = dial pulse dialing and carrier designated, KP’ = dial pulse dialing and carrier not designated or undetermined, KP’’ = DTMF dialing and carrier designated, KP’’’ = DTMF dialing and carrier not designated or undetermined)
DIALMETHOD = Remote switch requests only dialing method information (KP = dial pulse, KP’’ = DTMF)
NONE = Remote switch requests neither dialing method nor presubscription information
PRESUBSCRIBED = Remote switch requests only presubscription information; that is, whether the call is effected via the subscriber’s chosen carrier or via casual (10-10-) dialing (KP = carrier designated, KP’ = carrier not designated or undetermined)

Default value: NONE

tDgtFirst Identifies the duration, in milliseconds (100 msec increments), that the Plexus 9000 waits for first digit to be dialed before giving up and playing an announcement.

Type: integer

Range: {5000-40000}

Default value: 9000

tDgtShort Identifies the duration, in milliseconds (100 msec increments), that the Plexus 9000 waits after finding a partial match between the dialed digits and the requested digit-map, before ending digit collection and acting upon the partially-matched dialed digits.

Type: integer

Range: {1000-2000}

Default value: 2000

tDgtLong Identifies the duration, in milliseconds (100 msec increments), that the Plexus 9000 waits after a digit has been collected, before ending digit collection – regardless of any matching with the requested digit-map.

Type: integer

Range: {1000-9000}

Default value: 2000

Input Examples:

```
DLT-PRFL-CAS::1;
```

```
ED-PRFL-CAS::1:::CNTRLNG=N, TONETYPE=DTMF,  
RXADDRINFO=CD, TXLEADDLM=NONE, TXTRAILDLM=NONE,  
RXLEADDLM=NONE, RXTRAILDLM=NONE, TONEDURATION=65,  
PAUSEDURATION=65, TONEDURATION=65, XOUTPULSEDELAY=50,  
CONFONHOOK=1100, CONFOFFHOOK=100, GUARDTMR=1000,  
WINKDURATION=100, FWDDISCTIME=1500, KPMODE=NONE,  
TDGTFIRST=9000, TDGTSHORT=2000, TDGTLONG=2000;
```

```
ENT-PRFL-CAS::1:::CALLMODEL=SUBSCRIBER_LINE,  
SIGMODEL=E_M, CNTRLNG=N, TONETYPE=DTMF, RXADDRINFO=CD,  
TXLEADDLM=NONE, TXTRAILDLM=NONE, RXLEADDLM=NONE,  
RXTRAILDLM=NONE, TONEDURATION=65, PAUSEDURATION=65,  
SEIZEWINKDELAY=4000, OUTPULSEDELAY=50,  
CONFONHOOK=1100, CONFOFFHOOK=350, GUARDTMR=1000,  
WINKDURATION=100, FWDDISCTIME=1500, KPMODE=NONE,  
TDGTFIRST=9000, TDGTSHORT=2000, TDGTLONG=2000;
```

```
RTRV-PRFL-CAS::1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:CALLMODEL=SUBSCRIBER_LINE, SIGMODEL=E_M,  
CNTRLNG=N, TONETYPE=DTMF, RXADDRINFO=CD,  
TXLEADDLM=NONE, TXTRAILDLM=NONE, RXLEADDLM=NONE,  
RXTRAILDLM=NONE, TONEDURATION=65,  
PAUSEDURATION=65, SEIZEWINKDELAY=4000,  
OUTPULSEDELAY=50, CONFONHOOK=1100,  
CONFOFFHOOK=100, GUARDTMR=1000, WINKDURATION=100,  
FWDDISCTIME=1500, KPMODE=NONE, TDGTFIRST=9000,  
TDGTSHORT=2000, TDGTLONG=2000"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-GR303-CRV

Commands:

DLT-GR303-CRV: Delete GR303 CRV

ED-GR303-CRV: Edit GR303 CRV

ENT-GR303-CRV: Enter GR303 CRV

RTRV-GR303-CRV: Retrieve GR303 CRV

Descriptions:

DLT-GR303-CRV lets the user delete a GR303 Call Reference Value (subscriber line).

ED-GR303-CRV lets the user change the CAS profile and primary state, and whether the subscriber can be deleted, for a GR303 Call Reference Value (subscriber line).

ENT-GR303-CRV lets the user establish the CAS profile and primary state, and whether the subscriber can be deleted, for a GR303 Call Reference Value (subscriber line). ENT-GR303-CRV will not work unless the following commands have already been issued in the listed order: ENT-PRFL-CAS, ENT-SUB-IF, and ENT-GR303-IF.

RTRV-GR303-CRV lets the user retrieve parameters associated with a GR303 Call Reference Value (subscriber line).

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-GR303-CRV: [TID]:<crvId>:[CTAG];

ED-GR303-CRV: [TID]:<crvId>:[CTAG]::
[CASPRFLID=<casPrflId>],[REDLINED=<redLined>]:
[<pst>];

ENT-GR303-CRV: [TID]:<crvId>:[CTAG]::
CASPRFLID=<casPrflId>,[REDLINED=<redLined>]:
[<pst>];

RTRV-GR303-CRV: [TID]:<crvId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<crvId>:CASPRFLID=<casPrflId>,REDLINED=<redLined>:
  <pst>,<sst>"
;
```

Parameters:

- crvId** Identifies the AID as a GR303 call reference value. The pattern is a combination of the interface group number, the call reference value, and the subscriber interface number.
- Type:** CrvAidGrp
Range: <ifGrpNum>-<crv>-<subIfId>, where
ifGrpNum = {1-32767}
crv = {1-2048}
subIfId = {1-32767}
Default value: none
- casPrflId** Identifies the CAS profile applied to the interface.
- Type:** enum
Range: {1-128}
Default value: none
- redLined** Identifies whether a GR303 subscriber can be deleted.
- Type:** BoolYN
Range: N = subscriber can not be deleted
Y = subscriber can be deleted
Default value: N
- pst** Identifies the primary state of the GR303 subscriber line. A null value means no change to the current value.
- Type:** enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
OOS-AU = Out-Of-Service, Autonomous (output only)
OOS-AUMA = Out-Of-Service, Autonomous and Managed (output only)
OOS-MA = Out-Of-Service for Management (output only)
Default value: IS

sst Identifies (in RTRV output) the secondary state of the GR303 subscriber line.

Type: enum

Range: ACT = Active
FAF = Facilities Failure
SGEO = Supporting Entity Outage
SGEO_FAF = Supporting Entity Outage and Facilities Failure

Default value: none

Input Examples:

```
DLT-GR303-CRV::1-1-1;  
ED-GR303-CRV::1-1-1::CASPRFLID=1,REDLINED=N:IS;  
ENT-GR303-CRV::1-1-1::CASPRFLID=1,REDLINED=N:IS;  
RTRV-GR303-CRV::1-1-1;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"1-1-1:CASPRFLID=1,REDLINED=N:IS,ACT"  
;
```

Related Commands:

RTRV-STATUS-GR303CRV

DLT/ED/ENT/RTRV-GR303-IF

Commands:

DLT-GR303-IF: Delete GR303 Interface

ED-GR303-IF: Edit GR303 Interface

ENT-GR303-IF: Enter GR303 Interface

RTRV-GR303-IF: Retrieve GR303 Interface

Descriptions:

DLT-GR303-IF lets the user delete a GR303 interface group.

ED-GR303-IF lets the user modify the properties of a GR303 interface group.

ENT-GR303-IF lets the user establish a GR303 interface group.

RTRV-GR303-IF lets the user retrieve the properties of a GR303 interface group.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-GR303-IF: [TID]:<ifGrpNum>: [CTAG];

ED-GR303-IF: [TID]:<ifGrpNum>: [CTAG]::
[SWCHTYPE=<swchtype>], [FLWTHR=<flwthr>],
[ALLOC=<alloc>], [PPS=<pps>], [GRPNAME=<grpname>],
[RDTVNDR=<rdtvndr>], [T303=<t303>], [T313=<t313>],
[T396=<t396>], [DLSAP0WINSIZ=<dlsap0winsiz>],
[DLSAP0N200=<dlsap0n200>],
[DLSAP0T200=<dlsap0t200>],
[DLSAP0T203=<dlsap0t203>],
[DLSAP1WINSIZ=<dlsap1winsiz>],
[DLSAP1N200=<dlsap1n200>],
[DLSAP1T200=<dlsap1t200>],
[DLSAP1T203=<dlsap1t203>]: [<pst>];

```
ENT-GR303-IF:[TID]:<ifGrpNum>:[CTAG]::
[SWCHTYPE=<swchtype>],[FLWTHR=<flwthr>],
[ALLOC=<alloc>],[PPS=<pps>],[GRPNAME=<grpname>],
[RDTVNDR=<rdtvndr>],[T303=<t303>],[T313=<t313>],
[T396=<t396>],[DLSAP0WINSIZ=<dlsap0winsiz>],
[DLSAP0N200=<dlsap0n200>],
[DLSAP0T200=<dlsap0t200>],
[DLSAP0T203=<dlsap0t203>],
[DLSAP1WINSIZ=<dlsap1winsiz>],
[DLSAP1N200=<dlsap1n200>],
[DLSAP1T200=<dlsap1t200>],
[DLSAP1T203=<dlsap1t203>]:[<pst>];

RTRV-GR303-IF:[TID]:[<ifGrpNum>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ifGrpNum>;SWCHTYPE=<swchtype>;FLWTHR=<flwthr>;
  ALLOC=<alloc>;PPS=<pps>;GRPNAME=<grpname>;
  RDTVNDR=<rdtvndr>;T303=<t303>;T313=<t313>;
  T396=<t396>;DLSAP0WINSIZ=<dlsap0winsiz>;
  DLSAP0N200=<dlsap0n200>;DLSAP0T200=<dlsap0t200>;
  DLSAP0T203=<dlsap0t203>;
  DLSAP1WINSIZ=<dlsap1winsiz>;
  DLSAP1N200=<dlsap1n200>;DLSAP1T200=<dlsap1t200>;
  DLSAP1T203=<dlsap1t203>;:<pst>;<sst>"
;
```

Parameters:

ifGrpNum Identifies the AID as a GR303 interface group. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, parameters will be returned for all GR303 interface groups configured in the system.

Type: IfGrpNum

Range: {1-32767}

Default value: none

- swchtype** Identifies the switch type implemented in the IDT (Integrated Digital Terminal).
- Type:** enum
Range: CUSTOM
LUCENT
NORTEL
Default value: LUCENT
- flwthr** Identifies whether flow through provisioning is enabled on the interface group.
- Type:** BoolYN
Range: N = flow through provisioning is not enabled
Y = flow through provisioning is enabled
Default value: N
- alloc** Identifies the resource allocation method (hunting type) for the interface group.
- Type:** enum
Range: ASCENDING = Allocates the lowest numbered available channel in a numbered list of channels on the lowest numbered available link in a numbered list of links.
CIRCULAR = Allocates the next free channel, in ascending order, following the last channel selected.
DESCENDING = Allocates the highest numbered available channel in a numbered list of channels on the highest numbered available link in a numbered list of links.
RANDOM = Allocates the next free channel, in ascending order, based on a random entry into a numbered list of resources. After the first allocation from that numbered list of resources, subsequent attempts to find a free resource use the circular method.
Default value: CIRCULAR
- pps** Identifies whether path protection is inhibited for the interface group.
- Type:** BoolYN
Range: N = path protection is not inhibited
Y = path protection is inhibited
Default value: N
- grpname** Identifies the name of the GR303 interface group.
- Type:** string
Range: up to 20 alphanumeric characters (including underscores "_")
Default value: NULL

- rdtvndr** Identifies the vendor of the RDT (Remote Digital Terminal).
Type: string
Range: up to 20 alphanumeric characters (including underscores "_")
Default value: NULL
- t303** Identifies the maximum time, in seconds (0.5 second increments), that the IDT and RDT will wait for a reply to a SETUP message.
Type: integer
Range: {0.7-4.7}
Default value: 0.7
- t313** Identifies the maximum time, in seconds (0.1 second increments), that the IDT will wait for a reply to a CONNECT message that assigns a DS0 to the originating call.
Type: integer
Range: {0.4-4.0}
Default value: 0.4
- t396** Identifies the maximum time, in seconds (1.0 second increments), that the switch will wait for a reply to a SETUP message following initial expiration of timer t303.
Type: integer
Range: {0.7-14.7}
Default value: 14.7
- dlsap0winsiz** Identifies the number of unacknowledged information frames to buffer on SAP0, the Service Access Point TMC (Timeslot Management Channel).
Type: integer
Range: {1-7}
Default value: 7
- dlsap0n200** Identifies the maximum number of times a frame can be retransmitted on SAP0.
Type: integer
Range: {1-10}
Default value: 3

dlsap0t200 Identifies the maximum time, in seconds (0.05 second increments), that LAPD (Link Access Protocol - D Channel) waits for the receipt of an acknowledgement of a transmitted frame on SAP0.

Type: integer
Range: {0.1-0.35}
Default value: 0.35

dlsap0t203 Identifies the maximum time, in seconds (10 second increments), that the LAPD link can be IDLE on SAP0.

Type: integer
Range: {10-300}
Default value: 30

dlsap1winsiz Identifies the number of unacknowledged information frames to buffer on SAP1, the Service Access Point EOC (Embedded Operations Channel).

Type: integer
Range: {1-7}
Default value: 7

dlsap1n200 Identifies the maximum number of times a frame can be retransmitted on SAP1.

Type: integer
Range: {1-10}
Default value: 3

dlsap1t200 Identifies the maximum time, in seconds (0.05 second increments), that LAPD (Link Access Protocol - D Channel) waits for the receipt of an acknowledgement of a transmitted frame on SAP1.

Type: integer
Range: {0.1-0.35}
Default value: 0.35

dlsap1t203 Identifies the maximum time, in seconds (10 second increments), that the LAPD link can be IDLE on SAP1.

Type: integer
Range: {10-300}
Default value: 30

pst Indicates the primary state of the GR303 interface group. A null value means no change to the current value.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

OOS-AU = Out-Of-Service, Autonomous (output only)

OOS-AUMA = Out-Of-Service, Autonomous and Managed (output only)

OOS-MA = Out-Of-Service for Management (output only)

Default value: OOS

sst Identifies (in RTRV output) the secondary state of the GR303 interface group.

Type: enum

Range: ACT = Active

FAF = Facilities Failure

SGEO = Supporting Entity Outage

SGEO_FAF = Supporting Entity Outage and Facilities Failure

Default value: none

Input Examples:

```
DLT-GR303-IF::1;
```

```
ED-GR303-IF::1::SWCHTYPE=LUCENT,FLWTHR=N,  
  ALLOC=CIRCULAR,PPS=N,GRPNAME=GR303IF1,  
  RDTVNDR=TELICA,T303=0.7,T313=0.4,T396=14.7,  
  DLSAP0WINSIZ=7,DLSAP0N200=3,DLSAP0T200=0.35,  
  DLSAP0T203=30,DLSAP1WINSIZ=7,DLSAP1N200=3,  
  DLSAP1T200=0.35,DLSAP1T203=30:OOS;
```

```
ENT-GR303-IF::1::SWCHTYPE=LUCENT,FLWTHR=N,  
  ALLOC=CIRCULAR,PPS=N,GRPNAME=GR303IF1,  
  RDTVNDR=TELICA,T303=0.7,T313=0.4,T396=14.7,  
  DLSAP0WINSIZ=7,DLSAP0N200=3,DLSAP0T200=0.35,  
  DLSAP0T203=30,DLSAP1WINSIZ=7,DLSAP1N200=3,  
  DLSAP1T200=0.35,DLSAP1T203=30:OOS;
```

```
RTRV-GR303-IF::1;
```

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"1:SWCHTYPE=LUCENT,FLWTHR=N,ALLOC=CIRCULAR,PPS=N,
  GRPNAME=GR303IF1,RDTVNDR=TELICA,T303=0.7,
  T313=0.4,T396=14.7,DLSAP0WINSIZ=7,DLSAP0N200=3,
  DLSAP0T200=0.35,DLSAP0T203=30,DLSAP1WINSIZ=7,
  DLSAP1N200=3,DLSAP1T200=0.35,DLSAP1T203=30:IS,
  ACT"
;
```

Related Commands:

RTRV-RDT-L2
SW-TOPROTN-GR303IF

RTRV-RDT-L3

DLT/ENT/RTRV-GR303-PORT

Commands:

DLT-GR303-PORT: Delete GR303 Port

ENT-GR303-PORT: Enter GR303 Port

RTRV-GR303-PORT: Retrieve GR303 Port

Descriptions:

DLT-GR303-PORT lets the user delete the association of a GR303 interface group with a DS1 port.

ENT-GR303-PORT lets the user establish an association of a GR303 interface group with a DS1 port. GR303 functionality in the Plexus 9000 consists of Timeslot Management Channel (TMC) operations and Embedded Operation Channel (EOC) operations. TMC operations handle call setup and clearing procedures; EOC operations handle the provisioning and maintenance of the subscriber interface. Each GR303 interface group has a primary and a secondary TMC and EOC. A port with a primary or secondary TMC and EOC has 26 bearer channels. The other ports in the GR303 interface group have 28 bearer channels. Configure the port with the primary TMC and EOC first, then the port with the secondary TMC and EOC, and lastly the ports with only bearer channels. ENT-GR303-PORT will not work unless the following commands have already been issued in the listed order: ENT-EQPT and ENT-GR303-IF.

RTRV-GR303-PORT lets the user retrieve the identity and function of a DS1 port associated with a GR303 interface group.

Category: Signaling

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-GR303-PORT: [TID]:<grpId>:[CTAG];

ENT-GR303-PORT: [TID]:<grpId>:[CTAG]::PORT=<port>,
TYPE=<type>;

RTRV-GR303-PORT: [TID]:<grpId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<grpId>:PORT=<port>,TYPE=<type>"
;
```

Parameters:

- grpId** Identifies the AID as an association of a GR303 interface group with a DS1 port. The first part of the AID is the interface group number and the second part is the DS1 port number.
Type: IfGrpDs1Id
Range: {1-32767}-{1-28}
Default value: none
- port** Identifies the associated port and the IOM on which it is located.
Type: enum
Range: IOM-{1-17}-STS1-{1-8}-PORT-{1-28}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}
Default value: none
- type** Identifies the GR303 function for the port.
Type: enum
Range: BCHAN = Port is entirely bearer channels
PRI = Port contains primary TMC and EOC
SEC = Port contains secondary TMC and EOC
Default value: none

Input Examples:

```
DLT-GR303-PORT::1-1;  
ENT-GR303-PORT::1-1:::PORT=IOM-1-T3-1-PORT-1,  
TYPE=PRI;  
RTRV-GR303-PORT::1-1;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"1-1:PORT=IOM-1-T3-1-PORT-1, TYPE=PRI"  
;
```

Related Commands: none

ED/RTRV-GR303-CHAN

Commands:

ED-GR303-CHAN: Edit GR303 Channel

RTRV-GR303-CHAN: Retrieve GR303 Channel

Descriptions:

ED-GR303-CHAN lets the user change the state of DS0 channels on ports within a GR303 interface group. This command is not yet implemented; do not issue it.

RTRV-GR303-CHAN lets the user retrieve the state of a DS0 channel on a port within a GR303 interface group.

Category: Signaling

Security: SA for ED, View for RTRV

Input Formats:

ED-GR303-CHAN: [TID]:<chanId>:[CTAG]::<pst>;

RTRV-GR303-CHAN: [TID]:<chanId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<chanId>:<pst>"
;
```

Parameters:

chanId Identifies the AID as a DS0 channel on a port within a GR303 interface group. The pattern is a combination of the interface group number, and the physical channel on a port of the I/O module belonging to the GR303 interface group. A null value for the second part of the AID is equivalent to "ALL"; that is, by leaving the field blank, the state will be changed (in ED) or returned (in RTRV) for all configured channels for the specified GR303 interface group.

Type: ChanIdGrp

Range: IfGrpNum[-T0], where

IfGrpNum = {1-32767}, and

T0 = IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24}

IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}

Default value: none

pst Identifies the primary state of the GR303 subscriber line.

Type: enum

Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
OOS-AU = Out-Of-Service, Autonomous (output only)
OOS-AUMA = Out-Of-Service, Autonomous and Managed (output only)
OOS-MA = Out-Of-Service for Management (output only)

Default value: none

Input Examples:

```
ED-GR303-CHAN::1-IOM-1-T3-1-PORT-1-T0-1:::IS;  
RTRV-GR303-CHAN::1-IOM-1-T3-1-PORT-1-T0-1;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"1-IOM-1-T3-1-PORT-1-T0-1:IS"  
;
```

Related Commands: none

OPR/RLS-LPBK-GR303PORT

Commands:

OPR-LPBK-GR303PORT: Operate Loopback GR303 Port

RLS-LPBK-GR303PORT: Release Loopback GR303 Port

Descriptions:

OPR-LPBK-GR303PORT lets the user operate a local loopback on a specified GR303 port associated with a test access session in the Plexus 9000. The Plexus 9000 issues an error response if the GR303 port is not in a state that allows a loopback to occur – take the port out of service with ED-GR303-IF first. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV-COND command.

RLS-LPBK-GR303PORT lets the user release a local loopback on a specified GR303 port associated with a test access session in the Plexus 9000. A Plexus 9000 that has a loopback in effect includes the appropriate condition type information in response to a RTRV-COND command.

Category: Facility

Security: SA for both commands

Input Formats:

OPR-LPBK-GR303PORT: [TID]:<grpId>:[CTAG];

RLS-LPBK-GR303PORT: [TID]:<grpId>:[CTAG];

Output Format: none

Parameters:

grpId Identifies the AID as an association of a GR303 interface group with a DS1 port. The first part of the AID is the interface group number and the second part identifies the DS1 port within the group.

Type: IfGrpDs1Id

Range: {1-32767}-{1-28}

Default value: none

Input Examples:

OPR-LPBK-GR303PORT::1-1;

RLS-LPBK-GR303PORT::1-1;

Related Commands: none

RTRV-RDT-L2

Command:

RTRV-RDT-L2: Retrieve Remote Digital Terminal Layer 2

Description:

RTRV-RDT-L2 lets the user retrieve the values for the Layer 2 timers and counters from the RDT's Data Link profile for LAPD (Link Access Protocol - D Channel).

Category: Signaling

Security: View

Input Format:

RTRV-RDT-L2:[TID]:<ifGrpNum>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ifGrpNum>;DLSAP0WINSIZ=<dlsap0winsiz>,
  DLSAP0N200=<dlsap0n200>,DLSAP0T200=<dlsap0t200>,
  DLSAP0T203=<dlsap0t203>,
  DLSAP1WINSIZ=<dlsap1winsiz>,
  DLSAP1N200=<dlsap1n200>,DLSAP1T200=<dlsap1t200>,
  DLSAP1T203=<dlsap1t203>"
;
```

Parameters:

ifGrpNum Identifies the AID as a GR303 interface group.

Type: IfGrpNum

Range: {1-32767}

Default value: none

dlsap0winsiz Identifies the number of outstanding information frames to buffer on SAP0, the Service Access Point TMC (Timeslot Management Channel).

Type: integer

Range: {1-7}

Default value: none

dlsap0n200 Identifies the maximum number of times a frame can be retransmitted on SAP0.

Type: integer
Range: {1-10}
Default value: none

dlsap0t200 Identifies the maximum time, in seconds, that LAPD (Link Access Protocol - D Channel) waits for the receipt of an acknowledgement of a transmitted frame on SAP0.

Type: integer
Range: {0.1-0.35}
Default value: none

dlsap0t203 Identifies the maximum time, in seconds, that the LAPD link can be IDLE on SAP0.

Type: integer
Range: {10-300}
Default value: none

dlsap1winsiz Identifies the number of outstanding information frames to buffer on SAP0, the Service Access Point TMC (Timeslot Management Channel).

Type: integer
Range: {1-7}
Default value: none

dlsap1n200 Identifies the maximum number of times a frame can be retransmitted on SAP1.

Type: integer
Range: {1-10}
Default value: none

dlsap1t200 Identifies the maximum time, in seconds, that LAPD (Link Access Protocol - D Channel) waits for the receipt of an acknowledgement of a transmitted frame on SAP1.

Type: integer
Range: {0.1-0.35}
Default value: none

dlsap1t203 Identifies the maximum time, in seconds, that the LAPD link can be IDLE on SAP1.

Type: integer

Range: {10-300}

Default value: none

Input Example:

```
RTRV-RDT-L2::1;
```

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"1:DLSAP0WINSIZ=7,DLSAP0N200=3,DLSAP0T200=0.15,
  DLSAP0T203=30,DLSAP1WINSIZ=7,DLSAP1N200=3,
  DLSAP1T200=0.15,DLSAP1T203=30"
;
```

Related Commands:

RTRV-GR303-IF

RTRV-RDT-L3

RTRV-RDT-L3

Command:

RTRV-RDT-L3: Retrieve Remote Digital Terminal Layer 3

Description:

RTRV-RDT-L3 lets the user retrieve the values for the Layer 3 timers from the RDT's Data Link profile for LAPD (Link Access Protocol - D Channel).

Category: Signaling

Security: View

Input Format:

RTRV-RDT-L3: [TID]:<ifGrpNum>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ifGrpNum>:T303=<t303>,T308=<t308>,T396=<t396>,
T397=<t397>"
;
```

Parameters:

ifGrpNum Identifies the AID as a GR303 interface group.

Type: IfGrpNum

Range: {1-32767}

Default value: none

t303 Identifies the maximum time, in seconds, that the RDT will wait for a reply to a SETUP message.

Type: IfGrpNum

Range: {0.7-4.7}

Default value: none

t308 Identifies the maximum time, in seconds, that the RDT will wait for a reply to a RELEASE message.

Type: IfGrpNum

Range: {2.0-5.0}

Default value: none

t396 Identifies the maximum time, in seconds, that the switch will wait for a reply to a SETUP message following initial expiration of timer t303.

Type: IfGrpNum

Range: {0.7-14.7}

Default value: none

t397 Identifies the maximum time, in seconds, that the RDT will wait for the Plexus 9000 to acknowledge an INFORMATION message indicating customer has gone on-hook.

Type: IfGrpNum

Range: {60-180}

Default value: none

Input Example:

```
RTRV-RDT-L3::1;
```

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"1:T303=0.7,T308=4.0,T396=0.7,T397=120"
;
```

Related Commands:

RTRV-GR303-IF

RTRV-RDT-L2

RTRV-STATUS-GR303CRV

Command:

RTRV-STATUS-GR303CRV: Retrieve Status GR303 CRV

Description:

RTRV-STATUS-GR303CRV lets the user retrieve the channel and state associated with a GR303 Call Reference Value (subscriber line).

Category: Signaling

Security: View

Input Format:

RTRV-STATUS-GR303CRV: [TID]:<crvId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<crvId>:IOMP0RTDS0=<iomPortDs0>:<pst>,<sst>"
;
```

Parameters:

crvId Identifies the AID as a GR303 call reference value. The pattern is a combination of the interface group number, the call reference value, and the subscriber interface number.

Type: CrvAidGrp

Range: IFGRPNUM-CALLREFVAL-SUBSCRIBERIF, where

IFGRPNUM = {1-32767}

CALLREFVAL = {1-2048}

SUBSCRIBERIF = {1-32767}

Default value: none

- iomPortDs0** Identifies the I/O module, the DS1 port on the IOM, and the DS0 channel on the port pertaining to the CRV.
- Type:** enum
- Range:** IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24} = a channel on a T1 port on an STS1 I/O module
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24} = a channel on a T1 port on a DS3 I/O module
- Default value:** none
-
- pst** Identifies the primary state of the GR303 call reference value.
- Type:** enum
- Range:** IS = In-Service
OOS-AU = Out-Of-Service, Autonomous
OOS-MA = Out-Of-Service for Management
- Default value:** none
-
- sst** Identifies the secondary state of the GR303 call reference value.
- Type:** enum
- Range:** BLKD = Blocked
BUSY = Busy
FAF = Facilities Failure
IDLE = Idle
INBUSY=Incoming Busy
OUTBUSY=Outgoing Busy
SGEO = Supporting Entity Outage
- Default value:** none

Input Example:

```
RTRV-STATUS-GR303CRV::1-1-1;
```

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"1-1-1:IOMPORTDS0=IOM-2-T3-2-PORT-28-T0-24:IS,IDLE"
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-GR303-CRV
```


RTRV-STATUS-GR303IF

Command:

RTRV-STATUS-GR303IF: Retrieve Status GR303 Interface

Description:

RTRV-STATUS-GR303IF lets the user retrieve parameters associated with a GR303 interface group.

Category: Signaling

Security: View

Input Format:

RTRV-STATUS-GR303IF:[TID]:<ifGrpNum>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ifGrpNum>:ACTIVETMC=<activeTMC>,
  ACTIVEEOC=<activeEOC>:<pst>,<sst>"
;
```

Parameters:

ifGrpNum Identifies the AID as a GR303 interface group.

Type: IfGrpNum

Range: {1-32767}

Default value: none

activeTMC Identifies which TMC (Timeslot Management Channel) is active for the GR303 interface group.

Type: enum

Range: PRI = primary TMC is active

SEC = secondary TMC is active

Default value: none

activeEOC Identifies which EOC (Embedded Operation Channel) is active for the GR303 interface group.

Type: enum

Range: PRI = primary EOC is active
SEC = secondary EOC is active

Default value: none

pst Identifies the primary state of the GR303 interface group.

Type: enum

Range: IS = In-Service
OOS-AU = Out-Of-Service, Autonomous
OOS-AUMA = Out-Of-Service, Autonomous and Managed
OOS-MA = Out-Of-Service for Management

Default value: none

sst Identifies the secondary state of the GR303 interface group.

Type: enum

Range: ACT = Active
FAF = Facilities Failure
SGEO = Supporting Entity Outage
SGEO_FAF = Supporting Entity Outage and Facilities Failure

Default value: none

Input Example:

```
RTRV-STATUS-GR303IF::1;
```

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"1:ACTIVETMC=PRI,ACTIVEEOC=PRI,OOS-AU,FAF"
;
```

Related Commands:

DLT/ED/ENT/RTRV-GR303-IF

SW-TOPROTN-GR303IF

SW-TOPROTN-GR303IF

Command:

SW-TOPROTN-GR303IF: Switch To Protection GR303 Interface

Description:

SW-TOPROTN-GR303IF lets the user perform a protection switch on a GR303 interface group; i.e., it switches an active TMC (Time Management Channel) or EOC (Embedded Operation Channel) to standby.

Category: Signaling

Security: SA

Input Format:

SW-TOPROTN-GR303IF:[TID]:<ifGrpNum>:[CTAG]::
[<channel>];

Output Format: none

Parameters:

ifGrpNum Identifies the AID as a GR303 interface group.

Type: IfGrpNum

Range: {1-32767}

Default value: none

channel Identifies the active channel to fail over to standby.

Type: Channel

Range: BOTH

EOC

TMC

Default value: BOTH

Input Example:

SW-TOPROTN-GR303IF;

Related Commands:

DLT/ED/ENT/RTRV-GR303-IF

NOTES

DLT/ED/ENT/RTRV-SIP-IPADDR

Commands:

DLT-SIP-IPADDR: Delete SIP IP Address

ED-SIP-IPADDR: Edit SIP IP Address

ENT-SIP-IPADDR: Enter SIP IP Address

RTRV-SIP-IPADDR: Retrieve SIP IP Address

Descriptions:

DLT-SIP-IPADDR lets the user delete a SIP (Session Initiation Protocol) IP address.

ED-SIP-IPADDR lets the user change the primary and (optional) secondary IP addresses, and the description for a trunk group unique to a specific SIP (Session Initiation Protocol) Session Access Node.

ENT-SIP-IPADDR lets the user establish the primary and (optional) secondary IP addresses, and the description for a trunk group unique to a specific SIP (Session Initiation Protocol) Session Access Node. ENT-SIP-IPADDR will not work unless ENT-TRKGRP has already been issued.

RTRV-SIP-IPADDR lets the user retrieve the primary and (optional) secondary IP addresses, and the description for a trunk group unique to a specific SIP (Session Initiation Protocol) Session Access Node.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SIP-ADDR: [TID]:<tgnSipId>:[CTAG];

ED-SIP-IPADDR: [TID]:<tgnSipId>:[CTAG]::
[PRIMIPADDR=<primIPAddr>],[SECIPADDR=<secIPAddr>],
[DESC=<description>];

ENT-SIP-IPADDR: [TID]:<tgnSipId>:[CTAG]::
PRIMIPADDR=<primIPAddr>,[SECIPADDR=<secIPAddr>],
[DESC=<description>];

RTRV-SIP-IPADDR: [TID]:<tgnSipId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<tnSipId>:PRIMIPADDR=<primIPAddr>,
    SECIPADDR=<secIPAddr>,DESC=<description>"
;
```

Parameters:

tnSipId Identifies the AID as a trunk group unique to a specific Session Access Node. The first part of the AID is the trunk group number and the second part is the Session Access Node.

Type: TgnSipId
Range: {1-9999}-{1-16}
Default value: none

primIPAddr Identifies the primary IP address for the trunk group to access the feature server.

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: none

secIPAddr Identifies the optional secondary IP address for the trunk group to access the feature server.

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NULL

description Identifies the description of the interface.

Type: string
Range: up to 32 ASCII characters
Default value: NULL

Input Examples:

```
DLT-SIP-IPADDR::1-1;
ED-SIP-IPADDR::1-1::PRIMIPADDR=192.168.254.0;
ENT-SIP-IPADDR::1-1::PRIMIPADDR=192.168.254.0;
RTRV-SIP-IPADDR::1-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "1-1:PRIMIPADDR=192.168.254.0, SECIPADDR=NULL,
    DESC=NULL"
;
```

Related Commands: none

ED/RTRV-SIP-SYS

Commands:

ED-SIP-SYS: Edit SIP System

RTRV-SIP-SYS: Retrieve SIP System

Descriptions:

ED-SIP-SYS lets the user change the configuration for SIP (Session Initiation Protocol) within the Plexus 9000; that is, it configures the SIP stack for the number of supported connections and various timers.

RTRV-SIP-SYS lets the user retrieve the configuration for SIP (Session Initiation Protocol) within the Plexus 9000; that is, it retrieves the number of supported connections and various timers from the SIP stack.

Category: Signaling

Security: SA for ED, View for RTRV

Input Formats:

```
ED-SIP-SYS:[TID]:[<src>]:[CTAG]::  
  [<IDLETMR=<idletmr>],[CLEANUPTMR=<cleanuptr>],  
  [MAXCONNS=<maxconns>],[INVITETMOUT=<invitetmout>],  
  [T1=<t1>],[T2=<t2>],[ANNCURL=<anncURL>],  
  [REMOTEANNCREQ=<remoteAnncReq>],  
  [SENDPRACK=<sendprack>],[SESTMR=<sestmr>],  
  [INVITERETRY=<inviteretry>]:[<pst>];  
RTRV-SIP-SYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
  "<src>:IDLETMR=<idletmr>,CLEANUPTMR=<cleanuptr>,  
    MAXCONNS=<maxconns>,INVITETMOUT=<invitetmout>,  
    T1=<t1>,T2=<t2>,ANNCURL=<anncURL>,  
    REMOTEANNCREQ=<remoteAnncReq>,  
    SENDPRACK=<sendprack>,SESTMR=<sestmr>,  
    INVITERETRY=<inviteretry>:<pst>"  
;
```


Parameters:

- src** Identifies the AID as the Plexus 9000.
Type: COM
Range: COM
Default value: COM
- idletmr** Identifies the maximum time, in milliseconds, that a connection can be idle before it is deleted. The factory default is “120000”.
Type: integer
Range: {1-2147483647}
Default value: not applicable
- cleanuptmr** Identifies the time, in milliseconds, that the Connection Handler uses to check for idle connections. Telica recommends setting *cleanuptmr* to a value at least 10 times smaller than the value for *idletmr*. The factory default is “12000”.
Type: integer
Range: {1-2147483647}
Default value: not applicable
- maxconns** Identifies the maximum number of connections that the Connection Handler can make to a single remote address. The factory default value of “0” indicates that there is no limit to the permitted number of connections.
Type: integer
Range: {0-32767}
Default value: not applicable
- invitetmout** Identifies the duration, in milliseconds, that a SIP client will wait for a response to an INVITE request. A value of 0 indicates that the INVITE request will never expire and must therefore be explicitly cancelled. The factory default is “45000”.
Type: integer
Range: {0-3600000}
Default value: not applicable

- t1** Identifies the duration, in milliseconds, before the first retransmission of a request over UDP, or an INVITE response over any transport protocol. Subsequent retransmission intervals are calculated by doubling this initial value, up to a maximum limited to the value of *t2tmr*. The factory default is “500”.
- Type:** integer
Range: {500-60000}
Default value: not applicable
- t2** Identifies the maximum time, in milliseconds, before a request is retransmitted over UDP or an INVITE response is retransmitted over any transport protocol. The value of *t2tmr* cannot be less than the value of *t1tmr*. The factory default is “4000”.
- Type:** integer
Range: {4000-180000}
Default value: not applicable
- anncURL** Identifies the announcement URL used to validate the URL in a SIP INVITE message for playing an announcement. When the URL in the INVITE message does not match the provisioned announcement URL, the response will be “400 Bad Request”. The factory default is “ANNC”.
- Type:** string
Range: up to 32 characters, excluding comma (,), semicolon (;), and single quote (')
Default value: not applicable
- remoteAnncReq** Indicates whether remote announcement requests are allowed for SIP trunks. When set to “N”, SIP INVITE messages for playing an announcement receive a “405 Method Not Allowed” response. The factory default is “N”.
- Type:** BoolYN
Range: N = remote announcement requests are not allowed
Y = remote announcement requests are allowed
Default value: not applicable

sendPrack Indicates whether to send a Provisional Response Acknowledgement in response to a received 101-199 Provisional Response. When set to “Y”, all outgoing INVITEs contain the Supported header set with “100rel”. The Plexus 9000 always supports receiving Provisional Responses and Provisional Response Acknowledgements. The factory default is “N”.

Type: BoolYN

Range: N = remote announcements are not required
Y = remote announcements are required

Default value: not applicable

sesTmr Identifies the time, in seconds, before refreshing a SIP session. The value is included with both the SESSION-EXPIRES and the MIN-SE headers in the outgoing INVITE. Sessions are normally refreshed at half of the value of the EXPIRES timer. The recommended value for this timer when enabled is 1800 (30 minutes). Setting the value to “0” disables the session timer logic. The factory default is “0”.

Type: integer

Range: {0, 60-86400}

Default value: not applicable

inviteRetry Identifies the number of times that an INVITE will be retried while waiting for a response. The factory default is “6”.

Type: integer

Range: {0-6}

Default value: not applicable

pst Indicates the desired primary state of the SIP system. The Plexus 9000 ignores all SIP calls when the value of *pst* is “OOS”. A null value means no change to the current value. The factory default is “IS”. This parameter is not yet implemented; leave it blank.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

OOS-AU = Out-Of-Service, Autonomous (output only)

OOS-AUMA = Out-Of-Service, Autonomous and Managed (output only)

OOS-MA = Out-Of-Service for Management (output only)

Default value: not applicable

Input Examples:

```
ED-SIP-SYS::::IDLETMR=120000,CLEANUPTMR=12000,
MAXCONNS=0,INVITETMOUT=45000,T1=500,T2=4000,
ANNCURL=ANNC,REMOTEANNCREQ=N,SENDPRACK=N,SESTMR=0,
INVITERETRY=6:IS;

RTRV-SIP-SYS;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:IDLETMR=120000,CLEANUPTMR=12000,MAXCONNS=0,
INVITETMOUT=45000,T1=500,T2=4000,ANNCURL=ANNC,
REMOTEANNCREQ=N,SENDPRACK=N,SESTMR=0,
INVITERETRY=6:IS"
;
```

Related Commands: none

INIT-REG-SIPMSG / RTRV-PM-SIPMSG

Commands:

INIT-REG-SIPMSG: Initialize Register SIP Message

RTRV-PM-SIPMSG: Retrieve Performance SIP Message

Descriptions:

INIT-REG-SIPMSG lets the user initialize one or more storage registers or event counters for SIP (Session Initiation Protocol) message statistics.

RTRV-PM-SIPMSG lets the user retrieve current and historical performance data related to SIP (Session Initiation Protocol) messages.

Category: Signaling

Security: NSA for ED, View for RTRV

Input Formats:

```
INIT-REG-SIPMSG: [TID]: [<com>]: [CTAG]: [<montype>],  
                [<monval>], [<locn>], [<dirn>], [<tmper>], [<mondatt>],  
                [<montm>];
```

```
RTRV-PM-SIPMSG: [TID]: [<com>]: [CTAG]: [<montype>],  
                [<monlev>], [<locn>], [<dirn>], [<tmper>], [<mondatt>],  
                [<montm>];
```

Output Format:

```
                SID DATE TIME  
M   CTAG COMPLD  
    "<com>:<montype>,<monval>,<vldty>,<locn>,<dirn>,<tmper>,<mondatt>,<montm>"  
    ;
```

Parameters:

com Identifies the AID as the Plexus 9000.

Type: COM

Range: COM

Default value: COM

montype Identifies a type of monitored parameter for SIP messages.

Type: enum

Range: 301_MOVEDP = Moved Permanently: the number of times one or more network address formats contained in the session description were not available; i.e., the number of times the user could not be found at the address in the Request-URI (Uniform Resource Identifier).
302_MOVEDT = Moved Temporarily: the number of times one or more transport protocols described in the session description were not available
401_UNAUTH = Unauthorized: the number of times responses that the request requires user authentication are received from user agent servers (UAS) and registrars
402_PAYUPH = Payment required: this value is not used currently
403_FORBID = Forbidden: the number of times the server understood the request, but refused to fulfill it.
404_NOTFND = Not Found: the number of times either the user did not exist at the domain specified in the Request-URI, or the domain in the Request-URI did not match any of the domains handled by the recipient of the request
405_METHD = Method Not Allowed: the number of times the method specified in the Request-Line is not allowed for the address identified by the Request-URI
406_NOTACC1 = Not Acceptable: the number of times the resource identified by the request can only generate response entities with unacceptable content characteristics according to the Accept header field sent in the request
407_PROXY = Proxy Authentication Required: the number of times proxy servers send a response that the request requires user authentication
408_TIMEOUT0 = Request Timeout: the number of times servers could not produce a response within a suitable amount of time
409_CONFLCT = Conflict: the number of times the request could not be completed due to a conflict with the current state of the resource.
410_GONE = Gone: the number of times the requested resource is no longer available at the server and no forwarding address is known
411_LENREQ = Length Required: the number of times the server refuses to accept the request without a defined Content-Length header field containing the length of the message-body in the request message.

- 413_ENTLEN = Request Entity Too Large: the number of times the server refuses to process a request because the request entity-body is larger than the server is willing or able to process
- 414_URIEN = Request-URI Too Long: the number of times the server refuses to process a request because the Request-URI is longer than the server can interpret
- 415_MEDIA = Unsupported Media Type: the number of times the server refuses to process a request because the message body of the request is in a format not supported by the server for the requested method
- 420_BADEXT = Bad Extension: the number of times the server did not understand the protocol extension specified in a Proxy-Require or Require header field
- 480_TEMPUNV = Temporarily Unavailable: the number of times the called party's end system was contacted successfully but the called party is currently unavailable (for example, is not logged in, logged in but in a state that precludes communication, or has activated the "do not disturb" feature)
- 483_HOPCNT = Too Many Hops: the number of times the server received a request that contains a Max-Forwards header field (which limits the number of hops a request can transit on the way to its destination) with the value zero (i.e., no further forwarding allowed)
- 484_ADDRINC = Address Incomplete: the number of times the server received a request with an incomplete Request-URI
- 485_AMBIGUO = Ambiguous: the number of times the Request-URI was ambiguous
- 486_BUSYHR = Busy Here: the number of times the called party's end system was contacted successfully but the called party is currently not willing or able to take additional calls
- 487_REQTERM = Request Terminated: the number of times the request was terminated by a BYE or CANCEL request
- 488_NOTACCH = Not Acceptable Here: the number of times the user's agent was contacted successfully by the specific resource addressed by the Request-URI, but some aspects of the session description such as the requested media, bandwidth, or addressing style were not acceptable.
- 500_INTERR = Server Internal Error: the number of times the server encountered an unexpected condition that prevented it from fulfilling the request

501_NOTIMPL = Not Implemented: the number of times the server does not support the functionality required to fulfill the request

502_BADGTWY = Bad Gateway: the number of times the server, while acting as a gateway or proxy, received an invalid response from the downstream server it accessed in attempting to fulfill the request

503_SERVUNV = Service Unavailable: the number of times the server is temporarily unable to process the request due to temporary server overloading or maintenance

504_GTWYTO = Server Time-out: the number of times the server did not receive a timely response from an external server it accessed in attempting to process the request

600_BUSYEV = Busy Everywhere: the number of times the called party's end system was contacted successfully but the called party was busy and did not wish to take the call at that time

603_DECLINE = Decline: the number of times the called party was successfully contacted but the user explicitly did not wish to or could not participate

604_NOEXIST = Does Not Exist Anywhere: the number of times the server has authoritative information that the user shown in the Request-URI does not exist anywhere

606_NOTACC2 = Not Acceptable: the number of times the user's agent was contacted successfully but some aspects of the session description such as the requested media, bandwidth, or addressing style were not acceptable; i.e., the user wishes to communicate, but cannot adequately support the session described

ALL = all monitored parameters

ANNC_RCV = number of ANNC messages received by the Plexus 9000

ANNC_SENT = number of ANNC messages sent by the Plexus 9000

BYE_RCV = number of RELEASE messages received for established calls terminated due to normal release

BYE_SENT = number of established calls terminated due to normal release

BYE_TOUT = number of timeouts received by the Plexus 9000 in response to BYE (hangup) messages; i.e., the number of completed call terminations for which a BYE message was sent but no OK message received in response

BYEFINL_RCV = number of 200 (OK) messages received by the Plexus 9000 in response to BYE (hangup) messages; i.e., the total number of completed call terminations

CANC_RCV = number of CANCEL messages received due to termination of calls for reasons other than normal release

CANC_SENT = number of CANCEL messages sent due to termination of established calls for reasons other than normal release

CANCINV_SENT = number of calls pending cancellation when INVITE acknowledgement received

INFO_RCV = number of INFO messages received by the Plexus 9000

INFO_SENT = number of INFO messages sent by the Plexus 9000

INV_RCV = number of INVITE messages received by the Plexus 9000

INV_SENT = number of INVITE messages sent by the Plexus 9000

INV_TOUT = number of INVITE messages which timeout because no response is received

NOTIFY_RCV = number of NOTIFY messages received by the Plexus 9000

NOTIFY_SENT = number of NOTIFY messages sent by the Plexus 9000

OTHER = number of terminated calls due to undefined release conditions

REDIRINV_SENT = number of INVITE messages sent by the Plexus 9000 due to a REDIRECT request

REFER_RCV = number of REFER messages received by the Plexus 9000

REFER_SENT = number of REFER messages sent by the Plexus 9000

REINV_RCV = number of re-transmitted INVITE messages received by the Plexus 9000

SCALLS = number of standing SIP calls

SUBSCRIBE_RCV = number of SUBSCRIBE messages received by the Plexus 9000

SUBSCRIBE_SENT = number of SUBSCRIBE messages sent by the Plexus 9000

Default value: ALL

- monval** Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* is to be initialized. The value is in the form of numeric counts or rates. This parameter is presently unused (for INIT-REG); leave it blank.
Type: integer
Range: {0-9999}
Default value: 0
- monlev** Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over more than the entire period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: not applicable for output
- locn** Indicates the location of the storage registers or event counters to be initialized. Thus, "NEND" refers to PM values obtained at the identified entity, and "FEND" refers to PM values obtained at a distant entity. Currently only "NEND" is supported.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the Plexus 9000. A null value defaults to all applicable directions (currently only "BTH"). This parameter is presently unused; leave it blank. The Plexus 9000 currently returns only the value "BTH".
Type: enum
Range: BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods. This parameter is presently not supported; leave it blank.

Type: enum

Range: {1}-DAY = Time interval is exactly one day

{1-24}-HR = Interval of one to 24 hours (one day)

{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

mondatt Indicates the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Indicates the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

INIT-REG-SIPMSG;

RTRV-PM-SIPMSG;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:SCALLS,0"
"COM:INV_SENT,0"
"COM:REDIRINV_SENT,0"
"COM:BYE_SENT,0"
"COM:CANC_SENT,0"
"COM:CANCINV_SENT,0"
"COM:INV_RCV,0"
"COM:REINV_RCV,0"
"COM:BYE_RCV,0"
"COM:301_MOVEDP,0"
"COM:BYEFNL_RCV,0"
"COM:INV_TOUT,0"
"COM:BYE_TOUT,0"
"COM:301_MOVEDP,0"
"COM:302_MOVEDT,0"
"COM:401_UNAUTH,0"
"COM:402_PAYUPH,0"
"COM:403_FORBID,0"
"COM:404_NOTFND,0"
"COM:405_METHD,0"
"COM:406_NOTACC1,0"
"COM:407_PROXY,0"
"COM:408_TIMEOUT0,0"
"COM:409_CONFLCT,0"
"COM:410_GONE,0"
/* RTRV-PM-SIPMSG */
>
Telica>
```

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:411_LENREQ,0"
"COM:413_ENTLEN,0"
"COM:414_URIEN,0"
"COM:415_MEDIA,0"
"COM:420_BADEXT,0"
"COM:480_TEMPUNV,0"
"COM:483_HOPCNT,0"
"COM:484_ADDRINC,0"
"COM:485_AMBIGUO,0"
"COM:486_BUSYHR,0"
"COM:487_REQTERM,0"
"COM:488_NOTACCH,0"
"COM:500_INTERR,0"
```

```
"COM:501_NOTIMPL,0"
"COM:502_BADGTWY,0"
"COM:503_SERVUNV,0"
"COM:504_GTWYTO,0"
"COM:600_BUSYEV,0"
"COM:603_DECLINE,0"
"COM:604_NOEXIST,0"
"COM:606_NOTACC2,0"
"COM:OTHER,0"
"COM:REFER_SENT,0"
"COM:REFER_RCV,0"
"COM:NOTIFY_SENT,0"
/* RTRV-PM-SIPMSG */
>
Telica>

telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:NOTIFY_RCV,0"
"COM:SUBSCRIBE_SENT,0"
"COM:SUBSCRIBE_RCV,0"
"COM:INFO_SENT,0"
"COM:INFO_RCV,0"
"COM:ANNC_SENT,0"
"COM:ANNC_RCV,0"
/* RTRV-PM-SIPMSG */
;
```

Related Commands: none

NOTES

DLT/ED/ENT/RTRV-MGCP-GW

Commands:

DLT-MGCP-GW: Delete MGCP Gateway

ED-MGCP-GW: Edit MGCP Gateway

ENT-MGCP-GW: Enter MGCP Gateway

RTRV-MGCP-GW: Retrieve MGCP Gateway

Descriptions:

DLT-MGCP-GW lets the user delete an MGCP (Media Gateway Controller Protocol) gateway.

ED-MGCP-GW lets the user change the parameters associated with an MGCP (Media Gateway Controller Protocol) gateway. Use this command to increase the number of available lines associated with the gateway, and to change the gateway name and type, the MGCP variant, the MGCP signaling port, the transaction round-trip timeout values, whether to enable additional logging on MGCP dialogs, the type of action taken when transitioning from IS to OOS, and the primary state of the gateway.

ENT-MGCP-GW lets the user establish the parameters associated with an MGCP (Media Gateway Controller Protocol) gateway. Use this command to establish the gateway name and type, the MGCP variant, the MGCP signaling port, the transaction round-trip timeout values, whether to enable additional logging on MGCP dialogs, the type of action taken when transitioning from IS to OOS, and the primary state of the gateway.

RTRV-MGCP-GW lets the user retrieve the parameters associated with an MGCP (Media Gateway Controller Protocol) gateway, including the gateway name and type, the MGCP variant, the MGCP signaling port, the transaction round-trip timeout values, whether to enable additional logging on MGCP dialogs, the type of action taken when transitioning from IS to OOS, and the primary and secondary states of the gateway.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-MGCP-GW: [TID]:<gatewayaid>:[CTAG];

ED-MGCP-GW: [TID]:<gatewayaid>:[CTAG]::
    [MAXLINE=<maxline>], [NAME=<name>],
    [NAMETYPE=<nametype>], [PROTOCOL=<protocol>],
    [MGCPPORT=<mgcpport>], [RETRYTMO=<retrytmo>],
    [INITRTTMO=<initrttmo>], [MAXRTTMO=<maxrttmo>],
    [PENDINGTMO=<pendingtmo>], [LOGGING=<logging>],
    [AUDITINTERVAL=<auditinterval>],
    [CMDMODE=<cmdmode>], [ENDPTIDENT=<endptident>]:
    [<pst>];

ENT-MGCP-GW: [TID]:<gatewayaid>:[CTAG]::
    MAXLINE=<maxline>, NAME=<name>,
    [NAMETYPE=<nametype>], [PROTOCOL=<protocol>],
    [MGCPPORT=<mgcpport>], [RETRYTMO=<retrytmo>],
    [INITRTTMO=<initrttmo>], [MAXRTTMO=<maxrttmo>],
    [PENDINGTMO=<pendingtmo>], [LOGGING=<logging>],
    [AUDITINTERVAL=<auditinterval>],
    [CMDMODE=<cmdmode>], [ENDPTIDENT=<endptident>]:
    [<pst>];

RTRV-MGCP-GW: [TID]: [<gatewayaid>]: [CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<gatewayId>:MAXLINE=<maxline>,NAME=<name>,
    NAMETYPE=<nametype>,PROTOCOL=<protocol>,
    MGCPPORT=<mgcpport>,RETRYTMO=<retrytmo>,
    INITRTTMO=<initrttmo>,MAXRTTMO=<maxrttmo>,
    PENDINGTMO=<pendingtmo>,LOGGING=<logging>,
    AUDITINTERVAL=<auditinterval>,CMDMODE=<cmdmode>,
    ENDPTIDENT=<endptident>:<pst>,<sst>"
;
```


Parameters:

gatewayaid Identifies the AID as the gateway controlled under the Call Management Server (CMS). A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system retrieves data for all MGCP gateways configured in the system. A range of gateways can be shown (in RTRV) by the beginning and ending numbers separated by two ampersands and a hyphen ("&&-").

Type: integer

Range: {1-100000}

Default value: none

maxline Identifies the number of available lines associated with the gateway.

Type: integer

Range: {1-65536}

Default value: none

name Identifies the name of the gateway, either as a fully qualified domain name, or as an IP address with a range of {0-255}-{0-255}-{0-255}-{0-255}. A fully qualified domain name must be unique and the same on the Plexus 9000, the media gateway (the Internet access device, or IAD) and the domain name server (DNS).

Type: string

Range: up to 32 characters

Default value: none

nametype Identifies the type of name for the gateway.

Type: enum

Range: DYNAMIC = removes the gateway level check; no IP address based authentication is performed on incoming messages from the gateway. Endpoints are matched by the endpoint name in the MGCP message only, and any source IP address/port will be accepted. Specify the value of *name* as an IP address and not as an FQDN.

FQDN = fully qualified domain name

IPV4 = IP v4 address

Default value: FQDN

- protocol** Identifies the variant of MGCP used by the gateway.
- Type:** enum
Range: NCS = Network Call Signaling: used to control telephony-enabled cable modems
MGCP = basic Media Gateway Control Protocol in accordance with IETF RFC 3435
Default value: MGCP
- mgcpport** Identifies the signaling port in the MGCP gateway.
- Type:** integer
Range: {1025-65535}
Default value: 2427
- retrytmo** Identifies the maximum elapsed time, in milliseconds, after which the Plexus 9000 will not reattempt a transaction to the gateway.
- Type:** integer
Range: {3000-50000}, in 100 msec increments
Default value: 30000
- initrttmo** Identifies the estimated elapsed time, in milliseconds, to receive a response from the gateway to a transaction before reattempting the transaction.
- Type:** integer
Range: {200-1000}, in 100 msec increments
Default value: 200
- maxrttmo** Identifies the maximum elapsed time, in milliseconds, to receive a response to a transaction from the gateway before reattempting the transaction.
- Type:** integer
Range: {1000-10000}, in 100 msec increments
Default value: 5000
- pendingtmo** Identifies the maximum elapsed time, in milliseconds, to receive a response to a transaction from the gateway when a RESPONSE PENDING message has been received before reattempting the transaction.
- Type:** integer
Range: {500-2000}, in 100 msec increments
Default value: 1000

logging Identifies whether to enable additional logging on MGCP dialogs.

Type: BoolYN

Range: N = do not enable additional logging
Y = enable additional logging

Default value: N

cmdmode Identifies the type of action taken when transitioning from IS to OOS.

Type: enum

Range: FRCD = Forced mode – tears down connections
NORM = Normal mode

Default value: NORM

auditinterval Identifies the amount of time, in seconds, between audits of the gateway's endpoints by the Call Agent in the Plexus 9000. The Call Agent generates an alarm if the audit indicates that the gateway is unreachable.

Type: integer

Range: {0, 60-3600}

Default value: 0

endptident Identifies the method of validating the endpoint for the gateway. The following table shows the legal combinations and behavior of *nametype* and *endptident*:

<i>nametype</i>	<i>endptident</i> =NAMEIPADDR	<i>endptident</i> =NAMEONLY
IPV4	Same as IPV4 today (no SBC)	Interwork with SBC, SBC identified by IP address, endpoints identified by name only
FQDN	Same as FQDN today (no SBC)	Interwork with SBC, SBC identified by FQDN, endpoints identified by name only
DYNAMIC	Invalid/ Not Allowed	No SBC, support dynamic IP address environment

Specifying NAMEONLY, with or without an SBC (Session Border Controller), puts the remote gateway in “MAC mode”. This means that the MGCP endpoint identifies itself with a locally unique endpoint name plus the gateway MAC address (instead of IP address). For example, an MGCP message could contain this endpoint identifier “aaln/1@ 0800690201FC”. This mode has the advantages of providing a globally unique identification, and providing some measure of device authentication, both independent of using IP addresses. Because IP addresses may be private and/or dynamic, they do not meet the requirements of being both unique and static.

Type: enum

Range: NAMEIPADDR = validate both the MGCP endpoint name and IP address

NAMEONLY = validate the MGCP endpoint name only

Default value: NAMEIPADDR

pst Identifies the primary state of the gateway.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)

Default value: IS

- pst** Identifies (in RTRV output) the primary state, and primary state qualifier, of the gateway.
- Type:** enum
- Range:** IS-NR = In-Service, Normal
IS-RST = In-Service, Reset
OOS-ANR = Out-Of-Service, Abnormal
OOS-AU = Out-Of-Service, Autonomous
OOS-AUMA = Out-Of-Service, Autonomous and Managed
OOS-MA = Out-Of-Service, Managed
OOS-MAANR = Out-Of-Service, Managed and Abnormal
- Default value:** none
- sst** Identifies (in RTRV output) the secondary state of the gateway.
- Type:** enum
- Range:** BLKD = Blocked
BUSY = Busy
IDLE = Idle
INHIP = Inhibit in Progress
INXT = Inconsistent
SGEO = Supporting Entity Outage
TRANS = Transient
UEQ = Unequipped
- Default value:** none

Input Examples:

```
DLT-MGCP-GW::1;  
  
ED-MGCP-GW::1:::MAXLINE=2, NAME=MediaGatewayHost1,  
  NAMETYPE=FQDN, PROTOCOL=MGCP, MGCPPORT=2427,  
  RETRYTMO=30000, INITRTTMO=200, MAXRTTMO=5000,  
  PENDINGTMO=1000, LOGGING=N, AUDITINTERVAL=0,  
  CMDMODE=NORM, ENDPTIDENT=NAMEIPADDR:IS;  
  
ENT-MGCP-GW::1:::MAXLINE=2, NAME=MediaGatewayHost1,  
  NAMETYPE=FQDN, PROTOCOL=MGCP, MGCPPORT=2427,  
  RETRYTMO=30000, INITRTTMO=200, MAXRTTMO=5000,  
  PENDINGTMO=1000, LOGGING=N, AUDITINTERVAL=0,  
  CMDMODE=NORM, ENDPTIDENT=NAMEIPADDR:IS;  
  
RTRV-MGCP-GW::1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:MAXLINE=2,NAME=MediaGatewayHost1,NAMETYPE=FQDN,
  PROTOCOL=MGCP,MGCPPORT=2427,RETRYTMO=30000,
  INITRTTMO=200,MAXRTTMO=5000,PENDINGTMO=1000,
  LOGGING=Y,AUDITINTERVAL=0,CMDMODE=FRCD,
  ENDPTIDENT=NAMEIPADDR:IS-NR,IDLE"
;
```

Related Commands:

RTRV-STATUS-MGCPGW

DLT/ED/ENT/RTRV-MGCP-LINE

Commands:

DLT-MGCP-LINE: Delete MGCP Line

ED-MGCP-LINE: Edit MGCP Line

ENT-MGCP-LINE: Enter MGCP Line

RTRV-MGCP-LINE: Retrieve MGCP Line

Descriptions:

DLT-MGCP-LINE lets the user delete a line (i.e., endpoint) in a line group on an MGCP (Media Gateway Controller Protocol) gateway.

ED-MGCP-LINE lets the user change the parameters associated with a line (i.e., endpoint) in a line group on an MGCP (Media Gateway Controller Protocol) gateway. Use this command to change the endpoint's associated line group, name, type, type of action taken when transitioning from IS to OOS, and primary state.

ENT-MGCP-LINE lets the user establish the parameters associated with a line (i.e., endpoint) in a line group on an MGCP (Media Gateway Controller Protocol) gateway. Use this command to establish the endpoint's associated line group, name, type, type of action taken when transitioning from IS to OOS, and primary state.

RTRV-MGCP-LINE lets the user retrieve the parameters associated with a line (i.e., endpoint) in a line group on an MGCP (Media Gateway Controller Protocol) gateway, including the endpoint's associated line group, name, type of action taken when transitioning from IS to OOS, and the primary and secondary states.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-MGCP-LINE: [TID]:<mgcpLineId>:[CTAG];

ED-MGCP-LINE: [TID]:<mgcpLineId>:[CTAG]::
[MGCPLNGRPID=<mgcpIngrpId>],
[ENDPTNAME=<endptname>], [NAME=<name>],
[LINETYPE=<linetype>], [CMDMODE=<cmdmode>]: [<pst>];

```
ENT-MGCP-LINE:[TID]:<mgcplineid>:[CTAG]::
  MGCPNLNGRPID=<mgcplngrpid>,ENDPTNAME=<endptname>,
  [NAME=<name>],[LINETYPE=<linetype>],
  [CMDMODE=<cmdmode>]:[<pst>];

RTRV-MGCP-LINE::1-1;
```

Output Format:

```
      SID  DATE  TIME
M  CTAG  COMPLD
    "<mgcplineid>;MGCPNLNGRPID=<mgcplngrpid>,
      ENDPTNAME=<endptname>,NAME=<name>,
      LINETYPE=<linetype>,CMDMODE=<cmdmode>:<pst>,
      <sst>"
;
```

Parameters:

mgcpLineId Identifies the AID as a line (i.e., endpoint) in an MGCP gateway. The pattern is a combination of a gateway controlled under the Call Management Server (CMS) and the affected endpoint. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system retrieves data for all endpoints on all MGCP gateways configured in the system. A null value for the second part of the AID (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system retrieves data for all endpoints on the specified MGCP gateway. A range of endpoints can be shown (in RTRV) by the beginning and ending numbers separated by two ampersands and a hyphen ("&&-").

Type: MgcplineAid

Range: <gatewayId>-<lineId>, where
gatewayId = {1-100000} and
lineId = {1-65536}

Default value: none

mgcplngrpid Identifies the line group as a logical interface number associated with a set of lines (endpoints).

Type: integer

Range: {1-100000}

Default value: none

endptname Identifies the name of the endpoint, which distinguishes the line for use by the protocol, and must be both unique and the same on the Plexus 9000 and the media gateway. Endpoints can be represented as a fully-qualified domain name (for example, “aaln/1”), a MAC address (for example, “aaln/1@0800690201FC”), or an IP address (for example, “aaln/1@[127.0.0.1]”).

Type: string

Range: up to 32 characters (including “@”, “[”, and “]”)

Default value: none

name Identifies a description (or remarks) for the endpoint.

Type: string

Range: up to eight characters

Default value: NULL

linetype Identifies the type of endpoint. Only the value “AALN” is supported currently.

Type: enum

Range: AALN = Analog Access Line endpoint

ANN = Announcement server endpoint

CNF = Conference server endpoint

DS = Digital channel endpoint

Default value: AALN

cmdmode Identifies the type of action taken when transitioning from IS to OOS.

Type: enum

Range: FRCD = Forced mode – tears down connections

NORM = Normal mode

Default value: NORM

pst Identifies the primary state of the endpoint.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service
for Management)

Default value: IS

- pst** Identifies (in RTRV output) the primary state, and primary state qualifier, of the endpoint.
Type: enum
Range: IS-NR = In-Service, Normal
IS-RST = In-Service, Reset
OOS-ANR = Out-Of-Service, Abnormal
OOS-AU = Out-Of-Service, Autonomous
OOS-AUMA = Out-Of-Service, Autonomous and Managed
OOS-MA = Out-Of-Service, Managed
OOS-MAANR = Out-Of-Service, Managed and Abnormal
Default value: none
- sst** Identifies (in RTRV output) the secondary state of the endpoint.
Range: BLKD = Blocked
BUSY = Busy
IDLE = Idle
INHIP = Inhibit in Progress
INXT = Inconsistent
SGEO = Supporting Entity Outage
TRANS = Transient
UEQ = Unequipped
Default value: none

Input Examples:

```
DLT-MGCP-LINE::1-1;  
ED-MGCP-LINE::1-1:::MGCPNLNGRPID=1,ENDPTNAME=aa ln/S1,  
NAME=NULL,LINETYPE=AALN,CMDMODE=NORM:IS;  
ENT-MGCP-LINE::1-1:::MGCPNLNGRPID=1,ENDPTNAME=aa ln/S1,  
NAME=NULL,LINETYPE=AALN,CMDMODE=NORM:IS;  
RTRV-MGCP-LINE::1-1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1-1:MGCPNLNGRPID=1,ENDPTNAME=aa ln/S1,NAME=NULL,  
LINETYPE=AALN,CMDMODE=NORM:IS-NR,IDLE"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-MGCP-LNGRP

Commands:

DLT-MGCP-LNGRP: Delete MGCP Line Group

ED-MGCP-LNGRP: Edit MGCP Line Group

ENT-MGCP-LNGRP: Enter MGCP Line Group

RTRV-MGCP-LNGRP: Retrieve MGCP Line Group

Descriptions:

DLT-MGCP-LNGRP lets the user delete an MGCP (Media Gateway Controller Protocol) line group.

ED-MGCP-LNGRP lets the user change the parameters associated with a line group on an MGCP (Media Gateway Controller Protocol) gateway. Use this command to change the line group's name, method by which lines are allocated, amount of echo cancellation (echo tail) for outgoing calls, whether echo cancellation processing is required, the SDP profile, the type of action taken when transitioning from IS to OOS, and the primary state.

ENT-MGCP-LNGRP lets the user establish the parameters associated with a line group on an MGCP (Media Gateway Controller Protocol) gateway. Use this command to establish the line group's name, method by which lines are allocated, amount of echo cancellation (echo tail) for outgoing calls, whether echo cancellation processing is required, the SDP profile, the type of action taken when transitioning from IS to OOS, and the primary state.

RTRV-MGCP-LNGRP lets the user retrieve the parameters associated with a line group on an MGCP (Media Gateway Controller Protocol) gateway, including the line group's name, method by which lines are allocated, amount of echo cancellation (echo tail) for outgoing calls, whether echo cancellation processing is required, the SDP profile, the type of action taken when transitioning from IS to OOS, and the primary and secondary states.

Category: Signaling

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-MGCP-LNGRP:[TID]:<mgcplngrpid>:[CTAG];
ED-MGCP-LNGRP:[TID]:<mgcplngrpid>:[CTAG]::
    [NAME=<name>],[HUNTING=<hunting>],
    [ECHOCTRL=<echocntrl>],[LONGDELAY=<longdelay>],
    [SDPPRFL=<sdpprfl>],[CMDMODE=<cmdmode>]:[<pst>];
ENT-MGCP-LNGRP:[TID]:<mgcplngrpid>:[CTAG]::
    [NAME=<name>],[HUNTING=<hunting>],
    [ECHOCTRL=<echocntrl>],[LONGDELAY=<longdelay>],
    [SDPPRFL=<sdpprfl>],[CMDMODE=<cmdmode>]:[<pst>];
RTRV-MGCP-LNGRP:[TID]:[<mgcplngrpid>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
    "<mgcplineid>:NAME=<name>,HUNTING=<hunting>,
    ECHOCTRL=<echocntrl>,LONGDELAY=<longdelay>,
    SDPPRFL=<sdpprfl>,CMDMODE=<cmdmode>:<pst>,<sst>"
;
```

Parameters:

mgcplnGrpId Identifies the AID as an MGCP line group; that is, a logical interface number associated with a set of MGCP lines (endpoints). A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system retrieves data for all MGCP line groups configured in the system. A range of line groups can be shown (in RTRV) by the beginning and ending numbers separated by two ampersands and a hyphen ("&&-").

Type: integer

Range: {1-100000}

Default value: none

name Identifies a description (or remarks) for the line group.

Type: string

Range: up to eight characters

Default value: NULL

hunting Identifies the method by which lines are allocated.

Type: enum

Range: ASCENDING = Allocates the lowest numbered available endpoint in a numbered list of endpoints.
CIRCULAR = Allocates the next free endpoint, in ascending order, following the last endpoint selected.
DESCENDING = Allocates the highest numbered available endpoint in a numbered list of endpoints.
RANDOM = Allocates the next free channel, in ascending order, based on a random entry into a numbered list of resources. After the first allocation from that numbered list of resources, subsequent attempts to find a free resource use the circular method.

Default value: CIRCULAR

echocntrl Identifies the amount, in milliseconds, of echo cancellation for outgoing calls.

Type: integer

Range: {0-128}

Default value: 0

longdelay Identifies whether echo cancellation processing is required because of a long delay (echo tail).

Type: BoolYN

Range: N = echo processing is off (for short-haul; i.e., less than 15 msec propagation delay)
Y = echo processing is on (for long-haul)

Default value: Y

sdpprfl Identifies the SDP profile, comprising the preferred codec, packet time and silence suppression mode.

Type: integer

Range: {1-255}

Default value: 1

cmdmode Identifies the type of action taken when transitioning from IS to OOS.

Type: enum

Range: FRCD = Forced mode – tears down connections
NORM = Normal mode

Default value: NORM

- pst** Identifies the primary state of the line group.
Type: enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS
- pst** Identifies (in RTRV output) the primary state, and primary state qualifier, of the line group.
Type: enum
Range: IS-NR = In-Service, Normal
IS-RST = In-Service, Reset
OOS-ANR = Out-Of-Service, Abnormal
OOS-AU = Out-Of-Service, Autonomous
OOS-AUMA = Out-Of-Service, Autonomous and Managed
OOS-MA = Out-Of-Service, Managed
OOS-MAANR = Out-Of-Service, Managed and Abnormal
Default value: none
- sst** Identifies (in RTRV output) the secondary state of the line group.
Range: BLKD = Blocked
BUSY = Busy
IDLE = Idle
INHIP = Inhibit in Progress
INXT = Inconsistent
SGEO = Supporting Entity Outage
TRANS = Transient
UEQ = Unequipped
Default value: none

Input Examples:

```
DLT-MGCP-LNGRP::1;  
ED-MGCP-LNGRP::1:::NAME=NULL,HUNTING=CIRCULAR,  
ECHOCTRL=0, LONGDELAY=Y, SDPPRFL=1, CMDMODE=NORM:IS;  
ENT-MGCP-LNGRP::1:::HUNTING=CIRCULAR,ECHOCTRL=0,  
LONGDELAY=Y, SDPPRFL=1, CMDMODE=NORM:IS;  
RTRV-MGCP-LNGRP::1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
    "1:NAME=NULL,ENDPTNAME=NULL,HUNTING=CIRCULAR,
      ECHOCNTRL=0, LONGDELAY=Y, SDPPRFL=1, CMDMODE=NORM:
      IS-NR, IDLE"
;
```

Related Commands: none

ED/RTRV-MGCP-SYS

Commands:

ED-MGCP-SYS: Edit MGCP System

RTRV-MGCP-SYS: Retrieve MGCP System

Descriptions:

ED-MGCP-SYS lets the user change the signaling port number for MGCP (Media Gateway Controller Protocol) within the Plexus 9000.

RTRV-MGCP-SYS lets the user retrieve signaling port number for MGCP (Media Gateway Controller Protocol) within the Plexus 9000.

Category: Signaling

Security: SA for ED, View for RTRV

Input Formats:

ED-MGCP-SYS: [TID]: [<src>]: [CTAG]: : [PORT=<port>];

RTRV-MGCP-SYS: [TID]: [<src>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:PORT=<port>"
;
```

Parameters:

src Identifies the AID as the Plexus 9000.

Type: COM

Range: COM

Default value: COM

port Identifies the receive signaling port for the MGCS system, which must be the same on all media gateways controlled by the Plexus 9000. A null value means no change to the current value. The factory default is "2727".

Type: integer

Range: {1025-65535}

Default value: not applicable

Input Examples:

```
ED-MGCP-SYS:::::PORT=2727;  
RTRV-MGCP-SYS;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:PORT=2727"  
;
```

Related Commands: none

INIT-MGCP-LINE

Command:

INIT-MGCP-LINE: Initialize MGCP Line

Description:

INIT-MGCP-LINE lets the user initialize (reset) a line (i.e., endpoint) on an MGCP (Media Gateway Controller Protocol) gateway.

Category: Signaling

Security: SA

Input Format:

INIT-MGCP-LINE:[TID]:<mgcpLineid>:[CTAG];

Output Format: none

Parameters:

mgcpLineid Identifies the AID as a line (i.e., endpoint) in an MGCP gateway. The pattern is a combination of a gateway controlled under the Call Management Server (CMS) and the affected endpoint.

Type: MgcplLineAid

Range: <gatewayId>-<lineId>, where
gatewayId = {1-100000} and
lineId = {1-65536}

Default value: none

Input Example:

INIT-MGCP-LINE::1-1;

Related Commands: none

INIT-REG-MGCPMSG / RTRV-PM-MGCPMSG

Commands:

INIT-REG-MGCPMSG: Initialize Register MGCP Message

RTRV-PM-MGCPMSG: Retrieve Performance Monitors MGCP Message

Descriptions:

INIT-REG-MGCPMSG lets the user initialize one or more storage registers or event counters for MGCP (Media Gateway Controller Protocol) message statistics.

RTRV-PM-MGCPMSG lets the user retrieve current and historical performance data related to MGCP (Media Gateway Controller Protocol) messages.

Category: Signaling

Security: NSA for INIT-REG, View for RTRV-PM

Input Formats:

```
INIT-REG-MGCPMSG: [TID]: [<src>]: [CTAG]: [<montype>],  
[<monval>], [<locn>], [<dirn>], [<tmper>], [<mondatt>],  
[<montm>];
```

```
RTRV-PM-MGCPMSG: [TID]: [<src>]: [CTAG]: [<montype>],  
[<monlev>], [<locn>], [<dirn>], [<tmper>], [<mondatt>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<src>:<montype>,<monval>,<vldty>,<locn>,<dirn>,<tmper>,<mondatt>,<montm>"  
;
```

Parameters:

src Identifies the AID as the Plexus 9000.

Type: COM

Range: COM

Default value: COM

montype Identifies a type of monitored parameter for MGCP messages.

Type: enum

Range: 100-PENDING-RX = Pending: the number of received messages that a transaction is currently in process.
100-PENDING-TX = Pending: the number of transmitted messages that a transaction is currently in process.
101-QUEUED-RX = Pending: the number of received messages that a transaction is currently waiting.
101-PENDING-TX = Pending: the number of transmitted messages that a transaction is currently waiting.
200-OK-RX = OK: the number of received messages indicating normal completion of a transaction.
200-OK-TX = OK: the number of transmitted messages indicating normal completion of a transaction.
250-CONNDEL-RX = Connection Deleted: the number of received messages indicating that a connection has been successfully deleted.
250-CONNDEL-TX = Connection Deleted: the number of transmitted messages indicating that a connection has been successfully deleted.
400-TRANSERROR-RX = Transient Error: the number of received messages indicating the specified transaction could not be executed due to an unspecified transient error.
400-TRANSERROR-TX = Transient Error: the number of transmitted messages indicating the specified transaction could not be executed due to an unspecified transient error.
401-OFFHOOK = Off Hook: the number of messages sent from a gateway to the Plexus 9000 indicating that the phone is already off-hook, typically in response to an RQNT (Request Notification) message for off-hook.
402-ONHOOK = On Hook: the number of messages sent from a gateway to the Plexus 9000 indicating that the phone is already on-hook, typically in response to an RQNT (Request Notification) message for on-hook.
403-NORESOURCES-RX = No Resources: the number of received messages indicating the specified transaction could not be executed due to inadequate resources.
403-NORESOURCES-TX = No Resources: the number of transmitted messages indicating the specified transaction could not be executed due to inadequate resources.
404-NOBANDWIDTH-RX = No Bandwidth: the number of received messages indicating the specified transaction could not be executed due to inadequate bandwidth.

- 404-NOBANDWIDTH-TX = No Bandwidth: the number of transmitted messages indicating the specified transaction could not be executed due to inadequate bandwidth.
- 405-ENDPTRESTARTING = Endpoint Restarting: the number of messages sent from a gateway to the Plexus 9000 indicating the specified transaction could not be executed because the endpoint (line) is restarting.
- 406-TRANSTIMEOUT-RX = Transaction Timeout: the number of received messages indicating that a transaction did not complete in a specified period of time and has been aborted.
- 406-TRANSTIMEOUT-TX = Transaction Timeout: the number of transmitted messages indicating that a transaction did not complete in a specified period of time and has been aborted.
- 407-TRANSABORT-RX = Transaction Timeout: the number of received messages indicating that a transaction was aborted due to an external event, such as receipt of a DLCX (Delete Connection) message.
- 407-TRANSABORT-TX = Transaction Timeout: the number of transmitted messages indicating that a transaction was aborted due to an external event, such as receipt of a DLCX (Delete Connection) message.
- 409-OVERLOAD-RX = Overload: the number of received messages indicating that a transaction did not complete due to internal overload.
- 409-OVERLOAD-TX = Overload: the number of transmitted messages indicating that a transaction did not complete due to internal overload.
- 410-ENDPTNOTAVAIL = Endpoint Not Available: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed because no endpoint was available to satisfy a valid “any of” request.
- 500-ENDPTUNKNOWN-RX = Endpoint Unknown: the number of received messages indicating that a transaction could not be executed because the endpoint is unknown.
- 500-ENDPTUNKNOWN-TX = Endpoint Unknown: the number of transmitted messages indicating that a transaction could not be executed because the endpoint is unknown.
- 501-ENDPTNOTREADY-RX = Endpoint Not Ready: the number of received messages indicating that a transaction could not be executed because the endpoint is not ready.

- 501-ENDPTNOTREADY-TX = Endpoint Not Ready: the number of transmitted messages indicating that a transaction could not be executed because the endpoint is not ready.
- 502-ENDPTNORESOURCE = Endpoint No Resource: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed because the endpoint does not have sufficient resources.
- 503-WILDCARD-RX = Wildcard: the number of received messages indicating that a transaction could not be executed because the “all of” wildcard was too complicated.
- 503-WILDCARD-TX = Wildcard: the number of transmitted messages indicating that a transaction could not be executed because the “all of” wildcard was too complicated.
- 504-CMDNOTSUPP-RX = Command Not Supported: the number of received messages indicating that a transaction could not be executed because the command was not supported.
- 504-CMDNOTSUPP-TX = Command Not Supported: the number of transmitted messages indicating that a transaction could not be executed because the command was not supported.
- 505-REMCXDSCNOTSUPP = Remote Connection Descriptor Not Supported: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed because one or more mandatory parameters in the Remote Connection Description message are not supported.
- 506-LCLCXOPTCONFLICT = Local Connection Options Conflict: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed because of conflicting parameters in the Local Connection Options and Remote Connection Descriptor messages.
- 507-GENNOTSUPP-RX = Generation Not Supported: the number of received messages indicating that a transaction could not be executed because it contained unsupported functionality.
- 507-GENNOTSUPP-TX = Generation Not Supported: the number of transmitted messages indicating that a transaction could not be executed because it contained unsupported functionality.

- 508-QUARNOTSUPP = Quarantine Not Supported: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed because the quarantine handling was unknown or unsupported.
- 509-REMCXDSCERROR = Remote Connection Descriptor Error: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed because there was a syntax or other error in the Remote Connection Description message.
- 510-PROTERROR-RX = Protocol Error: the number of received messages indicating that a transaction could not be executed because a protocol error was detected.
- 510-PROTERROR-TX = Protocol Error: the number of transmitted messages indicating that a transaction could not be executed because a protocol error was detected.
- 511-EXTUNKNOWN-RX = Extension Unknown: the number of received messages indicating that a transaction could not be executed because it contained an unrecognized extension.
- 511-EXTUNKNOWN-TX = Extension Unknown: the number of transmitted messages indicating that a transaction could not be executed because it contained an unrecognized extension.
- 512-EVENTNOTSUPP = Event Not Supported: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed because the gateway is not equipped to detect one of the requested events.
- 513-SIGNALNOTSUPP = Signal Not Supported: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed because the gateway is not equipped to generate one of the requested signals.
- 514-ANNCNOTSUPP = Announcement Not Supported: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed because the gateway cannot send the specified announcement.
- 515-CONNIDINVAL-RX = Connection ID Invalid: the number of received messages indicating that a transaction could not be executed because it refers to an invalid connection ID (may have been deleted).

- 515-CONNIDINVAL-TX = Connection ID Invalid: the number of transmitted messages indicating that a transaction could not be executed because it refers to an invalid connection ID (may have been deleted).
- 516-CALLIDUNKNOWN-RX = Call ID Unknown: the number of received messages indicating that a transaction could not be executed because it refers to an unknown call ID.
- 516-CALLIDUNKNOWN-TX = Call ID Unknown: the number of transmitted messages indicating that a transaction could not be executed because it refers to an unknown call ID.
- 517-MODENOTSUPP = Mode Not Supported: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed because it refers to an unsupported or invalid mode.
- 518-PKGNOTSUPP-RX = Package Not Supported: the number of received messages indicating that a transaction contained a reference to an unknown or unsupported package.
- 518-PKGNOTSUPP-TX = Package Not Supported: the number of transmitted messages indicating that a transaction contained a reference to an unknown or unsupported package.
- 519-NODIGITMAP = No Digit Map: the number of messages sent from a gateway to the Plexus 9000 indicating that the endpoint does not have a digit map, typically in response to an RQNT (Request Notification) message from the Plexus 9000 to accumulate digits according to a digit map that is not provided in the RQNT message.
- 520-ENDPTRESTARTING = Endpoint Restarting: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed because the endpoint is restarting.
- 521-ENDPTREDIR = Endpoint Redirected: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction was ignored because the endpoint has been redirected to another call agent.
- 522-EVSIGINVAL-RX = Event Signal Invalid: the number of received messages indicating that a transaction contained a reference to a package that is unknown or unsupported.

- 522-EVSIGINVAL-TX = Event Signal Invalid: the number of transmitted messages indicating that a transaction contained a reference to a package that is unknown or unsupported.
- 523-ACTIONINVAL = Action Invalid: the number of messages sent from a gateway to the Plexus 9000 indicating that a transaction could not be executed due to an unknown action or combination of actions.
- 524-LCLCXOPTINXT = Local Connection Options Inconsistent: the number of messages sent from a gateway to the Plexus 9000 indicating that a CRCX (Create Connection) or MDCX (Modify Connection) transaction could not be executed because of an internal inconsistency in the Local Connection Options message.
- 525-LCLCXOPTTEXTUNKNOWN = Local Connection Options Extension Unknown: the number of messages sent from a gateway to the Plexus 9000 indicating that a CRCX (Create Connection) or MDCX (Modify Connection) transaction could not be executed because of an unknown extension in the Local Connection Options message.
- 526-NOBANDWIDTH-RX = No Bandwidth: the number of received messages indicating that a transaction could not be executed due to insufficient bandwidth.
- 526-NOBANDWIDTH-TX = No Bandwidth: the number of transmitted messages indicating that a transaction could not be executed due to insufficient bandwidth.
- 527-NOREMCXDSC = No Remote Connection Descriptor: the number of messages sent from a gateway to the Plexus 9000 indicating that a CRCX (Create Connection) or MDCX (Modify Connection) transaction could not be executed because no Remote Connection Descriptor message has been provided.
- 528-PROTVERSIONINCOMPAT-RX = Protocol Version Incompatibility: the number of received messages indicating that a transaction could not be executed because a protocol version incompatibility was detected.
- 528-PROTVERSIONINCOMPAT-TX = Protocol Version Incompatibility: the number of transmitted messages indicating that a transaction could not be executed because a protocol version incompatibility was detected.
- 529-HWFAILURE-RX = Hardware Failure: the number of received messages indicating that a transaction could not be executed due to an internal hardware failure.

- 529-HWFAILURE-TX = Hardware Failure: the number of transmitted messages indicating that a transaction could not be executed due to an internal hardware failure.
- 530-CASSIGERROR-RX = CAS Signaling Error: the number of received messages indicating that a transaction could not be executed due to a CAS signaling protocol error.
- 530-CASSIGERROR-TX = CAS Signaling Error: the number of transmitted messages indicating that a transaction could not be executed due to a CAS signaling protocol error.
- 531-TKGRPFAILURE-RX = Trunk Group Failure: the number of received messages indicating that a transaction could not be executed due to a trunk group facility failure.
- 531-TKGRPFAILURE-TX = Trunk Group Failure: the number of transmitted messages indicating that a transaction could not be executed due to a trunk group facility failure.
- 532-LCLCXOPTVALNOTSUPP = Local Connection Options Value Not Supported: the number of messages sent from a gateway to the Plexus 9000 indicating that a CRCX (Create Connection) or MDCX (Modify Connection) transaction could not be executed because of an unsupported value in the Local Connection Options message.
- 533-RESPTOOBIG-RX = Response Too Big: the number of received messages indicating that a transaction could not be executed because the response was too large.
- 533-RESPTOOBIG-TX = Response Too Big: the number of transmitted messages indicating that a transaction could not be executed because the response was too large.
- 534-CODECNEGFAIL-RX = Codec Negotiation Failure: the number of received messages indicating that a transaction could not be executed because of codec negotiation failure.
- 534-CODECNEGFAIL-TX = Codec Negotiation Failure: the number of transmitted messages indicating that a transaction could not be executed because of codec negotiation failure.
- 535-PTIMENOTSUPP-RX = Packetization Time Not Supported: the number of received messages indicating that a transaction could not be executed because the packetization period is not supported.

535-PTIMENOTSUPP-TX = Packetization Time Not

Supported: the number of transmitted messages indicating that a transaction could not be executed because the packetization period is not supported.

536-RESTARTMETHODNOTSUPP = Restart Method Not

Supported: the number of messages sent from the Plexus 9000 to a gateway indicating that a transaction could not be executed because it contained an unknown or unsupported restart method.

537-DIGITMAPEXTNOTSUPP = Digit Map Extension Not

Supported: the number of messages sent from the Plexus 9000 to a gateway indicating that a transaction could not be executed because it contained an unknown or unsupported digit map extension.

538-EVSIGERROR-RX = Event or Signal Error: the number of received messages indicating that a transaction could not be executed because there was an error in an event or signal parameter.

538-EVSIGERROR-TX = Event or Signal Error: the number of transmitted messages indicating that a transaction could not be executed because there was an error in an event or signal parameter.

539-PARAMNOTSUPP-RX = Parameter Not Supported: the number of received messages indicating that a transaction could not be executed because a parameter other than a package or vendor extension is not supported.

539-PARAMNOTSUPP-TX = Parameter Not Supported: the number of transmitted messages indicating that a transaction could not be executed because a parameter other than a package or vendor extension is not supported.

540-ENDPTCXLIMIT-RX = Endpoint Connection Limit: the number of received messages indicating that a transaction could not be executed because the endpoint connection limit has been exceeded.

540-ENDPTCXLIMIT-TX = Endpoint Connection Limit: the number of transmitted messages indicating that a transaction could not be executed because the endpoint connection limit has been exceeded.

541-LCLCXOPTNOTSUPP = Local Connection Options

Inconsistent: the number of messages sent from a gateway to the Plexus 9000 indicating that a CRCX (Create Connection) or MDCX (Modify Connection) transaction could not be executed because of an invalid or unsupported Local Connection Options message.

ALL = All monitored parameters

AUCX = Audit Connection: the number of AuditEndpoint messages sent by the Plexus 9000 to gateways to request information on specific connections established on their endpoints. These messages are optional from a call-processing point of view.

AUEP = Audit Endpoint: the number of AuditEndpoint messages sent by the Plexus 9000 to gateways to request information on capabilities of their endpoints. These messages are optional from a call-processing point of view.

CRCX = Create Connection: the number of CreateConnection messages sent by the Plexus 9000 to gateways to create connections on endpoints managed by that gateway.

DLCX = Delete Connection: the number of DeleteConnection messages that can be sent to or from the Plexus 9000. Typically, DLCX messages are sent by the Plexus 9000 to gateways to tear down existing connections on endpoints managed by that gateway.

MDCX = Modify Connection: the number of ModifyConnection messages sent by the Plexus 9000 to gateways to modify existing connections on endpoints managed by that gateway.

MGCP TERMS = MGCP Terminations: the number of existing standing calls; i.e., the number of current active calls on MGCP connections.

NTFYDIGITS = Notify Digits: the number of messages sent by gateways to the Plexus 9000 to indicate that digits have been collected (typically, accumulated according to a digit map provided by the Plexus 9000).

NTFYOFFHOOK = Notify Off Hook: the number of messages sent by gateways to the Plexus 9000 to indicate that a phone managed by that gateway has gone off-hook.

NTFYONHOOK = Notify On Hook: the number of messages sent by gateways to the Plexus 9000 to indicate that a phone managed by that gateway has gone on-hook.

NTFYOTHER = Notify Other: the number of all other notification messages, which report any event for which the Plexus 9000 has requested notification.

RETRANSMITS = Retransmits: the number of retransmitted messages that the Plexus 9000 has sent to gateways due to failures of previous attempts to send the message. A high or fast-growing value indicates potential network problems.

RQNT = Request Notification: the number of RequestNotification messages sent by the Plexus 9000 to gateways.

RSIPOTHER = Restart In Progress – Other: the number of RestartInProgress messages received by the Plexus 9000 from gateways – including forced, disconnect, graceful and cancel-graceful RSIP messages

RSIPRESTART = Restart In Progress – Restart: the number of RestartInProgress-Restart messages received by the Plexus 9000 from gateways.

TIMEOUTS = Timeouts: the number of message or transaction timeouts; i.e., messages of any type that the Plexus 9000 has attempted to send to a gateway but has not received a response after a number of retransmit attempts. A high or fast-growing value indicates potential network problems.

Default value: ALL

monval Identifies the monitored value as either the value to which the register identified by *montype* is to be initialized (for INIT-REG), or (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates. This parameter is presently not supported; leave it blank.

Type: integer

Range: {0-2147483647}

Default value: 0

monlev Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

vldty Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be "NULL".

Type: enum

Range: ADJ = Data manually adjusted or initialized

COMPL = Data accumulated over the entire time period

LONG = Data accumulated over greater than the entire time period

NA = Data not available

PRTL = Data accumulated over a portion of the time period

Default value: not applicable for output

- locn** Identifies the location of the storage counters to be initialized. This parameter is presently not supported; leave it blank.
Type: Location
Range: FEND = Far end
 NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the Plexus 9000. This parameter is presently not supported; leave it blank.
Type: Direction
Range: BTH = Both directions
 RCV = Receive direction only
 TRMT = Transmit direction only
Default value: BTH
- tmper** Identifies the accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods. This parameter is presently not supported; leave it blank.
Type: TimePeriod
Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: both 15-MIN and 24-HR
- mondat** Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.
Type: MonitoredDate
Range: {1-12}-{1-31}
Default value: current date
- montm** Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.
Type: MonitoredTime
Range: {0-23}-{0-59}
Default value: current time

Input Examples:

```
INIT-REG-MGCPMSG;  
RTRV-PM-MGCPMSG;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:MGCP TERMS,10000"  
"COM:CRCX,99999"  
;
```

Related Commands: none

RTRV-STATUS-MGCPGW

Command:

RTRV-STATUS-MGCPGW: Retrieve Status MGCP Gateway

Description:

RTRV-STATUS-MGCPGW lets the user retrieve the IP address of an MGCP (Media Gateway Controller Protocol) gateway when the gateway has been provisioned by its fully qualified domain name (the value of the parameter nametype in ENT-MGCP-GW is "FQDN").

Category: Signaling

Security: View

Input Format:

RTRV-STATUS-MGCPGW: [TID]:<gatewayId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<gatewayId>:[IPADDR=<ipaddr>]"
;
```

Parameters:

gatewayId Identifies the AID as the gateway controlled under the Call Management Server (CMS).

Type: integer

Range: {1-100000}

Default value: none

ipAddr Identifies the IP address for the MGCP gateway.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

Input Example:

RTRV-STATUS-MGCPGW: :1;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"1:IPADDR=110.13.116.126"
;
```

Related Commands:

DLT/ED/ENT/RTRV-MGCP-GW

NOTES

DLT/ED/ENT/RTRV-AUDIO-ANNC

Commands:

DLT-AUDIO-ANNC: Delete Audio Announcement
ED-AUDIO-ANNC: Edit Audio Announcement
ENT-AUDIO-ANNC: Enter Audio Announcement
RTRV-AUDIO-ANNC: Retrieve Audio Announcement

Descriptions:

DLT-AUDIO-ANNC lets the user delete an audio announcement.

ED-AUDIO-ANNC lets the user edit the parameters associated with an audio announcement.

ENT-AUDIO-ANNC lets the user establish an audio announcement.

RTRV-AUDIO-ANNC lets the user retrieve parameters associated with an audio announcement.

Category: Resource Provisioning **Security:** NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-AUDIO-ANNC: [TID]:<AnnouncementId>:[CTAG];  
ED-AUDIO-ANNC: [TID]:<AnnouncementId>:[CTAG]::  
    [NAME=<Name>],[DESC=<Description>],  
    [MSGLIST=<MsgList>],[RPTCNT=<RepeatCnt>];  
ENT-AUDIO-ANNC: [TID]:<AnnouncementId>:[CTAG]::  
    NAME=<Name>,[DESC=<Description>],[MSGLIST=<MsgList>],  
    [RPTCNT=<RepeatCnt>];  
RTRV-AUDIO-ANNC: [TID]: [<AnnouncementId>]: [CTAG];
```

Output Format:

```
    SID DATE TIME  
M   CTAG COMPLD  
    "<AnnouncementId>:[NAME=<Name>],  
    [DESCR=<Description>],[MSGLIST=<MsgList>],  
    RPTCNT=<RepeatCnt>"  
    ;
```

Parameters:

AnnouncementId Identifies the AID as an audio announcement. You cannot establish, change, or delete announcements 1-2999; they are already-configured standard announcements. Identifiers 3000-32766 are for user-supplied custom announcements. A null value (in RTRV) is equivalent to “ALL”; that is, by leaving the field blank, attributes for all audio announcements configured in the system will be returned.

Type: AnnouncementId

Range: {1-32766}

Default value: none

Name Identifies the name of the audio announcement.

Type: string

Range: up to 40 alphanumeric characters (including underscores “_”)

Default value: none

Description Identifies the description of the audio announcement.

Type: string

Range: up to 80 alphanumeric characters (including underscores “_”)

Default value: none

MsgList Identifies the messages comprising the announcement in play order. Messages are identified by instances of *AudioMsgAid*, as established by ENT-AUDIO-MSG, separated by dashes (“-”).

Type: string

Range: up to 80 alphanumeric characters (including underscores “_”)

Default value: none

RepeatCnt Identifies the number of times to repeat the audio announcement. A value of “0” indicates continuous repetition. This parameter is not supported presently; leave it blank

Type: integer

Range: {0-999}

Default value: 1

Input Examples:

```
DLT-AUDIO-ANNC::3001;  
ED-AUDIO-ANNC::3001:::NAME=AUDIO1,DESC=AUDIOFILE1,  
    MSGLIST=100-110;  
ENT-AUDIO-ANNC::3001:::NAME=AUDIO1,DESC=AUDIOFILE1,  
    MSGLIST=100-110;  
RTRV-AUDIO-ANNC::3001;
```

Output Example:

```
telica 2003-11-10 14:37:49  
M 0 COMPLD  
    "3001:NAME=AUDIO1,DESC=AUDIOFILE1,MSGLIST=100-110,  
    RPTCNT=1"  
;
```

Related Commands:

```
DLT/ED/ENT/RTRV-ANNC-EXT  
DLT/ED/ENT/RTRV-ANNC-MAP  
DLT/ED/ENT/RTRV-AUDIO-MSG
```

DLT/ED/ENT/RTRV-AUDIO-MSG

Commands:

DLT-AUDIO-MSG: Delete Audio Message
ED-AUDIO-MSG: Edit Audio Message
ENT-AUDIO-MSG: Enter Audio Message
RTRV-AUDIO-MSG: Retrieve Audio Message

Descriptions:

DLT-AUDIO-MSG lets the user delete an audio message, provided the audio message is not used in an existing audio announcement

ED-AUDIO-MSG lets the user change the parameters associated with an audio message.

ENT-AUDIO-MSG lets the user establish an audio message.

RTRV-AUDIO-MSG lets the user retrieve parameters associated with an audio message.

Category: Resource Provisioning **Security:** NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-AUDIO-MSG:[TID]:<AudioMsgAid>:[CTAG];  
ED-AUDIO-MSG:[TID]:<AudioMsgAid>:[CTAG]::  
    [NAME=<Name>],[DESC=<Description>],  
    [FILE=<FilePath>];  
ENT-AUDIO-MSG:[TID]:<AudioMsgAid>:[CTAG]::NAME=<Name>,  
    DESC=<Description>,FILE=<FilePath>;  
RTRV-AUDIO-MSG:[TID]:[<AudioMsgAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<AudioMsgAid>:[NAME=<Name>],[DESCR=<Description>],  
    FILESIZE=<FileSize>"  
;
```

Parameters:

AudioMsgAid Identifies the AID as an audio message. The first part of the AID is an integer representing the message identifier; the second part is an optional string representing the language variant of the message. You cannot establish, change, or delete audio messages 1-2999; they are already-configured standard messages. Identifiers 3000-63487 are for custom messages; message identifiers 63488-65535 are reserved for future use. A null value for the language variant defaults to the value of *DefVariant*, if any, specified in ED/RTRV-AUDIO-SYS. A null value (in RTRV) is equivalent to “ALL”; that is, by leaving the field blank, attributes for all audio messages configured in the system will be returned.

Type: AudioMsgAid

Range: {1-65535}[-<VARIANT>]

Default value: none

Name Identifies the name of the audio message.

Type: string

Range: up to 40 alphanumeric characters (including underscores “_”)

Default value: none

Description Identifies the description of the audio message.

Type: string

Range: up to 80 alphanumeric characters (including underscores “_”)

Default value: none

FilePath Identifies (in ED and ENT) the complete path to the file on an external FTP server that contains the audio data for the message.

Type: string

Range: up to 80 alphanumeric characters (including underscores “_”)

Default value: none

FileSize Identifies (in RTRV output) the size of the audio message file in bytes. Although the range is given as {0-8,388,607}, there is currently a maximum of six MB (value = 6000000). 8000 bytes are approximately one second of audio.

Type: integer

Range: {0-8,388,607}

Default value: none

Input Examples:

```
DLT-AUDIO-MSG::3001;  
ED-AUDIO-MSG::3001:::NAME=MSG1,DESC=This is a test,  
FILE=/audioData/MSG1.dat;  
ENT-AUDIO-MSG::3001:::NAME=MSG1,DESC=This is a test,  
FILE=/audioData/MSG1.dat;  
RTRV-AUDIO-MSG::3001;
```

Output Example:

```
telica 2003-11-10 14:37:49  
M 0 COMPLD  
"3001:NAME=MSG1,DESC=This is a test,FILESIZE=12000"  
;
```

Related Commands:

DLT/ED/ENT/RTRV-AUDIO-ANNC

ED/RTRV-AUDIO-SYS

Commands:

ED-AUDIO-SYS: Edit Audio System

RTRV-AUDIO-SYS: Retrieve Audio System

Descriptions:

ED-AUDIO-SYS lets the user change the parameters associated with the audio announcement/message system.

RTRV-AUDIO-SYS lets the user retrieve parameters associated with the audio announcement/message system.

Category: Resource Provisioning

Security: NSA for ED, View for RTRV

Input Formats:

```
ED-AUDIO-SYS:[TID]:[<src>]:[CTAG]::  
[FTPIPADDR=<FtpIpAddr>],[USERNAME=<UserName>],  
[DISKLIMIT=<DiskLimit>],[DEFVARIANT=<DefVariant>]:  
[<Password>];  
  
RTRV-AUDIO-SYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<src>:[FTPIPADDR=<FtpIpAddr>],  
[USERNAME=<UserName>],[DISKLIMIT=<DiskLimit>],  
[DEFVARIANT=<DefVariant>]"  
;
```

Parameters:

src Identifies the AID as the Plexus 9000. The factory default is "COM".
Type: COM
Range: COM
Default value: not applicable

FtpIpAddr Identifies, in dotted decimal notation, the IP address of the external FTP server containing the audio message files. The factory default for an invalid IP address is “0.0.0.0”.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: not applicable

UserName Identifies the FTP username used to log in to the FTP server containing the audio message files. The factory default is anonymous FTP login.

Type: string

Range: up to 63 alphanumeric characters (including underscores “_”)

Default value: not applicable

DiskLimit Identifies the amount of disk space in kilobytes to allow for use by audio files. This parameter is reserved for future use and, as such, is fixed at its maximum (default) value of 32768.

Type: integer

Range: {0-32768}

Default value: not applicable

DefVariant Identifies the default language variant used when the language variant is not specified by *AudioMsgAid* in ED/ENT-AUDIO-MSG. The factory default is “default” (lower case).

Type: string

Range: up to 63 alphanumeric characters (including underscores “_”)

Default value: not applicable

Password Identifies the FTP password used to log in to the FTP server containing the audio message files. The entered password displays as a series of asterisks. There is no factory default.

Type: string

Range: up to 63 alphanumeric characters (including underscores “_”)

Default value: not applicable

Input Examples:

```
ED-AUDIO-SYS::::FTPIPADDR=10.0.0.9, USERNAME=TELICA,  
  DEFVARIANT=default:*****;  
RTRV-AUDIO-SYS;
```

Output Example:

```
telica 2003-11-10 14:37:49
M 0 COMPLD
"COM:FTPIPADDR=10.0.0.9,USERNAME=TELICA,
DISKLIMIT=32786,DEFVARIANT=default"
;
```

Related Commands: none

RTRV-AUDIO-VMSG

Command:

RTRV-AUDIO-VMSG: Retrieve Audio Variable Message

Description:

RTRV-AUDIO-VMSG lets the user retrieve the description of a variable audio message.

Category: Resource Provisioning

Security: View

Input Format:

RTRV-AUDIO-VMSG: [TID]: [<vmsgname>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<vmsgname>: [DESC=<Descr>]"
;
```

Parameters:

vmsgname Identifies the AID as a variable audio message. A null value is equivalent to “ALL”; that is, by leaving the field blank, descriptions of all variable audio messages configured in the system will be returned.

Type: string

Range: up to 40 alphanumeric characters (including underscores “_”)

Default value: none

descr Identifies the description of the variable audio message.

Type: string

Range: up to 80 alphanumeric characters (including underscores “_”)

Default value: NULL

Input Example:

RTRV-AUDIO-VMSG: :DISCON;

Output Example:

```
telica 2003-11-10 14:37:49
M 0 COMPLD
"DISCON:DESC=has been disconnected"
;
```

Related Commands: none

NOTES

DLT/ED/ENT/RTRV-CCC-LIST

Commands:

DLT-CCC-LIST: Delete CCC List

ED-CCC-LIST: Edit CCC List

ENT-CCC-LIST: Enter CCC List

RTRV-CCC-LIST: Retrieve CCC List

Descriptions:

DLT-CCC-LIST lets the user remove the association of a non-active call content channel (CCC) with a CCC list. A CCC, represented by a directory number for a law enforcement agency (LEA), is a dedicated (i.e., permanently connected) channel reserved for use solely on a particular surveillance.

ED-CCC-LIST lets the user change the billing number and state for a call content channel (CCC) on a CCC list. A CCC, represented by a directory number for a law enforcement agency (LEA), is a dedicated (i.e., permanently connected) channel reserved for use solely on a particular surveillance.

ENT-CCC-LIST lets the user establish a call content channel (CCC) on a CCC list. A CCC, represented by a directory number for a law enforcement agency (LEA), is a dedicated (i.e., permanently connected) channel reserved for use solely on a particular surveillance.

RTRV-CCC-LIST lets the user retrieve the billing number and state for a single call content channel (CCC) on a CCC list, all CCCs on a CCC list, or every CCC on all CCC lists in the system.

Category: Call Control

Security: SA (and CALEA-enabled via ED/ENT-USER-SECU) for all commands

Input Formats:

DLT-CCC-LIST:[TID]:<ccclistaid>:[CTAG];

ED-CCC-LIST:[TID]:<ccclistaid>:[CTAG]::
[BILLINGALIAS=<billingalias>]:[<pst>];

ENT-CCC-LIST:[TID]:<ccclistaid>:[CTAG]::
[BILLINGALIAS=<billingalias>]:[<pst>];

RTRV-CCC-LIST:[TID]:[<ccclistaid>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<ccclistaid>:BILLINGALIAS=<billingalias>:<pst>,
    <sst>"
;
```

Parameters:

ccclistaid Identifies the AID as a call content channel associated with a specific list of call content channels. The first part of the AID is the numerical identifier for the CCC list and the second part is the CCC. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for every CCC on all CCC lists in the system will be returned. A null value for the second part of the AID (in RTRV) lets the user retrieve the billing number and state for all CCCs on a specified CCC list.

Type: CccListAid

Range: {1-32767}-{up to 21 digits}

Default value: none

billingalias Identifies the billing number applicable to the CCC.

Type: string

Range: up to 21 digits

Default value: NULL

pst Identifies the primary state of the CCC.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service
for Management)

Default value: IS

sst Identifies (in RTRV output) the secondary state of the CCC.

Type: enum

Range: BUSY = Busy

IDLE = Idle

Default value: none

Input Examples:

```
DLT-CCC-LIST::2-5083030911;  
ED-CCC-LIST::2-5083030911:::BILLINGALIAS=5084800911:  
IS;  
ENT-CCC-LIST::2-5083030911:::BILLINGALIAS=5084800911:  
IS;  
RTRV-CCC-LIST::2-5083030911;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"2-5083030911:BILLINGALIAS=5084800911:IS,BUSY"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-CDC

Commands:

DLT-CDC: Delete CDC

ED-CDC: Edit CDC

ENT-CDC: Enter CDC

RTRV-CDC: Retrieve CDC

Descriptions:

DLT-CDC lets the user delete a call data channel (CDC). A CDC, represented by an alphanumeric string, is a data communications link that carries call-identifying information from the service provider to law enforcement.

ED-CDC lets the user change the terminating IP address, the terminating port, and the state for a call data channel (CDC). A CDC, represented by an alphanumeric string, is a data communications link that carries call-identifying information from the service provider to law enforcement.

ENT-CDC lets the user establish a call data channel (CDC). A CDC, represented by an alphanumeric string, is a data communications link that carries call-identifying information from the service provider to law enforcement.

RTRV-CDC lets the user retrieve the terminating IP address, the terminating port, and the state either for a single call data channel (CDC), or for all CDCs in the system.

Category: Call Control

Security: SA (and CALEA-enabled via ED/ENT-USER-SECU) for all commands

Input Formats:

DLT-CDC: [TID]:<cdcId>:[CTAG];

ED-CDC: [TID]:<cdcId>:[CTAG]::[IPADDR=<ipAddr>],
[PORT=<port>]:[<pst>];

ENT-CDC: [TID]:<cdcId>:[CTAG]::[IPADDR=<ipAddr>],
PORT=<port>:[<pst>];

RTRV-CDC: [TID]:[<cdcId>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<cdcId>:IPADDR=<ipAddr>,PORT=<port>:<pst>"
;
```

Parameters:

- cdcId** Identifies the AID as a call data channel. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for every CDC in the system will be returned.
Type: string
Range: up to 15 alphanumeric characters
Default value: none
- ipAddr** Identifies the terminating IP address for the law enforcement agency (LEA) to which the CDC connects.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: none
- port** Identifies the terminating port number for the law enforcement agency (LEA) to which the CDC connects.
Type: integer
Range: {1-32767}
Default value: none
- pst** Identifies the primary state of the CDC.
Type: enum
Range: IS = In-Service
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management)
Default value: IS

Input Examples:

```
DLT-CDC::FBICDC001;
ED-CDC::FBICDC001:::IPADDR=110.13.116.126,PORT=2020:
IS;
ENT-CDC::FBICDC001:::IPADDR=110.13.116.126,PORT=2020:
IS;
RTRV-CDC::FBICDC001;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"FBICDC001:IPADDR=110.13.116.126,PORT=2020:IS"
;
```

Related Commands: none

DLT/ENT/RTRV-GMSC-LAESDN

Commands:

DLT-GMSC-LAESDN: Delete GMSC Lawfully Authorized Electronic Surveillance DN

ENT-GMSC-LAESDN: Enter GMSC Lawfully Authorized Electronic Surveillance DN

RTRV-GMSC-LAESDN: Retrieve GMSC Lawfully Authorized Electronic Surveillance DN

Descriptions:

DLT-GMSC-LAESDN lets the user designate a wireless subscriber as no longer being under CALEA surveillance.

ENT-GMSC-LAESDN lets the user designate a wireless subscriber as being under CALEA surveillance. ENT-GMSC-LAESDN will not work unless ENT-SUBSCRIBER has already been issued.

RTRV-GMSC-LAESDN lets the user determine the wireless subscribers under CALEA surveillance.

Category: Call Control

Security: SA (and CALEA-enabled via ED/ENT-USER-SECU) for all commands

Input Formats:

DLT-GMSC-LAESDN: [TID]:<subscriberDn>:[CTAG];

ENT-GMSC-LAESDN: [TID]:<subscriberDn>:[CTAG];

RTRV-GMSC-LAESDN: [TID]: [<subscriberDn>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<subscriberDn>"
;
```

Parameters:

subscriberDn Identifies the AID as a wireless subscriber under CALEA surveillance at the home MSC (Mobile Switching Center). A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, all wireless subscribers under CALEA surveillance in the system will be returned.

Type: string

Range: up to 21 digits

Default value: none

Input Examples:

DLT-GMSC-LAESDN : 5088048202;

ENT-GMSC-LAESDN : 5088048202;

RTRV-GMSC-LAESDN;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "5088048202"
  "5084900909"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-LAES-CASE

Commands:

DLT-LAES-CASE: Delete LAES Case

ED-LAES-CASE: Edit LAES Case

ENT-LAES-CASE: Enter LAES Case

RTRV-LAES-CASE: Retrieve LAES Case

Descriptions:

DLT-LAES-CASE lets the user delete a LAES (Lawfully Authorized Electronic Surveillance) case on a specific subscriber.

ED-LAES-CASE lets the user change the call data channel, the billing number, the name, the call content channel, and the state for a LAES (Lawfully Authorized Electronic Surveillance) case on a specific subscriber.

ENT-LAES-CASE lets the user establish a LAES (Lawfully Authorized Electronic Surveillance) case on a specific subscriber. ENT-LAES-CASE will not work unless ENT-SUBSCRIBER and ENT-CDC have already been issued.

RTRV-LAES-CASE lets the user retrieve the call data channel, the billing number, the name, the call content channel, and the state for a LAES (Lawfully Authorized Electronic Surveillance) case on a specific subscriber.

Category: Call Control

Security: SA (and CALEA-enabled via ED/ENT-USER-SECU) for all commands

Input Formats:

DLT-LAES-CASE: [TID]:<caseId>:[CTAG];

ED-LAES-CASE: [TID]:<caseId>:[CTAG]::[CDCID=<cdcId>],
[BILLINGDN=<billingDN>],[CASENAME=<caseName>],
[CKTOPTIONS=<cktOptions>],[CCCLISTID=<cccListId>]:
[<pst>];

ENT-LAES-CASE: [TID]:<caseId>:[CTAG]::
SUBJECTDN=<subjectDN>,[CDCID=<cdcId>],
[BILLINGDN=<billingDN>],[CASENAME=<caseName>],
[CKTOPTIONS=<cktOptions>],[CCCLISTID=<cccListId>]:
[<pst>];

RTRV-LAES-CASE: [TID]:[<caseId>]:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<caseId>:SUBJECTDN=<subjectDN>,CDCID=<cdcId>,
    BILLINGDN=<billingDN>,CASENAME=<caseName>,
    CKTOPTIONS=<cktOptions>,CCCLISTID=<cccListId>:
    <pst>"
;
```

Parameters:

caseId Identifies the AID as an LAES case. This identifier is provided by the LEA (Law Enforcement Agency) for whom the case is established. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for every LAES case in the system will be returned.

Type: string

Range: up to 25 alphanumeric characters

Default value: none

subjectDN Identifies the subscriber under surveillance.

Type: string

Range: up to 21 digits

Default value: none

cdcId Identifies the call data channel used for delivering call identifying information.

Type: string

Range: up to 15 alphanumeric characters

Default value: none

billingDN Identifies a valid billing number applicable to the case. This parameter is mandatory when the value of *cktOptions* is "ALLCONTENT".

Type: string

Range: up to 21 digits

Default value: NULL

caseName Identifies a specific instance of the LAES case.

Type: string

Range: up to 35 alphanumeric characters

Default value: NULL

cktOptions Identifies what to deliver for the case.

Type: enum

Range: ALLCONTENT = deliver both call data and call content
NOCONTENT = deliver call data only

Default value: NOCONTENT

cccListId Identifies the list of CCCs (call content channels) applicable to the case; that is, the list of LEA directory numbers to which call content is delivered.

Type: integer

Range: {1-32767}

Default value: NULL

pst Identifies the primary state of the case.

Type: enum

Range: IS = In-Service

OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service
for Management)

Default value: IS

Input Examples:

```
DLT-LAES-CASE::FBI-001;  
ED-LAES-CASE::FBI-001:::CDCID=FBICDC001,  
BILLINGDN=5083030911,CASENAME=FBI-001-HARRYPOTTER,  
CKTOPTIONS=NOCONTENT,CCCLISTID=NULL:IS;  
ENT-LAES-CASE::FBI-001:::SUBJECTDN=5083033636,  
CDCID=FBICDC001,BILLINGDN=5083030911,  
CASENAME=FBI-001-HARRYPOTTER,CKTOPTIONS=NOCONTENT,  
CCCLISTID=NULL:IS;  
RTRV-LAES-CASE::FBI-001;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"FBI-001:SUBJECTDN=5083033636,CDCID=FBICDC001,  
BILLINGDN=5083030911,  
CASENAME=FBI-001-HARRYPOTTER,  
CKTOPTIONS=NOCONTENT,CCCLISTID=NULL:IS"  
;
```

Related Commands: none

RTRV-PM-CALEA

Command:

RTRV-PM-CALEA: Retrieve Performance Monitors CALEA

Description:

RTRV-PM-CALEA lets the user retrieve the statistics on Call Content Channels (CCCs) and Call Data Channels (CDCs) since the last initialization of the counters.

Category: Call Control

Security: View

Input Format:

```
RTRV-PM-CALEA:[TID]:[<src>]:[CTAG]::[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

Parameters:

src Identifies the AID as the Plexus 9000.

Type: COM

Range: COM

Default value: COM

montype Identifies the CALEA performance statistic for which to retrieve the number of occurrences. A null value is equivalent to "ALL"; that is, by leaving the field blank, all CALEA performance statistics will be returned.

Type: enum

Range: ALL = All types

CCCATTEMPT = Number of attempts to establish a CCC

CCCFAILEXT = Number of attempts to establish a CCC that failed due to causes external to the Plexus 9000

CCCFAILINT = Number of attempts to establish a CCC that failed for reasons internal to the Plexus 9000

CCCFAILOOS = Number of attempts to establish a CCC that failed because the channel was out of service

CCCSUCCESS = Number of successful attempts to establish a CCC

CDCATTEMPT = Number of attempts to establish a CDC

CDCFAILEXT = Number of attempts to establish a CDC that failed due to causes external to the Plexus 9000

CDCFAILINT = Number of attempts to establish a CDC that failed for reasons internal to the Plexus 9000

CDCFAILOOS = Number of attempts to establish a CDC that failed because the channel was out of service

CDCSUCCESS= Number of successful attempts to establish a CDC

Default value: ALL

monval Identifies (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates.

Type: integer

Range: {0-2147483647}

Default value: 0

monlev Indicates the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be “NULL”.
- Type:** enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: not applicable for output
- locn** Identifies the location of the storage counters from which to retrieve performance data. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters relative to the Plexus 9000. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH
- tmper** Identifies the accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. This parameter is presently not supported; leave it blank.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: 15-MIN

mondatt Identifies the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Identifies the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Example:

RTRV-PM-CALEA;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:CCCATEMPT,18"
"COM:CCCFAILEXT,0"
"COM:CCCFAILINT,0"
"COM:CCCFAILOOS,0"
"COM:CCCSUCCESS,18"
"COM:CDCATEMPT,97"
"COM:CDCFAILEXT,0"
"COM:CDCFAILINT,0"
"COM:CDCFAILOOS,0"
"COM:CDCSUCCESS,97"
;
```

Related Commands: none

NOTES

DLT/ENT/RTRV-VMS-CKTID

Commands:

DLT-VMS-CKTID: Delete VMS Circuit Identification

ENT-VMS-CKTID: Enter VMS Circuit Identification

RTRV-VMS-CKTID: Retrieve VMS Circuit Identification

Descriptions:

DLT-VMS-CKTID lets the user delete an association between a DS0 channel in the Plexus 9000 and the Message Line Identifier that identifies the line to which a call is terminated in a Voice Mail System (VMS).

ENT-VMS-CKTID lets the user establish an association between a DS0 channel in the Plexus 9000 and the Message Line Identifier that identifies the line to which a call is terminated in a Voice Mail System (VMS). The Message Line Identifier is a seven-digit number made up of the three-digit Multi-Line Hunt Group (MLHG) identifier and the four-digit MLHG position identifier. An MLHG identifier relates a specific MLHG to an associated SMDI data link (or group of data links). An MLHG position identifier specifies a unique hunt terminal in the MLHG, and provides call history information on an SMDI data link (or group of data links) for calls terminated to that hunt terminal. ENT-VMS-CKTID will not work unless ENT-CAS-LINE has already been issued.

RTRV-VMS-CKTID lets the user retrieve the parameters defining the association between a DS0 channel in the Plexus 9000 and the Message Line Identifier that identifies the line to which a call is terminated in a Voice Mail System (VMS). The Message Line Identifier is a seven-digit number made up of the three-digit Multi-Line Hunt Group (MLHG) identifier and the four-digit MLHG position identifier. An MLHG identifier relates a specific MLHG to an associated SMDI data link (or group of data links). An MLHG position identifier specifies a unique hunt terminal in the MLHG, and provides call history information on an SMDI data link (or group of data links) for calls terminated to that hunt terminal.

Category: Call Control

Security: SA for DLT and ENT, View for RTRV

Input Formats:

DLT-VMS-CKTID: [TID]:<ds0Aid>:[CTAG];

ENT-VMS-CKTID: [TID]:<ds0Aid>:[CTAG]::MLHGID=<mlhgId>,
MLHGCKTID=<mlhgCktId>;

RTRV-VMS-CKTID: [TID]: [<ds0Aid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<ds0Aid>:MLHGID=<mlhgId>,MLHGCKTID=<mlhgCktId>"
;
```

Parameters:

ds0Aid Identifies the AID as a DS0 channel on an IOM. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system retrieves data for all DS0 channels configured in the system that are associated with Message Line Identifiers.

Type: T0

Range: IOM-{1-17}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24}
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}

Default value: none

mlhgId Identifies the MLHG identifier with exactly three digits, excluding those three-digit combinations identical to any of the exchanges (NXX codes) served by the Plexus 9000.

Type: integer

Range: {000-999}

Default value: none

mlhgCktId Identifies the MLHG position identifier with exactly four digits.

Type: integer

Range: {0000-9999}

Default value: none

Input Examples:

```
DLT-VMS-CKTID::IOM-1-T3-1-PORT-1-T0-1;
ENT-VMS-CKTID::IOM-1-T3-1-PORT-1-T0-1::MLHGID=001,
MLHGCKTID=0001;
RTRV-VMS-CKTID::IOM-1-T3-1-PORT-1-T0-1;
```

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"IOM-1-T3-1-PORT-1-T0-1:MLHGID=001,MLHGCKTID=0001"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-VMS-LNK

Commands:

DLT-VMS-LNK: Delete VMS Link

ED-VMS-LNK: Edit VMS Link

ENT-VMS-LNK: Enter VMS Link

RTRV-VMS-LNK: Retrieve VMS Link

Descriptions:

DLT-VMS-LNK lets the user delete an SMDI (Simplified Message Desk Interface) data link between the Plexus 9000 and a Voice Mail System (VMS).

ED-VMS-LNK lets the user change the parameters associated with an SMDI (Simplified Message Desk Interface) data link between the Plexus 9000 and a Voice Mail System (VMS). Use this command to change the directory numbers (DN) for the VMS and for message retrieval, whether the link can control Message Waiting Indicators (MWI) for subscribers, whether first or last forwarding number, calling party number presentation status and the calling party name are included in call history information, and the link's primary state.

ENT-VMS-LNK lets the user establish the parameters associated with an SMDI (Simplified Message Desk Interface) data link between the Plexus 9000 and a Voice Mail System (VMS). ENT-VMS-LNK associates an SMDI data link with a Message Storage and Retrieval (MSR) system in a VMS. Use this command to establish the directory numbers (DN) for the VMS and for message retrieval, the IP address and port number for the data link, whether the link can control Message Waiting Indicators (MWI) for subscribers, whether first or last forwarding number, calling party number presentation status and the calling party name are included in call history information, and the link's primary state. The Plexus 9000 can support no more than eight SMDI data links. The IP address and port number must be unique for each SMDI data link.

RTRV-VMS-LNK lets the user retrieve the parameters associated with an SMDI (Simplified Message Desk Interface) data link between the Plexus 9000 and a Voice Mail System (VMS). Use this command to retrieve the directory numbers (DN) for the VMS and for message retrieval, the IP address and port number for the data link, whether the link can control Message Waiting Indicators (MWI) for subscribers, whether first or last forwarding number, calling party number presentation status and the calling party name are included in call history information, and the link's primary state.

Category: Call Control

Security: SA for DLT/ENT, View for RTRV

Input Formats:

```
DLT-VMS-LNK: [TID]:<vmsLnkId>:[CTAG];  
ED-VMS-LNK: [TID]:<vmsLnkId>:[CTAG]:[VMSDN=<vmsDn>],  
[RTRVDN=<rtrvDn>],[MWICTRL=<mwiCtrl>],  
[FWDNUMCHOICE=<fwdNumChoice>],  
[CNDPHIST=<cndpHist>],[CNAMHIST=<cnamHist>]:  
[<pst>];  
ENT-VMS-LNK: [TID]:<vmsLnkId>:[CTAG]:VMSDN=<vmsDn>,  
RTRVDN=<rtrvDn>,[IPADDR=<ipaddr>],[PORT=<port>],  
[MWICTRL=<mwiCtrl>],[FWDNUMCHOICE=<fwdNumChoice>],  
[CNDPHIST=<cndpHist>],[CNAMHIST=<cnamHist>]:  
[<pst>];  
RTRV-VMS-LNK: [TID]: [<vmsLnkId>]: [CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<vmsLnkId>:VMSDN=<vmsDn>,RTRVDN=<rtrvDn>,  
IPADDR=<ipaddr>,PORT=<port>,MWICTRL=<mwiCtrl>,  
FWDNUMCHOICE=<fwdNumChoice>,CNDPHIST=<cndpHist>,  
CNAMHIST=<cnamHist>:<pst>,<sst>"  
;
```

Parameters:

vmsLnkId Identifies the AID as an SMDI (Simplified Message Desk Interface) data link between the Plexus 9000 and a Voice Mail System. The pattern is a combination of a generic Message Storage and Retrieval (MSR) system in a VMS and an SMDI data link between it and the Plexus 9000. A value of "0" for *msrId* indicates that the link is a virtual VMS link. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, the system retrieves data for all VMS data links configured in the system.

Type: VMS

Range: <msrId>-<smdiLnkId>, where
msrId = {0-999} and
smdiLnkId = {1-8}

Default value: none

- vmsDn** Identifies the directory number for the Voice Mail System.
Type: string
Range: up to 21 digits
Default value: none
- rtrvDn** Identifies the directory number for message retrieval from the VMS.
Type: string
Range: up to 21 digits
Default value: none
- ipAddr** Identifies the IP address of the terminal server for the data link. The value is “NULL” when the value of *msrId* (first part of AID) is “0”; specify the value for non-virtual VMS links.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NULL
- port** Identifies the TCP port number used to access the physical port on the terminal server. The value is “NULL” when the value of *msrId* (first part of AID) is “0”; specify the value for non-virtual VMS links.
Type: integer
Range: {10001-10008}
Default value: NULL
- mwiCtrl** Identifies whether the link can control Message Waiting Indicators (MWI) for subscribers.
Type: enum
Range: ON = data link can control MWI
OFF = data link cannot control MWI
Default value: ON
- fwdNumChoice** Identifies whether the first or last forwarding number is included in call history information sent over the data link.
Type: enum
Range: FIRST = first forwarding number is included
LAST = last forwarding number is included
Default value: FIRST

cndpHist Identifies whether call history messages sent to the Voice Mail System include the calling party number presentation status.

Type: BoolYN

Range: N = calling party number presentation status is not included
Y = calling party number presentation status is included

Default value: N

cnamHist Identifies whether call history messages sent to the Voice Mail System include the calling party name.

Type: BoolYN

Range: N = calling party name is not included
Y = calling party name is included

Default value: N

pst Identifies the primary state of the link.

Type: enum

Range: IS = In-Service: link processes MWI requests and forwards call history messages to the VMS
OOS = Out-Of-Service, implied OOS-MA (Out-Of-Service for Management): link neither processes MWI requests nor forwards call history messages to the VMS

Default value: OOS

pst Identifies (in RTRV output) the primary state, and primary state qualifier, of the link.

Type: enum

Range: IS = In-Service
OOS-AU = Out-Of-Service, Autonomous
OOS-AUMA = Out-Of-Service, Autonomous and Managed
OOS-MA = Out-Of-Service, Managed

Default value: none

sst Identifies (in RTRV output) the secondary state of the link.

Type: enum

Range: FLT = Faulted (due to a socket error on the SP)
SGEO = Supporting Entity Outage (Failure with TCP connection to terminal server caused by network or terminal server problem)

Default value: none

Input Examples:

```
DLT-VMS-LNK::1-1;  
ED-VMS-LNK::1-1:::VMSDN=9789736808,RTRVDN=9789736808,  
    MWICTRL=ON,FWDNUMCHOICE=FIRST,CNDPHIST=N,  
    CNAMHIST=N:OOS;  
ENT-VMS-LNK::1-1:::VMSDN=9789736808,RTRVDN=9789736808,  
    IPADDR=192.168.254.0,PORT=10001,MWICTRL=ON,  
    FWDNUMCHOICE=FIRST,CNDPHIST=N,CNAMHIST=N:OOS;  
RTRV-VMS-LNK::1-1;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"1-1:VMSDN=9789736808,RTRVDN=9789736808,  
    IPADDR=192.168.254.0,PORT=10001,MWICTRL=ON,  
    FWDNUMCHOICE=FIRST,CNDPHIST=N,CNAMHIST=N:  
    OOS-AU,FLT"  
;
```

Related Commands: none

ED/RTRV-VMS-SYS

Commands:

ED-VMS-SYS: Edit VMS System

RTRV-VMS-SYS: Retrieve VMS System

Descriptions:

ED-VMS-SYS lets the user change the parameters affecting the association between the Plexus 9000 and a Voice Mail System. Parameters include the VMWI (Visual Message Waiting Indicator) refresh period, the MWI control request holding time, whether Visual MWI and Abbreviated Ring can be provided to subscribers, and the service logic host route to a remote switch hosting either the voice mail system or its subscribers.

RTRV-VMS-SYS lets the user retrieve the parameters affecting the association between the Plexus 9000 and a Voice Mail System. Parameters include the VMWI (Visual Message Waiting Indicator) refresh period, the MWI control request holding time, whether Visual MWI and Abbreviated Ring can be provided to subscribers, and the service logic host route to a remote switch hosting either the voice mail system or its subscribers.

Category: Call Control

Security: SA for ED, View for RTRV

Input Formats:

```
ED-VMS-SYS:[TID]:[<src>]:[CTAG]::
    [MWIRESFRESH=<mwIRefresh>],[MWIT1=<mwIT1>],
    [MWIVISUAL=<mwIVisual>],[ABRRING=<abrRing>],
    [SLHRID=<slhrId>];

RTRV-VMS-SYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:MWIRESFRESH=<mwIRefresh>,MWIT1=<mwIT1>,
    MWIVISUAL=<mwIVisual>,ABRRING=<abrRing>,
    SLHRID=<slhrId>"
;
```

Parameters:

src Identifies the AID as the Plexus 9000.

Type: COM

Range: COM

Default value: COM

mwiRefresh Identifies the number of minutes after which the Plexus 9000 transmits an “Indicator On/Off” message to each VMWI (Visual Message Waiting Indicator)-enabled line. The Plexus 9000 does not queue or retransmit the message if the subscriber’s line is busy. The factory default is “30”.

Type: integer

Range: {0-60}

Default value: not applicable

mwiT1 Identifies the duration, in minutes, that an MWI control request can be held outstanding against the SMDI (Simplified Message Desk Interface) that requested it. The factory default is “150”.

Type: integer

Range: {120-240}

Default value: not applicable

mwiVisual Identifies whether Visual MWI can be provided to subscribers. The factory default is “OFF”.

Type: enum

Range: ON

OFF

Default value: not applicable

abrRing Identifies whether Abbreviated Ring can be provided to subscribers. The factory default is “OFF”.

Type: enum

Range: ON

OFF

Default value: not applicable

slhrId Identifies the service logic host route to a Service Control Point hosting either the voice mail system or its subscribers. The factory default is “NULL”.

Type: enum

Range: {0-31}

NULL

Default value: not applicable

Input Examples:

```
ED-VMS-SYS::::MWIRESFRESH=30,MWIT1=150,MWIVISUAL=OFF,  
  ABRRING=OFF,SLHRID=NULL;  
RTRV-VMS-SYS;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"COM:MWIRESFRESH=30,MWIT1=150,MWIVISUAL=OFF,  
  ABRRING=OFF,SLHRID=NULL"  
;
```

Related Commands: none

INIT-REG-VMSLNK / RTRV-PM-VMSLNK

Commands:

INIT-REG-VMSLNK: Initialize Register VMS Link

RTRV-PM-VMSLNK: Retrieve Performance Monitoring VMS Link

Descriptions:

INIT-REG-VMSLNK lets the user initialize one or more storage registers or event counters for message statistics related to SMDI (Simplified Message Desk Interface) data links between the Plexus 9000 and a generic Message Storage and Retrieval (MSR) system in a Voice Mail System (VMS).

RTRV-PM-VMSLNK lets the user retrieve current and historical performance data related to SMDI (Simplified Message Desk Interface) data links between the Plexus 9000 and a generic Message Storage and Retrieval (MSR) system in a Voice Mail System (VMS).

Category: Call Control

Security: NSA for ED, View for RTRV

Input Formats:

```
INIT-REG-VMSLNK: [TID]:<smdiLnkId>:[CTAG]:[<montype>],  
[<monval>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

```
RTRV-PM-VMSLNK: [TID]:<smdiLnkId>:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>];
```

Output Format:

```
          SID DATE TIME  
M CTAG COMPLD  
  "<smdiLnkId>:<montype>,<monval>,<vldty>,<locn>,  
    <dirn>,<tmper>,<mondatt>,<montm>"  
;
```

Parameters:

smdiLnkId Identifies the AID as an SMDI data link between a generic Message Storage and Retrieval (MSR) system in a VMS and the Plexus 9000.

Type: integer

Range: {1-8}

Default value: none

montype Identifies a type of monitored parameter for MGCP messages.

Type: enum

Range: ALL = All monitored parameters

CALLHSTMSGTX = the number of call history messages sent to the VMS.

CALLHSTBYTETX = the number of call history bytes sent to the VMS.

CALLHSTMSGDSC = the number of discarded call history messages.

MWIBLKMSGTX = the number of BLK messages sent to the VMS.

MWIBLKBYTETX = the number of BLK bytes sent to the VMS.

MWIINVMSGTX = the number of INV messages sent to the VMS.

MWIINVBYTETX = the number of INV bytes sent to the VMS.

MWIVLDMSGRX = the number of valid MWI messages.

MWIVLDBYTERX = the number of valid MWI message bytes received from the VMS.

MSGDSCOVFLW = the number of incoming messages dropped due to overflow.

INVMSGRX = the number of invalid messages received from the VMS.

MAXQBYTERX = the maximum number of bytes in the incoming message queue.

MAXQBYTETX = the maximum number of bytes in the outgoing message queue

MAXQMSGRX = the maximum number of messages in the incoming message queue.

MAXQMSGTX = Timeouts: the maximum number of messages in the outgoing message queue.

Default value: ALL

- monval** Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* is to be initialized. The value is in the form of numeric counts or rates. This parameter is presently not supported; leave it blank.
Type: integer
Range: {0-9999}
Default value: 0
- monlev** Identifies (for RTRV-PM input) the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it.
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: none
- locn** Identifies the location of the storage counters to be initialized. This parameter is presently not supported; leave it blank.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is presently not supported; leave it blank.
Type: enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH

tmper The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. A null value defaults to both applicable accumulation periods. This parameter is presently not supported; leave it blank.

Type: enum

Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)

Default value: both 15-MIN and 24-HR

mondatt Indicates the monitored date. The value indicates the beginning date for the performance-monitoring or storage register period defined by *tmper*. The format is MM-DD. This parameter is presently not supported; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

montm Indicates the monitored time. The value indicates the beginning time of day for the performance-monitoring or storage register period defined by *tmper*. The format is HH-MM. This parameter is presently not supported; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Examples:

```
INIT-REG-VMSLNK;  
RTRV-PM-VMSLNK;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"4:CALLHSTMSGTX,998"  
"4:CALLHSTBYTETX,12756"  
;
```

Related Commands: none

ED/RTRV-VOIP-NETSYS

Commands:

ED-VOIP-NETSYS: Edit VoIP NETSYS

RTRV-VOIP-NETSYS: Retrieve VoIP NETSYS

Descriptions:

ED-VOIP-NETSYS lets the user edit general system-wide parameters, on the IP network side, for the DSP resources in the Plexus 9000. Edits affect only new circuit setups after a VPS module has been removed and restored to service.

RTRV-VOIP-NETSYS lets the user retrieve general system-wide parameters, on the IP network side, for the DSP resources in the Plexus 9000.

Category: VoIP

Security: SA for ED, View for RTRV

Input Formats:

```
ED-VOIP-NETSYS:[TID]:[<src>]:[CTAG]::
[ECHOTAIL=<EchoTail>],[TDMCOMPAND=<TdmCompand>],
[DEFGAIN=<DefGain>],[NOMJITBUFSZ=<nomJitBufSz>];
RTRV-VOIP-NETSYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
      SID DATE TIME
M CTAG COMPLD
  "<src>:ECHOTAIL=<EchoTail>,TDMCOMPAND=<TdmCompand>,
    DEFGAIN=<DefGain>,NOMJITBUFSZ=<nomJitBufSz>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000 (COM).

Type: COM

Range: COM

Default value: COM

EchoTail Identifies the number of milliseconds after a transmission during which echoes are cancelled (if *EchoCanc* is set to “ON”). The factory default is “32”.

Type: enum

Range: 0
8
16
32
64
128

Default value: not applicable

TdmComband Identifies the companding type; that is, the PCM encoding method used in the analog-to-digital network conversion. The wide dynamic range of speech does not lend itself well to efficient linear digital encoding. A-law and Mu-law encoding effectively reduce the dynamic range of the signal, thereby increasing the coding efficiency and resulting in a signal-to-distortion ratio that is greater than that obtained by linear encoding for a given number of bits. The factory default is “MULAW”.

Type: enum

Range: ALAW = a-law algorithm: A standard compression algorithm, used in digital communications systems of the European digital hierarchy to optimize the dynamic range of an analog signal for digitizing.
LINEAR = linear encoding
MULAW = mu-law (μ -law) algorithm: A standard compression algorithm, used in digital communications systems of the North American digital hierarchy to optimize the dynamic range of an analog signal for digitizing.

Default value: not applicable

DefGain Identifies the default gain in negative decibels (actually, attenuation in decibels; i.e., the average attenuation for a packet in the network). The factory default is “0”.

Type: integer

Range: {0-20}

Default value: not applicable

nomJitBufSz Identifies the nominal jitter buffer size in milliseconds. The factory default is “10”.

Type: integer

Range: {10-200}

Default value: not applicable

Input Examples:

```
ED-VOIP-NETSYS:::::ECHOTAIL=32,TDMCOMPAND=MULAW,  
  DEFGAIN=0,NOMJITBUFSZ=10;  
RTRV-VOIP-NETSYS;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:ECHOTAIL=32,TDMCOMPAND=MULAW,DEFGAIN=0,  
  NOMJITBUFSZ=10"  
;
```

Related Commands: none

ED/RTRV-VOIP-SYS

Commands:

ED-VOIP-SYS: Edit VoIP System

RTRV-VOIP-SYS: Retrieve VoIP System

Descriptions:

ED-VOIP-SYS lets the user edit general system-wide parameters for the DSP resources in the Plexus 9000. Edits affect only new circuit setups after a VPS module has been removed and restored to service.

RTRV-VOIP-SYS lets the user retrieve general system-wide parameters for the DSP resources in the Plexus 9000.

Category: VoIP

Security: SA for ED, View for RTRV

Input Formats:

```
ED-VOIP-SYS:[TID]:[<src>]:[CTAG]::  
[DIFFSERV=<diffServ>],[AAL5ENC=<aal5Enc>],  
[VADTHRESH=<vadThresh>],  
[JITBUFPLMOD=<jitBufPlMod>],  
[JITBUFLOWTHRESH=<jitBufLowThresh>],  
[JITBUFHIGHTHRESH=<jitBufHighThresh>],  
[JITBUFRSPRT=<jitBufRspRt>],  
[ECDISABLE=<ecDisable>],  
[PINGHRTBTMR=<pingHrtBtTmr>],  
[SIDTXINTERVAL=<sidTxInterval>],  
[PKTFILTER=<pktFilter>],[UDPCHKSUM=<udpChksum>],  
[XTALKPERIOD=<xtalkPeriod>],  
[XTALKTHRESH=<xtalkThresh>],  
[IDLEPATTERN=<idlePattern>],[CNG=<cng>];  
  
RTRV-VOIP-SYS:[TID]:[<src>]:[CTAG];
```


Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:[DIFFSERV=<diffServ>],AAL5ENC=<aal5Enc>,
  VADTHRESH=<vadThresh>,JITBUFPLMOD=<jitBufPlMod>,
  JITBUFLOWTHRESH=<jitBufLowThresh>,
  JITBUFHIGHTHRESH=<jitBufHighThresh>,
  JITBUFRSPRT=<jitBufRspRt>,ECDISABLE=<ecDisable>,
  PINGHRTBTMR=<pingHrtBtTmr>,
  SIDTXINTERVAL=<sidTxInterval>,
  PKTFILTER=<pktFilter>,UDPCCHKSUM=<udpChksum>,
  XTALKPERIOD=<xtalkPeriod>,
  XTALKTHRESH=<xtalkThresh>,
  IDLEPATTERN=<idlePattern>,CNG=<cng>"
;
```

Parameters:

- src** Identifies the AID as a Plexus 9000.
Type: COM
Range: COM
Default value: COM
- diffServ** Identifies the six-bit wide DSCP bit mask, representing differentiated services for RTP ports, that follows the two-bit wide CU bit mask (always zero – cannot be changed) to form the TOS (Type of Service) octet. The factory default is “000101”.
Type: string
Range: six-digit string of “1”s and “0”s
Default value: not applicable
- aal5Enc** Identifies the encoding type for ATM (Asynchronous Transfer Mode) Adaptation Layer 5. The factory default is “VCMUX”.
Type: enum
Range: LLC SNAP = Logical Link Control SubNetwork Attachment Point
VCMUX = Virtual Connection Multiplexing
Default value: not applicable

vadThresh Identifies the voice activity detection threshold, which specifies lower and upper threshold settings used by the voice server modules when silence suppression is active on a VoIP call. The voice codec treats a maintained power level below the lower threshold as silence and triggers the generation of SID (Silence Insertion Descriptor) packets. The codec treats a maintained power level above the upper threshold as an active voice conversation and begins transmission of RTP VoIP packets. The generation of RTP versus SID packets when the power level fluctuates between the upper and lower thresholds is indeterminate. The factory default is “6”.

Type: integer

Range: {1-10}, where:

Value	Upper (dB)	Lower (dB)
1	-27	-39
2	-30	-42
3	-33	-45
4	-36	-48
5	-39	-51
6	-42	-54
7	-45	-57
8	-48	-60
9	-51	-63
10	-54	-66

Default value: not applicable

jitBufPlMod Identifies the jitter buffer playout mode. The factory default is “FIXED”.

Type: enum

Range: ADAPTIVE = proprietary voice buffer management
FIXED = fixed buffer management

Default value: not applicable

jitBufLowThresh Identifies the jitter buffer low threshold in milliseconds. The factory default is “10”.

Type: integer

Range: {0-315}

Default value: not applicable

jitBufHighThresh Identifies the jitter buffer high threshold in milliseconds. The value of *jitBufHighThresh* must be greater than the value of *jitBufLowThresh*. The factory default is “320”.

Type: integer

Range: {0-320}

Default value: not applicable

jitBufRspRt Identifies the jitter buffer response rate (time constant). The time constant determines the speed of adaptation with the following trade-off: a longer time constant slows adaptation but results in a more stable jitter buffer nominal threshold variable. A shorter time constant causes faster adaptation but at the same time may result in frequent changes in the jitter buffer nominal threshold variable. For jitters in bursts one can expect a better trade off by using a smaller time constant; for random jitter a longer time constant is more appropriate. The choice of optimal parameters is system dependent and should be selected based on the measure of jitter in the network. However, assuming random jitter and desire for small changes in delay over short instances, setting the value of *jitBufLowThresh* to “2”, *jitBufHighThresh* to “16”, and *jitBufRspRt* to “127” can be used as a start. The factory default is “127”.

Type: integer

Range: {1-127}

Default value: not applicable

ecDisable Identifies the echo canceller disable policy. The factory default is “G168”.

Type: enum

Range: G164

G165

G168

NONE

Default value: not applicable

pingHrtBtTmr Identifies the heartbeat timer in seconds; that is, how often the network access IOM pings the router. A value of “0” disables the ping test. The factory default is “1”.

Type: integer

Range: {0-10}

Default value: not applicable

sidTxInterval Identifies the frequency, in milliseconds, of SID packets generated in periods of silence during a conversation. The factory default is “100”.

Type: integer

Range: {10-1000}, in 10-millisecond increments

Default value: not applicable

pktFilter Identifies whether to enable RTP packet filtering for a call. If enabled, only RTP packets whose source IP/UDP address match the remote IP/UDP address specified when the circuit was created will be accepted by the system. For SIP installations and some feature servers this must be disabled. For non-SIP installations, this may prevent IP cross-talk from corrupting the voice bearer path. The factory default is “DISABLED”.

Type: enum

Range: DISABLED
ENABLED

Default value: not applicable

udpChksum Identifies whether to enable UDP checksum on RTP packets. The factory default is “DISABLED”.

Type: enum

Range: DISABLED
ENABLED

Default value: not applicable

xtalkPeriod Identifies the number of consecutive RTP packets with no change in any remote parameter (SSRC, UDP_PORT, IP_ADDRESS) to qualify the current RTP stream as valid. The factory default is “200”.

Type: integer

Range: {1-1000}

Default value: not applicable

xtalkThresh Identifies the number of packets with changes in the remote parameters (SSRC, UDP_PORT, IP_ADDRESS) required to generate an event indicating that IP XTALK may be present. The factory default is “100”.

Type: integer

Range: {0-1000}

Default value: not applicable

idlePattern Identifies the idle pattern generated (as a hex string) by the DSP when a clear channel data call is established over a VoIP circuit. When the jitter buffer under runs, the DSP generates the specified octet until the next RTP packet is received. In most situations, an HDLC protocol is transported over a clear channel VoIP RTP stream. If an underrun occurs, the transmission of an HDLC flag X.7e’ should be generated to force HDLC realignment. The factory default is “7E”.

Type: string

Range: {00-ff}

Default value: not applicable

cng Identifies the level, in negative decibels, at which to generate comfort noise during periods of silence. The factory default is "60".

Type: integer

Range: {30-77}

Default value: not applicable

Input Examples:

```
ED-VOIP-SYS::::DIFFSERV=000101,AAL5ENC=VCMUX,  
VADTHRESH=6,JITBUFPLMOD=FIXED,JITBUFLOWTHRESH=10,  
JITBUFHIGHTHRESH=320,JITBUFRSPRT=127,  
ECDISABLE=G168,PINGHRTBTTMR=1,SIDTXINTERVAL=100,  
PKTFILTER=DISABLED,UDPCHKSUM=DISABLED,  
XTALKPERIOD=20,XTALKTHRESH=10,IDLEPATTERN=7E,  
CNG=60;  
RTRV-VOIP-SYS;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"COM:DIFFSERV=000101,AAL5ENC=VCMUX,VADTHRESH=6,  
JITBUFPLMOD=FIXED,JITBUFLOWTHRESH=10,  
JITBUFHIGHTHRESH=320,JITBUFRSPRT=127,  
ECDISABLE=G168,PINGHRTBTTMR=1,SIDTXINTERVAL=100,  
PKTFILTER=DISABLED,UDPCHKSUM=DISABLED,  
XTALKPERIOD=20,XTALKTHRESH=10,IDLEPATTERN=7E,  
CNG=60"  
;
```

Related Commands: none

RTRV-PM-VPVOIP

Command:

RTRV-PM-VPVOIP: Retrieve Performance Monitors VPVOIP

Description:

RTRV-PM-VPVOIP lets the user retrieve current and historical performance data for a voice processor on a Voice over IP (VoIP) IOM.

Category: VoIP

Security: View

Input Format:

```
RTRV-PM-VPVOIP:[TID]:<vpId>:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondatt>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<vpId>:<montype>,<monval>,<vldty>,<locn>,<dirn>,<tmper>,<mondatt>,<montm>"  
;
```

Parameters:

vpId Identifies the AID as a voice processor on a VoIP IOM. A null value for the second field in the range is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all voice processors on the IOM specified by the first field in the range.

Type: vpId

Range: IOM-{1-17}[-VP-{1-8}]

Default value: none

montype Identifies the registers (for a type of monitored parameter) from which to retrieve performance data.

Type: enum

Range: ALL = All types

CINDROP = Number of incoming cells dropped

COUTDROP = Number of outgoing cells dropped

CR = Number of cells received

CT = Number of cells transmitted

CTDR = Number of control packets received

CTDT = Number of control packets transmitted

CTPRDROPIINVALIDSIZE = Number of control packets
dropped due to invalid size

CTPRDROPNONUDP = Number of control packets dropped
due to not being UDP

CTPRDROPNORSRC = Number of control packets dropped
due to lack of resources

HEC = Number of cells with header error count

IPR = Number of IP packets received

IPRBADHLEN = Number of IP packets received with bad
header length

IPRBADIP = Number of IP packets received with bad IP
address

IPRBADSUM = Number of IP packets received with bad
checksum

IPRBADUDP = Number of IP packets received with bad
UDP port

IPRVALID = Number of valid IP packets received

IPT = Number of IP packets transmitted

PR = Number of packets received

PT = Number of packets transmitted

UDPR = Number of UDP packets received

UDPT = Number of UDP packets transmitted

UNRECCELL = Number of unrecognized cells

Default value: ALL

monval Identifies (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates.

Type: integer

Range: {0-4294967295}

Default value: 0

monlev Indicates the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be “NULL”.
- Type:** enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: not applicable for output
- locn** Identifies the location of the storage counters from which to retrieve performance data. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH
- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: 15-MIN
- mondatt** Indicates the monitored date. The value indicates the beginning date for the performance-monitoring period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1-12}-{1-31}
Default value: current date

montm Indicates the monitored time. The value indicates the beginning time of day for the performance-monitoring period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Example:

```
RTRV-PM-VPVOIP::IOM-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"IOM-11-VP-3:CT,0,COMPL,,,,,"
"IOM-11-VP-3:CR,0,COMPL,,,,,"
"IOM-11-VP-3:HEC,0,COMPL,,,,,"
"IOM-11-VP-3:UNRECELLS,0,COMPL,,,,,"
"IOM-11-VP-3:OUTDROP,0,COMPL,,,,,"
"IOM-11-VP-3:INDROP,0,COMPL,,,,,"
"IOM-11-VP-3:PT,0,COMPL,,,,,"
"IOM-11-VP-3:PR,0,COMPL,,,,,"
"IOM-11-VP-3:UDPT,0,COMPL,,,,,"
"IOM-11-VP-3:UDPR,0,COMPL,,,,,"
"IOM-11-VP-3:CTDT,0,COMPL,,,,,"
"IOM-11-VP-3:CTDR,0,COMPL,,,,,"
"IOM-11-VP-3:IPT,0,COMPL,,,,,"
"IOM-11-VP-3:IPR,0,COMPL,,,,,"
"IOM-11-VP-3:IPRVALID,0,COMPL,,,,,"
"IOM-11-VP-3:IPRBADSUM,0,COMPL,,,,,"
"IOM-11-VP-3:IPRBADHLEN,0,COMPL,,,,,"
"IOM-11-VP-3:IPRBADIP,0,COMPL,,,,,"
"IOM-11-VP-3:IPRBADUDP,0,COMPL,,,,,"
"IOM-11-VP-3:CTPDROPNORSRC,0,COMPL,,,,,"
"IOM-11-VP-3:CTPDROPINVALIDSIZE,0,COMPL,,,,,"
"IOM-11-VP-3:CTPDROPNONUDP,0,COMPL,,,,,"
;
```

Related Commands: none

RTRV-STATUS-MG

Command:

RTRV-STATUS-MG: Retrieve Status Media Gateway

Description:

RTRV-STATUS-MG lets the user retrieve, for a Plexus 9000 configured as a media gateway, the number of active contexts, the number of TDM terminations available and used, the number of packet terminations used, and the number of resources available for various compression protocols and for TDM echo cancellation.

Category: VoIP

Security: View

Input Format:

RTRV-STATUS-MG: [TID]: [<src>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<src>:NUMCONTEXTS=<numContexts>,
    NUMTDMTERMUSED=<numTdmTermUsed>,
    NUMTDMTERMAVAIL=<numTdmTermAvail>,
    NUMVOIPTERMUSED=<numVoipTermUsed>,
    VOIPTDMECAVAIL=<voipTdmEcAvail>,
    RESPRFL1=<resPrfl1>,RESPRFL2=<resPrfl2>,
    RESPRFL3=<resPrfl3>,RESPRFL4=<resPrfl4>,
    RESPRFL5=<resPrfl5>,RESPRFL6=<resPrfl6>,
    RESPRFL7=<resPrfl7>,
    NOECAVAILCURRENT=<noEcAvailCurrent>,
    NOECAVAILTOTAL=<noEcAvailTotal>"
;
```

Parameters:

src Identifies the AID as a Plexus 9000.

Type: COM

Range: COM

Default value: COM

numContexts Identifies the number of active contexts.

Type: integer
Range: {0-2147483648}
Default value: none

numTdmTermUsed Identifies the number of TDM terminations used.

Type: integer
Range: {0-2147483648}
Default value: none

numTdmTermAvail Identifies the number of TDM terminations available.

Type: integer
Range: {0-2147483648}
Default value: none

numVoipTermUsed Identifies the number of VoIP terminations used.

Type: integer
Range: {0-2147483648}
Default value: none

voipTdmEcAvail Identifies the number of resources available for TDM echo cancellation on a VoIP IOM.

Type: integer
Range: {0-2147483648}
Default value: none

resPrfl1 Identifies the number of resources available for G711/Clear Channel data calls.

Type: integer
Range: {0-128000}
Default value: none

resPrfl2 Identifies the number of resources available for G729 compression on a VoIP IOM.

Type: integer
Range: {0-128000}
Default value: none

resPrfl3 Identifies the number of resources available for G723 compression on a VoIP IOM.

Type: integer
Range: {0-128000}
Default value: none

- resPrfl4** Identifies the number of resources available for G726 compression on a VoIP IOM.
Type: integer
Range: {0-128000}
Default value: none
- resPrfl5** Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.
Type: integer
Range: {0-2147483648}
Default value: none
- resPrfl6** Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.
Type: integer
Range: {0-2147483648}
Default value: none
- resPrfl7** Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.
Type: integer
Range: {0-2147483648}
Default value: none
- noEcAvailCurrent** Identifies the number of requests for TDM echo cancellation that have failed due to resource unavailability since the last issuance of this command.
Type: integer
Range: {0-2147483648}
Default value: none
- noEcAvailTotal** Identifies the number of requests for TDM echo cancellation that have failed due to resource unavailability since the last switch reboot.
Type: integer
Range: {0-2147483648}
Default value: COM

Input Example:

RTRV-STATUS-MG;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"COM:NUMCONTEXTS=0,NUMTDMTERMUSED=0,
  NUMTDMTERMAVAIL=16368,NUMVOIPTERMUSED=0,
  VOIPTDMECAVAIL=65535,RESPRFL1=0,RESPRFL2=0,
  RESPRFL3=0,RESPRFL4=0,RESPRFL5=0,RESPRFL6=0,
  RESPRFL7=0,NOECAVAILCURRENT=0,NOECAVAILTOTAL=0"
;
```

Related Commands: none

RTRV-STATUS-VPS

Command:

RTRV-STATUS-VPS: Retrieve Status Voice Processor Server

Description:

RTRV-STATUS-VPS lets the user retrieve information for the Voice Processor Server (VPS) modules (including the protection module) in a Plexus 9000 configured as a media gateway. Note that when a VPS module fails over to the protection module, its call path state remains in service; that is, the Plexus 9000 continues to report calls on the failed VPS module as still being on the failed VPS module.

Category: VoIP

Security: View

Input Format:

RTRV-STATUS-VPS: [TID]: [<iomAid>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<iomAid>:TYPE=<type>, VPSSTATUS=<vpsStatus>,
    VOIPNETWORKCONN=<voipNetworkConn>,
    TDMECAVAIL=<tdmEcAvail>, RESPRFL1=<resPrfl1>,
    RESPRFL2=<resPrfl2>, RESPRFL3=<resPrfl3>,
    RESPRFL4=<resPrfl4>, RESPRFL5=<resPrfl5>,
    RESPRFL6=<resPrfl6>, RESPRFL7=<resPrfl7>"
;
```

Parameters:

iomAid Identifies the AID as an IOM slot containing a Voice Processor Server module. A null value is equivalent to "ALL"; that is, by leaving the field blank, information for all Voice Processor Server modules in the system will be returned.

Type: IomAid

Range: IOM-{1-17}

Default value: none

type Identifies the type of VPS module; that is, whether it supports VoIP or VoA calls.

Type: enum

Range: VOA = Voice over ATM (Asynchronous Transfer Mode)
VOIP = Voice over Internet Protocol

Default value: none

vpsStatus Identifies the current state of the Voice Processor Server module.

Type: enum

Range: FAILINGOVER = a brief state while the protection IOM is
being initialized with the data about the failed IOM
IS = In-service
OOS = Out-of-service
PROTECTED = the state where the IOM is OOS and calls
are handled by the protection IOM
TEST = VPS is under test

Default value: none

voipNetworkConn Identifies indicates whether the VPS module's connectivity to the network can support VOIP calls.

Type: enum

Range: IS = In-service
OOS = Out-of-service

Default value: none

tdmEcAvail Identifies the number of resources available for TDM echo cancellation on the VPS module.

Type: integer

Range: {0-65535}

Default value: none

resPrfl1 Identifies the number of resources available for G711/Clear Channel data calls.

Type: integer

Range: {0-128000}

Default value: none

resPrfl2 Identifies the number of resources available for G729 compression on a VoIP IOM.

Type: integer

Range: {0-128000}

Default value: none

- resPrfl3** Identifies the number of resources available for G723 compression on a VoIP IOM.
Type: integer
Range: {0-128000}
Default value: none
- resPrfl4** Identifies the number of resources available for G726 compression on a VoIP IOM.
Type: integer
Range: {0-128000}
Default value: none
- resPrfl5** Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.
Type: integer
Range: {0-2147483648}
Default value: none
- resPrfl6** Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.
Type: integer
Range: {0-2147483648}
Default value: none
- resPrfl7** Identifies the number of resources available for a yet undetermined codec profile. This parameter is reserved for future use.
Type: integer
Range: {0-2147483648}
Default value: none

Input Example:

```
RTRV-STATUS-VPS::IOM-17;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"IOM-17:TYPE=VOIP,VPSSTATUS=IS,VOIPNETWORKCONN=OOS,
TDMECAVAIL=65535,RESPRFL1=0,RESPRFL2=0,
RESPRFL3=0,RESPRFL4=0,RESPRFL5=0,RESPRFL6=0,
RESPRFL7=0"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PRFL-PVCVOIP

Commands:

DLT-PRFL-PVCVOIP: Delete Profile PVCVOIP

ED-PRFL-PVCVOIP: Edit Profile PVCVOIP

ENT-PRFL-PVCVOIP: Enter Profile PVCVOIP

RTRV-PRFL-PVCVOIP: Retrieve Profile PVCVOIP

Descriptions:

DLT-PRFL-PVCVOIP lets the user delete a PVC (Permanent Virtual Connection) profile.

ED-PRFL-PVCVOIP lets the user change the ATM traffic parameters associated with a PVC (Permanent Virtual Connection) profile.

ENT-PRFL-PVCVOIP lets the user establish a profile for a PVC (Permanent Virtual Connection) endpoint that terminates Voice over IP traffic. The profile parameters only have an effect after issuing the ENT-PVC-ENDPTVOIP command. You cannot change the traffic type and bandwidth of an endpoint after the connection is provisioned.

RTRV-PRFL-PVCVOIP lets the user retrieve the ATM traffic parameters associated with a PVC (Permanent Virtual Connection) profile.

Category: VoIP

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-PRFL-PVCVOIP: [TID]:<pvcPrflId>:[CTAG];

ED-PRFL-PVCVOIP: [TID]:<pvcPrflId>:[CTAG]::
[SCR=<scr>],[PCR=<pcr>],[MBS=<mbs>],[CDVT=<cdvt>],
[TRAFFICTYPE=<trafficType>];

ENT-PRFL-PVCVOIP: [TID]:<pvcPrflId>:[CTAG]::
[SCR=<scr>],[PCR=<pcr>],[MBS=<mbs>],[CDVT=<cdvt>],
[TRAFFICTYPE=<trafficType>];

RTRV-PRFL-PVCVOIP: [TID]: [<pvcPrflId>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<pvcPrflId>:SCR=<scr>,PCR=<pcr>,MBS=<mbs>,
    CDVT=<cdvt>,TRAFFICTYPE=<trafficType>"
;
```

Parameters:

pvcPrflId Identifies the AID as a PVC profile. The Plexus 9000 is shipped with Profile #1 already established as a factory default; you cannot delete it. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all PVC profiles in the system will be returned.

Type: PvcPrflId

Range: {2-8}

Default value: none

scr Identifies the Sustained Cell Rate.

Type: integer

Range: {64-1412000}

Default value: 1412000

pcr Identifies the Peak Cell Rate.

Type: integer

Range: {64-1412000}

Default value: 1412000

mbs Identifies the PVC maximum burst size (that is., the burst tolerance) in milliseconds.

Type: integer

Range: {1-10000}

Default value: 10000

cdvt Identifies the cell delay variation tolerance in milliseconds.

Type: integer

Range: {0-10000}

Default value: 10000

trafficType Identifies the ATM traffic type.

Type: enum

Range: CBR = constant bit rate
RVBR = real-time variable bit rate
UBR = unspecified bit rate

Default value: UBR

Input Examples:

```
DLT-PRFL-PVCVOIP::2;  
ED-PRFL-PVCVOIP::2:::SCR=1412000,PCR=1412000,  
MBS=10000,CDVT=10000,TRAFFICTYPE=UBR;  
ENT-PRFL-PVCVOIP::2:::SCR=1412000,PCR=1412000,  
MBS=10000,CDVT=10000,TRAFFICTYPE=UBR;  
RTRV-PRFL-PVCVOIP::2;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"2:SCR=1412000,PCR=1412000,MBS=10000,CDVT=10000,  
TRAFFICTYPE=UBR"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-PVC-ENDPTVOIP

Commands:

DLT-PVC-ENDPTVOIP: Delete PVC ENDPTVOIP
ED-PVC-ENDPTVOIP: Edit PVC ENDPTVOIP
ENT-PVC-ENDPTVOIP: Enter PVC ENDPTVOIP
RTRV-PVC-ENDPTVOIP: Retrieve PVC ENDPTVOIP

Descriptions:

DLT-PVC-ENDPTVOIP lets the user delete a PVC (Permanent Virtual Connection) VoIP endpoint; i.e., a digital signal processor (DSP) on a VoIP module in a Plexus 9000 media gateway.

ED-PVC-ENDPTVOIP lets the user change the parameters associated with a PVC (Permanent Virtual Connection) VoIP endpoint; i.e., a digital signal processor (DSP) on a VoIP module in a Plexus 9000 media gateway.

ENT-PVC-ENDPTVOIP lets the user establish the parameters associated with a PVC (Permanent Virtual Connection) VoIP endpoint; i.e., a digital signal processor (DSP) on a VoIP server module in a Plexus 9000 media gateway.

RTRV-PVC-ENDPTVOIP lets the user retrieve the parameters associated with a PVC (Permanent Virtual Connection) VoIP endpoint; i.e., a digital signal processor (DSP) on a VoIP module in a Plexus 9000 media gateway.

Category: VoIP

Security: SA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-PVC-ENDPTVOIP:[TID]:<pvcId>:[CTAG];  
ED-PVC-ENDPTVOIP:[TID]:<pvcId>:[CTAG]::  
    [IPLNKMON=<ipLnkMon>],[LNKMONPER=<lnkMonPer>],  
    [LNKMAXTMOUTS=<lnkMaxTmouts>],[BWLMT=<bwLmt>],  
    [PKTLMT<pktLmt>]:<pst>;  
ENT-PVC-ENDPTVOIP:[TID]:<pvcId>:[CTAG]::  
    IPADDR=<ipAddr>,VPI=<vpi>,VCI=<vci>,  
    PVCPRFL=<pvcPrflId>,SUBNETMASK=<subnetMask>,  
    INTFC=<intfc>,[RMTPEERIP=<rmtPeerIp>],  
    [IPLNKMON=<ipLnkMon>],[LNKMONPER=<lnkMonPer>],  
    [LNKMAXTMOUTS=<lnkMaxTmouts>],[BWLMT=<bwLmt>],  
    [PKTLMT<pktLmt>]:<pst>;  
RTRV-PVC-ENDPTVOIP:[TID]:[<pvcId>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
  "<pvcId>:IPADDR=<ipAddr>,VPI=<vpi>,VCI=<vci>,  
    PVCPRFL=<pvcPrflId>,SUBNETMASK=<subnetMask>,  
    INTFC=<intfc>,RMTPEERIP=<rmtPeerIp>,  
    IPLNKMON=<ipLnkMon>,LNKMONPER=<lnkMonPer>,  
    LNKMAXTMOUTS=<lnkMaxTmouts>,BWLMT=<bwLmt>,  
    PKTLMT<pktLmt>:<pst>,<sst>"  
;
```

Parameters:

pvcId Identifies the AID as a PVC endpoint. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all PVC endpoints in the system will be returned.

Type: pvcId
Range: {1-4}
Default value: none

ipAddr Identifies the IP address for the PVC endpoint. IP addresses 0.0.0.0 and 255.255.255.255 are not valid.

Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: none

- vpi** Identifies the virtual path identifier for the PVC endpoint.
Type: integer
Range: {0-7}
Default value: none
- vci** Identifies the virtual circuit identifier for the PVC endpoint.
Type: integer
Range: {32-4096}
Default value: none
- pvcPrflId** Identifies the PVC profile associated with the PVC endpoint.
Type: integer
Range: {1-8}
Default value: none
- subnetMask** Identifies the IP address for the subnet mask.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NONE
- intfc** Identifies the optical carrier port on a specific IOM as the interface for the PVC endpoint.
Type: enum
Range: IOM-8-IF-{1-4}
Default value: IOM-8-IF-1
- rmtPeerIp** Identifies the remote peer IP address.
Type: string
Range: {0-255}.{0-255}.{0-255}.{0-255}
Default value: NULL
- ipLnkMon** Identifies whether to enable IP link monitoring for a valid remote peer IP address.
Type: BoolYN
Range: N = do not enable IP link monitoring
Y = enable IP link monitoring
Default value: N
- lnkMonPer** Identifies the frequency, in seconds, that IP ping heartbeat messages are sent by the VoIP IOM.
Type: integer
Range: {1-5}, in 0.5 increments
Default value: 1

InkMaxTmouts Identifies the number of consecutive IP ping heartbeat time-outs allowed before loss of IP connectivity and subsequent ENA-IOM failover occurs. When the ENA-IOM is connected to a router through a series of switches that have 802.1D spanning tree protocol enabled (and the value of *InkMonPer* is “1”), the number of consecutive timeouts must be greater than three times the configured forward delay timer configured in the Ethernet switches (default is 15 seconds).

Type: integer
Range: {10-65535}
Default value: 60

bwLmt Identifies the percentage of the bandwidth for the port that can be used.

Type: integer
Range: {0-100}
Default value: 100

pktLmt Identifies the maximum number of packets per second allowed for the PVC endpoint. A value of “0” signifies no limit.

Type: integer
Range: {0, 10000-500000}
Default value: 0

pst Identifies the primary state of the PVC.

Type: enum
Range: IS = In-service
OOS = Out-of-service
Default value: none

sst Identifies (in RTRV output) the secondary state of the PVC endpoint.

Range: ACT = Active
AINS = Automatic, In-service
FAF = Facilities Failure
FLT = Faulted
Default value: none

Input Examples:

```
DLT-PVC-ENDPTVOIP::1;  
ED-PVC-ENDPTVOIP::1:::IPLNKMON=N, LNKMONPER=1,  
LNKMAXTMOUTS=60,BWLM=100,PKTLMT=0:IS;  
ENT-PVC-ENDPTVOIP::1:::IPADDR=192.9.20.27,VPI=0,  
VCI=33,PVCPRFL=1,SUBNETMASK=192.9.20.26,  
INTFC=IOM-8-IF-1,RMTPEERIP=NONE,IPLNKMON=N,  
LNKMONPER=1,LNKMAXTMOUTS=60,BWLM=100,PKTLMT=0:  
PST=IS;  
RTRV-PVC-ENDPTVOIP::1;
```

Output Example:

```
telica 2004-05-14 14:37:49  
M 0 COMPLD  
"1:IPADDR=192.9.20.27,VPI=0,VCI=33,PVCPRFL=1,  
SUBNETMASK=192.9.20.26,INTFC=IOM-8-IF-1,  
RMTPEERIP=NONE,IPLNKMON=N,LNKMONPER=1,  
LNKMAXTMOUTS=60,BWLM=100,PKTLMT=0:IS,ACT"  
;
```

Related Commands:

DLT/ED/ENT/RTRV-ENET-ENDPTVOIP

RTRV-PM-VCCVOIP

Command:

RTRV-PM-VCCVOIP: Retrieve Performance Monitors VCCVOIP

Description:

RTRV-PM-VCCVOIP lets the user retrieve current and historical performance data for a Voice over IP (VoIP) Virtual Circuit Connection (VCC).

Category: VoIP

Security: View

Input Format:

```
RTRV-PM-VCCVOIP:[TID]:<vpsId>:[CTAG]:[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondat>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<vpsId>:<montype>,<monval>,[<vldty>],[<locn>],  
    [<dirn>],[<tmper>],[<mondat>],[<montm>]"  
;
```

Parameters:

vpsId Identifies the AID as a VCC on a Voice Processor Server (VPS) module. A null value for the second field in the range is equivalent to "ALL"; that is, by leaving the field blank, the system returns information for all VCCs on the VPS specified by the first field in the range.

Type: vpsId

Range: IOM-{1-17}[-VCC-{0-799}]

Default value: none

montype Identifies a type of monitored parameter for the specified VCC.

Type: enum

Range: AAL5CRCERR = Number of AAL5 CRC errors

AAL5ENCAPERR = Number of AAL5 frame encapsulation errors

ALL = All types

CR = Number of cells received

CT = Number of cells transmitted

Default value: ALL

- monval** Identifies (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates.
Type: integer
Range: {0-4294967295}
Default value: 0
- monlev** Indicates the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".
Type: enum
Range: {0-255}-{UP,DOWN}
Default value: 1-UP
- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; its value will be "NULL".
Type: enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: not applicable for output
- locn** Identifies the location of the storage counters from which to retrieve performance data. This parameter is not supported presently; leave it blank.
Type: enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
Type: enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH

- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: 15-MIN
- mondatt** Indicates the monitored date. The value indicates the beginning date for the performance-monitoring period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1-12}-{1-31}
Default value: current date
- montm** Indicates the monitored time. The value indicates the beginning time of day for the performance-monitoring period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {0-23}-{0-59}
Default value: current time

Input Example:

```
RTRV-PM-VCCVOIP::IOM-10-VCC-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"IOM-10-VCC-1:CT,555555"
"IOM-10-VCC-1:CR,666666"
"IOM-10-VCC-1:AAL5CRCERR,0"
"IOM-10-VCC-1:AAL5ENCAPERR,0"
;
```

Related Commands: none

RTRV-PM-VOIPCKT

Command:

RTRV-PM-VOIPCKT: Retrieve Performance Monitors VoIP Circuit

Description:

RTRV-PM-VOIPCKT lets the user retrieve current and historical performance data for a Voice over IP (VoIP) termination (circuit).

Category: VoIP

Security: View

Input Format:

```
RTRV-PM-VOIPCKT:[TID]:<voipCktId>:[CTAG]::[<montype>],  
[<monlev>],[<locn>],[<dirn>],[<tmper>],[<mondat>],  
[<montm>;
```

Output Format:

```
          SID DATE TIME  
M  CTAG COMPLD  
    "<voipCktId>:<montype>,<monval>,[<vldty>],[<locn>],  
    [<dirn>],[<tmper>],[<mondat>],[<montm>]"  
;
```

Parameters:

voipCktId Identifies the AID as a VoIP termination (circuit).

Type: string

Range: CTEXT-<ctxId>, where *ctxId* = {0-4294967295}

TERM-<voipTermId>, where *voipTermId* is a string of alphanumeric characters, in the form:

Chassis/Termination type/IOM/numeric ID for the ephemeral RTP termination =

Chassis/RTP/IOM{1-17}/32-bit field printed as hex

Default value: none

montype Identifies a type of monitored parameter for the specified VCC.

Type: enum

Range: ALL = All types

JBCOUNT = Current jitter buffer count

JITTER = Average inter-arrival jitter

JITTERPEER = Peer's inter-arrival jitter

OCTRX = Octets received

OCTTX = Octets transmitted

PKTLOST = Packets lost

PKTLOSTPEER = Packets that didn't make it to the peer

PKTRX = Packets received

PKTSIDRX = SID (Silence Insertion Descriptor) packets
received

PKTSIDTX = SID packets transmitted

PKTTX = Packets transmitted

RTCPPKTRX = RTCP packets received (presently
unsupported)

RTCPPKTTX = RTCP packets transmitted (presently
unsupported)

RTDELAY = Round trip delay (presently unsupported)

SDULOST = SDU (Service Data Units) lost

Default value: ALL

monval Identifies (for RTRV-PM output) the measured value of the monitored parameter. The value is in the form of numeric counts or rates.

Type: integer

Range: {0-4294967295}

Default value: 0

monlev Indicates the discriminating level of the requested monitored parameter. A null value defaults to "1-UP".

Type: enum

Range: {0-255}-{UP,DOWN}

Default value: 1-UP

- vldty** Identifies (for RTRV-PM output) the validity of the monitored interval; that is, whether the information for the specified time period was accumulated over the entire time period or some portion of it. This parameter is not supported presently; leave it blank – its value will be “NULL”.
- Type:** enum
Range: ADJ = Data manually adjusted or initialized
COMPL = Data accumulated over the entire time period
LONG = Data accumulated over greater than the entire time period
NA = Data not available
PRTL = Data accumulated over a portion of the time period
Default value: not applicable for output
- locn** Identifies the location of the storage counters from which to retrieve performance data. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: FEND = Far end
NEND = Near end
Default value: NEND
- dirn** Identifies the direction of the data stored in statistics counters. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: BTH = Both directions
RCV = Receive direction only
TRMT = Transmit direction only
Default value: BTH
- tmper** The accumulation period for performance counters. The only values currently allowed for *tmper* are “15-MIN” and “24-HR”. This parameter is not supported presently; leave it blank.
- Type:** enum
Range: {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
Default value: 15-MIN

mondatt Indicates the monitored date. The value indicates the beginning date for the performance-monitoring period defined by *tmper*. The format is MM-DD. This parameter is not supported presently; leave it blank.

Type: enum

Range: {1-12}-{1-31}

Default value: current date

monttm Indicates the monitored time. The value indicates the beginning time of day for the performance-monitoring period defined by *tmper*. The format is HH-MM. This parameter is not supported presently; leave it blank.

Type: enum

Range: {0-23}-{0-59}

Default value: current time

Input Example:

```
RTRV-PM-VOIPCKT::CTXT-1;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"CTXT-1:OCTTX,555555"
"CTXT-1:PKTTX,111111"
"CTXT-1:PKTSIDTX,0"
"CTXT-1:JITTER,0"
"CTXT-1:OCTRX,0"
"CTXT-1:PKTRX,0"
"CTXT-1:PKTLOST,0"
"CTXT-1:PKTSIDRX,0"
"CTXT-1:PKTLOSTPEER,0"
"CTXT-1:JITTERPEER,0"
"CTXT-1:SDULOST,0"
"CTXT-1:JBCOUNT,0"
"CTXT-1:RTDELAY,0"
"CTXT-1:RTCPPKTTX,0"
"CTXT-1:RTCPPKTRX,0"
;
```

Related Commands: none

RTRV-STATUS-CTXT

Command:

RTRV-STATUS-CTXT: Retrieve Status Context

Description:

RTRV-STATUS-CTXT lets the user retrieve information on TDM and packet terminations used on a MEGACO call.

Category: VoIP

Security: View

Input Format:

```
RTRV-STATUS-CTXT:[TID]:[<ctxtId>]:[CTAG]::
[<numCtxts>;
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"CTXID=<ctxtId>,[TDMTERMLIST=<tdmTermIdList>],
[VOIPTERMLIST=<voipTermIdList>],
[CONFERENCEESC=<conferenceRsc>],
[TOPOLOGYLIST=<topologyList>]"
;
```

Parameters:

ctxtId Identifies the AID as a MEGACO context. A null value is equivalent to "ALL"; that is, by leaving the field blank, information for the number of VoIP contexts specified by *numCtxts* will be returned.

Type: integer

Range: {0-4294967295}

Default value: none

numCtxts Identifies (in input) the number of contexts for which to retrieve information.

Type: integer

Range: {0-32767}

Default value: 20

tdmTermIdList Identifies a list of TDM terminations, separated by ampersands (&), for the context.

Type: string

Range: alphanumeric characters, in the form:
Chassis/Termination type/IOM/DS3 port/DS1 port/Channel =
Chassis/TDM/IOM{1-17}/T{1-8}/P{1-28}/C{1-24}

Default value: none

voipTermIdList Identifies a list of VoIP terminations, separated by ampersands (&), for the context.

Type: string

Range: alphanumeric characters, in the form:
Chassis/Termination type/IOM/numeric ID for the VoIP
termination =
Chassis/RTP/IOM{1-17}/32-bit field printed as hex

Default value: none

conferenceRsc Identifies a conference resource for the context.

Type: string

Range: alphanumeric characters, in the form:
Chassis/Termination type/numeric ID for the conference
resource =
Chassis/CONF/32-bit field printed as hex

Default value: none

topologyList Identifies a list of topology specifications, separated by ampersands (&), for the context.

Type: string

Range: alphanumeric characters, in the form:
Source termination – Destination termination – Relationship,
where the terminations can be in the formats shown by
tdmTermIdList and *voipTermIdList*, and the relationship
can be ONEWAY, BOTHWAYS, or ISOLATE

Default value: none

Input Example:

RTRV-STATUS-CTXT;

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
  "CTXTID=3117056,
    TDMTERMIDLIST=TELICA/TDM/IOM4/T3/P9/C10&,
    VOIPTERMIDLIST=TELICA/RTP/IOM9/900e49f&,
    CONFERENCERSC=NULL, TOPOLOGYLIST=NULL "
  "CTXTID=3117058,
    TDMTERMIDLIST=TELICA/TDM/IOM1/T7/P8/C23&,
    VOIPTERMIDLIST=TELICA/RTP/IOM9/900e4a0&,
    CONFERENCERSC=NULL, TOPOLOGYLIST=NULL "
;
```

Related Commands: none

RTRV-STATUS-TDMTERMID

Command:

RTRV-STATUS-TDMTERMID: Retrieve Status TDMTERMID

Description:

RTRV-STATUS-TDMTERMID lets the user retrieve information on TDM terminations used on a MEGACO call.

Category: VoIP

Security: View

Input Format:

RTRV-STATUS-TDMTERMID: [TID]:<tdmTermId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<tdmTermId>:CTXTID=<ctxtId>,DURATION=<duration>,
TDMSTATUS=<tdmstatus>,MODE=<mode>,
ECHOCANCSTATE=<echocancstate>,
ECHONLPSTATUS=<echonlpstatus>,
ECHOTAIL=<echotail>,TXGAIN=<txGain>,
RXGAIN=<rxGain>"
;
```

Parameters:

tdmTermId Identifies the AID as a TDM termination.

Type: TdmTermId

Range: alphanumeric characters, in the form:

Chassis/Termination type/IOM/DS3 port/DS1 port/Channel =
Chassis/TDM/IOM{1-17}/T{1-8}/P{1-28}/C{1-24}

Default value: none

ctxtId Identifies the MEGACO context.

Type: integer

Range: {0-4294967295}

Default value: none

duration Identifies the duration of the call in seconds.

Type: integer

Range: {0-4294967295}

Default value: none

tdmstatus Identifies the state of the TDM channel (DS0).

Type: enum

Range: IS = In-service

OOS = Out-of-service

Default value: none

mode Identifies the transmit mode for the termination.

Type: enum

Range: INACTIVE = termination not in use

LOOPBACK = termination in loopback

RECV_ONLY = receive only

SEND_ONLY = transmit only

SEND_RECV = transmit and receive

Default value: none

echocancstate Identifies whether echo cancellation can be enabled; that is, whether the termination has an associated DSP resource for echo cancellation.

Type: enum

Range: OFF = echo cancellation cannot be enabled

ON = echo cancellation can be enabled

Default value: none

echonlpstatus Identifies whether echo cancellation is currently enabled.

Type: enum

Range: OFF = echo cancellation disabled

ON = echo cancellation enabled

Default value: none

echotail Identifies the number of milliseconds after a transmission during which echoes are cancelled (when the value of *echonlpstatus* is "ON").

Type: enum

Type: integer

Range: {0-128}

Default value: none

txGain Identifies the transmit gain for the termination in decibels.

Type: enum

Range: {6, 4, 3, 2, 0, -2, -3, -4, -6, -8, -9, -10, -12, -15}

Default value: none

rxGain Identifies the receive gain for the termination in decibels.

Type: enum

Range: {6, 4, 3, 2, 0, -2, -3, -4, -6, -8, -9, -10, -12, -15}

Default value: none

Input Example:

```
RTRV-STATUS-TDMTERMID::TELICA/TDM/IOM3/T3/P1/C6;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"TELICA/TDM/IOM3/T3/P1/C6:CTXTID=30000004,
  DURATION=100,TDMSTATUS=IS,MODE=SEND_ONLY,
  ECHOCANCSTATE=ON,ECHONLPSTATUS=ON,ECHOTAIL=0,
  TXGAIN=0,RXGAIN=0"
;
```

Related Commands: none

RTRV-STATUS-VOIPTERMID

Command:

RTRV-STATUS-VOIPTERMID: Retrieve Status VOIPTERMID

Description:

RTRV-STATUS-VOIPTERMID lets the user retrieve information on packet terminations.

Category: VoIP

Security: View

Input Format:

RTRV-STATUS-VOIPTERMID: [TID]:<voipTermId>:[CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<voipTermId>:[CTXTID=<ctxtId>],
  DURATION=<duration>,MODE=<mode>,
  [LOCALIP=<localIp>],LOCALUDPPORT=<localUdpPort>,
  [REMOTEIP=<remoteIp>],
  REMOTEUDPPORT=<remoteUdpPort>,
  LOCALCODEC=<localCodec>,
  REMOTECODEC=<remoteCodec>"
;
```

Parameters:

voipTermId Identifies the AID as a packet termination.

Type: RtpTermId

Range: alphanumeric characters, in the form:

Chassis/Termination type/IOM/numeric ID for the ephemeral
RTP termination =

Chassis/RTP/IOM{1-17}/32-bit field printed as hex

Default value: none

ctxtId Identifies the MEGACO context containing the termination.

Type: integer

Range: {0-4294967295}

Default value: none

duration Identifies the duration of the call in seconds.

Type: integer

Range: {0-65535}

Default value: none

mode Identifies the transmit mode.

Type: enum

Range: INACTIVE = termination inactive

LOOPBACK = termination in loopback

RECV_ONLY = receive

SEND_ONLY = transmit

SEND_RECV = transmit and receive

Default value: none

localIp Identifies the local IP address.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

localUdpPort Identifies the local UDP port.

Type: integer

Range: {1025-66535}

Default value: none

remoteIp Identifies the remote IP address.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

remoteUdpPort Identifies the remote UDP port.

Type: integer

Range: {1025-66535}

Default value: none

localCodec Identifies the audio codec (coding/decoding algorithm types) used at the near end.

Type: enum

Range: CISCOCLEARCHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
G711 = G.711 for mu-law PCM encoding (North America)
G711ALAW = G.711 for a-law PCM encoding (Europe)
G723_53 = G.723 encoding at 5.3 Kbps
G723_63 = G.723 encoding at 6.3 Kbps
G726_16 = G.726 encoding at 16 Kbps (currently unsupported)
G726_24 = G.726 encoding at 24 Kbps (currently unsupported)
G726_32 = G.726 encoding at 32 Kbps
G726_40 = G.726 encoding at 40 Kbps (currently unsupported)
G729 = G.729A encoding
G729E = G.729E encoding (currently unsupported)
NULL = no value specified
X_CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream

Default value: none

remoteCodec Identifies the audio codec (coding/decoding algorithm types) used at the far end.

Type: enum

Range: CISCOCLEARCHANNEL = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
CLEARMODE = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream
G711 = G.711 for mu-law PCM encoding (North America)
G711ALAW = G.711 for a-law PCM encoding (Europe)
G723_53 = G.723 encoding at 5.3 Kbps
G723_63 = G.723 encoding at 6.3 Kbps
G726_16 = G.726 encoding at 16 Kbps (currently unsupported)
G726_24 = G.726 encoding at 24 Kbps (currently unsupported)
G726_32 = G.726 encoding at 32 Kbps
G726_40 = G.726 encoding at 40 Kbps (currently unsupported)
G729 = G.729A encoding
G729E = G.729E encoding (currently unsupported)
NULL = no value specified
X_CCD = encoding algorithm for the transmission of clear channel data (unrestricted digital data, i.e., ISDN HDLC traffic) in an RTP media stream

Default value: none

Input Example:

```
RTRV-STATUS-VOIPTERMID::TELICA/RTP/IOM9/900e49f;
```

Output Example:

```
telica 2004-05-14 14:37:49
M 0 COMPLD
"TELICA/RTP/IOM9/900e49f:CTXTID=30000004,DURATION=9,
LOCALIP=70.0.1.11,LOCALUDPPORT=2000,
REMOTEIP=70.0.1.11,REMOTEUDPPORT=2000,
LOCALCODEC=G711,REMOTECODEC=G711"
;
```

Related Commands: none

NOTES

DLT/ED/ENT/RTRV-SNMP-ACCESS

Commands:

DLT-SNMP-ACCESS: Delete SNMP Access

ED-SNMP-ACCESS: Edit SNMP Access

ENT-SNMP-ACCESS: Enter SNMP Access

RTRV-SNMP-ACCESS: Retrieve SNMP Access

Descriptions:

DLT-SNMP-ACCESS lets the user delete an SNMP access group.

ED-SNMP-ACCESS lets the user change the views associated with an SNMP access group.

ENT-SNMP-ACCESS lets the user establish an SNMP access group and its associated views.

RTRV-SNMP-ACCESS lets the user retrieve the views associated with an SNMP access group.

Category: VoIP

Security: NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-SNMP-ACCESS:[TID]:<SnpAccessAid>:[CTAG];  
ED-SNMP-ACCESS:[TID]:<SnpAccessAid>:[CTAG]::  
    [READVIEW=<ReadView>],[WRITEVIEW=<WriteView>],  
    [NOTIFYVIEW=<NotifyView>];  
ENT-SNMP-ACCESS:[TID]:<SnpAccessAid>:[CTAG]::  
    [READVIEW=<ReadView>],[WRITEVIEW=<WriteView>],  
    [NOTIFYVIEW=<NotifyView>];  
RTRV-SNMP-ACCESS:[TID]:[<SnpAccessAid>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<SnpAccessAid>:READVIEW=<ReadView>,  
    WRITEVIEW=<WriteView>,NOTIFYVIEW=<NotifyView>"  
;
```

Parameters:

SnmAccessAid Identifies the AID as an SNMP access group. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all SNMP access groups in the system will be returned.

Type: SnmpAccessAid

Range: <GROUPNAME>[-{SECLEVEL}[-{SECMODEL}]], where

GROUPNAME = up to 32 alphanumeric characters
(including underscores “_”) used to identify a set of
views for access control

SECLEVEL = the minimum security level required by a
message to access the group. Allowed values are:

AUTHNOPRIV = authentication and no privacy
(default)

AUTHPRIV = authentication and privacy

NOAUTHNOPRIV = no authentication, no
privacy

SECMODEL = security model required for access to the
group. Allowed values are:

ANY = any security model

SNMPV1 = SNMP version 1 security

SNMPV2C = SNMP version 2c security

USM = User-Based Security (default)

Default value: none

ReadView Identifies the name of the read view for read access. If no view exists with this name then no access is authorized. A null value indicates no access.

Type: string

Range: up to 32 alphanumeric characters (including underscores “_”)

Default value: NULL

WriteView Identifies the name of the write view for write access. If no view exists with this name then no access is authorized. A null value indicates no access.

Type: string

Range: up to 32 alphanumeric characters (including underscores “_”)

Default value: NULL

NotifyView Identifies the name of the notify view for notify access. If no view exists with this name then no access is authorized. A null value indicates no access.

Type: string

Range: up to 32 alphanumeric characters (including underscores “_”)

Default value: NULL

Input Examples:

```
DLT-SNMP-ACCESS::TELICA;  
ED-SNMP-ACCESS::TELICA:::READVIEW=READ_VIEW,  
WRITEVIEW=WRITE_VIEW,NOTIFYVIEW=NOTIFY_VIEW;  
ENT-SNMP-ACCESS::TELICA:::READVIEW=READ_VIEW,  
WRITEVIEW=WRITE_VIEW,NOTIFYVIEW=NOTIFY_VIEW;  
RTRV-SNMP-ACCESS::TELICA;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"TELICA:READVIEW=READ_VIEW,WRITEVIEW=WRITE_VIEW,  
NOTIFYVIEW=NOTIFY_VIEW"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SNMP-COMM

Commands:

DLT-SNMP-COMM: Delete SNMP COMM

ED-SNMP-COMM: Edit SNMP COMM

ENT-SNMP-COMM: Enter SNMP COMM

RTRV-SNMP-COMM: Retrieve SNMP COMM

Descriptions:

DLT-SNMP-COMM lets the user delete a community string for SNMP requests.

ED-SNMP-COMM lets the user change the parameters associated with a community string for SNMP requests.

ENT-SNMP-COMM lets the user establish a community string for SNMP requests.

RTRV-SNMP-COMM lets the user retrieve the parameters associated with a community string for SNMP requests

Category: VoIP

Security: NSA for DLT/ED/ENT, View for RTRV

Input Formats:

DLT-SNMP-COMM: [TID]:<CommStr>:[CTAG];

ED-SNMP-COMM: [TID]:<CommStr>:[CTAG]::
[IPADDR=<IpAddr>],[SUBNETMASK=<SubNetMask>],
[ACCESSTYPE=<AccessType>];

ENT-SNMP-COMM: [TID]:<CommStr>:[CTAG]::
[IPADDR=<IpAddr>],[SUBNETMASK=<SubNetMask>],
[ACCESSTYPE=<AccessType>];

RTRV-SNMP-COMM: [TID]: [<CommStr>]: [CTAG];

Output Format:

```
SID DATE TIME
M CTAG COMPLD
  "<CommStr>:IPADDRESS=<IpAddress>,
    SUBNETMASK=<SubNetMask>,ACCESS=<AccessType>"
;
```

Parameters:

CommStr Identifies the AID as a community string. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all community strings in the system will be returned.

Type: string

Range: up to 20 alphanumeric characters (including underscores "_")

Default value: none

IpAddress Identifies the IP address of the Network Management Station for the community string. Use 0.0.0.0 for any host.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: 0.0.0.0

SubNetMask Identifies the subnet mask of the Network Management Station for the community string. Use 0.0.0.0 for any host and 255.255.255.255 for a single host.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: 0.0.0.0 for any host, 255.255.255.255 for a single host

AccessType Identifies the access privilege level allowed. READONLY is the only access level currently used.

Type: enum

Range: READONLY
READWRITE

Default value: READONLY

Input Examples:

```
DLT-SNMP-COMM: : COMMSTR1;
```

```
ED-SNMP-COMM: : COMMSTRING1::: IPADDR=192.0.24.57,  
SUBNETMASK=255.255.255.255, ACESSTYPE=READONLY;
```

```
ENT-SNMP-COMM: : COMMSTRING1::: IPADDR=192.0.24.57,  
SUBNETMASK=255.255.255.255, ACESSTYPE=READONLY;
```

```
RTRV-SNMP-COMM: : COMMSTR1;
```

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
"COMMSTRING1:IPADDRESS=192.0.24.57,
  SUBNETMASK=255.255.255.255,ACCESS=READONLY"
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SNMP-TRAP

Commands:

DLT-SNMP-TRAP: Delete SNMP Trap
ED-SNMP-TRAP: Edit SNMP Trap
ENT-SNMP-TRAP: Enter SNMP Trap
RTRV-SNMP-TRAP: Retrieve SNMP Trap

Descriptions:

DLT-SNMP-TRAP lets the user delete an SNMP trap destination..

ED-SNMP-TRAP lets the user change the parameters for handling traps by the SNMP Agent.

ENT-SNMP-TRAP lets the user establish the parameters for handling traps by the SNMP Agent.

RTRV-SNMP-TRAP lets the user retrieve the parameters for handling traps by the SNMP Agent.

Category: VoIP

Security: NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-SNMP-TRAP:[TID]:<IpAddr>:[CTAG];  
ED-SNMP-TRAP:[TID]:<IpAddr>:[CTAG]::  
[COMMSTR=<CommStr>],[TRAPTYPE=<TrapType>],  
[ALLOWCRITICAL=<AllowCritical>],  
[ALLOWMAJOR=<AllowMajor>],  
[ALLOWMINOR=<AllowMinor>],  
[ALLOWEVENT=<AllowEvent>],[ALLOWT1=<AllowT1>],  
[ALLOWT3=<AllowT3>],[ALLOWSTS1=<AllowSTS1>],  
[ALLOWLINKUP=<AllowLinkUp>],  
[ALLOWLINKDOWN=<AllowLinkDown>],  
[ALLOWEQPT=<AllowEqpt>],[ALLOWOC=<AllowOC>],  
[ALLOWCOMM=<AllowComm>],[TRAPMODE=<TrapMode>];
```

```
ENT-SNMP-TRAP:[TID]:<IpAddr>:[CTAG]::  
[COMMSTR=<CommStr>],[TRAPTYPE=<TrapType>],  
[ALLOWCRITICAL=<AllowCritical>],  
[ALLOWMAJOR=<AllowMajor>],  
[ALLOWMINOR=<AllowMinor>],  
[ALLOWEVENT=<AllowEvent>],[ALLOWT1=<AllowT1>],  
[ALLOWT3=<AllowT3>],[ALLOWSTS1=<AllowSTS1>],  
[ALLOWLINKUP=<AllowLinkUp>],  
[ALLOWLINKDOWN=<AllowLinkDown>],  
[ALLOWEQPT=<AllowEqpt>],[ALLOWOC=<AllowOC>],  
[ALLOWCOMM=<AllowComm>],[TRAPMODE=<TrapMode>];  
  
RTRV-SNMP-TRAP:[TID]:[<IpAddr>]:[CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
"<IpAddress>:[COMMSTR=<CommStr>],  
 TRAPTYPE=<TrapType>,  
 ALLOWCRITICAL=<AllowCritical>,  
 ALLOWMAJOR=<AllowMajor>,ALLOWMINOR=<AllowMinor>,  
 ALLOWEVENT=<AllowEvent>,ALLOWT1=<AllowT1>,  
 ALLOWT3=<AllowT3>,ALLOWSTS1=<AllowSTS1>,  
 ALLOWLINKUP=<AllowLinkUp>,  
 ALLOWLINKDOWN=<AllowLinkDown>,  
 ALLOWEQPT=<AllowEqpt>,ALLOWOC=<AllowOC>,  
 ALLOWCOMM=<AllowComm>,TRAPMODE=<TrapMode>"  
;
```

Parameters:

IpAddr Identifies the IP address of a Network Management Station to which traps can be sent. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all Network Management Stations in the system will be returned.

Type: string

Range: {0-255}.{0-255}.{0-255}.{0-255}

Default value: none

CommStr Identifies the community string for traps sent to the Network Management Station identified by *IpAddress*.

Type: string

Range: up to 20 alphanumeric characters (including underscores “_”)

Default value: TRAP

TrapType Identifies the type for traps sent to the Network Management Station identified by *IpAddress*.

Type: enum

Range: V1TRAP = send SNMPv1 trap

V2TRAP = send SNMPv2 trap

Default value: V1TRAP

AllowCritical Identifies whether the SNMP agent can send critical alarmed traps.

Type: BoolYN

Range: N = SNMP agent does not allow critical alarmed traps

Y = SNMP agent allows critical alarmed traps

Default value: Y

AllowMajor Identifies whether the SNMP agent can send major alarmed traps.

Type: BoolYN

Range: N = SNMP agent does not allow major alarmed traps

Y = SNMP agent allows major alarmed traps

Default value: Y

AllowMinor Identifies whether the SNMP agent can send minor alarmed traps.

Type: BoolYN

Range: N = SNMP agent does not allow minor alarmed traps

Y = SNMP agent allows minor alarmed traps

Default value: Y

AllowEvent Identifies whether the SNMP agent can send event traps.

Type: BoolYN

Range: N = SNMP agent does not allow event traps

Y = SNMP agent allows event traps

Default value: Y

AllowT1 Identifies whether the SNMP agent can send T1 traps.

Type: BoolYN

Range: N = SNMP agent does not allow T1 traps

Y = SNMP agent allows T1 traps

Default value: Y

AllowT3 Identifies whether the SNMP agent can send T3 traps.

Type: BoolYN

Range: N = SNMP agent does not allow T3 traps

Y = SNMP agent allows T3 traps

Default value: Y

AllowSTS1 Identifies whether the SNMP agent can send STS1 traps.

Type: BoolYN

Range: N = SNMP agent does not allow STS1 traps
Y = SNMP agent allows STS1 traps

Default value: Y

AllowLinkUp Identifies whether the SNMP agent can send traps when a link is “up”.

Type: BoolYN

Range: N = SNMP agent does not allow “link is up” traps
Y = SNMP agent allows “link is up” traps

Default value: Y

AllowLinkDown Identifies whether the SNMP agent can send traps when a link is “down”.

Type: BoolYN

Range: N = SNMP agent does not allow “link is down” traps
Y = SNMP agent allows “link is down” traps

Default value: Y

AllowEqpt Identifies whether the SNMP agent can send equipment traps.

Type: BoolYN

Range: N = SNMP agent does not allow equipment traps
Y = SNMP agent allows equipment traps

Default value: Y

AllowOC Identifies whether the SNMP agent can send OCn traps.

Type: BoolYN

Range: N = SNMP agent does not allow OCn traps
Y = SNMP agent allows OCn traps

Default value: Y

AllowComm Identifies whether the SNMP agent can send common traps; that is, all traps (signaling, billing, statistics, etc.) other than those in the previous parameters.

Type: BoolYN

Range: N = SNMP agent does not allow common traps
Y = SNMP agent allows common traps

Default value: Y

TrapMode Identifies whether to map all events into approximately 16 traps, or to have a one-to-one mapping between events and traps (i.e. each event maps to a trap with a unique OID).

Type: BoolYN

Range: GENERIC = map all events into approximately 16 traps
SPECIFIC = one-to-one mapping between events and traps

Default value: GENERIC

Input Examples:

```
DLT-SNMP-TRAP::192.0.24.57;  
ED-SNMP-TRAP::192.0.24.57:::COMMSTR=TRAP,  
  TRAPTYPE=V1TRAP,ALLOWCRITICAL=Y,ALLOWMAJOR=Y,  
  ALLOWMINOR=Y,ALLOWEVENT=Y,ALLOWT1=Y,ALLOWT3=Y,  
  ALLOWSTS1=Y,ALLOWLINKUP=Y,ALLOWLINKDOWN=Y,  
  ALLOWEQPT=Y,ALLOWOC=Y,ALLOWCOMM=Y,TRAPMODE=GENERIC;  
ENT-SNMP-TRAP::192.0.24.57:::COMMSTR=TRAP,  
  TRAPTYPE=V1TRAP,ALLOWCRITICAL=Y,ALLOWMAJOR=Y,  
  ALLOWMINOR=Y,ALLOWEVENT=Y,ALLOWT1=Y,ALLOWT3=Y,  
  ALLOWSTS1=Y,ALLOWLINKUP=Y,ALLOWLINKDOWN=Y,  
  ALLOWEQPT=Y,ALLOWOC=Y,ALLOWCOMM=Y,TRAPMODE=GENERIC;  
RTRV-SNMP-TRAP::192.0.24.57;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
  "192.0.24.57:COMMSTR=TRAP,TRAPTYPE=V1TRAP,  
    ALLOWCRITICAL=Y,ALLOWMAJOR=Y,ALLOWMINOR=N,  
    ALLOWEVENT=Y,ALLOWT1=Y,ALLOWT3=Y,ALLOWSTS1=Y,  
    ALLOWLINKUP=Y,ALLOWLINKDOWN=Y,ALLOWEQPT=Y,  
    ALLOWOC=Y,ALLOWCOMM=Y,TRAPMODE=GENERIC"  
;
```

Related Commands: none

DLT/ED/ENT/RTRV-SNMP-USER

Commands:

DLT-SNMP-USER: Delete SNMP User
ED-SNMP-USER: Edit SNMP User
ENT-SNMP-USER: Enter SNMP User
RTRV-SNMP-USER: Retrieve SNMP User

Descriptions:

DLT-SNMP-USER lets the user delete an SNMPv3 user for SNMPv3 access.

ED-SNMP-USER lets the user change the group name, authentication password, and privacy password for an SNMPv3 user for SNMPv3 access.

ENT-SNMP-USER lets the user establish an SNMPv3 user for SNMPv3 access.

RTRV-SNMP-USER lets the user retrieve the authentication protocol, privacy protocol, and group name for an SNMPv3 user.

Category: VoIP

Security: NSA for DLT/ED/ENT, View for RTRV

Input Formats:

```
DLT-SNMP-USER: [TID]:<UserName>:[CTAG];  
ED-SNMP-USER: [TID]:<UserName>:[CTAG]::  
    [GRPNAME=<GrpName>]:<AuthPasswd>,<PrivPasswd>];  
ENT-SNMP-USER: [TID]:<UserName>:[CTAG]::  
    AUTHTYPE=<AuthType>, PRIVTYPE=<PrivType>,  
    GRPNAME=<GrpName>:[<AuthPasswd>],[<PrivPasswd>];  
RTRV-SNMP-USER: [TID]: [<UserName>]: [CTAG];
```

Output Format:

```
SID DATE TIME  
M CTAG COMPLD  
    "<UserName>:AUTHTYPE=<AuthType>,  
    PRIVTYPE=<PrivType>,GRPNAME=<GrpName>"  
;
```

Parameters:

UserName Identifies the AID as an SNMPv3 user name. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all SNMPv3 users in the system will be returned.

Type: string

Range: up to 32 alphanumeric characters (including underscores "_")

Default value: none

AuthType Identifies the authentication protocol for the user.

Type: enum

Range: MD5 = authentication protocol HMAC-MD5-96

NONE = no authentication

SHA = authentication protocol HMAC-SHA-96

Default value: none

PrivType Identifies the privacy protocol for the user. The value of *PrivType* must be "NONE" when the value of *SnmpAuth* is "NONE".

Type: enum

Range: DES = privacy protocol CBC-DES

NONE = no privacy

Default value: none

GrpName Identifies the name of the group that the user belongs to for access control. The group does not have to be created in order to assign the group name for a user but until the group is created the user effectively is not enabled to access any information in the SNMP entity (agent).

Type: string

Range: up to 32 alphanumeric characters (including underscores "_")

Default value: none

AuthPasswd Identifies the password used to generate the authentication key. The entered password displays as a series of asterisks.

Type: string

Range: 8 to 63 alphanumeric characters (including underscores "_")

Default value: none

PrivPasswd Identifies the password used to generate the privacy key. It cannot be the same value as the authentication password. The entered password displays as a series of asterisks.

Type: string

Range: 8 to 63 alphanumeric characters (including underscores "_")

Default value: none

Input Examples:

```
DLT-SNMP-USER::SNMPUSER1;  
ED-SNMP-USER::SNMPUSER1::GRPNAME=TELICA:*****,  
*****;  
ENT-SNMP-USER::SNMPUSER1::AUTHTYPE=NONE,  
PRIVTYPE=NONE,GRPNAME=TELICA:*****,*;  
RTRV-SNMP-USER::SNMPUSER1;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"SNMPUSER1:AUTHTYPE=NONE,PRIVTYPE=NONE,  
GRPNAME=TELICA"  
;
```

Related Commands: none

DLT/ENT/RTRV-SNMP-VIEW

Commands:

DLT-SNMP-VIEW: Delete SNMP View

ENT-SNMP-VIEW: Enter SNMP View

RTRV-SNMP-VIEW: Retrieve SNMP View

Descriptions:

DLT-SNMP-VIEW lets the user delete a view associated with SNMP access groups.

ENT-SNMP-VIEW lets the user establish a view associated with SNMP access groups.

RTRV-SNMP-VIEW lets the user retrieve the view types and masks associated with SNMP access groups.

Category: VoIP

Security: NSA for DLT and ENT, View for RTRV

Input Formats:

```
DLT-SNMP-VIEW: [TID]:<SnmViewAid>:[CTAG];  
ENT-SNMP-VIEW: [TID]:<SnmViewAid>:[CTAG]::  
    [VIEWTYPE=<ViewType>],[VIEWMASK=<ViewMask>];  
RTRV-SNMP-VIEW: [TID]: [<SnmViewAid>]: [CTAG];
```

Output Format:

```
    SID DATE TIME  
M    CTAG COMPLD  
    "<SnmViewAid>:VIEWTYPE=<ViewType>,  
    VIEWMASK=<ViewMask>"  
;
```

Parameters:

SnmviewAid Identifies the AID as an SNMP access group view. A null value (in RTRV) is equivalent to "ALL"; that is, by leaving the field blank, information for all SNMP access group views in the system will be returned. A null value for the second part of the AID (in DLT and RTRV) lets the user delete or retrieve the types and masks for an entire set of view trees.

Type: SnmpViewAid

Range: <VIEWNAME>[-<VIEWTREE>], where

VIEWNAME = up to 32 alphanumeric characters
(including underscores “_”) used to identify a set of
view trees

VIEWTREE = up to 63 digits (0-9) and periods (“.”) that
identify the view subtree in numerical dotted notation.
For example, the object identifier (OID) for the
Internet is “1.3.6.1”.

Default value: none

ViewType Identifies whether the view is included in the MIB view.

Type: enum

Range: EXCLUDED = view is not included in the MIB view
INCLUDED = view is included in the MIB view

Default value: INCLUDED

ViewMask Identifies the view tree bit mask (an octet string of 0 to 16 octets) where each bit represents whether to wildcard the corresponding object sub-identifier in the view tree. If the bit value is “0” then the sub-identifier is wildcarded and any value matches. The viewmask is extended with “1”s to match the number of sub-identifiers in the view tree.

Type: string

Range: 0 to 16 octets (hex bytes)
NULL

Default value: NULL

Input Examples:

DLT-SNMP-VIEW::INTERNET-1.3.6.1;

ENT-SNMP-VIEW::INTERNET-1.3.6.1:VIEWTYPE=INCLUDED,
VIEWMASK=NULL;

RTRV-SNMP-VIEW::INTERNET-1.3.6.1;

Output Example:

```
telica 2004-02-27 14:37:49
M 0 COMPLD
  "INTERNET-1.3.6.1:VIEWTYPE=INCLUDED,VIEWMASK=NULL"
;
```

Related Commands: none

ED/RTRV-SNMP-SYS

Commands:

ED-SNMP-SYS: Edit SNMP System

RTRV-SNMP-SYS: Retrieve SNMP System

Descriptions:

ED-SNMP-SYS lets the user configure SNMP Agent parameters and Trap Rate Limiting.

RTRV-SNMP-SYS lets the user retrieve Trap Rate Limiting and SNMP Agent parameters.

Category: VoIP

Security: NSA for ED, View for RTRV

Input Formats:

```
ED-SNMP-SYS:[TID]:[<src>]:[CTAG]::
[TRAPLIMITCNT=<TrapLimitCnt>],
[TRAPLIMITPERIOD=<TrapLimitPeriod>],
[SNMPENB=<SnpEnb>],[AUTHTRAPENB=<AuthTrapEnb>],
[SYSNAME=<SysName>],[SYSCONTACT=<SysContact>];

RTRV-SNMP-SYS:[TID]:[<src>]:[CTAG];
```

Output Format:

```
SID DATE TIME
M CTAG COMPLD
"<src>:TRAPLIMITCNT=<TrapLimitCnt>,
  TRAPLIMITPERIOD=<TrapLimitPeriod>,
  SNMPENB=<SnpEnb>,[AUTHTRAPENB=<AuthTrapEnb>],
  [SYSNAME=<SysName>],[SYSCONTACT=<SysContact>]"
;
```

Parameters:

src Identifies the AID as a Plexus 9000 media gateway.

Type: COM

Range: COM

Default value: COM

TrapLimitCnt Identifies the trap rate limit count – the maximum number of traps that can be sent by the SNMP agent during the time period defined by *TrapLimitPeriod*. Setting the value to “0” prevents the SNMP agent sending any traps. The factory default is 65535.

Type: integer

Range: {0-65535}

Default value: not applicable

TrapLimitPeriod Identifies the time period, in seconds, during which the SNMP agent can send traps. The factory default is 60 seconds.

Type: integer

Range: {0-65535}

Default value: not applicable

SnmEnb Identifies whether the SNMP agent can process incoming messages and send traps. The factory default is “Y”.

Type: BoolYN

Range: N = SNMP agent not enabled
Y = SNMP agent enabled

Default value: not applicable

AuthTrapEnb Identifies whether the SNMP agent can send “authentication failure” traps. The factory default is “Y”.

Type: BoolYN

Range: N = SNMP agent not enabled to send “authentication failure” traps
Y = SNMP agent enabled to send “authentication failure” traps

Default value: not applicable

SysName Identifies the system name for the SNMP agent. The factory default is the fully qualified domain name.

Type: string

Range: up to 63 alphanumeric characters (including underscores “_”)

Default value: not applicable

SysContact Identifies the name of the system administrator for the SNMP agent. The factory default is “NULL”.

Type: string

Range: up to 63 alphanumeric characters (including underscores “_”)

Default value: not applicable

Input Examples:

```
ED-SNMP-SYS::COM:::TRAPLIMITCNT=10,TRAPLIMITPERIOD=10,  
  SNMPENB=Y,AUTHTRAPENB=Y,SYSNAME=PLEXUS.TELICA.COM,  
  SYSCONTACT=JOHN_STAMAND;  
  
RTRV-SNMP-SYS;
```

Output Example:

```
telica 2004-02-27 14:37:49  
M 0 COMPLD  
"COM:TRAPLIMITCNT=65535,TRAPLIMITPERIOD=60,  
  SNMPENB=Y,AUTHTRAPENB=Y,  
  SYSNAME=PLEXUS.TELICA.COM,  
  SYSCONTACT=JOHN_STAMAND"  
;
```

Related Commands: none

CANC

Message:

CANC: Cancel

Description:

CANC is an automatic message transmitted by the Plexus 9000 to an administrator when a session established by a user is terminated because of "timeout"; i.e., no messages were exchanged during a given interval.

Category: Automatic Messages

Security: ADMIN

Input Format: none

Output Format:

```
      SID DATE TIME
A  ATAG  CANC
    "<uid>"
    ;
```

Parameters:

uid Identifies the user. The UID is the user ID or login name.

Range: 8 – 16 characters

Output Example:

```
      telica 2003-10-31 14:37:49
A  1  CANC
    "JOHNUSE"
    /*  CANC  */
    ;
```

REPT ALM <ReptAid>

Message:

REPT ALM <ReptAid>: Report Alarm (ALL, COM, ENET, EQPT, STS1, T1, T3)

Description:

REPT ALM messages are generated automatically by the Plexus 9000 to report the onset or clearing of an alarm condition that requires immediate attention. Non-alarmed conditions are reported with REPT EVT. REPT ALM does not signal environmental alarms.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
** ATAG REPT ALM <ReptAid>
  "<alm_id>:<ntfcncde>,<condtype>,<srveff>,<ocrdat>,<ocrtm>,<locn>,<dirn>,<monval>,<thlev>,<tmper>]:<conddescr>,<aiddet>,<obsdbhvr>,<exptdbhvr>]:<termination>,<tblisltd>]"
;
```

Parameters:

ReptAid Identifies the type of entity within the Plexus 9000 from which to retrieve alarms.

Type: ReptAid

Range: ALL = Designates the Plexus 9000 and all entities within it
COM = Common – designates the Plexus 9000 as a discreet entity
ENET = Ethernet ports
EQPT = Equipment – designates major assemblies
STS1 = STS1 ports
T1 = T1 ports
T3 = T3 ports

Default value: none

- alm_id** Identifies the specific entity within the Plexus 9000 to which the message pertains.
Range: ASCII characters
- ntfcncde** The notification code of the event that caused the condition to be reported. This indicates the alarm level.
Range: CL = Cleared. Never used in provisioning requests or returned in RTRVs - only active conditions are available through the RTRV-EVT/COND/ALM messages and by definition their notification codes are never CL/CLEAR.
CR = Critical
MJ = Major
MN = Minor
NA = Not Alarmed
- condtype** Indicates the condition type for an alarm or a reported event.
Range: alphanumeric characters
- srveff** The effect on service caused by the alarm condition.
Range: SA = Service-affecting condition.
NSA = Non-service-affecting condition
- ocrdat** Date when the specific event or violation occurred.
Range: {1-12}-{1-31} = {month}-{day of month}
- ocrtm** Time when the specific event or violation occurred.
Range: {0-23}-{0-59}-{0-59} = {hour}-{minute}-{second}
{0-23}-{0-59} = {hour}-{minute}
- locn** Indicates the location of the storage registers or event counters where the specific event or violation occurred. A null value defaults to all applicable locations.
Range: FEND = Far end
NEND = Near end

- dirn** The direction relative to the IOM or port on an IOM in the Plexus 9000 to which the command pertains. A null value defaults to all applicable directions.
- Range:** AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive
- monval** Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* is to be initialized. The value is in the form of numeric counts or rates. A null value indicates that there is no measured value associated with this trouble or event, or it is not accessible for remote reporting.
- Range:** {1-9999}
- thlev** Identifies the threshold level. *thlev* is reported if the alarm report has resulted from a degradation that has exceeded the defined or specified threshold level. A null value indicates that there is no threshold level associated with this event, or it is not accessible for remote reporting.
- Range:** {1-9999}
- tmper** The accumulation period for performance counters. A null value defaults to “not applicable”.
- Range:** {1}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)
- conddescr** Describes the alarm condition. A null value in this parameter means there is no information to be reported.
- Range:** alphanumeric characters
- aiddet** Specifies additional details about the entity being managed. Identifies the supplementary equipment used to identify the location of the reported trouble. A null value in this parameter means there is no information to be reported.
- Range:** COM
ENTITYID

obsdbhvr Identifies the observed behavior that resulted in the reported trouble. A null value in this parameter means there is no information to be reported.

Range: alphanumeric characters

exptdbhvr Identifies the expected behavior whose deviation is described in *obsdbhvr*. A null value in this parameter means there is no information to be reported.

Range: alphanumeric characters

termination Indicates how the diagnostic routine terminated in the event of a failure. A null value in this parameter means there is no information to be reported.

Range: IMED = Procedure stopped testing a unit when failure was received, and proceeded to any remaining equipment units.

NORM = The diagnostic terminated normally. The Plexus 9000 completed the entire set of phases and iterations of the procedure regardless of failed phases.

tblisltid Identifies the significance of the isolation information provided by the AID parameter included in the command message. In addition, identifies activity required to isolate the trouble to a replaceable or repairable unit, facility, etc. A null value defaults to “not applicable”.

Range: DGN = Diagnostics in progress and will be returned in a separate message. AID identifies the units on which the diagnostics are being performed.

ISLTD = Isolated. The AID is a repairable or replaceable unit.

NIMAN = Not isolated. Isolation must be performed manually. AID reports suspected units.

NIPSS = Not isolated. All diagnostics passed. AID reports suspected units.

Output Example:

```
telica 2003-10-31 14:37:49
A 2 REPT ALM EQPT
  "IOM-7:CL,PRCDRERR,NSA,08-03,18-35-03:\"Module in
    Slot 7 present but not provisioned\"";
```

REPT ALM SECU

Message:

REPT ALM SECU: Report Alarm Security

Description:

REPT ALM SECU messages are generated autonomously by the Plexus 9000 to report the onset or clearing of a security alarm condition that requires immediate attention. Non-alarmed conditions are reported with REPT EVT.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
** ATAG REPT ALM SECU
"<SecRepAid>:<ntfncnde>,<securityAlarmType>"
;
```

Parameters:

SecRepAid Identifies the entity to which the alarm pertains. For example, in the case of a buffer overflow, it identifies the security log (SECULOG). For a security alarm of type "INTRUSION", the AID is the CID where the intrusion occurred.

Range: alphanumeric characters

ntfncnde The notification code of the event that caused the condition to be reported. This indicates the alarm level.

Range: CL = Cleared. Never used in provisioning requests or returned in RTRVs - only active conditions are available through the RTRV-EVT/COND/ALM messages and by definition their notification codes are never CL/CLEAR.

CR = Critical

MJ = Major

MN = Minor

NA = Not Alarmed

securityAlarmType Identifies the type of security alarm.

Range: INTRUSION = Intrusion
LOGBUFR90 = Log buffer 90% full
LOGBUFROVFL = Log buffer overflow
TUIDAGE = Expired user ID

Output Example:

```
telica 2003-10-31 14:37:49
** 1 REPT ALM SECU
"SECULOG:NA, LOGBUFR90"
;
```

REPT BKUP

Message:

REPT BKUP: Report Backup

Description:

REPT BKUP messages are generated autonomously by the Plexus 9000 to report the completion (or non-completion) of a scheduled backup of the configuration data for the Plexus 9000, including the TimesTen database. Use SCHED-BKUP-EQPT to schedule database backups; use RTRV-BKUPSCHEDEQPT to verify them.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
** ATAG REPT BKUP
  "[<frommem>],[<fromdev>],[<tomem>],[<todev>]:
    [<memclass>],[<opt>]:[<status>]"
;
```

Parameters:

frommem Identifies the functional memory, file, or data area from which the data was to be copied.

Range: alphanumeric characters

fromdev Identifies the memory storage device in the Plexus 9000 from which the data was to be copied.

Range: alphanumeric characters

tomem Identifies the functional memory, file, or data area to which the data was to be copied.

Range: alphanumeric characters

todev Identifies the memory storage device in the Plexus 9000 to which the data was to be copied.

Range: alphanumeric characters

memclass Provides finer delimiting of the memory to be copied.

Range: alphanumeric characters

opt Identifies the option to be used for the copy.

Range: alphanumeric characters

status Identifies the pass/fail status of the scheduled backup operation. The Plexus 9000 returns an optional free-form text description of the failure when the value of *status* is "FAIL".

Range: PASS = Backup occurred as scheduled.
FAIL = Backup operation has failed.

Output Example:

```
telica 2003-10-31 14:37:49
** 1 REPT BKUP
"FROMMEM, , TOMEM: :PASS"
;
```

REPT COND <ReptAid>

Message:

REPT COND <ReptAid>: Report Condition (ALL, COM, ENET, EQPT, STS1, T1, T3)

Description:

REPT COND provides a periodic report of standing conditions on the Plexus 9000. The length of the interval between reports is determined by the value of the parameter *heartbeat* in the command ED-SYS-SECU. REPT-COND is generated when no activity occurs within the heartbeat timeframe. The schedule for these messages summarizes what already has been signaled by REPT EVT or by REPT ALM. It may not include threshold crossing conditions and may include conditions that are not reported at all in REPT ALM or REPT EVT messages. Unlike REPT ALM or REPT EVT, it supports multiple rows/conditions per message.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
A ATAG REPT COND <ReptAid>
  "[<cond_id>]: [<ntfcncde>], <condtype>, [<srveff>],
    [<ocrdat>], [<ocrtm>], [<locn>], [<dirn>],
    [<tmper>]"
;
```

Parameters:

AIDType Identifies the type of entity within the Plexus 9000 from which to report conditions.

Range: ALL = Designates the Plexus 9000 and all entities within it
COM = Common – designates the Plexus 9000 as a discreet entity
ENET = Ethernet ports
EQPT = Equipment – designates major assemblies
STS1 = STS1 ports
T1 = T1 ports
T3 = T3 ports

- cond_id** Identifies the specific entity within the Plexus 9000 to which the message pertains.
Range: ASCII characters
- ntfcncde** The notification code of the event that caused the condition to be reported. This indicates the alarm level. A null value defaults to "NA".
Range: CL = Cleared. Never used in provisioning requests or returned in RTRVs - only active conditions are available through the RTRV-EVT/COND/ALM messages and by definition their notification codes are never CL/CLEAR.
CR = Critical
MJ = Major
MN = Minor
NA = Not Alarmed
- condtype** Indicates the condition type for an alarm or a reported event.
Range: alphanumeric characters
- srveff** The effect on service caused by the alarm condition. A null value indicates that the effect on service is unknown or that the parameter is not used.
Range: SA = Service-affecting condition.
NSA = Non-service-affecting condition
- ocrdat** Date when the specific event or violation occurred. A null value defaults to the date in the message header.
Range: {1-12}-{1-31} = {month}-{day of month}
- ocrtm** Time when the specific event or violation occurred. A null value defaults to the time in the message header.
Range: {0-23}-{0-59}-{0-59} = {hour}-{minute}-{second}
{0-23}-{0-59} = {hour}-{minute}
- locn** Indicates the location of the storage registers or event counters to be initialized. A null defaults to either NEND or implies that there is no location associated with the response or automatic message.
Range: FEND = Far end
NEND = Near end

dirn The direction relative to the IOM or port on an IOM in the Plexus 9000 to which the command pertains. A null value defaults to "NA".

Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive

tmper The accumulation period for performance counters. A null value defaults to "15-MIN".

Range: {1-31}-DAY = Time interval is exactly one day
{1-24}-HR = Interval of one to 24 hours (one day)
{1-1440}-MIN = Interval of one to 1440 minutes (one day)

Output Example:

```
telica 2003-10-31 14:37:49
A 1 REPT COND
"COM:MN, CONDTYPE, NSA, 08-04, 08-45-40, FEND, NA, 15-MIN"
;
```

REPT DBCHG

Message:

REPT DBCHG: Report Database Change

Description:

REPT DBCHG messages are generated automatically by the Plexus 9000 to report database changes that have occurred as a result of commands entered to change equipment provisioning or configuration. Database changes include changes to the value of the TID or SID, the values of the keywords defined in the common block and specific block, the transition into and out of OOS-MA state, and RDLN (redlined) secondary state changes.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
A  ATAG REPT DBCHG
  "<free-format text messages>"
;
```

Parameters: None – The response includes one line of data in double quotes, followed by a carriage return line feed, for each external update that has occurred. Within the quotes, the format resembles the block structure of input commands. In fact, the blocks defined here resemble an input command that would achieve a database change equivalent to the external update.

Output Example:

```
telica 2003-10-31 14:37:49
A  1 REPT DBCHG
  "DATE=2003-08-03,TIME=10-44-46,USERID=telica,
    DBCHGSEQ=0:ent-eqpt::iom-7:BAA9UV0GAA,PRI,90,90,
    90,1.1.3.0.0.76:IS"
;
```

REPT EVT <ReptAid>

Message:

REPT EVT <ReptAid>: Report Event

Description:

REPT EVT <ReptAid> is generated by the Plexus 9000 to report the occurrence of non-alarmed events. An example is the crossing of a performance threshold.

Category: Automatic Messages

Security: View

Input Format: none

Description: REPT EVT <ReptAid> is generated by the Plexus 9000 to report the occurrence of non-alarmed events. An example is the crossing of a performance threshold.

Output Format:

```
SID DATE TIME
A  ATAG REPT EVT <ReptAid>
  "<evt_id>:<condtype>,[<condeff>],[<ocrdat>],
    [<ocrtm>],[<locn>],[<dirn>],[<monval>],
    [<thlev>],[<tmper>]:<desc>"
;
```

Parameters:

AIDType Identifies the type of entity within the Plexus 9000 from which to report conditions.

Range: ALL = Designates the Plexus 9000 and all entities within it
COM = Common – designates the Plexus 9000 as a discreet entity
ENET = Ethernet ports
EQPT = Equipment – designates major assemblies
STS1 = STS1 ports
T1 = T1 ports
T3 = T3 ports

evt_id Identifies the entity in the Plexus 9000 to which the message pertains. *evt_id* is the AID ALL and is optional. A null value is equivalent to "ALL" and avoids redundancy when the message code modifier is COM.

Range: ALL

condtype Indicates the condition type for an alarm or a reported event.

Range: alphanumeric characters

condeff Identifies the effect of the event on the condition of the Plexus 9000. A null value defaults to "TC".

Range: CL = A standing condition has cleared.
SC = A condition is active for an extended period of time.
TC = A condition does not change the basic condition of the Plexus 9000 for an extended period of time.

ocrdat Date when the specific event or violation occurred. A null value defaults to the date in the message header.

Range: {1-12}-{1-31} = {month}-{day of month}

ocrtm Date when the specific event or violation occurred. A null value defaults to the time in the message header.

Range: {0-23}-{0-59}-{0-59} = {hour}-{minute}-{second}
{0-23}-{0-59} = {hour}-{minute}

locn Indicates the location of the storage registers or event counters to be initialized. A null defaults to either NEND or implies that there is no location associated with the response or automatic message.

Range: FEND = Far end
NEND = Near end

dirn The direction relative to the IOM or port on an IOM in the Plexus 9000 to which the command pertains. A null value defaults to "NA".

Range: AZ = Transmit
BTH = Both directions
NA = Not applicable
RCV = Receive direction only
TDTC = Transmit direction toward customer
TDTN = Transmit direction toward network
TRMT = Transmit direction only
ZA = Receive

monval Monitored value is either the measured value of the monitored parameter, or the value to which the register identified by *montype* is to be initialized. The value is in the form of numeric counts or rates. A null value indicates that there is no measured value associated with this trouble or event, or it is not accessible for remote reporting.

Range: {1-9999}

thlev Identifies the threshold level. *thlev* is reported if the alarm report has resulted from a degradation that has exceeded the defined or specified threshold level. A null value indicates that there is no threshold level associated with this event, or it is not accessible for remote reporting.

Range: {1-9999}

tmper The accumulation period for performance counters. A null value defaults to "not applicable".

Range: {1-31}-DAY = Time interval is exactly one day
 {1-24}-HR = Interval of one to 24 hours (one day)
 {1-1440}-MIN = Interval of one to 1440 minutes (one day)

desc Describes the alarm condition.

Range: alphanumeric characters

Output Example:

```
telica 2003-10-31 14:37:49
A 5 REPT EVT EQPT
  "IOM-7:INIT-50,TC,08-03,10-46-25:\"Module in slot 7
    has been restored to service\"";
```

REPT EVT SESSION

Message:

REPT EVT SESSION: Report Event SESSION

Description:

REPT EVT SESSION is generated by the Plexus 9000 to report (to the user) the occurrence of a non-alarmed event related to establishing a session with the Plexus 9000 (i.e., a login for the Plexus 9000). The following events are included in this category:

- The user's password is about to expire, or has expired. The user receives additional information if the password has expired but the "grace period" during which the existing password can still be used has not expired. Upon receiving this message, the user must update the password with the command ED-PID.
- When a request is made to establish a session with the Plexus 9000 (i.e., when a logon is attempted), the Plexus 9000 transmits a warning, before access is granted, regarding unauthorized entry/use and possible consequences.

Category: Automatic Messages

Security: View

Input Format: none

Output Format:

```
SID DATE TIME
A  ATAG REPT EVT SESSION
   "<ne_id>:<exp>, [<pcn>], <warn>"
;
```

Parameters:

ne_id Identifies the Plexus 9000 with which a session is attempted.

Range: alphanumeric characters

exp Indicates whether the password is currently valid (i.e., no password update is currently required), has expired, or is about to expire (i.e., updating is required or imminent).

Range: N = password updating unnecessary

Y = password updating required immediately or soon

pcn Indicates the number of days still remaining during which the existing password is allowed. No further logon will be allowed if the user has not updated the password when this number becomes zero. A null value defaults to "7".

Range: {1-999}-DAY

warn Represents the free-format text warning, before access is granted, regarding unauthorized entry/use and possible consequences.

Range: alphanumeric characters

Output Example:

```
telica 2003-10-31 14:37:49
* 0 REPT EVT SESSION
"telica:N,,/* NOTICE: This us a private computer
  system. Unauthorized access or use may lead to
  prosecution. Last login: Thu Aug 03 2003
  13:07:26 */"
;
```


Access Identifiers

1.	ALL	4
2.	AlmqSessionId	10
3.	AltDnAid	10
4.	AnncId	10
5.	AnnouncementId	10
6.	AudioMsgAid	11
7.	BiccTrkAid	11
8.	BlockListAid	11
9.	CALLINGAREAAID	12
10.	CaptAid	12
11.	CaptSysId	13
12.	CarrierCode	13
13.	CasIfId	13
14.	CasPrflId	13
15.	CcAid	13
16.	CccListAid	14
17.	CcNpa	14
18.	CcNpaNxx	14
19.	CcNpaNxxStart	14
20.	cgpnRouteAid	15
21.	ChanIdGrp	15
22.	CicPrflId	15
23.	cl4SubId	16
24.	COM	16
25.	Cpc	16
26.	CrvAidGrp	17
27.	DgtModPrflAid	17
28.	DgtScrnAid	18
29.	DialPlanAid	22
30.	DialPlanTrigAid	23
31.	DigitModDnAid	23
32.	DigitModGenAid	25
33.	DigitModParamAid	26
34.	DigitModTnsAid	27
35.	ENET	28
36.	FAN	28
37.	IfGrpDs1Id	28
38.	IfGrpNum	28
39.	IomAid	29
40.	IOMODULE	29
41.	IOMorENET	29
42.	IOMorOC	29

43.	IOMorSP	30
44.	IOMorSPorSF	30
45.	IOMorSTS1	30
46.	IOMorT3	30
47.	IOMorT3orPORT	31
48.	IOMorT3orPORTorBITS	31
49.	isdnBcStaChannelStateAid	32
50.	IsdnChanAid	32
51.	IsdnIfNum	32
52.	IsdnLink	32
53.	IsdnRtAid	33
54.	lapdAid	33
55.	LinkId	34
56.	ListCodeAid	34
57.	LsetAid	34
58.	MgcpLineAid	34
59.	Mtp2PrflId	35
60.	Mtp3PrflId	35
61.	NNPAAid	35
62.	NpaNxx	35
63.	OC	35
64.	PcAid	36
65.	PcPrflId	36
66.	PORT	36
67.	PORTorBITS	36
68.	PvcId	37
69.	PvcPrflId	37
70.	RelCauseAid	37
71.	RouteAddrAid	37
72.	RouteN11Aid	38
73.	RouteSchedAid	39
74.	RouteSs7Aid	39
75.	RtId	39
76.	RtIntfcAid	40
77.	RtpTermId	40
78.	SccpSsnAid	40
79.	ScpAnncMap	41
80.	ScreenDigitsAid	41
81.	ScreenListAid	42
82.	ServiceId	42
83.	SlhrId	44
84.	SnmpAccessAid	44
85.	SnmpViewAid	45
86.	SP	45
87.	SPorIOM	45
88.	Ss7LnkAid	45

89.	Ss7PcAid	46
90.	Ss7TrkAid	46
91.	STS1	46
92.	SubIfAid	46
93.	SubSpeedAid	47
94.	T0	47
95.	T3	47
96.	T3orPORT	48
97.	T3PORT	48
98.	TdmTermId	48
99.	TestPortNum	48
100.	TgnAid	49
101.	TgnSipId	49
102.	TransSchedAid	49
103.	TrigEscListAID	50
104.	TriggerAid	50
105.	TrkAid	50
106.	VMS	51
107.	VoipPrfl	51
108.	VpId	51
109.	VpsId	51

The Access IDentification code (AID) directs an input command to its intended physical or data entity inside the NE. Equipment modules and facilities are typical examples of entities addressed by the access code.

1. ALL

Identifies the AID as all possible AIDs. This AID occurs only in autonomous messages returned by the Plexus 9000.

AID	Patterns
AlmqSessionId	Up to eight hexadecimal characters
AltDnAid	<SUBSCRIBERID>-SUBSCRIBERID>
AnncId	{32767-65535}
AnnouncementId	{1-65535}
AudioMsgAid	{1-65535}-<VARIANT>
BiccTrkAid	{1-9999}-{0-16382}
BlockListAid	<BLOCKNAME>-<SCREENTYPE> [-<SCREENSTRING>]
CALLINGAREAAID	CALLINGAREASTRING- CENTERNAMESTRING
CaptAid	BICC CAS-IOM-{1-17}-PORT-{1-28} CAS-IOM-{1-17}-PORT-{1-28}-T0 - {1-24} CAS-IOM-{1-17}-T3-{1-8}-PORT - {1-28} CAS-IOM-{1-17}-T3-{1-8}-PORT - {1-28}-T0-{1-24} ISDNIF-{1-32767} LSET-{1-20}
CaptSysId	{1}
CarrierCode	{0-9999}
CasIfId	{1-2147483645}
CasPrflId	{1-128}
CcAid	{1-99999}
CccListAid	{1-32767}-{up to 21 digits}
CcNpa	{1-99999}-{200-999}
CcNpaNxx	{1-99999}-{200-999}-{200-999}
CcNpaNxxStart	{1-99999}-{1-99999}-{1-99999}- {0-9999}
cgpnRouteAid	<RTADDR>-{ROUTEIDENT}

ChanIdGrp	IfGrpNum[-T0]
CicPrflId	{1-128}
cl4SubId	<subscriberId>-<callType> <subscriberId>-<carrier>
COM	COM
Cpc	{0-255}
CrvAidGrp	<ifGrpNum>-<crv>-<subIfId>
DgtModPrflAid	<dgtModName>[-<dgtString>[-<key> [-<nai>[-<minLen>]]]]
DgtScrnAid	<dgtScrnLbl>[-<primKey> [-<primKeyValue>[-<secKeyValue> [-<terKeyValue>]]]]
DialPlanAid	<dialPlanName>[-<nai>[-<digits> [-<minDgts>]]]
DialPlanTrigAid	<dialPlanName>-<ainTrigList>
DigitModDnAid	<dmLbl>[-<dnType>[-<nai>[-<digits> [-<minDgts>]]]]
DigitModGenAid	<dmLbl>[-<genType>[-<nmbrType> [-<digits>]]]
DigitModParamAid	<dmLbl>[-<primKey>[-<Value>]]
DigitModTnsAid	<dmLbl>[-<TNS>[-<carrier> [-<callTypeCode>[-<prtcl>]]]]
ENET	IOM-{8,10}-ENET-{1-4}
FAN	FAN
IfGrpDs1Id	{1-32767}-{1-28}
IfGrpNum	{1-32767}
IomAid	IOM-{1-17}
IOMODULE	IOM-{1-17}
IOMorENET	IOM-{8,10} IOM-{8,10}-ENET-{1-4}
IOMorOC	IOM-{8,10} IOM-{8,10}-OC12-{1-4} IOM-{8,10}-OC3-{1-4}
IOMorPORT	IOM-{1-17} IOM-{1-17}-PORT-{1-28} IOM-{1-17}-SST1-{1-8}-PORT-{1-28} IOM-{1-17}-T3-{1-8}-PORT-{1-28}
IOMorSP	IOM-{1-17} SP-{A-B}

IOMorSPorSF	IOM- $\{1-17\}$ SF- $\{A-B\}$ SP- $\{A-B\}$
IOMorSTS1	IOM- $\{1-17\}$ IOM- $\{1-17\}$ -STS1- $\{1-8\}$
IOMorT3	IOM- $\{1-17\}$ IOM- $\{1-17\}$ -T3- $\{1-8\}$
IOMorT3orPORT	IOM- $\{1-17\}$ IOM- $\{1-17\}$ -PORT- $\{1-28\}$ IOM- $\{1-17\}$ -STS1- $\{1-8\}$ IOM- $\{1-17\}$ -STS1- $\{1-8\}$ -PORT- $\{1-28\}$ IOM- $\{1-17\}$ -T3- $\{1-8\}$ IOM- $\{1-17\}$ -T3- $\{1-8\}$ -PORT- $\{1-28\}$
IOMorT3orPORTorBITS	IOM- $\{1-17\}$ IOM- $\{1-17\}$ -PORT- $\{1-28\}$ IOM- $\{1-17\}$ -STS1- $\{1-8\}$ IOM- $\{1-17\}$ -STS1- $\{1-8\}$ -PORT- $\{1-28\}$ IOM- $\{1-17\}$ -T3- $\{1-8\}$ IOM- $\{1-17\}$ -T3- $\{1-8\}$ -PORT- $\{1-28\}$ TMG- $\{A,B\}$
IsdnBcStaChannelStateAid	$\{1-32767\}$ - $\{1-32767\}$ - $\{1-24\}$
IsdnChanAid	$\{1-32767\}$ - $\{1-32767\}$ - $\{1-24\}$
IsdnIfNum	$\{1-32767\}$
IsdnLink	$\{1-32767\}$ - $\{1-32767\}$
IsdnRtAid	<RTNAME>- $\{0-32767\}$
lapdAid	GR303EOC- $\{1-32767\}$ - $\{1-28\}$ GR303TMC- $\{1-32767\}$ - $\{1-32767\}$ ISDN- $\{1-32767\}$ - $\{1-32767\}$ IUA-IOM- $\{1-17\}$ -PORT- $\{1-28\}$ IUA-IOM- $\{1-17\}$ -STS1- $\{1-8\}$ -PORT- $\{1-28\}$ IUA-IOM- $\{1-17\}$ -T3- $\{1-8\}$ -PORT- $\{1-28\}$
LinkId	$\{1-32767\}$ - $\{1-32767\}$
ListCodeAid	<LISTID>- $\{INDEX\}$
LsetAid	$\{1-20\}$
MgcpLineAid	<gatewayId>-<lineId>
Mtp2PrfId	$\{1-40\}$
Mtp3PrfId	$\{1-20\}$
NNPAAid	$\{1-99999\}$ - $\{200-999\}$

NpaNxx	{200-999}-{200-999}
OC	IOM-{8,10}-OC12-{1-4} IOM-{8,10}-OC3-{1-4}
PcAid	{0-255}-{0-255}-{0-255}
PcPrflId	{1-128}
PORT	IOM-{1-17}-PORT-{1-28} IOM-{1-17}-STS1-{1-8}-PORT-{1-28} IOM-{1-17}-T3-{1-8}-PORT-{1-28}
PORTorBITS	IOM-{1-17}-PORT-{1-28} IOM-{1-17}-STS1-{1-8}-PORT-{1-28} IOM-{1-17}-T3-{1-8}-PORT-{1-28} TMG-{A,B}
PvcId	{1-4}
PvcPrflId	{2-8}
RelCauseAid	{0-32767}-PROTOCOLTYPE- CODINGTYPE
RouteAddrAid	<RTADDR>-{ROUTEIDENT}
RouteN11Aid	<N11STRING>-<DSTRING>
RouteSchedAid	<SCHEDNAMESTRING>- <PRFLNAMESTRING>
RouteSs7Aid	<PCAIID>-<LSETAID>
RtId	<rtList>-<index>
RtIntfcAid	<RTNAME>-{0-32767}
RtpTermId	Alphanumeric characters in the form: Chassis/RTP/IOM{1-17}/ P{1025- 65535}
SccpSsnAid	<PCAIID>-{1-255}
ScpAnncMap	<ANNCMAPLBL>-{1-65535}
ScreenDigitsAid	<SUBSCRIBERID>-<SCREENTYPE>- <SCREENSTRING>
ScreenListAid	{LISTID}-{STARTRANGE}

ServiceId	ACB ACR AIN_TOLLFREE AR AUTHCODE CFBL CFDA CFV CID CIDCW CIS CNAB CNAM CND CNDB COT CRDPCL CWC CWT GMSC_IS41 GMSC_MAP LNP MWC RAF RDAS SC1 SC2 TOLLFREE TWC VMS
SlhrId	{0-31}
SnmpAccessAid	<GROUPNAME>-{SECLEVEL}- {SECMODEL}
SnmpViewAid	<VIEWNAME>-<VIEWTREE>
SP	SP-{A-B}
SPorIOM	IOM-{8,10} SP-{A-B}
Ss7LnkAid	{1-40}
Ss7PcAid	{0-255}-{0-255}-{0-255}
Ss7TrkAid	{1-9999}-{0-16382}
STS1	IOM-{1-17}-STS1-{1-8}
SubIfAid	{IFNUM}-{SUBIF}

SubSpeedAid	<SUBCRIBERID>-{2-99}
T0	IOM-{1-17}-PORT-{1-28}-T0-{1-24} IOM-{1-17}-STS1-{1-8}-PORT-{1-28}- T0-{1-24} IOM-{1-17}-T3-{1-8}-PORT-{1-28}- T0-{1-24}
T3	IOM-{1-17}-T3-{1-8}
T3orPORT	IOM-{1-17}-STS1-{1-8} IOM-{1-17}-STS1-{1-8}-PORT-{1-28}- T0-{1-24} IOM-{1-17}-T3-{1-8} IOM-{1-17}-T3-{1-8}-PORT-{1-28}- T0-{1-24}
T3PORT	IOM-{1-17}-STS1-{1-8}-PORT-{1-28}- T0-{1-24} IOM-{1-17}-T3-{1-8}-PORT-{1-28}- T0-{1-24}
TdmTermId	Alphanumeric characters in the form: Chassis/TDM/IOM{1-17}/ T{1-8}/ P{1-28}/C{1-24}
TestPortNum	TP-{1-24}
TgnAid	{1-9999}
TgnSipId	{1-9999}-{1-16}
TransSchedAid	<transSched>-<prflName>
TrigEscListAID	<trigEscList>-<startRange>
TriggerAid	<ainTrigListName>-<index>
TrkAid	{1-9999}-{1-32767}
VMS	<msrId>-<smdiLnkId>
VoipPrfl	{1-65535}
VpId	IOM-{1-17}-VP-{1-8}
VpsId	IOM-{1-17}-VCC-{0-799}

2. **AlmqSessionId**

Identifies the AID as an alarm queuing session in the list of active alarm queuing sessions.

Pattern	Description
Up to eight hexadecimal characters	Represents an IP address of a machine connecting to the alarm queue port

3. **AltDnAid**

Identifies the AID with a variable string indicating a subscriber and an alternate directory number associated with the subscriber.

Pattern	Description
<SUBSCRIBERID>- <SUBSCRIBERID>	Represents a subscriber and an alternate directory number with strings of exactly 10 digits

4. **AnnclId**

Identifies the AID as an audio announcement residing on an external announcement server.

Pattern	Description
{32767-65535}	Represents an external audio announcement

5. **AnnouncementId**

Identifies the AID as an audio announcement.

Pattern	Description
{1-32766}	Represents an audio announcement

6. AudioMsgAid

Identifies the AID as an audio message. The first part of the AID is an integer representing the message identifier; the second part is an optional string representing the language variant of the message.

Pattern	Description
{1-65535}-{VARIANT}	Represents an audio message

7. BiccTrkAid

Identifies the AID as a unique trunk (or range of trunks) associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk(s).

Pattern	Description
{1-9999}-{0-16382}	Represents a CIC

8. BlockListAid

Identifies the AID as a list containing strings of digits that a subscriber is blocked from calling.

Pattern	Description
<BLOCKNAME> -<SCREENTYPE> [-<SCREENSTRING>]	BLOCKNAME identifies the name of the list with a string of up to 21 characters representing the subscriber; SCREENTYPE identifies the type of screened number, with values of: • CUTTHRU = Casual calling carrier (any four-digit string specifying the cic on which calls are blocked – no default) • INTNATIONAL = Direct-dial international (any digit string up to 21 digits, but without 011 prefix) • NATIONAL = Any number in the NANP (1 or any NPA or any NPA-NXX or any complete NPA-NXX-xxxx or any digit string up to 21 digits) • OPERATOR = Local or long-distance operator request (0 or 00)

	• OPINTRN = Operator-assisted international (“DEFAULT”– blocks all calls prefixed by 01) • OPNAT = Operator-assisted national (0 and 411) SCREENSTRING identifies the digits to block with a string of up to 21 digits (shown parenthetically for each value of <i>SCREENTYPE</i>), or “DEFAULT”.

9. CALLINGAREAAID

Identifies the AID as an association between a local calling area and a rate center. The first 30-character string in the range identifies the name of the calling area, and the second 30-character string identifies the name of the rate center.

Pattern	Description
CALLINGAREASTRING-CENTERNAMESTRING	Represents the name of a calling area and the name of a rate center with strings of 30 characters each

10. CaptAid

Identifies the AID as (a) capture session access line(s).

Pattern	Description
BICC	All BICC trunks
CAS-IOM-{1-17}-PORT-{1-28}	All CAS channels on a specific T1 port on a DS1 IOM
CAS-IOM-{1-17}-PORT-{1-28}-T0-{1-24}	A CAS channel on a specific T1 port on a DS1 IOM
CAS-IOM-{1-17}-T3-{1-8}-PORT-{1-28}	All CAS channels on a specific T1 port on a DS3 IOM
CAS-IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}	A CAS channel on a specific T1 port on a DS3 IOM
ISDNIF-{1-32767}	An ISDN interface
LSET-{1-20}	An SS7 link set

11. CaptSysId

Identifies the AID as a server that can receive protocol capture session records. The range is restricted to {1} as there currently can be only one such server.

Pattern	Description
{1}	Represents a protocol capture session server

12. CarrierCode

Identifies the AID as a specific carrier.

Pattern	Description
{0-9999}	Represents a specific carrier

13. CasIfId

Identifies the AID as a Channel-Associated Signaling (CAS) interface.

Pattern	Description
{1-2147483645}	Represents a CAS interface

14. CasPrfId

Identifies the AID as a Channel-Associated Signaling (CAS) profile.

Pattern	Description
{1-128}	Represents a CAS profile

15. CcAid

Identifies the AID as a country code.

Pattern	Description
{1-99999}	Represents a country code

16. CccListAid

Identifies the AID as a call content channel (CCC) associated with a specific list of call content channels. The first part of the AID is the numerical identifier for the CCC list and the second part is the CCC.

Pattern	Description
{1-32767}-{up to 21 digits}	Represents a CCC associated with a specific list of call content channels

17. CcNpa

Identifies the AID as an NPA in a country. A null value for the second number in the range is equivalent to all NPAs in the system.

Pattern	Description
{1-99999}-{200-999}	Represents a country code and an NPA

18. CcNpaNxx

Identifies the AID as a specific exchange (NXX) in an NPA in a country. A null value for the third number in the range is equivalent to all exchanges in the system.

Pattern	Description
{1-99999}-{200-999}-{200-999}	Represents a country code, an NPA, and an NXX

19. CcNpaNxxStart

Identifies the AID as the starting number for a block of pooled numbers. The first set of numbers in the range represents the country code, the second set represents the area code, the third represents the local exchange, and the fourth (which must be exactly four digits) represents the starting number for the block.

Pattern	Description
{1-99999}-{1-99999}-{1-99999}-{0-9999}	Represents a country code, an NPA, an NXX, and the starting number for a block of pooled numbers

20. cgpnRouteAid

Identifies the AID as a route address. The pattern is a combination of the route address (the telephone number of a calling party associated with a route name) and the nature of address indicator for the route (defined by the parameter *ROUTEIDENT*).

Pattern	Description
<RTADDR>-{ROUTEIDENT}	<i>RTADDR</i> is a string of 1-21 digits. <i>ROUTEIDENT</i> can be: • INTNATNUM = international number • NATNUM = national significant number • SUBSNUM = subscriber number • UNKNOWN = Nature of Address unknown

21. ChanIdGrp

Identifies the AID as a DS0 channel on a port within a GR303 interface group. The pattern is a combination of the interface group number, and the physical channel on a port of the I/O module belonging to the GR303 interface group. A null value for the second part of the AID is equivalent to "ALL"; that is, by leaving the field blank, the state will be changed (in ED) or returned (in RTRV) for all configured channels for the specified GR303 interface group.

Pattern	Description
IfGrpNum[-T0]	IfGrpNum = {1-32767} T0 = IOM-{1-17}-STS1-{1-8}-PORT-{1-28}- T0-{1-24} IOM-{1-17}-T3-{1-8}-PORT-{1-28}- T0-{1-24}

22. CicPrflId

Identifies the AID as a CIC profile.

Pattern	Description
{1-128}	Represents a CIC profile

23. cl4SubId

Identifies the AID as the association between a subscriber and a carrier or a call type.

Pattern	Description
<subscriberId> -<callType> or <subscriberId> -<carrier>	<i>subscriberId</i> identifies the subscriber with a string of exactly 10 digits <i>callType</i> identifies the call type for which the subscriber assignment parameters apply, with values of: DEFAULT = all call types (default value) INTERLATA INTERNATIONAL INTRALATA <i>carrier</i> identifies the carrier for which the subscriber assignment parameters apply as a string of 1-4 digits with a default of "DEFAULT"

24. COM

Identifies the AID as the Plexus 9000 as a whole.

Pattern	Description
COM	Represents the Plexus 9000 as a whole

25. Cpc

Identifies the AID as a calling party category (one of the IAM parameters).

Pattern	Description
{0-255}	Represents a calling party category

26. CrvAidGrp

Identifies the AID as a GR303 call reference value. The pattern is a combination of the interface group number, the call reference value, and the subscriber interface number.

Pattern	Description
<ifGrpNum>- <crv>- <subIfId>	ifGrpNum = {1-32767} crv = {1-2048} subIfId = {1-32767}access to the group

27. DgtModPrflAid

Identifies the AID as a profile that identifies how to modify the digits distinguishing routed calls.

Pattern	Description
<dgtModName> [-<dgtString> [-<key> [-<nai> [-<minLen>]]]]	<i>dgtModName</i> identifies the name of the profile with a string of up to eight alphanumeric characters <i>dgtString</i> (optional only in RTRV) identifies the digits (distinguishing the routed calls) to modify with a string of 1-21 digits (default = "DEFAULT") <i>key</i> identifies the digits (distinguishing the routed calls) to modify with a string of 1-21 digits (default = "DEFAULT") <i>nai</i> identifies the nature of address indicator applicable to the specified digit string, with a default of "UNKNOWN" and values of: • INTNATNUM = international number • NATNUM = national significant number • NATOPREQ = national (long-distance) operator request • NONUMCUTTHRU = no number provided, cut through to carrier • NONUMOPREQ = no number provided, operator request • SUBOPREQ = subscriber (local) operator request • SUBSNUM = subscriber number • UNKNOWN = unknown

	<i>minLen</i> identifies the minimum length of the specified digit string as an integer from 7 to 21 with a default of 7

28. DgtScrnAid

Identifies the AID as a digit screening method.

Pattern	Description
<dgtScrnLbl> [-<primKey> [-<primKeyValue> [-<secKeyValue> [-<terKeyValue]]]]	<i>dgtScrnLbl</i> identifies the name of the applicable screening table with a string of 1-10 alphanumeric characters; <i>primKey</i> (optional only in RTRV) identifies the primary key applicable to the specified screening table, with values of: • BGN = Bearer Group Number (interface type) • CALLTYPE = Type of call (Class 5) • CDPN = Called party number • CGPN = Calling party number • CHRGN = Charge number • CIP = Carrier Information Parameter (for ISUP only) • CPC = Calling Party Category • CSI = Carrier Selection Information • GAP = Generic Address Parameter • GENDGTS = Generic Digits • JIP = Jurisdiction Information Parameter (NPANXX) • LATA = Local Access & Transport Area • OLI = Originating Line Information • SUBSTATUS = Subscriber status (valid only when the value "SUB" is the first listed for the parameter <i>actnInfoAnlz</i> in TRANSPLAN) • TNS = Transit Network Selection <i>primKeyValue</i> identifies the primary value applicable to the specified primary key parameter, with values of: BGN: • CASIF • DEFAULT • GR303

	• ISDNIF • MGCP • TGN CALLTYPE: • CUTTHRU • DEFAULT • DIR_ASSISTANCE • EMERGENCY • INTERLATA • INTERLATAOPREQ • INTNATNUM • INTNATOPREQ • INTRALATA • LOCALNUMBER • LOCALOPREQ • N11 • NATNUM • NONUMOPREQ • NOTPRSNT • TOLLFREE CDPN: • ABBREVPVT = abbreviated private • DEFAULT = matches all numbers • INTNATNUM = international number • INTNATOPREQ = international operator request • NATNUM = national significant number • NATOPREQ = national (long-distance) operator request • NONUMCUTTHRU = no number provided, cut through to carrier • NONUMOPREQ = no number provided, operator request • NOTPRSNT = matches calls without a CDPN • SUBOPREQ = subscriber (local) operator request • SUBSNUM = subscriber number • TESTLINE = test line test code • UNKNOWN = unknown (default value) CGPN: • ABBREVPVT = abbreviated private • DEFAULT = matches all numbers • NOTPRSNT = matches calls without a

	CGPN • NUNIINTNATNUM = non-unique international number • NUNINATNUM = non-unique national number • NUNISUBSNUM = non-unique subscriber number • TESTLINE = test line test code • UNIINTNATNUM = unique international number • UNINATNUM = unique national number • UNISUBSNUM = unique subscriber number CHRGN: • CDPNATNUM = ANI of the called party; national number • CDPSUBSNUM = ANI of the called party; subscriber number • CDPUNAVAIL = ANI of the called party; no number present • CGPNATNUM = ANI of the calling party; national number • CGPSUBSNUM = ANI of the calling party; subscriber number • DEFAULT = matches all numbers • NOTPRSNT = matches calls without a CHRGN • UNAVAIL = ANI not available or not provided CIP: 0-9999, DEFAULT, NOTPRSNT CPC: 00-FF (hexadecimal) , DEFAULT, NOTPRSNT CSI: • DEFAULT = matches all numbers • NOTPRESUB = not presubscribed and input by calling party • NOTPRSNT = matches calls without CSI • PRESUBDIAL = presubscribed and input by calling party • PRESUBNOTDIAL = presubscribed and not input by calling party • PRESUBUNKNOWN = presubscribed, input by calling party undetermined • UNKNOWN = no indication GAP: 0-255 (mandatory)

	GENDGTS: 0-31 (mandatory) JIP: 200000-999999, DEFAULT, NOTPRSNT LATA: 200-99999, DEFAULT, NOTPRSNT OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT SUBSTATUS: • ACTIVE = In Service (subscriber is present in the CL4SUB table and active) • DEFAULT = matches all numbers • INACTIVE = Out Of Service (subscriber is present in the CL4SUB table and inactive) • NOTINDB = Not in database (subscriber is not in the CL4SUB table) • NOTPRSNT = matches calls without • SUBSTATUS TNS: 0-9999 (the carrier ID), DEFAULT, NOTPRSNT <i>secKeyValue</i> identifies the secondary value applicable to the specified primary key parameter, with values of: • BGN: 1-31 digits, DEFAULT • CALLTYPE: No secondary value • CDPN: 1-31 digits, DEFAULT (set <i>secKeyValue</i> to DEFAULT if <i>primKeyValue</i> is DEFAULT or NOTPRSNT) • CGPN: 1-31 digits, DEFAULT (set <i>secKeyValue</i> to DEFAULT if <i>primKeyValue</i> is DEFAULT or NOTPRSNT) • CHRGN: 1-31 digits, DEFAULT (set <i>secKeyValue</i> to DEFAULT if <i>primKeyValue</i> is DEFAULT or NOTPRSNT) • CIP: No secondary value • CPC: No secondary value • CSI: No secondary value • GAP: 1-31 digits, DEFAULT, NOTPRSNT • GENDGTS: 1-31 digits, DEFAULT, NOTPRSNT • JIP: No secondary value

	• LATA: No secondary value • OLI: No secondary value • SUBSTATUS: No secondary value • TNS: 0-199 (the CAS 0ZZ/1NX code or the ISUP circuit code), DEFAULT (set <i>secKeyValue</i> to DEFAULT if <i>primKeyValue</i> is DEFAULT or NOTPRSNT) <i>terKeyValue</i> identifies the tertiary value (representing the protocol type) applicable only when the value of <i>primKey</i> is TNS, with values of: • CAS • ISUP (default – set <i>terKeyValue</i> to ISUP if <i>secKeyValue</i> is DEFAULT)

29. DialPlanAid

Identifies the AID as a custom dial plan.

Pattern	Description
<dialPlanName> [-<nai> [-<digits> [-<minDgts>]]]	<i>dialPlanName</i> identifies the name of the custom dial plan with a string of up to 21 alphanumeric characters <i>nai</i> identifies the nature of address indicator applicable to the specified custom dial plan, with values of: • ABBREVPVT = abbreviated number in private dial plan • DEFAULT = any nature of address indicator • INTNATNUM = international number • INTNATOPREQ = international number, operator request • NATNUM = national significant number • NATOPREQ = national (long-distance) operator request • NONUMCUTTHRU = no number provided, cut through to carrier • NONUMOPREQ = no number provided, operator request • SUBOPREQ = subscriber (local) operator request • SUBSNUM = subscriber number

	• UNKNOWN = unknown (default value) <i>digits</i> identifies the leading digits of the number to be matched with a string of 1-31 digits (default = "DEFAULT"); <i>minDgts</i> identifies the minimum length of the specified digit string as an integer from four to six with a default of four.

30. DialPlanTrigAid

Identifies the AID as the association of a custom dial plan with an AIN trigger list.

Pattern	Description
<dialPlanName> -<ainTrigList>	<i>dialPlanName</i> identifies the name of the custom dial plan with a string of up to 21 alphanumeric characters <i>ainTrigList</i> identifies the AIN Trigger List applicable to the specified custom dial plan with a string of up to 20 characters. "CUSTOM_DIALPLAN" is the only trigger type allowed for entries in the specified AIN Trigger List.

31. DigitModDnAid

Identifies the AID as a digit modification object keyed for a DN.

Pattern	Description
<dmLbl> [-<dnType> [-<nai> [-<digits> [-<minDgts]]]]	<i>dmLbl</i> identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters <i>dnType</i> (optional only in RTRV) identifies the primary key as the type of DN applicable to the specified digit modification table, with values of: • CDPN = Called party number • CGPN = Calling party number • CHRGN = Charge number <i>nai</i> identifies the nature of address indicator applicable to the specified type of DN, with a default of "DEFAULT" and values of:

	• ABBREVPVT = abbreviated private (only for CDPN and CGPN) • CDPNATNUM = ANI of the called party; national number (only for CHRGN) • CDPSUBSNUM = ANI of the called party; subscriber number (only for CHRGN) • CDPUNAVAIL = ANI of the called party; no number present (only for CHRGN) • CGPNATNUM = ANI of the calling party; national number (only for CHRGN) • CGPSUBSNUM = ANI of the calling party; subscriber number (only for CHRGN) • DEFAULT = matches all numbers • INTNATNUM = international number (only for CDPN) • INTNATOPREQ = international operator request (only for CDPN) • NATNUM = national significant number (only for CDPN) • NATOPREQ = national (long-distance) operator request (only for CDPN) • NONUMCUTTHRU = no number provided, cut through to carrier (only for CDPN) • NONUMOPREQ = no number provided, operator request (only for CDPN) • NOTPRSNT = matches calls without a CGPN, CDPN, or CHRGN • NUNIINTNATNUM = non-unique international number (only for CGPN) • NUNINATNUM = non-unique national number (only for CGPN) • NUNISUBSNUM = non-unique subscriber number (only for CGPN) • SUBOPREQ = subscriber (local) operator request (only for CDPN) • SUBSNUM = subscriber number (only for CDPN) • TESTLINE = test line test code (only for CGPN and CDPN) • UNAVAIL = ANI not available or not provided (only for CHRGN) • UNIINTNATNUM = unique international number (only for CGPN) • UNINATNUM = unique national number (only for CGPN)

	• UNISUBSNUM = unique subscriber number (only for CGPN) • UNKNOWN = unknown (only for CDPN); <i>digits</i> identifies the leading digits of the number to be matched as a string of up to 31 digits with a default of “DEFAULT” <i>minDgts</i> identifies the minimum allowable length of the incoming addressing digits as an integer from 0-30 with a default of 0.

32. DigitModGenAid

Identifies the AID as a digit modification object keyed for generic digits or generic address parameters.

Pattern	Description
<code><dmLbl></code> <code>[-<genType></code> <code>[-<nmbType></code> <code>[-<digits]]]</code>	<i>dmLbl</i> identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters <i>genType</i> (optional only in RTRV) identifies the primary key that applies to the specified digit modification table as either a generic address parameter or generic digits or a (user-defined) generic parameter, with values of: • GAP = Generic Address Parameter • GENDGTS = generic digits • GP = generic parameter <i>nmbType</i> (optional only in RTRV) identifies the numeric value representing the type of generic digits or generic address parameters, with values of: • 0-255 for GAP • 0-31 for GENDGTS • 0-255 for GP <i>digits</i> identifies the leading digits of the number to be matched as a string of up to 31 digits with a default of “DEFAULT”. When the value of <i>genType-nmbType</i> is “GENDGTS-9”, the value of <i>digits</i> is a string of either three or eight digits. When the value is three digits, the range is {000-127}. When the value is eight digits, the range for the first three digits is {000-127} and the range for the last five

	digits is {00000-16383}. When the value of <i>genType-nmbrType</i> is “GP-195”, the value of <i>digits</i> is a string of eight digits.

33. DigitModParamAid

Identifies the AID as a digit screening method.

Pattern	Description
<code><dmLbl></code> <code>[-<primKey></code> <code>[-<Value>]</code>	<i>dmLbl</i> identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters <i>primKey</i> (optional only in RTRV) identifies the primary key applicable to the specified screening table as a type of call parameter, with values of: • CALLTYPE = Type of call (Class 5) • CIP = Carrier Information Parameter (for ISUP only) • CPC = Calling Party Category • CSI = Carrier Selection Information • JIP = Jurisdiction Information Parameter (NPANXX) • LATA = Local Access & Transport Area • OLI = Originating Line Information <i>Value</i> identifies the value applicable to the specified parameter, with values of: CALLTYPE: • CUTTHRU • DEFAULT • DIR_ASSISTANCE • EMERGENCY • INTERLATA • INTERLATAOPREQ • INTNATNUM • INTNATOPREQ • INTRALATA • LOCALNUMBER • LOCALOPREQ • N11 • NATNUM • NONUMOPREQ • NOTPRSNT

	• TOLLFREE CIP: 0-9999, DEFAULT, NOTPRSNT CPC: 00-FF (hexadecimal) , DEFAULT, NOTPRSNT CSI: • DEFAULT = matches all numbers • NOTPRESUB = not presubscribed and input by calling party • NOTPRSNT = matches calls without CSI • PRESUBDIAL = presubscribed and input by calling party • PRESUBNOTDIAL = presubscribed and not input by calling party • PRESUBUNKNOWN = presubscribed, input by calling party undetermined • UNKNOWN = no indication JIP: 200000-999999, DEFAULT, NOTPRSNT LATA: 200-99999, DEFAULT, NOTPRSNT OLI: 00-FF (hexadecimal), DEFAULT, NOTPRSNT

34. DigitModTnsAid

Identifies the AID as a digit modification object keyed for the transit network selection (TNS) parameter, which is the circuit code for ISUP calls, or the Carrier or 0ZZ codes for CAS Feature group D.

Pattern	Description
<code><dmLbl></code> <code>[-<TNS></code> <code>[-<carrier></code> <code>[-<callTypeCode></code> <code>[-<prtcl]]]]</code>	<i>dmLbl</i> identifies the name of the applicable digit modification table with a string of 1-10 alphanumeric characters <i>TNS</i> (optional only in RTRV) identifies the primary key that applies to the specified digit modification table with “TNS” as the sole value <i>carrier</i> identifies the carrier code as a string of 1-4 digits, “NOTPRSNT”, or the default value “DEFAULT” <i>callTypeCode</i> identifies the ISUP circuit code or the CAS 0ZZ or 1NX codes as a string of 1-3 digits with a default of “DEFAULT” (set <i>callTypeCode</i> to DEFAULT if <i>carrier</i> is

	DEFAULT or NOTPRSNT) <i>prtcl</i> identifies the incoming trunk group protocol with values of CAS or ISUP (the default value – set <i>prtcl</i> to ISUP if <i>callTypeCode</i> is DEFAULT)

35. ENET

Identifies the AID as an Ethernet port on an IOM in the Plexus 9000.

Pattern	Description
IOM-{8,10}-ENET-{1-4}	Represents an Ethernet port on an IOM

36. FAN

Identifies the AID as the fan assembly in the Plexus 9000.

Pattern	Description
FAN	Represents the fan assembly

37. IfGrpDs1Id

Identifies the AID as an association of a DS1 port with a GR303 interface group. The first part of the AID is the interface group number and the second part is the DS1 port number.

Pattern	Description
{1-32767}-{1-28}	Represents an association of a DS1 port with a GR303 interface group

38. IfGrpNum

Identifies the AID as a GR303 interface group.

Pattern	Description
{1-32767}	Represents a GR303 interface group

39. IomAid

Identifies the AID as an IOM slot that contains a Voice Processor Server module.

Pattern	Description
IOM-{1-17}	Represents an IOM slot that contains a Voice Processor Server module

40. IOMODULE

Identifies the AID as an I/O module (IOM) by slot number.

Pattern	Description
IOM-{1-17}	Represents an IOM slot number

41. IOMorENET

Identifies the AID either as an IOM (by slot number), or as an Ethernet port on an IOM (by slot number and port number).

Pattern	Description
IOM-{8,10}	Represents an IOM slot number
IOM-{8,10}-ENET-{1-4}	Represents an Ethernet port on an IOM

42. IOMorOC

Identifies the AID either as an IOM (by slot number), or as an OC port on an IOM (by slot number and port number).

Pattern	Description
IOM-{8,10}	Represents an IOM slot number
IOM-{8,10}-OC12-{1-4}	Represents an OC12 port on an IOM
IOM-{8,10}-OC3-{1-4}	Represents an OC3 port on an IOM

43. IOMorSP

Identifies the AID either as an IOM (by slot number) or as a System Processor (SP) module.

Pattern	Description
IOM-{1-17}	An IOM slot number
SP-{A-B}	SP slot number A or B (System Processor functionality)

44. IOMorSPorSF

Identifies the AID either as an IOM (by slot number), as an SW/FAB A or B module, or as a SP A or B module.

Pattern	Description
IOM-{1-17}	An IOM slot number
SF-{A-B}	SW/FAB slot number A or B
SP-{A-B}	SP slot number A or B (System Processor functionality)

45. IOMorSTS1

Identifies the AID either as an STS1 IOM (by slot number), or as an STS1 port on a DS3 IOM (by slot number and port number).

Pattern	Description
IOM-{1-17}	A DS3 IOM slot number
IOM-{1-17}- STS1-{1-8}	An STS1 port on a DS3 IOM

46. IOMorT3

Identifies the AID either as a DS3 IOM (by slot number), or as a T3 port on a DS3 IOM (by slot number and port number).

Pattern	Description
IOM-{1-17}	A DS3 IOM slot number
IOM-{1-17}-T3-{1-8}	A T3 port on a DS3 IOM

47. IOMorT3orPORT

Identifies the AID either as an IOM (by slot number), or as a port on an IOM (by slot number and port number).

Pattern	Description
IOM-{1-17}	An IOM slot number
IOM-{1-17}-PORT-{1-28}	A T1 port on a DS1 IOM
IOM-{1-17}-STS1-{1-8}	An STS1 port on a DS3 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}	A T3 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a T3 port on a DS3 IOM

48. IOMorT3orPORTorBITS

Identifies the AID either as an IOM (by slot number), a port on an IOM (by slot number and port number), or a timing port in the Plexus 9000.

Pattern	Description
IOM-{1-17}	An IOM slot number
IOM-{1-17}-PORT-{1-28}	A T1 port on a DS1 IOM
IOM-{1-17}-STS1-{1-8}	An STS1 port on a DS3 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}	A T3 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a T3 port on a DS3 IOM
TMG-{A,B}	The BITS interface on rear Switch Fabric card A or B

49. isdnBcStaChannelStateAid

Identifies the AID as an ISDN B channel in the RTRV-STATUS-IDSNBCHAN command. The first range in the pattern represents the interface, the second range represents the link on the interface, and the third range represents the channel on the link.

Pattern	Description
{1-32767}-{1-32767}-{1-24}	Represents an ISDN B channel

50. IsdnChanAid

Identifies the AID as an ISDN B channel in the ED-STATE-IDSNBCHAN command. The first range in the pattern represents the interface, the second range represents the link on the interface, and the third range represents the channel on the link.

Pattern	Description
{1-32767}-{1-32767}-{1-24}	Represents an ISDN channel

51. IsdnIfNum

Identifies the AID as an ISDN interface.

Pattern	Description
{1-32767}	Represents an ISDN interface

52. IsdnLink

Identifies the AID as an ISDN link. The first number in the range identifies the interface; the second identifies the link.

Pattern	Description
{1-32767}-{1-32767}	Represents an ISDN link on an interface

53. IsdnRtAid

Identifies the AID as an ISDN route.

Pattern	Description
<RTNAME>-{0-32767}	Represents an ISDN route with a variable string, of up to 21 alphanumeric characters, indicating the route name (established in the AID <i>isdnRtId</i> in the command ENT-ROUTE-IDSNIF), and an associated priority range. The range establishes the order in which interfaces are to be accessed (with lower numbers indicating higher priority) when there is more than one interface. The value of the priority range is set to zero when there is only one interface.

54. lapdAid

Identifies the AID as an LAPD (Link Access Protocol – D channel) interface and link.

Pattern	Description
GR303EOC-{1-32767}-{1-28}	An Embedded Operations Channel on a GR303 interface
GR303TMC-{1-32767}-{1-32767}	A Timeslot Management Channel on a GR303 interface
ISDN-{1-32767}-{1-32767}	A link on an ISDN interface
IUA-IOM-{1-17}-PORT-{1-28}	A T1 port on a DS1 IOM containing the D-channel for ISDN User Adaptation (IUA) applications
IUA-IOM-{1-17}-STS1-{1-8} -PORT-{1-28}	A T1 port on an STS1 port on a DS3 IOM containing the D-channel for ISDN User (IUA) Adaptation applications
IUA-IOM-{1-17}-T3-{1-8} -PORT-{1-28}	A T1 port on a T3 port on a DS3 IOM containing the D-channel for ISDN User Adaptation (IUA) applications

55. LinkId

Identifies the AID as an ISDN link on an interface.

Pattern	Description
{1-32767}-{1-32767}	Represents an ISDN link with the first number identifying the interface and the second number identifying the link

56. ListCodeAid

Identifies the AID as an authorization code, a PIN code, or an authorization code with an associated PIN code in an authorization list.

Pattern	Description
<LISTID>-{INDEX}	Represents an authorization code, a PIN code, or an authorization code with an associated PIN code in an authorization list, where: <i>LISTID</i> identifies the name of the applicable authorization list with a string of up to 20 alphanumeric characters <i>INDEX</i> identifies a specific code in the authorization list with an integer of 1-500

57. LsetAid

Identifies the AID as a linkset.

Pattern	Description
{1-20}	Represents an SS7 link set

58. MgcplineAid

Identifies the AID as a line (i.e., endpoint) in an MGCP gateway. The pattern is a combination of a gateway controlled under the Call Management Server (CMS) and the affected endpoint.

Pattern	Description
<gatewayId>-<lineId>	gatewayId = {1-100000} lineId = {1-65536}

59. Mtp2PrflId

Identifies the AID as an MTP layer 2 profile.

Pattern	Description
{1-40}	Represents an MTP layer 2 profile

60. Mtp3PrflId

Identifies the AID as an MTP layer 3 profile.

Pattern	Description
{1-20}	Represents an MTP layer 3 profile

61. NNPAAd

Identifies the AID as a homed NPA in a country. The first number in the range identifies a country code; the second identifies a homed NPA. A null value for the second number in the range is equivalent to all NPAs in the system.

Pattern	Description
{1-999999}-{200-999}	Represents a country code and an NPA

62. NpaNxx

Identifies the AID as a homed NXX (exchange) in a specific NPA hosted by the Plexus 9000.

Pattern	Description
{200-999}-{200-999}	Represents the NPA with the first number and the NXX with the second number

63. OC

Identifies the AID as an OC port on an IOM in the Plexus 9000.

Pattern	Description
IOM-{8,10}-OC12-{1-4}	Represents an OC12 port on an IOM
IOM-{8,10}-OC3-{1-4}	Represents an OC3 port on an IOM

64. PcAid

Identifies the AID as a point code.

Pattern	Description
{0-255}-{0-255}-{0-255}	Represents a point code

65. PcPrfId

Identifies the AID as a point code profile.

Pattern	Description
{1-128}	Represents a point code profile

66. PORT

Identifies the AID as a T1 port on an IOM by slot number and port number.

Pattern	Description
IOM-{1-17}-PORT-{1-28}	A T1 port on a DS1 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a DS3 IOM

67. PORTorBITS

Identifies the AID either as a port on an IOM (by slot number and port number), or as the BITS interface on a Switch Fabric rear card.

Pattern	Description
IOM-{1-17}-PORT-{1-28}	A T1 port on a DS1 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a DS3 IOM
TMG-{A,B}	The BITS interface on rear Switch Fabric card A or B

68. PvcId

Identifies the AID as a PVC endpoint.

Pattern	Description
{1-4}	Represents a PVC endpoint

69. PvcPrflId

Identifies the AID as a PVC profile. The Plexus 9000 is shipped with Profile #1 already established as a factory default; you cannot delete it.

Pattern	Description
{2-8}	Represents a PVC profile

70. RelCauseAid

Identifies the AID as a release cause associated with a specific protocol and type of coding.

Pattern	Description
{0-32767}- PROTOCOLTYPE- CODINGTYPE	{0-32767} identifies the release cause <i>PROTOCOLTYPE</i> = ISDN, ISUP, or CAS <i>CODINGTYPE</i> = ANSI or CCITT

71. RouteAddrAid

Identifies the AID as a route address. The pattern is a combination of the route address (a telephone number associated with a route name) and the nature of address indicator (defined by the parameter *ROUTEIDENT*).

Pattern	Description
<RTADDR>-{ROUTEIDENT}	<i>RTADDR</i> is a string of 1-21 digits or characters a-e (or the word "DEFAULT" when the route identifier applies to all route addresses). <i>ROUTEIDENT</i> can be: • INTNATNUM = international number • NATNUM = national significant

	number • NATOPREQ = national (long-distance) operator request • NONUMCUTTHRU = no number provided, cut through to carrier • NONUMOPREQ = no number provided, operator request • RELINCCITT = Release cause value intended for ISDN with CCITT coding standard • RELINNAT = Release cause value intended for ISDN with National Specific coding standard • RELISCCITT = Release cause value intended for ISUP with CCITT coding standard • RELISNAT = Release cause value intended for ISUP with National Specific coding standard • SUBOPREQ = subscriber (local) operator request • SUBSNUM = subscriber number • TESTLINE = call is for testing purposes • UNKNOWN = Nature of Address unknown

72. RouteN11Aid

Identifies the AID as an N11 number (such as 411, 911) and an associated calling party number.

Pattern	Description
<N11STRING>-<DNSTRING>	<i>N11STRING</i> represents an N11 number with a digit between 2 and 9 followed by “11” <i>DNSTRING</i> represents the associated calling party number with either a number from one to ten digits or the word “DEFAULT”

73. RouteSchedAid

Identifies the AID as the name of the route schedule, and the name of the schedule profile applied to it.

Pattern	Description
<SCHEDNAMESTRING>-<PRFLNAMESTRING>	<i>SCHEDNAMESTRING</i> = up to 20 alphanumeric characters <i>PRFLNAMESTRING</i> = up to 20 alphanumeric characters, including “DEFAULT” (which must be entered prior to any user-defined schedule profile names).

74. RouteSs7Aid

Identifies the AID as an SS7 Route. The pattern is a combination of the adjacent destination point code and the link set connecting to it.

Pattern	Description
<PCAIID>-<LSETAID>	Represents the destination point code (with pattern {0-255}-{0-255}-{0-255}) and the link set connecting to it (with pattern {1-20})

75. RtId

Identifies the AID as a route with a string of up to 20 characters indicating the name of a route list in which the route is listed, and an associated index.

Pattern	Description
<rtList>-<index>	<i>rtList</i> identifies the name of the applicable route list with a string of 1-20 characters <i>index</i> identifies the particular route in the applicable route list as an integer between zero and 32767.

76. RtIntfcAid

Identifies the AID as a route. The pattern is a combination of the route name (up to 20 characters) and an associated priority. The priority establishes the order in which interfaces are accessed (with lower numbers indicating higher priority) when there is more than one interface. The value of the priority range is set to zero when there is only one interface.

Pattern	Description
<RTNAME>-{0-32767}	Represents an SS7 route interface as the route name with an associated priority

77. RtpTermId

Identifies the AID as a packet termination on a MEGACO call.

Pattern	Description
Alphanumeric characters in the form: Chassis/RTP/IOM{1-17}/ P{1025-65535}	Represents a packet termination as a combination of the chassis name, RTP termination type, IOM, and numeric ID for a specific VoIP resource (port)

78. SccpSsnAid

Identifies the AID as a combination of the remote point code (with pattern {0-255}-{0-255}-{0-255}) that receives a query and the subsystem number of the providing service.

Pattern	Description
<PCAID>-{1-255}	Represents a remote point code and a subsystem number

79. ScpAnncMap

Identifies the AID as an announcement specified by an SCP. The first part of the AID is a string of up to 20 characters that labels the announcement mapping; the second part is an integer identifying the announcement specified by the SCP.

Pattern	Description
<ANNCMAPLBL>-{1-65535}	Represents an announcement specified by an SCP

80. ScreenDigitsAid

Identifies the AID with a variable string indicating the subscriber, the type of screened number, and the string of blocked digits.

Pattern	Description
<SUBSCRIBERID>- <SCREENTYPE>- <SCREENSTRING>	SUBSCRIBERID identifies the subscriber with a string of exactly 10 digits SCREENTYPE identifies the type of screened number and can be: • CUTTHRU = Casual calling carrier (101xxxx) • INTERNATIONAL = Direct-dial international (011) • NATIONAL = Any number in the NANP (1 or any NPA or any NPA-NXX or any complete NPA-NXX-xxxx) • OPERATOR = Local or long-distance operator request (0 or 00) • OPINTRN = Operator-assisted international (01) • OPNAT = Operator-assisted long-distance (0) • SUBSNUM = N11 calls (x11, except 911) SCREENSTRING identifies the digits to block with a string of up to 21 digits (shown parenthetically for each value of SCREENTYPE).

81. ScreenListAid

Identifies the AID as a list of calling or called party numbers associated with an interface. The first number in the range identifies the list, and the second identifies the first subscriber number on the list by NPA, NXX, and XXXX.

Pattern	Description
{LISTID}-{STARTRANGE}	Identifies a list with a number in the range {1-32767} and the first subscriber number on the list by NPA, NXX, and XXXX with exactly 10 digits.

82. ServiceId

Identifies the AID as a type of IN service.

Pattern	Description
<ServiceId>	<i>ServiceId</i> represents a type of IN service – services applicable to specific releases have those releases shown parenthetically after the value. Parentheses also enclose standard (factory default) activation and deactivation codes. Values can be: • ACB = Automatic Call Back (Activation Code = 66, Deactivation Code = 86) • ACR = Anonymous Call Rejection (Activation Code = 77, Deactivation Code = 87) • AIN_TOLLFREE = Advanced Intelligent Network tollfree – tollfree calls resolved in the INAP layer of SS7 (Activation Code = NULL, Deactivation Code = NULL) • AR = Automatic Recall (Activation Code = 69, Deactivation Code = 89) • AUTHCODE = Authorization Code required for outgoing calls (Activation Code = NULL, Deactivation Code = NULL) • CFBL = Call Forwarding on Busy Line (Activation Code = NULL, Deactivation Code = NULL) • CFDA = Call Forwarding on No Answer (Activation Code = NULL, Deactivation Code = NULL) • CFV = Call Forwarding Variable (Activation Code = 72, Deactivation Code = 73) • CID = Calling Identity Delivery (Activation Code =

	61, Deactivation Code = NULL) • CIDCW = Call ID on Call Waiting (Activation Code = NULL, Deactivation Code = NULL) • CIS = Calling Identity Suppression (Activation Code = NULL, Deactivation Code = NULL) • CNAB = Calling Name delivery Blocking (Activation Code = NULL, Deactivation Code = NULL) • CNAM = Caller Name display (Caller ID) (Activation Code = NULL, Deactivation Code = NULL) • CND = Calling Number Delivery (Activation Code = NULL, Deactivation Code = NULL) • CNDB = Calling Number Delivery Blocking (Activation Code = 67, Deactivation Code = NULL) • COT = Customer Originated Trace (Activation Code = 57, Deactivation Code = NULL) • CRDPCL = Code Restriction/Diversion Prohibited Code List – block originating calls to specified screen digits (Activation Code = NULL, Deactivation Code = NULL) • CWC = Cancel Call Waiting (Activation Code = 70, Deactivation Code = NULL) • CWT = Call Waiting (Activation Code = NULL, Deactivation Code = NULL) • GMSC_IS41 (3.8.2 & 3.8.3) = Gateway MSC, ANSI IS41 based (Activation Code = NULL, Deactivation Code = NULL) • GMSC_MAP (3.8.2 & 3.8.3) = Gateway MSC, GSM MAP based (Activation Code = NULL, Deactivation Code = NULL) • LNP = Local Number Portability • MWC = Multi-Way Calling – Call Transfer (Activation Code = NULL, Deactivation Code = NULL) • RAF = Remote Access to Features (Activation Code = NULL, Deactivation Code = NULL) • RDAS = Residence Distinctive Alerting Service (Activation Code = NULL, Deactivation Code = NULL) • SC1 = Speed-dialing with one-digit code (Activation Code = 74, Deactivation Code = NULL) • SC2 = Speed-dialing with two-digit code (Activation Code = 75, Deactivation Code = NULL)

	• TOLLFREE = Tollfree (Activation Code = NULL, Deactivation Code = NULL) • TWC = Three-Way Calling (Activation Code = NULL, Deactivation Code = NULL) • VMS = Voice Mail System (Activation Code = NULL, Deactivation Code = NULL)

83. SlhrId

Identifies the AID as a service logic host route to a Service Control Point.

Pattern	Description
{0-31}	Represents a service logic host route

84. SnmpAccessAid

Identifies the AID as an SNMP access group.

Pattern	Description
<GROUPNAME>- {SECLEVEL}- {SECMODEL}	GROUPNAME = up to 32 alphanumeric characters (including underscores “_”) used to identify a set of views for access control SECLEVEL = the minimum security level required by a message to access the group. Allowed values are: AUTHNOPRIV = authentication and no privacy (default) AUTHPRIV = authentication and privacy NOAUTHNOPRIV = no authentication, no privacy SECMODEL = security model required for access to the group. Allowed values are: ANY = any security model SNMPV1 = SNMP version 1 security SNMPV2C = SNMP version 2c security USM = User-Based Security (default)

85. SnmpViewAid

Identifies the AID as an SNMP access group view.

Pattern	Description
<VIEWNAME>-<VIEWTREE>	VIEWNAME = up to 32 alphanumeric characters (including underscores “_”) used to identify a set of view trees. VIEWTREE = up to 63 digits (0-9) and periods (“.”) that identify the view subtree in numerical dotted notation. For example, the object identifier (OID) for the Internet is “1.3.6.1”.

86. SP

Identifies the AID as an active or standby System Processor module in a Plexus 9000.

Pattern	Description
SP-{A-B}	Represents either SP-A or SP-B

87. SPorIOM

Identifies the AID either as an IOM (by slot number) or as a System Processor (SP) module.

Pattern	Description
IOM-{8,10}	An IOM slot number
SP-{A-B}	SP slot number A or B (System Processor functionality)

88. Ss7LnkAid

Identifies the AID as an SS7 signaling link.

Pattern	Description
{1-40}	Represents an SS7 link

89. Ss7PcAid

Identifies the AID as a destination point code.

Pattern	Description
{0-255}-{0-255}-{0-255}	Represents a point code

90. Ss7TrkAid

Identifies the AID as a unique trunk (or range of trunks) associated with a trunk group number. The first number in the range identifies the trunk group number and the second number identifies the trunk(s). A range of trunks is shown by the beginning and ending numbers separated by two ampersands and a hyphen (“&&-”).

Pattern	Description
{1-9999}-{0-16382}	Represents a CIC in a trunk group

91. STS1

Identifies the AID as an STS1 port on an STS1 IOM in the Plexus 9000.

Pattern	Description
IOM-{1-17}-STS1-{1-8}	Represents a port on an STS1 IOM

92. SubIfAid

Identifies the AID as a subscriber interface number and whether it is a CAS, GR303, ISDN, or MGCP interface.

Pattern	Description
{IFNUM}-<SUBIF>	Represents the subscriber interface, where IFNUM = {1-2147483647} for CAS, {1-32767} for GR303 or ISDN, {1-100000} for MGCP SUBIF = {CAS, GR303, ISDN, MGCP}

93. SubSpeedAid

Identifies the AID with a variable string indicating a subscriber with a string of exactly 10 digits, and an associated speed-dialing code.

Pattern	Description
<SUBCRIBERID>-{2-99}	Represents a subscriber ID and its associated speed-dialing code

94. T0

Identifies the AID as a DS0 channel on an IOM.

Pattern	Description
IOM-{1-17}-PORT-{1-28}-T0-{1-24}	A DS0 channel on a T1 port on a DS1 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}-T0-{1-24}	A DS0 channel on a T1 port on an STS1 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}-T0-{1-24}	A DS0 channel on a T1 port on a DS3 IOM

95. T3

Identifies the AID as a T3 port on a DS3 IOM in the Plexus 9000.

Pattern	Description
IOM-{1-17}-T3-{1-8}	Represents a port on a DS3 IOM

96. T3orPORT

Identifies the AID as a port on a DS3 IOM (by slot and port numbers).

Pattern	Description
IOM-{1-17}-STS1-{1-8}	An STS1 port on a DS3 IOM
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}	A T3 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a T3 port on a DS3 IOM

97. T3PORT

Identifies the AID as a T1 port on a DS3 IOM (by slot and port numbers).

Pattern	Description
IOM-{1-17}-STS1-{1-8}-PORT-{1-28}	A T1 port on an STS1 port on a DS3 IOM
IOM-{1-17}-T3-{1-8}-PORT-{1-28}	A T1 port on a T3 port on a DS3 IOM

98. TdmTermId

Identifies the AID as a TDM termination on a MEGACO call.

Pattern	Description
Alphanumeric characters in the form: Chassis/TDM/IOM{1-17}/ T{1-8}/ P{1-28}/C{1-24}	Represents a TDM termination as a combination of the chassis name, TDM termination type, IOM, DS3 port, DS1 port, and Channel {1-24}

99. TestPortNum

Identifies the AID as a number of a DS0 channel on a test port.

Pattern	Description
TP-{1-24}	Represents a DS0 channel

100. TgnAid

Identifies the AID as a unique trunk group number.

Pattern	Description
{1-9999}	Represents a unique trunk group number

101. TgnSipId

Identifies the AID as a trunk group unique to a specific Session Access Node. The first part of the AID is the trunk group number and the second part is the Session Access Node.

Pattern	Description
{1-9999}-{1-16}	Represents a trunk group unique to a specific Session Access Node

102. TransSchedAid

Identifies the AID as a translation plan schedule that chooses translations based on the time of day.

Pattern	Description
<transSched> -<prflName>	<i>transSched</i> identifies the name of the translation plan schedule with a string of 1-10 alphanumeric characters (Translation plan schedules and translation plans cannot have the same names.) <i>prflName</i> (optional only in RTRV) identifies, with a string of 1-20 alphanumeric characters or the value "DEFAULT", the name of the routing schedule profile, previously defined by PRFL-SCHED, that determines the times and dates to use the listed translation plan.

103. TrigEscListAID

Identifies the AID as an escape (exception) list for a particular trigger type.

Pattern	Description
<trigEscList> -<startRange>	<i>trigEscList</i> identifies the name of the trigger type escape list with a string of up to 10 alphanumeric characters; <i>startRange</i> identifies the first number in the range of DNs associated with the escape list with a string of exactly 10 digits.

104. TriggerAid

Identifies the AID as a list of AIN triggers.

Pattern	Description
<ainTrigListName> -<index>	<i>ainTrigListName</i> identifies the name of the list of AIN triggers with a string of up to 21 alphanumeric characters; <i>index</i> identifies the particular trigger associated with the list as an integer with range 1-255. Each trigger has a unique combination of <i>trigType</i> and <i>screenDgts</i> .

105. TrkAid

Identifies the AID as a unique trunk associated with a trunk group number.

Pattern	Description
{1-9999}-{1-32767}	Identifies the trunk group number and the trunk number

106. VMS

Identifies the AID as an SMDI (Simplified Message Desk Interface) data link between the Plexus 9000 and a Voice Mail System. The pattern is a combination of a generic Message Storage and Retrieval (MSR) system in a VMS and an SMDI data link between it and the Plexus 9000. A value of "0" for *msrId* indicates that the link is a virtual VMS link.

Pattern	Description
<msrId>-<smdiLnkId>	msrId = {0-999} smdiLnkId = {1-8}

107. VoipPrfl

Identifies the AID as a VoIP call profile.

Pattern	Description
{1-65535}	Represents a VoIP call profile

108. VpId

Identifies the AID as a voice processor on a VoIP IOM. The pattern is a combination of the I/O Module and the voice processor.

Pattern	Description
IOM-{1-17}-VP-{1-8}	Represents a voice processor on a VoIP IOM

109. VpsId

Identifies the AID as a Virtual Circuit Connection (VCC).on a Voice Processor Server (VPS) module. The pattern is a combination of the VPS Module and the VCC.

Pattern	Description
IOM-{1-17}-VCC-{0-799}	Represents a VCC on a VPS Module

NOTES

Error Messages

Errors may be generated by any command or command response message. The format of an error message is as follows:

```
      sid date time
M  ctag DENY
    <errcde>
/* <errmsg> */
;
```

Error Code (errcde)	Error Type	Error Message (errmsg)
EATN	Equipage	Not Valid for Access Type
ENAC	Equipage	Not equipped with Alarm Cutoff
ENAD	Equipage	Not equipped with Audit capability
ENAR	Equipage	Not equipped with Automatic Reconfiguration
ENDG	Equipage	Not equipped with DiaGnostic capability
ENDS	Equipage	Not equipped with Duplex Switching
ENEA	Equipage	Not equipped with Error Analysis capability
ENEQ	Equipage	Not EQuipped
ENEX	Equipage	Not equipped with EXercise capability
ENFL	Equipage	Not equipped for Fault Locating
ENMD	Equipage	Not equipped with Memory Device
ENPM	Equipage	Not equipped for Performance Monitoring
ENPS	Equipage	Not equipped with Protection Switching
ENRI	Equipage	Not equipped for Retrieving specified Information
ENRS	Equipage	Not equipped for ReStoration
ENSA	Equipage	Not equipped for Scheduling Audit
ENSI	Equipage	Not equipped for Setting specified Information
ENSS	Equipage	Not equipped with Synchronization Switching
ICNV	Input	Command Not Valid
IDNV	Input	Data Not Valid
IDRG	Input	Data RanGe
IIAC	Input	Invalid ACcess identifier
IICT	Input	Invalid Correlation Tag
IIFM	Input	Invalid data ForMat
IIPG	Input	Invalid Parameter Grouping
IISP	Input	Invalid Syntax or Punctuation
IITA	Input	Invalid TArget identifier
INUP	Input	Non-null Unimplemented Parameter
IPMS	Input	Parameter MiSsing
ISCH	Input	Syntax invalid CHaracter (new Jul95)
ISPC	Input	Syntax invalid PunCtuation (new Jul95)

Error Code (errcde)	Error Type	Error Message (errmsg)
PICC	Privilege	Invalid Command Code
PIMA	Privilege	Invalid Memory Address
PIMF	Privilege	Invalid Memory File
PLNA	Privilege	Login Not Active
SAAL	Status	Already ALlowed
SABT	Status	ABorTed
SAIN	Status	Already INhibited
SAIS	Status	Already In Service
SAMS	Status	Already in Maintenance State
SAOP	Status	Already OPERated
SAPR	Status	Already in Protection state
SARB	Status	All Resources Busy
SATF	Status	Automatic Test Failed
SCNA	Status	Command Not Abortable
SCNF	Status	Command Not Found
SDAS	Status	Diagnosis Already Started
SDFA	Status	Duplex unit FAiled
SDLD	Status	Duplex unit Locked
SDNA	Status	Duplex unit Not Available
SDNR	Status	Data Not Ready
SDNS	Status	Diagnosis Not Started yet
SFAS	Status	Fault locating Already Started
SFNS	Status	Fault locating Not Started yet
SLNS	Status	Log Not Started yet
SNOS	Status	Not currently Out of Service
SNPR	Status	Not in Protection state
SNRM	Status	system Not in Restoration Mode
SNSR	Status	No Switch Request outstanding
SNVS	Status	Not in Valid State
SPFA	Status	Protection unit FAiled
SPLD	Status	Protection unit Locked
SPNA	Status	Process Not Abortable
SPNF	Status	Process Not Found
SRCI	Status	Requested Command(s) Inhibited
SROF	Status	Requested Operation Failed
SRTO	Status	Reply Time-Out
SSRD	Status	Switch Request Denied
SSRE	Status	System Resources Exceeded
STAB	Status	Test ABorted
SWFA	Status	Working unit FAiled
SWLD	Status	Working unit Locked