

Lucent Technologies
Bell Labs Innovations



4ESS™ Switch
Convert AMA to Dual Stream

CMCO (Call Code 066) AMA
Data to IC Stream

234-353-450
Issue 1
November 2001

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Lucent Technologies is the successor to the business and assets of AT&T Network Systems business unit.

How Are We Doing?

Document Title: **4ESS™** Switch Convert AMA to Dual Stream CMCO (Call Code 066) AMA Data to IC Stream

Document No.: 234-353-450

Issue 1

Date: November 2001

Lucent Technologies welcomes your feedback on this document. Your comments can be of great value in helping us improve our documentation.

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TASK INDEX LIST

FIND YOUR JOB IN THE LIST BELOW	THEN GO TO
Acceptance	NTP-002
Convert AMA to Dual Stream	NTP-003
Checklist	CKL-891
How To Use This Document	TNG-893

Acceptance

Acceptance tests are not required for verification of the growth procedures contained in this volume. The readiness of a frame or a unit to become part of the operating system is established by the successful completion of the particular procedure in its entirety.

Convert AMA to Dual Stream

	DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO
	<p style="text-align: center;">ASSUMPTIONS OF WORK COMPLETED BEFORE PERFORMING THIS PROCEDURE</p> <ol style="list-style-type: none"> 1. AMA Partitions 0 through 19 must be equipped and set to the OC stream. 2. The data set and transmission facility associated with the Growth Synchronous Data Link Controller (SDLC) 11 and SDL 22 must be installed and tested. 3. CFT00-0055 must be applied. 		
	<p style="text-align: center;">GENERAL WARNING AND NOTES WHEN CONVERTING AMA TO DUAL STREAM OC</p> <p style="text-align: center;"><i>WARNING: An antistatic wrist strap must be worn to prevent electrostatic discharge and possible damage to circuit packs while handling or installing circuit packs or backplane cables.</i></p> <p>Notes:</p> <ol style="list-style-type: none"> 1. This procedure is only to be used for moving the cellular mobile carrier originating (CMCO) (Call Code 066) AMA records to the new IC stream. 2. This procedure must only be performed in 4ESS™ switch offices running on the 4E24 generic. 3. The following passwords must be available to be set at the appropriate time: <ul style="list-style-type: none"> • AMAT PASSWORD • HOC PASSWORD • BACKUP HOC PASSWORD (if applicable) 4. If UN582 Universal Controller circuit pack for SDLC 11 is not installed at location 45-138 in Input/Output Processor (IOP) 1, IOP 1 and associated subdevices will be required to be temporarily removed and powered down during growth. Arrangements must be made with users for temporary stoppage when IOP 1 is removed from service. 		

DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO
<p>Notes: (Continued)</p> <ol style="list-style-type: none">5. This procedure is to be performed during three maintenance windows. The first maintenance window will grow SDLC 11 and SDL 22, equip two spare partitions to the IC Steam and then test CMCO AMA data being recorded on the new partition. The second maintenance window will reassign up to 10 existing OC partitions to the IC stream. The third maintenance window will reassign any remaining odd-numbered OC partitions to the IC stream.6. Your responses may differ slightly from the given responses due to spooling and/or 3B21D APS equipage. If there are any questions, contact your next higher support organization.7. Each step must be completed before continuing to the next. No failures are allowed. If a failure result is received, the failure must be corrected before continuing.8. At the end of this procedure, the AMA partitions will be assigned as follows:<ul style="list-style-type: none">• Partitions 0 through 7 are on disk pair 2 and 3• Partitions 8 through 15 are on disk pair 4 and 5• Partitions 16 through 23 are on disk pair 6 and 7The even partitions will be assigned to the OC stream and the odd partitions will be assigned to the IC stream.9. This procedure contains a soak interval for verifying system operation and stability during growth. During the soak interval, all abnormal conditions (such as interrupts, interjects, and diagnostic failures related to growth) must be investigated and resolved immediately. Growth equipment, being soaked, must be error free for at least the time specified.10. All 3B21D APS poke commands are entered on the command line. All 3B21D APS input messages are entered on the message line. The CMD/MSG key is used to position the cursor at the proper line.	

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
1	Place a check mark by each step when completed.	TELCO	—
2	Notify next higher support group that Dual Stream AMA Conversion procedure is being started.	TELCO	—
3	Ensure that CFT00-0055 is applied before continuing.	TELCO	—
4	At 1B Processor MTC terminal, enter message VER:OFFICE! and verify that your office is operating in 4E24 generic. This procedure must not be performed if NOT in the 4E24 generic. Contact next higher support group to determine course of action. <i>R e s p o n s e :</i> At 1B Processor MTC ROP: VER:OFFICE GENERIC INFO TOWN ST BL NBS PCF OPC NSN 4E<24>4A.nn yy aaaa aa aa aa a a a	TELCO	—
5	At 3B21D APS MCRT, enter message OP:AMA;MAPS! and verify that partitions 0 through 19 are equipped and assigned to the OC stream. This procedure must not be performed if partitions 0 through 19 are NOT equipped and assigned to the OC stream. Contact next higher support group to determine course of action.	TELCO	—
6	Verify 3B21D APS system status.	TELCO	DLP-500
7	At 3B21D APS MCRT, enter the following messages to inhibit automatic diagnostics: <ul style="list-style-type: none"> • INH:DMQ:SRC REX! • INH:DMQ:SRC ADP! <i>R e s p o n s e :</i> At 3B21D APS MCRT ROP: INH DMQ COMPLETED (for each of the above messages)	TELCO	—
ENSURE CLEAN FILE SYSTEM			
8	Copy incore equipment configuration data base (ECD) to disk.	TELCO	DLP-501
9	Run file system audits to ensure no file system errors.	TELCO	DLP-502
10	Update backup data base.	TELCO	DLP-503

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	ENSURE SDLC 11 IS NOT ACT		
11	At 3B21D APS MCRT, depress NORM/DISP (PF2) key and enter 115 in command mode to obtain the SDL Controllers display page (115).	TELCO	—
12	On the SDL Controllers display page (115), determine the state of SDLC 11 (IC AMA Controller).	TELCO	—
13	If SDLC 11 is ACT , at 3B21D APS MCRT, enter message RMV:SDLC 11! to remove SDLC 11 from service. <i>R e s p o n s e</i> At 3B21D APS MCRT ROP: RMV SDLC 11 TASK 3 MESSAGE STARTED RMV SDL 22 COMPLETED (if equipped) RMV SDLC 11 COMPLETED	TELCO	—
	UNEQUIP SDLC 11 (if required) AND UPDATE TO GROW		
	<p>Notes:</p> <ol style="list-style-type: none"> 1. During the next step, SDLC 11 will be degrown to UNEQIP (if equipped) and then updated to GROW. 2. There are two different execute messages which are dependent on the type of data set connection being used (PRIVATE or SWITCHED). The PRIVATE argument is used when the data set uses a dedicated link. The SWITCHED argument is used when the data set uses a dial up connection. 3. SDLC 11 will be degrown to UNEQIP and the regrown to GROW. 		

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
14	<p>Change SDLC 11 to GROW per A or B below:</p> <p>A. For offices using a data set with dedicated link for the new IC stream: At 3B21D APS MCRT, enter message EXC:ENVIR:UPROC,FN"/database/tools/dualama.grow", ARGS("PRIVATE")!</p> <p>to change the major state for SDLC 11 and SDL 22 to UNEQIP; then update SDLC 11 to GROW.</p> <p><i>R e s p o n s e :</i> At 3B21D APS MCRT ROP: /database/tools/dualama.grow : STARTING 1 OPTIONS Detected -- SCRIPT /database/tools/dualama.grow PROCEEDING SDLC 11 IS IN THE UNEQIP STATE --- SCRIPT /database/tools/dualama.grow PROCEEDING SDL 22 IS IN THE UNEQIP STATE --- SCRIPT /database/tools/dualama.grow PROCEEDING GROWTH TYPE = PRIVATE -- SDLC VARIABLES -- HSDC -- 0x2 -- 0x54 -- pu/duic -- u582 -- 2 -- 0xfff0 GROWTH TYPE = PRIVATE -- SDL VARIABLES -- HSD -- pu/dui -- amblx312 RCVECD PASSED - EXIT CODE = 0 SCRIPTED UPDATE OF SDLC 11 & SDL 22 TO UNEQIP COMPLETED SUCCESSFULLY SCRIPTED CHANGES TO SDLC 11 & SDL 22 TO UNEQIP MADE IN THE INCORE DATABASE ONLY RCVECD PASSED - EXIT CODE = 0 SCRIPTED UPDATE OF cpblx3 OPTION FORM amblx312 COMPLETED SUCCESSFULLY SCRIPTED CHANGES TO cpblx3 OPTION FORM amblx312 MADE IN THE INCORE DATABASE ONLY REPT SDLC 11 IN GROWTH STATE RCVECD PASSED - EXIT CODE = 0 SCRIPTED UPDATE OF SDLC 11 TO GROW COMPLETED SUCCESSFULLY SCRIPTED CHANGES TO SDLC 11 MADE IN THE INCORE DATABASE ONLY EXC ENVIR UPROC /database/tools/dualama.grow COMPLETED</p>	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
14	<p><i>(C o n t i n u e d</i></p> <p>B. For offices using a data set with a dial up connection for the new IC stream: At 3B21D APS MCRT, enter message EXC:ENVIR:UPROC,FN"/database/tools/dualama.grow", ARGS("SWITCHED")!</p> <p>to change the major state for SDLC 11 and SDL 22 to UNEQIP; then update SDLC 11 to GROW.</p> <p><i>R e s p o n s e :</i> At 3B21D APS MCRT ROP:</p> <p>/database/tools/dualama.grow : STARTING 1 OPTIONS Detected -- SCRIPT /database/tools/dualama.grow PROCEEDING SDLC 11 IS IN THE UNEQIP STATE --- SCRIPT /database/tools/dualama.grow PROCEEDING SDL 22 IS IN THE UNEQIP STATE --- SCRIPT /database/tools/dualama.grow PROCEEDING</p> <p>GROWTH TYPE = SWITCHED -- SDLC VARIABLES -- HSDC -- 0x2 -- 0x54 -- pu/duic -- u582 -- 2 -- 0xfff0</p> <p>GROWTH TYPE = SWITCHED -- SDL VARIABLES -- HSD -- pu/dui -- amblx312</p> <p>RCVECD PASSED - EXIT CODE = 0</p> <p>SCRIPTED UPDATE OF SDLC 11 & SDL 22 TO UNEQIP COMPLETED SUCCESSFULLY</p> <p>SCRIPTED CHANGES TO SDLC 11 & SDL 22 TO UNEQIP MADE IN THE INCORE DATABASE ONLY</p> <p>RCVECD PASSED - EXIT CODE = 0</p> <p>SCRIPTED UPDATE OF cpblx3 OPTION FORM amblx312 COMPLETED SUCCESSFULLY</p> <p>SCRIPTED CHANGES TO cpblx3 OPTION FORM amblx312 MADE IN THE INCORE DATABASE ONLY</p> <p>REPT SDLC 11 IN GROWTH STATE</p> <p>RCVECD PASSED - EXIT CODE = 0</p> <p>SCRIPTED UPDATE OF SDLC 11 TO GROW COMPLETED SUCCESSFULLY</p> <p>SCRIPTED CHANGES TO SDLC 11 MADE IN THE INCORE DATABASE ONLY</p> <p>EXC ENVIR UPROC /database/tools/dualama.grow COMPLETED</p>	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	<i>GROW SDLC 11 IN IOP 1</i>		
15	Using the Telephone Equipment Order (TEO), determine if a UN582 circuit pack and/or an SDL cable (ED4A104-30,G167) are to be installed in the 3B21D APS for the new Dual Stream.	TELCO	—
16	If UN582 circuit pack and/or SDL cable (ED4A104-30,G167) are to be installed, perform Steps 17 through 36 as required; otherwise, go to Step 37.	TELCO	—
17	At 3B21D APS MCRT, enter 102 in command mode to obtain Common Process display page (102).	TELCO	—
18	At 3B21D APS MCRT, on the Common Processor display page (102), determine if MTTY and ROP are port switched (connected) to the same MTTYC.	TELCO	—
19	At 3B21D APS MCRT, on the Common Processor display page (102), if MTTY and ROP are not port switched (connected) to the same MTTYC, enter 402 in command mode to switch ROP.	TELCO	—
20	At 3B21D APS MCRT, on the Common Processor display page (102), determine if MTTYC-0 is port switched (connected) to MTTY and ROP.	TELCO	—
21	If MTTYC-0 is NOT port switched (connected) to MTTY and ROP, at 3B21D APS MCRT, enter message SW:PORTSW! to switch MTTYCs.	TELCO	—
22	Wait for 3B21D APS MCRT to repaint.	TELCO	—
23	Notify users that are on the IOP 1 that the IOP will be temporarily powered down.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
24	<p>At 3B21D APS cabinet, on TN1820 circuit pack (EQL 45-080), operate ROS/RST switch to ROS.</p> <p><i>R e s p o n s e</i> ROS LED lights RQIP LED flashes; then goes off OOS LED lights</p> <p>At 3B21D APS MCRT ROP: RMV IOP 1 TASK x MESSAGE STARTED RMV subunit COMPLETED This message repeats for every subunit of the IOP removed from service RMV IOP 1 COMPLETED</p>	TELCO	—
25	<p>At 3B21D APS cabinet, on TN1820 circuit pack (EQL 45-080), operate ST/ON/OFF switch to OFF.</p> <p><i>R e s p o n s e</i> OFF LED lights</p> <p>At 3B21D APS MCRT ROP: REPT POWER REMOVED IOP 1</p>	TELCO	—
26	<p>In 3B21D APS cabinet, if UN582 circuit pack is not installed at location 45-138, perform Steps 27 through 29; otherwise, go to Step 30.</p>	TELCO	—
27	<p>At 3B21D APS cabinet in location 45-138, remove the blank face plate.</p>	TELCO	—
28	<p>Obtain a UN582 circuit pack and remove the circuit pack from its packaging.</p>	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	<p>Note: Excessive force is not required to properly seat the UN582 circuit pack. If the pack seating mechanism, at the bottom of the circuit pack, does not smoothly seat the circuit pack, identify reason that circuit pack cannot be properly seated and correct.</p>		
29	At 3B21D APS cabinet in location 45-138, insert the new UN582 circuit pack and properly seat.	TELCO	—
30	If an SDL cable (ED4A104-30,G167) is to be installed, perform Steps 31 and 32; otherwise, go to Step 33.	TELCO	—
31	At the back of the 3B21D APS cabinet, install appropriate connectors of the SDL cable (ED4A104-30,G167) to their respective following locations: <ul style="list-style-type: none"> • 45-138-132B • 45-138-145T 	TELCO	DLP-504
32	At the associated data set, connect the cable (ED4A104-30,G167) coming from SDL 22.	TELCO	—
33	At 3B21D APS cabinet, on TN1820 circuit pack (EQL 45-080), operate ST/ON/OFF switch to ST . <i>R e s p o</i> RQIP LED flashes; then goes off OFF LED goes off OOS and ROS LEDs remain lit At 3B21D APS MCRT ROP: REPT POWER RESTORED IOP 1 RMV IOP 1 TASK x MESSAGE STARTED RMV IOP 1 STOPPED X'5	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
34	<p>At 3B21D APS cabinet, on TN1820 circuit pack (EQL 45-080), operate ROS/RST switch to RST.</p> <p>Note: Any subunits of the IOP will be restored to service after the RST COMPLETED message is received.</p> <p><i>R e s p o n s e</i> ROS LED goes off. RQIP LED comes on; then goes off OOS LED goes off.</p> <p>At the 3B21D APS MCRT ROP: RST IOP 1 TASK x MESSAGE STARTED RMV IOP 1 STOPPED X'5 DGN IOP 1 COMPLETED ATP MESSAGE IN PROGRESS RST IOP 1 COMPLETED DGN subunit COMPLETED ATP MESSAGE IN PROGRESS</p> <p>This message is repeated for subunits (MTTYC, TTYC, SCSDC, SDLC) of the IOP being restored RST subunit COMPLETED</p> <p>This message is repeated for all subunits of the IOP being restored. DGN IOP 1 ATP MESSAGE COMPLETE</p>	TELCO	—
35	Notify users that are on IOP 1 to resume their activities.	TELCO	—
36	<p>At 3B21D APS MCRT, enter message DGN:SDLC 11;RAW! to diagnose the SDLC 11.</p> <p><i>R e s p o n s e</i> At 3B21D APS MCRT ROP: DGN SDLC 11 TASK x MESSAGE STARTED RMV SDLC 11 STOPPED X'9 DGN SDLC 11 PH 1 ATP MESSAGE IN PROGRESS DGN SDLC 11 PH 2 ATP MESSAGE IN PROGRESS DGN SDLC 11 PH 3 ATP MESSAGE IN PROGRESS DGN SDLC 11 PH 4 ATP MESSAGE IN PROGRESS DGN SDLC 11 COMPLETED ATP MESSAGE IN PROGRESS DGN SDLC 11 ATP MESSAGE COMPLETE</p>	TELCO	—

	DO THE ITEMS BELOW IN THE ORDER LISTED	FOR DETAILS, GO TO	
37	<p>At 3B21D APS MCRT, enter message EXC:ENVIR:UPROC,FN"/database/tools/dualama.grow", ARGS("SDLC-11","OOS")! to change the major state for SDLC 11 to OOS.</p> <p><i>R e s p o n s e :</i> At 3B21D APS MCRT ROP: /database/tools/dualama.grow : STARTING 2 OPTIONS Detected -- SCRIPT /database/tools/dualama.grow PROCEEDING SDLC 11 IS IN THE GROW STATE --- SCRIPT /database/tools/dualama.grow PROCEEDING SDL 22 IS IN THE UNEQIP STATE --- SCRIPT /database/tools/dualama.grow PROCEEDING /tools/3b21/dl.tool : STARTING BEGINNING GROWTH OF SDLC 11 USING THE /tools/3b21/dl.tool SCRIPT REPT SDLC 11 UNEQUIPPED REPT DEGROWTH SDLC 11 COMPLETED REPT SDLC 11 IN GROWTH STATE REPT GROWTH SDLC 11 IN PROGRESS REPT GROWTH SDLC 11 COMPLETED REPT SDLC 11 OUT OF SERVICE SCRIPT /database/tools/dualama.grow TAKING SDLC 11 TO OOS SCRIPTED UPDATE OF SDLC 11 TO OOS COMPLETED SCRIPTED CHANGES TO SDLC 11 MADE IN THE INCORE DATABASE ONLY EXC ENVIR UPROC /database/tools/dualama.grow COMPLETED</p>	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	GROW SDL 22 IN SDLC 11		
38	<p>At 3B21D APS MCRT, enter message EXC:ENVIR:UPROC, FN"/database/tools/dualama.grow", ARGS("SDL-22", "OOS")! to change the major state for SDL 22 to OOS. <i>R e s p o n s e :</i> At 3B21D APS MCRT ROP: /database/tools/dualama.grow : STARTING 2 OPTIONS Detected -- SCRIPT /database/tools/dualama.grow PROCEEDING SDLC 11 IS IN THE OOS STATE --- SCRIPT /database/tools/dualama.grow PROCEEDING SDL 22 IS IN THE UNEQIP STATE --- SCRIPT /database/tools/dualama.grow PROCEEDING /tools/3b21/dl.tool : STARTING BEGINNING GROWTH OF SDL 22 USING THE /tools/3b21/dl.tool SCRIPT REPT SDL 22 IN GROWTH STATE /tools/3b21/dl.tool RCVECD PASSED - EXIT CODE = 0 GROWING OF SDL 22 BY SCRIPT /tools/3b21/dl.tool COMPLETED SDL 22 IS IN GROW - CHANGES MADE TO INCORE DATABASE ONLY SCRIPT /database/tools/dualama.grow TAKING SDL 22 TO GROW SCRIPTED UPDATE OF SDL 22 TO GROW COMPLETED SCRIPTED CHANGES TO SDL 22 MADE IN THE INCORE DATABASE ONLY EXC ENVIR UPROC /database/tools/dualama.grow COMPLETED BEGINNING GROWTH OF SDL 22 USING THE /tools/3b21/dl.tool SCRIPT /tools/3b21/dl.tool RCVECD PASSED - EXIT CODE = 0 GROWING OF SDL 22 BY SCRIPT /tools/3b21/dl.tool COMPLETED SDL 22 IS IN GROWING - CHANGES MADE TO INCORE DATABASE ONLY REPT GROWTH SDL 22 IN PROGRESS REPT GROWTH SDL 22 COMPLETED</p>	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
39	<p>At 3B21D APS MCRT, enter message RST:SDLC 11;CONT! to restore SDLC 11 controller to service.</p> <p><i>R e s p o n s e</i> At 3B21D APS MCRT ROP: RST SDLC 11 TASK x MESSAGE STARTED RMV SDLC 11 STOPPED X'5 DGN SDLC 11 COMPLETED ATP MESSAGE IN PROGRESS RST SDLC 11 COMPLETED DGN SDLC 11 ATP MESSAGE COMPLETE</p>	TELCO	—
40	<p>At 3B21D APS MCRT, enter message RST:SDL 22! to restore SDL 22 to service.</p> <p><i>R e s p o n s e</i> At 3B21D APS MCRT ROP: RST SDL 22 TASK x MESSAGE STARTED RMV SDL 22 STOPPED X'5 RST SDL 22 COMPLETED</p>	TELCO	—
41	<p>Contact the responsible AMA work center and request only the connectivity test to the newly grown SDL 22. This test is to ensure that the HOC can connect to the office before storing AMA data to the new IC stream partitions. Do Not continue until testing is complete.</p>	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	<i>EQUIP PARTITIONS 21 AND 23 TO IC STREAM</i>		
42	<p>At 3B21D APS MCRT, enter message SET:AMA;CONFIG;IC:PART 21,EQUIP!</p> <p><i>R e s p o n s e :</i></p> <p>At 3B21D APS MCRT ROP:</p> <p>REPT AMA CONFIG FILE FOR IC STREAM WARNING - REQUESTED STREAM CONFLICTS WITH CURRENT AMA STREAM INDICATOR EQUIPPING PROCESS IS IN PROGRESS LOOK FOR FURTHER OUTPUT</p> <p>REPT AMA CONFIG FILE FOR IC STREAM NUMBER OF EQUIPPED PARTITIONS 1 TOTAL NUMBER OF AMA BLOCKS nnnnn 21 /dev/ama21 nnnnn</p> <p>PRM_1 ED00 E110 1C00 3FEB 79 00 00</p> <p>REPT AMA DISK WRITER FOR IC STREAM TERMINATION CODE 2</p> <p>REPT AMA DISK WRITER FOR IC STREAM ERROR CODE 25 PRIM</p> <p>REPT AMA DISK WRITER FOR IC STREAM ERROR CODE 25 BKUP</p> <p>REPT AMA DISK WRITER FOR IC STREAM ERROR CODE 26</p> <p>PRM_1 ED00 E201 0000 E000 7A 00 00</p> <p>REPT AMA DISK WRITER FOR IC STREAM INITIALIZATION COMPLETE</p>	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
43	<p>At 3B21D APS MCRT, enter message SET:AMA;CONFIG;IC:PART 23,EQUIP!</p> <p><i>R e s p o n s e :</i></p> <p>At 3B21D APS MCRT ROP:</p> <p>REPT AMA CONFIG FILE FOR IC STREAM WARNING - REQUESTED STREAM CONFLICTS WITH CURRENT AMA STREAM INDICATOR EQUIPPING PROCESS IS IN PROGRESS LOOK FOR FURTHER OUTPUT</p> <p>REPT AMA CONFIG FILE FOR IC STREAM NUMBER OF EQUIPPED PARTITIONS 2 TOTAL NUMBER OF AMA BLOCKS nnnnn 21 /dev/ama21 nnnnn 23 /dev/ama23 nnnnn</p> <p>PRM_1 E700 5300 0000 0000 79 00 00</p> <p>REPT AMA DISK WRITER FOR IC STREAM TERMINATION CODE 2</p> <p>REPT AMA DISK WRITER FOR IC STREAM INITIALIZATION COMPLETE</p>	TELCO	—
44	<p>At 3B21D APS MCRT, enter message SET:AMA;STREAM:DUAL!</p> <p><i>R e s p o n s e :</i></p> <p>At 3B21D APS MCRT ROP:</p> <p>REPT SET:AMA;STREAM - AMA CONFIG FILE NUMBER OF EQUIPPED PARTITIONS FOR IC STREAM IS 2 TOTAL NUMBER OF AMA BLOCKS FOR IC STREAM IS nnnnn 21 /dev/ama21 nnnnn 23 /dev/ama23 nnnnn NUMBER OF EQUIPPED PARTITIONS FOR OC STREAM IS 20 TOTAL NUMBER OF AMA BLOCKS FOR OC STREAM IS nnnnn • • •</p>	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
45	<p>At 3B21D APS MCRT, enter message OP:AMA;MAPS!</p> <p><i>R e s p o n s e :</i></p> <p>At 3B21D APS MCRT ROP:</p> <p>REPT AMA DISK MAPS FOR IC STREAM WRITE PARTITION 21 READ PARTITION 21 PARTITION 21 DISK MAP: FPO: -1 LPO: -1 FPS: -1 LPS: -1 FSO: -1 LSO: -1 FSS: -1 LSS: -1 FBO: 6 LBO: nnnnn FBS: -1 LBS: -1 PARTITION 23 DISK MAP: FPO: -1 LPO: -1 FPS: -1 LPS: -1 FSO: -1 LSO: -1 FSS: -1 LSS: -1 FBO: 6 LBO: nnnnn FBS: -1 LBS: -1</p> <p>REPT AMA DISK MAPS FOR OC STREAM WRITE PARTITION n READ PARTITION n • • •</p>	TELCO	—
46	Using printout and the previous Response, ensure that Partitions 21 and 23 are listed under the IC STREAM.	TELCO	—
47	Define office-dependent data for IC Stream on 3B21D APS.	TELCO	DLP-505
48	Verify AMA processes for IC Stream are running.	TELCO	DLP-506

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	TEST HOC's ABILITY TO POLL AND READ IC AMA DATA		
	<p>Notes:</p> <ol style="list-style-type: none"> 1. This section tests three functions: <ul style="list-style-type: none"> • That CMCO AMA data is being recorded on a new equipped IC partition. • That the HOC can retrieve the CMCO AMA data. • That the HOC can read the retrieved CMCO AMA data. 2. During this testing, Do Not enter the message UPD:HDATA! 3. The overwrite will only be left active long enough to collect a few CMCO AMA records before entering the STOP:OVRWRT! message. No interruption is allowed until the STOP:OVRWRT! message is entered. 		
49	<p>At the 3B21D APS MCRT, enter message ALW:AMA;SESSION:IC! to allow an AMA session to start.</p> <p>Response: At 3B21D APS MCRT ROP: DATA TRANSFER IS NOT MANUALLY INHIBITED</p>	TELCO	—
50	<p>At 1B Processor MTC terminal, Form Enter the following messages (Do Not Enter These Messages Until Instructed):</p> <ul style="list-style-type: none"> • IN:OWBUF:ADR 6663060,OLDDATA 0,DATA 1! • COPY:OWBUF! • STOP:OVRWRT! 	TELCO	—
51	<p>Ensure the address, old data, and data in the IN:OWBUF message are correct.</p>	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
52	At 1B Processor MCC terminal, enter 108 to obtain System Status Page (108).	TELCO	—
53	Enter 801 to restrict recent change (801 - RESTRICT RC colored black on white). <i>R e s p o n s e :</i> At 1B Processor MTC ROP: INH:RC MSG, RESTRICTED TO MOC	TELCO	—
54	At 1B Processor MTC terminal, enter message IN:OWBUF:ADR 6663060,OLDDATA 0,DATA 1! <i>R e s p o n s e :</i> At 1B Processor MTC ROP: IN:OWBUF CORE ADR OLD DATA NEW DATA 7746663060 00000000 00000001	TELCO	—
	Notes: 1. After the COPY message is entered in the next step, CMCO AMA data will be recording on the IC Stream Partition. 2. The overwrite will remain active for a maximum of 15 minutes (crossing a quarter hour time boundary). If after crossing the quarter hour, the LPS count has not changed, the STOP:OVRWRT! message must be entered. 3. If for any reason there is a problem recording CMCO AMA data to the IC Stream Partition, enter the STOP:OVRWRT! message immediately to stop recording to the IC Stream Partition.		
55	At 1B Processor MTC terminal, enter message COPY:OWBUF! and record the system time. <i>R e s p o n s e :</i> At 1B Processor MTC ROP: COPY:OWBUF COMPLETED	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
56	<p>At 3B21D APS MCRT, enter message OP:AMA;MAPS:IC!</p> <p><i>R e s p o n s e :</i></p> <p>At 3B21D APS MCRT ROP:</p> <p>REPT AMA DISK MAPS FOR IC STREAM</p> <p>WRITE PARTITION 21 READ PARTITION 21</p> <p>PARTITION 21 DISK MAP:</p> <p>FPO: -1 LPO: -1 FPS: 0 LPS: n n n n n</p> <p>FSO: -1 LSO: -1 FSS: -1 LSS: -1</p> <p>FBO: 6 LBO: nnnnn FBS: -1 LBS: -1</p> <p>PARTITION 23 DISK MAP:</p> <p>FPO: -1 LPO: -1 FPS: 0 LPS: n n n n n</p> <p>FSO: -1 LSO: -1 FSS: -1 LSS: -1</p> <p>FBO: 6 LBO: nnnnn FBS: -1 LBS: -1</p>	TELCO	—
57	Using the printout and response from the previous step, determine if the LPS field for PARTITION 21 or PARTITION 23 of the IC STREAM section changes from -1 to a higher count.	TELCO	—
58	Perform A, B, or C below as appropriate:		
	A. If the LPS field (Step 56) changes from -1 to a higher count, go to Step 59.	TELCO	—
	B. If the overwrite HAS NOT crossed a quarter hour time boundary and the LPS field HAS NOT changed from -1 to a higher count, repeat from Step 56.	TELCO	—
C. If the overwrite HAS crossed a quarter hour time boundary and the LPS field HAS NOT changed from -1 to a higher count, enter message STOP:OVRWRT! and determine why CMCO AMA data is not being recorded. After resolving, repeat from Step 54.	TELCO	—	
59	<p>At 1B Processor MTC terminal, enter message STOP:OVRWRT!</p> <p><i>R e s p o n s e :</i></p> <p>At 1B Processor MTC ROP:</p> <p>STOP:OVRWRT COMPLETED</p>	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
60	At 1B Processor MCC terminal, if System Status Page (108) is not displayed, enter 108 .	TELCO	—
61	Enter 801 to remove restrict recent change (801 - RESTRICT RC colored white on black). Response: At 1B Processor MTC ROP: ALW:RC MSG, MOC RESTRICTION RMVD	TELCO	—
62	Notify the appropriate AMA administration center to poll and verify the CMCO AMA data that was recorded on the new equipped IC AMA STREAM Partition. Request notification when the verification is done and whether the data is valid.	TELCO	—
63	Copy incore equipment configuration data base (ECD) to disk.	TELCO	DLP-501
64	At 3B21D APS MCRT, enter the following messages to allow automatic diagnostics: <ul style="list-style-type: none"> • ALW:DMQ:SRC REX! • ALW:DMQ:SRC ADP! <i>R e s p o n s e</i> At 3B21D APS MCRT ROP: ALW DMQ ENABLED xxx (for each of the above messages)	TELCO	—
65	Soak SDLC 11 and SDL 22 for 12 hours to ensure no problems exist with system operation after growth. While the soak continues, if the CMCO AMA data is invalid or the data could not be retrieved, contact next higher support group to determine cause and resolve.	TELCO	—
66	Before continuing, notification must have been received from the appropriate AMA administration center that the polled CMCO AMA data is valid.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
	SECOND MAINTENANCE WINDOW - REASSIGN ODD NUMBERED PARTITIONS TO IC STREAM		
67	Verify 3B21D APS system status.	TELCO	DLP-500
68	At 3B21D APS MCRT, enter the following messages to inhibit automatic diagnostics: <ul style="list-style-type: none"> • INH:DMQ:SRC REX! • INH:DMQ:SRC ADP! <p><i>R e s p o n s e</i> At 3B21D APS MCRT ROP: INH DMQ COMPLETED (for each of the above messages)</p>	TELCO	—
69	Reassign up to ten existing odd numbered OC Partitions to IC Partitions.	TELCO	DLP-507
70	If all ten odd numbered OC Partitions were not reassigned (Step 69), record the odd numbered OC Partition numbers not reassigned.	TELCO	—
71	At 1B Processor MTC terminal, Form Enter the following messages (Do Not Enter These Messages Until Instructed): <ul style="list-style-type: none"> • IN:OWBUF:ADR 6663060,OLDDATA 0,DATA 1! • COPY:OWBUF! • STOP:OVRWRT! • UPD:HDATA! 	TELCO	—
72	Ensure the address, old data, and data in the IN:OWBUF message are correct.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
73	At 1B Processor MCC terminal, enter 108 to obtain System Status Page (108).	TELCO	—
74	Enter 801 to restrict recent change (801 - RESTRICT RC colored black on white). <i>R e s p o n s e :</i> At 1B Processor MTC ROP: INH:RC MSG, RESTRICTED TO MOC	TELCO	—
75	At 1B Processor MTC terminal, enter message IN:OWBUF:ADR 6663060,OLDDATA 0,DATA 1! <i>R e s p o n s e :</i> At 1B Processor MTC ROP: IN:OWBUF CORE ADR OLD DATA NEW DATA 7746663060 00000000 00000001	TELCO	—
	Notes: 1. After the COPY message is entered in the next step, CMCO AMA data will be recording on the IC Stream Partition. 2. If for any reason there is a problem recording CMCO AMA data to the IC Stream Partition, enter the STOP:OVRWRT! message immediately to stop recording to the IC Stream Partition.		
76	At 1B Processor MTC terminal, enter message COPY:OWBUF! <i>R e s p o n s e :</i> At 1B Processor MTC ROP: COPY:OWBUF COMPLETED	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
77	<p>At 3B21D APS MCRT, enter message OP:AMA;MAPS:IC!</p> <p><i>R e s p o n s e :</i></p> <p>At 3B21D APS MCRT ROP: (Example of Partition 3 Recording CMCO AMA Data)</p> <p>REPT AMA DISK MAPS FOR IC STREAM WRITE PARTITION 3 READ PARTITION 3 PARTITION 1 DISK MAP: FPO: -1 LPO: -1 FPS: -1 LPS: -1 FSO: -1 LSO: -1 FSS: -1 LSS: -1 FBO: 6 LBO: nnnnn FBS: -1 LBS: -1</p> <p>PARTITION 3 DISK MAP: FPO: -1 LPO: -1 FPS: 0 LPS: n n n n n FSO: -1 LSO: -1 FSS: -1 LSS: -1 FBO: 6 LBO: nnnnn FBS: -1 LBS: -1</p> <p style="text-align: center;">• • •</p>	TELCO	—
78	Using the printout and response from the previous step, determine if the count in the LPS field for one PARTITION for the IC STREAM section changes.	TELCO	—
79	Perform A, B, or C below as appropriate:		
	A. If the LPS field (Step 77) changes from -1 to a higher count, go to Step 80.	TELCO	—
	B. If the overwrite HAS NOT crossed a quarter hour time boundary and the LPS field HAS NOT changed from -1 to a higher count, repeat from Step 77.	TELCO	—
C. If the overwrite HAS crossed a quarter hour time boundary and the LPS field HAS NOT changed from -1 to a higher count, enter message STOP:OVRWRT! and determine why CMCO AMA data is not being recorded. After resolving, repeat from Step 75.	TELCO	—	
80	<p>At 1B Processor MTC terminal, enter message UPD:HDATA!</p> <p><i>R e s p o n s e :</i></p> <p>At 1B Processor MTC ROP: UPD:HDATA COMPLETED</p>	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
81	At 1B Processor MCC terminal, if System Status Page (108) is not displayed, enter 108 .	TELCO	—
82	Enter 801 to remove restrict recent change (801 - RESTRICT RC colored white on black). Response: At 1B Processor MTC ROP: ALW:RC MSG, MOC RESTRICTION RMVD	TELCO	—
SECOND MAINTENANCE WINDOW - EQUIP PARTITIONS 20 AND 22 TO OC STREAM			
83	At 3B21D APS MCRT, enter message SET:AMA;CONFIG;OC:PART 20,EQUIP! <i>R e s p o n s e :</i> At 3B21D APS MCRT ROP: REPT AMA CONFIG FILE FOR OC STREAM WARNING - REQUESTED STREAM CONFLICTS WITH CURRENT AMA STREAM INDICATOR EQUIPPING PROCESS IS IN PROGRESS LOOK FOR FURTHER OUTPUT REPT AMA CONFIG FILE FOR OC STREAM NUMBER OF EQUIPPED PARTITIONS 11 TOTAL NUMBER OF AMA BLOCKS nnnnn 0 /dev/ama nnnnn • • • 20 /dev/ama20 nnnnn PRM_1 ED00 E110 1C00 3FEB 79 00 00 REPT AMA DISK WRITER FOR OC STREAM TERMINATION CODE 2 REPT AMA DISK WRITER FOR OC STREAM INITIALIZATION COMPLETE	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
84	<p>At 3B21D APS MCRT, enter message SET:AMA;CONFIG;OC:PART 22,EQUIP!</p> <p><i>R e s p o n s e :</i></p> <p>At 3B21D APS MCRT ROP:</p> <p>REPT AMA CONFIG FILE FOR OC STREAM WARNING - REQUESTED STREAM CONFLICTS WITH CURRENT AMA STREAM INDICATOR EQUIPPING PROCESS IS IN PROGRESS LOOK FOR FURTHER OUTPUT</p> <p>REPT AMA CONFIG FILE FOR OC STREAM NUMBER OF EQUIPPED PARTITIONS 12 TOTAL NUMBER OF AMA BLOCKS nnnnn 0 /dev/ama nnnnn • • • 22 /dev/ama22 nnnnn</p> <p>PRM_1 E700 5300 0000 0000 79 00 00</p> <p>REPT AMA DISK WRITER FOR OC STREAM TERMINATION CODE 2</p> <p>REPT AMA DISK WRITER FOR OC STREAM INITIALIZATION COMPLETE</p>	TELCO	—
85	<p>At 3B21D APS MCRT, enter message OP:AMA;MAPS:OC!</p> <p><i>R e s p o n s e :</i></p> <p>At 3B21D APS MCRT ROP:</p> <p>REPT AMA DISK MAPS FOR OC STREAM WRITE PARTITION n READ PARTITION n PARTITION 0 DISK MAP: FPO: -1 LPO: -1 FPS: -1 LPS: -1 FSO: -1 LSO: -1 FSS: -1 LSS: -1 FBO: 6 LBO: nnnnn FBS: -1 LBS: -1 • • • PARTITION 22 DISK MAP: FPO: -1 LPO: -1 FPS: -1 LPS: -1 FSO: -1 LSO: -1 FSS: -1 LSS: -1 FBO: 6 LBO: nnnnn FBS: -1 LBS: -1</p>	TELCO	—
86	Using printout and the previous Response, ensure that the even partitions are assigned to the OC Stream.	TELCO	—

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
87	<p>At 3B21D APS MCRT, enter the following messages to allow automatic diagnostics:</p> <ul style="list-style-type: none"> • ALW:DMQ:SRC REX! • ALW:DMQ:SRC ADP! <p><i>R e s p o n s e</i> At 3B21D APS MCRT ROP: ALW DMQ ENABLED xxx (for each of the above messages)</p>	TELCO	—
88	<p>If all ten odd numbered OC Partitions were reassigned to IC Partitions, go to Step 93; otherwise, if all ten odd numbered OC Partitions were not reassigned to IC Partitions, go to the next step.</p>	TELCO	—
89	<p>Stop this procedure until the next maintenance window. Safe point to temporarily stop this procedure. Continue with the next step when resuming.</p>	TELCO	—
	<p><i>THIRD MAINTENANCE WINDOW - REASSIGN LAST ODD NUMBERED OC PARTITION(s) TO IC PARTITION(s)</i></p>		
90	<p>At 3B21D APS MCRT, enter the following messages to inhibit automatic diagnostics:</p> <ul style="list-style-type: none"> • INH:DMQ:SRC REX! • INH:DMQ:SRC ADP! <p><i>R e s p o n s e</i> At 3B21D APS MCRT ROP: INH DMQ COMPLETED (for each of the above messages)</p>	TELCO	—
91	<p>Reassign the last odd numbered OC Partition(s) to the IC Partition(s).</p>	TELCO	DLP-508

DO THE ITEMS BELOW IN THE ORDER LISTED		FOR DETAILS, GO TO	
92	At 3B21D APS MCRT, enter the following messages to allow automatic diagnostics: <ul style="list-style-type: none"> • ALW:DMQ:SRC REX! • ALW:DMQ:SRC ADP! <i>R e s p o n s e</i> At 3B21D APS MCRT ROP: ALW DMQ ENABLED xxx (for each of the above messages)	TELCO	—
<i>RUN SYSTEM AUDITS AND WRITE BACKUP TAPES</i>			
93	Run file system audits to ensure no file system errors.	TELCO	DLP-502
94	Update backup data base.	TELCO	DLP-503
95	Write 3B21D APS backup tapes.	TELCO	DLP-509
96	Verify backup tapes.	TELCO	DLP-512
97	STOP! YOU HAVE COMPLETED THIS PROCEDURE.	TELCO	—

Verify 3B21D APS System Status

Note: This procedure is used to verify system status for the 3B21D APS.

1. Contact next higher support organization to verify Steps 2 through 7.
2. Ensure 3B21D APS has not experienced terminal suspends, bootstraps, diagnostic failures, or overloads within past 24 hours.
3. Ensure both CUs have been diagnosed ATP within the past 24 hours.
4. Ensure that there are no existing system problems and all system problems have been cleared.
5. Ensure CNI ring has no existing problems and all CNI ring problems have been cleared.
6. Ensure all link nodes in CNI ring are in ACT-USBL state and have not experienced any problems within past 24 hours.
7. Ensure signaling link has no existing problems and all signaling link problems have been cleared.
8. At 1B Processor MCC terminal, enter **108** to obtain System Status Display Page (108).
9. On the System Status Display Page (108), enter **810 (SDC - SERVICE DEGRADING FAILURE)** to obtain service-degrading report printout. If there are units listed in the report, contact next higher support organization for direction.
10. At 1B Processor MCC terminal, enter **118** to obtain 1B Processor Status Display Page (118).
11. On the 1B Processor Status Display Page (118), ensure APIs are in ACTIVE-STANDBY mode.

12. At 3B21D APS MCRT, depress **NORM/DISP (PF2)** key, position cursor at top of screen with **CMD/MSG** key, and enter **102** in command mode to obtain the Common Processor Display Page (102).
13. On the Common Processor Display Page (102), ensure disks and IOPs are duplex and CUs are in ACTIVE-STANDBY mode.
14. At 3B21D APS MCRT, enter message **OP:STATUS:FILESYS!**

Response: / on /dev/root read/write on (date) — system running on root

·
·

OR

/ on /dev/broot read/write on (date) — system running on broot

·
·

15. At 3B21D APS MCRT, depress **EA DISP** key.
16. Using 3B21D APS MCRT ROP, determine which file system is running on 3B21D APS.
17. System is running on?
If **/dev/root**, go to Step 18.
If **/dev/broot**, go to Step 24.

18. At 3B21D APS MCRT, enter **31** in command mode.

19. At 3B21D APS MCRT, enter **33** in command mode.

20. At 3B21D APS MCRT, enter message **SW:PORTSW!**

21. At 3B21D APS MCRT, enter **31** in command mode.

22. At 3B21D APS MCRT, enter **33** in command mode.

23. Continue with Step 29.
24. At 3B21D APS MCRT, enter **30** in command mode.
25. At 3B21D APS MCRT, enter **33** in command mode.
26. At 3B21D APS MCRT, enter message **SW:PORTSW!**
27. At 3B21D APS MCRT, enter **30** in command mode.
28. At 3B21D APS MCRT, enter **33** in command mode.
29. At 3B21D APS MCRT, enter **1107** in command mode to obtain the DLN/API Stream Status Display Page (1107).
30. On the DLN/API Stream Status Display Page (1107), ensure HDWR STATE and APPL STATE for two DLNs are set to **ACT**. Ensure MODE is **1WAY IN** and STREAM is **SCANIN** for one DLN; and MODE is **1WAY OUT** and **STREAM is SCANOUT** for the other DLN.
31. At 3B21D APS MCRT, depress **NORM/DISP (PF2)** key, depress **CMD/MSG** key, and enter message **OP:AUD:ALL!**.
32. At 3B21D APS MCRT ROP, locate audit status printout and record any audits that are inhibited. These audits will have to be allowed before performing growth.
33. At 3B21D APS MCRT, enter message **OP:RING;DETD!** and ensure that no "i" is listed for any link node. ("i" = isolated).
34. At 3B21D APS MCRT, verify API-DLN stream status (**OP:DLNCM;STREAM!**) using DLP-513.
35. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Copy Incore Equipment Configuration Data Base (ECD) to Disk

1. At the 3B21D computer terminal, is **Enter Form Name:** displayed?

If **Yes**, go to Step 10.
If **No**, go to Step 2.
2. Is the terminal being used for recent change the 3B21D Recent Change and Verify terminal?

If **Yes**, go to Step 3.
If **No**, go to Step 5.
3. At the 3B21D Recent Change and Verify terminal, enter the message **RCV:MENU:RCVECD!**.
4. Go to Step 7.
5. If the terminal being used for recent change is a 3B21D APS MCRT terminal, depress **NORM/DISP (PF2)** key.
6. Enter **199** in command mode to obtain display page 199.
7. Enter **incore**

Response: Cursor positioned at **reviewonly**.
8. Enter **n**

Response: Cursor positioned at **journaling**.
9. Enter *****

Response: **FORM EXECUTED** is displayed momentarily, then **Enter Form Name:** is displayed.

10. Enter **activate**

Response: Cursor positioned at **copy_inc_to_disk:Yes** field.

11. Depress **RETURN** key once.

Response: **Enter Execute, Change, Substitute, Validate, or Print:** is displayed.

12. Enter **e**

Response: **FORM EXECUTED** is displayed momentarily, then **Enter Form Name:** is displayed.

Note: It may take several minutes before **FORM EXECUTED** is displayed.

13. Depress **RETURN** key once.

Response: Recent change is exited.

14. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Run File System Audits to Ensure No File System Errors

1. At 3B21D APS MCRT, enter message **OP:STATUS:FILESYS!**

Response: **/ on /dev/root read/write on (date)** — system running on root

•
•

OR

/ on /dev/broot read/write on (date) — system running on broot

•
•

2. Using 3B21D APS MCRT ROP, determine which file system is running on 3B21D APS.
3. System is running on?
If **/dev/root**, go to Step 4.
If **/dev/broot**, go to Step 18.

Note: Steps 4 through 16 are being performed to run file system block and file system linkage audits on root file system.

4. At 3B21D APS MCRT, enter message **AUD:FSBLK 1,INS"a"!**, for one of the following files, to run the file system block audit on the primary partition:

where a = **/dev/root**
/dev/db
/dev/etc
/dev/log
/dev/tdas

Response: **AUD ENV=RTR FSBLK 1 a COMPLETED**
x ERRORS FOUND
x ERRORS CORRECTED
(where x is the number of errors).

5. Using 3B21D APS MCRT ROP, are the values the same for **ERRORS FOUND** and **ERRORS CORRECTED**?

If **Yes**, go to Step 9.
If **No**, go to Step 6.

6. Contact the appropriate support organization before running audit in CORR mode.
7. At 3B21D APS MCRT, enter message **AUD:FSBLK 1,INS"a";CORR!** to run the audit again specifying the Correction (CORR) mode.
8. If errors persist, contact your support organization for resolution. Continue at the next step when resolved.
9. Has file system block audit been run on all the files listed in Step 4?
If **Yes**, go to Step 11.
If **No**, go to Step 10.
10. Repeat from Step 4 for next file that has not been run.

11. At 3B21D APS MCRT, enter message **AUD:FSLINK 1,INS"a"!**, for one of the following files, to run the file system linkage audit on the primary partition:

where a = **/dev/root**
/dev/db
/dev/etc
/dev/log
/dev/tdas

Response: **AUD ENV=RTR FSLINK 1 a COMPLETED**
x ERRORS FOUND
x ERRORS CORRECTED
(where x is the number of errors).

12. Using 3B21D APS MCRT ROP, are the values the same for **ERRORS FOUND** and **ERRORS CORRECTED**?

If **Yes**, go to Step 16.
If **No**, go to Step 13.

13. Contact the appropriate support organization before running audit in CORR mode.

14. At 3B21D APS MCRT, enter message **AUD:FSLINK 1,INS"a";CORR!** to run the audit again specifying the Correction (CORR) mode.

15. If errors persist, contact your support organization for resolution. Continue at the next step when resolved.

16. Has file system linkage audit been run on all the files listed in Step 11?

If **Yes**, go to Step 32.
If **No**, go to Step 17.

17. Repeat from Step 11 for next file that has not been run.

Note: Steps 18 through 31 are being performed to run file system block and file system linkage audits on broot file system.

18. At 3B21D APS MCRT, enter message **AUD:FSBLK 1,INS"a"!**, for one of the following files, to run the file system block audit on the primary partition:

where a = **/dev/broot**
/dev/bdb
/dev/betc
/dev/log
/dev/tdas

Response: **AUD ENV=RTR FSBLK 1 a COMPLETED**
x ERRORS FOUND
x ERRORS CORRECTED
(where x is the number of errors).

19. Using 3B21D APS MCRT ROP, are the values the same for **ERRORS FOUND** and **ERRORS CORRECTED**?

If **Yes**, go to Step 23.
If **No**, go to Step 20.

20. Contact the appropriate support organization before running audit in CORR mode.

21. At 3B21D APS MCRT, enter message **AUD:FSBLK 1,INS"a";CORR!** to run the audit again specifying the Correction (CORR) mode.

22. If errors persist, contact your support organization for resolution. Continue at the next step when resolved.

23. Has file system block audit been run on all the files listed in Step 18?

If **Yes**, go to Step 25.
If **No**, go to Step 24.

24. Repeat from Step 18 for next file that has not been run.

25. At 3B21D APS MCRT, enter message **AUD:FSLINK 1,INS"a"!**, for one of the following files, to run the file system linkage audit on the primary partition:

where a = **/dev/broot**
/dev/bdb
/dev/betc
/dev/log
/dev/tdas

Response: **AUD ENV=RTR FSLINK 1 a COMPLETED**
x ERRORS FOUND
x ERRORS CORRECTED
(where x is the number of errors).

26. Using 3B21D APS MCRT ROP, are the values the same for **ERRORS FOUND** and **ERRORS CORRECTED**?

If **Yes**, go to Step 30.
If **No**, go to Step 27.

27. Contact the appropriate support organization before running audit in CORR mode.

28. At 3B21D APS MCRT, enter message **AUD:FSLINK 1,INS"a";CORR!** to run the audit again specifying the Correction (CORR) mode.

29. If errors persist, contact your support organization for resolution. Continue at the next step when resolved.

30. Has file system linkage audit been run on all the files listed in Step 25?

If **Yes**, go to Step 32.
If **No**, go to Step 31.

31. Repeat from Step 25 for next file that has not been run.

32. At 3B21D APS MCRT, enter message
EXC:ENVIR:UPROC,FN"/tools/bootaud"!

Response: **EXC ENV UPROC /tools/bootaud COMPLETED**

33. Was message received per the response in Step 32?

If **Yes**, go to Step 35.

If **No**, go to Step 34.

34. Determine cause and resolve. Repeat from Step 32.

35. Were errors received in the response in Step 32?

If **Yes**, go to Step 36.

If **No**, go to Step 37.

36. Contact appropriate support organization for resolution. After resolving, repeat from Step 32.

37. STOP! YOU HAVE COMPLETED THIS PROCEDURE.

Update Backup Data Base

1. At 3B21D APS MCRT, enter message **INH:RCV:ON!**

Response: **INH RCV COMPLETED**
4ESS INH RCV COMPL
RECENT CHANGE INHIBIT ON

2. Was printout received per the response in Step 1?

If **Yes**, go to Step 4.
If **No**, go to Step 3.

3. Determine cause and resolve; repeat from Step 1.

4. At 3B21D APS MCRT, enter message **OP:STATUS:FILESYS!**

Response: **/ on /dev/root read/write on (date)** — system running on root

•
•

OR

/ on /dev/broot read/write on (date) — system running on broot

•
•

5. Using 3B21D APS MCRT ROP, determine which file system is running on 3B21D APS.

6. System is running on?

If **/dev/root**, go to Step 7.
If **/dev/broot**, go to Step 10.

Note: Steps 7 through 9 are being performed to update broot data base.

7. At 3B21D APS MCRT, enter message **EXC:QCOPY:TOBROOT!** to update broot data base.

Note: The EXC command requires several minutes to complete.

Response: **REPT QCOPY:DISK COPY COMPLETED**

8. Using 3B21D APS MCRT ROP, Was **REPT QCOPY:DISK COPY COMPLETED** message received?

If **Yes**, go to Step 13.

If **No**, go to Step 9.

9. Contact the appropriate support organization for resolution. After resolving, repeat from Step 4.

Note: Steps 10 through 12 are being performed to update root data base.

10. At 3B21D APS MCRT, enter message **EXC:QCOPY:TOROOT!** to update root data base.

Note: The EXC command requires several minutes to complete.

Response: **REPT QCOPY:DISK COPY COMPLETED**

11. Using 3B21D APS MCRT ROP, Was **REPT QCOPY:DISK COPY COMPLETED** message received?

If **Yes**, go to Step 13.

If **No**, go to Step 12.

12. Contact the appropriate support organization for resolution. After resolving, repeat from Step 4.

13. At 3B21D APS MCRT, enter message **INH:RCV:OFF!**

Response: **INH RCV COMPLETED**

4ESS INH RCV COMPL

RECENT CHANGE INHIBIT OFF

14. Was printout received per the response in Step 13?

If **Yes**, go to Step 16.

If **No**, go to Step 15.

15. Determine cause and resolve; repeat from Step 13.

16. STOP! YOU HAVE COMPLETED THIS PROCEDURE.

Connect Cable (ED4A104-30,G167) to SDL 22

1. Using Figure 1, at back of the 3B21D APS cabinet, determine location for connecting the SDL 22 cable (EQLs 45-138-145 and 45-138-132).
2. Connect the proper connector to the appropriate location determined in Step 1.

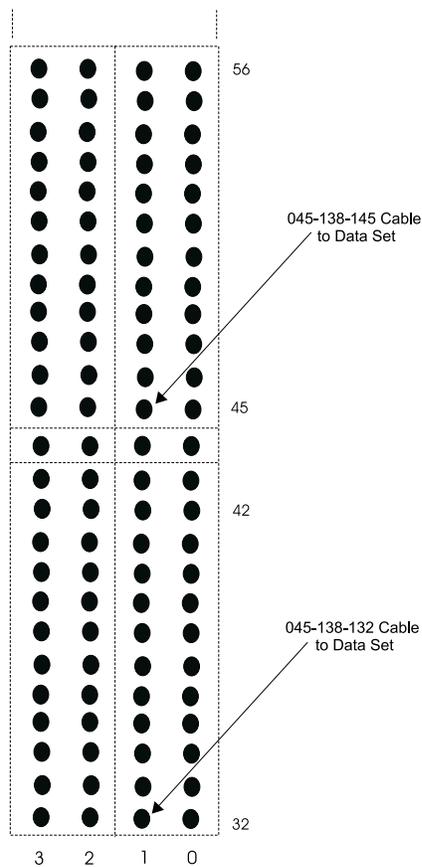


Figure 1. Backplane Cable Location

3. Connect the proper connector to the appropriate location determined in Step 1.
4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Define Office-Dependent Data for IC AMA Teleprocessing

1. At 3B21D APS MCRT, enter message
SET:AMA;CONTROL;IC:OPTION TP,OFFICEID a,HOCPSWD b [,BACKUPSWD c]!

where: a = 6-digit office ID assigned by HOC (Network Recording Management)
 b = 10-digit password for normal HOC
 c = 10-digit password for backup HOC

Response: **REPT AMA CONTROL FILE FOR IC STREAM**
OFFICE ID a
DAYS UNTIL EXPIRATION x
PROCESS START TIME 00:00
PROCESS STOP TIME 00:00
DEFAULT MT FOR AUTO TAPE START x
AMA OPTION IS TELEPROCESSING
DATA TRANSFER b MANUALLY INHIBITED
AMAT PASSWORD 0040a
HOC PASSWORD c
BACKUP HOC PASSWORD d
PASSWORD FROM LAST SESSION x
TAPE SESSION IS NOT IN PROGRESS
TELEPROCESSING SESSION IS NOT IN PROGRESS
AUTOMATIC TAPE WRITING e INHIBITED
TAPE SEQUENCE NUMBER x
TAPE DATA SET ID x
MAXIMUM DISK WRITE DELAY x SECONDS
MAXIMUM SEQUENCE NUMBER OPTION IS SHORT (x)
THE FAST STREAM IS OC
DEFERRED FORMATTING x ALLOWED
3B APS RECORDING MODE IS x

where a = Entered office ID
 b = **IS** (if AMA session is inhibited) or
 IS NOT (if AMA session is allowed)
 c = Entered normal HOC password
 d = Entered backup HOC password
 e = **IS** (if tape writing is inhibited) or
 IS NOT (if tape writing is allowed)
 x = Don't care

2. Was printout received per the response in Step 1?

If **Yes**, go to Step 4.

If **No**, go to Step 3.

3. Determine cause and resolve. Repeat from Step 1.

4. At 3B21D APS MCRT, enter message
ALW:AMA;SESSION:IC!

Response: **REPT AMA CONTROL FILE FOR IC STREAM**
OFFICE ID a
DAYS UNTIL EXPIRATION x
PROCESS START TIME 00:00
PROCESS STOP TIME 00:00
DEFAULT MT FOR AUTO TAPE START x
AMA OPTION IS TELEPROCESSING
DATA TRANSFER b MANUALLY INHIBITED
AMAT PASSWORD 0040a
HOC PASSWORD c
BACKUP HOC PASSWORD d
PASSWORD FROM LAST SESSION x
TAPE SESSION IS NOT IN PROGRESS
TELEPROCESSING SESSION IS NOT IN PROGRESS
AUTOMATIC TAPE WRITING e INHIBITED
TAPE SEQUENCE NUMBER x
TAPE DATA SET ID x
MAXIMUM DISK WRITE DELAY x SECONDS
MAXIMUM SEQUENCE NUMBER OPTION IS SHORT (x)
THE FAST STREAM IS OC
DEFERRED FORMATTING x ALLOWED
3B APS RECORDING MODE IS x

where

- a = Entered office ID
- b = **IS** (if AMA session is inhibited) or
IS NOT (if AMA session is allowed)
- c = Entered normal HOC password
- d = Entered backup HOC password
- e = **IS** (if tape writing is inhibited) or
IS NOT (if tape writing is allowed)
- x = Don't care

5. Was printout received per the response in Step 4?

If **Yes**, go to Step 7.

If **No**, go to Step 6.

6. Determine cause and resolve. Repeat from Step 4.

7. Use the 3B21D APS MCRT ROP from Step 4 and the following information to verify Steps 8 through 14.

Response: **REPT AMA CONTROL FILE FOR IC STREAM**
OFFICE ID a
DAYS UNTIL EXPIRATION x
PROCESS START TIME 00:00
PROCESS STOP TIME 00:00
DEFAULT MT FOR AUTO TAPE START x
AMA OPTION IS TELEPROCESSING
DATA TRANSFER b MANUALLY INHIBITED
AMAT PASSWORD 0040a
HOC PASSWORD c
BACKUP HOC PASSWORD d
PASSWORD FROM LAST SESSION x
TAPE SESSION IS NOT IN PROGRESS
TELEPROCESSING SESSION IS NOT IN PROGRESS
AUTOMATIC TAPE WRITING e INHIBITED
TAPE SEQUENCE NUMBER x
TAPE DATA SET ID x
MAXIMUM DISK WRITE DELAY x SECONDS
MAXIMUM SEQUENCE NUMBER OPTION IS SHORT (x)
THE FAST STREAM IS OC
DEFERRED FORMATTING x ALLOWED
3B APS RECORDING MODE IS x

where a = Entered office ID
b = **IS NOT**
c = Entered normal HOC password
d = Entered backup HOC password
e = **IS** (if tape writing is inhibited) or
IS NOT (if tape writing is allowed)
x = Don't care

8. Verify OFFICE ID is correct.
9. Verify PROCESS START and PROCESS STOP times are 00:00.
10. Verify AMA OPTION is TELEPROCESSING.
11. Verify data transfer IS NOT manually inhibited.
12. Verify AMAT PASSWORD is 0040 followed by office ID.
13. Verify HOC PASSWORD is correct.
14. Verify neither TAPE nor TELEPROCESSING SESSION is in progress.
15. Did Steps 8 through 14 verify correctly?
 If **Yes**, go to Step 17.
 If **No**, go to Step 16.
16. Contact appropriate support group for resolution. After resolving, repeat from Step 1.
17. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify IC AMA Processes Running

1. At 3B21D APS MCRT, enter message **OP:STATUS:PROCESS,ALLKERNS!**.

Response: **OP STATUS PROCESS STARTED**
OP STATUS PROCESS IN PROGRESS SEGMENT x
(Previous message is repeated for each segment.)
OP STATUS PROCESS COMPLETED SEGMENT x

where: x = segment number

Note: Expect responses for both the OC and IC Streams.

2. Using the ROP printout, determine if AMformat and AMdwriterxx for appropriate stream are listed under DEVICE column.

where xx = ic or oc

3. Are the processes from Step 2 listed in printout for appropriate stream?

If **Yes**, go to Step 5.
if **No**, go to Step 4.

4. Contact the appropriate support organization for resolution. After resolving, repeat from Step 1.

5. At 3B21D APS MCRT, enter message **OP:STATUS:PROCESS,ALL!**.

Response: **OP STATUS PROCESS STARTED**
OP STATUS PROCESS IN PROGRESS SEGMENT x
(Previous message is repeated for each segment.)
OP STATUS PROCESS COMPLETED SEGMENT x

where: x = segment number

Note: Expect responses for both the OC and IC Streams. AMftp_{xx} (where xx is ic and/or oc) process(es) may be received.

6. Using the ROP printout, determine if /ama/AMmonoc and /ama/AMmonic processes are listed under the CMD column.

7. Are the processes from Step 6 listed in printout for the appropriate stream?

If **Yes**, go to Step 9.

If **No**, go to Step 8.

8. Contact appropriate support organization for resolution. After resolving, repeat from Step 5.

9. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Reassign Odd Numbered OC Partitions to IC Partitions

Note: This procedure will reassign up to ten odd numbered OC partitions to IC partitions. OC partitions that have the AMA pointers pointing to there location (including any partitions between the WRITE and READ PARTITIONs) can not be changed until the pointers have moved away from those partitions. Two odd-numbered partitions will be changed at a time with a 20 minute soak period before equipping the next two IC partitions. During this procedure, an odd numbered OC partition (not being pointed to) will be unequipped and then equipped as an IC partition. This process is then repeated for all odd numbered OC partitions. Any odd numbered OC partition that could not be reassigned because of pointer locations will be changed during the third maintenance window.

1. At 3B21D APS MCRT, enter message **OP:AMA;MAPS:OC!**

R e s p o n s e :

At 3B21D APS MCRT ROP:

```
REPT AMA DISK MAPS FOR OC STREAM  
WRITE PARTITION n READ PARTITION n  
  .  
  .  
  .
```

2. Using printout and the response in Step 1, determine the **WRITE PARTITION** and **READ PARTITION** numbers for the OC Stream.

3. In Table A, put an "X" in the Pointer column associated with **WRITE PARTITION** determined in Step 2.

TABLE A Partition Reassignment Check List

Partition Number	Pointer	Unequip OC	Equip IC	Partition Number	Pointer	Unequip OC	Equip IC
0		NR	NR	10		NR	NR
1				11			
2		NR	NR	12		NR	NR
3				13			
4		NR	NR	14		NR	NR
5				15			
6		NR	NR	16		NR	NR
7				17			
8		NR	NR	18		NR	NR
9				19			
NR - No Change Required.							

4. Is the **READ PARTITION** number the same as the **WRITE PARTITION** number (Step 2)?

If **Yes**, in Table A, put an "X" in the Pointer column associated with the next higher Partition number that was "X'ed" in Step 3.

Note: If the WRITE PARTITION number is smaller than the READ PARTITION number, then the pointer has looped back to the beginning. Therefore, for example, if the WRITE PARTITION number is 2 and the READ PARTITION number is 18, then you would put an "X" in the Pointer column for partitions 18, 19, 0, 1, and 2.

If the WRITE PARTITION number is larger than the READ PARTITION number, then the pointer has not looped back to the beginning. Therefore, for example, if the WRITE PARTITION number is 18 and the READ PARTITION number is 16, then you would put an "X" in the Pointer column for partitions 16, 17, and 18.

If **No**, in Table A, put an "X" in the Pointer column associated with the **READ PARTITION** number determined in Step 2 and all Pointer positions between the "X'ed" READ and WRITE PARTITIONS.

Note: In the next step, start with the first odd numbered OC partition after the last "X'ed" Pointer position. After you have reached the bottom of the Table, loop back to the top until you have come to the first "X'ed" Pointer position.

- Using Table A, determine one odd numbered OC partition that does not have an "X" in the Pointer column.

Note: In the SET message in the next step, make sure there is an odd partition number entered because no even partitions are to be changed.

- At 3B21D APS MCRT, enter message
SET:AMA;CONFIG;OC:PART a,UNEQUIP!
Where a = Partition number determined in Step 5.

R e s p o n s e :

**REPT AMA CONFIG FILE FOR OC STREAM
PARTITION a WAS SUCCESSFULLY UNEQUIPPED**

**REPT AMA CONFIG FILE FOR OC STREAM
NUMBER OF EQUIPPED PARTITIONS n
TOTAL NUMBER OF AMA BLOCKS nnnnn
XX /dev/amaXX nnnnn
(Repeated for Each Equipped Partition)**

REPT AMA DISK WRITER FOR OC STREAM TERMINATION CODE 2

REPT AMA DISK WRITER FOR OC STREAM INITIALIZATION COMPLETE

- Using printout and the response in Step 6, determine if the entered **PARTITION** number **WAS SUCCESSFULLY UNEQUIPPED**

- Was Partition Successfully Unequipped?

If **Yes**, go to Step 12.
If **No**, go to Step 9.

9. Was **UNEQUIP REQUEST STOPPED**
THERE IS PRIMARY DATA ON THIS PARTITION message received in Step 6?

If **Yes**, go to Step 10.
If **No**, go to Step 11.

10. Pointer(s) is pointing to the entered partition number. Repeat from Step 5 using another odd numbered OC partition in Table A that has not been reassigned.

11. Determine cause and resolve; repeat from Step 5.

12. In Table A, put an "X" in the Unequip column associated with Partition number entered in Step 6.

Note: In the SET message in the next step, make sure the same odd partition number that was just set to UNEQUIP is entered.

13. At 3B21D APS MCRT, enter message
SET:AMA;CONFIG;IC:PART a,EQUIP!
Where a = Partition number just entered in Step 6.

R e s p o n s e :

REPT AMA CONFIG FILE FOR IC STREAM
NUMBER OF EQUIPPED PARTITIONS n
TOTAL NUMBER OF AMA BLOCKS nnnnn
XX /dev/amaXX nnnnn
(Repeated for Each Equipped Partition)

REPT AMA DISK WRITER FOR IC STREAM TERMINATION CODE 2

REPT AMA DISK WRITER FOR IC STREAM INITIALIZATION COMPLETE

14. Using printout and the response in Step 13, determine if /dev/amaXX format is shown for partition just equipped. Where XX is the partition number.

If **Yes**, go to Step 16.
If **No**, go to Step 15.

15. Determine cause and resolve; repeat from Step 13.

16. In Table A, put an "X" in the Equip column associated with Partition number entered in Step 13.

17. Using Table A, determine if all the odd numbered Partitions have been Unequipped from the OC Partitions and Equipped to the IC Partitions, excluding the odd numbered Partition(s) with an "X" in the Pointer column.

18. Have all the odd numbered OC partitions been reassigned to the IC partitions (Step 17)?

If **Yes**, go to Step 21.

If **No**, go to Step 19.

19. Wait 20 minutes before proceeding to the next step to allow dkwriter to stabilize.

20. Using Table A, determine an odd numbered OC partition that has not been equipped to the IC Partition and repeat from Step 6. **Do not pick the odd numbered partition(s) with an "X" in the Pointer column.**

21. At 3B21D APS MCRT, enter message **OP:AMA;MAPS!**

R e s p o n s e :

At 3B21D APS MCRT ROP:

REPT AMA DISK MAPS FOR IC STREAM
WRITE PARTITION n READ PARTITION n
•
•
•

REPT AMA DISK MAPS FOR OC STREAM
WRITE PARTITION n READ PARTITION n
•
•
•

22. Does the printout show all of the partitions that were reassigned to the IC Stream?

If **Yes**, go to Step 24.

If **No**, go to Step 23.

23. Determine cause and resolve; repeat from Step 1.

Note: Steps 24 and 25 are being performed to see if more odd numbered OC partitions can be reassigned before stopping for the night.

24. Using the printout received in Step 21, determine if the Pointers have moved from the Pointer positions that were "X'ed" in Table A and that those odd numbered OC partition(s) can now be reassigned.

25. Can the remaining odd numbered OC partition(s) be reassigned?

If **Yes**, go to Step 26.

If **No**, go to Step 44.

26. Using Table A, determine one odd numbered OC partition that has not been reassigned.

Note: In the SET message in the next step, make sure there is an odd partition number entered because no even partitions are to be changed.

27. At 3B21D APS MCRT, enter message

SET:AMA;CONFIG;OC:PART a,UNEQUIP!

Where a = Partition number determined in Step 26.

R e s p o n s e :

**REPT AMA CONFIG FILE FOR OC STREAM
PARTITION a WAS SUCCESSFULLY UNEQUIPPED**

**REPT AMA CONFIG FILE FOR OC STREAM
NUMBER OF EQUIPPED PARTITIONS n
TOTAL NUMBER OF AMA BLOCKS nnnnn
XX /dev/amaXX nnnnn
(Repeated for Each Equipped Partition)**

REPT AMA DISK WRITER FOR OC STREAM TERMINATION CODE 2

REPT AMA DISK WRITER FOR OC STREAM INITIALIZATION COMPLETE

28. Using printout and the response in Step 27, determine if the entered **PARTITION** number **WAS SUCCESSFULLY UNEQUIPPED**

29. Was Partition Successfully Unequipped?

If **Yes**, go to Step 33.

If **No**, go to Step 30.

30. Was **UNEQUIP REQUEST STOPPED**

THERE IS PRIMARY DATA ON THIS PARTITION message received in Step 27?

If **Yes**, go to Step 31.

If **No**, go to Step 32.

31. Pointer(s) is pointing to the entered partition number. Repeat from Step 27 using another odd numbered OC partition in Table A that has not been reassigned.

32. Determine cause and resolve; repeat from Step 26.

33. In Table A, put an "X" in the Unequip column associated with Partition number entered in Step 27.

Note: In the SET message in the next step, make sure the same odd partition number that was just set to UNEQUIP is entered.

34. At 3B21D APS MCRT, enter message

SET:AMA;CONFIG;IC:PART a,EQUIP!

Where a = Partition number just entered in Step 27.

R e s p o n s e :

REPT AMA CONFIG FILE FOR IC STREAM

NUMBER OF EQUIPPED PARTITIONS n

TOTAL NUMBER OF AMA BLOCKS nnnnn

XX **/dev/amaXX** nnnnn

(Repeated for Each Equipped Partition)

REPT AMA DISK WRITER FOR IC STREAM TERMINATION CODE 2

REPT AMA DISK WRITER FOR IC STREAM INITIALIZATION COMPLETE

35. Using printout and the response in Step 34, determine if /dev/amaXX format is shown for partition just equipped. Where XX is the partition number.

If **Yes**, go to Step 37.

If **No**, go to Step 36.

36. Determine cause and resolve; repeat from Step 34.

37. In Table A, put an "X" in the Equip column associated with Partition number entered in Step 34.

38. Using Table A, determine if all the odd numbered Partitions have been Unequipped from the OC Partitions and Equipped to the IC Partitions.

39. Have all the odd numbered OC partitions been reassigned to the IC partitions (Step 38)?

If **Yes**, go to Step 42.

If **No**, go to Step 40.

40. Wait 20 minutes before proceeding to the next step to allow dkwriter to stabilize.

41. Using Table A, determine an odd numbered OC partition that has not been equipped to the IC Partition and repeat from Step 27.

42. At 3B21D APS MCRT, enter message **OP:AMA;MAPS:IC!**

R e s p o n s e :

At 3B21D APS MCRT ROP:

REPT AMA DISK MAPS FOR IC STREAM
WRITE PARTITION n READ PARTITION n
•
•
•

43. Does the printout show all of the partitions that were reassigned to the IC Stream?

If **Yes**, go to Step 45.

If **No**, go to Step 44.

44. Determine cause and resolve; repeat from Step 41.

45. STOP! YOU HAVE COMPLETED THIS PROCEDURE.

Reassign Last Odd Numbered OC Partition(s) to the IC Partition(s)

Note: This procedure will reassign the last odd numbered OC partition(s) to the IC partition(s). The remaining odd numbered OC partition(s) will only be changed if the pointer has moved away from that partition(s).

1. At 3B21D APS MCRT, enter message **OP:AMA;MAPS:OC!**

R e s p o n s e :

At 3B21D APS MCRT ROP:

REPT AMA DISK MAPS FOR OC STREAM
WRITE PARTITION n READ PARTITION n
•
•
•

2. Using printout and the response in Step 1, determine if any odd numbered OC Partitions are listed.
3. Are any odd numbered OC Partitions listed?
If **Yes**, go to Step 5.
If **No**, go to Step 4.
4. No odd numbered OC Partitions remain to be reassigned. Go to Step 28.

- Using the printout in Step 1, determine the odd numbered OC partitions and enter in Table A in the Partition Number column.

TABLE A Partition Reassignment Check List

Partition Number	Unequip OC	Equip IC

- Using printout and the response in Step 1, determine the **WRITE PARTITION** and **READ PARTITION** numbers for the OC Stream.

Note: Only odd numbered OC Partitions can be reassigned when the pointer(s) are not pointing to their location. The following are rules to determine if the partition can be reassigned at this time:

- If the WRITE PARTITION and READ PARTITION numbers are the same even number and the next higher partition number is even, then the odd numbered OC partition(s) can be reassigned.
- If the WRITE PARTITION and READ PARTITION numbers are different even numbers and the partition numbers between the WRITE PARTITION and READ PARTITION are even, then the odd numbered OC partition(s) can be reassigned.

- Using printout and the response in Step 1, determine if the odd numbered OC Partition(s) can be reassigned.

- Can the odd numbered OC Partition(s) be reassigned?

If **Yes**, go to Step 10.

If **No**, go to Step 9.

- Pointer(s) is pointing to the odd partition. Repeat from Step 1 until the pointer(s) has moved away from this location.

10. Using Table A, determine one odd numbered OC Stream partition.

Note: In the SET message in the next step, make sure there is an odd partition number entered because no even partitions are to be changed.

11. At 3B21D APS MCRT, enter message
SET:AMA;CONFIG;OC:PART a,UNEQUIP!
Where a = Partition number determined in Step 10.

R e s p o n s e :

**REPT AMA CONFIG FILE FOR OC STREAM
PARTITION a WAS SUCCESSFULLY UNEQUIPPED**

**REPT AMA CONFIG FILE FOR OC STREAM
NUMBER OF EQUIPPED PARTITIONS n
TOTAL NUMBER OF AMA BLOCKS nnnnn
XX /dev/amaXX nnnnn
(Repeated for Each Equipped Partition)**

REPT AMA DISK WRITER FOR OC STREAM TERMINATION CODE 2

REPT AMA DISK WRITER FOR OC STREAM INITIALIZATION COMPLETE

12. Using printout and the response in Step 11, determine if the entered **PARTITION** number **WAS SUCCESSFULLY UNEQUIPPED**

13. Was Partition Successfully Unequipped?

If **Yes**, go to Step 17.
If **No**, go to Step 14.

14. Was **UNEQUIP REQUEST STOPPED
THERE IS PRIMARY DATA ON THIS PARTITION** message received in Step 11?

If **Yes**, go to Step 15.
If **No**, go to Step 16.

15. Pointer(s) is pointing to the entered partition number. Repeat from Step 1 until the pointer(s) has moved to an even numbered partition.

16. Determine cause and resolve; repeat from Step 11.

17. In Table A, put an "X" in the Unequip column associated with Partition number entered in Step 11.

18. At 3B21D APS MCRT, enter message
SET:AMA;CONFIG;IC:PART a,EQUIP!
Where a = Partition number just entered in Step 11.

R e s p o n s e :

REPT AMA CONFIG FILE FOR IC STREAM
NUMBER OF EQUIPPED PARTITIONS n
TOTAL NUMBER OF AMA BLOCKS nnnnn
XX **/dev/amaXX** nnnnn
(Repeated for Each Equipped Partition)

REPT AMA DISK WRITER FOR IC STREAM TERMINATION CODE 2

REPT AMA DISK WRITER FOR IC STREAM INITIALIZATION COMPLETE

19. Using printout and the response in Step 18, determine if /dev/amaXX format is shown for partition just equipped. Where XX is the partition number.

If **Yes**, go to Step 21.
If **No**, go to Step 20.

20. Determine cause and resolve; repeat from Step 18.

21. In Table A, put an "X" in the Equip column associated with Partition number entered in Step 11.

22. Are odd numbered OC Partitions in Table A remaining to be reassigned?

If **Yes**, go to Step 23.
If **No**, go to Step 24.

23. Wait 20 minutes before proceeding to the next step to allow dkwriter to stabilize.

24. Repeat from Step 10 for the next partition to be reassigned.

25. At 3B21D APS MCRT, enter message **OP:AMA;MAPS!**

R e s p o n s e :

At 3B21D APS MCRT ROP:

REPT AMA DISK MAPS FOR IC STREAM
WRITE PARTITION n READ PARTITION n

•
•
•

REPT AMA DISK MAPS FOR OC STREAM
WRITE PARTITION n READ PARTITION n

•
•
•

26. Does the printout show 12 partitions for the IC Steam and 12 partitions for the OC Stream?

If **Yes**, go to Step 28.

If **No**, go to Step 27.

27. Determine cause and resolve; repeat from Step 1.

28. STOP! YOU HAVE COMPLETED THIS PROCEDURE.

Write 3B21D APS Backup Tapes

Note: The 4-mm tape length must be 90 M.

Caution: *Care must be taken when inserting the tape into the DAT unit. Tape must not be forced.*

1. Insert blank or erasable 4-mm tape with write-protect tab in the up (unlocked) position into available 3B21D APS DAT unit using DLP-510.

2. At 3B21D APS MCRT, enter message **INH:AUD:ECD!** to inhibit the ECD audits.

Response: **INH AUD COMPLETED**

3. At 3B21D APS MCRT, enter message **INH:RCV:ON!** to inhibit CNI DMS recent changes.

Response: **4ESS INH RCV COMPL
RECENT CHANGE INHIBIT ON**

4. At 3B21D APS MCRT, enter message
EXC:ENVIR:UPROC, FN"/tools/bootaud"

Response: **EXC ENV UPROC /tools/bootaud COMPLETED**

5. Was message received per the response in Step 4?

If **Yes**, go to Step 7.

If **No**, go to Step 6.

6. Determine cause and resolve. Repeat from Step 4.

7. Were errors received in the message in Step 4?

If **Yes**, go to Step 8.

If **No**, go to Step 9.

8. Correct errors. Repeat from Step 4.

9. At 3B21D APS MCRT, enter message
DUMP:FILE:ALL,FN"/etc/pdtspec"! to dump the /etc/pdtspec file.

Response: DUMP FILE ALL COMPLETED
/dev/lboot
/dev/lboot21
/dev/vtoc
/dev/boot
/dev/bboot
/dev/root
/dev/etc
/dev/db
/dev/amafiles
/dev/amabfiles

10. Were all /etc/pdtspec files, listed in Step 9, received?

If **Yes**, go to Step 12.
If **No**, go to Step 11.

11. Contact next higher support organization for resolution. After resolving, repeat from Step 9.

12. At 3B21D APS MCRT, enter message
COPY:BKDISK;START:SRC"/dev/vtoc",TD"/dev/mtX0",TPSIZE 90,COM!
(where X = DAT unit number with backup tape inserted [0 or 1]).

Note: This procedure is based on using a tape size of 90 M (TPSIZE 90). Other tape sizes are not valid for this procedure.

Response: **COPY BKDISK DISMOUNT GENERIC TAPE LABEL AND MOUNT NEXT TAPE**

13. Was printout received per the response in Step 12?

If **Yes**, go to Step 15.
If **No**, go to Step 14.

14. Determine cause and resolve; repeat from Step 12.

15. Remove tape from DAT unit using DLP-511, label the tape **rt0 1**, and put write-protect tab in the down (locked) position.

16. Insert blank or erasable 4-mm tape with write-protect tab in the up (unlocked) position into same 3B21D APS DAT unit that **rt0 1** tape was removed from using DLP-510.

17. At 3B21D APS MCRT, enter message
COPY:BKDISK;ACK:TFSIZE 90!

Note: This procedure is based on using a tape size of 90 M (TFSIZE 90). Other tape sizes are not valid for this procedure.

Response: **COPY BKDISK COMPLETED, DISMOUNT DATABASE TAPE AND LABEL**

18. Was printout received per the response in Step 17?

If **Yes**, go to Step 20.

If **No**, go to Step 19.

19. Determine cause and resolve; repeat from Step 16.

20. At 3B21D APS MCRT, enter message **ALW:AUD:ECD!** to allow the ECD audits.

Response: **ALW AUD COMPLETED**

21. At 3B21D APS MCRT, enter message **INH:RCV:OFF!** to turn off the manual inhibit of CNI DMS recent changes.

Response: **4ESS INH RCV COMPL
RECENT CHANGE INHIBIT OFF**

22. Remove tape from DAT unit using DLP-511, label the tape **db**, and put write-protect tab in the down (locked) position.

23. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Insert Tape in 3B21D APS Digital Audio Tape (DAT) Unit

Note: The 4-mm tape length must be 90 M.

Caution: *Care must be taken when inserting the tape into the DAT unit. Tape must not be forced.*

1. Is tape to be written?

If **Yes**, go to Step 2.

If **No**, go to Step 3.

2. See Figure 1. Put write-protect tab in the up (unlocked) position.

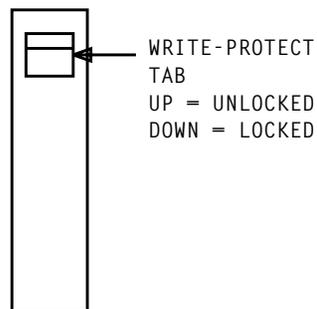


Figure 1. 4-mm Tape

3. See Figure 2. At an available 3B21D APS DAT unit (EQL 11-124 or 62-124), insert blank or erasable 4-mm tape with write-protect tab in appropriate position.

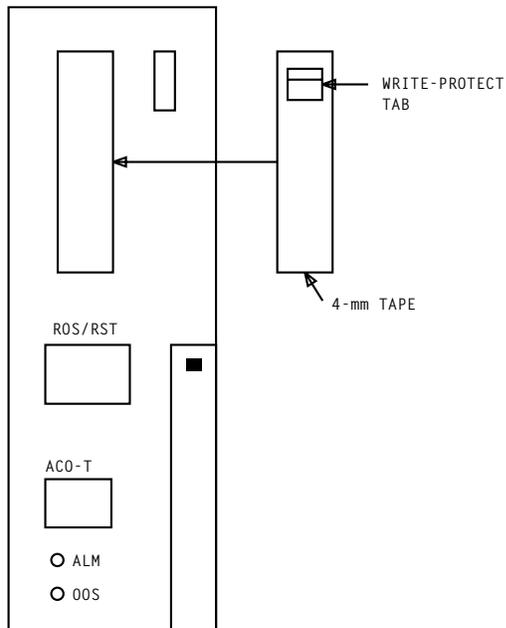


Figure 2. DAT Unit with 4-mm Tape

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Remove Tape From 3B21D APS Digital Audio Tape (DAT) Unit

1. See Figure 1. At 3B21D APS DAT unit that contains tape to be removed, depress eject button.

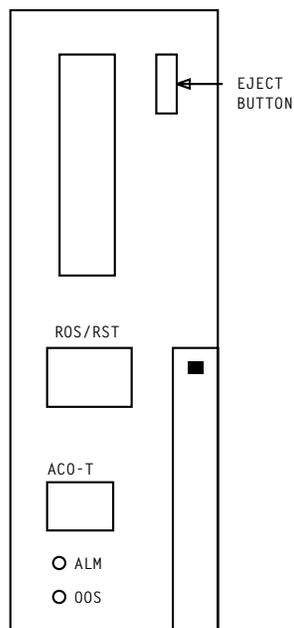


Figure 1. DAT Unit

2. Was tape just written?

If **Yes**, go to Step 3.

If **No**, go to Step 4.

3. See Figure 2. Put write-protect tab in the down (locked) position.

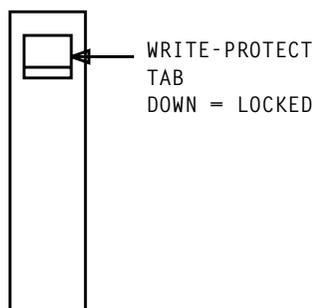


Figure 2. DAT Unit

4. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify 3B21D APS Backup Tapes

1. Insert one 3B21D APS backup tape on available DAT unit using DLP-510.

2. At 3B21D APS MCRT, enter message

VFY:TAPE,TD"/dev/mtX0"!

(where X = DAT unit number with backup tape inserted [0 or 1]).

Response: **VFY TAPE STARTED**

**VFY TAPE COMPLETED RETRIES 0 HEADER MISMATCHES 0 DATA
MISMATCHES 0**

3. After tape verifies, was printout received per the response in Step 1?

If **Yes**, go to Step 5.

If **No**, go to Step 4.

4. Determine cause and resolve. Tapes may need to be rewritten.

5. Remove backup tape from DAT unit using DLP-511.

6. Have all backup tapes been verified?

If **Yes**, go to Step 7.

If **No**, repeat from Step 1.

7. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Verify 3B21D APS API-DLN Stream Status

1. At 3B21D APS MCRT, enter message **OP:DLNCM;STREAM!**

Response: The information shown in Figure 1 is displayed and printed.

```
OP DLNCM STREAM COMPLETED

API-DLN STREAM STATUS

APII: SCAN BOTH                    DLN: SCAN BOTH

INCOMING BUFFER                    OUTGOING BUFFER
START          X'-----          START          X'-----
END            X'-----          END            X'-----
LOAD POINTER   X'-----          LOAD POINTER   X'-----
UNLOAD POINTER X'-----          UNLOAD POINTER X'-----
END POINTER    X'-----          END POINTER    X'-----
----- = VARIABLE HEX DATA
```

Figure 1. Sample OP:DLNCM printout

2. Was printout received similar to Figure 1?

If **Yes**, go to Step 3.
If **No**, go to Step 4.

3. Does printout show API and DLN as SCAN BOTH?

If **Yes**, go to Step 5.

If **No**, go to Step 4.

4. Contact next higher support organization for resolution. After resolving, repeat from Step 1.

5. **STOP! YOU HAVE COMPLETED THIS PROCEDURE.**

Checklist

ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE	ITEM	ISSUE
IXL-001 NTP-002 NTP-003 DLP-500 DLP-501							
DLP-502 DLP-503 DLP-504 DLP-505 DLP-506							
DLP-507 DLP-508 DLP-509 DLP-510 DLP-511							
DLP-512 DLP-513 CKL-891 TNG-893							

- Revised or added item
- Not Used

HOW TO USE THIS DOCUMENT

This document gives you all the step-by-step instructions you need to do your job (task). These instructions are given in the order that they *must* be done. Failure to follow the instructions in the order given may cause service interruptions.

This document is divided into parts called procedures. Each procedure is given a 3-digit number. These numbers range from 001 through 893. Procedures are arranged in this document in numerical order beginning with 001.

Figure 1 is a typical IXL-001 procedure and is titled *Tasks*. It is an alphabetical listing of the jobs that you may have to do. To use an IXL-001 procedure, just find the job you need to do in the **FIND YOUR JOB IN THE LIST BELOW** column. Next, follow the dotted line to the procedure number and begin the task. For example, suppose you are given the job of doing a system test. On the IXL-001 procedure, as shown in Figure 1, notice that it is listed in the **THEN GO TO** column as NTP-016. It could have been any other 3-digit number.

Figure 2 is an example of an NTP (Non-Trouble Procedure). Each NTP provides specific instructions for doing a job. It consists of numbered items (or steps) listed in the order that you must do them to complete your job. To use this procedure, you must start with item 1 in the **DO THE ITEMS BELOW IN ORDER LISTED** column and continue until all items have been done. When you get to an item that you do not know how to do, look for the procedure number for that item under the **FOR DETAILS, GO TO** column. This is the number of the procedure that will give you detailed, step-by-step instructions to do that item. Note that item 2 in Figure 2 uses lettered (A, B) entries. This means that there are alternate ways of doing item 2 depending on equipment options or equipment conditions. You do only the one that fits your equipment options or equipment conditions.

For example, suppose you are doing a system test. The IXL-001 as shown in Figure 1, has directed you to NTP-016 as shown in Figure 2, and you are on item 8 "Mount Tape" in the **DO THE ITEMS BELOW IN ORDER LISTED** column. Mount the tape if you know how. If you do not know how to mount the tape, go to the procedure number listed in the **FOR DETAILS, GO TO** column for the detailed, step-by-step instructions. In this case, it happens to be DLP-500. In either case, you must continue with the next item listed in NTP-016 until you complete the job.

LT 123-456-789 Issue 2	IXL-001 Page 1 of 2
TASK INDEX LIST	
FIND YOUR JOB IN THE LIST BELOW	THEN GO TO
Alert; External - Horn, Ringer, Etc. - Remove.....	NTP-028
Amplifiers; Channel - Recorded Announcement Frame - Test.....	NTP-009
BRDG LED - Does Not Light - Correct	TAP-117
Bridging Controller; Trunk - J1C015MB - Replace	DLP-572
Channel Amplifiers - Recorded Announcement Frame - Test.....	NTP-009
Extended Station Capability - Nonkey Set Only - Reported Failure	TAP-123
External Alert - Horn, Ringer, Etc. - Remove.....	NTP-028
Interchange Two Working Station Numbers.....	NTP-081
LED: BRDG - Does Not Light - Correct	TAP-117
Loudspeaker Paging - Add	NTP-059
New International Trunk, R1 Signaling - Incoming - Establish	NTP-010
New Tandem Trunk - T-Carrier and Digroup Terminal - Establish	NTP-008
Station Capability; Extended - Nonkey Set Only - Reported Failure	TAP-123
System Test - Perform	NTP-016
Trunk Bridging Controller - J1C015MB - Replace	DLP-572

Figure 1. Typical List of Jobs You May Have to Do

LT 123-456-789 Issue 2	NTP-016 Page 1 of 2
PERFORM SYSTEM TEST	
DO THE ITEMS BELOW IN ORDER LISTED	FOR DETAILS, GO TO
1 Test Local Maintenance Terminal	DLP-531
2 Place SEC/SEB in Off-Line Mode	
A. If in On-Line Mode, Change System From On-Line to Off-Line	DLP-509
B. If Powered Down, Condition System for Off-Line Operation as Follows	
1. Power up Minicomputer	DLP-503
2. Power up Line Printer	DLP-503
3. Power up Maintenance Terminal	DLP-510
. . .	
. . .	
. . .	
. . .	
. . .	
. . .	
7 Run Computer Display Terminal Test For All Positions	DLP-513
8 Mount Tape	DLP-500
9 Test Computer Display	DLP-522

Figure 2. Typical List of Specific Instructions for Doing a Job

Figure 3 is a typical page of a DLP-500 (Detailed Level Procedure - 500) that gives numbered, step-by-step instructions. To use this procedure, you must start with Step 1 and proceed as directed by the instructions until you complete this procedure. Note that Step 1 of this procedure is preceded by a statement called a SUMMARY. A summary is used as a memory jogger, and briefly tells you how to do the procedure and what measurements or results you can observe. If you can do the procedure after reading the SUMMARY, go ahead and do it without reading any further.

Now, look at Step 6 of DLP-500 as shown in Figure 3. Note that following the action statement there is the sentence, For help see DLP-563. When you see a statement like this, it means that additional step-by-step instructions for doing just that step are given in the referenced procedure. In this case, DLP-563 gives you the details on how to ensure that the write-enable ring is not installed on the file reel. In this case, if you cannot do Step 6, then go to DLP-563. In either case, you must continue with Step 7 until you have completed the procedure. In some cases, you may be directed to a procedure where the procedure number is preceded by the letters TAP (Trouble Analysis Procedure); for example, TAP-109. This means that you have trouble in the equipment, and in this case TAP-109 will give you step-by-step instructions to fix the trouble. After you have fixed the trouble, you must return to Step 1 of the procedure that sent you to TAP-109. However, if you came directly from IXL-001 to TAP-109, then your job is completed when you have fixed the trouble.

Admonishments: Three admonishments are used in this document as follows:

DANGER: This means there is a possibility of personal injury.

Caution: This means there is a possibility of service interruption.

WARNING: This means there is a possibility of equipment damage.

Important Items: Table A lists the more important items used in this document.

LT 123-456-789 Issue 2	MOUNT TAPE	DLP-500 Page 1 of 2
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SUMMARY: Install tape with or without write enable ring, as required. Thread tape and position tape at BOT (Beginning Of Tape) marker.

1. Get file reel and empty take-up reel.
2. Set **START/STOP** switch to **STOP**.
3. Set **ON LINE/OFF LINE** switch to **OFF LINE**.
4. Set **LOAD/BR REL** switch to center position.
5. Is data to be written on tape?
 If **yes**, then install write enable ring on file reel and go to Step 7.
 If **no**, then do Step 6.
6. Ensure that write enable ring is not installed on file reel. For help see DLP-563.
7. Open tape transport door.

Figure 3. Typical List of Detailed Instructions for Doing a Job

TABLE A Important Procedural Items and Definitions

Item	Definition
Acceptance (NTP-002)	Provides information and identifies jobs to be done to accept equipment after it is installed.
Maintenance Philosophy	The maintenance philosophy, when provided, gives an overview of the considerations designed into the trouble-clearing procedures.
DLP (Detailed Level Procedure)	Detailed, step-by-step instructions.
TAP (Trouble Analysis Procedure)	Step-by-step, trouble-clearing instructions to locate and/or fix troubles.
NTP (Non-Trouble-Clearing Procedure)	A list of items to perform normal work other than trouble-clearing.