297-8001-801CP

DMS-100 Family

# North American DMS-100

Feature Description Manual

LEC0017 and up Preliminary 15.01 April 2002

NORTEL NETWORKS™

DMS-100 Family

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Feature Description Manual

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# Publication history

**April 2002**

Preliminary change page release 15.01 for NA017.

# 1 About this document

## When to use this document

This document provides feature information for the DMS-100 switch. Feature information helps operating company personnel to prepare for insertion of a new PCL load. The feature also helps personnel to understand elements of the software. Operating company personnel involved in planning and engineering or in maintenance activities can use this document.

## How to check the version and issue of this document

Numbers indicate the version and issue of the document. For example, 01.01.

The first two digits indicate the version. When the document is updated to support a new software release, the version number increases. For example, the first release of a document is 01.01. In the *next* software release cycle, the first release of the same document is 02.01.

The second two digits indicate the issue. The issue number increases when the document is revised but rereleased in the *same* software release cycle. For example, the second release of a document in the same software release cycle is 01.02.

You must determine which version of this document applies to your office software, and the order of your product documentation. Refer to the release information in *DMS-10 and DMS-100 Product Documentation Directory*, 297-8991-001.

## The order of this document

This document contains descriptions of features that associate with the PCL. This document includes support sections.

### Hardware requirements

This section lists the system hardware required for the specified PCLs in the current software release. Hardware requirements are also provided in the individual feature descriptions where applicable.

### Summary tables

This section contains a summary table for each specified PCL in the current software release. This table indicates the information that is available in this document for each feature. For instance, the table shows the functional areas that are affected by that feature, such as restrictions and limitations.

### Feature descriptions

This section contains a feature description for each feature in this release. The following sections are included in each feature description if they apply to the feature:

- Hardware requirements
- Limitations and restrictions
- Interactions
- Datafill
- Service orders
- Operational measurements
- Logs
- User interface
- Billing

### Cross-reference table

This section contains a cross-reference table for each specified PCL in the current software release. The cross-reference tables list the following:

- feature number.
- feature name
- functional group name
- functional group ordering code

## The order of reference documentation

The *Feature Description Manual* is part of the reference documentation that supports the Nortel Networks line of DMS-100 Family products. The reference documentation is part of of the DMS-100 Family library.

Reference documentation contains the following documents.

| Number | Title |
|---|---|
| 297-1001-830 | *Automatic Message Accounting Reference Manual* |
| 297-8991-824 | *Command Interface Reference Manual* |
| 297-8991-805 | *Hardware Description Manual* |
| 297-XXXX-351 | *North American DMS-100 Customer Data Schema Reference Manual* |
| 297-XXXX-840 | *North American DMS-100/200 Log Report Reference Manual* |
| 297-XXXX-855 | *North American DMS-100/200 Office Parameters Reference Manual* |
| 297-XXXX-814 | *North American DMS-100/200 Operational Measurements Reference Manual* |
| 297-XXXX-350 | *North American DMS-100/200 Translations Guide* |

***Note 1:*** The document layer, XXXX, indicates the product CM load (PCL). In the PCL documentation structure, the document layer number depends on the PCL number for a software load.

***Note 2:*** As of NA0011 (LEC and LET) and EUR010 (EUR) releases, any reference to the data schema section of the *Translations Guide* will be mapped to the *Customer Data Schema Reference Manua*l.

# 2 Hardware requirements

This section provides information about the required gating hardware for this release.

## Related PCL release

The related Product Computing-module Loads (PCL) for this release are as follows:

- North American
  - — Local Exchange Carrier (LEC) for DMS-100
  - — DMS-100/DMS-200 Traffic Operator Position System (TOPS) combination switch (LET)
- Global

## Related gating hardware by CSP release

The following Communications Systems Platform (CSP) release gating hardware is required for this release. The platform cannot support Product CM Lineup (PCL) or Product PM Lineup (PPL) without this hardware.

**Table 1 Hardware requirements**

| CSP release | PEC (Note) | Product | Description | Reason |
|---|---|---|---|---|
| 06 | there is no PEC | | | |
| 07 | 9X13KA | ENET | 16 MB Processor | Minimum memory= 6 MB |
| | EX22BA or EX22BB | Line Peripheral Processor (LPP) | 8 MB ASU | 4 MB LIU7 Exhaust |
| 013 | there is no PEC | | | |
| ***Note:*** PEC-Product Equipment Code | | | | |

## Hardware requirements (continued)

**Table 1 Hardware requirements**

| CSP release | PEC (Note) | Product | Description | Reason |
|---|---|---|---|---|
| 014 | there is no PEC | | | |
| 015 | there is no PEC | | | |
| ***Note:*** PEC-Product Equipment Code | | | | |

# 3 LEC feature components summary

The following table summarizes the effect of features on hardware and software components. In the table, each feature number cross-references to the hardware and software components that the feature affects.

The feature numbers appear in the left column in alphanumeric order, and the components appear across the top of the table. The components have a correlating section heading in each feature description in this manual. Refer to each feature descriptions in this manual for exact feature information.

The letter Y for a feature number and associated component indicates that the feature description contains information for that correlating section. For example, Y in the *LG* column indicates the feature affects logs. Additional information is available in the Logs section of the feature description in this manual. A blank means the feature does not have an effect on the given component. Information does not appear in the correlating section for the component when the feature number has a blank.

**Table 1 Available feature information**

| Feature Number | DS | HW | L&R | IN | DF | SO | OM | LG | CI | BL |
|---|---|---|---|---|---|---|---|---|---|---|
| 59033985 | Y | Y | | | Y | | | | | |
| 59035336 | Y | Y | Y | | | | | | Y | |

***Note:*** *DS = Description* *HW* = Hardware requirements *L&R* = Limitations and restrictions *IN* = Feature interactions *DF* = Datafill *SO* = Service orders *OM* = Operational measurements *LG* = Logs *CI* = Command interface *BL* = Billing or automatic message accounting

# 4 Feature descriptions

This chapter contains a description of each new or modified feature applicable to this release. Feature descriptions include information about feature hardware and software components.

Feature descriptions appear in alphanumeric order according to the feature number.

# A59033985
# PRI 1 Way Trunks

## Feature name

PRI 1 Way Trunks

## Description

This feature provides a cost effective way to transport only PRI outbound traffic to an Internet Service Provider(ISP) by using ISDN Primary Rate Interface (PRI) links. To provide with one way PRI outbound links a new table for provisioning peripherals on which all PRI trunks will be datafilled as 1 way. The new table will consists of dedicated outgoing SPMs, DTCIs and LTCs.

## Hardware requirements

DMS Core hardware is required for this feature.

## Limitations and restrictions

A59033985 has no limitations or restrictions.

## Interactions

A59033985 does not interact with other functionalities.

## Datafill

The table control components requires the new table PRI1way to be created. The new table will contain peripherals datafilled to be used as one way outbound only. This means all PRI trunks on SPM 0, DTCI 1 and LTC 2 are 1 way outbound trunks and all originations on these trunks are rejected. However, all other types of trunks like ISUP or PTS will not be impacted by entries in this table.

## Service orders

A59033985 does not change the Service Order System (SERVORD).

## Operational measurements

A59033985 does not change operational measurements (OM).

## Logs

A59033985 does not change logs.

## User interface

A59033985 does not change the user interface.

# A59033985
# PRI 1 Way Trunks (end)

## Billing

A59033985 does not generate billing records or changes.

# A59035336
# PRI Translation Enhancements

## Feature name

PRI Translation Enhancements

## Description

## Hardware requirements

This feature introduces a new CALLTYPE option for the SG selector in the routing tables. The CALLTYPE option provides the customers the capability of determining whether the outgoing call type is Public (PUB) or Private (PVT). When SG selector is encountered, the call type will be changed to new call type on an as needed basis.(In much the same way as the ISA selector currently operates).

## Limitations and restrictions

This feature is only intended to modify the calltype information for PRI trunks only, and specifically NTNA and NI2 variants only. Other trunk types are not supported:

- Only DMS-100 NTNA and NI2 PRI variants are supported by this feature.
- Only PUB and PVT call type options are supported by the NTNA PRI.
- Only PUB call type option is supported by the NI2 PRI.
- Due to the real time impact, above restrictions/limitations are not enforced by the software.

## Interactions

A59035336 does not interact with other functionalities.

## Datafill

This feature addresses the customers request on having the option to change the outgoing call type on an as needed basis. In order to provide this new functionality, the SG selector in the routing tables (a list of routing tables is shown below) is enhanced to have a new CALLTYPE option.

The SG option is present in the following groups of tables:

- HNPACONT.RTEREF
- OFCRTE, OFRT, OFR2, OFR3, OFR4
- IBNRTE, IBNRT2, IBNRT3, IBNRT4

## A59035336
## PRI Translation Enhancements (end)

- xxRTE tables: ACRTE, PXRTE, CTRTE, FARTE, NSCRTE, OFCRTE, FTRTE
- FNPACONT.RTEREF

### Service orders

A59035336 does not change the Service Order System (SERVORD).

### Operational measurements

A59035336 does not change operational measurements (OM).

### Logs

A59035336 does not change logs.

### User interface

In traver the original problem was when a call came in as PUB and encountered rteref selector in table LTCALLS and was changed to PVT. With calltype option, original problem is resolved by adding calltype option with public selector and PUB calls remains PUB as desired by customer..

### Billing

A59035336 does not generate billing records or changes.

# 5 LEC cross-reference

The following table provides the functional group ordering code and the functinality ordering code for each feature. In the table, the features are sorted by feature number. (See the individual feature descriptions in this manual for specific information about the feature.)

**Table 1 Features (sorted by feature number)**

| Feature number | Feature name | Functional group ordering code | Functionality ordering code |
|---|---|---|---|
| 59033985 | PRI 1 Way Trunks | | |
| 59035336 | PRI Translation Enhancements | | |

DMS-100 Family

# North American DMS-100

Feature Description Manual

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