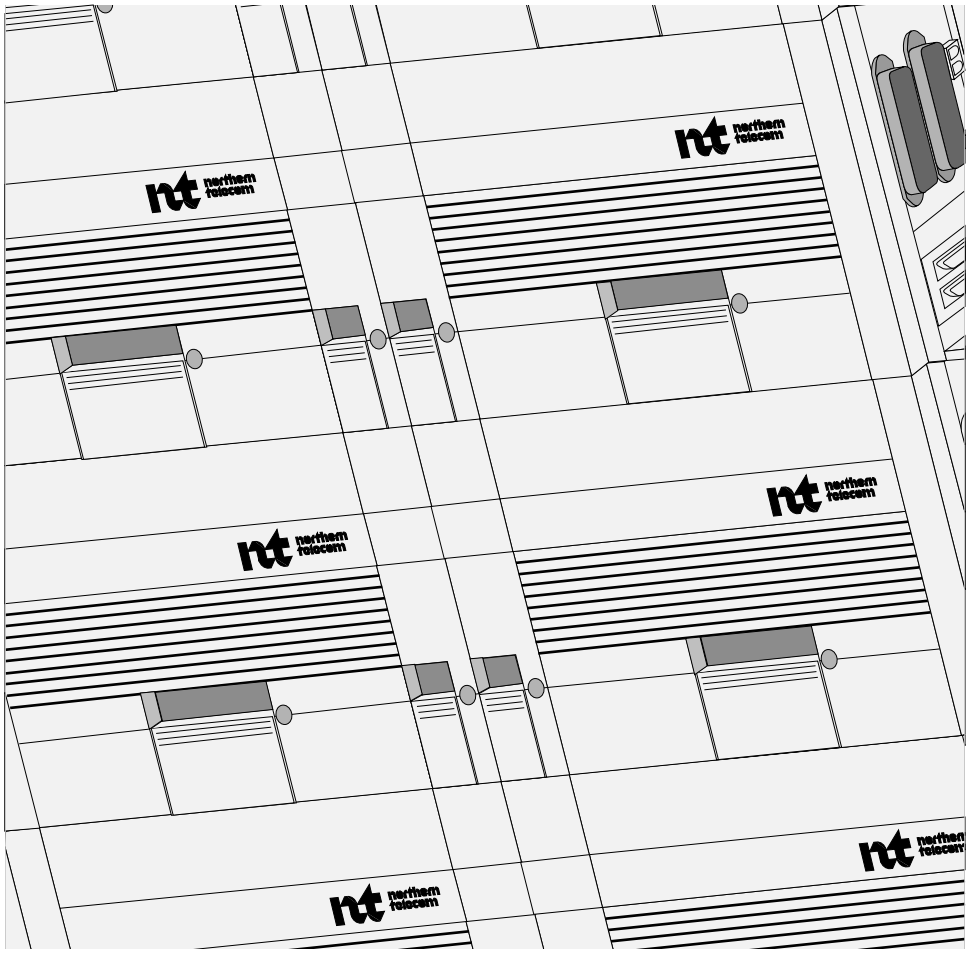
NT4K00LA **323-3001-315**

SONET Products

AccessNode

Line Card Provisioning Procedures

Issue 3.0 October 1999



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Publication history

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AN17.20 Standard release of the document, Issue 3.0. The default values for 2-wire NT4K67AC for the FXS service (on page 3-5) were changed.

June 1999

AN17 Standard release of the document, Issue 2.0. Changes include the following:

- procedures for changing and displaying MVI alarm settings
- procedures for assigning and unassigning call reference and IG values
- procedures for provisioning a 3DS0 ISDN circuit

February 1999

AN16 Standard release of the document, Issue 1.0. Changes include the following:

- default CRV range changed from 672 to 1344 in introductory paragraph
- max shelf number changed from 14 to 28
- outdated graphics removed
- ANX line expansion changes to correct commands and number of VLCMs
- changed IDT value from 1-9999 to 1-32767

June 1998

AN15 Standard 01.01 release of the document. Added information about the DMS Access feature to chapters 1 and 3.

September 1997

AN14 Standard 01.01 release of the document. Added Chapter 5 (Provisioning GR-303 MVI line card services).

April 1997

AN12.21 Standard 01.01 release of the document. Updated UDLC information in Chapter 1.

July 1996

AN12 Standard 01.01 release of the document.

November 1995

AN11 Standard 03.01 release of the document.

May 1995

Update to Standard AN10 release of the document. On page 3-2, page numbers in the chapter task list have been updated. A caution has been added to page 3-73 about adding error correction to existing DDS circuits on DS1 tandem.

April 1995

Standard AN10 release of the document.

March 1995

AN08 formal addendum.

December 1994

Standard AN08 release of the document.

April 1994

Standard AN07 release of the document.

May 1993

Standard FWP06 release of the document.

Contents

About this document

This document contains the procedures for provisioning individual circuits on AccessNode equipment using the operations center (OPC) user interface.

Audience

This document is for circuit provisioners, maintenance technicians, and experienced installers from Nortel Networks or a telephone operating company.

How to use this document

Use the task list in Chapter 1 to determine which procedures you need to perform. For each task in the left column, perform its procedures in the sequence listed.

Warnings and safety precautions

This section includes samples of the danger and caution warnings for proper handling and operation of equipment.

To avoid injury, follow all danger warnings included with this product, as well as safety procedures established by your company.

To avoid damage to equipment or service interruptions, follow all caution warnings included with this product, as well as procedures established by your company.

Samples of danger and caution warnings follow.

DANGER

Risk of personal injury

A danger warning informs the reader of a risk of personal injury.

CAUTION
Risk of service interruption or equipment damage
A caution warning informs the reader of a risk of service interruption or equipment damage.

DANGER
Risk of electric shock
This warning advises you of a possible electrical hazard. When you see this warning, proceed with care, to avoid personal injury.

OPC and NEUI command conventions

Detailed information on commands, parameters, and response conventions used in NEUI procedures is available in *Network Element User Interface Description*, 323-3001-300, in *Operations, Administration, and Provisioning*, Volume 4A. The same information is available for OPC procedures in *OPC User Interface Description,* 323-3001-301, in *Operations, Administration, and Provisioning,* Volume 4A.

You can use a graphical terminal for the operations center (OPC) procedures in this document (even though the procedures are based on a character-mode terminal). If you use a graphical terminal, you must substitute the graphical equivalent of the character-mode keystrokes used in the procedures. See the Graphical Reference card that is provided in the sleeve of this volume.

Overview of line card provisioning

Line card (DS0) provisioning at the AccessNode network element user interface (NEUI) is done only for non-GR-303 DS0 circuits such as universal digital loop carrier (UDLC), tandem, TR08. Provisioning for GR-303 DS0 circuits is done at the switch interface. This chapter has the general information you need to know before provisioning individual circuits on AccessNode equipment using the operations controller (OPC) user interface.

Chapter contents

This chapter includes the following topics:

Equipment cautions and warnings

This section has the warnings and precautions for personal safety and for proper handling and operation of equipment.

Static electricity

It is usual for static electrical charges to build up on your body if you walk a short distance. This buildup of static electricity can damage some circuit packs if it is not properly discharged first. Circuit packs that are sensitive to damage by static electricity should be packaged in antistatic material. The following precautions are recommended.

Handling circuit packs

Units that are sensitive to static electricity have the following label on their antistatic shipping bags:

ATTENTION
OBSERVER LES PRECAUTIONS
POUR LA MANIPULATION DES
DISPOSITIFS SENSIBLES AUX
CHARGES STATIQUES

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
SENSITIVE DEVICES

To avoid static electrical damage when handling circuit packs, follow these rules:

- Do not remove circuit packs from their antistatic packages unless you are using antistatic protection, such as wearing an antistatic wrist strap. The wrist strap is attached to a long cord, which must terminate at a good ground source, so that static buildup is harmlessly discharged. Alternative antistatic methods include conductive carpet, conductive shoes, or heel grounders. Use the equipment recommended by your company.
- Handle each circuit pack by the faceplate or stiffener. Do not touch electrical connections, pins, or soldered surfaces.
- Protect optical connectors by covering them with clean dust caps.

Storing and transporting circuit packs

When storing and transporting circuit packs, follow these rules:

- Never transport, stack, or store circuit packs without first placing them in their antistatic material and shipping package.

  Note: Proper packaging is especially important for heavier dual-card units, like the integrated remote test unit (IRTU), to avoid physical damage and accumulation of dirt or dust on goldplated contacts. Be careful not to damage any parts when inserting the circuit pack into its packaging.

- Avoid storage in areas where the relative humidity can exceed 95% and the temperature can exceed 70 degrees C, because circuit packs may warp or corrode.

Laser radiation

AccessNode equipment and associated optical test sets use laser sources that emit light energy into fiber cables. This energy is within the red (visible) and infrared (invisible) regions of the electromagnetic spectrum.

Laser products are subject to federal and state or provincial regulations, and local practices. Regulation 21 CFR 1040 of the U.S. Bureau of Radiological Health requires manufacturers to certify each laser product as Class I, II, III, or IV, depending upon the characteristics of the laser radiation emitted. In terms of health and safety, Class I products present the least hazard (none at all), while Class IV products present the greatest hazard.

DANGER

Risk of eye damage

At all times when handling optical fibers, follow the safety procedures recommended by your company.

Read and observe the following the precautions to decrease the risk of exposure to laser radiation.

Although Nortel Networks S/R optical products have a Class I certification, hazardous exposure to laser radiation can occur when fibers that connect system components are disconnected or broken. Certain procedures carried out during testing require the handling of optical fibers without dust caps and therefore increase the risk of exposure. Exposure to either visible or invisible laser light can damage your eyes under certain conditions.

The caution label at right is on the optical interface card, near the optical connector.

Caution

Avoid direct exposure to beam. Invisible light can blind. Keep all optical connectors capped.

Handling optical fibers

During service, maintenance, repair, or removal of cables or equipment, follow these rules:

- Avoid direct exposure to fiber ends or optical connector ends. Laser radiation may be present and can damage your eyes.
- Follow the manufacturer’s instructions when using an optical test set. Incorrect calibration or control settings can result in hazardous levels of radiation.

Splicing optical fibers

During the splicing of any fiber cable, you might have to look at the fibers using an eye loupe (a small magnifier). Take the following precautions:

- Power off all laser sources related to those fibers, and make sure they remain off (whether located at the central office, subscriber premises, or remote location).
- Disconnect any optical test sets from the fibers (whether locally or remotely connected).
- Use only the optical instruments approved by your company.

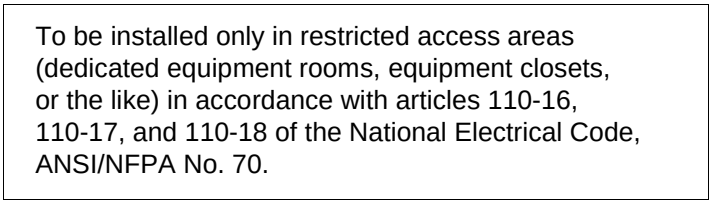
Repairing optical fibers

If an accidental break in the fiber feeder cable occurs, take the following steps:

- Notify both central-office personnel and field-repair personnel of the problem.
- Identify to central-office personnel what fibers are damaged.
- Power off all laser sources related to the damaged fibers (whether located at the central office, subscriber premises, or remote location).

Equipment warning label

The warning label shown below is located in the top left corner on the back cover of the equipment.



Process overview of line provisioning and testing

You can add customer circuits and test the copper-distribution shelves. The following document contains the procedures for testing a new system:

- *Commissioning and Testing,* Volume 3

Procedures for testing a copper-distribution shelf that you have added to an existing system are in *System Expansion Procedures,* 323-3001-324, in *Operations, Administration, and Provisioning,* Volume 4C.

Provisioning and testing process

Provisioning and testing new customer circuits is summarized as follows:

1 The engineer prepares a circuit design. The circuit design has the information for provisioning the circuit, including the following:

   — service type

   — line card settings, such as the gain, balance, impedance, and equalization attributes

2 If the cable characteristics are unknown, the engineer determines the cable characteristics. See *Line Card Application and Special Services Engineering*, 323-3001-155, in *Engineering, Configuration, and Ordering Guide*, Volume 1, for guidance in determining the characteristics of an unknown cable.

3 The engineer specifies the line card settings that must be provisioned. See *Line Card Application and Special Services Engineering*, 323-3001-155, in *Engineering, Configuration, and Ordering Guide*, Volume 1, for engineering rules and line card settings for various line cards and outside plant cables.

   Note: You can install line cards before or after you provision the circuits. See *Line Card Testing Procedures*, 323-3001-316, in this volume, for procedures on installing line cards, and procedures for circuit lineup and for end-to-end testing after initial circuit provisioning is completed.

Bulk provisioning circuits

You can save time by preprovisioning a range of slots for POTS (plain old telephone service) or by bulk provisioning circuits for TR-08 applications.

To preprovision a range of slots with the POTS service type or to preprovision a shelf (24 line cards) with one of four available service types—POTSRT, UVGRT, COINRT, or DPT, see Chapter 2, "Bulk-provisioning universal or end-to-end TR-08 circuits" on page 2-1.

Provisioning individual circuits

Circuit provisioning is described in Chapter 3, "Provisioning, modifying, and deleting circuits" on page 3-1. This includes defining the service type for a new circuit to the network element database and adjusting the equipment settings for the new circuit to the values specified in the circuit design.

DS1 tandem and DS1 TR-08 circuits

Before you provision DS1 tandem or DS1 TR-08 circuits, you must provision DS1 facilities at the fiber central office terminal (FCOT) using the Manage Facility Assignments dialog in the Connection Manager tool. To do this, see *Provisioning and Operations Procedures,* 323-3001-310, in this volume.

> ***Note:*** If you are provisioning integrated circuits with integrated remote test units (IRTU) using DS1 tandem lines for communication links, provision system control and talk/monitor links as IRTU line card (ILC) POTS.

Integrated circuits

For integrated circuits, especially for a line terminating on a DMS-100 family digital switch, perform line provisioning at the maintenance and administration position (MAP). Provision the circuit using the following datafill tables:

- LNINV for all lines
- LENLINES for POTS and coin lines
- KSETINV and KSETLINE for electronic business set service (EBS) lines.

See the DMS-100 Family *Subscriber Carrier Module—100 Access Translations Guide,* 297-2741-350 for datafill requirements.

Introduction to circuits and system configurations

To follow the procedures, you must know circuit types (see Table 1-1) and AccessNode configurations (see Table 1-2).

Table 1-1
AccessNode circuit types

Type of circuit	Description
Integrated circuits	• are DS0s from the remote fiber terminal (RFT) that exit the fiber central office terminal (FCOT) on DS1s • require a DS1/VT mapper at the FCOT and terminate on line cards at the RFT • terminate on digital switches that conform to the TR-303 or TR-08 Bellcore standard
Universal digital loop carrier (UDLC) circuits	• exit the FCOT at the voice frequency level • require line cards at both the FCOT and the RFT • are only supported by point-to-point systems
DS1 tandem circuits	• are DS0s from the RFT that exit the FCOT on DS1s • require a DS1/VT mapper at the FCOT and terminate on line cards at the RFT • are nonlocally switched or nonswitched

Table 1-2
AccessNode configuration types

Type of configuration	Description
Universal configuration	• contains UDLC circuits • can contain DS1 tandem circuits • requires an ABM (access bandwidth manager) shelf at both the FCOT and the RFT
Integrated configuration	• contains integrated (GR-303 or TR-08 or both) circuits • can contain DS1 tandem circuits • requires an ABM shelf at the RFT • can exist on either an ABM or a TBM (transport bandwidth manager) shelf at the FCOT
Combined configuration	• contains both integrated (GR-303 or TR-08 or both) circuits and UDLC circuits • can contain DS1 tandem circuits • requires an ABM shelf at both the FCOT and the RFT

Note 1: Transport DS1s can exist on any configuration (if the slots are available), and require a DS1/VT mapper at both the FCOT and the RFT.

Note 2: Transport DS3s can exist on any configuration except a combined configuration having an operations controller (OPC) at the FCOT. They require a DS3/STS mapper at both the FCOT and the RFT.

Document task list

Table 1-3 on page 1-10 lists the document task list. To use the task list, in the left column locate the task you want to perform, then perform the procedures listed to the right in the specified sequence.

The following table lists the supported services for each application listed in the task list.

This application	Supports these services
UDLC	• Plain ordinary telephone set (POTS) • coin, universal voice grade (UVG) • Special services (FX, TO, ETO, DPO, DPT, DX, E&M, PLR, TDM, DDS, PLAR, and MRD)
DS1 tandem	• Special services (FX, TO, ETO, DPO, DPT, DX, E&M, PLR, TDM, DDS, PLAR, and MRD)
TR-08	• POTSRT • UVGRT • COINRT • DPT
GR-303 DMS	• LoopStRes • LoopGndBus • coin • electronic business set (EBS)
VLCM	• LoopStRes • LoopGndBus • coin (coin loop and coinGND) • P-phone

Table 1-3
Document task list

If you want to perform this task	Then perform these procedures	Found on
Bulk-provision universal (UDLC) circuits	Procedure 2-1 Bulk-provisioning universal circuits with POTS service code	page 2-2
Bulk-provision a TR-08 shelf for POTSRT, UVGRT, COINRT, or DPT services	Procedure 2-2 Bulk-provisioning TR-08 end-to-end circuits	page 2-5
Provision a new GR-303 DMS circuit	Provisioning a new DS1 facility at the FCOT (if necessary) Provisioning the circuit at the DMS MAP or at the OPS/INE user interface ***Note:*** To provision ISDN circuits, set up the connections at the host then provision the GR-303 DMS connection. Refer to the DMS documentation for information on setting the circuit up at the host.	323-3001-310 in this volume DMS family document 297-2741-350 or your OPS/INE user documentation
Provision a new universal (UDLC) circuit in a point-to-point system	Procedure 3-1 Adding a circuit	page 3-17
Provision a new DS1 tandem or TR-08 circuit	Provisioning a new DS1 facility at the FCOT (if necessary) Procedure 3-1 Adding a circuit	323-3001-310 in this volume page 3-17
Provision a new VLCM service	Provisioning a new DS1 facility (if not already done) Service order procedure 0193, Configure DMSAccess feature	323-3001-310 in this volume Data Modification Manual, *297-3404-311*, in DMS-10 Family 400 - Series Generics
Modify an existing VLCM service	Procedure 3-2 Modifying a VLCM service	page 3-21

—continued—

Table 1-3 (continued)
Document task list

If you want to perform this task	Then perform these procedures	Found on
Modify an existing universal (UDLC) circuit in a point-to-point system	Procedure 3-3 Modifying circuit details	page 3-23
Modify an existing DS1 tandem or TR-08 circuit	Provisioning a new DS1 facility at the FCOT (if not already done) Procedure 3-3 Modifying circuit details	323-3001-310 in this volume page 3-23
Delete an existing circuit of any type provisioned at the OPC	Procedure 3-4 Deleting a circuit	page 3-27
Provision line card or service events as logs or alarms	Procedure 5-1 Setting service-level logs and alarms or Procedure 5-2 Setting line-card level logs and alarms or Procedure 5-3 Enabling or disabling line card alarms or Procedure 5-4 Enabling or disabling ISDN alarms	page 5-3 page 5-7 page 5-11 page 5-14
—end—		

Bulk-provisioning universal or end-to-end TR-08 circuits

You must provision a circuit before it can be used. To save time, you can bulk-provision large numbers of circuits to a POTS default configuration.

To add, edit, or delete individual circuits, refer to Chapter 3 of this document.

For a detailed description of the Default Provisioning Manager tool, see *OPC User Interface Description*, 323-3001-301, in *Operations, Administration, and Provisioning*, Volume 4A.

Chapter task list

This chapter includes the following tasks:

Procedure 2-1
Bulk-provisioning universal circuits with POTS service code

Use this procedure to provision a group of line cards as POTS universal circuits between two network elements. You can specify the group of line cards as a range of shelves or a range of cards.

Although the AccessNode supports a number of different services, the majority of universal circuits are provisioned as POTS. This procedure lets you provision in advance up to 672 universal circuits for POTS service. Line cards do not have to be present to do this provisioning function.

Requirements

You must meet the following requirements before performing this procedure:

- Have a userID and password that allow you to access the operations controller (OPC) and the Default Provisioning Manager tool.
- Read the command conventions for the interface type you are using (CMT or graphical) in *OPC User Interface Description*, 323-3001-301, in *Operations, Administration, and Provisioning*, Volume 4A.

Action

Step	Action
1	Log in to the OPC and open the Default Provisioning Manager from the Provisioning Administration toolset. *The Default Provisioning Manager main window appears with the cursor in the first network element (NE) field.*
2	Press **Ctrl_L /** (or Keypad **3**) to display the chooser menu for the first NE field.
3	Move to the NE you want to provision, then press **Space** (or Keypad **0**). *The selected NE appears in the first NE field and the associated NE appears in the second NE field.*
4	You can provision all circuits between the fiber central office terminal (FCOT)/remote fiber terminal (RFT) pair, or a range of circuits in one or more shelves.

If you are provisioning	Then go to
a shelf or range of shelves	step 5
all circuits in the FCOT/RFT pair	step 11

—continued—

Procedure 2-1 (continued)
Bulk-provisioning universal circuits with POTS service code

Step	Action

Provisioning a shelf or a range of shelves

5 Tab to the CD (copper distribution) shelf field.

6 In the fiber central office terminal (FCOT) where you are provisioning the default circuits, do one of the following:

- Specify the shelf.
- Specify a range of shelves by typing a dash (-) between the first and last shelves in the range.

If you enter a value that is out of range, the field value appears in reverse video with an X to the left of the field.

If you enter a range of shelves, the full range of slots (1-96) appears in the slot field. If the range of slots is changed, an error appears.

7 Tab to the Slot field if you specified a single shelf and you want to limit provisioning to a single slot or range of slots within the shelf.

8 Enter the slot or range of slots that you want to provision.

To specify a range of slots, type a dash (-) between the first and last slots in the range.

The slot or slot range appears in the field.

If you enter a value that is out of range, the field value appears in reverse video with an X to the left of the field.

9 Tab to the second NE field and repeat steps 2 through 8 for the second NE.

10 Continue with the rest of this procedure.

Provisioning all circuits in the FCOT/RFT pair

11 Tab to the **Provision** button, then press **Ctrl_A** (or Keypad **0**).

A confirmation dialog appears, indicating the range of circuits that will be provisioned if you proceed.

12 Tab to the **Yes** button then press **Ctrl_A** (or Keypad **0**).

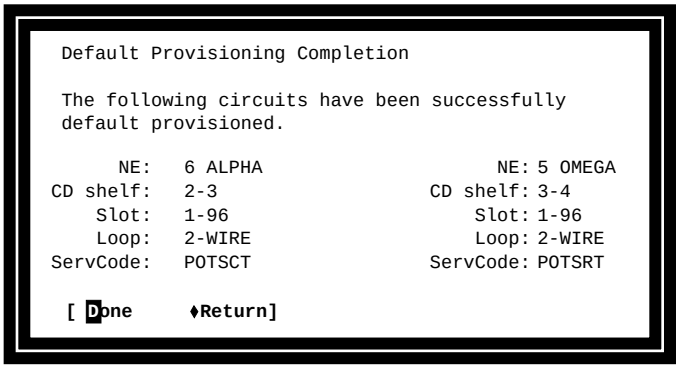
The provisioning operation begins. The Wait dialog appears, indicating the progress of the provisioning operation. When completed, a result dialog appears. If the default provisioning completed without exception, the following completion dialog appears.

—continued—

Procedure 2-1 (continued)
Bulk-provisioning universal circuits with POTS service code

Step	Action

PC-22175



If one or more of the circuits within the specified range could not be provisioned, the completion dialog has a different form. The specific circuits that could not be provisioned are listed, along with a reason for the exception.

13 Tab to the **Done** button, then press **Ctrl_A** (or Keypad **0**).

The main window appears.

14 To exit the tool:

a. Display the window menu by pressing **Ctrl_L W** (or Keypad **6**).

The window menu appears.

b. Select the Exit command by pressing **Space** (or Keypad **0**).

The tool disappears.

—end—

Procedure 2-2
Bulk-provisioning TR-08 end-to-end circuits

Use this procedure to bulk provision end-to-end circuits between a pair of a fiber central office terminal (FCOT) and a remote fiber terminal (RFT). The circuits can be provisioned a link at a time.

This procedure lets you provision up to 96 AccessNode end-to-end circuits using the TR-08 Default Provisioning Manager tool. You can provision one, two, three, or four links at a time by specifying a service code (POTSRT, UVGRT, COINRT, or DPT) for the links to be provisioned and leaving the other service codes blank.

These circuits can be provisioned with the following service codes:

- 2W POTS (plain old telephone service)
- 2W UVG (universal voice grade)
- 2W COIN (pay phone)
- 2W DPT (dial pulse terminating)

Requirements

The following requirements must be met before performing this procedure:

- Have a userID and password that allow you to access the operations controller (OPC) and the TR-08 Default Provisioning tool.
- Read the command conventions for the interface type you are using (CMT or graphical) in *OPC User Interface Description,* 323-3001-301, in *Operations, Administration, and Provisioning,* Volume 4A.

Action

Step	Action
1	Log in to the OPC and open the TR-08 Default Provisioning tool from the Provisioning Administration toolset. *The TR-08 Default Provisioning tool main window appears, with the cursor in the NE (network element) field.*
2	Display the chooser menu for the first NE by pressing **Ctrl_L /** (or Keypad **3**). *A list of the available NEs appears.*

—continued—

Procedure 2-2 (continued)
Bulk-provisioning TR-08 end-to-end circuits

Step	Action
3	Move to the NE you want to provision, then press **Space** (or Keypad **0**). *The selected NE appears in the first NE field and the associated NE appears in the second NE field.* You can also tab to the second NE field and select another NE from the chooser menu.
4	Tab to the TR-08 System field and display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The chooser menu appears showing the available TR-08 systems.* ***Note:*** The chooser menu displays only the TR-08 systems that have been previously assigned.
5	Using the arrow keys, move to the TR-08 System you want, then press **Space** (or Keypad **0**). *Links A to D fields are automatically filled in, showing the locations (slot and port) of each link.*
6	Determine what you want to do.

If the second NE field displays	Then
nothing	tab to the second NE field and select an RFT from the chooser menu
an RFT	tab to the CD shelf field and enter the number of the shelf you want

7	Tab to the Service field for Link A and display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The chooser menu appears showing the types of service available.*
8	Using the arrow keys, move to the type of service you want, then press **Space** (or Keypad **0**). *The type of service appears in the Link A field.*
9	Repeat steps 7 and 8 for Links B, C, and D.
10	Tab to the **Provision** button, then press **Ctrl_A** (or Keypad **0**). *A confirmation dialog appears, indicating the range of circuits that will be provisioned if you proceed.*

—continued—

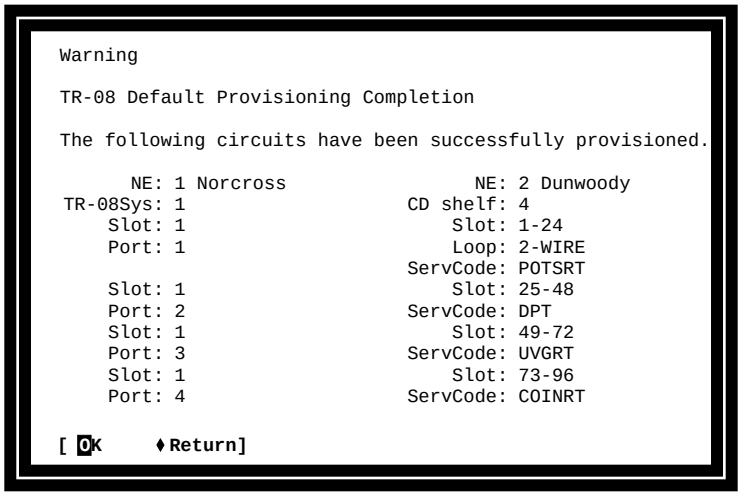
Procedure 2-2 (continued)
Bulk-provisioning TR-08 end-to-end circuits

Step	Action

11 Tab to the **Yes** button, then press **Ctrl_A** (or Keypad **0**).

The provisioning operation begins. The Wait dialog appears, indicating the progress of the provisioning operation. When completed, a result dialog appears. If the TR-08 default provisioning completes without exception, the following completion dialog appears.

PC-22184



If one or more of the circuits within the specified range could not be provisioned, the completion dialog has a different form. The specific circuits that could not be provisioned are listed, along with a reason for the exception.

12 Tab to the **Done** button, then press **Ctrl_A** (or Keypad **0**).

The main window appears.

13 To exit the tool:

a. Display the window menu by pressing **Ctrl_L W** (or Keypad **6**).

The window menu appears.

b. Select the Exit command by pressing **Space** (or Keypad **0**).

The tool disappears.

—end—

Provisioning, modifying, and deleting circuits

This chapter contains procedures for provisioning AccessNode circuits.

Chapter task list

This chapter includes the following tasks:

Procedure	Topic	See
3-1	Adding a circuit	page 3-17
3-2	Modifying a VLCM service	page 3-21
3-3	Modifying circuit details	page 3-23
3-4	Deleting a circuit	page 3-27
3-5	Changing the automatic gain control setting	page 3-32

If you cannot successfully complete these procedures, contact your next level of support.

Provisioning Manager tool description

The Provisioning Manager manages the provisioning of locally switched, nonlocally switched, and nonswitched circuits that pass through single-ended, fiber-fed point-to-point, fiber-fed ring, and DS1-fed AccessNode systems. The Provisioning Manager tool allows you to add, modify, and delete copper-distribution shelf (CDS) line cards, DS1 tandem, TR-08, DS1 tandem VT, and TR-08 tandem VT circuits.

For more information about the Provisioning Manager tool, see *OPC User Interface Description*, 323-3001-301, in *Operations, Administration, and Provisioning*, Volume 4A.

The screens that appear in this chapter are samples of screens for different circuit types. The screens you see may differ depending on the type of system you are using and the circuit type you are provisioning.

The Provisioning Manager supports an "open" interface that allows you to fill in provisioning information in any sequence (instead of from top to bottom). As you perform the procedures in this chapter, fill in the information you have available. The Provisioning Manager greys out or does not display options in the chooser menus that are not valid options based on your previous choices.

The Provisioning Manager autofills any field where, based on your previous choices, only one option is valid for a field. After the Provisioning Manager autofills the field, you can type a different value into the field but the chooser menu is not available.

Before you provision DS1 tandem/VT or TR-08/VT circuits, you need to allocate or assign the desired DS1 facilities (on the desired DS1/VT mapper) to DS1 tandem/VT or TR-08/VT. To do this, use the Manage Facility Assignments dialog in the Connection Manager tool. See *Provisioning and Operations Procedures*, 323-3001-310, in this volume, for procedures.

Before using these procedures to provision special services circuits, determine line card prescription settings. See *Line Card Application and Special Services Engineering*, 323-3001-155, in the *Engineering, Configuration, and Ordering Guide,* Volume 1.

For large numbers of circuits

To provision a large number of CDS line card circuits for plain old telephone service (POTS) or TR-08 circuits, use the procedures for bulk provisioning in Chapter 2.

If you are provisioning many circuits (up to approximately 120 circuits), you may need to exit the Provisioning Manager tool at some point because of memory limitations. You can continue provisioning when you reopen the tool.

Restrictions and limitations

Observe the following restrictions and limitations when setting service-level and line-card level logs and alarms:

- Only one of the following provisioning tools can be opened at any time:
  - — Provisioning Manager
  - — Default Provisioning Manager
  - — TR-08 Default Provisioning Manager
- The Provisioning Manager tool does not support provisioning operations such as query, add, modify, or delete on integrated circuits or related facilities.

Service codes and their attributes

Table 3-1 on page 3-4 lists universal digital loop carrier (UDLC) service codes associated with each line card.

The following tables list the possible combinations of service code and attributes that you can provision for a UDLC line using the Provisioning Manager. For each attribute, the table also lists the allowed range of values and the default value.

- Table 3-2 on page 3-5 lists service codes for 2-wire lines.
- Table 3-3 on page 3-8 lists service codes for 4-wire lines.
- Table 3-4 on page 3-11 lists service codes for 6/8-wire lines.

Table 3-5 on page 3-12 lists circuit attributes and their descriptions. After you select the service code on the Add Circuit dialog or the Circuit Details dialog, the applicable attributes appear in the Line Termination Attribute Form area of the dialog.

Table 3-6 on page 3-15 lists the default TR-08 mapping of DS0 channels and remote fiber terminal (RFT) slots.

Table 3-1
UDLC service codes associated with each line card

PEC	Line card type	Service code	Function
NT4K65	2-wire station	POTSRT	plain old telephone service
NT4K79	2-wire station	UVGRT POTSRT	universal voice grade plain old telephone service
NT4K78	2-wire station	MRD	manual ringdown
NT4K67	2-wire station	FXS DPO TOS ETOS UVGRT POTSRT COINRT PLAR	foreign exchange, station end dial pulse originating transmission only equalized transmission only universal voice grade plain old telephone service coin service private line automatic ringdown
NT4K68	2-wire office	FXO DPT TOO ETOO UVGCT POTSCT COINCT	foreign exchange, office end dial pulse terminating transmission only equalized transmission only universal voice grade plain old telephone service coin service
NT4K69	4-wire analog or digital	FXO FXS DX TO ETO DDS	foreign exchange, office end foreign exchange, station end duplex signaling transmission only equalized transmission only digital data service
NT4K77	6-wire or 8-wire	E&M1 E&M2 E&M3 PLR1 PLR2 TDM1 TDM2 TDM1O TDM1S TDM2O TDM2S	E&M signaling, type 1 E&M signaling, type 2 E&M signaling, type 3 pulse link repeater, type 1 pulse link repeater, type 2 tandem signaling, type 1, 2-state tandem signaling, type 2, 2-state tandem signaling, type 1 office end, 3-state tandem signaling, type 1, station end, 3-state tandem signaling, type 2, office end, 3-state tandem signaling, type 2, station end, 3-state

Table 3-2
2-wire service codes and their attributes

Service codes	Attribute	Range	Default
FXO	Transmit gain	–5.0 to 6.5 dB	0.0 dB
	Receive gain	–10.0 to 3.5 dB	0.0 dB
	Equalization	0 to 6	0
	Hybrid balance	0 to 121	66
	Impedance	600 ohm, 900 ohm	900 ohm
	Off-hook trunk conditioning	on or off	on
	Full-time on hook transmission	on or off	off
	Red-lined connection	on or off	off
FXS	Transmit gain	–5.0 to 6.5	–2
	Receive gain	–10.0 to 3.5	–2
	Transmit OHT gain	–10 to 0	–2
	Receive OHT gain	–10 to 0	–2
	Equalization	0 to 6	0
	Hybrid balance	0 to 136	136
	Impedance	600 ohm, 900 ohm	900 ohm
	Off-hook trunk conditioning	on or off	on
	Full-time on hook transmission	on or off	off
	Red-lined connection	on or off	off
DPT	Transmit gain	–5.0 to 6.5	0.0
	Receive gain	–10.0 to 3.5	0.0
	Equalization	0 to 6	0
	Hybrid balance	0 to 121	68
	Impedance	600 ohm, 900 ohm	600 ohm
	Off-hook trunk conditioning	on or off	on
	Red-lined connection	on or off	off
DPO	Transmit gain	–5.0 to 6.5	–2.0
	Receive gain	–10.0 to 3.5	–2.0
	Dial pulse mode	loop or battery ground	loop
	Equalization	0 to 6	0
	Hybrid balance	0 to 135	2
	Impedance	600 ohm, 900 ohm	900 ohm
	Off-hook trunk conditioning	on or off	on
	Red-lined connection	on or off	off

—continued—

Table 3-2 (continued)
2-wire service codes and their attributes

Service codes	Attribute	Range	Default
TOS	Transmit gain	–5.0 to 6.5	–2.0
	Receive gain	–10.0 to 3.5	–2.0
	Hybrid balance	0 to 135	38
	Impedance	600 ohm, 900 ohm	600 ohm
	Transmit blocking	enabled or disabled	disabled
	Receive blocking	enabled or disabled	disabled
	Red-lined connection	on or off	off
TOO	Transmit gain	–5.0 to 6.5	0.0
	Receive gain	–10.0 to 3.5	0.0
	Hybrid balance	0 to 121	66
	Impedance	600 ohm, 900 ohm	900 ohm
	Transmit blocking	enabled or disabled	disabled
	Receive blocking	enabled or disabled	disabled
	Red-lined connection	on or off	off
ETOS	Transmit gain	–5.0 to 6.5	–2.0
	Receive gain	–10.0 to 3.5	–2.0
	Equalization	0 to 6	0
	Hybrid balance	0 to 135	38
	Impedance	600 ohm, 900 ohm	600 ohm
	Transmit blocking	enabled or disabled	disabled
	Receive blocking	enabled or disabled	disabled
	Red-lined connection	on or off	off
ETOO	Transmit gain	–5.0 to 6.5	0.0
	Receive gain	–10.0 to 3.5	0.0
	Equalization	0 to 6	0
	Hybrid balance	0 to 121	66
	Impedance	600 ohm, 900 ohm	900 ohm
	Transmit blocking	enabled or disabled	disabled
	Receive blocking	enabled or disabled	disabled
	Red-lined connection	on or off	off

—continued—

Table 3-2 (continued)
2-wire service codes and their attributes

Service codes	Attribute	Range	Default
MRD	Transmit gain	–5.0 to 0.0	-1.0
	Receive gain	–10.0 to 0.0	-1.0
	Red-lined connection	on or off	off
PLAR1 PLAR2	Transmit gain	–5.0 to 6.5	-1.0
	Receive gain	–10.0 to 3.5	-1.0
	Hybrid balance	0 to 135	38
	Equalization	0 to 6	0
	Busy tone	on or off	off
	Impedance	600 ohm, 900 ohm	600 ohm
	Red-lined connection	on or off	off
UVGCT	Full–time on hook transmission	on or off	off
	Red-lined connection	on or off	off
UVGRT	Transmit OHT gain	–10 to 0	–10
	Receive OHT gain	–10 to 0	–10
	Full-time on hook transmission	on or off	off
	Red-lined connection	on or off	off
POTSCT POTSRT COINCT COINRT	Full-time on hook transmission	on or off	off
	Red-lined connection	on or off	off
ILCPOTS	Test head	1 or 2	1
	Type	control dialup or monitor	monitor
—end—			

Table 3-3
4-wire service codes and their attributes

Service codes	Attribute	Range	Default
DX	Transmit gain	–7.0 to 17.5	0.0
	Receive gain	–16.0 to 8.5	0.0
	Transmit equalizer slope	0 to 15	0
	Transmit equalizer height	0 to 16	0
	Transmit equalizer bandwidth	0 to 16	0
	Receive equalizer slope	0 to 15	0
	Receive equalizer height	0 to 16	0
	Receive equalizer bandwidth	0 to 16	0
	Balance resistance	1300, 1500, 1700, 1900, 2100, 2300, 2500, 2700, 2900,3100, 3300, 3500, 3700 ohm	1300 ohm
	Cable	nonloaded, loaded	nonloaded
	Transmit impedance	150 ohm, 600 ohm, 1200 ohm	600 ohm
	Receive impedance	150 ohm, 600 ohm, 1200 ohm	600 ohm
	Signalling leads	normal, reversed	normal
	Off-hook trunk conditioning	on or off	on
	Red-lined connection	on or off	off
TO	Transmit gain	–7.0 to 17.5	0.0
	Receive gain	–16.0 to 8.5	0.0
	Transmit impedance	150 ohm, 600 ohm, 1200 ohm	600 ohm
	Receive impedance	150 ohm, 600 ohm, 1200 ohm	600 ohm
	Sealing current	off, continuous, reverse, sink	off
	Red-lined connection	on or off	off

—continued—

Table 3-3 (continued)
4-wire service codes and their attributes

Service codes	Attribute	Range	Default
ETO	Transmit gain	–7.0 to 17.5	0.0
	Receive gain	–16.0 to 8.5	0.0
	Transmit equalizer slope	0 to 15	0
	Transmit equalizer height	0 to 16	0
	Transmit equalizer bandwidth	0 to 16	0
	Receive equalizer slope	0 to 15	0
	Receive equalizer height	0 to 16	0
	Receive equalizer bandwidth	0 to 16	0
	Cable	nonloaded, loaded	nonloaded
	Transmit impedance	150 ohm, 600 ohm, 1200 ohm	600 ohm
	Receive impedance	150 ohm, 600 ohm, 1200 ohm	600 ohm
	Sealing current	off, continuous, reverse, sink	off
	Red-lined connection	on or off	off
FXO	Transmit gain	–7.0 to 17.5	0.0
	Receive gain	–16.0 to 8.5	0.0
	Transmit equalizer slope	0 to 15	0
	Transmit equalizer height	0 to 16	0
	Transmit equalizer bandwidth	0 to 16	0
	Receive equalizer slope	0 to 15	0
	Receive equalizer height	0 to 16	0
	Receive equalizer bandwidth	0 to 16	0
	Cable	nonloaded, loaded	nonloaded
	Transmit impedance	150 ohm, 600 ohm, 1200 ohm	600 ohm
	Receive impedance	150 ohm, 600 ohm, 1200 ohm	600 ohm
	Signalling leads	normal, reversed	normal
	Off-hook trunk conditioning	on or off	on
	Red-lined connection	on or off	off

—continued—

Table 3-3 (continued)
4-wire service codes and their attributes

Service codes	Attribute	Range	Default
FXS	Transmit gain	–7.0 to 17.5	0.0
	Receive gain	–16.0 to 8.5	0.0
	Transmit equalizer slope	0 to 15	0
	Transmit equalizer height	0 to 16	0
	Transmit equalizer bandwidth	0 to 16	0
	Receive equalizer slope	0 to 15	0
	Receive equalizer height	0 to 16	0
	Receive equalizer bandwidth	0 to 16	0
	Cable	nonloaded, loaded	nonloaded
	Transmit impedance	150 ohm, 600 ohm, 1200 ohm	600 ohm
	Receive impedance	150 ohm, 600 ohm, 1200 ohm	600 ohm
	Signalling leads	normal, reversed	normal
	Off-hook trunk conditioning	on or off	on
	Red-lined connection	on or off	off
DDS	Data rate	2400 bps, 4800 bps, 9600 bps, 19.2K bps, 56K bps, 64K bps	64K bps
	DDS line type	OCUDP,DS0DP	FCOT: DS0DP, OCUDP RFT: OCUDP
	Error correction	on or off	off
	Secondary channel* **	on or off	off
	Zero code suppression**	on or off	on
	Customer remote test* **	on or off	off
	Latching loopback	on or off	on
	Red-lined connection	on or off	on
	* for OCUDP DDS function only ** not valid for 64k rate		
—end—			

Table 3-4
6/8 wire service codes and their attributes

Service codes	Attribute	Range	Default
EM1 EM2 EM3 PLR1 PLR2	Transmit gain Receive gain Off-hook trunk conditioning Red-lined connection	–7.0 to 17.5 –16.0 to 8.5 on or off on or off	0.0 0.0 on off
TDM1 TDM2 TDM1O TDM1S TDM2O TDM2S	Transmit gain Receive gain Off-hook trunk conditioning Red-lined connection	–7.0 to 17.5 –16.0 to 8.5 on or off on or off	0.0 0.0 on off

Table 3-5
Description of service code attributes

Attribute	Description
Balance resistance	Identifies the different resistor settings (in ohms) for duplex signaling
Busy tone	If you turn on the busy tone option, the following sequence of events occurs: • The alerting signal ceases if the called end is still on-hook after 2 minutes. • The audible ringback in the transmit (Tx) direction is replaced by a fast busy tone for 2 minutes. • The fast busy is replaced by a howler for 2 minutes. • The howler is replaced by quiet pulse-code modulation (PCM).
Cable	Identifies whether the cable is loaded or non-loaded
Customer remote test	Indicates whether the customer can perform remote testing. A checked box means that the customer can perform remote testing. An unchecked box means that the customer cannot perform remote testing.
Data rate	Represents the rate data is transmitted or received from the line card in kb/s. This field appears as a data selector.
DDS line type	Indicates the basic type of DDS line being used, DS0DP or OCUDP
Dial pulse mode	Indicates the different resistor settings for the dial pulse mode for the DPO service. The default is battery-ground mode. A loop mode is available, which improves dial pulse distortion for a switch that provides loop pulsing.
Equalization	Equalizer coefficients for NT4K68 or NT4K67 line cards. The coefficients for the receive and transmit direction are the same.
Error correction	Error correction can be provisioned On or Off for each DDS circuit. Subrate DDS circuits (2.4, 4.8, 9.6, or 19.2 kb/s) support error correction within the DS0. DDS circuits operating at 56 kb/s and 64 kb/s require a second DS0 on the network side of the line card when the error correction option is provisioned to On. The impact of the second DS0 channel for error correction includes the following: • The additional DS0 assignment must be coordinated with other equipment connected to the circuit. • The service is temporarily interrupted on an existing DDS service when the error correction function is turned On or Off (affects both UDLC and DS1 tandem).
	**CAUTION** **Interruption of service** On an existing DDS service on DS1 tandem, service is permanently interrupted if you turn error correction On when a different service is provisioned in the adjacent DS0 channel. (DDS needs the adjacent DS0 channel for error correction.) To restore service, turn error correction Off again.

—continued—

Table 3-5 (continued)
Description of service code attributes

Attribute	Description
Full-time on-hook transmission (OHT)	Indicates whether data transmission or reception occurs while the telephone is on hook. A checked box means that data is received or transmitted on a full-time basis. Full-time OHT is needed for services like alarm reporting or meter reading. An unchecked box means that data cannot be received or transmitted on a full-time basis. Full-time OHT is not needed for the caller number delivery (CND) service and similar services.
Hybrid balance	The hybrid balance settings for 2-wire line cards
Impedance	The impedance setting for the 2-wire line card
Latching loopback	Enables or disables the latching loopback functionality in the line card
Off-hook trunk conditioning	Describes the response of the line card when an alarm occurs. A checked box means off-hook trunk conditioning, where the line card idles the loop for 2 to 3 seconds and then busies out the loop. An unchecked box means on-hook trunk conditioning, where the line card idles the loop when an alarm occurs.
Receive blocking	Indicates whether blocking is enabled or disabled in the digital to analog direction of the voice signal path
Receive equalizer bandwidth	Represents the bandwidth equalization in the digital to analog direction of the voice signal path
Receive equalizer height	Represents the height equalization in the digital to analog direction of the voice signal path
Receive equalizer slope	Represents the slope equalization in the digital to analog direction of the voice signal path
Receive gain (db)	Represents the gain in the digital to analog direction of the voice signal path
Receive impedance	Describes the receive impedance settings for the 4-wire line card
Receive OHT gain (db)	Represents the gain in the data receive signal path when the telephone is on hook
Red lined connection	Identifies a priority circuit with limitations on disconnect and test access. A checked box indicates a priority circuit. An unchecked box indicates a non-priority circuit.
Sealing current	Indicates the sealing type current being used
Secondary channel	Represents whether a secondary user data channel is available. Checked box indicates a secondary channel; unchecked box, no secondary channel.
Signalling leads	Represents whether the signaling leads are normal or reversed

—continued—

Table 3-5 (continued)
Description of service code attributes

Attribute	Description
Test head	Identifies the test head on the integrated remote test unit (IRTU) circuit pack where the circuit ILCPOTS terminates. ILCPOTS is the IRTU line card POTS-type service.
Transmit blocking	Indicates whether blocking is enabled or disabled in the analog to digital direction of the voice signal path
Transmit equalizer bandwidth	Represents the bandwidth equalization in the analog to digital direction of the voice signal path
Transmit equalizer height	Represents the height equalization in the analog to digital direction of the voice signal path
Transmit equalizer slope	Represents the slope equalization in the analog to digital direction of the voice signal path
Transmit gain (db)	Represents the gain in the analog to digital direction of the voice signal path
Transmit impedance	Describes the transmit impedance settings for the 4-wire line card
Transmit OHT gain (db)	Represents the gain in the data transmit signal path when the telephone is on hook
Type (ILCPOTS)	Identifies subcategories of the main service code. Monitor specifies that this line termination is used as the talk/monitor path for the integrated remote test unit (IRTU) test head. Control dial-up specifies that this line is used as a dial-up modem control path for the IRTU test head. ***Note:*** The AccessNode does not support provisioning the ILC using a Universal Edge 9000 (UE9000) line card address. You must provision the ILC using a copper distribution shelf (CDS) line card address.
Zero code suppression	Indicates whether zero code suppression is occurring for the service. A checked box indicates there is zero code suppression. An unchecked box indicates no zero code suppression.
—end—	

Table 3-6
TR-08 default mapping of DS0 channels and RFT slots

Switch DS0 channel (Note 1)		FCOT DS0 channel (Note 2)	CDS slot number for TR-08 shelf			
0 to 23 scheme	**1 to 24 scheme**		**A**	**B**	**C**	**D**
0	1	1	1	25	49	73
1	2	3	2	26	50	74
2	3	5	3	27	51	75
3	4	7	4	28	52	76
4	5	9	5	29	53	77
5	6	11	6	30	54	78
6	7	13	7	31	55	79
7	8	15	8	32	56	80
8	9	17	9	33	57	81
9	10	19	10	34	58	82
10	11	21	11	35	59	83
11	12	23	12	36	60	84
12	13	2	13	37	61	85
13	14	4	14	38	62	86
14	15	6	15	39	63	87
15	16	8	16	40	64	88
16	17	10	17	41	65	89
17	18	12	18	42	66	90
18	19	14	19	43	67	91
19	20	16	20	44	68	92
20	21	18	21	45	69	93
21	22	20	22	46	70	94
22	23	22	23	47	71	95
23	24	24	24	48	72	96

Note 1: Use the column that lists the DS0 numbering scheme for your switch.

Note 2: The TR-08 Default Provisioning Manager tool enforces the indicated assignments between the FCOT DS0s and the copper distribution shelf (CDS) slots. The Provisioning Manager tool allows flexible assignment.

Endpoint types

Endpoint types specify the physical connectivity of either endpoint of a circuit. Each circuit has two endpoints and in the current release, at least one of those endpoints must be a line card as specified by the copper distribution shelf (CDS) line card type.

The endpoints of a circuit are referred to as End A and End Z and can be interchanged. Table 3-7 lists the endpoint types supported for each system configuration.

Table 3-7
Endpoint types supported for each system

If the system has this topology	And you provision End A as this type	Then you can provision the End Z as this type
ABM (access bandwidth manager)/ABM point-to-point	CDS line card DS1 tandem channel TR-08 channel	CDS line card
	CDS line card	CDS line card DS1 tandem channel TR-08 channel
TBM (transport bandwidth manager)/ABM point-to-point	DS1 tandem channel TR-08 channel	CDS line card
	CDS line card	DS1 tandem channel TR-08 channel
DFA (DS1-fed AccessNode)/RFT (Remote fiber terminal)	DS1 tandem channel TR-08 channel	CDS line card
	CDS line card	DS1 tandem channel TR-08 channel
Single-ended RFT	DS1 tandem VT channel TR-08 VT channel	CDS line card
	CDS line card	DS1 tandem VT channel TR-08 VT channel
VTBM ring	DS1 tandem channel TR-08 channel	CDS line card
	CDS line card	DS1 tandem channel TR-08 channel

Procedure 3-1
Adding a circuit

Use this procedure to add a circuit to an AccessNode system.

For	See	On page
a list of services compatible with each line card	"UDLC service codes associated with each line card"	3-4
a description of the line termination attributes and their acceptable values	" 2-wire service codes and their attributes"	3-5
	" 4-wire service codes and their attributes"	3-8
	"6/8 wire service codes and their attributes"	3-11
A list of endpoint types supported for each system	"Endpoint types supported for each system"	3-16

Requirements

Meet the following requirements before doing this procedure:

- Have a userID and password that allow you access to the OPC.
- Read the command conventions for the interface you are using (CMT or graphical) in *OPC User Interface Description*, 323-3001-301, in *Operations, Administration, and Provisioning*, Volume 4A.

Action

Step	Action
1	Log onto the operations controller (OPC) and open the Provisioning Manager tool from the Provisioning Administration toolset. *The Provisioning Manager main window appears.*
2	Display the Operations menu by pressing **Ctrl**_ **L T** (or Keypad **,**). *The Operations menu appears.*
3	Move to Add Circuit, then press **Space** (or Keypad **0**). *The Specify Circuit for Add dialog appears.* This dialog lets you specify the type of circuit that you want to add, and lets you define the network element components that terminate the circuit.

—continued—

Procedure 3-1 (continued)
Adding a circuit

Step	Action

4 Complete all of the valid fields on the dialog. Display the chooser menu for a specific field by pressing **Ctrl_L** / (or Keypad **3**).

The following table describes the fields that are available on the dialog.

Field	Description
End A Type	specifies the type of circuit to be added
End Z Type	The only valid value for this field is CDS Line Card.
NE	specifies the FCOT within the OPC span of control
Shelf	specifies the physical shelf that has the card that supports this type of circuit
Slot	specifies the physical slot in the common equipment (CE) shelf where the card is inserted
Port	specifies a DS1 circuit on the DS1 card. Valid values are from 1 to 14.
DSO Channel	specifies a channel within the DS1 circuit. Valid values are from 1 to 24.
VT group	identifies the VT group in the STS-1 that you are provisioning
VT number	identifies the VT number within the VT group

Note: As you enter information in these fields, the OPC completes any other fields that it can, based on the information you enter. Some fields may not be available, based on the information you enter.

5 Continue entering data and selecting choices from the chooser menus until you have completed all the appropriate fields.

6 Tab to the **OK** button, then press **Ctrl_A** (or Keypad **0**) to continue, or tab to and select the **Cancel** button to return to the main window.

*When you select the **OK** button, the information you entered is verified.*

If the circuit already exists, an error dialog describing the error appears. If you make a data entry error, or attempt to provision an unavailable CD shelf, an X appears beside the field that contains the error. Correct the error and perform this step again.

If no errors are detected, the Add Circuit dialog appears.

Some fields are automatically filled in based on previously entered information.

—continued—

Procedure 3-1 (continued)
Adding a circuit

Step	Action
7	In the Circuit ID field, enter a common language name for the circuit (up to 40 characters).
8	Tab to the Loop Type field. Enter the loop type, or complete the following steps: **a.** Display the chooser menu by pressing **Ctrl_L** / (or Keypad **3**). *The chooser menu appears.* **b.** Move to the loop type assigned to the circuit, then press **Space** (Keypad **0**). *The selection appears in the Loop Type field.*
9	Tab to the Service Code field, display the chooser menu, and select the Service code. *The Line Termination Attribute form is filled in with the attributes corresponding to the specified circuit type and service code.* *If only one service code for one end is valid for service code that you entered for the other end, the loop type and service code are automatically filled in for the second end and the default attribute values appear in the Line Termination Attribute form.* If the loop type and service code are filled in for the second end, go to step 12. If not, continue with step 10.
10	Tab to the LoopType field. Enter the loop type or select it from the chooser menu. *The selection appears in the Loop Type field.*
11	Tab to the Service Code field. Enter the service code or select it from the chooser menu. *The Line Termination Attribute form is filled in with the attributes corresponding to the specified circuit type and service code.*
12	You can modify the line termination attributes, if desired. ***Note:*** For a description of the line termination attributes and their acceptable values, see Table 3-2 on page 3-5.

If you want to	Then go to
modify a line termination attribute	step 13
save the circuit details without modifying the attributes	step 16

—continued—

Procedure 3-1 (continued)
Adding a circuit

Step	Action
13	Tab to the line termination attribute that you want to modify.
14	If the attribute option has a check button (if not, got to step15): **a.** Move to the required option using the arrow keys. **b.** Select the required option by pressing **Ctrl_A** (or Keypad **0**). *A mark appears beside the check button.*
15	If the attribute option is a data entry field: **a.** Display the field menu by pressing **Ctrl_L** (or Keypad **Enter**). **b.** Move to the Select All command, then press **Ctrl_A** (or Keypad **0**). **c.** Enter the required value in the field. *The new attribute appears in the field.*
16	Tab to the **OK** button, then press **Ctrl_A** (or Keypad **0**) to save the circuit definition. *An Add Circuit Confirmation dialog appears. The Add Circuit Confirmation dialog summarizes the details of the CDS Line Card that you have defined.* ***Note:*** If a DX service in the fiber central office terminal (FCOT) is connected to a DX service in the remote fiber terminal (RFT), at least one side of the DX circuit must be terminated before placing it in service.
17	Select the **OK** button to begin the Add Circuit process. Otherwise, tab to the **Cancel** button to return to the Add Circuit dialog, then press **Ctrl_A** (or Keypad **0**). *When you select the **OK** button, the circuit information is downloaded to the specified circuit packs. An Add Circuit Completion dialog appears, which indicates successful addition of the circuit and displays a summary of the circuit details.*
18	Select the **OK** button by pressing **Ctrl_A** (or Keypad **0**). *The Provisioning Manager main window appears.*

If you want to	Then
exit the tool	press **Esc)**
add another circuit	go to step 2

—end—

Procedure 3-2
Modifying a VLCM service

Use this procedure to modify service for virtual line concentrating module (VLCM) circuits provisioned on a DS1-fed AccessNode (DFA) or a host digital terminal (HDT) in AccessNode Express. It applies only to systems connected to DMS-10NA switches.

> ***Note:*** For a translation table that shows how AccessNode lines translate to lines on the DMS-10NA switch, see "Appendix A: DMS Access translation table" in this book.

Requirements

You must log in to the VLCMCI tool. If you do not know how to do this, see *Network Element User Interface Description*, 323-3001-300, in *Operations, Administration, and Provisioning*, Volume 4A.

—continued—

Procedure 3-2 (continued)
Modifying a VLCM service

Action

Step	Action
1	To modify the service for a range of line cards, enter **editsvc <start VLCM #> <start LSG #> <start line #> <end VLCM #> <end LSG #> <end line #> <service type>** ↵

where

<start VLCM #>	beginning VLCM number: **1** to **2**
<start LSG #>	beginning line subgroup number on DMS-10NA switch: **0** to **19**
<start line #>	beginning line card slot number on DMS-10NA switch within the line subgroup: **0** to **31**
<end VLCM #>	ending VLCM number: **1** to **2**
<end LSG #>	ending line subgroup number on DMS-10NA switch: **0** to **19**
<end line #>	ending line card slot number on DMS-10NA switch within the line subgroup: **0** to **31**
<service type>	type of service: • COINLP • COINGND • GND • LSR ***Note:*** For the 6X18 line card on the DMS-10NA switch, you must log in to the AccessNode to set the service to ground start (COINGND or GND). Be sure the service has been provisioned correctly on the AccessNode and the DMS-10NA switch.

The "Service change operation completed, please check LC log for details" message appears.

Note: If you change the service on the line card to COINLP or COINGND, COIN appears in the Service Class field in the LC log. To verify the change has taken place correctly, use the sysmon command. The service is listed as either GCOIN or LCOIN in the CPSRV field.

—end—

Procedure 3-3
Modifying circuit details

Use this procedure to modify the termination attributes of a circuit in an AccessNode system.

For	See	On page
a list of services compatible with each line card	"UDLC service codes associated with each line card"	3-4
a description of the line termination attributes and their acceptable values	" 2-wire service codes and their attributes"	3-5
	" 4-wire service codes and their attributes"	3-8
	"6/8 wire service codes and their attributes"	3-11
a list of endpoint types supported for each system	"Endpoint types supported for each system"	3-16

Requirements

The following requirements must be met before proceeding:

- Have a userID and password that permit access to the OPC.
- Read the command conventions for the interface you are using (CMT or graphical) in *OPC User Interface Description*, 323-3001-301 in *Operations, Administration, and Provisioning*, Volume 4A.

Action

Step	Action
1	Log onto the operations controller (OPC) and open the Provisioning Manager tool from the Provisioning Administration toolset. *The Provisioning Manager main window appears.*
2	Display the View menu by pressing **Ctrl_LG** (or Keypad **2**).
3	Use the arrow key to select the View menu.
4	Select either the "Sort by Remote Location" or the "Sort by CO Location" option with the arrow key.

—continued—

Procedure 3-3 (continued)
Modifying circuit details

Step Action

Note: You may sort the circuits by CO location, or by Remote location. The circuits are dependent on the type of system being used. The types of circuits that may be provisioned are:

Circuit	System
CES ports for DS1 type of connection (CO)	Point-to-point, DFA
VT Nums for SEAN type of connection (CO)	Single-ended or Ring
CDS Shelves for UDLC type of connection (CO FCOT)	Point-to-point or Single-ended
CDSs (Remote RFT)	

5 Once you have selected the sort option, choose it with **Space** (or Keypad **0**). The locations are displayed. This list is either DS1s or CDSs depending on the sort option selected.

6 Use the arrow key to select the desired DS1 or CDS.

7 Display the Expand option by pressing **Ctrl_LT** (or Keypad **2**).

8 Select the Expand option with **Space**. A list of provisioned circuits is displayed.

9 Use the Tab key to access the list of circuits.

10 Use the arrow key to choose the circuit you wish to modify.

11 Display the Details option by pressing **Ctrl_LT** (or Keypad **2**).

12 Select the option with **Space**.

The Specify Circuit for Details dialog appears with the circuit information entered for you.

13 Tab to the **OK** button to complete circuit identification, or tab to the **Cancel** button to return to the main window, then press **Ctrl_A** (or Keypad **0**) to make your choice.

The Circuit Details dialog appears.

14 To modify the circuit ID, complete the following:

a. Display the Circuit ID field menu by pressing **Ctrl_L** (or Keypad **Enter**).

The menu appears.

b. Move to the Select all command, then press **Space** (or Keypad **0**).

The circuit ID is highlighted in reverse video.

c. Enter the new circuit ID (up to 40 characters).

The new Circuit ID field appears.

—continued—

Procedure 3-3 (continued)
Modifying circuit details

Step	Action
15	To modify the loop type, tab to the Loop Type field and enter the loop type directly, or complete the following: **a.** Display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The chooser menu appears.* **b.** Move to the new loop type assigned to the circuit, then press **Space** (or Keypad **0**). *The new value appears in the Loop Type field.*
16	To modify the service code, tab to the Service Code field, and enter the service code, or complete the following: **a.** Display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The chooser menu appears.* **b.** Move to the new service code, then press **Space** (or Keypad **0**). *The new value appears in the Service Code field, and the corresponding attributes appear in the Line Termination Attribute form.*
17	You can modify the line termination attributes, if desired. ***Note:*** For a description of the line termination attributes and their acceptable values, see Table 3-2 on page 3-5.

If you want to	Then go to
modify a line termination attribute	step 18
save the circuit details without modifying the attributes	step 21

18	Tab to the line termination attribute that you want to modify.
19	If the attribute option has a check button, complete the following: **a.** Move to the required option using the arrow keys. **b.** Select the option by pressing **Ctrl_A** (or Keypad **0**). *A mark appears besides the check button.*
20	If the attribute option is a data entry field, complete the following: **a.** Display the field menu by pressing **Ctrl_L** (or Keypad **Enter**). **b.** Move to the Select All command, then press **Ctrl_A** (or Keypad **0**). **c.** Enter the required value in the field. *The new attribute appears in the field.*
21	Tab to the **OK** button, then press **Ctrl_A** (or Keypad **0**) to save the circuit definition.

—continued—

Procedure 3-3 (continued)
Modifying circuit details

Step	Action
	A Circuit Details Confirmation dialog appears. The Circuit Details Confirmation dialog summarizes the details of the CDS Line card. ***Note:*** If a transmit (TX) circuit in the fiber central office terminal (FCOT) is connected to a TX circuit in the remote fiber terminal (RFT), at least one side of the TX circuit must be terminated before you place the circuits in service.
22	Select the **OK** button to begin the modification process. Otherwise, tab to the **Cancel** button to return to the Circuit Details dialog, then press Ctrl_A (or Keypad 0). *When you select the **OK** button, the modified circuit information is downloaded to the specified circuit packs.* *A Circuit Details Completion dialog, appears that confirms the successful modification of the circuit and summarizes the circuit details.*
23	Select the **OK** button by pressing **Ctrl_A** (or Keypad **0**). *The main window appears.*

If you want to	**Then**
exit the tool	press **Esc Shift**
modify another circuit	step 2

—end—

Procedure 3-4
Deleting a circuit

Use this procedure to delete a specific CDS line card, DS1 tandem, DS1 tandem VT, TR-08, or TR-08 VT circuit on an AccessNode system.

For	See	On page
a list of services compatible with each line card	"UDLC service codes associated with each line card"	3-4
a description of the line termination attributes and their acceptable values	" 2-wire service codes and their attributes"	3-5
	" 4-wire service codes and their attributes"	3-8
	"6/8 wire service codes and their attributes"	3-11
a list of endpoint types supported for each system	"Endpoint types supported for each system"	3-16

Requirements

Before performing this procedure, you must do the following:

- Have a userID and password that allow you access to the OPC.
- Read the command conventions for the type of interface you are using (CMT or graphical) in *OPC User Interface Description*, 323-3001-301 in *Operations, Administration, and Provisioning*, Volume 4A.

Action

Step	Action
1	Log onto the operations controller (OPC) and open the Provisioning Manager tool from the Provisioning Administration toolset. *The Provisioning Manager main window appears.*
2	Display the Operations menu by pressing **Ctrl**_ **L T** (or Keypad **,**). *The Operations menu appears.*
3	Move to Delete Circuit, then press **Space** (or Keypad **0**). *The Specify Circuit for Delete dialog appears.* The Specify Circuit for Delete dialog allows you to specify the type of circuit that you want to delete, and to define the network element components that terminate the circuit.

—continued—

Procedure 3-4 (continued)
Deleting a circuit

Step	Action
4	Tab to the Type field and display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The chooser menu appears, listing the available circuit types.* ***Note:*** You need to enter the information for only one network element (NE). The Provisioning Manager determines the corresponding endpoint of the circuit.
5	Move to the circuit type you want to delete, then press **Space** (or Keypad **0**). *The Specify Circuit for Delete dialog appears with the circuit type displayed in the type field. The other fields in the dialog depend on the type of circuit you chose.*
6	Tab to the NE field. Enter the NE ID or name or both, or complete the following steps: **a.** Display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The chooser menu appears. The chooser menu displays the commissioned NEs in the OPC span of control.* **b.** Move to the NE that contains the circuit you are deleting, then press **Space** (or Keypad **0**). *The OPC validates the entry. If you make an error, an "X" appears in the field. Correct the error and repeat this step.*

—continued—

Procedure 3-4 (continued)
Deleting a circuit

Step	Action
7	Enter the circuit location details.

If the circuit type is	Then
a CDS line card	1 Tab to the CD (copper-distribution) Shelf field and enter the CDS number of the shelf that contains the slot for the circuit. ***Note:*** Each NE can have up to 7 CDSs numbered 1 through 7. 2 Tab to the Slot field and enter the slot number assigned to the circuit. ***Note:*** Each CDS can have up to 96 slots numbered 1 through 96. Go to step 8.
DS1 tandem or TR-08 Channel	1 Tab to the DS1 Slot field and enter the DS1/VT mapper slot number, or complete the following steps: ***Note:*** See the facility assignment sheets to determine the slot number. a. Display the chooser menu by pressing **Ctrl**_**L /** (or Keypad **3**). *The chooser menu appears, listing the commissioned NEs in the OPC span of control.* b. Move to the NE that contains the circuit you are deleting, then press **Space** (or Keypad **0**). *The DS1 slot number appears in the Slot field. The Shelf field is preset to 1, because the DS1 card that supports DS1 tandem circuits can reside only in shell number 1.* 2 Tab to the DS1 Port field and enter the value for the DS1 port, or complete the following steps. ***Note:*** Each DS1/VT mapper can have up to 14 DS1s numbered from 1 through 14. a. Display the chooser menu by pressing **Ctrl**_**L /** (or Keypad **3**). *The chooser menu appears, listing the commissioned NEs in the OPC's span of control.* b. Move to the NE that contains the circuit you are deleting, then press **Space** (or Keypad **0**). *The DS1/VT number appears in the Port field. The Shelf field is preset to 1, because the DS1 card that supports DS1 tandem circuits can reside only in shell number 1.* 3 Tab to the DS0 Channel field and enter the DS0 channel within the DS1 circuit. ***Note:*** Each DS1circuit can accommodate up to 24 DS0 channels. Go to step 8.
—continued—	

—continued—

Procedure 3-4 (continued)
Deleting a circuit

If the circuit type is	Then
DS1 tandem VT or TR-08 VT Channel	1 Tab to the VT group field and enter the number of the VT group that you are deleting, or complete the following steps: a. Display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The chooser menu appears, listing the commissioned NEs in the OPC span of control.* b. Move to the NE that contains the circuit you are deleting, then press **Space** (or Keypad **0**). *The number of the VT group appears in the VT group field. The STS field is preset to 1, for STS-1.* 2 Tab to the VT Number field and enter the VT number within the VT group, or complete the following steps. ***Note:*** Each DS1/VT mapper can have up to 14 DS1s numbered from 1 through 14. a. Display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The chooser menu appears, listing the commissioned NEs in the OPC span of control.* b. Move to the NE that contains the circuit you are deleting, then press **Space** (or Keypad **0**). *The VT number appears in the VT Number field.* 3 Tab to the DS0 Channel field and enter the DS0 channel within the DS1 circuit. ***Note:*** Each DS1circuit can accommodate up to 24 DS0 channels. Go to step 8.
—end—	

8 Tab to the **OK** button to complete circuit identification, or tab to the **Cancel** button to return to the main window, then press **Ctrl_A** (or Keypad **0**).

If you select the OK button, the information you entered is verified. If you make a data entry error an X appears beside the field that contains the error. Correct the error and perform this step again. If no errors are detected, the Delete Circuit Confirmation dialog, which summarizes the details of the circuit, appears.

9 Select the **OK** button to begin the deletion process. Otherwise, tab to the **Cancel** button to return to the Specify Circuit for Delete dialog, then press **Ctrl_A** (or Keypad **0**).

When you select the OK button, the deleted circuit and line termination information is removed from the OPC circuit database. A Delete Circuit Completion dialog appears, showing successful deletion of the circuit and summarizing the circuit details.

—continued—

Procedure 3-4 (continued)
Deleting a circuit

Step	Action
10	Select the **OK** button by pressing **Ctrl_A** (or Keypad **0**). *The Provisioning Manager main window appears.*

If you want to	Then
exit the tool	enter **Esc)**
delete another circuit	go to step 2

—end—

Procedure 3-5
Changing the automatic gain control setting

Use this procedure to turn off automatic gain control (AGC) for line cards connected to UDLC EBS circuits or channel bank equipment. You must change the default AGC value set by the line card load. The default sets AGC on. For operations with this equipment, you must turn AGC off.

Requirements

Before you begin this procedure, you must meet the following conditions:

- Know the release number of the line card load .
- Have a userID and password that permit access to the operations controller (OPC) and the network element user interface.
- Read the command conventions for the type of interface you are using (CMT or graphical) in *OPC User Interface Description*, 323-3001-301 in *Operations, Administration, and Provisioning*, Volume 4A.

Action

Step	Action
1	Log in to the OPC and access the network element user interface.
2	Display the LCLOADCI prompt by entering: **lcloadci**↵
3	Select the line card for which you are changing the AGC by entering: **reloadlc <reset method> <service type> <linecard type> <line card vintage>**

—continued—

Procedure 3-5 (continued)
Changing the automatic gain control setting

Step **Action**

where		
<reset method>	**lc <shelf type> <shelf number> <slot>**	shelf type: **CDS** or **ANX** shelf number: **1-7** for CDS, **1-28** for ANX slot: **1-96** for CDS, **1-48** for ANX
	range <shelf type> <start shelf> <start slot> <end shelf> <end slot>	shelf type: **CDS** or **ANX** start shelf: **1-7** for CDS, **1-28** for ANX start slot: **1-96** for CDS, **1-48** for ANX end shelf: **1-7** for CDS, **1-28** for ANX end slot: **1-96** for CDS, **1-48** for ANX
	shelf <shelf type> <shelf>	shelf type: **CDS** or **ANX** shelf: **1-7** for CDS, **1-28** for ANX
	All <shelf type>	shelf type: **CDS** or **ANX**
<service type>	**EBS**	
<linecard type>	**NT4K67AB**	
<linecard vintage>	release number of the line card load: **0** to **99**	

A confirmation message prompts you to continue. After you clear the confirmation message, the following message appears:

```
You have selected EBS service.
Do you want to clear the EBS_AGC bit? (Yes/No)
If the EBS line card is connecting to the
channel bank, then you need to clear this bit.
```

4 Turn off AGC for the equipment by entering:

yes↵

The following message appears:

```
You have selected to clear the EBS_AGC bit.
```

LCLOADCI resets the AGC bit to turn off automatic gain control, then reloads the line card.

—end—

Provisioning GR-303 line card services, or 3DS0 ISDN and IDSL line card services

This chapter details how to provision GR-303 multi-vendor interface (MVI), 3DS0 ISDN, or IDSL line card services using Transaction Language 1 (TL1).

The TL1 interface in an AccessNode operations controller (OPC) offers surveillance and control, provisioning, and testing capabilities between AccessNode network elements (NE) and a remote operations system (OS). Provisioning functions include creating, editing, retrieving, and deleting.

> ***Note:*** Perform the following procedures *before* provisioning services at the local switch. (For examples of DMS SuperNode provisioning, see "Examples of GR-303 MVI provisioning for DMS SuperNode" on page 4-17.)

GR-303 MVI line card services can also be changed using MVIPROV.

Chapter task list

This chapter includes the following task:

Procedure	Topic	See
4-1	Provisioning GR-303 MVI line card services	page 4-2
4-2	Provisioning a 3DS0 ISDN or IDSL circuit	page 4-18

If you cannot successfully complete a procedure, contact your next level of support.

Procedure 4-1
Provisioning GR-303 MVI line card services

When the first GR-303 MVI host is provisioned, the AccessNode sets up a preprovisioning table (RFT slot association table) for all slots on the RFT. Use the MVIPROV command interface (CI) tool to display or modify the slot assignments or MVI event reporting as follows:

- List assignments for one or more RFT line card slots, including the following information: shelf type, card shelf and slot, call reference value (CRV), host, default service, and current service.
- Change CRVs for one or more RFT slots homing on the GR-303 MVI host switch. The CRV, assigned at the host switch, is the logical address of the service. CRVs can be assigned only to a slot when the current service value in the association table is "No service." Therefore, the task must precede the assignment of services at the switch. The CRV range is 1 to 2048; the default CRV range is 1 to 1344 for AccessNode Express, 1 to 672 for AccessNode.
- Change the service assignment on one or more RFT slots to MVIPOTS, MVICOIN, or MVIUVG. All slots initially default to MVIPOTS service. (Service pre-assignment is required because GR-303 switch provisioning commands do not uniquely distinguish MVIPOTS, MVICOIN, and MVIUVG service types. However, MVILRB and TR303_ISDN services *are* uniquely identified.)
- Change the integrated digital terminal (IDT) value for a newly upgraded MVI host. The host IDT range is 1 to 32767.
- List the host provisioning data, including all of the interface groups (IG) to which an RFT is assigned, the host switch's CLLI, IDT, and type of GR-303 interface.

  Note: When the operations controller (OPC) Host Provisioning Manager accepts the interface group number (IG#) for the first GR-303 MVI switch, the system automatically displays the value in the IG field for all slots in the RFT preprovisioning table. As you add additional MVI interface groups, reassign the IG field accordingly for the appropriate slots.

- Change MVI alarm settings or display MVI alarm status.
- Unassign call reference and IG values. Threshold settings represent the percentage of DS1s provisioned.

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Modifying existing service assignments

The impact of using the MVIPROV CI tool to reassign a slot while the slot is still in service depends on the current service type as follows:

- If the current service on the slot is MVIPOTS, MVICOIN, or MVIUVG, then modifying the service type using MVIPROV at the RFT immediately changes the current service to the new service type. **This change is immediately service affecting**. We recommend that you delete the existing service (at the switch) before reassigning its slot at the RFT.
- If the current service on the slot is anything other than MVIPOTS, MVICOIN, or MVIUVG, and you reassign the slot to MVIPOTS, MVICOIN, or MVIUVG using MVIPROV at the RFT, the AccessNode ignores this service change. Reprovisioning must be performed at the switch.

Automatic service assignments

The system automatically assigns service types as follows:

- If the ISDN is assigned at the GR-303 local digital switch (LDS), then it ignores the value from the MVIPROV CI and provisions ISDN.
- If a ground start service is provisioned from the GR-303 LDS, then it changes the service type from MVIPOTS to MVIUVG. It does not change MVICOIN services under similar circumstances. Changing the service back to loop start does not affect the service type, which remains MVIUVG.

Requirements

A GR-303 MVI host switch has been added to RFT data using the OPC Host Provisioning Manager tool.

Action

Step	Action
1	Log in to the network element user interface. *The Network Element Status screen appears.*
2	Start the MVIPROV CI tool by entering: **mviprov** ↵
3	View a list of GR-303 service options by entering: **help** ↵ *The list of options appears.*

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step	Action

4 Determine the subtask you wish to perform:

For instructions on		Go to
EDITSVC	Assigning services to RFT line card slots	step 5
EDITCRV	Modifying the call reference or IG values	step 8
QUERYPROV	Listing the RFT slot assignments	step 10
QUERYIDT	Listing host provisioning data	step 11
EDITIDT	Modifying MVI host IDT values	step 12
NILCRV	Unassigning call reference and IG values	step 14
QUERYNIL	Listing unassigned call reference and IG values	step 16
HELP	Listing the MVIPROV CI commands	step 17
QUIT	Exiting this procedure	step 30

Assigning services to RFT line card slots

5 Assign services to RFT line card slots by entering:

editsvc < edit method > < service type > ↵

where <edit method>		
is:	**all**	edits the service on all slots
or:	**slot <shelftype> <shelf #> <slot #> <circuit #>**	
	where:	
	<shelftype>	**CDS**, **ANX**, or **UE**
	<shelf #>	**1** to **7** for CDS, **1** to **28** for ANX, **1** to **7** for UE
	<slot #>	**1** to **96** for CDS, **1** to **48** for ANX, **1** to **16** for UE
	<circuit #>	**1** to **24** for UE, not applicable to CDS or ANX

—continued—

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step	Action

or:	**range <shelftype> <start shelf #> <start slot #> <start circuit #> <end shelf #> <end slot #> <end circuit #>** where: <shelftype> **CDS**, **ANX**, or **UE** <start shelf #> <end shelf #> **1** to **7** for CDS, **1** to **28** for ANX, **1** to **7** for UE <start slot #> <end slot #> **1** to **96** for CDS, **1** to **48** for ANX, **1** to **16** for UE <start circuit #> <end circuit #> **1** to **24** for UE, not applicable to CDS or ANX
	Note: The "start" number must be less than or equal to the corresponding "end" number.
<service type>	**mvipots**, **mviuvg**, or **mvicoin**
—end—	

The edit method and service type appear. Confirmation is requested.

6 Confirm or cancel the command by entering:

y ↵ or **n** ↵

A warning appears, and confirmation is requested.

7 Confirm or cancel the command by entering:

y ↵ or **n** ↵

If confirmed, the command is executed.

To perform another subtask, return to the table in step 4 on page 4-4.

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step	Action

Modifying the call reference or IG values

8 Modify call reference values by entering:

editcrv < edit method > < IG> ↵

where <edit method>		
is:	**slot <shelftype> <shelf #> <slot #> <circuit #> <CRV #>** where:	
	<shelftype>	**CDS**, **ANX**, or **UE**
	<shelf #>	**1** to **7** for CDS, **1** to **28** for ANX, **1** to **7** for UE
	<slot #>	**1** to **96** for CDS, **1** to **48** for ANX, **1** to **16** for UE
	<circuit #>	**1** to **24** for UE, not applicable to CDS or ANX
	<CRV #>	**1** to **2048**

—continued—

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step Action

or:	**range <shelftype> <start shelf #> <start slot #> <start circuit #> <end shelf #> <end slot #> <end circuit #> <start CRV> <end CRV>** where: <shelftype> **CDS**, **ANX**, or **UE** <start shelf #> <end shelf #> **1** to **7** for CDS, **1** to **28** for ANX, **1** to **7** for UE <start slot #> <end slot #> **1** to **96** for CDS, **1** to **48** for ANX, **1** to **16** for UE <start circuit #> <end circuit #> **1** to **24** for UE, not applicable to CDS or ANX <start CRV> <end CRV> **1** to **2048** (the number of CRVs specified must be equal to the number of lines specified)
	Note: The "start" number must be less than or equal to the corresponding "end" number.
<IG>	identifies the interface group (**1** to **5**)
—end—	

The edit method and IG appear. Confirmation is requested.

9 Confirm or cancel the command by entering:

y ↵ or **n** ↵

If confirmed, the command is executed.

To perform another subtask, return to the table in step 4 on page 4-4.

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step	Action

Listing the RFT slot assignments

10 Review RFT slot assignment information by entering:

queryprov < query method > ↵

where <query method>		
is:	**slot <shelftype> <shelf #> <slot #> <circuit #>** where:	
	<shelftype>	**CDS**, **ANX**, or **UE**
	<shelf #>	**1** to **7** for CDS, **1** to **28** for ANX, **1** to **7** for UE
	<slot #>	**1** to **96** for CDS, **1** to **48** for ANX, **1** to **16** for UE
	<circuit #>	**1** to **24** for UE, not applicable to CDS or ANX
or:	**shelf <shelftype> <shelf #>** where:	
	<shelftype>	**CDS**, **ANX**, or **UE**
	<shelf #>	**1** to **7** for CDS, **1** to **28** for ANX, **1** to **7** for UE
—continued—		

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step	Action	
	or:	**range <shelftype> <start shelf #> <start slot #> <start circuit #> <end shelf #> <end slot #> <end circuit #>** where: <shelftype> **CDS**, **ANX**, or **UE** <start shelf #> **1** to **7** for CDS, **1** to **28** for ANX, **1** to **7** for UE <end shelf #> <start slot #> **1** to **96** for CDS, **1** to **48** for ANX, **1** to **16** for UE <end slot #> <start circuit #> **1** to **24** for UE, not applicable to CDS or ANX <end circuit #>
		Note: The "start" number must be less than or equal to the corresponding "end" number.
	or:	**serv <service type>** where: <service type> **mvipots**, **mviuvg**, or **mvicoin**
	or:	**CRV <CRV #> <IG #>** where: <CRV #> **1** to **2048** <IG #> **1** to **5**
		—end—

The list of line card slots appears.

You can advance to the next screen of information by pressing **Return**.

To perform another subtask, return to the table in step 4 on page 4-4.

Note: An integrated services digital network (ISDN) service is listed as GR303_ISDN in the MVIPROV CI tool. In the Line Card Equipment screen, the service is designated as ISDN_U.

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step	Action
	Listing host provisioning data
11	View the host provisioning data by entering: **queryidt** ↵ *The host provisioning data appears.* To perform another subtask, return to the table in step 4 on page 4-4.
	Modifying MVI host IDT values
12	Modify MVI host IDT values by entering: **editidt <IG> <host IDT>** where <IG> the interface group (**1** to **5**) <host IDT> in the OPC database, the digital switches with lines to the RFT (**1** to **32767**) *The edit method and Host IDT appear. Confirmation is requested.*
13	Confirm or cancel the command by entering: **y** ↵ or **n** ↵ *If confirmed, the command is executed.* To perform another subtask, return to the table in step 4 on page 4-4.

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step	Action

Unassigning call reference and IG values

14 Unassign the call reference values by entering:

nilcrv < edit method > ↵

where <edit method>	
is:	**slot <shelftype> <shelf #> <slot #> <circuit #>** where: <shelftype> **CDS**, **ANX**, or **UE** <shelf #> **1** to **7** for CDS, **1** to **28** for ANX, **1** to **7** for UE <slot #> **1** to **96** for CDS, **1** to **48** for ANX, **1** to **16** for UE <circuit #> **1** to **24** for UE, not applicable to CDS or ANX
or:	**range <shelftype> <start shelf #> <start slot #> <start circuit #> <end shelf #> <end slot #> <end circuit #>** where: <shelftype> **CDS**, **ANX**, or **UE** <start shelf #> <end shelf #> **1** to **7** for CDS, **1** to **28** for ANX, **1** to **7** for UE <start slot #> <end slot #> **1** to **96** for CDS, **1** to **48** for ANX, **1** to **16** for UE <start circuit #> <end circuit #> **1** to **24** for UE, not applicable to CDS or ANX
	Note: The “start” number must be less than or equal to the corresponding “end” number.

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step Action

where <edit method>	
is:	**CRV <CRV #> <IG #>** where: <CRV #> **1** to **2048** <IG #> **1** to **5**
or:	**CRV_range <start CRV #> <end CRV #> <IG #>** where: <start CRV #> **1** to **2048** <end CRV #> <IG #> **1** to **5**
	Note: The "start" number must be less than or equal to the corresponding "end" number.

The edit method and IG appear. Confirmation is requested.

15 Confirm or cancel the command by entering:

y ↵ or **n** ↵

If confirmed, the command is executed.

To perform another subtask, return to the table in step 4 on page 4-4.

Listing unassigned call reference and IG values

16 List the call reference values by entering:

querynil ↵

The list of unassigned CRVs appears. You can advance to the next screen of information by pressing Return.

To perform another subtask, return to the table in step 4 on page 4-4.

Listing the MVIPROV CI commands

17 View the list of MVIPROV CI commands by entering:

help ↵

The list of MVIPROV CI commands appears.

To perform another subtask, return to the table in step 4 on page 4-4.

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step Action

Listing the event reporting commands

18 Display the Event Reporting CI commands by entering:

eventrep ↵ **help** ↵

The list of commands appears

19 Determine the subtask you wish to perform from the Event Reporting CI menu:

For instructions on		Go to
SVCALM	Changing the service alarm setting	step 20
SVCALMSTAT	Viewing the service alarm setting	step 21
COHALM	Changing the status of the change overhead bit event report	step 22
COHALMSTAT	Viewing the status of the change overhead bit event report	step 23
MVIALARM	Changing the MVI alarm settings	step 24
MVIALARMSTAT	Viewing the MVI alarm settings	step 25
SETTHRES	Setting or disabling the traffic alarm thresholds	step 26
GETTHRES	Viewing the status of the traffic alarm thresholds	step 28
HELP	Listing the Event Reporting CI commands	step 29
QUIT	Exiting this procedure	step 30

Changing the service alarm setting

20 Enable or disable the service alarm by entering from the Event Reporting CI menu:

svcalm ↵ and then **enable** ↵ or **disable** ↵

If confirmed, the command is executed.

To perform another subtask, return to the table in step 19 on page 4-13.

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step	Action

Viewing the service alarm setting

21 View the status of the service alarm by entering from the Event Reporting CI menu:

svcalmstat ↵

The current service alarm setting displays (enabled or disabled)./

To perform another subtask, return to the table in step 19 on page 4-13.

Changing the status of the change overhead bit event report

22 Enable or disable the change overhead bit event report by entering from the Event Reporting CI menu:

cohalm ↵ and then **enable** ↵ or **disable** ↵

If confirmed, the command is executed.

To perform another subtask, return to the table in step 19 on page 4-13.

Viewing the status of the change overhead bit event report

23 View the status of the change overhead bit event report by entering from the Event Reporting CI menu:

cohalmstat ↵

The current change overhead bit event report setting displays (enabled or disabled).

To perform another subtask, return to the table in step 19 on page 4-13.

Changing the MVI alarm settings

24 Enable or disable the MVI alarm by entering from the Event Reporting CI menu:

mvialarm <IG> ↵ and then **enable** ↵ or **disable** ↵

where

<IG> the interface group (**1** to **5**)

If confirmed, the command is executed.

To perform another subtask, return to the table in step 19 on page 4-13.

Viewing the MVI alarm settings

25 View the status of the MVI alarm by entering from the Event Reporting CI menu:

mvialarmstat ↵

A list of MVI alarm settings for IGs 1 through 5 (enabled or disabled) appears.

To perform another subtask, return to the table in step 19 on page 4-13.

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step	Action

Setting or disabling the traffic alarm thresholds

26 Set high or low traffic alarm thresholds by entering from the Event Reporting CI menu:

setthres <IG> ↵ <threshold type> ↵ <percentage threshold> ↵

where

<IG>	the interface group (**1** to **5**)
<threshold type>	high or low threshold (**hi** or **lo**)
<percentage threshold>	**0** to **100**

If confirmed, the command is executed.

Note: Threshold settings you enter represent the percentage of DS1s provisioned.

27 Disable traffic alarm reporting by performing step 26 and entering **0** ↵ for both high and low threshold percentages.

If confirmed, traffic alarm reporting is disabled for the IG selected.

To perform another subtask, return to the table in step 19 on page 4-13.

Viewing the status of the traffic alarm thresholds

28 View the status of the high and low threshold settings for all IGs (1 through 5) by entering from the Event Reporting CI menu:

getthres ↵

A list of the high and low threshold settings for IGs 1 through 5 appears.

To perform another subtask, return to the table in step 19 on page 4-13.

Listing the Event Reporting CI commands

29 View the list of Event Reporting CI commands by entering from the Event Reporting CI menu:

help ↵

The list of Event Reporting CI commands appears.

To perform another subtask, return to the table in step 19 on page 4-13.

—continued—

Procedure 4-1 (continued)
Provisioning GR-303 MVI line card services

Step	Action
	Exiting this procedure
30	Close the Event Reporting CI tool and the MVIPROV CI tool by entering twice: **quit** ↵ *The CI prompt appears.*
31	Return to the Network Element Status screen by entering: **fwp** ↵ *The Network Element Status screen appears.*

—end—

Examples of GR-303 MVI provisioning for DMS SuperNode

Provision GR-303 MVI services in the same way as GR-303 DMS services. In the RDT inventory table RDTINV, define the network element as **gentmc** (generic TMC) instead of **rft**. For example:

For GR-303 MVI:

```
ne35 1 0 35 sma 1 35 ne35 $ $ gentmc 2 671 n y $ (1 13) (2 14) $
n stdln s $ (network_ID 1) (system_ID 1)
(networkelement_ID 35) (equipment_ID 1) $ Y ↵
```

For GR-303 DMS:

```
ne35 1 0 34 sma 5 35 ne35 $ $ rft 1 7 1 96 y $ (1 4) (2 5) $
n stdln s $ (network_ID 1) (system_ID 1)
(networkelement_ID 35) (equipment_ID 1) $ ↵
```

Use the line inventory table LNINV to associate an RDTLSG service with the call reference value (CRV). In the following example, CRV# 610 is filled in the shelf and slot number fields, as 6 10:

```
add ne35 1 0 6 10 rdtlsg stdln hasu n nl n nil ↵
```

The entered data is displayed in the LNINV table as follows:

```
LEN               CARDCODE  PADGRP  STATUS  GND BNV MNO  CARDINFO
NE35 01 0 06 10   RDTLSG    STDLN   HASU    N   NL  N    NIL
```

For GR-303 MVI, **06 10** in the data above refers to absolute line card # 610. For GR-303 DMS, **06 10** refers to shelf 6 slot 10. The status changes to **WORKING** when you assign the directory number.

Use the service order tool SERVORD to assign a directory number to the service. For example:

```
new $ 4351610 1fr 0 ne35 1 0 6 10 dgt $ ↵
```

Procedure 4-2
Provisioning a 3DS0 ISDN or IDSL circuit

Use this procedure to provision a 3DS0 ISDN or IDSL circuit using Transaction Language 1 (TL1) commands. You can preprovision this service for later use with one NT4K67AC (Rel 20) line card.

See *TL1 Interface Description*, 323-3001-190, for more information on TL1 commands.

Action

Step	Action
1	Log in to the OPC and open the NE Login Manager tool. For directions, see *OPC User Interface Description,* 323-3001-301, in *Operations, Administration and Provisioning*, Volume 4A.
2	Log in to the network element. *The Network Element User Interface (NEUI) screen appears.*
3	At the prompt, enter the following: **quit all** ↵ *The CI prompt appears.*
4	Open the TL1CI tool by entering: **tl1ci** ↵ *The CI tool loads.*
5	Enter the TL1 commands needed for the type of provisioning you require. See Table 4-1.

Table 4-1
TL1 commands

To do this task	go to
Provision a 3DS0 ISDN or IDSL circuit	step 6
Place a 3DS0 ISDN or IDSL circuit in service or out of service	step 10
Query a 3DS0 ISDN or IDSL circuit	step 12
Delete a 3DS0 ISDN or IDSL circuit	step 15

—continued—

Procedure 4-2 (continued)
Provisioning a 3DS0 ISDN or IDSL circuit

Step	Action

Provisioning a 3DS0 ISDN or IDSL circuit

6 Provision the DS0 line termination for the 3DS0 ISDN or IDSL circuit:

```
ENT-T0:<TID>:<AID>:<CTAG>:::<Fblock>:<state>;
```

where

<GSFN>	Service Type: 3DS0ISDN or IDSL
<TID>	Target Identifier. Denotes the NE targeted by the request.
<AID>	Access Identifier. Enter using the following format: RT1-<xx>-<yy>
<CTAG>	Correlation Tag. A tag or series of one to six alphanumeric characters that are used to identify each transaction.
<Fblock>	Keyword parameter specifying the special service being provisioned.
<state>	The new service state for the channel. Enter **IS** for in-service or **OOS** for out-of-service.

Example syntax:

ENT-T0:NE16:RT1-VM1-10:TAG:::GSFN=3DS0ISDN, LOOPTYPE=2W:IS;

Example response:

VM19-NE16-ANX1 99-03-11 16:14:09

M TAG COMPLD

7 Enter the cross-connect termination for the first channel of the 3DS0 ISDN or IDSL circuit. Use the following table to determine the provisioning sequence for the channels:

If the circuit is	Then provision the channels in this order
3DS0 ISDN	D, B1, B2
IDSL	B1, B2

—continued—

Procedure 4-2 (continued)
Provisioning a 3DS0 ISDN or IDSL circuit

Step	Action

```
ENT-CRS-T0:<TID>:<AID>:<CTAG>:::CTYPE=<CTYPE>;
```

where

<TID> Target identifier. Denotes the NE targeted by the request.

<AID> Access identifier. Enter using the following format:

<channel spec>,<line card spec>

where channel spec is:
Point-to-point = CO1-STx-y-z
(x = tic port, y= tic subport & z= channel)
ANX = CO1-CE1-a-b-c
(a = DS1, b = Port, & c = channel)

where line card spec is:
ANX = RT1-VMxx-yy
(xx = VM number, yy = line card slot)

CDS = RT1-xx-yy
(xx = shelf number, yy = line card slot)

<CTAG> Correlation tag. A tag or series of one to six alphanumeric characters that are used to identify each transaction.

<CTYPE> Channel type: D, B1, or B2 for 3DS0 ISDN; B1 or B2 for IDSL.

Example syntax:

for 3DS0 ISDN:
ENT-CRS-T0:NE16:RT1-VM1-10,CO1-CE1-1-12-4:123:::CTYPE=D;

for IDSL:
ENT-CRS-T0:NE16:RT1-VM1-10,CO1-CE1-1-12-4:123:::CTYPE=B1;

Example response:

NE16 99-03-11 16:18:49

M TAG COMPLD

8 Enter the cross-connect termination for the two remaining channels by repeating step 7.

9 Return to step 5 or end procedure.

—continued—

Procedure 4-2 (continued)
Provisioning a 3DS0 ISDN or IDSL circuit

Step	Action

Placing a 3DS0 ISDN or IDSL circuit in service or out of service

10 Place the 3DS0 ISDN or IDSL circuit in service or out of service:

```
ED-T0:<TID>:<AID>:<CTAG>:::GSFN=<GSFN>,LOOPTYPE=2W:
 <state>;
```

where

<GSFN>	Service Type. 3DS0ISDN or IDSL.
<TID>	Target Identifier. Denotes the NE targeted by the request.
<AID>	Access Identifier. Enter using the following format: <hostname>-<CDS or VM shelf number>-<line card slot>
<CTAG>	Correlation Tag. A tag or series of one to six alphanumeric characters that are used to identify each transaction.
<state>	The new service state for the channel. Enter **IS** for in-service or **OOS** for out-of-service.

11 Return to step 5 or end the procedure.

Query the parameters of a 3DS0 ISDN or IDSL circuit

12 Retrieve the cross-connect query for the 3DS0 ISDN or IDSL circuit:

```
RTRV-CRS-T0:<TID>:<AID>:<CTAG>;
```

where

<TID>	Target identifier. Denotes the NE targeted by the request.
<AID>	Access identifier. Enter using one of the following three formats: RT1-x-y RT1-x-y&&RT1-z-a ALL
<CTAG>	Correlation tag. A tag or series of one to six alphanumeric characters that are used to identify each transaction.

—continued—

Procedure 4-2 (continued)
Provisioning a 3DS0 ISDN or IDSL circuit

Step	Action

13 Retrieve the parameters that you have provisioned:

```
RTRV-T0:<TID>:<AID>:<CTAG>;
```

where

<TID> Target identifier. Denotes the NE targeted by the request.

<AID> Access identifier. Enter using the following format:

RT1-x-y (single)

RT1-x-y&&RT1-z-a (range)

ALL

<CTAG> Correlation tag. A tag or series of one to six alphanumeric characters that are used to identify each transaction.

Example syntax:

RTRV-T0:NE16:RT1-VM1-10:TAG; IP TAG

Example response:

VM19-NE16-ANX1 99-03-11 16:20:25

M TAG COMPLD

14 Return to step 5 or end the procedure.

Deleting a 3DS0 ISDN or IDSL circuit

15 Delete the cross-connect termination for the first channel of the circuit. Use the following table to determine the provisioning sequence for the channels:

If the circuit is	Then deprovision the channels in this order
3DS0 ISDN	B1, B2, D
IDSL	B1, B2

—continued—

Procedure 4-2 (continued)
Provisioning a 3DS0 ISDN or IDSL circuit

Step	Action

`DLT-CRS-T0:<TID>:<AID>:<CTAG>:::CTYPE=<CTYPE>;`

where

<TID> Target Identifier. Denotes the NE targeted by the request.

<AID> Access Identifier. Enter using the following format:

<hostname>-<CDS or VM shelf number>-<line card slot>,<CO side AID>

<CTAG> Correlation Tag. A tag or series of one to six alphanumeric characters that are used to identify each transaction.

<CTYPE> Channel Type. B1, B2, or D for 3DS0 ISDN; B1 or B2 for IDSL.

16 Delete the cross-connect termination for the two remaining channels by repeating step 15.

17 Delete the DS0 line termination for the 3DS0 ISDN or IDSL circuit:

`DLT-T0:<TID>:<AID>:<CTAG>;`

where

<TID> Target Identifier. Denotes the NE targeted by the request.

<AID> Access Identifier. Enter using the following format:
ANX = RT1-VMxx-yy
(xx = VM number, yy = line card slot)

CDS = RT1-xx-yy
(xx = shelf number, yy = line card slot)

<CTAG> Correlation Tag. A tag or series of one to six alphanumeric characters that are used to identify each transaction.

18 Return to step 5 or end procedure.

—end—

Setting service-level and line-card level logs and alarms

The Alarm Provisioning Manager is found in the Network Admin and Provisioning Admin toolsets.

The Alarm Provisioning Manager tool allows you to set line card trouble events as logs or alarms. When you set an event as an alarm, you can define the alarm severity level. The scope of affected log/alarm settings can be a group of network elements (NE) within the operations controller (OPC) span of control, a single NE, or a line card on a NE.

For further information on the Alarm Provisioning Manager tool, see the description in *OPC User Interface Description*, 323-3001-301, in *Operations, Administration, and Procedures*, Volume 4A.

Chapter task list

This chapter includes the following tasks. If you cannot successfully complete a procedure, contact your next level of support.

Procedure	Topic	See
5-1	Setting service-level logs and alarms	page 5-3
5-2	Setting line-card level logs and alarms	page 5-7
5-3	Enabling or disabling line card alarms	page 5-11
5-4	Enabling or disabling ISDN alarms	page 5-14

Restrictions and limitations

Observe the following restrictions and limitations when setting service-level and line-card level logs and alarms.

- Only one instance of the Alarm Provisioning Manager can be opened.
- You cannot open the Alarm Provisioning Manager from the backup OPC.
- Any line-card level log or alarm settings are automatically cleared when the line card is deprovisioned. If a setting other than the default or service-level setting is required, the line-card level log or alarm setting must be reprovisioned when the line card is reprovisioned with a new service.

Procedure 5-1
Setting service-level logs and alarms

Use this procedure to set service-level trouble events as either logs or alarms. If you select the alarm option, then you can set the severity of the alarm. Service-level trouble events can be set either for a group of network elements (NE) or a single NE within the operations controller (OPC) span of control.

Note 1: Line-card level settings override service-level settings.
Note 2: A default line-card level setting is not available. If a line-card level setting does not exist, the service-level is used.

Requirements

Before proceeding, the following requirements must be met:

- Have a userID and password that allow you to access the OPC and to open the Alarm Provisioning Manager tool.
- Read the command conventions for the interface you are using (CMT or graphical) in *OPC User Interface Description*, 323-3001-301, in *Operations, Administration, and Procedures*, Volume 4A.

Action

Step	Action
1	Log in to the OPC and open the Alarm Provisioning Manager tool. *The Alarm Provisioning Manager main window appears.*
2	Display the Line card alarm provisioning dialog by pressing **Ctrl_A** (or Keypad **0**). *The Line card alarm provisioning dialog appears.*
3	Tab to the Scope of provisioning field and display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The chooser menu appears.*
4	Move to the Service level option, then press **Space** (or Keypad **0**). *The Service level option appears in the Scope of provisioning field.*
5	Select the **OK** button by pressing **Ctrl_A** (or Keypad **0**). *The Service level provisioning dialog appears.*

—continued—

Procedure 5-1 (continued)
Setting service-level logs and alarms

Step	Action

6 Move to the network element list.

If you want to	Then go to
view the current setting of an NE	step 7
clear the service-level log/alarm setting list	step 10
set a service-level trouble event for an NE	step 14
exit the tool	step 21

7 Move to the NE required, then press **Ctrl_A** (or Keypad **0**).

The NE is highlighted.

8 Tab to the Display Setting field, then press **Ctrl_A** (or Keypad **0**).

A confirmation dialog appears.

9 Select the **OK** button by pressing **Ctrl_A** (or Keypad **0**).

The log/alarm setting list appears showing the current setting associated with each service type.

Go to step 6.

10 Tab to the service-level log/alarm setting list. Use the arrow keys to scroll through the list, if required.

11 Display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). Move to Deselect All, then press **Space** (or Keypad **0**).

The log/alarm list clears.

12 Move to the NE required, then press **Ctrl_A** (or Keypad **0**).

13 Tab to the Display Setting field, then press **Ctrl_A** (or Keypad **0**).

A dialog appears confirming the settings.

Go to step 6.

14 Tab to the Service type field, then press **Ctrl_A** (or Keypad **0**).

15 Select the service type you want by pressing **Ctrl_A** (or Keypad **0**).

The service is selected.

16 Display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**).

The chooser menu appears.

—continued—

Procedure 5-1 (continued)
Setting service-level logs and alarms

Step	Action

17 Select one of the following from the chooser menu.

If you want to	Then
Set as default	1 Select the Set as default option by pressing **Space** (or Keypad **0**). *Default appears in the Log/Alarm field.* 2 Go to step 18.
Set as log	1 Select the Set as log option by pressing **Space** (or Keypad **0**). *Log appears in the Log/Alarm field.* 2 Go to step 18.
Set as alarm	1 Select the Set as alarm option by pressing **Space** (or Keypad **0**). *The severity chooser menu appears.* 2 Select the severity by pressing **Space** (or Keypad **0**). *Alarm appears in the Log/Alarm field, and the selected severity level appears in the Severity field.* 3 Go to step 18.

18 Select one of the following:

If you want to	Then go to
exit the procedure	step 20
set another service-level log/alarm for the same NE	step 14
set another service-level log/alarm for a different NE	step 19

19 Select the **Apply** button by pressing **Ctrl_A** (or Keypad **0**).

The LC alarm provisioning information is transferred to the selected NE(s). A confirmation dialog appears.

20 Select the **OK** button by pressing **Ctrl_A** (or Keypad **0**).

The line card alarm provisioning dialog appears.

If you want to	Then go to
exit the tool	step 21
set another log/alarm	step 6

—continued—

Procedure 5-1 (continued)
Setting service-level logs and alarms

Step	Action
21	To exit the tool: **a.** Select the Service level provisioning screen **Cancel** button by pressing **Ctrl_A** (or Keypad **0**). *The LC alarm provisioning screen appears.* **b.** Select the LC alarm provisioning screen **Cancel** button by pressing **Ctrl_A** (or Keypad **0**). *The Alarm Provisioning manager window appears.* **c.** Display the window menu by pressing **Ctrl_L W** (or Keypad **6**). *The window menu appears.* **d.** Select the Exit command by pressing **Space** (or Keypad **0**). *The tool disappears.* **—end—**

Procedure 5-2
Setting line-card level logs and alarms

Use this procedure to set line-card level trouble events as either logs or alarms. If you select the alarm option, then you can set the severity of the alarm.

Note 1: Line-card level alarm provisioning means that the logs/alarms are set on a slot per slot basis.

Note 2: Line-card level settings override service-level settings.

Note 3: A default line-card level setting does not exist. If a line-card level setting does not exist, the service-level is used.

Requirements

Before proceeding, the following requirements must be met:

- Have a userID and password that allow you to access the operations controller (OPC) and to open the Alarm Provisioning Manager tool.
- Read the command conventions for the interface you are using (CMT or graphical) in *OPC User Interface Description*, 323-3001-301, in *Operations, Administration, and Provisioning*, Volume 4A.

Action

Step	Action
1	Log in to the OPC and open the Alarm Provisioning Manager tool. *The Alarm Provisioning Manager main window appears.*
2	Display the Line card alarm provisioning dialog by pressing **Ctrl_A** (or Keypad **0**). *The Line card alarm provisioning dialog appears.*
3	Tab to the Scope of provisioning field and display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The chooser menu appears.*
4	Move to the Line card level option, then press **Space** (or Keypad **0**). *The Line card option appears in the field.*
5	Tab to the **OK** button, then press **Ctrl_A** (or Keypad **0**). *The Line card level LC alarm provisioning screen appears.*
6	Tab to the NE field and display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The NE chooser menu appears, listing all network elements (NEs) in the OPC span of control.*

—continued—

Procedure 5-2 (continued)
Setting line-card level logs and alarms

Step	Action
7	Move to the required NE, then press **Space** (or Keypad **0**). *The selected NE appears in the NE field.*
8	Tab to the CD shelf field and display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The CD shelf chooser menu appears. It lists available CD shelves.*
9	Select the required CD shelf number by pressing **Space** (or Keypad **0**). *The CD shelf number appears in the CD shelf field.*
10	Tab to the Slot number field and enter the number of the slot.

If you	Then
want to view the current settings	tab to the **Current setting** button, then press **Ctrl_A** (or Keypad **0**). Go to step 11.
do not want to view the current settings	step 11

11	Tab to the Log/Alarm field and display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The Log/Alarm field chooser menu appears.*

—continued—

Procedure 5-2 (continued)
Setting line-card level logs and alarms

Step	Action
12	Select one of the following from the chooser menu.

If you want to select	Then
Reset to service level	1 Select the Reset to service level option by pressing **Space** (or Keypad **0**). *The Reset to service level option appears in the Log/Alarm field.* 2 Select the **Apply** button by pressing **Ctrl_A** (or Keypad **0**). *A completion dialog appears, indicating that the operation completed successfully.* 3 Select the **OK** button by pressing **Ctrl_A** (or Keypad **0**). *The line card alarm provisioning dialog appears.* 4 Go to step 13.
Log	1 Select the Log option by pressing **Space** (or Keypad **0**). *The Log option appears in the Log/Alarm field.* 2 Select the **Apply** button by pressing **Ctrl_A** (or Keypad **0**). *A completion dialog appears, indicating that the operation completed successfully.* 3 Select the **OK** button by pressing **Ctrl_A** (or Keypad **0**). *The line card alarm provisioning dialog appears.* 4 Go to step 13.
Alarm	1 Select the Alarm option by pressing **Space** (or Keypad **0**). *The Alarm option appears in the Log/Alarm field.* 2 Tab to the Severity button and display the chooser menu by pressing **Ctrl_L /** (or Keypad **3**). *The severity field chooser menu appears.* 3 Select the severity by pressing **Space** (or Keypad **0**). *The selected severity level appears in the Severity field.* 4 Select the **Apply** button by pressing **Ctrl_A** (or Keypad **0**). *A completion dialog appears, indicating that the operation completed successfully.* 5 Select the **OK** button by pressing **Ctrl_A** (or Keypad **0**). *The line card alarm provisioning dialog appears.* 6 Go to step 13.

13 Select one of the following.

If you want to	Then go to
exit the tool	step 14
set another LC level log/alarm	step 6

—continued—

Procedure 5-2 (continued)
Setting line-card level logs and alarms

Step	Action
14	To exit the tool: **a.** Select the LC level provisioning screen **Cancel** button by pressing **Ctrl_A** (or Keypad **0**). *The LC alarm provisioning screen appears.* **b.** Select the LC alarm provisioning screen **Cancel** button by pressing **Ctrl_A** (or Keypad **0**). *The Alarm Provisioning manager window appears.* **c.** Display the window menu by pressing **Ctrl_L W** (or Keypad **6**). *The window menu appears.* **d.** Select the Exit command by pressing **Space** (or Keypad **0**). *The tool disappears.* **—end—**

Procedure 5-3
Enabling or disabling line card alarms

Use this procedure to enable or disable (inhibit) the reporting of line card alarms for specific line cards. Disabling a line card alarm prevents raising the alarm at the next occurrence of the trouble event, but does not clear an existing alarm.

For example, you can temporarily disable alarms to prevent raising a line card missing alarm when you remove a line card on an in-service line termination. Alternatively, you could place the line termination out of service to avoid raising this alarm or to clear an existing instance of this alarm. In this case, only a log report is issued when the line card is removed.

The LC Equip Alarm Provisioning screen in the network element user interface (NEUI) is accessible only if a line card is provisioned to report events as alarms, not logs. Use the operations controller (OPC) tool to provision line card events as logs or alarms and to provision the severity of each line card alarm.

Requirements

Before proceeding, the following requirements must be met:

- Have a user ID and password that allow you to access the OPC and to open the Alarm Provisioning Manager tool.
- Read the command conventions in *Network Element User Interface Description*, 323-3001-300, in *Operations, Administration, and Provisioning*, Volume 4A.

—continued—

Procedure 5-3 (continued)
Enabling or disabling line card alarms

Action

Step	Action
	Note 1: The LC Equip Alarm Provisioning screen is accessible only if a line card is provisioned to report events as alarms, not logs. ***Note 2:*** To modify alarm reporting on a multi-slot line card, display the master slot for the service, not a slave slot.
1	From the Network Element Status screen, display the LC Equip Alarm Provisioning screen, by entering: **eq lc <cds #> <slot #>** ↵ **almprov** ↵ where < cds # > **1** to **7**; copper distribution shelf number < slot # > **1** to **96**; line card slot number ***Note:*** For AccessNode Express, to display the LC Equip Alarm Provisioning screen, enter: **eq anxlc <vm #> <slot #>** ↵ **almprov** ↵ where < vm # > **1** to **28**; ANX shelf number < slot # > **1** to **48**; line card slot number *The LC Equip Alarm Provisioning screen appears. It shows the alarm points for the line card, and the reporting status of each.* ***Note:*** The EditStat command in the LC Equip Alarm Provisioning screen is accessible only with the appropriate level userID and password. **—continued—**

Procedure 5-3 (continued)
Enabling or disabling line card alarms

Step	Action

2 Set individual alarm points to On or Off by entering:

editstat <alarm point #> <on|off> ↵

where

<alarm point #> the alarm point number is to the left of the alarm point description, as listed in the following table

<on|off> On enables alarm reporting

Off disables (inhibits) alarm reporting when an alarm condition occurs

Number	Alarm point description	Default
1	Line card fail	On
2	Line card missing	On

If you set an alarm point to Off, you are prompted for confirmation. Enter:

y ↵

The new alarm point setting appears in reverse video.

Repeat this step to modify alarm generation for other alarm points on this line card.

3 To change alarm point settings on another line card, enter:

select <cds #> <slot #> ↵

where

<cds #> the number of the copper distribution shelf (CDS) where you are changing the alarm point settings

<slot #> the number of the slot where you are changing the alarm point settings

The LC Equip Alarm Provisioning screen appears for the selected line card.

4 Repeat step 2 to modify alarm generation for the selected line card.

5 Exit the LC Equip Alarm Provisioning screen by entering:

fwpui ↵

The Network Element Status screen appears.

—end—

Procedure 5-4
Enabling or disabling ISDN alarms

Use this procedure to enable or disable the generation of a minor alarm for an integrated services digital network (ISDN) service type for all ISDN circuits in the network element (NE).

Note: If you use this tool to disable ISDN alarms, it does not clear existing ISDN NT1 alarms. This tool disables new ISDN alarms after the NT1 is placed on line.

Requirements

You must be familiar with the MAPCI-type network element user interface (NEUI).

Action

Step	Action

1 Log into the NEUI at the remote fiber terminal (RFT).

2 Enter:

SMCSTMCI ↵

The SMCSTMCI command interpreter (CI) is invoked.

3 Select one of the following actions and proceed.

If you want to	Then enter
view the current ISDN LOS Event Notification setting	view_isdn_los_status ↵
enable ISDN alarms	change_isdn_los_status enable ↵
disable ISDN alarms	change_isdn_los_status disable ↵
exit the SMCSTMCI command interpreter	quit ↵

—end—

Appendix A: DMS Access translation table

Table 6-1 shows how AccessNode lines translate to lines on the DMS-10NA switch. Use this information when you provision, maintain, or post lines from an AccessNode or a DMS-10NA.

Table 6-1
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
1	1	1	1	0	0
1	2	1	1	0	1
1	3	1	1	0	2
1	4	1	1	0	3
1	5	1	1	0	4
1	6	1	1	0	5
1	7	1	1	0	6
1	8	1	1	0	7
1	9	1	1	0	8
1	10	1	1	0	9
1	11	1	1	0	10
1	12	1	1	0	11
1	13	1	1	0	12

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
1	14	1	1	0	13
1	15	1	1	0	14
1	16	1	1	0	15
1	17	1	1	0	16
1	18	1	1	0	17
1	19	1	1	0	18
1	20	1	1	0	19
1	21	1	1	0	20
1	22	1	1	0	21
1	23	1	1	0	22
1	24	1	1	0	23
1	25	1	1	0	24
1	26	1	1	0	25
1	27	1	1	0	26
1	28	1	1	0	27
1	29	1	1	0	28
1	30	1	1	0	29
1	31	1	1	0	30
1	32	1	1	0	31
1	33	1	1	1	0
1	34	1	1	1	1
1	35	1	1	1	2
1	36	1	1	1	3

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
1	37	1	1	1	4
1	38	1	1	1	5
1	39	1	1	1	6
1	40	1	1	1	7
1	41	1	1	1	8
1	42	1	1	1	9
1	43	1	1	1	10
1	44	1	1	1	11
1	45	1	1	1	12
1	46	1	1	1	13
1	47	1	1	1	14
1	48	1	1	1	15
1	49	1	1	1	16
1	50	1	1	1	17
1	51	1	1	1	18
1	52	1	1	1	19
1	53	1	1	1	20
1	54	1	1	1	21
1	55	1	1	1	22
1	56	1	1	1	23
1	57	1	1	1	24
1	58	1	1	1	25
1	59	1	1	1	26

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
1	60	1	1	1	27
1	61	1	1	1	28
1	62	1	1	1	29
1	63	1	1	1	30
1	64	1	1	1	31
1	65	1	1	2	0
1	66	1	1	2	1
1	67	1	1	2	2
1	68	1	1	2	3
1	69	1	1	2	4
1	70	1	1	2	5
1	71	1	1	2	6
1	72	1	1	2	7
1	73	1	1	2	8
1	74	1	1	2	9
1	75	1	1	2	10
1	76	1	1	2	11
1	77	1	1	2	12
1	78	1	1	2	13
1	79	1	1	2	14
1	80	1	1	2	15
1	81	1	1	2	16
1	82	1	1	2	17

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
1	83	1	1	2	18
1	84	1	1	2	19
1	85	1	1	2	20
1	86	1	1	2	21
1	87	1	1	2	22
1	88	1	1	2	23
1	89	1	1	2	24
1	90	1	1	2	25
1	91	1	1	2	26
1	92	1	1	2	27
1	93	1	1	2	28
1	94	1	1	2	29
1	95	1	1	2	30
1	96	1	1	2	31
2	1	1	1	3	0
2	2	1	1	3	1
2	3	1	1	3	2
2	4	1	1	3	3
2	5	1	1	3	4
2	6	1	1	3	5
2	7	1	1	3	6
2	8	1	1	3	7
2	9	1	1	3	8

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
2	10	1	1	3	9
2	11	1	1	3	10
2	12	1	1	3	11
2	13	1	1	3	12
2	14	1	1	3	13
2	15	1	1	3	14
2	16	1	1	3	15
2	17	1	1	3	16
2	18	1	1	3	17
2	19	1	1	3	18
2	20	1	1	3	19
2	21	1	1	3	20
2	22	1	1	3	21
2	23	1	1	3	22
2	24	1	1	3	23
2	25	1	1	3	24
2	26	1	1	3	25
2	27	1	1	3	26
2	28	1	1	3	27
2	29	1	1	3	28
2	30	1	1	3	29
2	31	1	1	3	30
2	32	1	1	3	31

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
2	33	1	1	4	0
2	34	1	1	4	1
2	35	1	1	4	2
2	36	1	1	4	3
2	37	1	1	4	4
2	38	1	1	4	5
2	39	1	1	4	6
2	40	1	1	4	7
2	41	1	1	4	8
2	42	1	1	4	9
2	43	1	1	4	10
2	44	1	1	4	11
2	45	1	1	4	12
2	46	1	1	4	13
2	47	1	1	4	14
2	48	1	1	4	15
2	49	1	1	4	16
2	50	1	1	4	17
2	51	1	1	4	18
2	52	1	1	4	19
2	53	1	1	4	20
2	54	1	1	4	21
2	55	1	1	4	22

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
2	56	1	1	4	23
2	57	1	1	4	24
2	58	1	1	4	25
2	59	1	1	4	26
2	60	1	1	4	27
2	61	1	1	4	28
2	62	1	1	4	29
2	63	1	1	4	30
2	64	1	1	4	31
2	65	1	1	5	0
2	66	1	1	5	1
2	67	1	1	5	2
2	68	1	1	5	3
2	69	1	1	5	4
2	70	1	1	5	5
2	71	1	1	5	6
2	72	1	1	5	7
2	73	1	1	5	8
2	74	1	1	5	9
2	75	1	1	5	10
2	76	1	1	5	11
2	77	1	1	5	12
2	78	1	1	5	13

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
2	79	1	1	5	14
2	80	1	1	5	15
2	81	1	1	5	16
2	82	1	1	5	17
2	83	1	1	5	18
2	84	1	1	5	19
2	85	1	1	5	20
2	86	1	1	5	21
2	87	1	1	5	22
2	88	1	1	5	23
2	89	1	1	5	24
2	90	1	1	5	25
2	91	1	1	5	26
2	92	1	1	5	27
2	93	1	1	5	28
2	94	1	1	5	29
2	95	1	1	5	30
2	96	1	1	5	31
3	1	1	1	6	0
3	2	1	1	6	1
3	3	1	1	6	2
3	4	1	1	6	3
3	5	1	1	6	4

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
3	6	1	1	6	5
3	7	1	1	6	6
3	8	1	1	6	7
3	9	1	1	6	8
3	10	1	1	6	9
3	11	1	1	6	10
3	12	1	1	6	11
3	13	1	1	6	12
3	14	1	1	6	13
3	15	1	1	6	14
3	16	1	1	6	15
3	17	1	1	6	16
3	18	1	1	6	17
3	19	1	1	6	18
3	20	1	1	6	19
3	21	1	1	6	20
3	22	1	1	6	21
3	23	1	1	6	22
3	24	1	1	6	23
3	25	1	1	6	24
3	26	1	1	6	25
3	27	1	1	6	26
3	28	1	1	6	27

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
3	29	1	1	6	28
3	30	1	1	6	29
3	31	1	1	6	30
3	32	1	1	6	31
3	33	1	1	7	0
3	34	1	1	7	1
3	35	1	1	7	2
3	36	1	1	7	3
3	37	1	1	7	4
3	38	1	1	7	5
3	39	1	1	7	6
3	40	1	1	7	7
3	41	1	1	7	8
3	42	1	1	7	9
3	43	1	1	7	10
3	44	1	1	7	11
3	45	1	1	7	12
3	46	1	1	7	13
3	47	1	1	7	14
3	48	1	1	7	15
3	49	1	1	7	16
3	50	1	1	7	17
3	51	1	1	7	18

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
3	52	1	1	7	19
3	53	1	1	7	20
3	54	1	1	7	21
3	55	1	1	7	22
3	56	1	1	7	23
3	57	1	1	7	24
3	58	1	1	7	25
3	59	1	1	7	26
3	60	1	1	7	27
3	61	1	1	7	28
3	62	1	1	7	29
3	63	1	1	7	30
3	64	1	1	7	31
3	65	1	1	8	0
3	66	1	1	8	1
3	67	1	1	8	2
3	68	1	1	8	3
3	69	1	1	8	4
3	70	1	1	8	5
3	71	1	1	8	6
3	72	1	1	8	7
3	73	1	1	8	8
3	74	1	1	8	9

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
3	75	1	1	8	10
3	76	1	1	8	11
3	77	1	1	8	12
3	78	1	1	8	13
3	79	1	1	8	14
3	80	1	1	8	15
3	81	1	1	8	16
3	82	1	1	8	17
3	83	1	1	8	18
3	84	1	1	8	19
3	85	1	1	8	20
3	86	1	1	8	21
3	87	1	1	8	22
3	88	1	1	8	23
3	89	1	1	8	24
3	90	1	1	8	25
3	91	1	1	8	26
3	92	1	1	8	27
3	93	1	1	8	28
3	94	1	1	8	29
3	95	1	1	8	30
3	96	1	1	8	31
4	1	1	1	9	0

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
4	2	1	1	9	1
4	3	1	1	9	2
4	4	1	1	9	3
4	5	1	1	9	4
4	6	1	1	9	5
4	7	1	1	9	6
4	8	1	1	9	7
4	9	1	1	9	8
4	10	1	1	9	9
4	11	1	1	9	10
4	12	1	1	9	11
4	13	1	1	9	12
4	14	1	1	9	13
4	15	1	1	9	14
4	16	1	1	9	15
4	17	1	1	9	16
4	18	1	1	9	17
4	19	1	1	9	18
4	20	1	1	9	19
4	21	1	1	9	20
4	22	1	1	9	21
4	23	1	1	9	22
4	24	1	1	9	23

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
4	25	1	1	9	24
4	26	1	1	9	25
4	27	1	1	9	26
4	28	1	1	9	27
4	29	1	1	9	28
4	30	1	1	9	29
4	31	1	1	9	30
4	32	1	1	9	31
4	33	1	2	10	0
4	34	1	2	10	1
4	35	1	2	10	2
4	36	1	2	10	3
4	37	1	2	10	4
4	38	1	2	10	5
4	39	1	2	10	6
4	40	1	2	10	7
4	41	1	2	10	8
4	42	1	2	10	9
4	43	1	2	10	10
4	44	1	2	10	11
4	45	1	2	10	12
4	46	1	2	10	13
4	47	1	2	10	14

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
4	48	1	2	10	15
4	49	1	2	10	16
4	50	1	2	10	17
4	51	1	2	10	18
4	52	1	2	10	19
4	53	1	2	10	20
4	54	1	2	10	21
4	55	1	2	10	22
4	56	1	2	10	23
4	57	1	2	10	24
4	58	1	2	10	25
4	59	1	2	10	26
4	60	1	2	10	27
4	61	1	2	10	28
4	62	1	2	10	29
4	63	1	2	10	30
4	64	1	2	10	31
4	65	1	2	11	0
4	66	1	2	11	1
4	67	1	2	11	2
4	68	1	2	11	3
4	69	1	2	11	4
4	70	1	2	11	5

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
4	71	1	2	11	6
4	72	1	2	11	7
4	73	1	2	11	8
4	74	1	2	11	9
4	75	1	2	11	10
4	76	1	2	11	11
4	77	1	2	11	12
4	78	1	2	11	13
4	79	1	2	11	14
4	80	1	2	11	15
4	81	1	2	11	16
4	82	1	2	11	17
4	83	1	2	11	18
4	84	1	2	11	19
4	85	1	2	11	20
4	86	1	2	11	21
4	87	1	2	11	22
4	88	1	2	11	23
4	89	1	2	11	24
4	90	1	2	11	25
4	91	1	2	11	26
4	92	1	2	11	27
4	93	1	2	11	28

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
4	94	1	2	11	29
4	95	1	2	11	30
4	96	1	2	11	31
5	1	1	2	12	0
5	2	1	2	12	1
5	3	1	2	12	2
5	4	1	2	12	3
5	5	1	2	12	4
5	6	1	2	12	5
5	7	1	2	12	6
5	8	1	2	12	7
5	9	1	2	12	8
5	10	1	2	12	9
5	11	1	2	12	10
5	12	1	2	12	11
5	13	1	2	12	12
5	14	1	2	12	13
5	15	1	2	12	14
5	16	1	2	12	15
5	17	1	2	12	16
5	18	1	2	12	17
5	19	1	2	12	18
5	20	1	2	12	19

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
5	21	1	2	12	20
5	22	1	2	12	21
5	23	1	2	12	22
5	24	1	2	12	23
5	25	1	2	12	24
5	26	1	2	12	25
5	27	1	2	12	26
5	28	1	2	12	27
5	29	1	2	12	28
5	30	1	2	12	29
5	31	1	2	12	30
5	32	1	2	12	31
5	33	1	2	13	0
5	34	1	2	13	1
5	35	1	2	13	2
5	36	1	2	13	3
5	37	1	2	13	4
5	38	1	2	13	5
5	39	1	2	13	6
5	40	1	2	13	7
5	41	1	2	13	8
5	42	1	2	13	9
5	43	1	2	13	10

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
5	44	1	2	13	11
5	45	1	2	13	12
5	46	1	2	13	13
5	47	1	2	13	14
5	48	1	2	13	15
5	49	1	2	13	16
5	50	1	2	13	17
5	51	1	2	13	18
5	52	1	2	13	19
5	53	1	2	13	20
5	54	1	2	13	21
5	55	1	2	13	22
5	56	1	2	13	23
5	57	1	2	13	24
5	58	1	2	13	25
5	59	1	2	13	26
5	60	1	2	13	27
5	61	1	2	13	28
5	62	1	2	13	29
5	63	1	2	13	30
5	64	1	2	13	31
5	65	1	2	14	0
5	66	1	2	14	1

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
5	67	1	2	14	2
5	68	1	2	14	3
5	69	1	2	14	4
5	70	1	2	14	5
5	71	1	2	14	6
5	72	1	2	14	7
5	73	1	2	14	8
5	74	1	2	14	9
5	75	1	2	14	10
5	76	1	2	14	11
5	77	1	2	14	12
5	78	1	2	14	13
5	79	1	2	14	14
5	80	1	2	14	15
5	81	1	2	14	16
5	82	1	2	14	17
5	83	1	2	14	18
5	84	1	2	14	19
5	85	1	2	14	20
5	86	1	2	14	21
5	87	1	2	14	22
5	88	1	2	14	23
5	89	1	2	14	24

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
5	90	1	2	14	25
5	91	1	2	14	26
5	92	1	2	14	27
5	93	1	2	14	28
5	94	1	2	14	29
5	95	1	2	14	30
5	96	1	2	14	31
6	1	1	2	15	0
6	2	1	2	15	1
6	3	1	2	15	2
6	4	1	2	15	3
6	5	1	2	15	4
6	6	1	2	15	5
6	7	1	2	15	6
6	8	1	2	15	7
6	9	1	2	15	8
6	10	1	2	15	9
6	11	1	2	15	10
6	12	1	2	15	11
6	13	1	2	15	12
6	14	1	2	15	13
6	15	1	2	15	14
6	16	1	2	15	15

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
6	17	1	2	15	16
6	18	1	2	15	17
6	19	1	2	15	18
6	20	1	2	15	19
6	21	1	2	15	20
6	22	1	2	15	21
6	23	1	2	15	22
6	24	1	2	15	23
6	25	1	2	15	24
6	26	1	2	15	25
6	27	1	2	15	26
6	28	1	2	15	27
6	29	1	2	15	28
6	30	1	2	15	29
6	31	1	2	15	30
6	32	1	2	15	31
6	33	1	2	16	0
6	34	1	2	16	1
6	35	1	2	16	2
6	36	1	2	16	3
6	37	1	2	16	4
6	38	1	2	16	5
6	39	1	2	16	6

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
6	40	1	2	16	7
6	41	1	2	16	8
6	42	1	2	16	9
6	43	1	2	16	10
6	44	1	2	16	11
6	45	1	2	16	12
6	46	1	2	16	13
6	47	1	2	16	14
6	48	1	2	16	15
6	49	1	2	16	16
6	50	1	2	16	17
6	51	1	2	16	18
6	52	1	2	16	19
6	53	1	2	16	20
6	54	1	2	16	21
6	55	1	2	16	22
6	56	1	2	16	23
6	57	1	2	16	24
6	58	1	2	16	25
6	59	1	2	16	26
6	60	1	2	16	27
6	61	1	2	16	28
6	62	1	2	16	29

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
6	63	1	2	16	30
6	64	1	2	16	31
6	65	1	2	17	0
6	66	1	2	17	1
6	67	1	2	17	2
6	68	1	2	17	3
6	69	1	2	17	4
6	70	1	2	17	5
6	71	1	2	17	6
6	72	1	2	17	7
6	73	1	2	17	8
6	74	1	2	17	9
6	75	1	2	17	10
6	76	1	2	17	11
6	77	1	2	17	12
6	78	1	2	17	13
6	79	1	2	17	14
6	80	1	2	17	15
6	81	1	2	17	16
6	82	1	2	17	17
6	83	1	2	17	18
6	84	1	2	17	19
6	85	1	2	17	20

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
6	86	1	2	17	21
6	87	1	2	17	22
6	88	1	2	17	23
6	89	1	2	17	24
6	90	1	2	17	25
6	91	1	2	17	26
6	92	1	2	17	27
6	93	1	2	17	28
6	94	1	2	17	29
6	95	1	2	17	30
6	96	1	2	17	31
7	1	1	2	18	0
7	2	1	2	18	1
7	3	1	2	18	2
7	4	1	2	18	3
7	5	1	2	18	4
7	6	1	2	18	5
7	7	1	2	18	6
7	8	1	2	18	7
7	9	1	2	18	8
7	10	1	2	18	9
7	11	1	2	18	10
7	12	1	2	18	11

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
7	13	1	2	18	12
7	14	1	2	18	13
7	15	1	2	18	14
7	16	1	2	18	15
7	17	1	2	18	16
7	18	1	2	18	17
7	19	1	2	18	18
7	20	1	2	18	19
7	21	1	2	18	20
7	22	1	2	18	21
7	23	1	2	18	22
7	24	1	2	18	23
7	25	1	2	18	24
7	26	1	2	18	25
7	27	1	2	18	26
7	28	1	2	18	27
7	29	1	2	18	28
7	30	1	2	18	29
7	31	1	2	18	30
7	32	1	2	18	31
7	33	1	2	19	0
7	34	1	2	19	1
7	35	1	2	19	2

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
7	36	1	2	19	3
7	37	1	2	19	4
7	38	1	2	19	5
7	39	1	2	19	6
7	40	1	2	19	7
7	41	1	2	19	8
7	42	1	2	19	9
7	43	1	2	19	10
7	44	1	2	19	11
7	45	1	2	19	12
7	46	1	2	19	13
7	47	1	2	19	14
7	48	1	2	19	15
7	49	1	2	19	16
7	50	1	2	19	17
7	51	1	2	19	18
7	52	1	2	19	19
7	53	1	2	19	20
7	54	1	2	19	21
7	55	1	2	19	22
7	56	1	2	19	23
7	57	1	2	19	24
7	58	1	2	19	25

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
7	59	1	2	19	26
7	60	1	2	19	27
7	61	1	2	19	28
7	62	1	2	19	29
7	63	1	2	19	30
7	64	1	2	19	31
7	65				
7	66				
7	67				
7	68				
7	69				
7	70				
7	71				
7	72				
7	73				
7	74				
7	75				
7	76				
7	77				
7	78				
7	79				
7	80				
7	81				

—continued—

Table 6-1 (continued)
DMS Access translation table

AccessNode		DMS-10NA			
CDS shelf	**CDS line card #**	**DMS-10 bay**	**DMS-10 shelf**	**DMS-10 LSG**	**DMS-10 line**
7	82				
7	83				
7	84				
7	85				
7	86				
7	87				
7	88				
7	89				
7	90				
7	91				
7	92				
7	93				
7	94				
7	95				
7	96				
—end—					

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