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Preside Multiservice Data Manager

Service Provisioning for ATM

User Guide

241-6001-600

Preside Multiservice Data Manager
Service Provisioning for ATM
User Guide

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About this document

This document explains how to use the ATM service provisioning tool. The ATM service provisioning tool is part of the Nortel Networks Preside Multiservice Data Manager (MDM) toolset.

For more information about this document, see the following sections:

Who should read this document and why

This document is intended for personnel who are managing and provisioning Passport 7000, 15000, and 20000 nodes.

What you need to know

This document assumes that you have knowledge of the Preside Multiservice Data Manager (MDM) and an understanding of the Passport product.

How this document is organized

The information in this document is organized as follows:

- "Introducing ATM service provisioning" (page 17) describes the tool and its advantages.

- "Installing the ATM service provisioning tool" (page 25) describes the software installation procedures.

- "Setup requirements and configuration" (page 29) provides information on setup and system requirements, and it describes how to start the tool.

- "ATM service provisioning tool user interface" (page 41) describes the tool interface.

- "General provisioning procedures" (page 103) provides generic procedures that may apply to any of the circuit types.

- "ATM permanent virtual connections" (page 139) provides the procedures to provision an ATM PVC circuit.

- "ATM soft permanent virtual path and soft permanent virtual channel connections" (page 173) provides the procedures to provision and ATM SPVC or ATM SPVP.

- "Frame relay to ATM circuits" (page 191) provides the procedures to provision SIWF FrAtm to FrAtm SPVC, SIWF FrAtm to ATM Access SPVC and SIWF Atm to FrAtm Access SPVC connections.

- "ATM Traffic Management Profile Editor" (page 217) describes the ATM Traffic Management Profile Editor and how to use it.

What's new in this document

This document was updated to include the following feature:

- "FrAtm Service Provisioning" (page 14)

FrAtm Service Provisioning

This feature addresses the requirement for a FrAtm Service Provisioning solution for the following FRF.8 FrAtm scenarios:

- SIWF FR-ATM to FR-ATM access SPVC

- SIWF FR-ATM to ATM access SPVC

- SIWF ATM to FR-ATM access SPVC

This feature adds three new SPVC types to ATM service provisioning:

- FrAtm to FrAtm SPVC

- FrAtm to Atm SPVC

- Atm to FrAtm SPVC

For information about the user interface for FrAtm service provisioning, see "ATM service provisioning tool user interface" (page 41).

For information about the procedures to provision FrAtm SPVC circuits, see "Frame relay to ATM circuits" (page 191).

Text conventions

This document uses the following text conventions:

- `nonproportional spaced plain type`

  Nonproportional spaced plain type represents system generated text or text that appears on your screen.

- **`nonproportional spaced bold type`**

  Nonproportional spaced bold type represents words that you should type or that you should select on the screen.

- *italics*

  Statements that appear in italics in a procedure explain the results of a particular step and appear immediately following the step.

  Words that appear in italics in text are for naming.

- `[optional_parameter]`

  Words in square brackets represent optional parameters. The command can be entered with or without the words in the square brackets.

- `<general_term>`

  Words in angle brackets represent variables which are to be replaced with specific values.

- UPPERCASE,lowercase

  In MDM, uppercase and lowercase letters that appear in UNIX commands and parameters must be matched exactly. The system matches upper and lowercase characters differently.

The term absolute pathname refers to the full specification of a path starting from the root directory. Absolute pathnames always begin with the slash (/) symbol. A relative pathname takes the current directory as its starting point, and starts with any alphanumeric character (other than /).

Related documents

See the following documents for related information:

- 241-6001-310 *Preside MDM Server Reference Guide*

- 241-6001-400 *Preside MDM Administration Database User Guide*

- 241-6001-405 *Preside MDM Administration Database Schema*

- 241-6001-602 *Preside MDM Service Provisioning for CES SVC User Guide*

- 241-6001-610 *Preside MDM Nodal Provisioning User Guide*

- 241-6001-801 *Preside MDM Overview*

- 241-5701-060 *Passport 7400, 15000, 20000 Components*

- 241-5701-700 *Passport 7400, 15000, 20000 ATM Overview*

- 241-5701-705 *Passport 7400, 15000, 20000 ATM Traffic Management Fundamentals*

- 241-5701-710 *Passport 7400, 15000, 20000 ATM Configuration Guide*

- 241-5701-720 *Passport 7400, 15000, 20000 AAL1 Circuit Emulation Guide*

- 241-5701-920 *Passport 7400, 15000, 20000 Frame Relay to ATM Interworking Guide*

Chapter 1
Introducing ATM service provisioning

This section introduces the Nortel Networks Preside Multiservice Data Manager (MDM) ATM service provisioning application. This section contains the following information:

- "ATM service provisioning overview" (page 17)

- "Benefits of ATM service provisioning" (page 22)

ATM service provisioning overview

ATM service provisioning is an application that lets you create end-to-end services on multiple Passport nodes from a single window. See the following sections for additional information:

- "ATM permanent virtual connections (PVCs)" (page 18)

- "ATM soft permanent virtual connections (SPVC and SPVP)" (page 18)

- "Frame relay to ATM (FR-ATM) connections" (page 19)

- "ATM service provisioning and the MDM Administration Database" (page 20)

For more information on the ATM service provisioning application, see "ATM service provisioning tool user interface" (page 41).

Provisioning of the Circuit Emulation Service (CES) over ATM switched virtual circuit (SVC) connections is handled by the CES SVC service provisioning tool. See 241-6001-602 *Preside MDM Service Provisioning for CES SVC User Guide*.

ATM permanent virtual connections (PVCs)

The ATM service provisioning application lets you provision Passport permanent virtual connections (PVC).

A Passport permanent virtual connection can be either a virtual path or virtual channel. A permanent connection has a predefined static route that provides a permanently configured connection between the customer premise equipment and the ATM networks. Permanent connections are set up using predetermined user requirements for bandwidth and the duration of the connection. Once configured, permanent connections remain set up even when not in use.

For Trunk, VccBearerService, VpcBearerService, CES over PVC circuit types you can change the following items:

- default and node specific Traffic Management (TM) profiles

- customer field

- the correlationTag field

- the node configuration of the circuit

- attributes of the nodes within the circuit that are directly related to provisioning these types of circuits

ATM soft permanent virtual connections (SPVC and SPVP)

The ATM service provisioning tool lets you provision Passport soft permanent virtual path (SPVP) and soft permanent virtual channel (SPVC) connections.

Passport soft permanent virtual connections support the same functionality as permanent virtual connections (PVC) and eliminate the need to manually provision each node along the connection. The end point is provisioned but the connection route is automatically selected. Soft permanent connections also support automatic route selection, and connection establishment and re-establishment.

For SPVC/SPVP circuits, you can change the node name for the source and destination nodes. Since this circuit consists of two nodes changing either one modifies the circuit. The following attributes of both nodes are editable so if you change the node name, you can adjust the values.

- ATMIF

- calling address

- VPI/VCI values

    Note: The ability to change the destination node name, and its attributes is available in PCR4.2 and above and will depend on whether the AIS option has been set.

Frame relay to ATM (FR-ATM) connections

The ATM service provisioning tool lets you provision Passport frame relay to ATM (FR-ATM) connections. The Passport FR-ATM interworking service allows frame relay traffic to travel over an ATM networking and transport infrastructure.

To provision a FR-ATM connection, you bind the interworking function of a FR-ATM DLCI to an ATM VCC. You then configure a normal ATM S/PVC across the ATM subnet.

The ATM service provisioning tool supports the application of the FRF.8 standard for service interworking (SIWF). The SIWF maps frame relay DLCIs to ATM VCCs on a one-to-one basis.

The ATM service provisioning tool addresses the following FRF.8 FrAtm scenarios:

- SIWF FR-ATM to FR-ATM Access SPVC
  The ATM service provisioning tool supports the creation of an end-to-end FR connection across a homogeneous PNNI cloud where Passport is on the edge of the network offering FR service on both ends.

- SIWF FR-ATM to ATM Access SPVC
  The ATM service provisioning tool supports the creation of a FRATM connection across a homogeneous PNNI cloud where Passport is on the

edge of the network offering FR service on one end-point and ATM on the other. This is accomplished on Passport by providing FRF.8 interworking on one of the Passport edge nodes.

- SIWF ATM to FR-ATM Access SPVC
  The ATM service provisioning tool supports the creation of a FRATM connection across a homogeneous PNNI cloud where Passport is on the edge of the network offering ATM service on the source end-point and FrAtm on the destination. This is accomplished on Passport by providing FRF.8 interworking on one of the Passport edge nodes.

In addition, the ATM service provisioning tool user interface lets you perform the following tasks:

- select the interfaces (FrAtm, AtmIfs) used in the circuit

- display and search FrAtm instances on a Passport

- create and configure new DLCIs for the connection

ATM service provisioning and the MDM Administration Database

If the MDM Administration Database is installed and you use the ATM service provisioning tool to configure and activate on-switch data, the MDM Administration Database is updated to maintain the current view of the network. If you do not activate the configuration, the MDM Administration Database is not updated because the current network view has not changed. The changes, however, will exist on the switch in either the edit or saved view.

ATM service provisioning tool populates the Administration Database with the newly provisioned circuit data for the following ATM connections:

- ATM PVC

- ATM PVP

- Passport Trunks over ATM

- ATM SPVC

- ATM SPVP

- FRATM ACCESS SPVC

To populate the database using the ATM service provisioning tool, the following conditions must be met:

- You have installed the database software.

- You have successfully activated the circuit immediately after provisioning it.

  For additional information on the database population process, see 241-6001-400 *Preside MDM Administration Database User Guide*.

The circuit type in the service provisioning tool corresponds to the circuit type in the database as follows:

- VccBearerService is considered to be an ATM PVC

- VpcBearerService is considered to be an ATM PVP

- Trunk is considered to be a Trunk over ATM PVC

- ATM SPVP are considered to be a ATM SPVP

- For SPVCs, and FRATM ACCESS SPVCs the circuit type in the database is determined by the interface type on the source node, as follows:

  — The ATM to FrAtm and ATM to ATM scenarios are considered to be ATM SPVCs.

  — The FrAtm to FrAtm and FrAtm to ATM scenarios are considered to be FrAtm Access SPVCs.

The ATM service provisioning tool uses information in the Administration Database when modifying ATM circuits. You can use the circuit id to retrieve circuit information from the database. You can access information in the database in the following ways:

- through the Circuit Viewer tool. You can find the circuit in Circuit Viewer and set the circuit context. The ATM service provisioning tool gets the circuit context and retrieves the circuit from the database. For information on Circuit Viewer and how to use it, see 241-6001-011 *Preside MDM Fault Management User Guide*.

- by entering the circuit id, if known, directly into the Circuit Id field in the ATM service provisioning window.

For additional information on editing, copying, and deleting ATM circuits, see the following sections:

Benefits of ATM service provisioning

ATM service provisioning lets you perform the following tasks:

- create, edit, and delete the following circuits:

    — ATM logical trunks over ATM PVCs

    — ATM virtual path connection (VPC) or virtual channel connection (VCC) bearer service

    — AAL1 CES over PVCs

    — SIWF FR-ATM to FR-ATM Access SPVC

    — SIWF FR-ATM to ATM Access SPVC

    — SIWF ATM to FR-ATM Access SPVC

- select any node in the network as the next hop in an ATM PVC

- use an assisted routing feature that automatically plots the shortest path between two selected end nodes in an ATM PVC connection

- edit the nodal configuration (path) of PVC and SPVC circuits and the attributes of the nodes that make up the circuit.

- provision SPVC destination address. You no longer have to manually enter this address, which is 40 hexadecimal characters long.

- validate the called VPI and VCI on the destination node in ATM SPVC service provisioning

- support SPVC Lock and Unlock for SPVC and SPVP connections

- specify primary and alternate path (Designated Transit List (DTL)) to be taken by the SPVP or SPVC

- enable or disable the AIS generation at the source and destination ends when creating an SPVC or SPVP

- enable or disable the PNNI route selection algorithm when the manual paths fail

- select any node in the network when configuring the master or remote end of an FrAtm connection

- display and search for FrAtm instances on a Passport

- create and configure DLCIs

- use either a Passport or non-Passport as the remote end of the connection

- integration into the Administration Database providing diagnostic, discovery, and editing support

- set the correlationTag attribute, and storing the correlationTag attribute in the Administration Database

- set a circuit ID for all nodes in the path, and storing the circuit ID in the Administration Database, independent of the correlation tag

- apply a traffic management (TM) profile to each node in the path, with a different TM profile applied to each Vcc/Vpp in a path. The TM profile is stored on a Virtual Connection basis in the Administration Database

- create, edit and view Traffic Management (TM) profiles with the ATM Traffic Management Profile Editor

- save, confirm, activate, and commit provisioning changes

- provides progress information and error reporting during provisioning

Chapter 2
Installing the ATM service provisioning tool

For system requirements and installation instructions for the ATM service provisioning tool, see the following sections:

Requirements

The current supported platform of the ATM service provisioning tool is SPARC Solaris.

The ATM service provisioning tool requires the following software:

- Preside Multiservice Data Manager (MDM). The ATM service provisioning tool is part of Preside MDM on the MDM CD-ROM.

- third-party software supplied by Nortel Networks on the MDM CD-ROM, consisting of the following items:

    — associated JRE patches for Solaris

- a valid license key

Installing the ATM service provisioning tool software

The ATM service provisioning tool is part of the Preside Mulitservice Data Manager (MDM) software. When you load the Preside MDM software from CD-ROM with the InstallAnywhere program as described in 241-6001-100 *Preside MDM Installer Guide* you are instructed to:

- load the Solaris software patches for the Java Runtime Environment that is needed to run the ATM service provisioning tool. See 241-6001-100 *Preside MDM Installer Guide*.

- load the Preside MDM software with the InstallAnywhere program. When you run the InstallAnywhere program to load the Preside MDM, the program automatically loads the software packages required for the ATM service provisioning. These packages are Preside MDM base and the Java Runtime Environment (JRE). You do not need to load any additional packages. See 241-6001-100 *Preside MDM Installer Guide*.

- If you do not already have a license, you will need to add a license key and customer identifier before you can run the ATM service provisioning tool for the first time. See the procedure"Adding a license key and customer identifier" (page 27).

Adding a license key and customer identifier

You need a license before you can run the ATM service provisioning tool for the first time.

Nortel Networks provides this information along with the Preside Multiservice Data Manager (MDM) software on the MDM CD-ROM. If you do not have this information, contact your Nortel Networks account representative.

Prerequisites

You only need to perform this procedure if the license you have for Preside MDM does not allow you to run the ATM service provisioning tool.

Procedure steps

1   Log in as root.

2   Using a UNIX editor open the following file for editing:

/etc/opt/Magellan/LIClicenses.cfg

3   Add the license key to the file.

4   Check what you have typed carefully.

5   Save the file and exit from it.

6   Open the following file for editing:

/etc/opt/Magellan/LICcustName.cfg

7   Check what you typed carefully.

8   Save the file and exit from it.

Chapter 3
Setup requirements and configuration

For information on setup requirements and configuration for the ATM service provisioning tool, see the following sections:

*   "ATM service provisioning tool configuration overview" (page 29)

*   "Configuring the end-to-end server" (page 30)

*   "Changing the server port number" (page 32)

*   "Configuring the server host" (page 33)

*   "Configuring access to the server host" (page 34)

*   "Configuring a connection to a remote Administration Database" (page 35)

*   "Setup prerequisites" (page 36)

ATM service provisioning tool configuration overview

Before using the ATM service provisioning tool, you need to do some or all of the following configuration tasks:

*   "Configuring the end-to-end server" (page 30)

*   "Changing the server port number" (page 32)

*   "Configuring the server host" (page 33)

*   "Configuring access to the server host" (page 34)

*   "Configuring a connection to a remote Administration Database" (page 35)

Configuring the end-to-end server

Use this procedure to configure and start the ATM end-to-end server. You need to use the Preside Multiservice Data Manager (MDM) Server Administration tool to edit the entry for the ATM end-to-end server. For more information on the end-to-end server, see 241-6001-310 *Preside MDM Server Reference Guide*.

Procedure steps

1 In the Preside MDM window, select **System** -> **Administration** -> **Server Administration**.

The **Server Manager Administration Tool** window opens.

2 From the **Security** menu, select the **Enable Editing...** command.

The **SVM Enter Edit Password** dialog opens and prompts for a password.

3 If required, type a valid password and click **OK**.

4 From the **Edit** menu, select **Edit** and then select **New**.

The **Server Manager Edit Server** dialog opens.

5 In the **Descriptive** name field, type the following information:

`end-to-end server`

6 In the **Startup command field**, type the following information:

`/opt/MagellanNMS/bin/eteserver [-p <portno>]`

`[-p <portno>]`   specifies the TCP port number for monitoring incoming requests. The default value is 6600.

Note: The port number must not be used by any other process.

7 Enable the **Automatic startup at reboot time** option.

8 Click **Save and Start**.

The data you entered is stored and the server is started.

9 From the **File** menu, choose **Refresh Server** list.

An updated server list is displayed, including the eteServer.

10 Using the mouse menu button, click on the eteServer entry in the server list.

The **Server Functions** pop-up menu opens.

11   From the pop-up menu, select **Start**.

The end-to-end server starts.

Changing the server port number

Use this procedure to update the client resource file if your setup runs the end-to-end server on a port other than the default. You need to update the client resource file for the provisioning tool and reconfigure the server.

Procedure steps

1 While logged on as root, edit the ATM provisioning resource file:

   /opt/MagellanNMS/cfg/eteATMRes.cfg

2 To change the server port number from the default value of 6600, set the port parameter to the appropriate port number:

   port = <portno>

   where:

   <portno> is the TCP port number.

3 Go to the **MDM Server Manager Administration** tool and edit the server port number option. See "Configuring the end-to-end server" (page 30).

4 Restart the end-to-end server.

Configuring the server host

Use this procedure to update the eteATMRes.cfg file. By default, the local host is the server host. If you are running the client on a different host than the server, you need to update the resource file.

Procedure steps

1   While logged on as root, edit the resource file:

/opt/MagellanNMS/cfg/eteATMRes.cfg

2   Set the host parameter:

host = <hostname>|<ipaddress>

<ipaddress> is the address of the host server.

Configuring access to the server host

Use this procedure to update the hosts file. By default, the local host is the server host. If you are running the client on a different host than the end-to-end server, you need to update the hosts file to add the IP address and host name of the server.

Procedure steps

1   While logged on as root, display the contents of the hosts file:

   more /etc/hosts

2   Check that the file contains an entry with the IP address and host name of the end-to-end server.

3   If the entry is not listed, open an edit view of the resource file and add the IP address and host name of the end-to-end server on a new line:

   <ipaddress> <hostname>

Configuring a connection to a remote Administration Database

Use this procedure and the Circuit Database Administration tool to connect to a remote Administration Database. For information on the Circuit Database Administration tool, see 241-6001-400 *Preside MDM Administration Database User Guide*.

Procedure steps

1   In the Preside MDM window, select **System** -> **Administration** -> **Circuit Database Administration**.

The Circuit Database Administration tool opens.

2   From the main menu bar, select **Options** -> **Configuration...**.

The **Configuration Options** dialog box opens.

3   In the **Database Host** field, enter the host on which the Administration Database is running and click **OK**.

Setup prerequisites

Before using the ATM service provisioning tool, ensure that you have met the following prerequisites:

- configured the Passport switches for service provisioning, as described in "Passport configuration" (page 36)

- set up the information files required by the provisioning tool, as described in "Information files" (page 36)

Passport configuration

The ATM service provisioning application creates logical trunking, VCC, or VPC components and their subcomponents. Therefore, before using the application, you must ensure that all the Passports to be provisioned are configured for ATM and/or CES services up to the logical connection layer. The following preconfiguration is required:

- physical installation of cards, cabling, and other elements required to interconnect the Passports for service provisioning

- provisioning of cards, logical processors, software, ports, AtmIf components, and Uni/Pnni/Iisp subcomponents (if required) on the switches

For information on configuring Passports, refer to your Passport documentation.

Information files

The ATM service provisioning tool uses information provided in the following text files:

- "eteATMConnections.cfg file" (page 37)

- "eteATMProfiles.cfg file" (page 38)

You can create these information files (in ASCII format) using any text editor. You can find sample versions of these files in the /opt/MagellanNMS/cfg directory. If you edit these files, save the changes in the /op/MagellanNMS/cfg directory.

Note: If the eteATMConnections.cfg file or the eteATMProfiles.cfg file is edited, the ATM service provisioning tool must be restarted for the changes to take effect. For information about starting the tool, see "General provisioning procedures" (page 103).

eteATMConnections.cfg file

The eteATMConnections.cfg file provides information about direct connections between nodes. This information is used by the assisted routing feature.

For each node, use the following syntax:

```
EM/<first_node_name> atmif/<atmif_number>:EM/
<second_node_name> atmif/<atmif_number>
```

where:

atmif_number is the ATM interface number.

: indicates a connection relationship.

For example:

```
EM/bdacr10 atmif/100:EM/bdacc3f atmif/50
```

Save the file as eteATMConnections.cfg in the /opt/MagellanNMS/cfg directory.

The connections file can be generated from topology information stored in the GMDR server.

To generate the file, issue the following command:

```
/opt/MagellanNMS/bin/getLinks > /opt/MagellanNMS/cfg/
eteATMConnections.cfg
```

Note: The FMDR servers feeding the GMDR server must be running with the -l AL option:

```
/opt/MagellanNMS/bin/fmdr -l AL
```

The -l option turns on automatic generation of ATM topology.

FMDR uses the remoteAtmInterfaceLabel attribute of the AmtIf component to generate the topology. This attribute must be provisioned with the full name of the remote AtmIf component.

See 241-6001-310 *Preside MDM Server Reference Guide* for further information on the GMDR and FMDR servers.

eteATMProfiles.cfg file

The eteATMProfiles.cfg file provides Traffic Management (also known as quality of service (QoS)) parameters. Information from this file is displayed in the Default TM profile field in the application window. See "Circuit Properties panel" (page 48).

The eteATMProfiles.cfg files are stored in the /opt/MagellanNMS/cfg/ete directory on the Preside MDM running the ATM service provisioning tool.

If you have saved ATM Traffic Management Profiles prior to R14.1, the first time the ATM service provisioning tool is run from a new MDM install, a warning dialog box opens informing you of the new location for the eteATMProfiles.cfg files. Any eteATMProfiles.cfg files created before R14.1 remain unchanged in /opt/MagellanNMS/cfg. However, the ATM service provisioning tool does not use these files.

For each TM profile, use the following syntax:
```
[<QoSProfileName>]
key value
key value
```

where:
QoSProfileName   is the profile name (contains no spaces).

key value   is derived from attribute value pairs of the TrafficManagement component.

For more information, see 241-5701-710 *Passport 7400, 15000, 20000 ATM Configuration Guide*.

For more information on CDL types and ATM traffic management, see
241-5701-705 *Passport 7400, 15000, 20000 ATM Traffic Management
Fundamentals* and 241-5701-700 *Passport 7400, 15000, 20000 ATM
Overview*.

Example:

```
[AVCCBearerServiceQoSProfile]
txTrafficDescParm 1 0 2 0 3 0 4 0 5 8
txTrafficDescType 4
```

Chapter 4
ATM service provisioning tool user interface

For a description of the ATM service provisioning tool see the following sections:

- "Overview of ATM service provisioning tool window" (page 41)

- "Menu bar" (page 45)

- "Circuit Properties panel" (page 48)

- "Circuit Path panel for PVC circuit types" (page 51)

- "Node Properties panel" (page 52)

- "SPVC or SPVP Routing panel" (page 74)

- "ATM service provisioning dialog boxes" (page 77)

- "PVC dialog boxes" (page 88)

- "SPVC or SPVP dialog boxes" (page 91)

- "FRATM ACCESS SPVC dialog boxes" (page 99)

- "Using the keyboard" (page 101)

Overview of ATM service provisioning tool window

The ATM service provisioning window lets you do all your provisioning for the following circuit types:

- the following ATM soft permanent virtual connections:

  — SPVC

  — SPVP

- the following ATM permanent virtual connections (PVC)

    — Trunk

    — VccBearerService

    — VpcBearerService

    — CES over PVC

- FRATM ACCESS SPVC. This circuit type covers the following scenarios:

    — FrAtm to FrAtm SPVC

    — FrAtm to Atm SPVC

    — ATM to FrAtm SPVC. In the Administration Database, this is considered an ATM SPVC because it originates on an ATM interface.

When you open the tool, the SPVC circuit type is selected, and the default operation is service creation.

For an illustration of the ATM service provisioning tool window at start-up, see the figure "ATM service provisioning window at launch showing the default circuit type (SPVC)" (page 43).

Figure 1
ATM service provisioning window at launch showing the default circuit type (SPVC)

The ATM service provisioning window is dynamic and shows different elements for PVC, SPVC/SPVP, and FrAtm circuit types.

For PVC circuit types (trunk, VccBearerService, VpcBearerService, CES over PVC), the main window has the following elements:

- "Menu bar" (page 45)

- "Circuit Properties panel" (page 48)

- "Circuit Path panel for PVC circuit types" (page 51)

- "Node Properties panel for PVCs" (page 53)

- "Command panel" (page 76)

For SPVC and SPVP circuit types, the main window has the following elements:

- "Menu bar" (page 45)

- "Circuit Properties panel" (page 48)

- "Node Properties panel for SPVCs or SPVPs" (page 61)

- "SPVC or SPVP Routing panel" (page 74)

- "Command panel" (page 76)

For FRATM ACCESS SPVC circuit types, the main window has the following elements:

- "Menu bar" (page 45)

- "Circuit Properties panel" (page 48)

- "Node Properties panel for FRATM ACCESS SPVC" (page 68)

- "Command panel" (page 76)

See also...

- "ATM permanent virtual connections" (page 139)

- "ATM soft permanent virtual path and soft permanent virtual channel connections" (page 173)

- "Frame relay to ATM circuits" (page 191)

- "ATM Traffic Management Profile Editor" (page 217)

Menu bar

The menu bar consists of the following menus:

- File

- Edit

- View

- Tools

- Help

Note: You can use mnemonics or command accelerators to access menu options. For additional information, see "Using the keyboard" (page 101).

File menu

Note: The Edit Circuit..., Copy Circuit..., and Delete Circuit... commands are shown only if the Administration Database is installed.

The File menu contains the following commands:

- Edit Circuit...
  This command opens the Edit Circuit retrieve dialog box to retrieve the configuration data of a circuit from the Administration Database so that you can edit the circuit.

- New Circuit
  This command lets you create a new circuit. This command clears all node information in the current provisioning path, so you can start over with new path information.

- New Circuit Using Shortest Path...
  This command opens the Shortest path dialog box to create a new PVC, with the path automatically selected based on the shortest path between the endpoints. The New Circuit Using Shortest Path... command is enabled for PVC application types (Trunk, VccBearerService, VpcBearerService, CES over PVC) but is disabled for SPVC or SPVP application types. For additional information on the shortest path dialog box, see "Shortest path dialog box" (page 88).

- Copy Circuit...
  This command opens the Copy Circuit retrieval dialog box to create a
  new circuit with the pertinent data copied from a circuit stored in the
  Administration Database.

- Delete Circuit...
  This command opens the Delete Circuit retrieval dialog box to retrieves
  the configuration data of a circuit from the Administration Database and
  lets you delete the circuit.

- Exit...
  Exit... closes the main window, and exits the ATM service provisioning
  tool.

Edit menu

The Edit menu contains the commands that let you change the nodal
configuration of the circuit.

Note: The Edit menu commands are only available for PVC circuit types
and are disabled when you select the SPVC or SPVP circuit type.

The Edit menu contains the following options:

- Add Node After
  This command adds a node to the right of the selected node in the path
  of the following circuit types:

  — trunk

  — VccBearerService

  — VpcBearerService

- Add Node Before
  This command adds a node to the left of the selected node in the path.of
  the following circuit types:

  — trunk

  — VccBearerService

  — VpcBearerService

- Delete Node
  This command deletes the selected node from the path. If the path only contains a single node, you cannot delete it; the Delete option is disabled.

  Note: These menu options are also available by right-clicking on a node in the Circuit Path panel to open a pop-up menu.

View menu

The View menu contains the Show Messages... command. Selecting this command opens the Status Window which displays status information about the tool and the provisioning operation. See "Status Window" (page 87).

Tools menu

The tools menu contains launch points for related Preside Multiservice Data Manager (MDM) tools. The Tools menu contains the following commands:

- Nodal Provisioning
  This command provides a launch point for the Nodal Provisioning tool. See 241-6001-610 *Preside MDM Nodal Provisioning User Guide*.

  Currently, Passport accepts only one provisioning session at a time. Be sure that Nodal Provisioning is in read-only mode or it is closed before trying to apply your service. Otherwise, an error message is generated because the Nodal Provisioning tool holds the provisioning session. The error message does not inform you that this is the reason for the error message.

- Circuit Viewer
  This command launches the Circuit Viewer tool. For information about the Circuit Viewer tool, see 241-6001-011 *Preside MDM Fault Management User Guide*.

- Circuit Database Administration
  This command launches the Circuit Database Administration tool. For information about the Circuit Database Administration tool, see 241-6001-400 *Preside MDM Administration Database User Guide*.

- ATM Traffic Management Profile Editor
  This command opens the ATM Traffic Management Profile Editor. For additional information, see the section "ATM Traffic Management Profile Editor" (page 217).

Help menu

The Help menu displays online help information. The Help menu contains the following command:

- About...
  This command displays the name of the tool, Service Provisioning - ATM.

- Help on Window
  This command displays the online help information for the ATM service provisioning tool main window.

Circuit Properties panel

The Circuit Properties panel in the ATM service provisioning window specifies data that applies to the entire ATM PVC, SPVC/SPVP or FrAtm circuit. The circuit properties panel may vary, depending on the circuit type that you have selected.

The Circuit Properties panel has the following fields which are common to trunk, VccBearerService, VpcBearerService, SPVC/SPVP, and FrAtm circuit types:

Note: The Circuit Properties panel for the CES over PVC circuit type also contains most of these fields. It does not contain the Circuit Id and Customer fields or the Use Circuit Id check box.

- Circuit Type
  This field lets you select the type of ATM circuit that you want to set up. You can select one of the following from the dropdown list:

    — SPVC

    — SPVP

    — Trunk

    — VccBearerService

    — VpcBearerService

    — CES over PVC

— FRATM ACCESS SPVC

The default circuit type that appears when you initially open the ATM service provisioning tool is SPVC.

- Circuit Id
  The Circuit Id lets circuit management applications more easily find and identify circuits based on meaningful customer names. When creating a circuit, this field is read-write. Otherwise, it is read-only.

  Note: The Circuit Id field appears in the ATM service provisioning window only if you have configured the system to use an Administration Database.

  The Circuit Id provides a method for operators to link subscriber information with the virtual circuit, providing a unique and meaningful name to assist in the management of the circuit. A suggested format is "Customer Name" plus a unique identifier (for example, BigCustomer00000023). This format provides visibility of the end subscriber, while still allowing the circuit to be uniquely identified.

  The Circuit Id is a 128-byte text field, with no restriction or uniqueness checking on the node. If the Use Circuit Id is checked, the circuit Id is stored in the CorrelationTag attribute of the vpc or vpd component. For ATM PVC it is set to the same value for all components in the end to end circuit. For ATM SPVCs, it is set at the source node only.

- Correlation Tag
  This field is used to set the value of the correlationTag attribute to the entered value for each VCC/VPC component in the connection. If accounting collection is enabled at the ATM Interface, then setting the CorrelationTag turns on accounting for permanent virtual connections. If you do not want accounting, then you should disable accounting at the ATM Interface or leave the Correlation Tag field empty.

  When creating or editing a circuit, this field is read-write. Otherwise, it is read-only.

- Use Circuit Id check box
  When you select Use Circuit Id, you set the value of the correlationTag to the value of the Circuit Id.

Note: This field is displayed in the ATM service provisioning window only if the you have configured the system to use an Administration Database.

• Customer
This is an optional field that lets you specify the customer of the circuit.

Note: This field is displayed in the ATM service provisioning window only if you have configured the system to use an Administration Database.

When creating or editing a circuit, this field is read-write. Otherwise, this field is read-only.

• Default User ID
This field is used to indicate the default User ID and password to be used to log into each of the Passport switches in the ATM path during service provisioning. This field is always read-write.

• Default Password
This field is used to indicate the default password to be used to log into a Passport node. This field is always read-write.

The Circuit Properties panel also contains the following fields for SPVC/SPVP circuit types:

• Admin Control
The Admin Control feature introduces a provisionable attribute (adminControl) under the SPVC or SPVP component that lets you specify the initial state of the SPVC/SPVP connection following initial provisioning and after FP restarts and software reloads. When the connection is locked, the VPI and VCI numbers are reserved on the source node of the call, but no bandwidth is used.

The Circuit Properties panel also contains the following field for Trunk, VccBearerService, VpcBearerService, and CES over PVC circuits:

- Default TM Profile
  This field contains the default Traffic Management (TM) Profile for the selected circuit type.

  The TM profiles define default traffic management (also known as Quality of Service) parameters for the circuit. You can select a TM profile for the circuit from a drop down list. This profile may be overridden for individual Vcc or Vpc components, and is specified in the Node Properties pane.

  This Default TM Profile field is editable.The Edit TM Profiles [....] button to the right of the Default TM Profile drop down list opens the ATM Traffic Management Profile Editor dialog box. For additional information, see the section "ATM Traffic Management Profile Editor" (page 217).

  The TM parameters are provided through the TM Profiles file. This file specifies the traffic management component attributes and values that are to be applied to all nodes in the path. For information on setting up this file, see "Information files" (page 36).

Circuit Path panel for PVC circuit types

The Circuit Path panel is displayed for nodes in the PVC path, specifically for the following circuit types:

- Trunk

- VccBearerService

- VcpBearerService

- CES over PVC

The Circuit Path section is not displayed for SPVC and SPVP circuit types because provisioning is performed on only one node.

The Circuit Path section displays the nodes in the PVC path. The Circuit Path section provides a graphical representation of the ATM circuit that you are provisioning. When you create a new circuit, by default, a single empty node is displayed in this area.

As you add nodes, each node appears with links on one or both sides indicating its placement as an end node or relay node in the path.

When you select a node, the Node Properties section displays the provisioning details for the node.

Each node in the path has a pop-up menu containing commands that correspond to the commands in the Edit menu. You can access the pop-up menu by selecting the node and then right-clicking. The pop-up menu options are:

- Add After
  This command adds a node to the left of the selected node in the path.

- Add Before
  This command adds a node to the right of the selected node in the path.

- Delete
  This command deletes the selected node in the path. If the path only contains a single node, you cannot delete it; the Delete option is disabled.

The pop-up menu options are enabled only when creating a new circuit.

Node Properties panel

The Node Properties panel lets you provide data that is specific to each node that you are configuring in the ATM connection. The fields in the Node Properties panel are based on the circuit type that you are configuring.

For a detailed description of the Node properties panel for PVC, SPVC, or FrAtm connections, see the following sections:

- "Node Properties panel for PVCs" (page 53)

- "Node Properties panel for SPVCs or SPVPs" (page 61)

- "Node Properties panel for FRATM ACCESS SPVC" (page 68)

Node Properties panel for PVCs

You use the Node Properties panel to provide data that is specific to each node you are configuring in the ATM PVC path. The node being configured is determined by the node graphic that is selected in the Circuit Path path. For more information, see "Circuit Path panel for PVC circuit types" (page 51).

The fields are read only or read-write, depending on the circuit operation that you are performing (create, modify, or delete)

The PVC Node Properties panel contains the following common elements:

- Node Name field
  Use the Node Name field to select the name of the node to be provisioned from the list of available nodes. The list of node names is provided by the Host Group Directory Server (HGDS).

- End Node check box
  The End Node application instance is displayed for ATM logical trunks and CES PVCs only. The End Node check box is checked for the first node in the path. You must select End Node for the last node in the ATM PVC or CES ATM path.

- Node details panels
  The fields in the node details panel contains a split pane of input fields on the left and right sides. The details panel changes with the type of service being provisioned. You use these fields to provide detailed information about the node that you have selected in the Circuit Path. For further information on the contents of the node details panel for each circuit type, see "Node details" (page 54).

- Use Defaults check box
  Use this check box to indicate whether the default user ID and password (see "Circuit Properties panel" (page 48)) are used to provision the selected node. Select Use Defaults to use the default user ID and password. When you deselect the defaults option, you need to type a specific user ID and password in the appropriate fields.

- User Id field
  The User Id field is enabled only if the Use Defaults check box is deselected. If you are not using the default user ID, you can enter a user ID in this field.

- Password field
  The Password field is enabled only if the Use Defaults check box is deselected. If you are not using the default Password, you can enter a user ID in this field.

- Path navigation buttons
  The path navigation buttons let you select the previous or next nodes in the path, displaying the configuration data in the node details area for the selected node.

  When a navigation button is not applicable, it is disabled (greyed out). For example, once you provision the last node in the path, the Next button has grey letters because there are no additional nodes to add. The action buttons are as follows:

  — Back
    The Back button allows you to navigate back through the nodes in the path.

  — Next
    The Next button allows you to navigate forward through the nodes in the path.

  You may also navigate by selecting the node in the graphical area path.

Node details
The fields in the node details panel depend on the type of service being provisioned. The following sections describe the node details panel for the various circuit types:

- "Node details for VccBearerService and VpcBearerService circuit types" (page 54)

- "Node details for CES over PVC circuit type" (page 56)

- "Node details for trunk circuit type" (page 59)

Node details for VccBearerService and VpcBearerService circuit types
For an illustration of the main window and Node Properties panel for a PVC circuit type, see the figure"Node details for PVC (VccBearerService)" (page 55).

Figure 2
Node details for PVC (VccBearerService)

The left and right sides of the PVC details panels contain the following fields:

- ATM IF
  Use this field to specify the ATM interface number.

- VPI
  Use this field to specify the virtual path identifier number.

- VCI
  Use this field to specify the virtual channel identifier number.

  Note: This field is disabled for the VpcBearerService circuit type (PVPs).

- Use Default TM
  Use this section to indicate whether the default Traffic Management (TM) profile is applied to the Vcc Vcd Tm or Vpc Vpd Tm component. By selecting Use Default TM, you use the default TM.

- TM Profile
  Deselecting the Use Default TM Profile option, enables the TM Profile field. You can select a different TM profile from the TM list, to be applied to the current VCD or VPD.

Node details for CES over PVC circuit type
You use the CES details panel for CES end nodes.

For an illustration of the Node Details panel for a CES circuit, see the figure"Node details for CES over PVC" (page 57).

Figure 3
Node details for CES over PVC

When you select the CES over PVC Circuit Type, the input fields for the right details panel are the same as for the node details for PVC.

- ATM IF
  Use this field to specify the ATM interface number.

- VPI
  Use this field to specify the virtual path identifier number.

- VCI
  Use this field to specify the virtual channel identifier number.

- Use Default TM
  Use this section to indicate whether the default Traffic Management (TM) profile is applied to the Vcc Vcd Tm or Vpc Vpd Tm component. By selecting Use Default TM, you use the default TM.

- TM Profile
  Deselecting the Use Default TM Profile option, enables the TM Profile field. You can select a different TM from the TM list, to be applied to the current VCC or VPD.

On the left side, the following input fields appear:

- Aal1CES
  Use this field to specify the AAL1 CES component identifier.

- Service Type
  Use this field to specify the AAL1 CES service type.

  — Select structured to add a TrunkConditioning component, if it doesn't already exist, to the channel associated with the AALI CES component.

  — Select unstructured to delete the Trunk Conditioning component from the channel associated with the AALI CES component.

- Channel
  Use this field to specify the AALI CES interface. You can click the browse button [...] to the right of the Channel field to search the available channels (all channels which are not linked to an application). When you select the button, a search dialog box opens. You can search for available channels on a specific logical processor (LP) or on all LPs. See "Browse Channels dialog box" (page 90).

Node details for trunk circuit type
Use the Trunk details panel for Trunk end nodes.

For an illustration of the Trunk details panel, see the figure "Node details for Trunk" (page 60).

Figure 4
Node details for Trunk
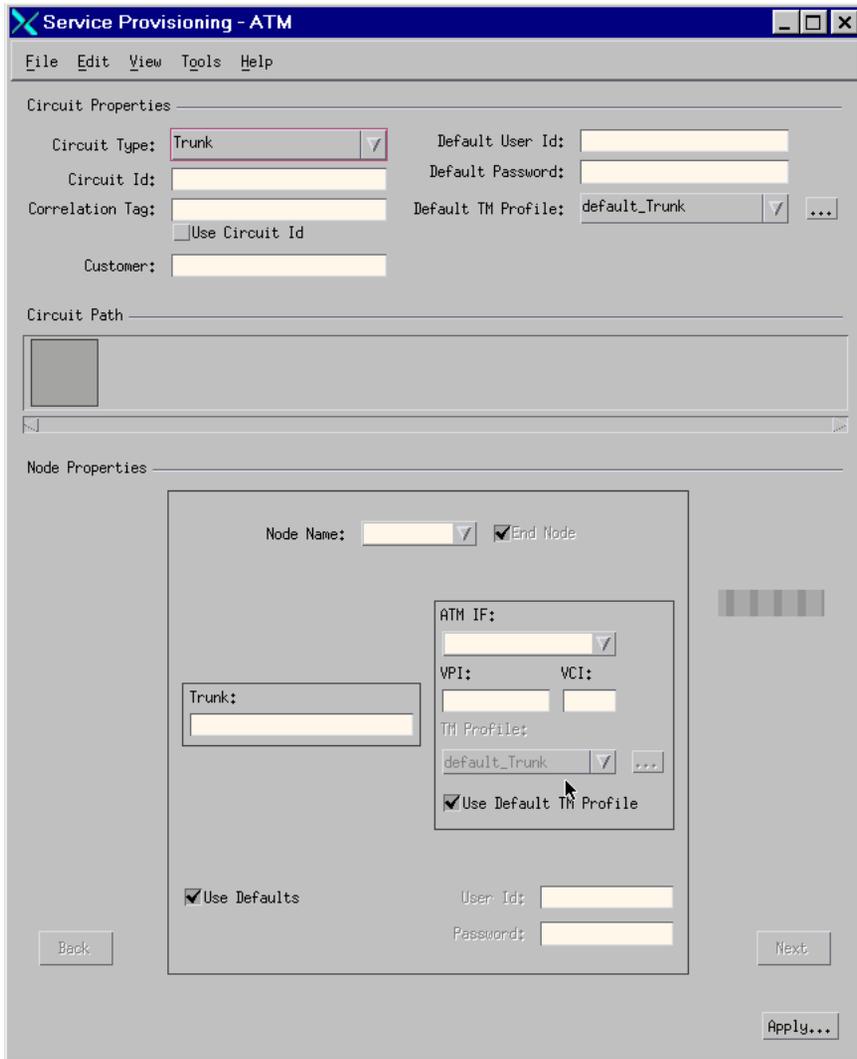
When you select the Trunk circuit type, the input fields for the right details panel are the same as for the node details for PVC and CES over PVC:

- ATM IF
  Use this field to specify the ATM interface number.

- VPI
  Use this field to specify the virtual path identifier number.

- VCI
  Use this field to specify the virtual channel identifier number.

- Use Default TM
  Use this section to indicate whether the default Traffic Management (TM) profile is applied to the Vcc Vcd Tm or Vpc Vpd Tm component. By selecting Use Default TM, you use the default TM.

- TM Profile
  Deselecting the Use Default TM Profile option, enables the TM Profile field. You can select a different TM from the TM drop down list, to be applied to the current VCC or VPD.

On the left side, the following input field appears:

- Trunk
  Use this field to specify the trunk identifier.

Node Properties panel for SPVCs or SPVPs

You use the Node Properties panel to provide data for the source and destination nodes of the SPVC or SPVP. Although the attributes being provisioned all belong to the source node, the destination node is used to look up the called address and to validate the destination VPI and VCI.

The node properties panel contains a split pane of input fields on the left and right sides. You use these fields to provide the node details for the source and destination nodes.

Note: The fields in the SPVC Node Properties area may be read-only or read-write, based on the type of circuit operation (create, modify, or delete) being performed.

For an illustration of the SPVC Node Properties panel, see the figure "Main window - SPVC circuit type" (page 62).

Figure 5
Main window - SPVC circuit type
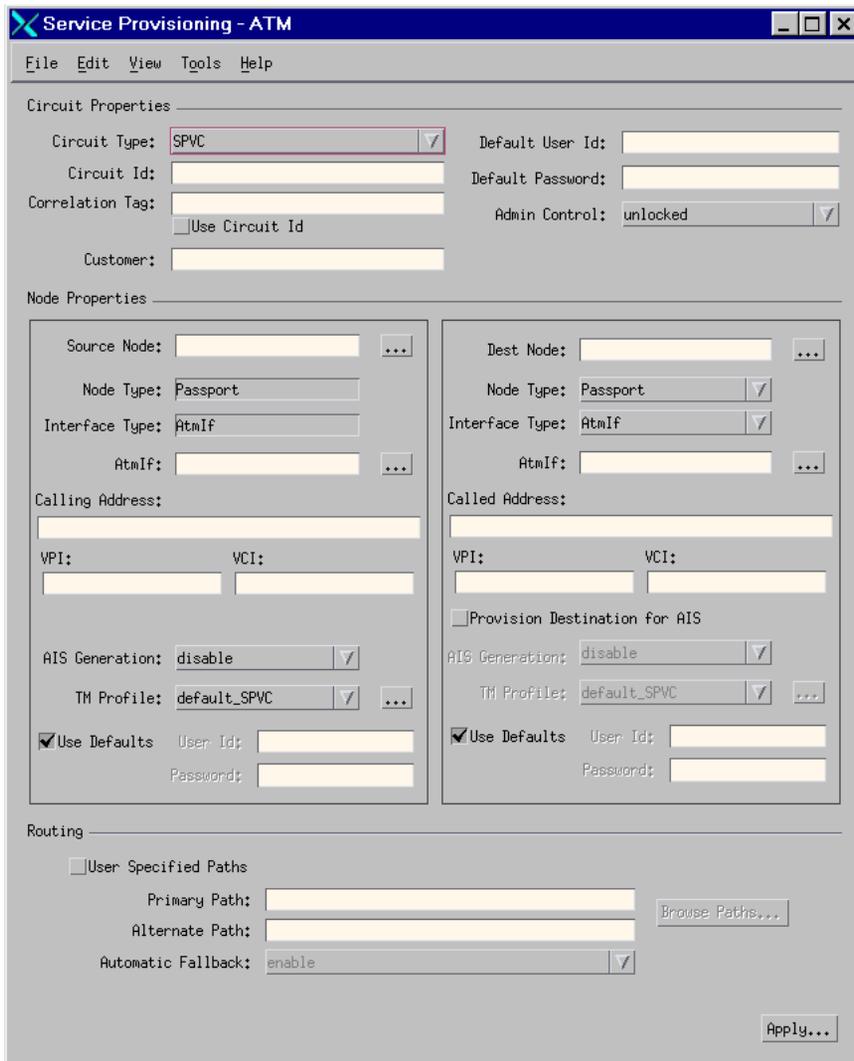
For a description of the details panel of the SPVC Node Properties area, see the following sections:

- "Source fields" (page 63)

- "Destination fields" (page 64)

Source fields
The following are the source application fields:

- Source Node
  Use this field to enter the source node. You can click the browse button [...], to the right of the Source Node field to open the Browse Nodes dialog box to search the available nodes. When you select the button, a search dialog box opens. You can search for available nodes from a list of available nodes. The list of node names is provided by the Host Group Directory Server (HGDS). See "Browse Nodes dialog box" (page 92).

- Node Type
  By default the source node must always be a Passport so this field is read-only.

- Interface Type
  By default the source node of an Atm SPVC must always be ATM so this field is read-only.

  Note: This field appears only in the SPVC circuit type.

- AtmIf
  Use this field to specify the instance number of the ATM interface to be used on the source node. You can click the browse button [...], to the right of the ATM IF field, to open the Browse Addresses dialog box to query the Passport for a list of valid AtmIfs and addresses on the node. You can select and AtmIf from the list. See "Browse Addresses dialog box" (page 93).

- Calling Address
  Use this field to specify the calling address associated with the source interface. This field is optional. If you do not specify a value, the node uses the default source ATM interface address.

- VPI
  Use this field to specify the source virtual path identifier number.

- VCI
  Use this field to specify is the source virtual channel identifier number.
  This field is disabled for the SPVP application.

- AIS Generation
  This drop down list lets you select between disabling or enabling the
  generation of an Alarm Indication Signal (AIS) to the Customer Premise
  Equipment (CPE), when the switched portion of the SPVC or SPVP is
  disconnected. By default, AIS generation is disabled. When you edit a
  circuit, this feature is in read-write mode.

- TM Profile
  The Traffic Management (TM) profile defines the Quality of Service
  parameters for the connection. The default TM profile for the selected
  circuit type appears in the drop down list.

  The edit TM Profiles button [....] to the right of the TM Profile drop down
  list opens the ATM Traffic Management Profile Editor dialog box. For
  additional information, "ATM Traffic Management Profile Editor"
  (page 217).

  The TM parameters are provided by the TM Profile files. When you edit
  a circuit, this attribute is read-write.

- Use Defaults
  Select the Use Defaults option to use the default user ID and password to
  provision the selected node.

- User Id and Password
  When you deselect the Use Defaults option, you need to type a specific
  User ID and password in the User Id and Password fields before you can
  log onto the node.

Destination fields
The destination node of the circuit can be a Passport or Foreign (non-
Passport) device. The following are the destination application fields:

- Dest Node
  Use this field to enter the Destination node only if the destination node is
  a Passport. This field is disabled if you have selected Foreign from the
  Node Type drop down list. You can use the browse button [...], to the right
  of the Dest Node field, to open the Browse Nodes dialog box. This dialog

box lets you search and select a node from a list of available Passport nodes. The list of node names is provided by the Host Group Directory Server (HGDS). See "Browse Nodes dialog box" (page 92).

- Node Type
  Use the Node Type drop down list to select the destination device. The destination can be a Passport or a Foreign (non-Passport) device. If you select Foreign, the Dest Node and Interface fields become disabled. The Provision Destination for AIS, AIS Generation and TM Profile drop down lists become disabled.

- Interface Type
  You can select an AtmIf or FrAtm interface from the drop down list for the destination end of the circuit.

- instance number
  For SPVC circuit types this field name is dynamic, and depends on whether you have selected an AtmIf or FrAtm interface type. For SPVP circuit types, the destination interface type can only be an AtmIf.

  — AtmIf
    For SPVC or SPVP circuit types, this field represents the instance number of the ATM interface to be used on the destination Passport. You should fill in this field only if the destination node is a Passport. When you complete both the Dest Node and AtmIf fields, the tool looks up the address of the ATM Interface on the destination node and auto-populate the called address field. You can open the Browse Addresses dialog box by clicking the browse button [...], found to the right of the AtmIf field to browse a list of AtmIfs and their addresses on the destination node and select an AtmIf from the list. If an AtmIf has more than one address, you can select the desired address from the list. See "Browse Addresses dialog box" (page 93). If you type in an AtmIf instance number without using the browse capability, the tool queries the Passport for the default address.

  — FrAtm
    For SPVC circuit types, this field represents the instance number of the FrAtm interface to be used on the destination Passport. You should fill in this field only if the destination node is a Passport. When you complete both the Dest Node and FrAtm fields, the tool looks up the address of the FrAtm Interface on the destination node and auto-populates the called address field. If there is no FrAtm

interface provisioned, a provisioning error occurs and the operation fails. You can open the FrAtm Browse Dialog box by clicking the browse button [...], found to the right of the FrAtm field to browse a list of FrAtm Interfaces and their addresses on the destination node and select an FrAtm interface from the list.

- Called Address
  For SPVC circuit types, you can specify the address of either the ATM or FrAtm instance. For SPVP circuit types, the called address is for the destination AtmIf interface.

  — AtmIf Called Address
    For SPVCs or SPVPs, this field specifies the address associated with the destination ATM interface that the source end will call. If the destination end is a Passport, the tool looks up the address and auto-populates the field. If the destination end is a non-Passport, this field is mandatory.

  — FrAtm Called Address
    For SPVCs, this field specifies the address associated with the destination FrAtm interface, in native X.121, E.164, or ATM address in NSAP format, that the source end will call. If the destination end is a Passport, the tool looks up the address and auto-populates the field. If the destination end is a non-Passport, this field is mandatory.

- TM Profile
  The Traffic Management (TM) profile defines the Quality of Service parameters for the connection. The default TM profile for the selected circuit type appears in the drop down list.

  The edit TM Profiles [....] button to the right of the TM Profile drop down list opens the ATM Traffic Management Profile Editor dialog box. For additional information, see "ATM Traffic Management Profile Editor" (page 217).

  The TM Profile drop down list and edit button are disabled if you select Foreign as the Node Type.

  The TM parameters are provided by the TM Profile files. You can specify the TM profile for the destination node if the destination endpoint is provisioned. When you edit a circuit, this attribute is in read-write mode.

- Use Defaults
  Select the Use Defaults option to use the default user id and password to
  provision the selected node. If you deselect the Use Defaults option, you
  need to type a specific userid and password in the User Id and Password
  fields to log onto the node.

If you have selected the SPVP circuit type, or AtmIf from the Interface Type
drop down list for the SPVC circuit, the following fields may also appear:

- VPI
  Use this field to specify the remote virtual path identifier number. When
  the configuration is applied, the service provisioning tool verifies that a
  Vcc component under the destination AtmIf, with the given called
  VpiVci does not already exist. If it does, an error message opens. The
  verification is not performed if a destination node is not specified.

- VCI
  Use this field to specify the remote virtual channel identifier number.
  This field is disabled for the SPVP application.

  Note: When the VPI and the VCI values are entered for the first time, the
  Called VPI and Called VCI fields are set to the same values. You can
  overwrite them. Although the values do not need to match, the same
  naming is often used for correlation purposes.

- Provision Destination for AIS check box
  Select this option to create the destination endpoint at provisioning time
  and to allow the setting of the AIS generation attribute on the destination
  endpoint. If you do not select the Provision Destination for AIS, the
  service provisioning tool dynamically creates the endpoint at call setup
  time and AIS generation is disabled.

  Note: This option is disabled if you select Foreign as the Node Type.

- AIS Generation
  This drop down list lets you select between disabling or enabling the
  generation of an Alarm Indication Signal (AIS) to the Customer Premise
  Equipment, when the switched portion of the SPVC or SPVP is
  disconnected. By default, AIS generation is disabled. To have AIS
  capability at the destination node, the destination must be provisioned, as

well as the traffic management parameters related to it. You need to provide the node name and ATMIF. When you edit a circuit, this feature is in read-write mode.

Note: This drop down list is disabled if you select Foreign as the Node Type.

If you have selected the SPVC circuit type, and FrAtm from the Interface Type drop down list, the following additional field appears:

• DLCI
This field specifies the DLCI on the destination node. This field is mandatory for both the Passport and non-Passport scenarios. If the destination node is a Passport, the DLCI should not already exist on the Passport. The tool creates it automatically. If the destination node is not a Foreign node (non-Passport), the DLCI should exist on the node. The Get Next button is enabled only if the destination node is a Passport.You can also click the Get Next button to automatically populate the DLCI field with the next available DLCI number on the Passport.

Node Properties panel for FRATM ACCESS SPVC

You use the Node Properties panel to provide data for the source and destination nodes of the FrAtm circuit. The node properties panel contains a split pane of input fields on the left and right sides. You use these fields to provide the node details for the source and destination nodes.

Note: The fields in the Node Properties area may be read-only or read-write, based on the type of circuit operation (create, modify, or delete) being performed.

For an illustration of the FRATM ACCESS SPVC Node Properties panel, see the figure "Main window - FRATM ACCESS SPVC circuit type, for FrAtm to FrAtm SPVC" (page 69).

Figure 6
Main window - FRATM ACCESS SPVC circuit type, for FrAtm to FrAtm SPVC

For a description of the details panel of the Node Properties area, see the following sections:

- "Source fields" (page 63)

- "Destination fields" (page 64)

Source fields
The following are the source application fields:

- Source Node
  Use this field to enter the source node. The source node must be a Passport. You can also click the browse button [...], to the right of the Source Node field to open the Browse Nodes dialog box to search the available Passport nodes in the network. When you select the button, a search dialog box opens. You can search for available nodes from a list of available nodes. The list of node names is provided by the Host Group Directory Server (HGDS). See "Browse Nodes dialog box" (page 92).

- Node Type
  This field is read-only since the node type for the source side must always be a Passport.

- Interface Type
  This field is read-only since the source of a FrAtm Access SPVC must always be FrAtm.

- FrAtm
  Use this field to specify the instance number of the FrAtm interface to be used on the source Passport. You can also click the browse button [...], to the right of the FrAtm field, to open the FrAtm Browse Dialog box to query the Passport selected in the source node field for the list of FrAtm Interfaces on the source node. You can select an available FrAtm Interface from the list and also show and select an unassigned DLCI. For a description of the FrAtm Browse dialog box, see "FRATM Browse Dialog box" (page 99).

- DLCI
  Use this field to specify the instance number of the DLCI to be created as part of the circuit on the source node. You can also click the Get Next button to automatically populate the DLCI field with the next available DLCI number on the Passport.

- TM Profile
The Traffic Management (TM) profile defines the Quality of Service parameters for the connection. The default FRATMSPVC TM profile appears in the drop down list.

    The edit TM Profiles button [....] to the right of the TM Profile drop down list opens the ATM Traffic Management Profile Editor dialog box. For additional information, "ATM Traffic Management Profile Editor" (page 217).

    The TM parameters are provided by the TM Profile files. When you edit a circuit, this attribute is read-write.

- Use Defaults
Select the Use Defaults option to use the default user ID and password to provision the selected node.

- User Id and Password
When you deselect the Use Defaults option, you need to type a specific User ID and password in the User Id and Password fields before you can log onto the node.

Destination fields
The following are the destination application fields:

- Dest Node
Use this field to enter the destination node name. The destination can be a Passport or Foreign (non-Passport) device. This is an optional field and you should only enter a node name if the destination node is a Passport device. You can use the browse button [...], to the right of the Dest Node field, to open the Browse Nodes dialog box. This dialog box lets you search and select a node from a list of available Passport nodes. The list of node names is provided by the Host Group Directory Server (HGDS). See "Browse Nodes dialog box" (page 92).

- Node Type
The destination node can be a Passport or Foreign node. If you select Passport, all the destination fields are enabled. If you select Foreign, the Dest Node, and the AtmIf or FrAtm fields are disabled. The TM Profile drop down list is also disabled.

- Interface Type
  You can specify whether the destination end of the circuit is an AtmIf or FrAtm interface.

- Instance number
  This field name is dynamic, and depends on whether you have selected an AtmIf or FrAtm interface type:

  — AtmIf
    If you select the AtmIf interface type, this field represents the instance number of the Atm interface to be used on the destination Passport. You should fill in this field only if the destination node is a Passport. When you complete both the Dest Node and AtmIf fields, the tool looks up the address of the Atm Interface on the destination node and auto-populate the called address field. You can open the Browse Addresses dialog box by clicking the browse button [...], found to the right of the AtmIf field. You can browse a list of AtmIfs and their addresses on the destination node and select an AtmIf from the list. If an AtmIf has more than one address, you can select the desired address from the list. See "Browse Addresses dialog box" (page 93). If you type in an AtmIf instance number without using the browse capability, the tool queries the Passport for the default address.

  — FrAtm
    If you select the FrAtm interface type, this field represents the instance number of the FrAtm interface to be used on the destination Passport. You should fill in this field only if the destination node is a Passport. When you complete both the Dest Node and FrAtm fields, the tool looks up the address of the FrAtm Interface on the destination node and auto-populate the called address field. If there is no FrAtm interface provisioned, a provisioning error occurs and the operation fails. You can open the FrAtm Browse Dialog box by clicking the browse button [...], found to the right of the FrAtm field. You can browse a list of FrAtm Interfaces and their addresses on the destination node and select an FrAtm interface from the list. See "FRATM Browse Dialog box" (page 99).

- Called Address
  Use this field to specify either the address of the ATM or FrAtm instance

   — AtmIf called address
If you have selected the AtmIf interface type, this field specifies the address associated with the destination ATM interface, in native X.121, E.164, or ATM address in NSAP format, that the source end will call. If the destination end is a Passport, the tool looks up the address and auto-populates the field. If the destination end is a non-Passport, this field is mandatory.

   — FrAtm called address
If you have selected the FRAtm interface type, this field specifies the address associated with the destination FrAtm interface, in native X.121, E.164, or ATM address in NSAP format, that the source end will call. If the destination end is a Passport, the tool looks up the address and auto-populates the field. If the destination end is a non-Passport, this field is mandatory.

- Use Defaults
Select the Use Defaults option to use the default user id and password to provision the selected node.

- User Id and Password fields
If you deselect the Use Defaults option, you need to type a specific userid and password in the User Id and Password fields to log onto the node.

If you have selected AtmIf from the Interface Type drop down list, the following additional fields appear in the destination side of the Node Properties panel:

- VPI and VCI
Use these fields to specify the VCC of the remote address.

If you have selected FrAtm from the Interface Type drop down list, the following additional fields appear in the destination side of the Node Properties panel:

- DLCI
This field specifies the DLCI on the destination node. This field is mandatory for both the Passport and non-Passport scenarios. If the destination node is a Passport, the DLCI should not already exist on the Passport. The tool creates it automatically. If the destination node is not a Foreign node (non-Passport), the DLCI should exist on the node. The

Get Next button is enabled only if the destination node is a Passport. You can also click the Get Next button to automatically populate the DLCI field with the next available DLCI number on the Passport

- TM Profile
The Traffic Management (TM) profile defines the Quality of Service parameters for the circuit. The default TM profile for the FRATM SPVC circuit type appears in the drop down list. The TM Profile drop down list is disabled it the Node Type is foreign.

The edit TM Profiles [....] button to the right of the TM Profile drop down list opens the ATM Traffic Management Profile Editor dialog box. For additional information, see "ATM Traffic Management Profile Editor" (page 217).

SPVC or SPVP Routing panel

The Routing panel appears for only SPVC and SPVP circuit types. The Routing panel lets you enable the routing feature which lets you specify the routing options (Designated Transit List (DTL) path) to be taken by the SPVC or SPVP to establish the connection. You can provision two manual paths for each SPVC or SPVP; a primary path and alternate path. Initially, the tool uses the primary path to establish the connection. If the primary path fails, the tool uses the alternate path. If both fail, the service provisioning tool provides the Automatic Fallback option which lets you enable or disable the default PNNI route selection algorithm. If you enable the Automatic Fallback option, this algorithm calculates the routing path based on predefined criteria and traffic management (TM) constraints.

You can also search the pre-configured manual DTL path names based on Destination Node and Path Name search criteria. See "Browse Paths dialog box" (page 96).

After you successfully activate the connection, it is stored in the Administration Database, along with the Primary Path, Alternate Path, and Automatic Fallback attributes.

The Routing panel contains the following items:

- "User Specified Paths" (page 75)

- "Primary Path" (page 75)

- "Alternate Path" (page 75)

- "Browse Paths... button" (page 75)

- "Automatic Fallback" (page 75)

User Specified Paths

The User Specified Paths check box lets you enable the routing capability. When this attribute is enabled, the SPVC or SPVP uses the paths that you specify to establish the connection. When disabled, the service provisioning tool uses the default PNNI route selection algorithm.

Primary Path

The Primary Path field lets you type the name of the path that the tool initially uses to establish the connection.

Alternate Path

The Alternate Path field is an optional field where you can type the name of a path that the tool can use to establish a connection if the primary path fails.

Browse Paths... button

The Browse Paths... search button opens the Browse Paths dialog box. This dialog box lets you search and select a path from a list of valid paths on the source node. For additional information, see "Browse Paths dialog box" (page 96).

Automatic Fallback

The Automatic Fallback dropdown list provides two options:

- enable
  Select enable to use the PNNI route selection algorithm it the primary and alternate paths fail.

- disable
  Select disable to disable the PNNI route selection algorithm.

Command panel

The command panel appears at the bottom of the interface. This panel contains buttons which are used to apply the configuration that you have set up in the ATM service provisioning tool. The buttons found in the command section depend on the type of operation being performed:

- Circuit Creation

  When creating a new circuit, the command panel has the following command button:

  — Apply
    This button opens the Create Circuit dialog box if you have entered all required configuration data. The create circuit dialog box lets you apply the configuration that you have set up in the ATM service provisioning tool. If mandatory configuration data is missing, the Message dialog box opens, and provides details about the missing data. For additional information on the Create Circuit dialog box, see "Create Circuit dialog box" (page 80).

- Circuit Editing

  When you are editing a circuit, the command panel has the following buttons:

  — Validate
    This button validates the circuit configuration data that you have retrieved from the Administration Database against the current Passport configuration data. If the data matches, the applicable fields are set to read-write and the Reset and Apply buttons are enabled. If there are differences in the component data, the differences are reported in the status window and you cannot edit the circuit. If the stored data is in error, you may edit the data using the Circuit Database Administration tool, or you can repopulate the database from the network. See 241-6001-400 *Preside MDM Administration Database User Guide* for relevant procedures. You can also verify that the Passport node is running the correct view. If not, you can load and activate a different view.

  — Reset
    This button resets all configuration data fields to the values currently

stored in the Administration Database, replacing any editing changes that you have made, but not yet applied. The Reset button is disabled until the circuit has been successfully validated.

— Apply
The Apply button is disabled until the circuit has been successfully validated. The Apply button opens the Edit Circuit dialog box, once you have entered all required configuration data. The Edit Circuit dialog box lets you apply the configuration that you have set up in the ATM service provisioning tool. If mandatory configuration data is missing, the Message dialog box opens and provides details about the missing data. For additional information on the Edit Circuit dialog box, see "Edit Circuit dialog box" (page 83).

• Circuit Deletion
When deleting a circuit, the command area contains the following button:

— Delete
This button opens the Delete Circuit dialog box. This dialog box lets you delete the circuit. For additional information, see "Delete Circuit dialog box" (page 85).

ATM service provisioning dialog boxes

This section describes the dialog boxes available in the ATM service provisioning user interface.

For dialogs boxes that are available for all connections See the following sections for a description of the dialog box:

• "Retrieve dialog boxes" (page 78)

• "Create Circuit dialog box" (page 80)

• "Edit Circuit dialog box" (page 83)

• "Delete Circuit dialog box" (page 85)

• "Status Window" (page 87)

For a description of the dialog boxes relating to only the PVC application, see the following sections:

• "Shortest path dialog box" (page 88)

- "Browse Channels dialog box" (page 90). The Browse Channels dialog box applies to the CES over PVC connection only.

For a description of the dialog boxes relating to only SPVC/SPVPs, see the following:

- "Browse Nodes dialog box" (page 92)

- "Browse Addresses dialog box" (page 93)

- "Browse Paths dialog box" (page 96)

For a description of the dialog boxes relating to FrAtm Access SPVC see the following:

- "Browse Nodes dialog box" (page 92)

- "FRATM Browse Dialog box" (page 99)

- "Browse Addresses dialog box" (page 93). This dialog box is available on the destination when the Interface Type is an AtmIf.

Dialog boxes common to PVC, SPVC/P and FrAtm Access SPVC applications

The following dialog boxes and window are common to the PVC, SPVC/ SPVP and FrAtm Access SPVC applications:

- "Retrieve dialog boxes" (page 78)

- "Create Circuit dialog box" (page 80)

- "Edit Circuit dialog box" (page 83)

- "Delete Circuit dialog box" (page 85)

- "Status Window" (page 87)

Retrieve dialog boxes

The ATM service provisioning tool has a selection of retrieve dialogs boxes. These dialog boxes s let you retrieve a circuit from the Administration Database so that you can edit, copy or delete a circuit.

A retrieve dialog box opens when you select one of the following commands from the File menu in the ATM service provisioning tool window menu bar:

• Edit Circuit

• Copy Circuit

• Delete Circuit

For an example of the retrieve dialog box, see the figure "Example of a Retrieve dialog box" (page 79). This example shows the retrieve dialog box that opens you select the Edit Circuit command from the File menu.

Figure 7
Example of a Retrieve dialog box
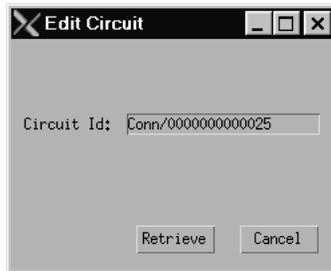
The retrieve dialog boxes contain the following items:

• Circuit Id field
  You enter the Circuit ID of the circuit to be retrieved from the Administration Database. If you do not know the Circuit ID, you can use the Circuit Viewer tool to search for the desired circuit. See 241-6001-011 *Preside MDM Fault Management User Guide* for the procedure to search for a circuit using the Circuit Viewer tool. Selecting a circuit in the Circuit Viewer circuit list sets the context. When the retrieve dialog box opens, the Circuit Id field contains the circuit ID which is currently in context. You can also retrieve the current context if you right click the Circuit Id field and select Get Context.

• Command buttons

  — Retrieve
    Selecting the Retrieve button retrieves the circuit from the Administration Database. If the data is successfully retrieved, the

dialog box closes, and the circuit data displays in the ATM service provisioning tool window. If two or more circuits have the same circuit ID, the first circuit found is used. If a circuit is not found, a warning message opens and the Retrieve dialog box remains open.

— Cancel
Selecting cancel closes the Retrieve dialog box and cancels the retrieval of circuit data.

The data that displays in the ATM service provisioning tool main window as a result of a successful retrieve action depends on the circuit operation that you have selected.

•   Edit Circuit...

— The data displays as read-only until you validate the circuit.

— The Command area displays the Validate..., Reset, and Apply... buttons. The Validate... button is enabled. The Reset and Apply... buttons are disabled.

•   Copy Circuit...

— The data displays as read-write.

— The data is copied from the source circuit, except for the following fields which remain blank: VPI, VCI, Called VPI, Called VCI, Trunk, AAL1 CES, Channel.

— The Command area displays the Apply... button which is enabled.

•   Delete Circuit...

— The Data is displayed as read-only.

— The Command area displays the Delete... button which is enabled.

Create Circuit dialog box

The Create Circuit dialog box lets you specify how to apply the configuration that you have set up in the ATM Service Provisioning tool. The Create Circuit dialog box opens when you select the Apply button in the Command area of the ATM service provisioning window when you are creating a circuit.

For an illustration of the Create Circuit dialog box, see the figure "Create Circuit dialog box" (page 81).

Figure 8
Create Circuit dialog box
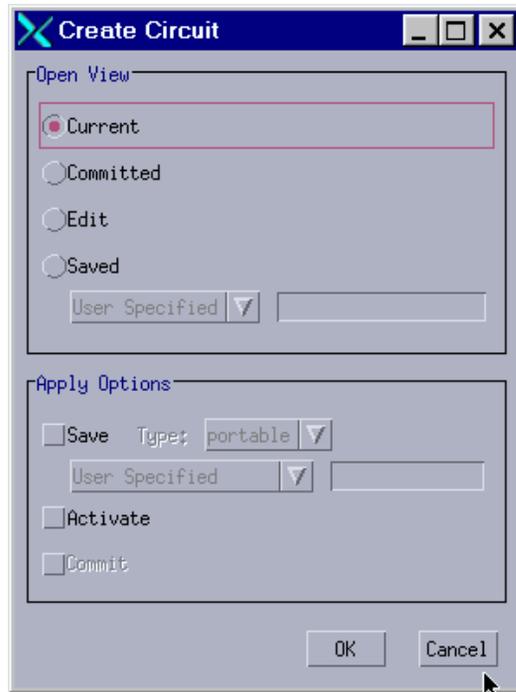
The Create Circuit dialog box contains the following panels:

• "Open View panel" (page 81)

• "Apply Options panel" (page 82)

• "Command buttons" (page 83)

Open View panel
The Open View panel lets you specify the view to which to apply your configuration changes. The Open View panel contains the following options:

• Current
Current copies the current view to the edit view.

• Committed
Committed copies the committed view to the edit view.

- Edit
  Edit uses the edit view.

- Saved
  Save loads the specified view. If you select Saved, you need to select one of the following options from the drop down list:

  — User Specified. When you select User Specified, you need to enter a view file name.

  — Dated. When you select dated you need to enter a date in the format <yymmdd>, where yy is the year, mm is the month and dd is the day. When you enter a date, the service data view with the highest version number (nn) is found. When an exact match does not exist, the most recent service data view, relative to the date is used. That is, the dated service data view with the latest date earlier than the given date, and with the latest version number, is opened. For additional information on dated views, see the section Using dated MCFs in 241-6001-304 *Preside MDM Configuration Management Administrator Guide*. The file must exist on all the Passports being configured

Apply Options panel

The Apply Options panel lets you specify how to apply the configuration changes. The panel contains the following check boxes.

- Save
  Save saves the configuration on the node. The Type dropdown list is enabled and you can select one of the following format options:

  — portable saves the view in portable format

  — delta saves the view in delta format

  — ascii saves the view in ASCII forma

  When you select Save, you need to select one to the following options from the drop down list:

  — User Specified. You need to enter a view file name in the adjacent text box.

  — Dated. You need to enter a date in the format yymmdd. where yy is the year, mm is the month and dd is the day. When you enter a date, the view is saved with the date followed by the next version number

<nn> in the sequence, in the format <yymmdd><nn>. For example, 03012903. The file is created on all nodes that are being provisioned. For additional information on dated views, see the section "Using dated MCFs" in 241-6001-304 *Preside MDM Configuration Management Administrator Guide*.

- Activate
  Activate activates the configuration changes. The activation is automatically confirmed. If you have installed the Administration Database, the database is populated with the circuit data.

- Commit
  Commit commits the configuration as the default at startup. Commit is enabled only if you have selected Activate.

Command buttons
The Create dialog box has the following command buttons

- OK
  OK begins the provisioning of the nodes in the path.

- Cancel
  Cancel cancels the creation of the circuit and closes the Create Circuit dialog box.

Edit Circuit dialog box

The Edit Circuit dialog box lets you specify how to apply the modifications to a configuration. The Edit Circuit dialog box opens when you click Apply in the Command area of the main window when you are modifying a circuit.

Circuist modifications are always validated against and applied to the current view. If the changes are not activated, the changes do not appear in the current Passport view, nor are they updated in the Administration Database. If the changes are not activated, and the circuit is edited a second time, the original changes are not visible.

For an illustration of the Edit Circuit dialog box, see the figure "Edit Circuit dialog box" (page 84).

Figure 9
Edit Circuit dialog box

The Edit Circuit dialog box has the following apply options:

- Save

   Save saves the configuration on the node. The Type dropdown list is enabled and you can select one of the following format options:

   — portable saves the view in portable format

   — delta saves the view in delta format

   — ascii saves the view in ASCII format

   You need to select one of the following options from the drop down list:

   — User Specified. You need to enter a view file name in the adjacent text box.

   — Dated. You need to enter a date in the format yymmdd. where yy is the year, mm is the month and dd is the day. When you enter a date, the view is saved with the date followed by the next version number <nn> in the sequence, in the format <yymmdd><nn>. For example, 03012903. The file is created on all nodes that are being provisioned. For additional information on dated views, see the section "Using dated MCFs" in 241-6001-304 *Preside MDM Configuration Management Administrator Guide*.

- Activate
  Activate activates the configuration changes. The activation is
  automatically confirmed. If you have installed the Administration
  Database, the database is populated with the circuit data.

- Commit
  Commit commits the configuration as the default at startup. Commit is
  disabled until you select Activate so you cannot commit the view without
  activating the view.

- Command buttons
  The Edit Circuit dialog box has the following command buttons:

  — OK
    OK begins the provisioning of the nodes in the path.

  — Cancel
    Cancel cancels the circuit modification action and close the Edit
    Circuit dialog box.

Delete Circuit dialog box

The Delete Circuit dialog box lets you specify how to apply the deletion of a
circuit. The Delete Circuit dialog box opens when you select the Delete
button in the Command area of the ATM service provisioning window when
you are deleting a circuit.

Circuit deletions are always validated against and applied to the current view.
If the changes are not activated, the changes do not appear in the current
Passport view, nor do they appear in the database. If you delete a circuit, and
the change is not activated, the circuit is still in the current view and the
Administration Database is not updated.

For an illustration of the Delete Circuit dialog box, see the figure "Delete
Circuit dialog box" (page 86).

Figure 10
Delete Circuit dialog box

The Delete Circuit dialog box contains the following apply options:

- Save
  Save saves the configuration on the node. The Type dropdown list is
  enabled and you can select one of the following format options:

  — portable saves the view in portable format

  — delta saves the view in delta format

  — ascii saves the view in ASCII format

  You need to select one of the following options from the drop down list:

  — User Specified. You need to enter a view file name in the adjacent
    text box.

  — Dated. You need to enter a date in the format yymmdd. where yy is
    the year, mm is the month and dd is the day. When you enter a date,
    the view is saved with the date followed by the next version number
    <nn> in the sequence, in the format <yymmdd><nn>. For example,
    03012903. The file is created on all nodes that are being provisioned.
    For additional information on dated views, see the section "Using
    dated MCFs" in 241-6001-304 *Preside MDM Configuration
    Management Administrator Guide*.

- Activate
  Activate activates the configuration changes. The activation is
  automatically confirmed. If you have installed the Administration
  Database, the database is populated with the circuit data.

- Commit
  Commit commits the configuration as the default at startup. Commit is
  disabled until you select Activate so you cannot commit the view without
  activating the view.

- Command buttons
  The Delete Circuit dialog box has the following command buttons:

  — OK
    Select OK to begin the circuit deletion. The data that is retrieved
    from the Administration Database is validated against the Passport
    configuration data. If the data matches, the deletion proceeds. If the
    component data differs, the differences are reported in the status
    window and the circuit deletion does not proceed. If the stored data
    is incorrect, you can edit the data using the Circuit Database
    Administration tool or you can repopulate the database from the
    network. For the procedure to repopulate the database, see
    241-6001-400 *Preside MDM Administration Database User Guide*.
    You may also verify that the Passport node is running the correct
    view. If not, you may load and activate a different view.

  — Cancel
    Select Cancel to cancel the circuit deletion and close the Delete
    Circuit dialog box.

Status Window

The Status Window opens when you select the Show Messages... command
from the View Menu in the Menu bar. The Status Window displays status
information about the tool and the provisioning operation.

For an illustration of the Status Window, see "Status Window" (page 88).

Figure 11
Status Window
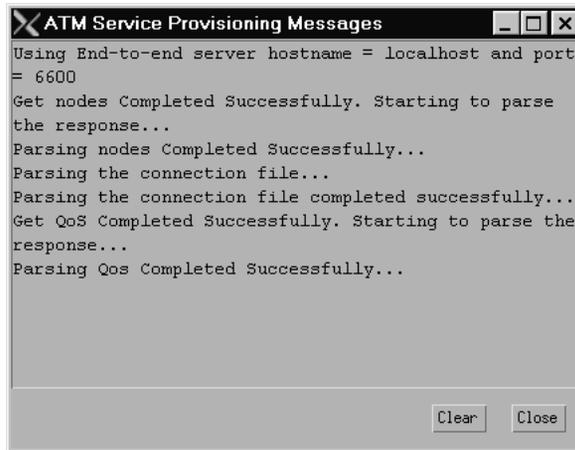
The status dialog box contains the following command buttons:

- Clear
  Select Clear to clear the status messages.

- Close
  Select Close to close the Status dialog box.

PVC dialog boxes

See the following sections for a description of dialog boxes available for PVC circuit types.

- "Shortest path dialog box" (page 88) is available for ATM PVCs (Trunk, VccBearerService, VpcBearerService and CES over PVC circuit types

- "Browse Channels dialog box" (page 90) is available for the CES over PVC circuit type only.

Shortest path dialog box

The shortest path dialog opens when you select New Circuit Using Shortest Path... command from the File menu. This command is enabled for ATM PVCs (Trunk, VccBearerService, VpcBearerService and CES over PVC circuit types). The feature streamlines the process of selecting nodes for an

ATM PVC through assisted routing, that is, by determining the shortest path
(in number of hops) between two selected end nodes and automatically
plotting the nodes in between.

For an illustration of the shortest path dialog box, see the figure "Shortest path
dialog box" (page 89).

Figure 12
Shortest path dialog box
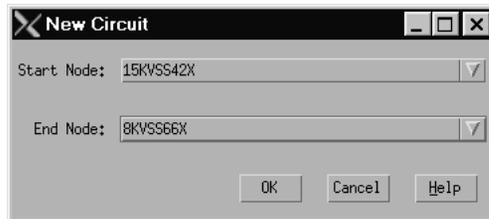
The shortest path dialog box contains the following:

- Start Node
  The Start Node provides a dropdown list of available nodes from which
  you can select the first node of the circuit.

- End Node
  End Node provides a dropdown list of available nodes from which you
  can select the end node of the circuit.

- Command buttons

  — OK
    OK initiates the plotting of the path between the selected nodes. The
    information is added to the ATM service provisioning window.

  — Cancel
    Cancel ends the assisted routing operation.

  — Help
    Help launches the online help for the dialog box.

Browse Channels dialog box

The Browse Channels dialog box lets you search for and select from a list of available channels on a specific LP or on all LPs. This dialog box is available for CES over PVC circuit types only.

You open the Browse Channels dialog box by clicking the browse button [...], found to the right of the Channel field in the Node Properties panel of CES over PVC Circuit Type, opens the Browse Channels dialog box.

For an illustration of the Browse Channels dialog box, see the Figure "Browse Channels dialog box" (page 90).

Figure 13
Browse Channels dialog box
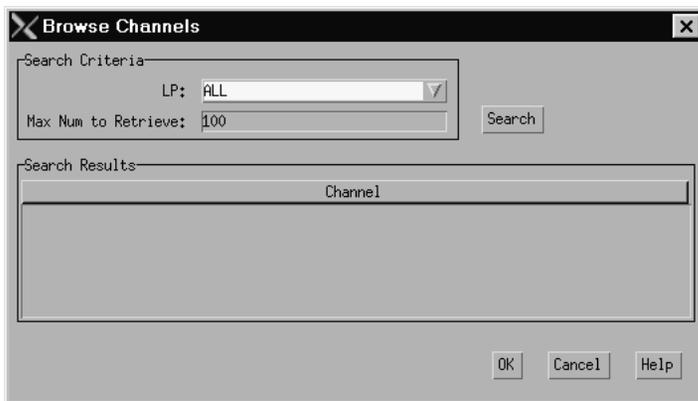
For a description of the parts of the Browse Channels dialog box, see the following sections:

- "Search Criteria area" (page 91)

- "Search button" (page 91)

- "Search Results area" (page 91)

- "Command buttons" (page 91)

Search Criteria area
The Search Criteria area lets you specify the search parameters:

- LP field lets you search for available channels, on a specified LP or on all LPs, from a drop down list. The default is ALL.

- Max Num to Retrieve field lets you restrict the number of channel instances retrieved. The default value is 100.

Search button
Clicking the Search button populates the Search Results area with a list of addresses matching the search criteria.

Search Results area
The Search Results area provides a list of channels that are not linked to an application and that meet the search criteria. You can select the desired channel and press the OK button to populate the selected channel to the Channel field in the ATM service provisioning window.

Command buttons
The Browse Channels dialog box has the following command buttons:

- OK
  OK populates the selected channel to the Channel field in the ATM service provisioning window and closes the dialog box.

- Cancel
  Cancel closes the Browse Channels dialog box without changing the Channel field.

- Help
  Help accesses the help information for the dialog box.

SPVC or SPVP dialog boxes

The following dialog boxes are available for SPVC and SPVP circuit types:

Note: The "Browse Addresses dialog box" (page 93) is available for the destination for a FRATM ACCESS SPVC when the destination Interface Type is AtmIf.

- "Browse Nodes dialog box" (page 92)

- "Browse Addresses dialog box" (page 93)

Browse Nodes dialog box

The Browse Nodes dialog box lets you search and select an node from a list of nodes available from the HGDS server. This dialog box is available for both the source and destination nodes.

The Browse Nodes dialog box opens when you click the browse button [...] found to the right of the Source Node or Dest Node fields.

For an illustration of the Browse Nodes dialog box, see the figure "Browse Nodes dialog box" (page 92).

Figure 14
Browse Nodes dialog box
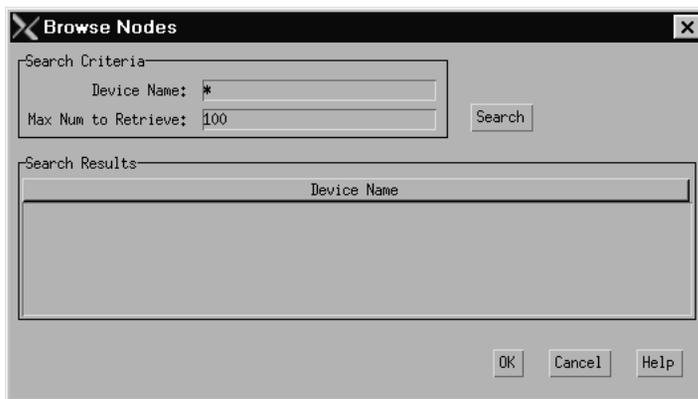
The Browse Nodes dialog box consists of the following elements:

Search Criteria panel

The Search Criteria panel has the following fields:

- Device Name
  Use the Device Name field to specify the node name for the search. By default, the Device Name field is populated with the wildcard character * to retrieve all devices.

- Max Num to Retrieve
  Use the Max Num to Retrieve field to restrict the number of instances retrieved. You can enter a value in the field. The default value is 100.

Search button

Clicking the Search button populates the Search Results area with the node names matching the search criteria.

Search Results area

The Search Results area provides the results of your search. The Device Name area lists the available nodes. You can select the desired node.

Command buttons

The Browse Nodes dialog box has the following command buttons:

- OK
  This button copies the selected node into the node field in the ATM service provisioning tool window and closes the dialog box.

- Cancel
  Cancel closes the dialog box. The node field is unchanged in the ATM service provisioning window.

- Help
  Help accesses the on-line help information for the dialog box.

Browse Addresses dialog box

The Browse Addresses dialog box lets you search and select an address from a list of valid addresses for the node. This dialog box is available for both the source and destination nodes.

After entering a valid device name, user ID and password, you can open the Browse Addresses dialog box by clicking the browse button [...] found to the right of the ATM IF field in either the Source or Destination Node areas.

Note: If you do not provide a valid device name, user ID or password, an message dialog box opens which indicates that you need to enter a Node Name, User ID, and Password.

For an illustration of the Browse Addresses dialog box, see the figure "Browse Addresses dialog box" (page 94).

Figure 15
Browse Addresses dialog box
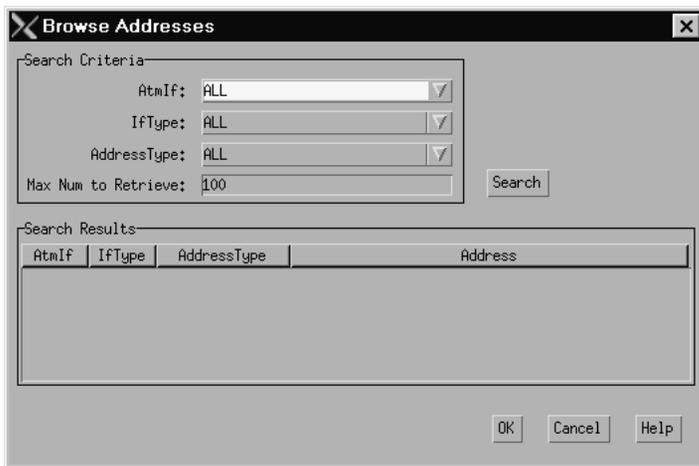
For a description of the parts of the Browse Addresses dialog box, see the following sections:

- "Search Criteria area" (page 95)

- "Search button" (page 95)

- "Search Results area" (page 95)

- "Command buttons" (page 95)

Search Criteria area
The Search criteria area lets you specify the search parameters:

- AtmIf
  By default the AtmIf field is populated with the Destination AtmIf value
  of the ATM service provisioning window. If not yet specified, the default
  value is ALL. Only AtmIfs that have UNI, PNNI, or IISP components
  show up.

- IfType
  The IfType criteria may be UNI, IISP, PNNI, or ALL. The default value
  is ALL. The IfType restricts the search of addresses to the named type of
  AtmIf component.

- Address Type
  The Address Type criteria may be default, primary, alternate or ALL. The
  default value is ALL. Primary and alternate addresses will only be listed
  if they have a TerminateSPvpAndSPvc subcomponent.

- Address Max Num to Retrieve
  This criteria restricts the number of address instances retrieved. The
  default value is 100.

Search button
Clicking the Search button populates the Search Results area with a list of
addresses matching the search criteria.

Search Results area
The Search Results area provides a list of addresses available from the
specified node that meet the search criteria. You can select the desired
address.

Command buttons
The Browse Addresses dialog box has the following command buttons:

- OK
  OK copies the AtmIf and address that you select in the Search Results
  area into the node field on the ATM service provisioning main window
  and closes the dialog box.

- Cancel
Cancel closes the dialog box without changing the AtmIf and Address fields in the ATM service provisioning main window.

- Help
Help accesses the help information for the dialog box.

Browse Paths dialog box

The Browse Paths search dialog box lets you search and select a Designated Transit List (DTL) path to be taken by the SPVC or SPVP from a list of valid paths on the source node.

The Browse Paths search dialog box opens when you click the Browse Paths... button in the ATM service provisioning window for SPVC or SPVP circuit types after you have entered the following information:

- source node name

- user ID

- password

If you have not entered a valid source node, user ID, and password, a message dialog box opens prompting you to enter the missing information.

Figure 16
Browse Paths dialog box

The Browse Paths dialog box has the following areas:

Search Criteria panel
The Search Criteria panel lets you specify the search parameters:

- Path Name
  The Default is the wild card (*). You can specify a path name in this field.

- Destination Node
  By default, this field contains the name of the Destination Node from the Destination Node field in the main window. If you have not specified a node name in the main window, the default is the wild card (*).

- Max Num to Retrieve
  This field lets you restrict the number of instances retrieved by specifying a maximum number to retrieve. the default value is 50.

- Search button
  When you click this button, you initiate the search and populate the Search Results panel with a list of Manual Designated Transit List (MDTL) paths which match the search criteria.

Search Results panel

The Search Results panel displays a list of MDTL paths available on the specified node which meet the search criteria. When you select a path, the path details are populated in the Path Details panel. The Search Results panel has the following command buttons:

- Set Primary
  When you select a path in the Search Results panel, and then click the Set Primary button, the selected path name is copied into the Primary Path field in the Routing panel of the main window.

- Set Alternate
  When you select a path in the Search Results panel, and then click the Set Alternate button, the selected path name is copied into the Alternate Path field in the Routing panel of the main window.

Path Details panel

When you select a path in the Search Results panel, the Path Details panel provides a list of nodes and port IDs that make up the selected path. If the port is an ATM port, and is non-zero, the port ID is mapped to its ATM IF value.

Close button

The Close button closes the dialog box.

FRATM ACCESS SPVC dialog boxes

The following dialog box is available for the FRATM ACCESS SPVC circuit type:

• "FRATM Browse Dialog box" (page 99)

Note: The "Browse Addresses dialog box" (page 93) is available for the destination for a FRATM ACCESS SPVC when the destination Interface Type is AtmIf.

FRATM Browse Dialog box

The FrAtm Browse Dialog box lets you search and display FrAtm interfaces and their addresses. You can select a FrAtm interface from a list of available interfaces on the node. This dialog box is available from both the source and destination nodes.

The FrAtm Browse Dialog box opens when you click the browse button [...] found to the right of the FrAtm field in the source or destination sides of the Node Properties panel.

For an illustration of the FrAtm Browse Dialog box, see the figure "FrAtm Browse Dialog box" (page 100).

Figure 17
FrAtm Browse Dialog box

The FrAtm Browse Dialog box consists of the following elements:

- "Search results area" (page 100)

- "Show button" (page 100)

- "Search Results area" (page 93)

- "Command buttons" (page 93)

Search results area
The search results area displays the FrAtm Interfaces and their Addresses.

Show button
Clicking the show button populates the Unassigned DLCI area with available DLCIs.

Unassigned DLCI area
When you click the Show button, the Unassigned DLCI area lists the unassigned DLCIs. You can select a DLCI.

Command buttons

The FrAtm Browse Dialog box has the following command buttons:

• OK

OK populates the FrAtm field in the ATM service provisioning window with the FrAtm interface that you have selected from the list. The dialog box closes.

• Cancel

Cancel closes the dialog box. The FrAtm field is unchanged in the ATM service provisioning window.

Using the keyboard

For ATM service provisioning, you can use the keyboard instead of the mouse to select a menu option, or to execute a command by using an accelerator. Every menu option in the menu bar has a mnemonic and an accelerator associated with it. See the following sections:

• "Mnemonics" (page 101)

• "Command accelerators" (page 101)

Mnemonics

Every menu option in the menu bar has a mnemonic associated with it. The single character that selects a given menu item is shown by the underscore under that letter in the name of the menu item. If there are duplicate options in the same menu, the second capital letter in the option is used. If there are no other capital letters in the menu option, then the second letter in the option is used.

You can use mnemonics by pressing the F10 key, entering the mnemonic for the menu bar option, and then entering the mnemonic for the entry that you want to use in the menu.

Command accelerators

The ATM service provisioning tool provides command accelerators to execute menu commands.The accelerators are usually the control key followed by the first letter of the menu option. Accelerators that are commonly used to reflect the options that are common to most applications are used.

Chapter 5
General provisioning procedures

This section describes the procedures that apply to any of the circuit types in the ATM service provisioning tool. This section contains the following information:

- **starting the ATM service provisioning tool**

  — "Starting the ATM service provisioning tool from the Preside MDM window" (page 105)

  — "Starting the ATM service provisioning tool from the Nodal Provisioning tool" (page 106)

  — "Starting the ATM service provisioning tool from the Circuit Database Administration tool" (page 109)

  — "Starting the ATM service provisioning tool from Circuit Viewer" (page 110)

- **generic provisioning procedures**

  — "Editing an ATM circuit" (page 111)

  — "Copying an ATM circuit" (page 116)

  — "Deleting an ATM circuit" (page 121)

- **applying provisioning changes**

  — "Applying service creations" (page 126)

  — "Applying service modifications" (page 129)

  — "Applying service deletions" (page 131)

- **"Invalid circuit conditions" (page 133)**

    — "Manually deleting a circuit from the network and Administration Database" (page 134)

    — "Correcting the circuit in the network" (page 136)

Prerequisites

Before using the service provisioning tool, you need to do the following tasks:

- Ensure that all of the Passports to be provisioned are configured for ATM and/or CES service up to the logical connection layer. For more information, see "Passport configuration" (page 36).

- Set up the required information files. For details, see "Information files" (page 36).

Starting the ATM service provisioning tool from the Preside MDM window

Use this procedure to start the ATM service provisioning tool from the Preside MDM window.

Procedure steps

1   Launch **Preside MDM**.

   `/opt/MagellanNMS/bin/nmstool &`

2   In the **Preside MDM** window, select **Configuration** -> **Passport Devices** -> **Service Provisioning** -> **ATM**.

   If you have installed the Administration Database, an authentication dialog box opens.
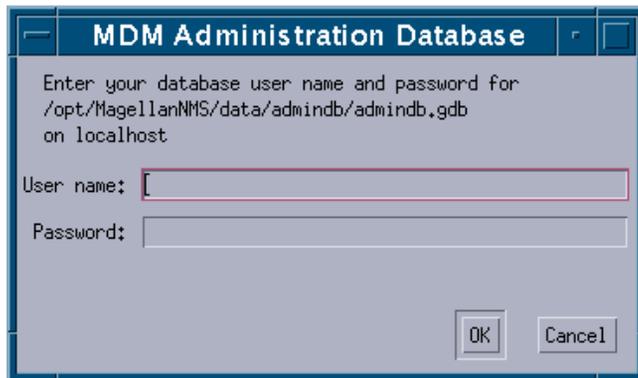
3   In the **User name** and **Password** fields, type a valid user name and password and click **OK**.

   The **Service Provisioning - ATM** window opens.

Starting the ATM service provisioning tool from the Nodal Provisioning tool

Use this procedure to start the ATM service provisioning tool from the external tools menu in Nodal Provisioning.

Procedure steps

1 Open **Preside MDM**.

   /opt/MagellanNMS/bin/nmstool &

2 In the **Preside MDM** window, select **Configuration** -> **Passport Devices -> Nodal Provisioning**.

   The **Nodal Provisioning** splash screen appears, and then the **Device Selection** dialog opens.

3 From the drop down list of devices, select a device and click **OK**.

   An authentication dialog opens.

4 Complete the following steps to authenticate to the device:

   a. In the **Username** field, enter a user name.

   b. In the **Password** field, enter a password.

   c. Click **OK**.

   The **Open View** dialog box opens.

5 Select an **Access Mode** and **View Mode** and click **Ok**.

   The **Nodal Provisioning** window opens.

6 From the menu bar, select **External Tools** -> **Service Provisioning** -> **ATM**.

   If you have installed the Administration Database, an authentication dialog box opens.

7 In the **User name** and **Password** fields, type a valid user name and password and click **OK**.

   The **Service Provisioning - ATM** window opens.

Starting the ATM service provisioning tool from the Network Viewer Start Tool menu

Use this procedure to start the ATM service provisioning tool in context from the Network Viewer tool. When you launch the service provisioning tool from Network Viewer, the Network Viewer remains open and you can continue to use it.

The order in which you select the nodes in Network Viewer determines how the service provisioning tool populates its node path.

If you select more than two nodes in Network Viewer and then start the ATM service provisioning tool with Trunk, VCC Bearer Service or VPC Bearer Service, or CES over PVC, the order that you added the nodes in the Network Viewer window is the order in which they appear in the node path in the Service Provisioning - ATM window

If you select more than two nodes in Network Viewer and then start the ATM service provisioning tool with SPVP or SPVC, the first two nodes are used for context. The first node that you select is the source node. The second node that you select is the destination node. Other selected nodes are unused.

Procedure steps

1   Launch Preside MDM.

   /opt/MagellanNMS/bin/nmstool &

2   In the **Preside MDM** window, select **Fault** -> **Network Viewer**.

   Network Viewer opens.

3   In **Network Viewer**, select the nodes required to provision the ATM service by doing one of the following:

   • click on the background of the **Network Viewer** window, drag the mouse and release it when all the desired nodes are included in the area where you dragged the mouse, or

   • press the shift key and click on the nodes that you know have the required cards to provision the ATM service

4   While holding the shift key, click the right mouse button on a selected node and select **Start Tool** -> **Configuration** -> **Service Provisioning** and select a circuit type:

- **SPVC**

- **SPVP**

- **Trunk**

- **Vcc Bearer Service**

- **VPC Bearer Service**

- **CES over PVC**

- **FRATM ACCESS SPVC**

If you have installed the Administration Database, an authentication dialog box opens. Proceed to step 5.

If you have not installed the database, the **Service Provisioning - ATM** window opens.

5   In the **User name** and **Password** fields, enter a valid user name and password.

The **Service Provisioning - ATM** window opens. The node path contains all the nodes selected in the **Network Viewer**. The selected application type appears in the **Application Type** field of the main window.

Starting the ATM service provisioning tool from the Circuit Database Administration tool

Use this procedure to start the ATM service provisioning tool from the Circuit Database Administration tool.

Procedure steps

1   In the **Preside MDM** window, select **System -> Administration -> Circuit Database Administration**.

An authentication dialog box opens.
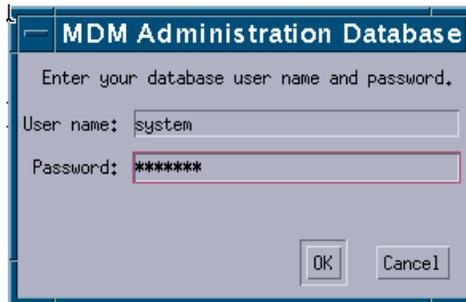
2   In the **User name** and **Password** fields, type a valid user name and password.

The **Circuit Database Administration** window opens.

3   From the tools menu in the **Circuit Database Administration** window, select **Tools -> ATM Service Provisioning**.

The **Service Provisioning - ATM** window opens.

Starting the ATM service provisioning tool from Circuit Viewer

Use this procedure to open the ATM service provisioning tool from Circuit Viewer.

Procedure steps

1   In the Preside MDM window, select **Fault** -> **Circuit Viewer**.

An authentication dialog box opens.

2   In the **User name** and **Password** fields, type a valid user name and password.

The **Circuit Viewer** window opens.

3   From the tools menu in the **Circuit Viewer** window, select **Tools** -> **ATM Service Provisioning**.

The **Service Provisioning - ATM** window opens.

Editing an ATM circuit

Use this procedure to edit an ATM circuit.

> *Note:* You can also edit a circuit using the Circuit Database Administration tool. However, if you use this tool to edit a circuit, the changes are only reflected in the Administration Database, not on-switch.

This procedure uses the Circuit Viewer tool to find the circuit to be edited. Alternatively, you can also select the Edit Circuit command from the File menu, and type a valid circuit ID in the Circuit Id field. If the circuit ID that you type does not belong to any circuit in the Administration Database, an error message displays.

Editing a VCC Bearer Service, VPC Bearer Service or Trunk

You can edit both the node configuration of the circuit path or attributes of the nodes which make up the circuit.

You can edit the following for VCC Bearer Service, VPC Bearer Service and Trunk:

- Trunk
- AtmIf
- VPI and VCI
- default and node specific TM profiles
- customer
- correlationTag

The following table shows the Edit menu commands that let you modify the node configuration of the nodes that make up a VCC Bearer Service, VPC Bearer Service or Trunk circuit path, and the corresponding pop-up menu commands.

Edit menu commands	Pop-up menu commands
Add Node After	Add After
Add Node Before	Add Before
Delete Node	Delete

Editing a SPVC or SPVP

For SPVC/SPVP circuits, you can change the node name for the Source Node and Dest Node. Since this circuit consists of two nodes changing either one modifies the circuit.

Note: The ability to change the destination node name, and its attributes is available in Passport software release PCR4.2 and above and will depend on whether the AIS option has been set.

All fields, except the circuit ID are editable:

- AtmIf

- callingAddress

- calledAddress

- calledVpiVci for SPVC and for SPVP called Vpi is also editable

- default TM profile

- adminControl

- customer

- AIS Generation attribute

- Mdtl usage, and primaryPath, alternatePath, and automaticFallback attributes

- correlationTag

The Edit menu commands are disabled for SPVC and SPVP connections.

Prerequisites

Before proceeding with this procedure you need to know the circuit ID of the circuit that you want to edit.

Procedure steps

1   You can use the **Circuit Viewer** to retrieve and select the circuit that you want to edit. For the procedure to retrieve circuits, see 241-6001-011 *Preside MDM Fault Management User Guide*.

If you use the **Circuit Viewer** to retrieve and select a circuit, the **Circuit Id** field displays the circuit ID that you selected in the **Circuit Viewer** tool.

If you decide not to use the **Circuit Viewer**, proceed to step 2.

2   In the **File** menu of the ATM Service Provisioning tool window, select **Edit Circuit...** .

The **Edit Circuit** dialog opens.

Enter a circuit ID in the **Circuit Id** field.

Note: You can change your selection of circuit id by selecting another circuit in the **Circuit Viewer** and then selecting the **Get Context** menu item in the **Circuit Id** field pop-up menu. The **Circuit Id** field in the **Delete Circuit** dialog is populated with the newly selected circuit ID.

3   Click **Retrieve**.

If the circuit is found, the ATM service provisioning window is populated with the circuit data.

If more than one circuit matching the query is found, a dialog opens listing the matching circuits. Select the correct circuit and click **OK**.

The data displayed in the **Circuit Properties** and **Node Properties** sections matches the data displayed in the **Circuit Viewer**. The data is displayed in read-only mode. The **Default User Id** and **Default Password** fields are enabled. The **Validate** button is displayed and enabled. The **Reset** and **Apply** buttons are displayed and disabled.

Click **Cancel** if you want to end the operation. The **Edit Circuit** dialog closes.

4   In the **Default User Id** and **Default Password** fields, type the default user ID and password to provision the Passports nodes in the path.

You can override the default user ID and password for a selected node in the path by deselecting the **Use Defaults** option and then entering a new userid and password.

5   In the command section of the main window, click **Validate...** .

The data that was retrieved from the Administration Database is validated against the current Passport configuration data. If the retrieve operation is successful and the data matches, a message indicates that the circuit is valid. The **Reset** and **Apply** buttons are enabled. Proceed to step 6.

If the validate action fails because the circuit in the Administration Database is invalid, a dialog opens with the message that the circuit does not match the on-switch data. This indicates that one or more of the provisioned components no longer exist in the network.

The **Reset** and **Apply** buttons in the main window are not enabled and the provisioning data fields remain read-only.

If you click **View** -> **Show Messages...** in the main window, the messages dialog box displays the information on the first component that was found to be invalid. The service provisioning tool does not detect all invalid components.

Click **OK** in the Message dialog box and refer to "Invalid circuit conditions" (page 133) for the procedure to correct an invalid circuit condition.

6   Modify the circuit data.

Optionally, if at any time you want to return to the original data stored in the Administration Database, click **Reset**. Any fields that you edited are reset to their original value

7   To apply the configuration changes, click **Apply**.

The **Confirm ATM Circuit Changes** dialog box opens summarizing the changes made to the circuit.

8   To confirm the circuit changes before they are applied, click **OK**.

To cancel the changes, click **Cancel**.

If mandatory data is missing, a message dialog opens specifying the missing data. Enter the missing data and click **OK**.

If you clicked **OK** and there are no missing data, the **Edit Circuit** dialog box opens.
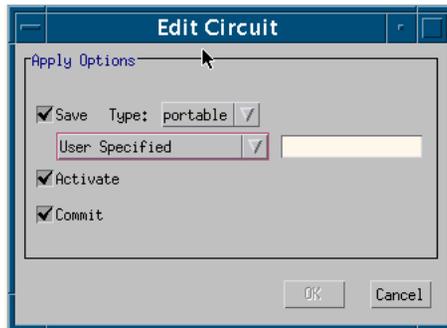
9   Apply the circuit modifications. See "Applying service modifications" (page 129).

After clicking Apply, the circuit is automatically revalidated. If there are differences in the component data, the differences are reported in the status window, and the circuit changes are not applied.

If the stored data is incorrect, you can edit the data using the Circuit Database Administration tool, or repopulate the database from the network. For the procedures to edit the data and repopulate the database, see 241-6001-400 *Preside MDM Administration Database User Guide*.

Copying an ATM circuit

This procedure uses the Circuit Viewer tool to find the circuit to be copied. Alternatively, you can also select the Copy Circuit... command from the File menu, and type a valid circuit id in the Circuit Id field. If the circuit id that you type does not belong to any circuit in the Administration Database, an error message displays.

When you copy an ATM circuit, the following occurs on the Passport:

- VCC Bearer Service
  When copying a VCC connection, the ATM service provisioning tool copies the following:

  — the nodes in the path

  — the source and destination AtmIfs

  — the default and node specific TM profiles

  — the customer

- VPC Bearer Service
  When copying a VCC connection the ATM service provisioning tool copies the following data:

  — nodes in the path

  — source and destination AtmIfs

  — default and node specific TM profiles

  — customer

- Trunk
  When copying a Trunk over PVC connection, the ATM service provisioning tool copies the following data:

  — nodes in the path

  — source and destination AtmIfs

  — default and node specific TM profiles

  — customer

- When copying an SPVC connection, the ATM service provisioning tool copies the following data:

- — source node

- — destination node, if known

- — source AtmIf

- — destination AtmIf, if known

- — calling and called address

- — customer

- — adminControl state

- — AIS generation attribute

- — Mdtl usage, and primaryPath, alternatePath and automaticFallback
  attributes

- When copying an SPVP connection, the ATM service provisioning tool
  copies the following data:

  - — source node

  - — destination node, if known

  - — source AtmIf

  - — destination AtmIf, if known

  - — calling and called address

  - — customer

  - — adminControl state

  - — AIS generation attribute

  - — Mdtl usage, and primaryPath, alternatePath and automaticFallback
    attributes

- When copying a FrAtm to FrAtm SPVC, the ATM service provisioning
  tool copies the following data:

  - — source node

  - — destination node, if known

  - — source FrAtm

  - — destination FrAtm, if known

    — called address

    — customer

- When copying a FrAtm to ATM SPVC, the ATM service provisioning tool copies the following data:

    — source node

    — destination node, if known

    — source FrAtm

    — destination AtmIf, if known

    — called address

    — customer

- When copying an ATM to FrAtm SPVC, the ATM service provisioning tool copies the following data:

    — source node

    — destination node, if known

    — source AtmIf

    — destination FrAtm, if known

    — called address

    — customer

    — adminControl state

Prerequisites

Before proceeding with this procedure you need to know the circuit ID of the circuit that you want to copy.

Procedure steps

1   You can use the **Circuit Viewer** to retrieve and select the circuit that you want to copy. For the procedure to retrieve circuits, see 241-6001-011 *Preside MDM Fault Management User Guide*.

    If you decide not to use the **Circuit Viewer**, proceed to step 2.

2   In the **File** menu of the ATM Service Provisioning tool main window, select **Copy Circuit...** .

The **Copy Circuit** dialog opens. If you have used the **Circuit Viewer** to
retrieve and select a circuit, the **Circuit Id** field displays the circuit ID that
you selected in the **Circuit Viewer** tool.

Otherwise, enter a circuit ID in the **Circuit Id** field.
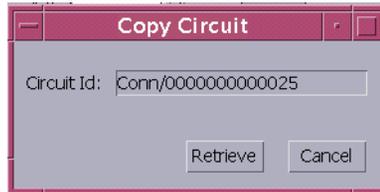
3   Click **Retrieve**.

If the circuit is found, the ATM service provisioning window is populated
with the circuit data.

If more than one circuit matching the query is found, a dialog opens listing
the matching circuits. Select the correct circuit and click **OK**.

For PVC, Trunk, and PVP circuits, the following data matches the data
shown in Circuit Viewer:

- nodes in the path

- source and destination AtmIfs

- default and node specific TM profiles

- customer

- correlationTag (for Trunk circuits)

For SPVC and SPVP circuits, the following data matches the data shown
in Circuit Viewer:

- source node

- source AtmIf

- calling and called address

- customer

- adminControl state

4   Complete the circuit data.

5   In the command area, click **Apply...** .

6 The **Create Circuit** dialog opens.

7 Apply the configuration changes as described in "Applying service creations" (page 126).

Deleting an ATM circuit

You can use the Circuit Viewer tool to find and retrieve the circuit to be deleted. Alternatively, you can select the Delete Circuit... command from the File menu, and type a valid circuit ID in the Circuit Id field. If the circuit ID that you type does not belong to any circuit in the Administration Database, an error message displays.

The following happens on the Passport when you delete a circuit:

*   VCC Bearer Service
    When deleting a VCC connection, the source and destination VCC components are deleted on each Passport node in the path.

*   VPC Bearer Service
    When deleting a VPC connection, the source and destination VPC components are deleted on each Passport node in the path.

*   Trunk
    When deleting a Trunk over PVC connection,

    — the Trunk component and VCC component that is linked to the Trunk, are deleted on each end node in the path

    — the source and destination VCC components are deleted on each relay node in the path

*   SPVC
    When deleting an SPVC connection, the VCC component is deleted at the source node.

    If the destination end is provisioned, the ATM service provisioning tool deletes the VCC component at the destination node.

*   SPVP
    When deleting an SPVP connection, the VPC component is deleted at the source node.

    If the destination end point is provisioned, the service provisioning tool deletes the Vpc component from the destination node.

- FrAtm to FrAtm SPVC
deletes the DLCI component on the source node. If the destination node is a Passport then the DLCI component is deleted on the destination node.

- FrAtm to ATM SPVC
deletes the DLCI component on the source node.

- ATM to FrAtm SPVC
deletes the VCC component on the source node. If the destination node is a Passport and the destination node is known, the DLCI component is deleted on the destination node.

Deleting a FrAtm circuit whose destination node is not known, either because the destination is a foreign node or because the circuit was not created with the ATM service provisioning tool and discovered by circuit discovery, will result in a dangling DLCI on the destination node.

The following occurs in the Administration Database:

- for PVCs, the circuit and VCC components are deleted

- for PVPs, the circuit and VPC components are deleted

- for SPVCs, the circuit and VCC components are deleted

- for SPVPs, the circuit and VPC components are deleted

- for trunks, the circuit, Vcc, trunk, and AtmAc components, are deleted

Prerequisites

Before proceeding with this procedure you need to know the circuit ID of the circuit that you want to delete.

Procedure steps

1   You can use the **Circuit Viewer** to retrieve and select the circuit that you want to delete. For the procedure to retrieve circuits, see 241-6001-011 *Preside MDM Fault Management User Guide*.

    If you decide not to use the **Circuit Viewer**, proceed to step 2.

2   In the **File** menu of the ATM service provisioning tool window, select the **Delete Circuit...** command.

The **Delete Circuit** dialog box opens. If you used the **Circuit Viewer** to select and retrieve the circuit, the **Circuit Id** field displays the circuit ID that you selected in the **Circuit Viewer** tool.

Otherwise, enter a circuit ID in the **Circuit Id** field.

Note: You can change your selection of circuit ID by selecting another circuit in the **Circuit Viewer** and then selecting the **Get Context** menu item in the **Circuit Id** field popup menu. The **Circuit Id** field in the **Delete Circuit** dialog is populated with the newly selected circuit ID.

3   Click **Retrieve**.

If the circuit is found, the ATM service provisioning window is populated with the circuit data.

If more than one circuit matching the query is found, a dialog opens listing the matching circuits. Select the correct circuit and click **OK**.

The data is displayed in read-only mode.

4   In the **Default User Id** and **Default Password** fields, type the default user ID and password to provision the Passports nodes in the path.

You can override the default user ID and password for a selected node in the path by deselecting the **Use Defaults** option and then entering a new user ID and password.

5   In the command section of the main window, click **Delete...**.

The **Delete Circuit** dialog opens.
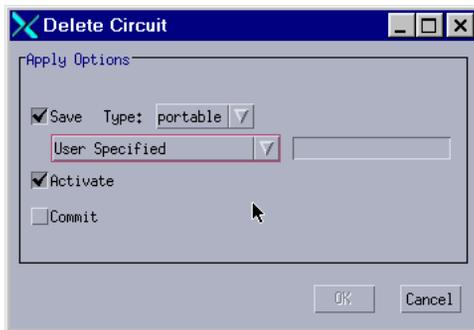
6 Apply the service deletion. See "Applying service deletions" (page 131).

The data that was retrieved from the Administration Database is validated against the current Passport configuration data. If the retrieve operation is successful and the data matches, the circuit is deleted.

If the validate action fails because the circuit in the Administration Database is invalid, a dialog opens with the message that the circuit does not match the on-switch data. This indicates that one or more of the provisioned components no longer exist in the network.

The delete action does not occur.

If you click **View** -> **Show Messages...** in the main window, the messages dialog box displays the information on the first component that was found to be invalid. The service provisioning tool does not detect all invalid components.

Click **OK** in the Message dialog box and refer to "Invalid circuit conditions" (page 133) for procedures to correct an invalid circuit condition.

Applying service creations

Use the following procedure to apply a new circuit.

Prerequisites

This procedure requires that the following conditions are met:

* you have created a new circuit. See "ATM permanent virtual connections" (page 139)"ATM soft permanent virtual path and soft permanent virtual channel connections" (page 173), and "Frame relay to ATM circuits" (page 191).

* You have clicked Apply in the main window and opened the Create Circuit dialog box.

Procedure steps

1 In the **Open View** panel, select one of the following view options to which you want to apply the configuration changes:

* Select **Current** to copy the current view into the edit view.

* Select **Committed** to copy the committed view into the edit view.

* Select **Edit** to use the existing edit view

- Select **Saved** and then select either **User Specified** or **Dated** from the drop down list.

    If you select User Specified, enter a file name in the adjacent text box.

    If you select Dated, enter a date in the format yymmdd. where yy is the year, mm is the month and dd is the day. When you enter a date, the service data view with the highest version number <nn> is found. When an exact match does not exist, the most recent service data view, relative to the date is used. That is. the dated service data view with the latest date earlier that the given date, and with the latest version number, is opened. For additional information on dated views, see the section Using dated MCFs in 241-6001-304 *Preside MDM Configuration Management Administrator Guide*.

2   To save the configuration on the node, in the **Apply Options** panel, select **Save**.

3   From the **Type** dropdown list, select one of the following format options:

    - **portable** saves the view in portable format

    - **delta** saves the view in delta format

    - **ascii** saves the view in ASCII format

4   From the drop down list, select one of the following options:

    - **User Specified**. Enter a view file name in the adjacent text box.

    - **Dated**. Enter a date in the format yymmdd. where yy is the year, mm is the month and dd is the day. When you enter a date, the view is saved with the date followed by the next version number <nn> in the sequence, in the format <yymmdd><nn>. For example, 03012903. The file is created on all nodes that are being provisioned. For additional information on dated views, see the section "Using dated MCFs" in 241-6001-304 *Preside MDM Configuration Management Administrator Guide*.

5   To activate the new configuration, select **Activate**. The activation is automatically confirmed. If you have installed the Administration Database, the database is populated with the circuit data.

6   To commit the configuration as the default on startup, select **Commit**. You must have selected **Activate** before you can select the **Commit** option.

7   Click **OK**.

Provisioning information and error messages, if any occur, display in the status area while the connection is being set up. The **Create Circuit** dialog box closes.

Applying service modifications

Use this procedure to apply the configuration changes when you modify or delete a circuit.

The ATM service provisioning tool begins the apply process by re-provisioning any Passport devices that have been affected by the changes. These changes may include deleting nodes, adding nodes anywhere in the circuit, and may involve removing components from some devices, adding components to others, and changing component attribute values on others.

Following the re-provisioning, the new provisioning data is stored in the Administration Database. The modified circuit can be monitored from the Circuit Viewer tool.

Prerequisites

This procedure requires the following conditions are met:

* you have modified the node configuration of the circuit or modified node attributes. See "Editing an ATM circuit" (page 111)

* you have clicked **Apply** in the main window and confirmed your editing changes. The **Edit Circuit** dialog box has opened.

Figure 18
Edit Circuit dialog box
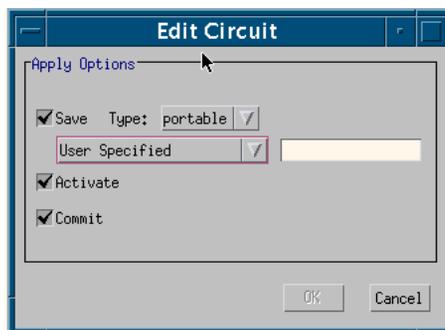
Procedure steps

1   To save the configuration on the node, from the **Apply Options** panel, select **Save**.

2   From the **Type** drop down list, select one of the following format options:

- **portable s**aves the view in portable format.

- **delta** saves the view in delta format

- **ascii** saves the view in ASCII format

3   From the drop down list, select one of the following options:

- **User Specified**. Enter a view file name in the adjacent text box.

- **Dated**. Enter a date in the format yymmdd. where yy is the year, mm is the month and dd is the day. When you enter a date, the view is saved with the date followed by the next version number <nn> in the sequence, in the format <yymmdd><nn>. For example, 03012903. The file is created on all nodes that are being provisioned. For additional information on dated views, see the section "Using dated MCFs" in 241-6001-304 *Preside MDM Configuration Management Administrator Guide*.

4   Select **Activate** to activate the new configuration.

The activation is automatically confirmed. If you have installed the Administration Database, the database is populated with the circuit data.

5   To commit the configuration as the default at startup, select **Commit**. You need to select the Activate option before you can select the Commit option.

6   Click **OK**.

Applying service deletions

Use this procedure to apply the configuration changes when you delete a circuit.

Prerequisites

This procedure requires the following conditions are met:

- you have modified the node configuration of the circuit or modified node attributes. See "Deleting an ATM circuit" (page 121)

- you have clicked **Delete** in the command section of the main window. The **Delete Circuit** dialog box is open.

Figure 19
Delete Circuit dialog box
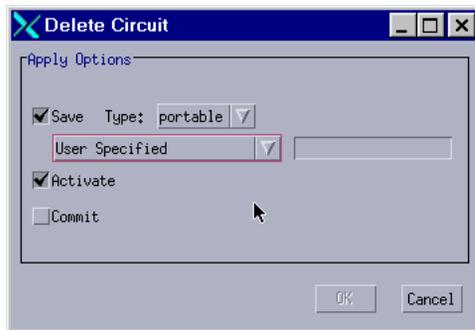
Procedure steps

1   To save the configuration on the node, select **Save**.

2   From the **Type** dropdown list, select one of the following format options:

- **portable s**aves the view in portable format

- **delta** saves the view in delta format

- **ascii** saves the view in ASCII format

3   From the drop down list, select one of the following options:

- **User Specified**. Enter a view file name in the adjacent text box.

- **Dated**. Enter a date in the format yymmdd. where yy is the year, mm is the month and dd is the day. When you enter a date, the view is

saved with the date followed by the next version number <nn> in the sequence, in the format <yymmdd><nn>. For example, 03012903. The file is created on all nodes that are being provisioned. For additional information on dated views, see the section "Using dated MCFs" in 241-6001-304 *Preside MDM Configuration Management Administrator Guide*

4   To activate the new configuration, select **Activate**.

The activation is automatically confirmed. If you have installed the Administration Database, the database is populated with the circuit data.

5   To commit the configuration as the default on startup, select **Commit**. You must have selected the **Activate** option before you can select the **Commit** option.

6   Click **OK**.

Invalid circuit conditions

Use the following procedures to resolve an invalid circuit condition. An invalid circuit condition may occur in the following circumstances:

- the Administration Database is not synchronized with the network

- erroneous provisioning changes have occurred in the network

To resolve an invalid circuit condition, you can take the following actions:

- remove the circuit from both the database and the network by using one of the following procedures:

  — reload the affected nodes into the Administration Database. For the relevant procedure, refer to 241-6001-400 *Preside MDM Administration Database User Guide*.

  — manually remove the circuit from both the Administration Database and the network. See "Manually deleting a circuit from the network and Administration Database" (page 134).

- fix the circuit in the network so that it aligns with the Administration Database. This is achieved by provisioning the missing pieces in the network. See "Correcting the circuit in the network" (page 136).

Manually deleting a circuit from the network and Administration Database

Use this procedure to manually delete a circuit from the Administration Database and the network when you have an invalid circuit condition. An invalid circuit condition occurs when a circuit is validated against the on-switch data and it is found that one or more of the provisioned components no longer exist on the network. This situation generates a message that the circuit does not match the on-switch data.

Procedure steps

1   Before deleting the circuit from the database, determine if there are any components of the circuit still provisioned in the network.

To identify data still provisioned in the network, you need to locate the invalid circuit using the **Circuit Viewer** tool:

Note: Refer to the Circuit Viewer section in 241-6001-011 *Preside MDM Fault Management User Guide* for procedures to use the **Circuit Viewer** tool.

a.   Open **Circuit Viewer** and locate the invalid circuit using the **Circuit Retrieval Criteria** panel.

b.   From the **Circuit(s) found** list, select the circuit.

c.   Right-click on the circuit and from the pop-up menu, select **Start State Polling**.

d.   In the **Circuit details** panel, select the **Circuit components** tab.

The state of all components is displayed in the **State** column. Components that are marked "purple" no longer exist in the network. All other components, independent of the state reported, exist in the network.

2   Manually delete all VCC components using one of the following methods:

- the delete component capability of the **Nodal Provisioning** tool. Refer to 241-6001-610 *Preside MDM Nodal Provisioning User Guide* for the relevant procedure.

- the Passport command line interface via telnet

Note: You need to log into each node on which components for the circuit exist, check for the presence of the components, and delete each component found. Once all necessary components on a given node are deleted, you need to activate the view.

3   Once the circuit is completely removed from the network, use the **Circuit Database Administration** tool to delete the circuit from the database. For the relevant procedure, refer to 241-6001-400 *Preside MDM Administration Database User Guide*.

Correcting the circuit in the network

Use this procedure to provision the missing pieces in the network to align the circuit with the Administration Database. An invalid circuit condition occurs when a circuit is validated against the on-switch data and it is found that one or more of the provisioned components no longer exist on the network. This situation generates a message that the circuit does not match the on-switch data.

Procedure steps

1   Before correcting the circuit in the network to align with the Administration Database, determine which components are missing and if there are any components of the circuit still provisioned in the network.

   To identify data still provisioned in the network, you need to do the following tasks:

   • Open the ATM service provisioning tool to view the components of the circuit (for instance, its interfaces and circuit pieces). These components can span several nodes.

   • log into each participating node and check for the presence of the components. This can be done using either the Nodal Provisioning tool (see 241-6001-610 *Preside MDM Nodal Provisioning User Guide*) or Passport command line interface via telenet.

2   Once you have determine which components are missing, use one of the following methods to correct the circuit in the network:

   • reload views onto the nodes that are improperly configured. You can only use this approach if the provisioning error was a result of an incorrect view being loaded onto a node. Although MDM does not provide a system that provides history of views loaded onto the nodes in the network, there are several MDM tools that can assist in this process. including the Configuration Repository and the Network Reporting System. For information on these tools, see 241-6001-400 *Preside MDM Administration Database User Guide* and 241-6001-022 *Preside MDM Network Reporting System User Guide*. Once you have made the network corrections, you can use the ATM service provisioning tool to validate the circuit. It will mark the circuit as "Normal" in the Administration Database so it becomes manageable.

   • delete the circuit from both the database and the network and re-provision the entire circuit. You need to use this approach when the provisioning cannot be corrected by reloading the views onto the

nodes. First record the nodes, interfaces, connection components (VPC/VCC, DLCI), customer, and traffic management profiles using the procedures described in step 1. Then follow the procedure "Manually deleting a circuit from the network and Administration Database" (page 134) to delete the circuit. Once the circuit is deleted, you can use the service provisioning tool to provision the circuit, using the information that you recorded.

Chapter 6
ATM permanent virtual connections

The ATM service provisioning tool is used to create the following ATM permanent virtual (PVC) connections over one or more Passport nodes:

- ATM PVC - Vcc Bearer Service

- ATM PVC - Vpc Bearer Service

- ATM PVC - Trunk over ATM PVC

- CES over ATM PVC

Once you have successfully activated the provisioning data, they are stored as a circuit in the Administration Database.

This section contains the following information:

Prerequisites

Before using the service provisioning tool, you need to do the following tasks:

- Ensure that all of the Passports to be provisioned are configured for ATM and/or CES service up to the logical connection layer. For more information, see "Passport configuration" (page 36).

- Set up the required information files. For details, see "Information files" (page 36).

Adding a node before or after a selected node

Use this procedure to add a single node before or after a selected node for the following PVC circuit types:

- Trunk

- VccBearerService

- VpcBearerService

- CES over PVC

You can add a node before or after a selected node. The VPI and VCI values and the TM profiles of each side of the new node is the same as the corresponding adjacent node.

If the node is inserted before the first node in the circuit, the node is automatically de-selected as an end node and the new node is made the first node. The trunk information for the original end node is moved to the new end node.

Procedure steps

1   Complete one of the following steps:

2   To add a node to the left of the selected node

- In the **Circuit Path** section of the main window, right-click on a node and from the pop-up menu select **Add Before**.

- In the **File** menu, select **Edit** -> **Add Node Before**.

To add a node to the right of the selected node, complete one of the following steps:

- In the **Circuit Path** section of the main window, right-click on a node and from the pop-up menu select **Add After.**

- In the **File** menu, select **Edit** -> **Add Node After**.

Deleting a node within a circuit

Use the following procedure to delete a node anywhere in an ATM PVC path for the following circuit types:

- Trunk

- VccBearerService

- VpcBearerService

- CES over PVC

If the deleted node is the first one in the circuit, the node to the right becomes the first node. If the last node is deleted, the node to the left becomes the new end node. In both cases, the trunk value for the old end node becomes the trunk for the new end node.

If the end (that is, last) node of a two node circuit is deleted, no changes are made to the remaining node. If the first node of a two node circuit is deleted, the VPI, VCI, and Trunk information is cleared on the remaining node. If only a single node exists in the Circuit Path, it cannot be deleted. The Delete Node command in the Edit menu, and the Delete command in the node's pop-up menu, are disabled.

Procedure steps

1 In the **Circuit Path** section of the **ATM service provisioning** window, click on the node that you wish to delete.

2 Complete one of the following steps:

- Right-click and select **Delete** from the pop-up menu.

- From the **Edit** menu, select **Delete Node**.

When a non end node is deleted, and the destination values of the left node are not the same as the source values of the right node, you are prompted to take one of the following actions with regard to the VCI and VPI values of the adjacent nodes of the deleted node:

- leave the value as is

- set the values to the destination side of the left node

- set the values to the source side of the right node

3 Select an option and click **OK**.

4   In the command panel, click **Apply**.

A confirmation dialog box opens stating that the node will be deleted.

5   In the confirmation dialog, select **OK** to delete the circuit.

If you do not wish to delete the circuit, select **Cancel.**

If you wish to restore the circuit, click **Reset**.

6   Apply the deletion. See the procedure "Applying service modifications" (page 129).

Deleting all nodes in a path

Use the following procedure to delete all nodes in an ATM PVC path for the following circuit types:

- Trunk

- VccBearerService

- VpcBearerService

- CES over PVC

Procedure steps

1 In the ATM service provisioning window, select **File** -> **New Circuit**.

All the nodes, except the first node, are cleared from the circuit path.

Using assisted routing

The ATM service provisioning tool provides an assisted routing feature to streamline the process of selecting nodes for ATM PVC circuit types:

- Trunk

- VccBearerService

- VpcBearerService

- CES over PVC

The assisted routing feature determines the shortest path (in number of hops) between two selected end nodes and automatically plots the nodes in between.

Procedure steps

1   From the **Service Provisioning - ATM** window, select **File** -> **New Circuit Using Shortest Path...**.

The **New Circuit** dialog opens.

2   Select a node in the **Start Node** field.

3   Select a node in the **End Node** field.

4   Click **OK**.

The tool plots the path between the selected nodes and adds this information to the **Service Provisioning - ATM** window.

Note: If the tool cannot determine a path between the selected nodes, an error message opens.

Creating ATM PVC circuits

The ATM service provisioning tool is used to create ATM connections over one or more Passport nodes. Once you have successfully activated the provisioning data, they are stored as a circuit in the Administration Database. See the following sections for procedures to create the following connections:

- "Creating an ATM PVC - VCC Bearer Service" (page 147)

- "Creating an ATM PVP - VPC Bearer Service" (page 152)

- "Creating a Passport Trunk over ATM PVC" (page 157)

- "Creating a CES over ATM PVC connection" (page 164)

- "Using assisted routing" (page 145)

Creating an ATM PVC - VCC Bearer Service

This section describes the procedures to provision an ATM PVC on a Passport. When creating a VCC connection, the ATM service provisioning tool performs the following at each Passport node in the path:

- creates a VCC subcomponent on the source and destination AtmIf. If an AtmIf component does not exist, the operation ends. If a Vcc component already exists, the operation ends.

- creates Nrp subcomponents on the Vccs and links them

- sets the TM attributes on the Vcd Tm subcomponents of the Vccs

- sets the Vcc Vcd correlationTag for all Vccs

The Administration Database is populated with the following circuit data:

- circuit ID - set to the value of the circuit id field

- circuit type - set to ATM_PVC

- flags: set to USER_GENERATED indicates that the circuit was created by a service provisioning tool. Note that this term is not displayed in the circuit management tools.

- comment: records that the circuit was created by the ATM service provisioning tool

- TM profile: set to the name of the Traffic Management (TM) profile

- customer: set to the value of the customer field

- connections: a connection for each source and destination of each node in the path containing Vpi and Vci values, TM profile name, and correlationTag

Task flow navigation

See also,

Configuring the first node

1 Start the **ATM service provisioning** tool from the **Preside MDM** window:

Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

2 From the **ATM service provisioning** window, select **File** -> **New Circuit**.

3 In the **Circuit Type** list in the main window, select the VccBearerService circuit type.

4 If you are using circuit management, complete the following steps

- in the **Circuit Id** field, enter a circuit ID. If the circuit ID already exists, a dialog opens asking you to decide whether or not to continue with the configuration operation. Click **Continue** to begin configuration, or **Cancel** to discontinue.

- optionally, in the **Customer** field, enter a customer name. An error message opens if the customer name already exists in the Administration Database. If the customer does not exist in the database, it is created.

5 To set the correlation tag to the same value as the circuit ID, check the **Use Circuit Id** check box. Other wise, in the **Correlation Tag** field, enter an independent identifier, as required.

The correlation tag is only 32 bytes, so if you use the circuit ID, you need to limit the allowed 128 byte circuit ID to 32 bytes. If you have selected **Use Circuit Id** and more than 32 characters are entered in the **Circuit Id** field, the correlation tag on the Passport device is set to the first 32 characters.

Note: If accounting collection has been enabled at the ATM Interface, then provisioning the correlation tag enables accounting collection for the VCC. The correlation tag can be left un-provisioned if this effect is not desired.

6 In the **Default User Id** and **Default Password** fields, type the default user id and password to provision the Passport devices in the path.

7 From the **Default TM** list, select a TM profile to apply to the ATM PVC.

A list of TM profiles is provided through the TM Profiles file. For information on setting up this file, see "Information files" (page 36).

8 Select the displayed node in the **Circuit Path** panel.

9 In the **Node Properties** section, type a node name in the **Node Name** field, or select a node from the drop down list.

This becomes the first node in the PVC path.

Note: If you use the assisted routing feature, the node name is provided for you. See "Using assisted routing" (page 145).

10   In the node details section of the **Node Properties** panel, complete the following steps:

- •   In the **Source** (ingress) and **Dest (**egress) **ATM IF** fields, type the ingress and egress ATM Interface, or select the ingress and egress ATM interface from the list. The ingress and egress ATM interface must already exist on the switch.

- •   In the **Source** (ingress) and **Dest** (egress) VPI fields, type the ingress and egress virtual path identifier.

- •   In the **Source** (ingress) and **Dest** (egress) VCI fields, type the ingress and egress virtual connection identifier numbers.

Note 1: If you enter VPI or VCI values which are already in use, an error message appears in the **Status Window** informing you that the VPI or VCI value is in use.

Note 2: If you enter invalid data, an error message in the **Status Window** informs you of the error.

11   To override the default TM profiles applied to the specific Vcc Vcd Tm component, deselect the **Use Defaults** option and select a new TM profile from the list.

12   To override the default user ID and password, deselect the **Use Defaults** option, and enter a new user ID and password.

13   Proceed to add additional nodes to the PVC, if desired.

Configuring additional nodes

Once you have set up the first node, you can add none, one, or more nodes to a PVC using the following procedure.

1   In the **Circuit Path** panel, select the newly created node and complete one of the following steps:

   • Right-click and from the pop-up menu, select **Add Before** to add a node to the left of the selected node, or **Add After** to add a node to the right of the selected node from the popup menu.

   • From the **Edit** menu, select **Add Node Before** to add a node to the left of the selected node, or **Add Node After** to add a node to the right of the selected node.

   A new node appears in the **Circuit Path** area.

2   In the **Node Properties** section, select or type a node name in the **Node Name** field.

   Note: If you use the assisted routing feature, the node name is provided for you. See "Using assisted routing" (page 145).

3   In the **Node Properties** section, complete the following steps:

   • In the **Source** (ingress) and **Dest** (egress) ATM IF fields, type the ingress and egress ATM Interface, or select the ingress and egress ATM interface from the list.

   • In the **Source** (ingress) and **Dest** (egress) VPI fields, type the ingress and egress virtual path identifier.

   • In the **Source** (ingress) and **Dest** (egress) VCI fields, type the ingress and egress virtual connection identifier numbers.

   Note: If you enter invalid data, an error message opens to inform you of the error.

4   To override the default TM profile applied to the specific Vcc Vcd Tm component, deselect the **Use Defaults** option and select a new TM Profile.

5   To override the default user ID and password, deselect the **Use Defaults** option, and enter a new user ID and password.

6   Click **Apply**.

   If mandatory data is missing, a message dialog box opens and describes what is missing. Enter the missing information and click **Apply** again.

If successful, a **Create Circuit** dialog box opens.

7   Proceed to apply the service creation. See "Applying service creations" (page 126).

Creating an ATM PVP - VPC Bearer Service

This section provides the procedures required to provision an ATM PVP on Passport.

When creating a VPC connection, the ATM service provisioning tool performs the following actions at each Passport node in the path:

- creates VPC subcomponents on the source and destination AtmIf. If an AtmIf component does not exist, the operation ends. If a Vpc component already exists, the operation ends.

- creates Nrp subcomponents on the Vpc and links them

- sets the TM attributes on the Vpd Tm subcomponents of the Vpc

- sets the Vpc Vpd correlationTag on the Vpcs

The Administration Database is populated with the following data:

- circuit ID: set to the value of the circuit Id field

- circuit type: set to ATM_PVP

- flags: set to USER_GENERATED

- comment: records that the circuit was created by the ATM Service Provisioning tool

- class of service: set to the name of the TM profile

- customer: set to the value of the customer field

- connections: a connection for each source and destination of each node in the path containing Vpi values, TM profile name, and correlationTag

Task flow navigation

See also,

Configuring the first node

1   Start the ATM service provisioning tool from the **Preside MDM** window:

Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

2   From the ATM service provisioning window, select **File** -> **New Circuit**.

3   Select the circuit type, VpcBearerService circuit type, from the **Circuit Type** list.

4   If you are using circuit management, complete the following steps

- in the **Circuit Id** field, enter a circuit ID. If the circuit ID already exists, a dialog opens asking you to decide whether or not to continue with the configuration operation. Click **Continue** to begin configuration, or **Cancel** to discontinue.

- optionally, in the **Customer** field, enter a unique customer name. An error message opens if the customer name already exists in the Administration Database.

5   To set the correlation tag to the same value as the circuit ID, check the **Use Circuit Id** check box. Other wise, in the **Correlation Tag** field, enter an independent identifier, as required.

The correlation tag is only 32 bytes, so if you use the circuit ID, you need to limit the allowed 128 byte circuit ID to 32 bytes. If you have selected **Use Circuit Id** and more than 32 characters are entered in the **Circuit Id** field, the correlation tag on the Passport device is set to the first 32 characters.

Note: If accounting collection has been enabled at the ATM Interface, then provisioning the correlation tag enables accounting collection for the VCC. The correlation tag can be left un-provisioned if this effect is not desired.

6   In the **Default UserId** and **Default Password** fields, type the default user ID and default password to provision the Passport nodes in the path.

7   From the **Default TM** list, select a TM profile to apply to the ATM PVP.

A list of TM profiles is provided through the TM Profiles file. For information on setting up this file, see "Information files" (page 36).

8   Select the displayed node in the **Circuit Path** panel.

9   In the **Node Properties** panel, complete the following steps:

- In the **Node Name** field type a node name, or select a node from the list. This becomes the first node in the PVP path.

Note: If you use the assisted routing feature, the node name is provided for you. See "Using assisted routing" (page 145).

- In the **Source** (ingress) and **Dest** (egress) ATM IF fields, type the ingress and egress ATM interface or select the ingress and egress ATM interface from the list. The ATM interface must already exist on the device.

- In the **Source** (ingress) and **Dest** (egress) VPI fields, type the ingress and egress virtual path identifier numbers.

Note 1: If you enter VPI values which are already in use, an error message appears in the **Status Window** informing you that the value is in use.

Note 2: If you enter invalid data, an error message in the Status Window informs you of the error.

10 To override the default TM profiles applied to the specific Vpc Vpd Tm component, deselect the **Use Default TM Profile** option and select a new TM profile from the **TM Profile** drop down list.

11 To override the default user ID and password, deselect the **Use Defaults** option, and enter a new user ID and password.

12 Proceed to add additional nodes to the PVC. See "Configuring additional nodes" (page 155).

Configuring additional nodes

Once you set up the first node in the ATM PVP, you can add none, one, or more nodes.

1   In the **Circuit Path** panel, select the newly created node and complete one of the following steps:

- Right-click, and from the pop-up menu, select **Add After** to add a node to the right of the selected node, or **Add Before** to add a node to the left of the selected node.

- From the **Edit** menu, select **Add Node After** to add a node to the right of the selected node, or **Add Node Before** to add a node to the left of the selected node

A new node appears in the **Circuit Path** section.

2   In the **Node Properties** section complete the following steps:

- Select or type a node name in the **Node Name** field.

Note: If you use the assisted routing feature, the node name is provided for you. See "Using assisted routing" (page 145).

- In the **ATM IF** field, type the **Source** (ingress) and **Dest** (egress) ATM interface, or select the ingress and egress ATM interface from the list.

- In the **Source** (ingress) and **Dest** (egress) VPI fields, type the ingress and egress virtual path identifier numbers.

Note 1: If you enter VPI values which are already in use, an error message appears in the **Status Window** informing you that the value is in use.

Note 2: If you enter invalid data, an error message in the **Status Window** informs you of the error.

3   To override the default TM profile applied to the specific Vpc Vpd Tm component, deselect the **Use Defaults** option and select a new TM Profile.

4   To override the default user ID and password, deselect the **Use Defaults** option, and enter a new user ID and password.

5   Click **Apply**.

If mandatory data is missing, a message dialog box opens and describes what is missing. Enter the missing information and click **Apply** again.

If successful, a **Create Circuit** dialog box opens.

6   Apply the service creation. See "Applying service creations" (page 126).

Creating a Passport Trunk over ATM PVC

This section shows you how to use the ATM service provisioning tool to provision a Passport Trunk over an ATM PVC.

When creating a Trunk over PVC, the ATM Service provisioning tool performs the following at each end node in the path:

- creates the following components:

  — Trunk.
    If the Trunk component already exists, the operation ends.

- creates the following subcomponents:

  — Trunk AtmAc

  — Vcc.
    If the AtmIf component does not exist, the operation ends. If the Vcc already exists, the operation ends.

  — Vcc Nep

- sets the TM attributes on the Vcd Tm subcomponent of the Vcc

- links the AtmAc and Nep components

- sets the Vcc Vcd correlationTag for all Vccs

When creating a Trunk over PVC, the ATM service provision tool performs the following actions on each relay node in the path:

- creates the following subcomponents:

  — a VCC on the source and destination AtmIf.
    If an AtmIf component does not exist, the operation ends. If a Vcc component already exists, the operation ends.

  — Nrp subcomponents on the Vccs and links them

- sets the following:

  — TM attributes on the Vcd Tm subcomponents of the Vccs

  — Vcc Vcd correlationTag for all Vccs

In the Administration Database, the following information is stored:

- circuit ID: set to the value of the circuit Id field

- circuit type: set to ATM_TRUNK

- flags: set to USER_GENERATED

- comments: records that the circuit was created by the ATM service provisioning tool

- class of service: set to the name of the TM profile

- customer: set to the value of the customer field

- connections: a connection for each source and destination of each node in the path containing Vpi and Vci values, TM profile name and correlationTag.

- trunk: a trunk and atmac component for the first and last nodes in the circuit

Task flow navigation

See also,

Configuring the first node

1   Start the ATM service provisioning tool from the **Preside MDM** window:

    Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

2   From the ATM service provisioning window, select **File** -> **New Circuit**.

3   From the **Circuit Type** list, select **Trunk**.

4   If you are using circuit management, complete the following steps

5   in the **Circuit Id** field, enter a circuit ID. If the circuit ID already exists, a dialog opens asking you to decide whether or not to continue with the configuration operation. Click **Continue** to begin configuration, or **Cancel** to discontinue.

6   optionally, in the **Customer** field, enter a unique customer name. An error message opens if the customer name already exists in the Administration Database.

7   To set the correlation tag to the same value as the circuit ID, check the **Use Circuit Id** check box. Other wise, in the **Correlation Tag** field, enter an independent identifier, as required.

    The correlation tag is only 32 bytes, so if you use the circuit ID, you need to limit the allowed 128 byte circuit ID to 32 bytes. If you have selected **Use Circuit Id** and more than 32 characters are entered in the **Circuit Id** field, the correlation tag on the Passport device is set to the first 32 characters.

    Note: If accounting collection has been enabled at the ATM Interface, then provisioning the correlation tag enables accounting collection for the VCC. The correlation tag can be left un-provisioned if this effect is not desired.

8   In the **Default UserId** and **Default Password** fields, type the default user ID and default password to provision the Passport nodes in the path.

9   From the **Default TM** list, select a TM profile to apply to the ATM PVC.

    A list of TM profiles is provided through the TM Profiles file. For information on setting up this file, see "Information files" (page 36).

10   In the **Circuit Path** panel, select the displayed node.

11   In the **Node Properties** panel complete the following steps:

    •   Select or type a node name in the **Node Name** field.

    This becomes the trunk end node.

Note: If you use the assisted routing feature, the node name is provided for you. See "Using assisted routing" (page 145).

- In the **Trunk** field, type the trunk instance name.

- Type the ATM interface.

- Type the virtual path identifier of the VCC that is linked to the trunk.

- Type the virtual connection identifier numbers of the VCC that is linked to the trunk.

Note 1: The service provisioning application creates the Trunk, so the trunk instance name should not already exist on the device. The ATM interface should exist, and the VCCs should not already exist on the device. When you enter VPI or VCI values that are already in use, an error message appears in the Status Window informing you that the VPI or VCI value is in use.

Note 2: If you enter invalid data, an error message in the **Status Window** informs you of the error.

12 To override the default TM profile applied to the specific Vcc Vcd Tm component, deselect the **Use Defaults** option and select a new TM profile.

13 To override the default user ID and password, deselect the **Use Defaults** option, and enter a new user ID and password.

Configuring relay nodes

Once you have set up the first node in the path, you can add none, one, or more than one node to the path. To add additional nodes, use the following procedure.

1 In the **Circuit Path** panel, select the newly created node and complete one of the following steps:

   • Right-click, and from the pop-up menu, select **Add After** to add a node to the right of the selected node or **Add Before** to add a node to the left of the selected node.

   • From the **Edit** menu, select **Add Node After** to add a node to the right of the selected node or **Add Node Before** to add a node to the left of the selected node

   A new node appears in the **Circuit Path** panel.

2 In the node details area of the **Node Properties** panel, type a node name in the Node Name field, or select a name from the drop down list.

   Note: If you use the assisted routing feature, the node name is provided for you. See "Using assisted routing" (page 145).

3 In the **Node Properties** section, enter the following data for each relay node that you create:

   • In the **Source** (ingress) and **Dest** (egress) ATM IF fields, type the ingress and egress ATM interface, or select ingress and egress ATM interface from the list.

   • In the **Source** (ingress) and **Dest** (egress) VPI fields, type the ingress and egress virtual path identifier.

   • In the **Source** (ingress) and **Dest** (egress) VCI fields, type the ingress and egress virtual connection identifier numbers.

   Note: The ATM Interface should already exist on the device. The VCCs should not exist.

4 To override the default user ID and password, deselect the **Use Defaults** option, and enter a new user ID and password.

5 To override the default TM profile applied to the specific Vcc Vcd Tm component, deselect the **Use Defaults** option and select a new TM Profile.

Configuring the end node

1   In the **Circuit Path** panel, select the newly created node and complete one of the following steps:

- Right-click, and from the pop-up menu, select **Add After** to add a node to the right of the selected node or **Add Before** to add a node to the left of the selected node.

- From the **Edit** menu, select **Add Node After** to add a node to the right of the selected node or **Add Node Before** to add a node to the left of the selected node

Another node is added to the path. This becomes the end node in the path.

2   Select the newly added end node.

3   Enter the following mandatory data in the node details section of the **Node Properties** panel:

- Select or type a node name in the **Node Name** field
  This becomes the trunk end node.

Note: If you use the assisted routing feature, the node name is provided for you. See "Using assisted routing" (page 145).

- Select the **End Node** check box.

- In the **Trunk** field, type the trunk instance value.

- Type the ATM interface.

- Type the virtual path identifier (VPI) of the VCC that is linked to the trunk.

- Type the virtual connection identifier (VCI) numbers of the VCC that is linked to the trunk.

Note: The service provisioning application creates the trunk, so the trunk instance name should not already exist on the device. The ATM interface should exist, and the VCCs should not already exist on the device.When you enter VPI or VCI values that are already in use, an error message appears in the **Status Window** informing you that the VPI or VCI value is in use.

Note: If you enter invalid data, an error message in the **Status Window** informs you of the error.

4   To override the default user ID and password, deselect the **Use Defaults** option, and enter a new user ID and password.

5   To override the default TM profile applied to the specific Vcd vpd Tm component, deselect the **Use Defaults** option and select a new TM Profile.

6   Click **Apply**.

If mandatory data is missing, a message dialog box opens and describes what is missing. Enter the missing information and click **Apply** again.

If successful, a **Create Circuit** dialog box opens.

7   Apply the service creation. For the procedure, see "Applying service creations" (page 126).

The Trunk over PVC is configured on each Passport node in the path.

Creating a CES over ATM PVC connection

This section describes the procedures to provision a CES connection to an ATM network using a PVC.

When creating a CES over PVC connection, the ATM service provisioning tool performs the following at each end node in the path:

- creates an AAL1 CES component and links the component to the channel. If the AAL1 CES component already exists, the operation ends. If the channel doesn't exist, the operation ends.

- sets the AAl1CES serviceType. If the serviceType is structured, the tool adds a TrunkConditioning component, if it does not already exist, to the channel associated with the AAL1 CES component.

    If the serviceType is unstructured, the tool deletes the TrunkConditioning component from the channel associated with the AAL1 CES component.

- creates the following subcomponents:

    — AAL1 CES ATmAc

    — creates a VCC
      If the AtmIf component does not exist, the operation ends. If the VCC already exists, the operation ends.

    — Vcc Nep

- sets the TM attributes on the Tm subcomponent of the Nep

- links the Nap and Nep components

When creating a CES over PVC connection, the ATM service provisioning tool performs the following at each relay node in the path:

- creates a VCC subcomponent on the source and destination AtmIf. If an AtmIf component does not already exist, the operation ends. If a Vcc component already exists, the operation ends.

- creates Nrp subcomponents on the Vccs

- sets the TM attributes on the Vcd Tm subcomponents of the Vccs

- links the source and destination Nrp components

Task flow navigation

See the following procedures:

- "Configuring the first node" (page 165)

- "Configuring one or more relay nodes" (page 168)

- "Configuring the end node" (page 170)

- "Applying service creations" (page 126)

See also,

- "Using assisted routing" (page 145)

Configuring the first node

1 Start the ATM service provisioning tool from the Preside MDM window:

   Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

2 From the ATM service provisioning window, select **File** -> **New Circuit**.

3 From the **Circuit Type** list, select **CES over PVC**.

4 If you are using circuit management, complete the following steps

5 in the **Circuit Id** field, enter a circuit ID. If the circuit ID already exists, a dialog opens asking you to decide whether or not to continue with the configuration operation. Click **Continue** to begin configuration, or **Cancel** to discontinue.

6 optionally, in the **Customer** field, enter a unique customer name.

7 To set the correlation tag to the same value as the circuit ID, check the **Use Circuit Id** check box. Other wise, in the **Correlation Tag** field, enter an independent identifier, as required.

   The correlation tag is only 32 bytes, so if you use the circuit ID, you need to limit the allowed 128 byte circuit ID to 32 bytes. If you have selected **Use Circuit Id** and more than 32 characters are entered in the **Circuit Id** field, the correlation tag on the Passport device is set to the first 32 characters.

   Note: If accounting collection has been enabled at the ATM Interface, then provisioning the correlation tag enables accounting collection for the VCC. The correlation tag can be left un-provisioned if this effect is not desired.

8   In the **Default User Id** and **Default Password** fields, type the default user ID and default password to provision the Passport node.

9   From the **Default TM** list, select a default traffic management (TM) profile to apply to the ATM PVC.

A list of TM profiles is provided through the TM Profiles file. For information on setting up this file, see "Information files" (page 36).

10 Select the first displayed node in the **Circuit Path** section.

11 In the **Node Properties** section, type a node name in the **Node Name** field, or select a node from the list.

This becomes the first node in the PVC path.

Note: If you use the assisted routing feature, the node name is provided for you. See "Using assisted routing" (page 145).

12 In the **Node Properties** section, complete the node details:

- In the **Aal1CES** field, type the AAL1 CES instance value.

- Select the AAL1 CES service type from the drop down list. If the Service Type field specifies structured, the tool adds a TrunkConditioning component, if it does not already exist, to the channel associated with the AAL1 CES component. If the **Service Type** field specifies unstructured, the tool deletes the TrunkConditioning component from the channel associated with the AAL1 CES component.

- In the **Channel** field, enter the full channel instance name, for example Lp/1 DS1/3 Chan/0, to which the AAL1 CES instance is linked. or use the can also use the **Browse [...]** button to the right of the Channel field to open the **Browse Channels** dialog to search for all available channels

- In the **ATM IF** field, select the ATM Interface from the list, or type the ATM interface

- Type the virtual path identifier (VPI) of the VCC that is linked to the AAL1 CES.

- Type the virtual connection identifier (VCI) numbers of the VCC that is linked to the AAL1 CES.

Note 1: The service provisioning application creates the AAL1 CES, so the AAL1CES instance name should not already exist on the device. The ATM interface should exist, and the VCCs should not already exist on the

device. When you enter VPI or VCI values that are already in use, an error message appears in the Status Window informing you that the VPI or VCI value is in use.

Note 2: If you enter invalid data, an error message in the Status Window informs you of the error.

13   To override the default TM profiles applied to the specific Vcc Vcd Tm component, deselect the **Use Defaults** options and select a new TM profile from the list.

14   To override the default user ID and password, deselect the **Use Defaults** option, and enter a new user ID and password.

15   Proceed to add additional nodes to the PVC. See "Configuring one or more relay nodes" (page 168).

Configuring one or more relay nodes

Once you have set up the first node, you can add one or more nodes to a PVC using the following procedure.

1 In the **Circuit Path** panel, select the newly created node and complete one of the following steps:

- Right-click, and from the pop-up menu, select **Add After** to add a node to the right of the selected node or **Add Before** to add a node to the left of the selected node.

- From the **Edit** menu, select **Add Node After** to add a node to the right of the selected node or **Add Node Before** to add a node to the left of the selected node

A new node appears in the **Path Nodes** area.

2 In the **Node Properties** section, select or type a node name in the **Node Name** field.

Note: If you use the assisted routing feature, the node name is provided for you. See "Using assisted routing" (page 145).

3 In the **Node Properties** section, complete the following steps:

- In the **Source** (ingress) and **Dest** (egress) ATM IF fields, type the ingress and egress ATM Interface, or select the ingress and egress ATM interface from the list.

- In the **Source** (ingress) and **Dest** (egress) VPI fields, type the ingress and egress virtual path identifier.

- In the **Source** (ingress) and **Dest** (egress) VCI fields, type the ingress and egress virtual connection identifier numbers.

Note 1: The service provisioning application creates the AAL1 CES, so the AAL1CES instance name should not already exist on the device. The ATM interface should exist, and the VCCs should not already exist on the device. When you enter VPI or VCI values that are already in use, an error message appears in the **Status Window** informing you that the VPI or VCI value is in use.

Note 2: If you enter invalid data, an error message in the **Status Window** informs you of the error.

4 To override the default user ID and password, deselect the **Use Defaults** option, and enter a new user ID and password.

5   To override the default TM profile applied to the specific Vcc Vpd Tm
    component, deselect the **Use Defaults** option and select a new TM
    Profile.

6   Proceed to configure the end node.

Configuring the end node

1   In the **Circuit Path** panel, select the newly created node and complete one of the following steps:

   • Right-click, and from the pop-up menu, select **Add After** to add a node to the right of the selected node or **Add Before** to add a node to the left of the selected node.

   • From the **Edit** menu, select **Add Node After** to add a node to the right of the selected node or **Add Node Before** to add a node to the left of the selected node

   A new node appears in the **Path Nodes** area. This becomes the end node.

2   In the **Node Properties** section, select or type a node name in the **Node Name** field.

   Note: If you use the assisted routing feature, the node name is provided for you. See "Using assisted routing" (page 145).

3   Select the **End Node** check box.

4   In the **Node Properties** section, complete the node details:

   • In the **Aal1CES** field, type the AAL1 CES instance value.

   • Select the AAL1 CES service type from the drop down list. If the Service Type is structured, the tool adds a TrunkConditioning component, if it does not already exist, to the channel associated with the AAL1 CES component. If the Service Type is unstructured, the tool deletes the TrunkConditioning component from the channel associated with the AAL1 CES component.

   • In the **Channel** field, enter the full channel instance name, for example Lp/1 DS1/3 Chan/0, to which the AAL1 CES instance is linked. You can also use the **Browse [...]** button to the right of the **Channel** field to open the **Browse Channels** dialog to search for all available channels.

   • Type the ATM interface.

   • Type the virtual path identifier (VPI) of the VCC that is linked to the AAL1 CES.

   • Type the virtual connection identifier (VCI) numbers of the VCC that is linked to the AAL1 CES.

Note: If you enter VPI or VCI values which are already in use, an error message appears in the **Status Window** informing you that the VPI or VCI value is in use.

Note: If you enter invalid data, an error message in the **Status Window** informs you of the error.

5   To override the default user ID and password, deselect the **Use Defaults** option, and enter a new user ID and password.

6   To override the default TM profile applied to the specific Vcc Vcd Tm component, deselect the **Use Defaults** option and select a new Tm Profile.

7   Click **Apply**.

If mandatory data is missing, a message dialog box opens and describes what is missing. Enter the missing information and click **Apply** again.

If successful, a **Create Circuit** dialog box opens.

8   Apply the service provisioning. For the procedure, see "Applying service creations" (page 126).

Chapter 7
ATM soft permanent virtual path and soft permanent virtual channel connections

This section provides procedures to for ATM soft permanent virtual path (SPVP) and soft permanent virtual channel (SPVC) connections:

Note: This section covers ATM to ATM connections only. For the following FR.8 FrAtm scenarios, SIWF FrAtm to FrAtm SPVC, SIWF FrAtm to ATM Access SPVC, and SIWF ATM to FrAtm Access SPVC see the section "Frame relay to ATM circuits" (page 191).

- "Prerequisites" (page 173)

- "Creating an ATM SPVC connection" (page 175)

- "Creating ATM SPVP connection" (page 181)

- "Browsing Node Names" (page 186)

- "Browsing Addresses" (page 187)

- "Browsing MDTL paths" (page 188)

Prerequisites

Before using the service provisioning tool, you need to do the following tasks:

- Ensure that all of the Passports to be provisioned are configured for ATM and/or CES service up to the logical connection layer. For more information, see "Passport configuration" (page 36).

- Set up the required information files. For details, see "Information files" (page 36).

Creating an ATM SPVC connection

This section describes how to use the ATM service provisioning tool to provision an ATM SPVC connection.

Figure 20
SPVC connections
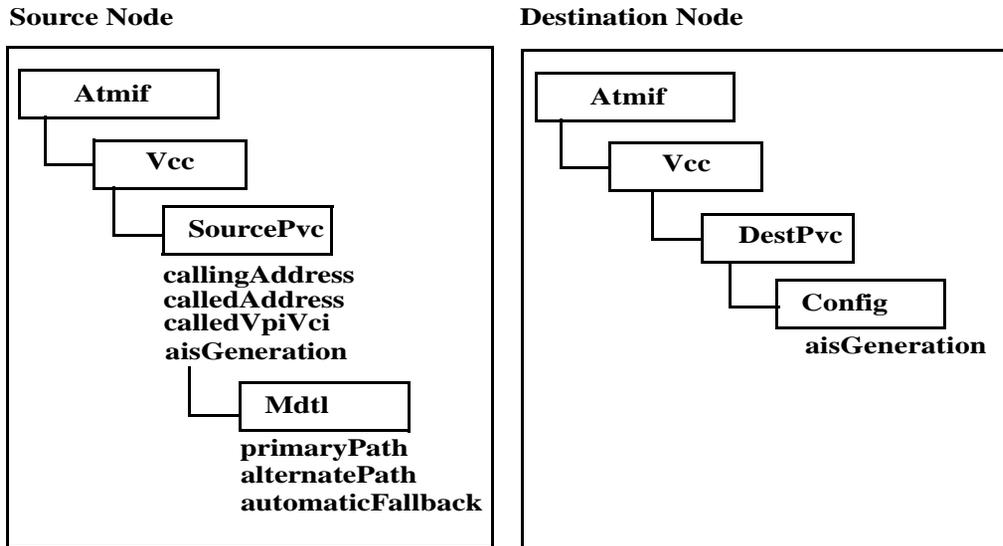
When creating an SPVC connection, the ATM service provisioning tool performs the following on the source node:

- creates the following components:

    — Vcc component under the source AtmIf component on the source node. If the AtmIf component does not already exist, the operation terminates. If the Vcc component already exists, the operation terminates.

    — Vcc SourcePvc component

- sets the SourcePvc callingAddress, calledAddress, called VpiVci, aisGeneration attributes

- if Mdtl routing is selected, creates the Mdtl component and sets the primaryPath, alternatePath and automaticFallback attributes

- sets the attributes of the Vcd Tm subcomponents of the source Vcc to the value of the QoS profile

- if the provision destination option is selected, the destination end of the connection is provisioned. The ATM service provisioning tool then performs the following at the destination node:

  — creates a Vcc component with the given calledVpicalledVci under the destination AtmIf component on the destination node. If the AtmIf component does not exist, the operation is terminated. If the Vcc component already exists, the operation is terminated

  — creates a Vcc DestPvc Config component

  — Sets the Dest Pvc Config aisGeneration attribute

  — Sets the destination TM attributes on the Tm subcomponent of the destination VccVcd

If the provision destination option is selected on the destination node, the destination end of the connection is dynamically created by the call setup.

When validating the data retrieved from the Administration Database against the current view of the Passport switches, the ATM service provisioning tool performs the following validation at the source node:

- verifies that the Vcc Source Pvc component exists

- verifies that the calledAddress, and calledVpi and calledVci match

If the destination end is provisioned, the ATM service provisioning tool performs the following validation at the destination node:

- verifies that the Vcc DestPvc Config component exists

When creating an SPVC connection, the Administration Database is populated with the following circuit information:

- circuit ID: set to the value of the circuit Id field

- circuit type: set to ATM_SPVC

- flags: set to USER_GENERATED

- comment: records that the circuit was created by the ATM service provisioning (SP) tool

- TM Profile: set to the name of the TM profile

- customer: set to the value of the customer field

- connections: a source vcc with the correlation Tag, adminControl, AtmIf, Vpi, called address, and called VpiVci, Tm Profile, AIS generation

- if routing is selected: primary path, alternate path, and automatic fallback

- if the destination is provisioned: a destination vcc with the correlationTag Tm profile, AIS generation

Use the following procedures to provision an ATM SPVC path

Procedure steps

1   Start the ATM service provisioning tool from the **Preside MDM** window:

   Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

2   From the ATM service provisioning window, select **File** -> **New Circuit**.

3   In the **Circuit Properties** panel, select SPVC from the **Circuit Type** list.

4   If you are using circuit management, complete the following steps:

   - In the **Circuit Id** field, type a circuit ID.

   - In the **Correlation Tag** field, type a correlationTag, or select the **Use Circuit Id** option to set the value of the correlationTag to the value of the circuit ID.

   - Optionally, if you are using circuit management, in the Customer field, enter a unique customer name. An error message opens if the customer name already exists in the Administration Database.

5   Select the initial state of the SPVC connection from the **adminControl** field.

When the connection is permlocked, the VPI and VCI numbers are reserved on the source node of the call but no bandwidth is used. The default value is unlocked.

6 In the **Default User Id** and **Default Password** fields, enter the default user ID and password to provision the Passport node.

7 In the **Node Properties** panel, type a node name in the **Source** field or click the browse nodes [...] button and select a node from the **Browse Nodes** dialog. See "Browsing Node Names" (page 186).

8 The **Node Type** is always a Passport and the **Interface Type** is always AtmIf for the source node.

9 On the source, enter the source ATM interface, virtual path identifier (VPI), and virtual connection identifier number (VCI),

Note 1: The source ATM interface must already exist on the device.

Note 2: The VCCs should not already exist on the device.

10 If you do not want to use the default value, enter a calling address. If you want to use the default value, leave this field blank. You can click the browse button [...] next to the AtmIf field to open the **Browse Addresses** dialog to search and select a calling address from the list of available interfaces. The **Calling Address** field is auto-populated.with the selected AtmIf address.

11 In the destination panel, select a **Node Type**. Your choices are **Passport** or **Foreign**.

12 If provisioning a Passport destination, enter a destination node name or click the browse nodes [...] button and select a node from the **Browse Nodes** dialog. See "Browsing Node Names" (page 186).

If you have selected a Node Type of Foreign, this field is disabled.

13 Select the AtmIf **Interface Type**.

14 If the destination is a Passport, enter the destination ATM interface, destination virtual path identifier, and destination virtual connection identifier.

Note 1: The destination ATM interface must already exist on the device.

Note 2: The VCCs should not already exist on the device.

15 If you want to use the default destination interface address, leave the called address entry blank. Otherwise, enter a value or, if your destination is a Passport, click the browse addresses button [...] to open the **Browse Addresses** dialog. You can search and select a called address from the

list of available addresses. See "Browsing Addresses" (page 187).

If the destination node is a foreign node, the Browse Addresses button {...} is disabled and you will need to enter the values.

16   Enable or disable AIS Generation at the source and destination. This attribute enables/disables the generation of an Alarm Indication Signal (AIS) to the Customer Premise Equipment (CPE), when the switched portion of the SPVC is disconnected.

On the destination side, to enable AIS, select the Provision Destination for AIS option. This option is disabled if your destination is a Foreign node.

17   In the **TM Profile** field, type the quality of service profile to apply to the source ATM SPVC, or select the traffic management (TM) profile from the dropdown list. If the destination endpoint is being provisioned you also need to specify a TM profile for the destination node.

If the destination is a Foreign node type, this option is disabled.

A list of TM profiles is provided through the TM Profiles file. For information on setting up this file, see "Information files" (page 36).

18   Select **Use Defaults** in both the source and destination if you wish to use the default user ID and password specified in step 6. Otherwise, enter a user ID and password for the source and/or destination.

19   To use the user specified routing feature, in the **Routing** panel select **User Specified Paths**.

20   In the **Primary Path** field type the name of the path that the tool will use to initially establish the connection. Optionally, you can search for and select a path from a list of available paths by using the **Browse Paths** dialog. See "Browsing MDTL paths" (page 188).

21   Optionally, in the **Alternate Path** field, enter the name of the Alternate Path which the tool will use to establish the connection if the primary path selection fails. Optionally, you can search for and select a path from a list of available paths using the **Browse Paths** dialog. See "Browsing MDTL paths" (page 188).

22   Optionally, select the **Automatic Fallback** option which enables or disables the use of the default PNNI route selection algorithm if the manual (primary and alternate) paths fail.

23   Click **Apply**.

If mandatory data is missing, a message dialog box opens and describes what is missing. Enter the missing information and click **Apply** again.

If successful, a **Create Circuit** dialog box opens.

24 Apply the service creation. See "Applying service creations" (page 126).

Creating ATM SPVP connection

This section describes how to use the ATM service provisioning tool to provision an ATM SPVP connection.

Figure 21
SPVP connections
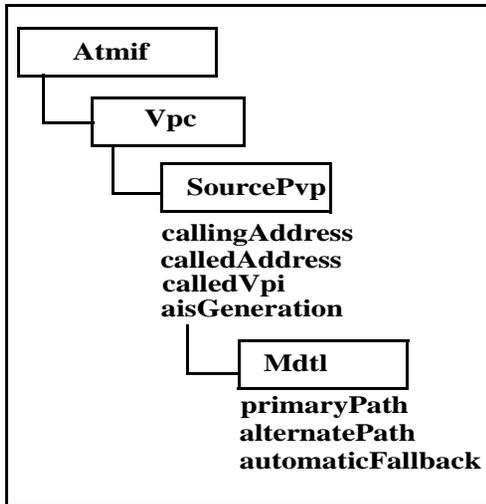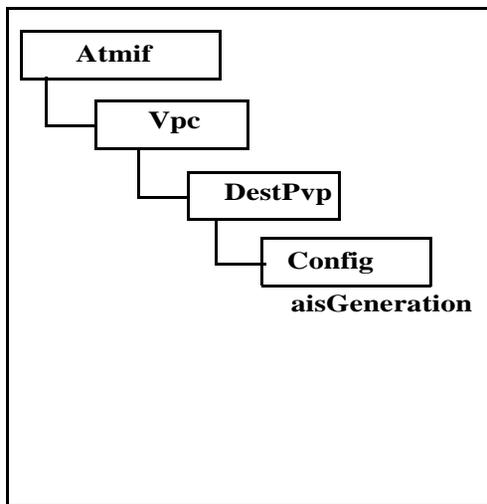
When creating an SPVP connection, the Atm service provisioning tool performs the following on the source node:

- creates the following components:

    — Vpc component under the source AtmIf component on the source node. If the AtmIf component does not already exist, the operation is terminated. If the Vpc component already exists, the operation is terminated.

    — Vpc SourcePvp component

- sets the SourcePvp callingAddress, calledAddress, called VpiVci, aisGeneration attributes

- if Mdtl routing is selected, creates the Mdtl component and sets the primary path, alternate path, and automaticFallback attributes

- sets the attributes on the Vpd Tm subcomponents of the source Vpc to the values of the TM profile

If the provision destination option is selected on the destination node, the destination end of the connection is provisioned. The ATM service provisioning tool then performs the following at the destination node:

- creates a Vpc component with the given calledVpi under the destination AtmIf component on the destination node. If the AtmIf component does not exist, the operation is terminated. If the Vpc component already exists, the operation is terminated.

- Creates a Vpc DestPvp Config component

- sets the DestPvp Config aisGeneration attribute

- sets the destination TM attributes on the Tm subcomponent of the destination VpcVpd.

  If the aisGeneration attribute is not enabled on the destination node, the destination end of the connection is dynamically created by the call setup.

When validating the data retrieved from the Administration Database against the current view of the Passport switches, the ATM service provisioning tool performs the following validation at the source node:

- verifies that the Vcc Source Pvp component exists

- verifies that the calledAddress, and calledVpi match

If the destination end is provisioned, the ATM service provisioning tool performs the following validation at the destination node:

- verifies that the Vpc DestPvp Config component exists

When creating an SPVC connection, the Administration Database is populated with the following circuit information:

- circuit id: set to the value of the circuit id field

- circuit type: set to ATM_SPVP

- flags: set to USER_GENERATED

- comment: records that the circuit was created by the ATM service provisioning (SP) tool

- TM Profile: set to the name of the TM profile

- customer: set to the value of the customer field

- connections: a source vpc with the correlationTag, adminControl, AtmIf, Vpi, called address and called Vpi, TM profile, AIS generation

- if the destination is provisioned: a destination vcc with the correlationTag, Tm profile, AIS generation

- if Routing is selected: primary path, alternate path, and automatic fallback

Use the following procedures to provision an ATM SPVP path

- "Creating ATM SPVP connection" (page 181)

- "Browsing Node Names" (page 186)

- "Browsing Addresses" (page 187)

- "Browsing MDTL paths" (page 188)

- "Applying service creations" (page 126)

Procedure steps

1   Start the ATM service provisioning tool from the Preside MDM window:

Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

2   From the ATM service provisioning window, select **File** -> **New Circuit**.

3   In the **Circuit Properties** panel, select SPVC from the **Circuit Type** list.

4   If you are using circuit management, complete the following steps

- In the **Circuit Id** field, type a circuit ID.

- In the **Correlation Tag** field, type a correlationTag or select the **Use Circuit Id** option to set the value of the correlationTag to the value of the circuit ID.

- Optionally, if you are using circuit management, in the **Customer** field, enter a unique customer name. An error message opens if the customer name already exists in the database.

5 Select the initial state of the SPVP connection from the **adminControl** field.

When the connection is permlocked, the VPI and VCI numbers are reserved on the source node of the call but no bandwidth is used. The default value is unlocked.

6 In the **Default User Id** and **Default Password** fields, enter the default user ID and password to provision the Passport node.

7 In the **Node Properties** panel, type a node name in the **Source** field or click the browse nodes [...] button and select a node from the **Browse Nodes** dialog. See "Browsing Node Names" (page 186). The **Node Type** is always a Passport.

8 Enter the source ATM interface, virtual path identifier, virtual connection identifier number, called virtual path identifier, and called virtual connection identifier.

Note 1: The source ATM interface must already exist on the device.

Note 2: The VCCs should not already exist on the device.

9 If you do not want to use the default value, enter a calling address. If you want to use the default value, leave this field blank. Otherwise, enter a value or click the browse addresses button [...] to open the **Browse Addresses** dialog. You can search and select a called address from the list of available addresses. See "Browsing Addresses" (page 187).

10 In the destination panel, select a **Node Type**. Your choices are **Passport** or **Foreign**.

11 If provisioning a Passport destination, enter a destination node name or click the browse nodes [...] button and select a node from the **Browse Nodes** dialog. See "Browsing Node Names" (page 186).

If you have selected a Node Type of Foreign, this field is disabled.

12 If provisioning a Passport, enter the destination ATM interface, destination virtual path identifier, and destination virtual connection identifier.

Note 1: The destination ATM interface must already exist on the device.

Note 2: The VCCs should not already exist on the device.

13 If you want to use the default destination interface address, leave the called address entry blank. Otherwise, enter a value or click the browse addresses button [...] to open the **Browse Addresses** dialog. You can search and select a called address from the list of available addresses. See "Browsing Addresses" (page 187).

If the destination node is a foreign node, the Browse Addresses button {...} is disabled and you will need to enter the values.

14 Enable or disable AIS Generation on the source and destination. This attribute enables/disables the generation of an Alarm Indication Signal (AIS) to the Customer Premise Equipment (CPE), when the switched portion of the SPVP is disconnected.

On the destination side, to enable AIS, also select the **Provision Destination for AIS** option. This option is disabled if the destination node is a non-Passport.

15 In the **Default TM** field, type the traffic management profile to apply to the ATM SPVP, or select the traffic management (TM) profile from the dropdown list.

A list of TM profiles is provided through the TM Profiles file. For information on setting up this file, see "Information files" (page 36).

16 Select **Use Defaults** in the source and/or destination if you wish to use the default user ID and password specified in step 6. Otherwise, enter a user ID and password for the source and/or destination.

17 To use the user specified routing feature, in the **Routing** panel, select **User Specified Paths**.

18 In the **Primary Path** field, type the name of the path that the tool will use to initially establish the connection. You can also search for and select a path, using the **Browse Paths** dialog. See "Browsing MDTL paths" (page 188).

19 Optionally, in the **Alternate Path** field, enter the name of the Alternate Path which the tool can use to establish the connection if the primary path selection fails. You can also search for and select a path, using the **Browse Paths** dialog. See "Browsing MDTL paths" (page 188).

20 Optionally, select the **Automatic Fallback** option which enables or disables the use of the default PNNI route selection algorithm if the manual (primary and alternate) paths fail.

21 Click **Apply**.

If mandatory data is missing, a message dialog box opens and describes what is missing. Enter the missing information and click **Apply** again.

If successful, a **Create Circuit** dialog box opens.

22 Apply the service creation. See "Applying service creations" (page 126)

Browsing Node Names

Use this procedure to search for and select a Passport device from a list of available devices. This procedure applies to the SPVC or SPVP application types.

Procedure steps

1   In the ATM service provisioning window, click the browse nodes [...] button.

The **Browse Nodes** dialog opens.

2   Enter the desired search criteria in the **Device Name** field or use the default wildcard * to retrieve all devices.

3   Optionally, in the **Max Num to Retrieve** field, set the maximum number of search result instances that you want to retrieve. The default is 100.

4   Click **Search**.

The **Search Results** area is populated with a list of valid node names that match the search criteria.

5   Select the desired node.

6   Click **OK**.

The node field in the node properties area of the ATM service provisioning window is populated with the selected node.

Browsing Addresses

Use this procedure to select a valid ATM address. The following procedure applies to the SPVC or SPVP application types.

Procedure steps

1   Open the ATM service provisioning tool.

The ATM service provisioning window opens.

2   Select SPVC or SPVP in the **Application** field.

3   If the source and destination nodes have the same user ID and password, in the **User Id** and **Password** fields in the **Default Node Properties** area, type the default user ID and password to be used to provision the Passport devices in the path.

Note: Since **Use Defaults** is checked, by default, in both the **Source Node** and **Destination Node Properties** areas, the user ID and password is used for both the source and destination nodes.

If the target node has a different user ID and password from the default, deselect the **Use Defaults** option for the target node and enter the specific user ID and password for the target node.

4   Choose the device name.

5   In the ATM service provisioning window, select the browse addresses [...] button.

The **Browse Addresses** dialog opens.

6   In the **Browse Addresses** dialog, enter the desired search criteria.

7   Click the **Search** button.

The **Search Results** area is populated with a list of the valid addresses matching the search criteria.

8   Select the desired address.

9   Click **OK**.

If the Destination Node, the **Called Address** field is populated with the selected address. If the Source Node, the **Calling Address** field is populated with the selected address. The **Atmlf** field is populated with the selected Atmlf. The dialog closes.

If the search fails, a dialog opens showing the error. Click **OK** in the message dialog.

Browsing MDTL paths

This procedure applies to Browsing Manual Designated Transit List (MDTL) paths for both SPVC and SPVP circuit types. The Browse Paths dialog opens after you enter a valid source node name, user ID, and password in the main window.

1   In the **Routing** panel of the main window, select the **User Specified Paths** check box.

2   Click the **Browse Paths...** button.

The Browse Paths dialog opens.

3   In the **Search Criteria** panel of the **Browse Paths** dialog, enter the desired search criteria:

•   In the **Path Name**, enter a path name.

- In the **Destination Node**, enter a destination node name if you have not already specified the destination node in the main window. If you have specified a destination node in the main window, this name appears in the **Destination Node** field of the **Browse Paths** dialog.

- In the **Max Num to Retrieve** field, enter the maximum number of instances retrieved by the search.

4   Click **Search**.

The **Search Results** panel is populated with a list of valid paths that match the search criteria.

5   Select the desired primary path.

The **Path Details** panel displays the details for the selected path.

6   To copy the selected path to the primary path field in the main window, click the **Set Primary** button.

7   Select the desired alternate path.

The **Path Details** panel displays the details for the selected path.

8   To copy the selected alternate path to the **Alternate Path** field in the main window, click the **Set Alternate** button.

9   Click **Close** to close the **Browse Paths** dialog.

The selected primary and alternate path names are displayed in their respective path fields in the main window.

Chapter 8
Frame relay to ATM circuits

This section provides procedures to provision the following FR.8 Frame relay to Atm (FrAtm) scenarios:

- SIWF FrAtm to FrAtm SPVC

  — "Creating a FRF.8 FrAtm to FrAtm SPVC between Passport devices" (page 192)

  — "Creating a FRF.8 FrAtm to FrAtm SPVC between a Passport device and a non-Passport device" (page 196)

- SIWF FrAtm to ATM Access SPVC

  — "Creating a FRF.8 FrAtm to ATM SPVC between Passport devices" (page 199)

  — "Creating a FrAtm to Atm SPVC between a Passport device and a non-Passport device" (page 203)

- SIWF ATM to FrAtm Access SPVC

  — "Creating a ATM to FrAtm SPVC between Passport devices" (page 206)

  — "Creating an ATM to FrAtm SPVC between a Passport device and a non-Passport device" (page 212)

For information on the Passport frame relay to ATM (FR-ATM) service, see 241-5701-920 *Passport 7400, 15000, 20000 Frame Relay to ATM Interworking Guide*.

Creating a FRF.8 FrAtm to FrAtm SPVC between Passport devices

Use this procedure to create an end-to-end Frame Relay connection to enable a Frame Relay customer-provided equipment (CPE) to communicate with another Frame Relay CPE across a homogeneous ATM PNNI network. In this procedure Passport is on the edge of the network, offering Frame Relay service on both ends. The source device must always be a Passport and the destination device is a Passport.

This procedure provisions the following on the source Passport node:

• creates a Data Link Connection Identifier (DLCI) component under the source FrAtm. If the source FrAtm does not exist, the operation terminates. If the specified DLCI already exists, the operation terminates.

• creates the service interworking function (SIWF) component under the source DLCI

• creates a soft PVC (SPVC) component under the source SIWF

• sets the source SIWF attributes: remote address (raddr), rci, and correlation tag (correlationTag) attributes

• sets the traffic management attributes under the source component FrAtm DLCI ServiceParameters

This procedure provisions the following on the destination Passport node:

• Creates a DLCI under the destination FrAtm. If the destination FrAtm does not exist, the operation terminates. If the destination DLCI already exists, the operation terminates.

• Creates a SIWF under the destination DLCI.

When validating a FR/ATM Access SPVC retrieved from the Administration Database against the current view of Passport switches, the ATM service provisioning tool performs the following actions on the source node:

• verifies that the Fratm DLCI SIWF spvc component exists

• verifies that the raddr and rci attributes match

If the destination node is known, the tool verifies that the FrAtm DLCI SIWF component exists.

Prerequisites

The FrAtm interfaces are provisioned before using the service provisioning tool.

You have reviewed the section on basic provisioning procedures for general procedures.

Procedure steps

1   Start the **ATM service provisioning** tool from the **Preside MDM** window:

    Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

    If the Administration Database is installed, a dialog box opens prompting you for a database user ID and password.

2   In the User name and Password fields, type a user ID and password, and click **OK**.

    The **Service Provisioning - ATM** window opens.

3   In the **Circuit Type** list in the main window, select the **FRATM ACCESS SPVC** circuit type.

4   In the **Default User Id** and **Default Password** fields, type the default user id and password to provision the Passport devices in the path.

5   If you are using circuit management, complete the following steps

    •   in the **Circuit Id** field, enter a circuit ID.

    •   optionally, in the **Customer** field, enter a customer name. If the customer does not exist in the database, it is created.

6   To set the correlation tag to the same value as the circuit ID, check the **Use Circuit Id** check box. Other wise, in the **Correlation Tag** field, enter an independent identifier, as required.

    The correlation tag is only 32 bytes, so if you use the circuit ID, you need to limit the allowed 128 byte circuit ID to 32 bytes. If you have selected **Use Circuit Id** and more than 32 characters are entered in the **Circuit Id** field, the correlation tag on the Passport device is set to the first 32 characters.

Note: If accounting collection has been enabled at the ATM Interface, then provisioning the correlation tag enables accounting collection for the VCC. The correlation tag can be left un-provisioned if this effect is not desired.

7 On the source side of the **Node Properties** panel, type a node name in the **Source Node** field or click the browse [...] button and select a Passport node from the **Browse Nodes** dialog. The source node must be a Passport.

8 You cannot change the Node Type and Interface Type fields. These fields are read only since the source node is always a Passport, and the interface type is always FrAtm.

9 Click the browse [...] button and select a FrAtm interface from the list of interfaces displayed in the **FrAtm Browse Dialog**.

10 Click the **Get Next** button next to the DLCI field to auto-populate the field with the next available DLCI on the source Passport, or type in an instance number that is not already in use on the Passport.

11 From the **TM Profile** drop down list, select the FrAtm TM profile, or accept the default profile. You can edit the TM Profile by clicking the [...] button next to the TM Profile field.

12 Select the Use Defaults check box to use the default user ID and password. Otherwise, enter a user ID and password in the **User Id** and **Password** fields.

13 In the **Dest Node** field, on the destination side of the **Node Properties** panel, type the name of the destination Passport device, or click the browse [...] button next to this field to open the **Browse Nodes** dialog box. Select a Passport from the list of available Passports, and click **OK**.

14 Select **Passport** from the **Node Type** drop down list.

15 Select the **FrAtm** Interface type.

16 Click the browse [...] button next to the destination **FrAtm** field. Select a FrAtm interface from the list of available FrAtm interfaces.

The **Called Address** field is auto-populated with the address of the destination FrAtm that you have selected.

17 Click the **Get Next** button next to the destination **DLCI** field to auto-populate the field with the next DLCI on the destination Passport or type in an instance number that is not already in use in the Passport.

18   From the **TM Profile** drop down list, select the FrAtm TM profile, or accept the default profile. You can edit the TM Profile by clicking the [...] button next to the TM Profile field.

19   Select the **Use Defaults** check box to use the default user ID and password. Otherwise, enter a user ID and password in the **User Id** and **Password** fields.

20   Apply and activate the provisioning. See "Applying service creations" (page 126).

Procedure job aid

Figure 22
FrAtm to FrAtm SPVC CDL where the source and destination are Passports
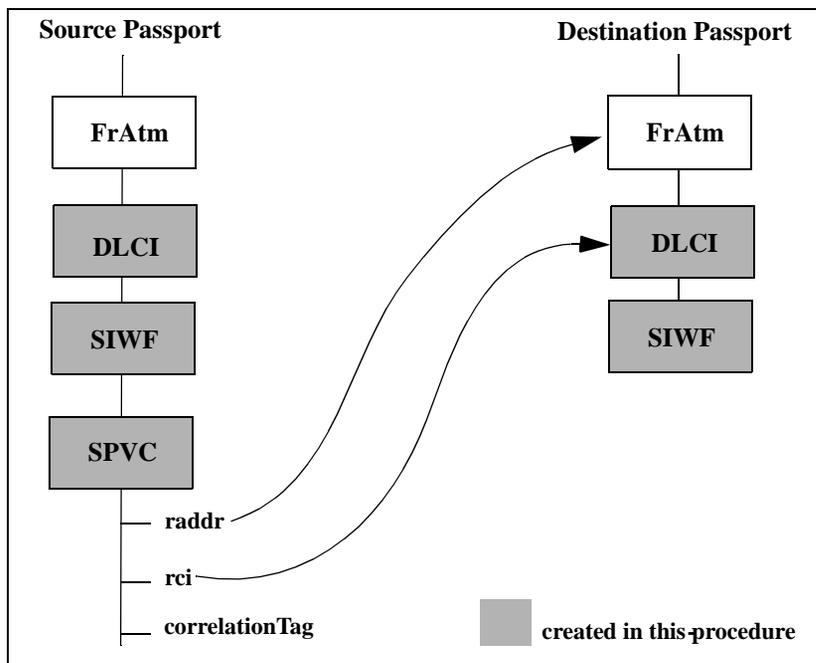
Creating a FRF.8 FrAtm to FrAtm SPVC between a Passport device and a non-Passport device

Use this procedure to create an end-to-end Frame Relay connection to enable a Frame Relay customer-provided equipment (CPE) to communicate with another Frame Relay CPE across a homogeneous ATM PNNI network. The source device must always be a Passport and the destination device is a non-Passport running FrAtm FRF.8.

This procedure provisions the following on the source Passport node:

- creates a Data Link Connection Identifier (DLCI) component under the source FrAtm. If the source FrAtm does not exist, the operation terminates. If the specified DLCI already exists, the operation terminates.

- creates the service interworking function (SIWF) component under the source DLCI

- creates a soft PVC (SPVC) component under the source SIWF

- sets the source SIWF attributes: remote address (raddr), rci, and correlation tag (correlationTag) attributes

- sets the traffic management attributes under the source component FrAtm DLCI ServiceParameters (Sp)

When validating a FR/ATM Access SPVC data retrieved from the Administration Database against the current view of Passport switches, the ATM service provisioning tool performs the following actions on the source node:

- verifies that the Fratm DLCI SIWF spvc component exists

- verifies that the raddr and rci attributes match

Prerequisites

The FrAtm interface on the source is provisioned before using the service provisioning tool.

The destination node has been provisioned. Since the destination node is not a Passport, the service provisioning tool does not provision it.

You have reviewed the section on basic provisioning procedures for general provisioning procedures.

Procedure steps

1 Start the **ATM service provisioning** tool from the **Preside MDM** window:

Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

If the Administration Database is installed, a dialog box opens prompting you for a database user ID and password.

2 In the User name and Password fields, type a user ID and password, and click **OK**.

The **Service Provisioning - ATM** window opens.

3 In the **Circuit Type** list in the main window, select the **FRATM_Access_ SPVC** circuit type.

4 In the **Default User Id** and **Default Password** fields, type the default user id and password to provision the Passport devices in the path.

5 If you are using circuit management, complete the following steps

- in the **Circuit Id** field, enter a circuit ID.

- optionally, in the **Customer** field, enter a customer name. If the customer does not exist in the database, it is created.

6 To set the correlation tag to the same value as the circuit ID, check the **Use Circuit Id** check box. Other wise, in the **Correlation Tag** field, enter an independent identifier, as required.

The correlation tag is only 32 bytes, so if you use the circuit ID, you need to limit the allowed 128 byte circuit ID to 32 bytes. If you have selected **Use Circuit Id** and more than 32 characters are entered in the **Circuit Id** field, the correlation tag on the Passport device is set to the first 32 characters.

Note: If accounting collection has been enabled at the ATM Interface, then provisioning the correlation tag enables accounting collection for the VCC. The correlation tag can be left un-provisioned if this effect is not desired.

7 On the source side of the **Node Properties** panel, type a node name in the **Source Node** field or click the browse [...] button and select a Passport node from the **Browse Nodes** dialog. The source node must be a Passport.

8   You cannot change the Node Type and Interface Type fields. These fields are read only since the source node is always a Passport, and the interface type is always FrAtm.

9   Click the browse [...] button and select a FrAtm interface from the list of interfaces displayed in the **FrAtm Browse Dialog**.

10   Click the **Get Next** button next to the DLCI field to auto-populate the field with the next available DLCI on the source Passport, or type in an instance number that is not already in use on the Passport.

11   From the **TM Profile** drop down list, select the FrAtm TM profile, or accept the default profile. You can edit the TM Profile by clicking the [...] button next to the TM Profile field.

12   Select the Use Defaults check box to use the default user ID and password. Otherwise, enter a user ID and password in the **User Id** and **Password** fields.

13   On the destination side, the Dest Node field is disabled.

14   Select **Foreign** from the **Node Type** drop down list.

15   Select the **FrAtm** interface type from the **Interface Type** drop down list.

The FrAtm field is disabled.

16   Fill in the **Called Address** field of the FrAtm interface being used on the non-Passport.

17   Fill in the DLCI field with the DLCI used on the destination non-Passport. The Get Next button and TM Profile drop down list are disabled.

18   Select the **Use Defaults** check box to use the default user ID and password. Otherwise, enter a user ID and password in the **User Id** and **Password** fields.

19   Apply and activate the provisioning. See "Applying service creations" (page 126).

Creating a FRF.8 FrAtm to ATM SPVC between Passport devices

Use this procedure to allow a Frame Relay customer-provided equipment (CPE) to communicate with an ATM CPE across a homogeneous ATM PNNI network. In this procedure, Passport is on the edge of the network offering Frame Relay services on one end-point and ATM on the other. This is accomplished on Passport by providing FRF.8 interworking on one of the Passport edge nodes. In this procedure, both the source and destination devices are Passports.

The following provisioning occurs on the source node:

- creates a creates a Data Link Connection Identifier (DCLI) under the source FrAtm. If the source FrAtm does not exist, the operation terminates. If the specified DCLI already exists, the operation terminates.

- creates the service interworking function (SIWF) component under the source DLCI

- creates a soft PVC (SPVC) component under the source SIWF

- sets the source SPVC attributes remote address (raddr), rci, and correlation tag (correlationTag)

- sets the traffic management attributes under the source component FrAtm DLCI ServiceParameters (Sp)

When validating a FR/ATM Access SPVC retrieved from the Administration Database against the current view of Passport switches, the ATM service provisioning tool performs the following actions on the source node:

- verifies that the Fratm DLCI SIWF spvc component exists

- verifies that the raddr and rci attributes match

Prerequisites

The FrAtm and AtmIf interfaces are provisioned before using the service provisioning tool.

You have reviewed the section on basic provisioning procedures for general provisioning procedures.

Procedure steps

1 Start the **ATM service provisioning** tool from the **Preside MDM** window:

Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

If the Administration Database is installed, a dialog box opens prompting you for a database user ID and password.

2 In the User name and Password fields, type a user ID and password, and click **OK**.

The **Service Provisioning - ATM** window opens.

3 From the **Circuit Type** list, select **FRATM ACCESS SPVC**.

4 In the **Default User Id** and **Default Password** fields, type the default user id and password to provision the Passport devices in the path.

5 If you are using circuit management, complete the following steps

- in the **Circuit Id** field, enter a circuit ID.

- optionally, in the **Customer** field, enter a customer name. If the customer does not exist in the database, it is created.

6 To set the correlation tag to the same value as the circuit ID, check the **Use Circuit Id** check box. Other wise, in the **Correlation Tag** field, enter an independent identifier, as required.

The correlation tag is only 32 bytes, so if you use the circuit ID, you need to limit the allowed 128 byte circuit ID to 32 bytes. If you have selected **Use Circuit Id** and more than 32 characters are entered in the **Circuit Id** field, the correlation tag on the Passport device is set to the first 32 characters.

Note: If accounting collection has been enabled at the ATM Interface, then provisioning the correlation tag enables accounting collection for the VCC. The correlation tag can be left un-provisioned if this effect is not desired.

7 On the source side of the **Node Properties** panel, type a node name in the **Source Node** field or click the browse [...] button and select a Passport node from the **Browse Nodes** dialog. The source node must be a Passport.

8 You cannot change the **Node Type** and **Interface Type** fields. These fields are read only since the source node is always a Passport, and the interface type is always FrAtm.

9   Click the browse [...] button next to the **FrAtm** field and select a FrAtm interface from the list of interfaces displayed in the **FrAtm Browse Dialog** box.

10   Click the **Get Next** button next to the DLCI field to auto-populate the field with the next available DLCI on the source Passport, or type in an instance number that is not already in use on the Passport.

11   From the **TM Profile** drop down list, select the FrAtm TM profile, or accept the default profile. You can edit the TM Profile by clicking the [...] button next to the TM Profile field.

12   Select the Use Defaults check box to use the default user ID and password. Otherwise, enter a user ID and password in the **User Id** and **Password** fields.

13   In the **Dest Node** field, on the destination side of the **Node Properties** panel, type the name of the destination Passport device, or click the browse [...] button next to this field to open the **Browse Nodes** dialog box. Select a Passport from the list of available Passports, and click **OK**.

14   Select **Passport** from the **Node Type** drop down list.

15   Select the **AtmIf** Interface type from the **Interface Type** drop down list.

16   Click the browse [...] button next to the destination **AtmIf** field. Select a ATM interface from the list of available ATM interfaces.

The **Called Address** field is auto-populated with the address of the destination ATM that you have selected.

17   Fill in the VPI and VCI fields.

18   Select the **Use Defaults** check box to use the default user ID and password. Otherwise, enter a user ID and password in the **User Id** and **Password** fields.

19   Apply and activate the provisioning. See "Applying service creations" (page 126).

Procedure job aid

Figure 23
FrAtm to Atm SPVC CDL where the source and destination are Passports
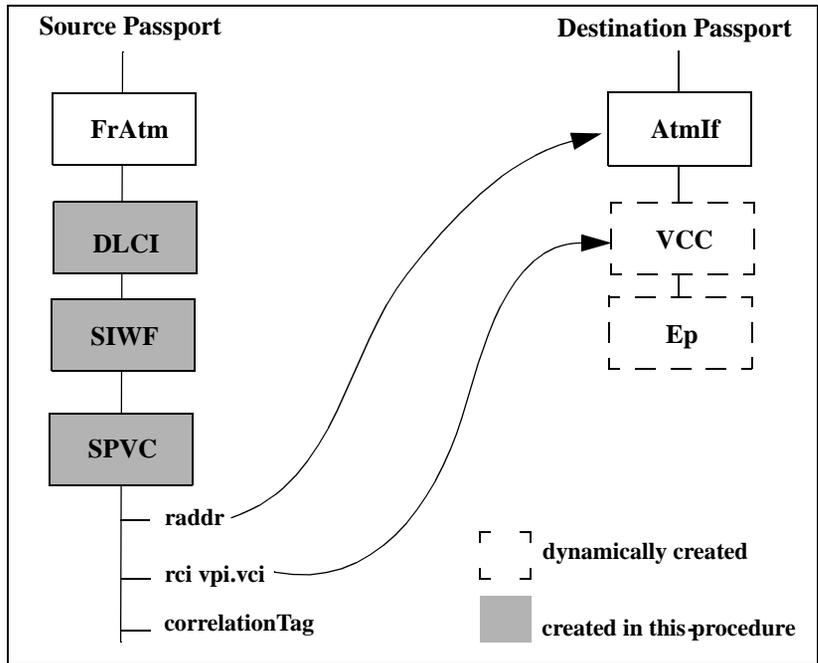
Creating a FrAtm to Atm SPVC between a Passport device and a non-Passport device

Use this procedure to create a FrAtm to ATM SPVC circuit between a source Passport device and a destination non-Passport device running ATM.

The following provisioning occurs on the source node:

- creates a creates a Data Link Connection Identifier (DCLI) under the source FrAtm. If the source FrAtm does not exist, the operation terminates. If the specified DCLI already exists, the operation terminates.

- creates the service interworking function (SIWF) component under the source DLCI

- creates a soft PVC (SPVC) component under the source SIWF

- sets the source SPVC attributes remote address (raddr), rci, and correlation tag (correlationTag)

- sets the traffic management attributes under the source component FrAtm DLCI ServiceParameters

When validating a FR/ATM Access SPVC retrieved from the Administration Database against the current view of Passport switches, the ATM service provisioning tool performs the following actions on the source node:

- verifies that the Fratm DLCI SIWF spvc component exists

- verifies that the raddr and rci attributes match

Prerequisites

The FrAtm and AtmIf interfaces are provisioned before using the service provisioning tool.

The destination node has been provisioned. Since the destination node is not a Passport, the service provisioning tool does not provision it.

You have reviewed the section on basic provisioning procedures for general provisioning procedures.

Procedure steps

1   Start the **ATM service provisioning** tool from the **Preside MDM** window:

Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

If the Administration Database is installed, you are prompted for a database user ID and password.

2   In the User name and Password fields, type a user ID and password, and click **OK**.

The **Service Provisioning - ATM** window opens.

3   From the **Circuit Type** drop down list, select the **FRATM ACCESS SPVC** circuit type.

4   In the **Default User Id** and **Default Password** fields, type the default user ID and password to provision the Passport devices in the path.

5   If you are using circuit management, complete the following steps

- in the **Circuit Id** field, enter a circuit ID.

- optionally, in the **Customer** field, enter a customer name.If the customer does not exist in the database, it is created.

6   To set the correlation tag to the same value as the circuit ID, check the **Use Circuit Id** check box. Otherwise, in the **Correlation Tag** field, enter an independent identifier, as required.

The correlation tag is only 32 bytes, so if you use the circuit ID, you need to limit the allowed 128 byte circuit ID to 32 bytes. If you have selected **Use Circuit Id** and more than 32 characters are entered in the **Circuit Id** field, the correlation tag on the Passport device is set to the first 32 characters.

7   On the source side of the **Node Properties** panel, type a node name in the **Source Node** field or click the browse [...] button and select a Passport node from the **Browse Nodes** dialog. The source node must be a Passport.

8   You cannot change the Node Type and Interface Type fields. These fields are read only since the source node is always a Passport, and the interface type is always FrAtm.

9   Click the browse [...] button and select a FrAtm interface from the list of interfaces displayed in the **FrAtm Browse Dialog**.

10   Click the **Get Next** button next to the DLCI field to auto-populate the field with the next available DLCI on the source Passport, or type in an instance number that is not already in use on the Passport.

11   From the **TM Profile** drop down list, select the FrAtm TM profile, or accept
the default profile. You can edit the TM Profile by clicking the [...] button
next to the TM Profile field.

12   Select the Use Defaults check box to use the default user ID and
password. Otherwise, enter a user ID and password in the **User Id** and
Password fields.

13   On the destination side, the Dest Node field is disabled.

14   Select **Foreign** from the **Node Type** drop down list.

15   Select the **AtmIf i**nterface type from the **Interface Type** drop down list.

The AtmIf field is disabled.

16   Fill in the **Called Address** field of the ATM interface being used on the
destination non-Passport.

17   Fill in the VPI and VCI fields.

18   Apply and activate the provisioning. See "Applying service creations"
(page 126).

Creating a ATM to FrAtm SPVC between Passport devices

Use this procedure to create an ATM to FrAtm SPVC circuit between Passport devices. The circuit originates at an ATM node, crosses a PNNI network, and terminates on a node accessing a Frame Relay customer-provided equipment (CPE).

The following provisioning occurs on the source node:

- creates a VCC under the source AtmIf. If the source AtmIf does not exist, the operation terminates. If the source VCC already exists, the operation terminates

- creates the SourcePVC under the sourceVCC

- Sets the SourcePVC attributes: calledAddress, calledVpiVci

- Sets the calledVpiVci value to 0.remotedlci

The following provisioning occurs on the destination node:

- creates a creates a Data Link Connection Identifier (DCLI) under the source FrAtm. If the source FrAtm does not exist, the operation terminates. If the specified DCLI already exists, the operation terminates.

- creates the service interworking function (SIWF) component under the source DLCI

When validating a ATM to FrAtm SPVC retrieved from the Administration Database against the current view of Passport switches, the ATM service provisioning tool performs the following actions on the source node:

- verifies that the Atmif Vcc SourcePvc component exists

- verifies that the calledAddress, calledVpi and calledVci match

If the destination node is known, the tool verifies that the FrAtm DLCI SIWF component exists on the destination.

Prerequisites

The FrAtm and AtmIf interfaces are provisioned before using the service provisioning tool.

You have reviewed the section on basic provisioning procedures for general provisioning procedures.

Procedure steps

1   Start the **ATM service provisioning** tool from the **Preside MDM** window:

Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

If the Administration Database is installed, you are prompted for a database user ID and password.

2   In the User name and Password fields, type a user ID and password, and click **OK**.

The **Service Provisioning - ATM** window opens.

3 From the **Circuit Type** drop down list, select the **SPVC** circuit type.
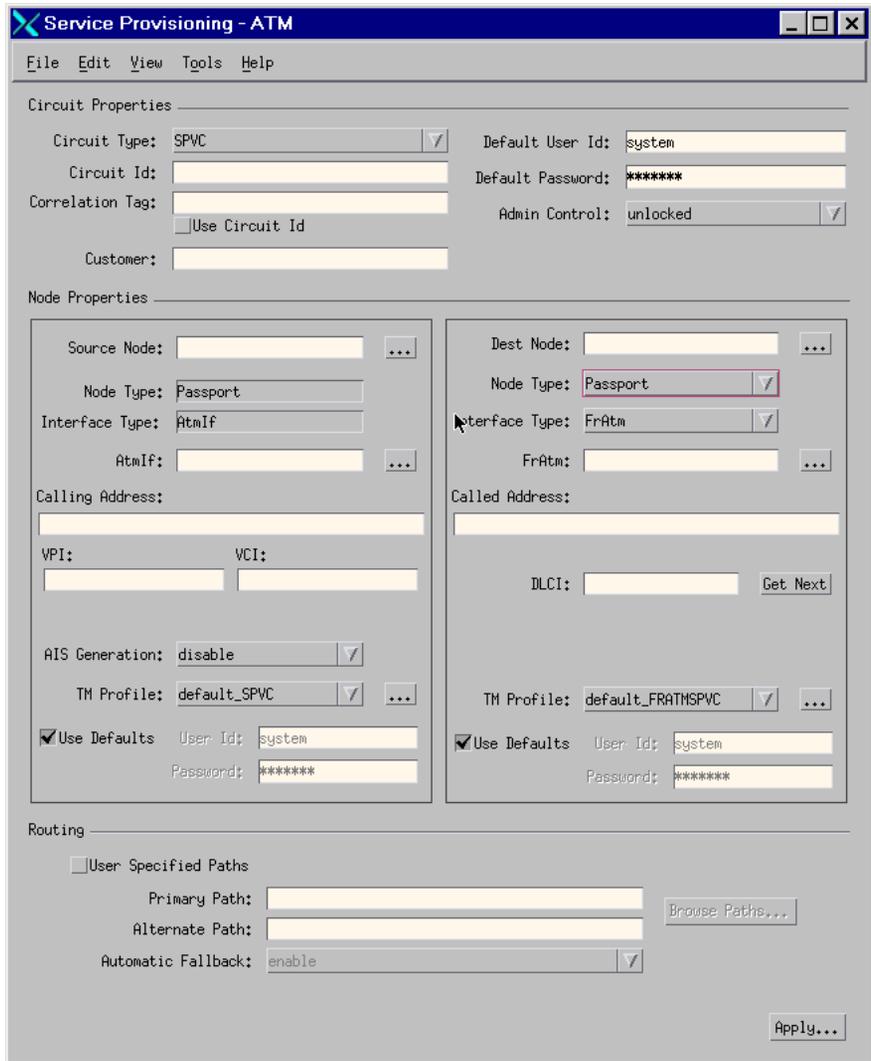
4 In the **Circuit Type** list in the main window, select the **SPVC** circuit type.

5 In the **Default User Id** and **Default Password** fields, type the default user id and password to provision the Passport devices in the path.

6   If you are using circuit management, complete the following steps

  •   in the **Circuit Id** field, enter a circuit ID.

  •   optionally, in the **Customer** field, enter a customer name. If the customer does not exist in the database, it is created.

7   To set the correlation tag to the same value as the circuit ID, check the **Use Circuit Id** check box. Other wise, in the **Correlation Tag** field, enter an independent identifier, as required.

  The correlation tag is only 32 bytes, so if you use the circuit ID, you need to limit the allowed 128 byte circuit ID to 32 bytes. If you have selected **Use Circuit Id** and more than 32 characters are entered in the **Circuit Id** field, the correlation tag on the Passport device is set to the first 32 characters.

  Note: If accounting collection has been enabled at the ATM Interface, then provisioning the correlation tag enables accounting collection for the VCC. The correlation tag can be left un-provisioned if this effect is not desired.

8   On the source side of the **Node Properties** panel, type a node name in the **Source Node** field or click the browse [...] button and select a Passport node from the **Browse Nodes** dialog. See "Browsing Node Names" (page 186).

9   You cannot change the Node Type and Interface Type fields. These fields are read only since the source node is always a Passport, and the interface type is always AtmIf.

10   Click the browse [...] button next to the source AtmIf, and select a ATM interface from the list of available interfaces in the **Browse Addresses** dialog box. See "Browsing Addresses" (page 187).

  The **Calling Address** field is auto-populated with the address of the AtmIf that you select.

11   Fill in the VPI and VCI fields.

12   Enable or disable AIS Generation at the source. This attribute enables/disables the generation of an Alarm Indication Signal (AIS) to the customer-provided equipment (CPE), when the switched portion of the SPVC is disconnected.

13   From the **TM Profile** drop down list, select the Atm TM profile, or accept the default profile. You can edit the TM Profile by clicking the [...] button next to the TM Profile field.

14 In the **Dest Node** field, type the name of the Passport device, or click the browse [...] button next to this field to open the **Browse Nodes** dialog box. Select a Passport from the list of available Passport devices and click **OK**.

15 From the Node Type drop down list, select **Passport**.

16 From the **Interface Type** drop down list, Select **FrAtm**.

17 Click the browse [...] button next to the destination **FrAtm** field select an FrAtm Interface from the list of available FrAtm interfaces.

The **Called Address** field is auto-populated with the address of the destination FrAtm that you have selected.

18 Click the **Get Next** button to the right of the **DLCI** field, or type in an instance number that is not already in use on the Passport.

If you click **Get Next**, the field is auto-populated with the next available DLCI on the destination Passport.

19 From the **TM Profile** drop down list, select the TM profile, or accept the default profile. You can edit the TM Profile by clicking the [...] button next to the TM Profile field.

20 Select the Use Defaults check box to use the default user ID and password. Otherwise, enter a user ID and password in the **User Id** and **Password** fields.

21 Apply the provisioning. See "Applying service creations" (page 126).

Procedure job aid

Figure 24
Atm to FrAtm SPVC CDL where the source and destination are Passports
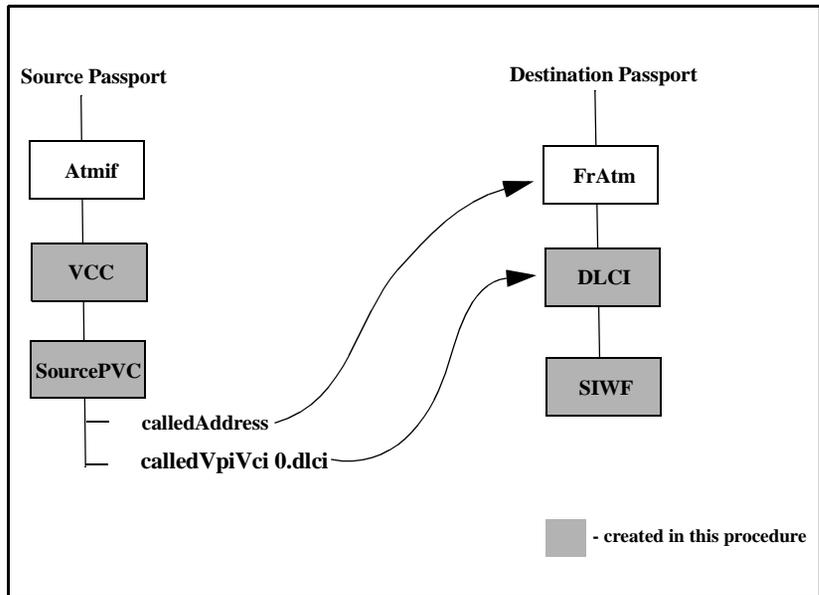
Creating an ATM to FrAtm SPVC between a Passport device and a non-Passport device

Use this procedure to create an Atm to FrATM SPVC circuit between a Passport and non-Passport device. The circuit originates at an ATM node, crosses a PNNI network, and terminates on a node accessing a Frame Relay customer-provided equipment (CPE). The following provisioning occurs on the destination node:

The following provisioning occurs on the source node:

- creates a VCC under the source AtmIf. If the source AtmIf does not exist, the operation terminates. If the source VCC already exists, the operation terminates

- creates the SourcePVC under the sourceVCC

- Sets the SourcePVC attributes: calledAddress, calledVpiVci

When validating a ATM to FrAtm SPVC retrieved from the Administration Database against the current view of Passport switches, the ATM service provisioning tool performs the following actions on the source node:

- verifies that the Atmif Vcc SourcePvc component exists

- verifies that the calledAddress, calledVpi and calledVci match

  Note: In the database, the ATM to FrAtm SPVC is considered an ATM SPVC because it originates on an ATM interface.

Prerequisites

The FrAtm and AtmIf interfaces are provisioned before using the service provisioning tool.

The destination node has been provisioned. Since the destination node is not a Passport, the service provisioning tool does not provision it.

You have reviewed the section on basic provisioning procedures for general provisioning procedures.

Procedure steps

1 Start the **ATM service provisioning** tool from the **Preside MDM** window:

Configuration -> **Passport Devices** -> **Service Provisioning** -> **ATM**

If the Administration Database is installed, you are prompted for a database user ID and password.

2   In the User name and Password fields, type a user ID and password, and click **OK**.

The **Service Provisioning - ATM** window opens.

3 In the **Circuit Type** list in the main window, select the **ATM SPVC** circuit type.

4 In the **Default User Id** and **Default Password** fields, type the default user id and password to provision the Passport devices in the path.

5   If you are using circuit management, complete the following steps

- in the **Circuit Id** field, enter a circuit ID.

- optionally, in the **Customer** field, enter a customer name. If the customer does not exist in the database, it is created.

6   To set the correlation tag to the same value as the circuit ID, check the **Use Circuit Id** check box. Other wise, in the **Correlation Tag** field, enter an independent identifier, as required.

The correlation tag is only 32 bytes, so if you use the circuit ID, you need to limit the allowed 128 byte circuit ID to 32 bytes. If you have selected **Use Circuit Id** and more than 32 characters are entered in the **Circuit Id** field, the correlation tag on the Passport device is set to the first 32 characters.

Note: If accounting collection has been enabled at the ATM Interface, then provisioning the correlation tag enables accounting collection for the VCC. The correlation tag can be left un-provisioned if this effect is not desired.

7   On the source side of the **Node Properties** panel, type a node name in the **Source Node** field or click the browse [...] button and select a Passport node from the **Browse Nodes** dialog. See "Browsing Node Names" (page 186).

8   Type an ATM Interface name in the source **AtmIf** field, or click the browse [...] button and select a ATM interface from the list of available ATM interfaces. See the section Browsing ATM Interfaces.

9   Fill in the **VPI** and **VCI** fields.

10 Enable or disable AIS Generation at the source. This attribute enables/disables the generation of an Alarm Indication Signal (AIS) to the customer-provided equipment (CPE), when the switched portion of the SPVC is disconnected.

11 From the **TM Profile** drop down list, select the TM profile, or accept the default profile. You can edit the TM Profile by clicking the [...] button next to the TM Profile field.

12 On the destination side of the **Node Properties** panel, the **Dest Node** field is disabled.

13 Select **Foreign** in the **Node Type** field.

14 Select **FrAtm** from the **Interface Type** drop down list.

15 Apply the provisioning. See "Applying service creations" (page 126).

Chapter 9
ATM Traffic Management Profile Editor

For a description of the ATM Traffic Management Profile Editor and how it works see the following sections:

- "About the ATM Traffic Management Profile Editor" (page 217)

- "Starting the ATM Profile Editor from the Preside MDM toolset" (page 226)

- "Starting the ATM Profile Editor from a command line" (page 227)

- "Opening the ATM Traffic Management Profile Editor from the ATM service provisioning tool" (page 228)

- "Modifying attribute values" (page 230)

- "Deleting a Traffic Management profile" (page 231)

- "Saving a traffic management profile" (page 232)

- "Setting the traffic management profile as the selected traffic management profile for the Passport device" (page 233)

- "Applying a Traffic Management profile to a Passport device" (page 235)

About the ATM Traffic Management Profile Editor

The ATM Traffic Management Profile Editor provides a graphical user interface to manage the Traffic Management (TM) profiles for the Asynchronous Transfer Mode (ATM) service provisioning tool. The user interface is dynamic. That is, its contents correspond to the ATM service being provisioned (Trunk, VccBearerServiced, VpcBearerService, CES over PVC, SPVC, SPVP, or FrATM ACCESS SPVC).

You can perform the following TM profile management tasks with the ATM Traffic Management Profile Editor:

• create TM profiles

• view and modify one or more values in an existing TM profile while you are using the ATM service provisioning tool, and apply the changes without saving the TM profile to disk

• save multiple TM profiles so that manual file versioning is possible

The table "Modifiable components and attributes" (page 218) identifies the circuit type and components whose attributes you can modify using the Traffic Management Profile Editor. Each must be dealt with on an individual basis.

Table 1
Modifiable components and attributes

Circuit Type	Component
SPVC	AtmIf Vcc Vcd Tm
SPVP	AtmIf Vpc Vpd Tm
VccBearerService	AtmIf Vcc Vcd Tm
VpcBearerService	AtmIf Vpc Vpd Tm
Trunk	AtmIf Vcc Vcd Tm
CES over PVC	AtmIf Vcc Vcd Tm
FRF.8 FrAtm PVC	FrAtm DLCI ServiceParameters (Sp)

Opening the ATM Traffic Management Profile Editor

You can open the ATM Traffic Management Profile Editor in the following ways:

• in standalone mode from the Configuration -> Passport Devices -> Administration menu

• in standalone mode from a command line

• from the ATM service provisioning tool

ATM Traffic Management Profile Editor user interface

The user interface opened in standalone mode differs from that which appears when you open the Profile Editor from the ATM service provisioning tool in the following ways:

- In standalone mode, the Circuit Type drop down list is enabled, allowing you to select another circuit type. When you open the Profile Editor from the ATM service provisioning tool, the circuit type in the Circuit Type drop down list corresponds to the type that you selected in the ATM service provisioning tool and is read-only.

- In standalone mode, the Profile Editor contains the Save, Delete, Close and Help buttons. You cannot apply the TM profile to the Passport device when in standalone mode. You need to apply the TM profile from the ATM service provisioning tool. See "Applying a Traffic Management profile to a Passport device" (page 235). When opened from the ATM service provisioning tool, the Profile Editor contains the Apply, Apply and Save, Delete, Close and Help buttons.

For an illustration of the ATM Traffic Management Profile Editor, see the figure "ATM Traffic Management Profile Editor" (page 220). This figure illustrates the ATM TM Profile Editor when you launch it from the ATM service provisioning client. When you launch the ATM Traffic Management Profile Editor as a stand-alone tool, a similar dialog box opens, but it does not have the Apply and Apply and Save buttons.

Figure 25
ATM Traffic Management Profile Editor
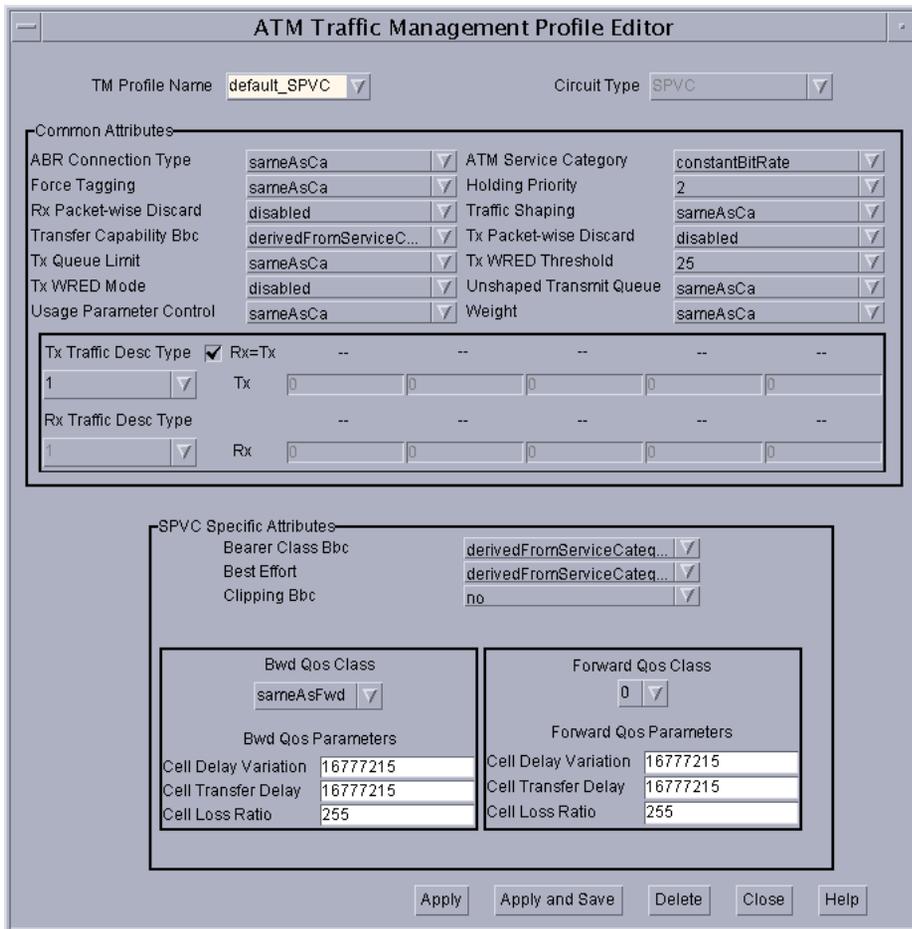
Complex attributes have descriptive labels that make them easier to identify. These labels change according to the value of the Traffic Descriptor Type attribute.

Default values are provided for each component's attributes and specific values are set for those instances where an attribute must assume a particular value.

Note: The default value for an attribute always appears at the top of the drop down list.

For the Bandwidth QoS Parameters and Forward QoS Parameters seen in SPVC mode, you can obtain the default values for the text fields by resting the mouse over the respective text field to access a tool tip. Tx and Rx Traffic Descriptor Parameters, regardless of the mode, do not have similar tool tips because of the variation between the different card and circuit types. The only common restriction in the Tx and Rx Traffic Descriptor text fields is that the maximum is always 2147483647.

If an attribute is mandatory for a certain service, the attribute and its values are shown but are greyed out so that they are inaccessible. As a result, you will not be able to edit them. An example of this is the value for txTrafficDesParm attribute. The txTrafficDesParm attribute must all be 0 if txTrafficDescType is 1 or 2. You can, therefore, only modify non-critical attribute values. This safeguards against corruption of the TM profile for the service and reduces likelihood of corruption or failure at "check prov."

The following command buttons that are common to both interfaces:

- **Delete** deletes the TM profile selected in the TM Profile Name drop down list.

- **Close** closes the ATM Traffic Management Profile Editor. If you opened the ATM Traffic Management Profile Editor from the ATM service provisioning tool, closing the tool sends the currently selected TM profile back to the ATM service provisioning tool.

- **Help** opens the on-line documentation for the ATM Traffic Management Profile Editor

If opened in standalone mode, the Profile Editor also contains the following command button:

- Each **Save** action overwrites the entire contents of the eteATMProfiles.cfg file. Only the currently selected TM profile has its changes saved to disk. Changes made to the other TM profiles since the last save are not written to disk.

If opened from the ATM service provisioning tool, the Profile Editor also contains the following commands

- **Apply and Save** generates a TM profile in the eteATMProfiles.cfg file with the specified name overwriting the contents of the previous TM profile. You can also change the name of the TM profile in the TM Profile Name field to create a new TM profile. See "Saving TM profiles" (page 223) and the procedure for "Saving a traffic management profile" (page 232).

- **Apply** creates a new TM profile in memory only with the current TM profile name plus a asterisk (*) appended to the end of it. This TM profile will only exist until the ATM tool is exited.

  Note: The TM profile that gets selected for the Passport device is the one currently selected in the ATM Traffic Management Profile Editor when the tool closes, and not the latest TM profile that was applied.

  See "Setting the traffic management profile as the selected traffic management profile for the Passport device" (page 233)

Relationship to the ATM service provisioning tool interface

The Default TM drop down list in the ATM service provisioning tool is populated from the eteATMProfiles.cfg file with only the traffic management profiles that have been created and stored for the service type currently being provisioned, as specified in the Circuit Type drop down list. Consequently, TM profiles that are created and stored for another ATM service would not appear in the Default TM drop down list.

You are provided with a default Traffic Management profile for each of the circuit types (Trunk, CES over PVC, VccBearerService, VpcBearerService, SPVC, SPVP). This provides you with the basis from which to create customized Traffic Management profiles.

When you select a circuit type in the ATM service provisioning tool, the default Traffic Management profile is automatically selected.

Traffic Management profiles are applied to the Passport device from the ATM service provisioning tool. See "Applying a Traffic Management profile to a Passport device" (page 235).

Modifying TM profiles

You can modify the non-mandatory attribute values. When you select a TM profile in the ATM service provisioning tool and then click the edit TM button [...], you open the ATM Traffic Management Profile Editor with the attribute values for the selected TM profile appearing in the attribute fields.

For the procedure to modify TM profile attributes, see "Modifying attribute values" (page 230).

Saving TM profiles

Note: You cannot save the default TM profile for any of the circuit types.

You can view and modify one or more of the traffic management values, and apply the changes without ever saving them to disk.

When a TM profile has been changed, applied, but not saved to disk, an asterisk (*) appears at the end of its name to indicate that the traffic management profile has changed from the original traffic management profile.

Traffic management profiles that are saved to memory and not to disk are written to the Administration Database as "Custom" after a circuit is successfully activated on the Passport device. This indicates that this TM Profile has not been saved to disk and could have been altered substantially from its original base TM Profile. When retrieving a circuit from the database, you need to make your own record of what the TM Profile means. Since a "Custom" TM Profile is not stored to disk, you cannot apply it to the Passport device after retrieving a circuit from the database.

If a save is required, you can save the TM profile under the same name, or a new name. Saving under the same name generates a TM profile in the eteATMProfiles.cfg file with the specified name overwriting the contents of the previous TM profile.

Saving under a new name allows for manual file versioning.

Note: It is recommended, when you create a traffic management profile, that you give it a meaningful name to make it easier to retrieve the desired traffic management profile in the ATM service provisioning tool window.

For the procedure to save TM profiles, see "Saving a traffic management profile" (page 232).

Storage of TM profiles

The TM profiles are stored locally on the Preside Multiservice Data Manager (MDM) that is running the ATM client. For additional information on the eteATMProfiles.cfg file, see "eteATMProfiles.cfg file" (page 38).

Warning and error messages

Warning or error messages are displayed in the ATM service provisioning tool messages window. This window is accessed by View -> Show Messages... The following situations generate an error or warning message:

Note: Warning messages do not stop the provisioning session.

- If you have saved ATM Traffic Management Profiles prior to R14.1, the first time the ATM service provisioning tool is run from a new MDM install, a warning dialog box opens informing you of the new location for the eteATMProfiles.cfg files. Any eteATMProfiles.cfg files created before R14.1 remain unchanged in /opt/MagellanNMS/cfg. However, the ATM service provisioning tool does not use these files.

- the ATM service provisioning tool cannot read from the /opt/MagellanNMS/cfg/eteATMProfiles.cfg or /opt/MagellanNMS/lib/cfg/eteATMAttributes.cfg files

- for SPVC circuits which allow Bwd QoS parameters. For PCR release 2.2 to PCR 3.0 the Bwd QoS had three parameters. For PCR 3.1 and above, it only has two. The ATM service provisioning tool always tries to apply all three parameters and will generate a warning message if the PCR release does not support all three parameters. The warning does not stop the other two parameters from being set.

- for Tx WRED Mode and Tx WRED Threshold attributes. These attributes did not exist before PCR release 3.0 so a warning message is generated if the ATM service provisioning tool tries to apply these attributes to a pre-3.0 PCR release. This does not affect the other TM attributes being set, as they are set in a separate set command.

Procedures

For relevant procedures, see the following sections:

- "Starting the ATM Profile Editor from the Preside MDM toolset" (page 226)

- "Starting the ATM Profile Editor from a command line" (page 227)

- "Opening the ATM Traffic Management Profile Editor from the ATM service provisioning tool" (page 228)

- "Modifying attribute values" (page 230)

- "Deleting a Traffic Management profile" (page 231)

- "Saving a traffic management profile" (page 232)

- "Setting the traffic management profile as the selected traffic management profile for the Passport device" (page 233)

- "Applying a Traffic Management profile to a Passport device" (page 235)

Starting the ATM Profile Editor from the Preside MDM toolset

Use this procedure to open the ATM Traffic Management Profile Editor in stand-alone mode, independent of the ATM service provisioning tool. Since there is no interaction with the ATM service provisioning tool you can only view, edit, and save the TM Profile to disk. You can not send it to the ATM service provisioning tool.

Procedure steps

1   Start **Preside MDM**:

2   In the Preside MDM toolsets window, select **Configuration** -> **Passport Devices** -> **Administration** -> **ATM Traffic Management Profile Editor**.

The **ATM Traffic Management Profile Editor** dialog box opens with the default_SPVC displayed in the TM Profile Name field.

In stand-alone mode, the **Circuit Type** drop down list is editable and the action buttons are **Save**, **Delete**, **Close**, and **Help**. **Apply** and **Apply and Save** are not available.

Starting the ATM Profile Editor from a command line

Use this procedure to open the ATM Traffic Management Profile Editor from a command line on a Preside Multiservice Data Manager (MDM) workstation. When you start the ATM Profile Editor from a command line, it starts in stand-alone mode, independent of the ATM service provisioning tool. Since there is no interaction with the ATM service provisioning tool you can only view, edit, and save the TM Profile to disk. You can not send it to the ATM service provisioning tool.

Procedure steps

1   Open an xterm on the Preside MDM workstation

2   Enter the following command:

`/opt/MagellanNMS/bin/eteATMTM &`

The **ATM TM Profile Editor** dialog box opens with the default_SPVC displayed in the TM Profile Name field.

Opening the ATM Traffic Management Profile Editor from the ATM service provisioning tool

Use this procedure to start the ATM Traffic Management Profile Editor from the ATM service provisioning tool. This procedure lets you view and modify the TM profile of an existing circuit.

Procedure steps

1 Start Preside MDM:

2 To start the ATM service provisioning tool, select one of the following options:

- in the Preside MDM window, select **Configuration** -> **Passport Devices** -> **Service Provisioning** -> **ATM**

- in a UNIX shell, enter the following command at the prompt:

  /opt/MagellanNMS/bin/eteATM

3 If the Administration Database is installed, you are prompted for a userid and password. Enter a valid user id and password.

The ATM service provisioning tool opens.

4 In **Circuit Properties** panel of the ATM service provisioning tool main window, select a service type from the **Circuit Type** dropdown list.

The TM Profile shows the default TM profile for the selected circuit type.

5 To open the ATM Traffic Manager Profile Editor, select one of the following options:

- Click the **Edit TM [...]** button found to the right of the **Default TM Profile** dropdown list.

- From the **Tools** menu select **ATM Traffic Management Profile Editor.**

The **ATM Traffic Management Profile Editor** opens with the **TM Profile Name** field containing the default traffic management profile for the circuit type selected in step 4.

If you have saved ATM Traffic Management Profiles prior to R14.1, the first time the ATM service provisioning tool is run from a new MDM install, a warning dialog box opens informing you of the new location for the eteATMProfiles.cfg files. Any eteATMProfiles.cfg files created before R14.1 remain unchanged in /opt/MagellanNMS/cfg. However, the ATM service provisioning tool does not use these files.

For PVC circuit types, when you click the edit TM profile button [...] you can select another TM profile from the TM Profile Name drop down list, and this TM profile becomes the selected TM profile in the Default TM Profile field in the ATM service provisioning tool.

Modifying attribute values

Use this procedure to modify Traffic Management attributes. Attributes that cannot be modified are greyed out.

Prerequisites

This procedure requires that the following conditions are met:

- you have launched the ATM Traffic Management Profile Editor

- you have selected the TM Profile that you wish to modify.

Procedure steps

1   Click in the text field of the attribute that you wish to modify.

2   Type in the new value, or select a new value from the drop down list.

3   Repeat steps 1 and 2 for all the attributes you wish to modify.

4   If you opened the ATM Traffic Management Profile Editor in stand-alone mode, select Save. See "Saving a traffic management profile" (page 232).

If you opened the ATM Traffic Management Profile Editor from the ATM service provisioning tool, select one of the following options:

- Apply. See "Applying a Traffic Management profile to a Passport device" (page 235).

- Apply and Save. See "Saving a traffic management profile" (page 232)

Deleting a Traffic Management profile

Use this procedure to delete a traffic management profile. You can not delete a default TM profile.

Prerequisites

This procedure requires that the following conditions are met:

•   you have launched the ATM Traffic Management Profile Editor

Procedure steps

1   From the **TM Profile Nam**e drop down list, in the **ATM Traffic Management Profile** window, select the TM profile that you wish to delete.

2   Click **Delete**.

A confirmation dialog box opens confirming that you wish to proceed with the delete action.

3   Click **Yes** to delete the selected TM profile.

Saving a traffic management profile

Use this procedure to save a traffic management profile in the eteATMProfiles.cfg file. Note that you cannot overwrite the default TM profile for any of the circuit types.

Prerequisites

This procedure requires that the following conditions are met:

• you have launched the ATM Traffic Management Profile Editor

Procedure steps

1   In the **ATM Traffic Management Profile Editor** dialog box, modify attribute values, as desired. See "Modifying attribute values" (page 230).

2   Retain the current file name or in the **TM Profile Name** field, enter a new name, if you wish to create a new TM profile. It is recommended, when you give the new TM profile a meaningful name to make it easier to retrieve the desired traffic management profile in the ATM service provisioning tool window.

   Note: You can keep the original TM profile and save the current TM profile contents under a new name, by typing a new name for the TM profile.

3   If you opened the Profile Editor from the ATM service provisioning tool, click **Apply and Save**.

   A TM Profile is generated in the eteATMProfiles.cfg file with the specified file name overwriting the contents of the previous TM profile. If you created a new file name for the TM profile, this new name appears in both the TM Profile Name field in the Profile Editor and in the TM profile field in ATM service provisioning window.

   If you click **Apply,** an asterisk (*) appears at the end of the TM profile name once Apply is clicked.

   If you opened the Profile Editor in standalone mode, click **Save**.

   A TM Profile is generated with the specified file name, overwriting the contents of the previous TM profile.

Setting the traffic management profile as the selected traffic management profile for the Passport device

Use this procedure to modify and set the traffic management (TM) profile as the selected TM profile for the Passport device, without applying the profile to the Passport device.

Prerequisites

This procedure requires that the following condition is met:

- you have launched the ATM service provisioning tool

Procedure steps

1   In the **ATM service provisioning tool** select the circuit that the TM profile will be applied to by selecting the circuit type, component instances and Passport device.

2   From the **Default TM** drop down list, select the TM profile that will be applied to the circuit, or select the default TM profile, if desired.

Only the TM profiles that are valid for the selected circuit type are displayed in the drop down list.

3   Click the edit TM button **[...]** to open the **ATM Traffic Management Profile Editor**.

4   Select one of the following actions:

- Click Apply to save the current TM Profile in memory. This does not apply the settings to the device but only saves the TM profile to memory. An asterisk (*) is appended to the TM profile name.

- Modify the TM profile and click **Apply** to create a new TM profile in memory with an asterisk (*) at the end of its name. This does not apply the settings to the device, but only saves the TM Profile to memory.

- Modify the TM profile and click **Apply and Save** to overwrite the existing TM profile and save it to disk.

The TM profile that is selected in the Profile Editor when it is closed becomes the selected TM profile in the drop down list on the device from which the Traffic Management Profile Editor was started in the service provisioning tool. To apply the TM profile to the device, along with the rest of the circuit configuration, you need to click **Apply** from the ATM service provisioning tool. See "Applying a Traffic Management profile to a Passport device" (page 235).

Applying a Traffic Management profile to a Passport device

Use this procedure to apply a traffic management profile to an ATM circuit on the Passport device. TM profiles can only be applied to a Passport device from the ATM service provisioning tool.

Prerequisites

This procedure requires that the following conditions are met:

- you have opened the ATM service provisioning tool

- the Traffic Management (TM) Profile that you wish to apply exists in the eteATMProfiles.cfg file.

Procedure steps

1   In the **ATM service provisioning tool** window select the circuit that the TM profile will be applied to by selecting the circuit type, component instance, and Passport device.

2   From the **Default TM** drop down list, select the TM profile that will be applied to the circuit, or select the Default TM profile, if desired.

Only the TM profiles that are valid for the selected circuit type are displayed in the drop down list.

3   Select the **Use Default TM** check box, if desired.

4   Click **Apply** to apply the TM profile to the Passport device.

If applying an existing TM Profile, the ATM service provisioning tool applies the TM profile to the Passport device, only if the name of the TM profile has changed. If the contents of the TM Profile have changed, but the name is the same, the TM settings are applied to the Passport device if these changes occurred in a Traffic Management Profile Editor launch from the current instance of the ATM service provisioning tool. Once the ATM service provisioning tool instance is dismissed, a record of these changes is lost.

Note: When a "Custom TM profile is retrieved from the database, if the custom TM profile is the selected TM on a node when the circuit is applied to the Passport, no changes are made to the TM attributes of the corresponding node in the circuit.

Preside Multiservice Data Manager

Service Provisioning for ATM

User Guide

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