## **HP OpenView Performance Insight**

## **Report Pack for ATM**

**Software Version: 3.0** 

Reporting and Network Solutions



**May 2004** 

© Copyright 2004 Hewlett-Packard Development Company, L.P.

### **Legal Notices**

#### Warranty

Hewlett-Packard makes no warranty of any kind with regard to this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be held liable for errors contained herein or direct, indirect, special, incidental or consequential damages in connection with the furnishing, performance, or use of this material.

A copy of the specific warranty terms applicable to your Hewlett-Packard product can be obtained from your local Sales and Service Office.

#### **Restricted Rights Legend**

Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013.

Hewlett-Packard Company United States of America

Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19(c)(1,2).

#### **Copyright Notices**

© Copyright 2001-2004 Hewlett-Packard Development Company, L.P., all rights reserved.

No part of this document may be copied, reproduced, or translated into another language without the prior written consent of Hewlett-Packard Company. The information contained in this material is subject to change without notice.

#### **Trademark Notices**

OpenView is a U.S. registered trademark of Hewlett-Packard Development Company, L.P.

Java<sup>™</sup> is a U.S. trademark of Sun Microsystems, Inc.

Oracle® is a registered U.S. trademark of Oracle Corporation, Redwood City, California.

UNIX® is a registered trademark of The Open Group.

Windows® and Windows NT® are U.S. registered trademarks of Microsoft® Corp.

### **Support**

Please visit the HP OpenView website at:

#### http://openview.hp.com/

There you will find contact information and details about the products, services, and support that HP OpenView offers. You can go directly to the HP OpenView support site at:

### http://support.openview.hp.com/

The support site provides access to:

- Product manuals
- Troubleshooting information
- Patches and updates
- · Problem reporting
- Support program information
- Training information

# contents

Chapter 1	Overview OVPI and the ATM Protocol Enhancements in ATM 3.0. Folders and Reports Ways to Customize Reports Sources for Additional Information	7 8 8 10
Chapter 2	The Upgrade Install1Guidelines for a Smooth Upgrade1Upgrading Version 2.0 to Version 3.01Package Removal1	13 14
Chapter 3	The New Install1Guidelines for a Smooth Installation1Installing ATM 3.02Options for Viewing Reports2Seeing Performance Data in Reports2Package Removal2	19 20 22 23
Chapter 4	Distributed Systems2Verifying Correct Package Installation2Configuring the Central Server2Configuring Satellite Servers2	25 26
Chapter 5	Adding Property Data to Reports2The Property Import Utility.2Creating Your Own Property Import File3Changing the Default Run Time3	29 32
Chapter 6	Using Change Forms4Update ATM PVC Cell Parameters4Update ATM QoS Parameters4Update Port Information4	41 43
Chapter 7	The PVC Reports	15

Chapter 8	The Port Reports	63
Chapter 9	The SVC Reports	83
Chapter 10	Editing Tables and Graphs	93
	View Options for Tables	93
	View Options for Graphs	95
Index		101

## **Overview**

This chapter covers the following topics:

- OVPI and the ATM protocol
- Enhancements in version 3.0
- Folders and reports
- Ways to customize reports
- Sources for additional information

### **OVPI and the ATM Protocol**

HP OpenView Performance Insight, commonly known as OVPI, is the core operating environment for a growing number of reporting solutions. Each reporting solution consists of a report pack and at least one datapipe. When you install the datapipe, you configure OVPI for data collection; when you install the report pack, you configure OVPI for data summarization and aggregation. While the datapipe and report pack are responsible for providing OVPI with processing directives, OVPI is responsible for manipulating data and populating a set of report templates with trending analysis.

Like the previous version of this package, version 3.0 of the ATM Report Pack will help you spot problem areas, rank PVCs, ports, and SVCs in term of current performance, and estimate what performance will be like in the future. The reports in ATM 3.0 will provide answers to the following questions:

- Is the network providing an acceptable level of service?
- Which PVCs and port are utilized the most?
- Do I have underutilized PVCs and ports that could handle more traffic?
- Are errored and dropped cells taking place during excessive utilization?
- Is there a substantial difference between ingress and egress utilization?
- Which PVCs and ports are likely to degrade network performance?
- Are SVC switches handling requests for connections?
- How does performance compare on a customer-by-customer basis?
- How does performance compare on a region-by-region basis?

### **Enhancements in ATM 3.0**

ATM 2.0 was released in May 2003. Version 2.0 installed on OVPI 4.5. Following is a list of the datapipes available with ATM 2.0:

- Cisco ATM Datapipe 2.0
- Fore ATM Datapipe 2.0
- Ascend ATM Datapipe 2.0
- Newbridge ATM Datapipe 2.0
- Stratacom ATM Datapipe 2.0
- ATM MIB2 Interfaces Datapipe 2.0

There are no new reports in ATM 3.0 and there is no thresholds sub-package in ATM 3.0. (A thresholds sub-package is anticipated in the upcoming release.) The enhancements in version 3.0 are:

- Installs on OVPI 5.0
- Supports Oracle as well as Sybase database software
- Includes the following change forms:
  - Update ATM PVC Cell Parameters
  - Update ATM QoS Parameters
  - Update Port Information

You may use any of the following datapipes with ATM 3.0:

- Cisco ATM Datapipe 3.0
- Fore ATM Datapipe 3.0
- Ascend ATM Datapipe 3.0
- Newbridge ATM Datapipe 3.0
- Stratacom ATM Datapipe 3.0
- ATM ifEntry Datapipe 1.0

The ATM ifEntry Datapipe is a prerequisite for the Cisco ATM Datapipe 3.0. No other datapipe in this list requires the ATM ifEntry Datapipe.

### **Folders and Reports**

ATM 3.0 package contains 49 interactive reports. There are three folders:

- PVC (22 reports)
- Port (16 reports)
- SVC (11 reports)

The reports in the PVC folder focus on the following metrics:

Peak cell rate (PCR)

- Sustained cell rate (SCR)
- Percentage of dropped cells

The reports in the Port folder focus on the following metrics:

- Number of cell bits transmitted
- Utilization
- Discards
- Errors

The reports in the SVC folder focus on the following metrics:

- Success rate of call attempts
- Number of calls per second

For a list of the reports in each folder, see the report chapters (7, 8, and 9). A brief description of the generic reports follows. Reports are in alphabetical order.

**Capacity Planning**. Allows you to assess growth, balance traffic, and plan for increases or decreases in utilization. Shows PVC endpoints and ports that are projected to be overutilized or underutilized in the near future.

**Configuration.** Indicates which PVCs and ports have property columns that are undefined. If required fields are not defined appropriately, utilization values may be incorrect.

**Daily Availability.** Provides service level agreement statistics on a daily and monthly basis. These statistics show the percentage of time that managed elements were functional. Statistics include average hourly, daily, and monthly port and PVC endpoint availability.

**Executive Summary.** Presents summary views of PVC endpoints, SVCs, or ports by customer or by region. Graphs show total in and out traffic, errors, discards, and percentage of volume based on Quality of Service types.

**Forecast.** Enables you to anticipate network growth. Points out possible hot spots that are likely to occur within the next 30 days. Delivers a view into the future so that staff can take whatever steps are necessary to prevent problems from arising.

**Hot Spots.** Identifies specific elements that consistently exceeded a threshold parameter over the course of the previous day. Helps pinpoint problems. Grade of Service charts correlate exceptions and overutilization, allowing network managers to anticipate the impact on Quality of Service commitments.

**Near Real Time.** Not a report type, strictly speaking. Provides utilization, error, and discard data for active interfaces, trunks, and EtherChannels; the time period begins with the most recent poll and goes back six hours; drill-down to daily and monthly data.

**QuickView.** Offers a detailed look at PVC endpoints, ports, or SVCs over three time periods: yesterday, the past month, and the last six hours. Shows the ten elements with the highest daily average utilization and the highest number of call attempts.

**Snapshot.** A subset of the QuickView. When you launch a QuickView, you see tables showing the ten most utilized PVCs, ports, or SVCs. When you launch a Snapshot, a dialog box lets you select specific PVCs, ports, or SVCs for analysis. Launch a QuickView to see the bigger picture. Launch a Snapshot when you know in advance which elements you want to analyze.

**Top Ten.** Shows PVC endpoints or ports based on highest utilized direction; these are the worst performers with the most severe problems. The port report shows the utilization for each PVC endpoint on that port. The SVC report shows the top ten SVC ports based on call attempts and calls per second.

## **Ways to Customize Reports**

You can customize reports by applying group filters, by editing parameters, by editing tables and graphs, by importing customers and locations, and by adding details about PVC parameters, QoS parameters, and ports. If you apply a group filter, you are filtering out data for the purpose of creating customer-specific reports. If you edit a table, graph, or parameter, you are making temporary changes to individual reports. For more about editing tables and graphs (selecting a different view option for tables and graphs) see the final chapter in this manual, Editing Tables and Graphs.

### **Group Filters**

If you intend to share your reports with customers, or let divisions within your enterprise see division-specific performance data, your reports will need to be customer-specific, containing data limited to one customer. Creating customer-specific reports is an administrator task that involves the following steps:

- Importing custom property information (customer names and device locations) using Common Property Tables 3.0
- Creating a group account for all of the users affiliated with a particular customer
- Creating a group filter for the group account

For more information about creating filters for group accounts, refer to the *HP OpenView Performance Insight 5.0 Administration Guide.* 

### **Report Parameters**

By editing a parameter, you can apply a constraint to the report, thereby eliminating data you do not want to see. For example, if you edit the Customer Name parameter, data for every customer except the customer you typed in the Customer Name field will drop from the report; similarly, if you edit the Source Location, data for all locations except the location you typed in the Source Location field will drop from the report.

You may apply multiple constraints at once. ATM 3.0 supports the following parameters:

- Device
- Port Name
- VPI
- VCI
- Customer
- Location

Some reports support every parameter in this list, while most reports support a subset of this list. To edit parameters, click the **Edit Parameters** icon at the bottom right-hand corner of the report. When the **Edit Parameters** window opens, type the constraint in the field and then click **Submit**.

### **Importing Properties**

Provisioning for the ATM Report Pack is handled by a built-in property import utility. Use this utility to populate reports with the following information:

- Customer names and customer IDs
- Regions and region IDs
- Ingress and egress Quality of Service values
- Peak cell rate and sustained cell rate values
- Port speed

If the datapipe you are using provides these values, then using the property import utility to import these values is not necessary. However, if the datapipe you installed does not provide this information—or if the data that it provides is incorrect—then you must use the property import utility to import correct values.

If you want to update existing information, you have the option of editing a property file (a file you exported from OVPI), or using the PVC, QoS, and port change forms listed earlier in this chapter. For details about the forms, see Chapter 6, Using Change Forms.

### **Sources for Additional Information**

Unlike this user guide, which provides samples of some but not all reports, the demo package that comes with ATM 3.0 contains fully-populated samples of every report in the package. So if you have access to the demo package and you want to know what fully-populated reports look like, install it. Like real reports, demo reports are interactive—selection tables are linked to graphs and you may experiment with parameters and view options. Unlike real reports, demo reports are static.

For information regarding the latest enhancements to the ATM Report Pack 3.0 and any known issues affecting this package, refer to the *ATM Report Pack 3.0 Release Statement*. You may also be interested in the following documents:

- Common Property Tables 3.0 User Guide
- Frame Relay Report Pack 4.0 User Guide
- Thresholds Module 5.0 User Guide
- NNM/OVPI Integration Module 2.0 User Guide
- RNS 5.0 Release Notes, April 2004

Manuals for the core product, OVPI, and manuals for the reporting solutions that run on OVPI can be downloaded from the following site:

#### http://support.openview.hp.com/support

Select **Technical Support** > **Product Manuals** to open the **Product Manual Search** page. Manuals for OVPI are listed under **Performance Insight**. Manuals for report packs, datapipes, preprocessors, and NNM SPIs are listed under **Reporting and Network Solutions**.

Every title listed under Reporting and Network Solutions 5.0 indicates the month and year of publication. Because updated user guides are posted to this site on a regular basis, you should check this site for updates before using an older, outdated PDF.

Sources for Additional Information

## The Upgrade Install

This chapter covers the following topics:

- Guidelines for a smooth upgrade
- Upgrading from ATM 2.0 to ATM 3.0
- Package removal

If you are installing the ATM Report Pack for the first time, this chapter does not apply to you. See instead Chapter 3, The New Install.

## **Guidelines for a Smooth Upgrade**

The product CD that contained ATM 2.0 included an install script that let you select NNM components or OVPI report packs. The RNS 5.0 CD is similar. If you select OVPI report packs for installation, the install script will extract every OVPI package from the CD and copy every package to the Packages directory on your system. Just as before, with the previous CD, after the extraction step finishes the install script will prompt you to start the Package Manager install wizard. Before you get to that step, review the following guidelines.

### **Prerequisites**

Make sure the following software is already installed before upgrading to ATM 3.0:

- OVPI 5.0
- Any available OVPI 5.0 Service Pack
- Interface Reporting Report Pack 4.0
- Common Property Tables 3.0

### **Distributed Environments**

If your system is distributed, every server must be running OVPI 5.0 and all available Service Packs for OVPI 5.0. In addition, you will need to disable trendcopy on the central server beginning the installation, and you will need to re-enable trendcopy on the central server once the installation is complete. Following is an overview of the entire procedure:

- 1 Disable trendcopy on the central server.
- **2** For the central server:
  - Upgrade to Common Property Tables 3.0; deploy reports
  - Upgrade to Interface Reporting 4.0; deploy reports
  - Upgrade to ATM 3.0; deploy reports.
- **3** For each satellite server:
  - Upgrade to Common Property Tables 3.0
  - Upgrade to Interface Reporting 4.0
  - Upgrade to ATM 3.0
  - Remove existing datapipes (the datapipes you were using with ATM 2.0)
  - Install one or more new datapipes
- **4** Re-enable trendcopy on the central server.

### **Upgrading Common Property Tables**

If you are running an older version of Common Property Tables, you need to upgrade your current version to version 3.0. Do that by installing the version 2.2 to 3.0 upgrade package. Install this package first and complete the install before installing anything else.

## **Upgrading Version 2.0 to Version 3.0**

Perform the following tasks to upgrade from version 2.0 to version 3.0:

- Task 1: Extract packages from the RNS 5.0 CD
- Task 2: Upgrade from Common Property Tables 2.2 to Common Property Tables 3.0
- Task 3: Upgrade from Interface Reporting 3.0 to Interface Reporting 4.0
- Task 4: Install the ATM 2.0-to-3.0 upgrade package
- Task 5: Remove old datapipes
- Task 6: Install new datapipes
- Task 7: Restart OVPI Timer

#### Task 1: Extract packages from the RNS 5.0 CD

- 1 Log in to the system. On UNIX systems, log in as root.
- **2** Stop OVPI Timer and wait for processes to terminate.

Windows: Select Settings > Control Panel > Administrative Tools > Services

*UNIX*: As root, type one of the following:

HP-UX: sh /sbin/ovpi\_timer stop

Sun: sh /etc/init.d/ovpi timer stop

- 3 Insert the RNS 5.0 CD. On Windows, a Main Menu displays automatically; on UNIX, mount the CD if the CD does not mount automatically, navigate to the top level directory on the CD, and run the ./setup command.
- Type **1** in the choice field and press **Enter**. The install script displays a percentage complete bar. When the copy is complete, the install script starts Package Manager. The Package Manager welcome window opens.

If you navigated to the Packages directory, you would see the following folders under the ATM folder:

- ATM.ap
- ATM\_Demo.ap
- UPGRADE ATM 2-to-3.ap

Installing the demo package is optional. You may install the demo package by itself, or you may install the demo package along with everything else. Reports in the demo package are interactive, selection tables are linked to graphs, and you may experiment with editing parameters and selecting view options for individual tables and graphs.

#### Task 2: Upgrade to Common Property Tables 3.0

Observe these guidelines:

- Do not install any other package with the CPT upgrade package; install the CPT upgrade package and *only* the CPT upgrade package.
- When prompted to accept or disable the option to Deploy Reports, accept the default. (If you do not deploy reports, you will not get the forms that come with Common Property Tables.)
- When the install finishes, click Done to return to the Management Console.

If you need help with this task, refer to the Common Property Tables 3.0 User Guide.

#### Task 3: Upgrade to Interface Reporting 4.0

This task entails installing the upgrade package, removing existing datapipes (Interface Discovery Datapipe 1.1 and the IR ifEntry Datapipe 1.1), and installing new datapipes. If you need help with this task, refer to the *Interface Reporting 4.0 User Guide*.

### Task 4: Install the ATM 2.0-to-3.0 upgrade package

- 1 From the Management Console, select **Tools > Package Manager**. The Package Manager welcome window opens.
- **2** Click **Next**. The Package Location window opens.
- 3 Click the **Install** radio button.
- 4 Approve the default installation directory or select a different directory if necessary.
- 5 Click **Next**. The Report Deployment window opens.
- 6 Accept the defaults for Deploy Reports, Application Server, and Port.
- 7 Type your user name and password for the OVPI Application Server.
- 8 Click **Next**. The Package Selection window opens.
- **9** Click the check box next to the following package:

#### UPGRADE\_ATM\_Report\_Pack\_2\_to\_3

- 10 Click Next. The Type Discovery window opens. Disable the default and click Next. The Selection Summary window opens
- 11 Click **Install**. The Installation Progress window opens and the install begins. When the install finishes, a package install complete message appears.
- 12 Click **Done** to return to the Management Console.



Do not be surprised if the UPGRADE package you just installed seems to have disappeared from view. Package Manager will display what you just installed as *ATM Report Pack 3.0*. This is not a mistake.

#### Task 5: Remove old datapipes

The datapipes you were using with ATM 2.0 cannot be upgraded. You need to remove your existing datapipes, then install the latest version of each datapipe. Start Package Manager and follow the on-screen instructions for package removal. Select for removal all the datapipes you were using with ATM 2.0. When the removal finishes, click **Done** to return to the Management Console.

#### Task 6: Install new datapipes

- 1 From the Management Console, select **Tools > Package Manager**. The Package Manager welcome window opens.
- **2** Click **Next**. The Package Location window opens.
- 3 Click the Install radio button.
- 4 Approve the default installation directory or select a different directory if necessary.
- 5 Click Next. The Report Deployment window opens.
- 6 Disable the default for Deploy Reports.
- 7 Click **Next**. The Package Selection window opens.
- 8 Click the check box next to one or more of the following packages:

Cisco ATM Datapipe 3.0



This datapipe requires the ATM if Entry Datapipe 1.0; Package Manager will install the ATM if Entry Datapipe 1.0 for you.

Ascend ATM Datapipe 3.0

Fore ATM Datapipe 3.0

Stratacom ATM Datapipe 3.0

Newbridge ATM Datapipe 3.0

- 9 Click **Next**. The Type Discovery window opens. Disable the default and click **Next**. The Selection Summary window opens.
- 10 Click Install. The Installation Progress window opens and the install begins. When the install finishes, the package installation complete message appears.
- 11 Click **Done** to return to the Management Console.

#### Task 7: Restart OVPI Timer.

```
Windows: Select Settings > Control Panel > Administrative Tools > Services UNIX: As root, type one of the following:
```

```
HP-UX: sh /sbin/ovpi_timer start
Sun: sh /etc/init.d/ovpi_timer start
```

### Package Removal

Follow these steps to uninstall ATM 3.0. Removing ATM 3.0 will automatically remove any datapipe you are using with ATM 3.0.

- 1 Log in to the system. On UNIX systems, log in as root.
- **2** Stop OVPI Timer and wait for processes to terminate.
- 3 Select HP OpenView > Performance Insight > Package Manager. The Package Manager welcome window opens.
- 4 Click Next. The Package Location window opens.
- 5 Click the Uninstall radio button.
- 6 Click Next. The Report Undeployment window opens.
- 7 If ATM reports were deployed from this server, accept the defaults for Undeploy Reports, Application Server Name, and Port. Otherwise, clear the check box and skip to step 9.
- **8** Type the username and password for the OVPI Application Server.
- 9 Click **Next**. The Package Selection window opens. Click the check box next to the following packages:

```
ATM 3.0
ATM Demo 3.0
```

- 10 Click OK.
- 11 Click **Next.** The Selection Summary window opens.
- 12 Click Uninstall. The Progress window opens and the removal process begins. When the uninstall process is complete, a package removal complete message appears.
- 13 Click **Done** to return to the Management Console.
- 14 Restart OVPI Timer.

## The New Install

This chapter covers the following topics:

- Guidelines for a smooth installation
- Installing ATM 3.0
- Options for viewing reports
- · Seeing performance data in reports
- Package removal

If you are currently running ATM 2.0, this chapter does not apply to you. See instead Chapter 2, The Upgrade Install.

### **Guidelines for a Smooth Installation**

The RNS 5.0 product CD includes NNM components as well as OVPI report packs. If you have already extracted OVPI packages from the RNS 5.0 CD, all of the OVPI packages that were on the CD have been copied to the Packages directory and are now available for installation. Install the ATM Report Pack 3.0 by starting Package Manager and following the familiar onscreen instruction.

If you have not extracted packages from the RNS 5.0 CD, you can do that now. The install script will extract every package from the CD and copy the results to the Packages directory on your system. When the extraction step finishes, the install script will prompt you to start Package Manager. Before getting to that step, review the following guidelines.

### **Prerequisites**

Make sure the following software is already installed before installing Interface Reporting:

- OVPI 5.0
- Any available Service Pack for OVPI 5.0
- Interface Reporting Report Pack 4.0
- Common Property Tables 3.0

#### **Distributed Environments**

If your system is distributed, every server must be running OVPI 5.0 and all available Service Packs for OVPI 5.0. In addition, you will need to disable trendcopy on the central server beginning the installation, and you will need to re-enable trendcopy on the central server once the installation is complete. Here are the steps involved in getting everything installed on a distributed system:

- 1 Disable trendcopy on the central server.
- 2 If you are running CPT 2.2 on the central server, upgrade to 3.0
- 3 If you are running Interface Reporting 3.0 on the central server, upgrade to 4.0.
- 4 Install ATM 3.0 on the central server; deploy reports
- **5** For each satellite server:
  - If you are running CPT 2.2, upgrade to 3.0
  - If you are running IR 3.0, upgrade to IR 4.0
  - Install ATM 3.0
  - Install at least one datapipe
- **6** Re-enable trendcopy on the central server.

### **Upgrading Common Property Tables**

If you are running an older version of Common Property Tables, you need to upgrade that package to version 3.0. If you are not running an older version of Common Property Tables, there is no need to do anything. Package Manager will install the latest version of CPT for you, automatically.

Do not install the upgrade for Common Property Tables *and* other packages at the same time. Instead, install the upgrade package and *only* the upgrade package. For more information about installing and using Common Property Tables, refer to the *Common Property Tables 3.0 User Guide*.

### **Installing ATM 3.0**

This section covers the following tasks:

- Task 1: Extract packages from the RNS 5.0 product CD
- Task 2: If necessary, upgrade Common Property Tables
- Task 3: Install these packages:
  - ATM 3.0
  - At least one ATM datapipe
  - Interface Reporting 4.0
- Task 4: Restart OVPI Timer

#### Task 1: Extract packages from the RNS 5.0 CD

- 1 Log in to the system. On UNIX systems, log in as root.
- **2** Stop OVPI Timer and wait for processes to terminate.

Windows: Select Settings > Control Panel > Administrative Tools > Services

*UNIX*: As root, type one of the following:

HP-UX: sh /sbin/ovpi\_timer stop

Sun: sh /etc/init.d/ovpi\_timer stop

- 3 Insert the RNS 5.0 CD. On Windows, a Main Menu displays automatically; on UNIX, mount the CD, navigate to the top-level directory for the CD drive, and type the setup command.
- 4 Select OVPI report packs by typing 1 in the choice field and pressing Enter. The install script displays a percentage complete bar. When extraction finishes, the install script starts Package Manager. The Package Manager welcome window opens.

If you navigate to the Packages directory on your system, you will see the following folders under the ATM folder:

- ATM.ap
- ATM\_Demo.ap
- UPGRADE ATM 2-to-3.ap

You may ignore the upgrade package. Installing the demo package is optional. You may install the demo package by itself, or you may install the demo package along with everything else. Demo reports are interactive. Selection tables are linked to graphs and you may experiment with view options for individual tables and graphs.

### Task 2: Upgrade to Common Property Tables 3.0

If you are running CPT 2.2, and you have not already upgraded to CPT 3.0, do this now. Observe these rules:

- Do not install any other package with the CPT upgrade package; install the CPT upgrade package and *only* the CPT upgrade package.
- When prompted to accept or disable the option to Deploy Reports, accept the default. (If your system is distributed, you can disable the default when performing this step on satellite servers.)
- When the install finishes, click Done to return to the Management Console.

If you need help with the upgrade, refer to the Common Property Tables 3.0 User Guide.

#### Task 3: Install ATM 3.0 and at least one datapipe

- 1 With Package Manager running, select Tools > Package Manager.
- 2 Click Next. The Package Location window opens.
- 3 Click the Install radio button.
- 4 Approve the default installation directory or use the browse feature to select a different directory if necessary.

- 5 Click **Next**. The Report Deployment window opens. Accept the default for Deploy Reports; accept the default for application server name and port.
- 6 Type the username and password for the OVPI Application Server.
- 7 Click Next. The Package Selection window opens.
- 8 Click the check box next to the following package:

ATM 3.0

ATM\_Demo 3.0 [optional]

9 Click the check box next to at least one of the following packages:

Cisco ATM Datapipe 3.0



This datapipe requires the ATM if Entry Datapipe 1.0; Package Manager will install the dependent datapipe for you.

Ascend ATM Datapipe 3.0

Fore ATM Datapipe 3.0

Stratacom ATM Datapipe 3.0

Newbridge ATM Datapipe 3.0



The Cisco ATM Datapipe 3.0 requires the ATM if Entry Datapipe 1.0.

- 10 Click **Next**. The Type Discovery window opens. To run Type Discovery immediately after package installation, accept the default.
- 11 Click Next. The Selection Summary window opens.
- 12 Click Install. The Installation Progress window opens and the install process begins. When the install finishes, a package install complete message appears.
- 13 Click **Done** to return to the Management Console.
- 14 Restart OVPI Timer.

Windows: Select Settings > Control Panel > Administrative Tools > Services

*UNIX*: As root, type one of the following:

HP-UX: sh /sbin/ovpi\_timer start

Sun: sh /etc/init.d/ovpi\_timer start

## **Options for Viewing Reports**

Before reports can be viewed using a web browser, they must be deployed. During the preceding installation step, you enabled the Deploy Reports option. As a result, ATM 3.0 reports are deployed and available for remote viewing.

The method of report viewing available to you depends on how OVPI was installed. If the client component is installed on your system, you have access to Report Viewer, Report Builder, and the Management Console. If the client component was not installed on your system, the Web Access Server is your only option for viewing reports.

For more information about the client components, refer to the *Performance Insight Installation Guide*. For more information about deploying, viewing, and undeploying reports, refer to the *Performance Insight Guide to Building and Viewing Reports*.

## **Seeing Performance Data in Reports**

Some reports populate with data sooner than others. The first report to populate with data is the Near Real Time report. You will see data in this report within a few hours of installation. Other reports, including any report that begins with an analysis of yesterday's performance, will need at least one full day's worth of data before results are available. Although capacity planning and forecast reports will begin to populate with data right away, reliable forecasting depends on a complete baseline, which will take about six weeks to produce.

## **Package Removal**

Follow these steps to uninstall ATM 3.0. Removing ATM 3.0 will automatically remove any ATM datapipe.

- 1 Log in to the system. On UNIX systems, log in as root.
- 2 Stop OVPI Timer and wait for processes to terminate.
- 3 Select HP OpenView > Performance Insight > Package Manager. The Package Manager welcome window opens.
- 4 Click Next. The Package Location window opens.
- 5 Click the Uninstall radio button.
- 6 Click Next. The Report Undeployment window opens.
- 7 If ATM reports were deployed from this server, accept the defaults for Undeploy Reports, Application Server Name, and Port. Otherwise, clear the check box and skip to step 9.
- 8 Type the username and password for the OVPI Application Server.
- 9 Click **Next.** The Package Selection window opens. Click the check box next to *ATM 3.0.*
- 10 Click OK.
- 11 Click Next. The Selection Summary window opens.
- 12 Click Uninstall. The Progress window opens and the removal process begins. When the uninstall process is complete, a package removal complete message appears.
- 13 Click **Done** to return to the Management Console.
- 14 Restart OVPI Timer.

## **Distributed Systems**

This chapter does not apply to you if:

- You are running ATM 3.0 on a single OVPI server
- You were running a previous release of the ATM package in a distributed environment and you just upgraded to ATM 3.0

If you just upgraded to ATM 3.0, the changes you made the first time were not overwritten when you installed the upgrade package. Your system will continue to operate as it did before the upgrade; there is no need to make additional modifications.

## **Verifying Correct Package Installation**

If you intend to run ATM 3.0 as a distributed system, you need to configure all of the servers in the system. Before getting to that step, let's verify that you have the right packages on each server.

#### **Packages on the Central Server**

- ATM 3.0; with reports deployed
- Interface Reporting 4.0, with reports deployed
- Common Property Tables 3.0; with reports [forms] deployed

#### **Packages on Each Satellite Server**

- ATM 3.0
- Common Property Tables 3.0
- At least one of the following datapipes:
  - Ascend ATM Datapipe 3.0
  - Fore ATM Datapipe 3.0
  - Cisco ATM Datapipe 3.0



Cisco ATM Datapipe 3.0 requires ATMifEntry Datapipe 1.0.

- Stratacom ATM Datapipe 3.0
- Newbridge ATM Datapipe 3.0

Typically, the central server does not poll. If you want the central server in your system to poll, you should install datapipes on the central server. In addition, you may deploy reports from satellite servers, but only if you want local reporting — the ability to view reports on satellite servers.

## **Configuring the Central Server**

To configure the central server, perform the following tasks:

- Task 1: Set up connections with satellite server databases
- Task 2: Configure trendcopy pull commands and modify the entry in OVPI Timer

#### Task 1: Set up connections with satellite server databases

- 1 Start the Management Console.
- 2 Click the Systems icon on the lower left. The System/Network Administration pane opens.
- 3 Right-click the **Databases** folder. When prompted, select **Add OVPI Database**. The Add Database Wizard opens.
- 4 Click Next.
- 5 Type the hostname and port number for the database you want to add; click **Next**.
- 6 Review the Summary. Repeat Steps 4 and 5 for each additional database.
- 7 Click Finish when you are done.

#### Task 2: Configure trendcopy pull commands and modify the entry in OVPI Timer

1 Open this file:

```
$DPIPE_HOME/scripts/ATM_trendsum_hourly.pro
```

- 2 Modify the trendcopy commands so that each command includes the correct server name for each satellite server.
- 3 If necessary, add more commands.
- 4 *Optional.* If the installation requires rate data to be available on the central server, then uncomment the Ratm copy commands.



Copying polled rate data from each satellite server every hour, increases the amount of traffic between the satellites and the central server and increases the processing load on the central server.

- 5 If you do not require rate data to be available on the central server, then you should undeploy the Near Real Time and Hot Spots reports from the application server machine that is using the central server.
- 6 If the central server is not going to poll any devices, then comment out the calls to trend sum.

7 Modify the hourly OVPI Timer entry. The default is 40 minutes after the hour. Change the start time to 25 minutes after the hour. Changing the time will prevent the central server from trying to copy data from satellite servers just when the satellite servers are beginning their summarizations.

## **Configuring Satellite Servers**

Follow these steps to configure each satellite server.

- 1 Switch off interface aggregations above the hourly level by editing the \$DPIPE\_HOME/lib/trendtimer.sched file; comment out the line referencing ATM\_Daily.pro.
- 2 Using Table Manager, reduce the retention period of all ATM tables to a maximum of 2 days.
- 3 Configure polling policies for the datapipe(s), taking care that each node can only be polled from one system and by one datapipe type.
  - If remote pollers are being used, avoid duplicate polling across the pollers or between the satellite and the pollers.
  - If a satellite server has two or more remote pollers, create separate polling policies for each poller and use view groups to separate the devices.
- 4 Make sure that the system clock on the satellite server is synchronized with the system clock on the central server.

Configuring Satellite Servers

## **Adding Property Data to Reports**

There are three property import files that must be produced in accordance with the naming and file-layout formats defined by the ATM Report Pack. The files are:

- ATM\_Port\_Property.dat
- ATM\_PVC\_Property.dat
- ATM\_SVC\_Property.dat

There are three ways to produce property import files:

- · Export the data you need from a network provisioning system
- Export existing property data from OVPI
- Create the files yourself

This chapter covers the following topics:

- The property import utility
- Creating your own property import files
- Changing the default run time

## The Property Import Utility

Provisioning for the ATM Report Pack is handled by a property import utility packaged with the report pack. Use this utility to populate reports with the following information:

- Customer names and customer IDs
- Regions and region IDs
- · Ingress and egress Quality of Service values
- Peak cell rate and sustained cell rate values
- Port speed

If you want to produce reports tailored to one customer or region, you must use the property import utility to import customer and region information. If you are operating an enterprise network, you have the option of importing information about each division of the company, treating each division as though it were a customer.

Whether or not you need to import Quality of Service, cell rate, and Port speed values depends on the datapipe you are using. If the datapipe provides these values, then you will not need to use the property import utility to import these values. However, if the datapipe you installed does not provide this information—or if the data that it provides is incorrect—then you must use the property import utility to import correct values.

To calculate utilization, OVPI requires values for the following attributes:

- PCR
- SCR
- Port Speed

PCR and SCR values are used by OVPI determine peak and sustained cell utilization. Port speed is used by OVPI to determine port utilization.

### **Exporting Data from a Network Provisioning System**

Exporting data from a network provisioning system is the easiest of the three options for creating the property import files. If this method is available, then most of your work is already done.



When exporting customer data from a provisioning system, the dsi\_target\_name and dsi\_table\_key MUST match what the collector (ee\_collect or mw\_collect) has as the dsi\_target\_name and dsi\_table\_key.

Follow these steps to export data from a network provisioning system:

- 1 Create three property import files and name each file correctly.
- **2** Write a script to output the necessary fields.
- 3 Place your property import files in the directory where OVPI expects to find them.

When the daily import process runs, the property import utility will import the information from the property data files into the property tables.

### **Exporting Files from OVPI**

Exporting property data from OVPI is an option only if property information already exists in property tables. Initially, there will be no property data to export.

The export process does not run automatically. You initiate it manually any time that you want to update a property table or create an entry in the *trandtimer.sched* file. The export process generates tab-delimited, time-stamped property data files and puts the files in the default PropertyData directory. You can then edit each file in WordPad or a spreadsheet application such as EXCEL.



If you bring the data into a spreadsheet program, you must be sure to save the file in the proper tab-delimited format.

Can you simply leave the original property import files in the PropertyData directory, edit them as needed, and then run the import process to load the updates? No. Since your datapipes may be discovering new elements and updating certain fields in the property tables, your original property import files will be outdated.

### **The Export Procedure**

Follow these steps to export property information from OVPI:

- 1 Go to a command prompt line at the system level.
- 2 In the {DPIPE\_HOME}/scripts directory, type:

```
trend_proc -f ATM_exportdata.pro
```

The export program:

- Reads a definition file to determine which columns to export from the property tables
- Exports data from K\_atm\_pvc, K\_atm\_port, and K\_atm\_svc into the directory that
  has been designated to hold the export files

The files contain one row for each object. If no objects have been discovered, that is, if no polling cycle has been completed yet and the property tables are empty, the files do not contain any rows.

- Generates the following tab-delimited property data files and places them in the default directory:
  - ATM\_PVC\_Property.dat.timestamp
  - ATM\_Port\_Property.dat.timestamp
  - ATM\_SVC\_Property.dat.timestamp
- 3 Edit these files according to the guidelines in Editing a Property Data File on page 33.
- 4 Place the property data files in the directory where OVPI expects to find them:

```
DPIPE_HOME/data/PropertyData
```

5 You may run the import process manually, ahead of schedule, or wait for the same process to run automatically. If you want to run the process manually, enter the following command in the in the {DPIPE\_HOME}/scripts directory:

```
trend_proc -f ATM_importdata.pro
```

### **Editing a Property Data File**

When editing a property data file, observe these guidelines:

- Use every column that the format dictates.
- Do not modify the sequence of columns.
- Do not use quotes.
- Do not use NULL values.

• Make sure that the property data columns of dsi\_target\_name and dsi\_table\_key match the values of dsi\_target\_name and dsi\_table\_key in the property table.



If you have a dsi\_target\_name of atmSwitch2 with a dsi\_table\_key value of 145 in your property file, there must be a matching dsi\_target\_name of atmSwitch2 with a dsi\_table\_key value of 145 in the property table. Otherwise, a new row and keyid value will be inserted into the property table.

- The prop\_PortName must be the same value that the datapipe inserts for dsi\_table\_key into the property table when collecting data for the Port statistics.
- Set the values of the \*\_id values to -2, which is the default value, if you are not using some or all of them. For example, if you are not using region\_id, set the value for region\_id in your file to be -2.
- Use the following file naming convention: ATM\_element\_Property.dat

Place your file in this directory:

{DPIPE\_HOME}/data/PropertyData

## **Creating Your Own Property Import File**

If export from a network provisioning database is not an option for you and there is no property data to export from OVPI, then you need to create the files manually and save them to the proper directory. It does not matter which spreadsheet application you use to create these files. However, you must save the results as ASCII tab-delimited files.

The ATM Report Pack includes sample property data files in the PropertyData directory. Use these files for guidance if you have to create your own property import files. From left to right, the columns in the sample files are as follows:

- 1 dsi\_target\_name
- 2 dsi table key
- 3 prop\_description
- 4 prop\_PortSpeed
- 5 prop\_PortType
- 6 prop\_cust\_id
- 7 prop\_region\_id
- 8 prop\_region\_name
- 9 prop\_customer\_name

If the sample file shows data in the region and customer columns, the user wants to display performance data by region as well as by customer.

### **Required Utilization Values**

OVPI is unable to calculate utilization unless various utilization values are available. If the datapipe does not provide these values, or if the values provided by the datapipe are incorrect, you must add these values to your property import files and then import them.

PVC utilization cannot be calculated unless the following values are available:

- prop\_SCR
- prop\_RevSCR
- prop\_PCR
- prop\_RevPCR

Port utilization cannot be calculated unless the prop\_PortSpeed value is available.

Although you can modify the properties of an existing PVC, port, or SVC, you should not modify dsi\_target\_name or dsi\_table\_key as these values are used by OVPI to identify the PVC, port, or SVC. If you change them, they will no longer match existing values in the property tables, causing the SQL update script to add a new row to the property table instead of modifying an existing row.

### **File Formats and Reserved Values**

This section describes the format of the following files:

- ATM\_PVC\_Property.dat
- ATM\_Port\_Property.dat
- ATM\_SVC\_Property.dat

#### ATM PVC Property.dat

The following table shows the sequence of columns in the PVC property import file and provides a definition for each column value.

Column	Definition
dsi_target_name	Device name or IP address.
dsi_table_key	Device index: a unique value based on how the device is indexed or summarized.
prop_description	Customer definable field that is used in des_descr.

Column	Definition
prop_ATMQoSNumber	Database value: integer Required by the ReportPack. Enumerated Value for Class Name of Ingress QoS.  -2 = Unassigned QoS (default)  1 = CBR  2 = VBR-RT  3 = VBR-NRT  4 = ABR  5 = UBR
prop_RevATMQoSNumber	Database value: integer Required by the ReportPack. If not set uses the value from ATMQoSNumber. Enumerated Value for Class of Egress QoS -2 = Unassigned QoS (default) 1 = CBR 2 = VBR-RT 3 = VBR-NRT 4 = ABR 5 = UBR
prop_SCR	Database value: float Required by the ReportPack if applicable. Sustained cell rate on the egress direction.
prop_RevSCR	Database value: float Required by the ReportPack if applicable. If not set uses the value from SCR. Sustained cell rate on the ingress direction.
prop_PCR	Database value: float Required by the ReportPack if applicable. Peak cell rate on the egress direction.
prop_RevPCR	Database value: float Required by the ReportPack if applicable. If not set uses the value from PCR. Peak cell rate on the ingress direction.
prop_VPI	Database value: float Virtual Path Identifier.
prop_VCI	Database value: float Virtual Channel Identifier.

Column	Definition
prop_ATMPVCNumber	Database value: integer 1 - ATM Channel 2 = ATM Path -2 = Unknown (default)
prop_PortSpeed	Not required for PVC endpoints.  Database value: float  Port speed in bits per second for the ingress direction.
prop_PortType	Database value: varchar (128) Port type (UNI, NNI, ICI, etc.) for the ingress direction.
prop_PortName	Database value: varchar (128) Required by the ReportPack. Should be supplied by the DataPipe. The port on which the PVC endpoint resides. This value should match the prop_PortName value in the K_atm_port table associated with the same device and port that the PVC endpoint is located on.
prop_PortDescription	Database value: varchar (128) User definable.
prop_cust_id	Database value: integer Required by the ReportPack. Unique integer value for each customer. Assigned a default value of -2 when first populated.
prop_region_id	Database value: integer Required by the ReportPack. Unique integer value for each region. Assigned a default value of -2 when first populated.
prop_region_name	Database value: varchar (128) Required by the ReportPack. Region name associated with region_id value.
customer_name	Database value: varchar (128) Required by the ReportPack. Customer name associated with cust_id.

### ATM\_Port\_Property.dat

The following table shows the sequence of columns in the port property data file and provides a definition for each column value.

COLUMN	DEFINITION
dsi_target_name	Device name or IP address.
dsi_table_key	Device index: a unique value based on how the device is indexed or summarized.
prop_description	Customer definable field that is used in des_descr.
prop_PortSpeed	Database value: float
	Required by the ReportPack.
	Port speed in bits per second for the ingress direction.
prop_PortType	Database value: varchar (128)
	Port type (UNI, NNI, ICI, etc.) for the ingress direction.
prop_PortName	Database value: varchar (128)
	Required by the ReportPack. Should be supplied by the DataPipe.
	The port value. This value should match the dsi_table_key listed above.
prop_PortDescription	Database value: varchar (128)
	User definable.
prop_cust_id	Database value: integer
	Required by the ReportPack.
	Unique integer value for each customer. Assigned default value of -2 when first populated.
prop_region_id	Database value: integer
	Required by the ReportPack.
	Unique integer value for each region. Assigned default value of -2 when first populated.
prop_region_name	Database value: varchar (128)
	Required by the ReportPack.
	Region name associated with region_id value.
prop_customer_name	Database value: varchar (128)
	Required by the ReportPack.
	Customer name associated with cust_id.

#### ATM\_SVC\_Property.dat File

The following table shows the sequence of columns in the SVC property data file and provides a definition for each column value.

COLUMN	DEFINITION
dsi_target_name	Device name or IP address.
dsi_table_key	Device index: a unique value based on how the device is indexed or summarized.
prop_description	Customer definable field that is used in des_descr.
prop_PortType	Database value: varchar (128)
	Port type (UNI, NNI, ICI, etc.) for the ingress direction.
prop_PortName	Database value: varchar (128)
	Required by the ReportPack. Should be supplied by the DataPipe.
	The port value. This value should match the dsi_table_key listed above.
prop_PortDescription	Database value: varchar (128)
	User definable.
prop_cust_id	Database value: integer
	Required by the ReportPack.
	Unique integer value for each customer. Assigned default value of -2 when first populated.
prop_region_id	Database value: integer
	Required by the ReportPack.
	Unique integer value for each region. Assigned default value of -2 when first populated.
prop_region_name	Database value: varchar (128)
	Required by the ReportPack.
	Region name associated with region_id value.
prop_customer_name	Database value: varchar (128)
	Required by the ReportPack.
	Customer name associated with cust_id.

#### **Reserved Values**

Certain values for region\_id and cust\_id are reserved. The following table indicates which values are reserved

COLUMN NAME	RESERVED VALUE
region_id	-2, -1, and 0
cust_id	-2, -1, and 0

#### **The Import Procedure**

To import information from the property data files to the property tables in OVPI, run the import process manually, or let the import process run automatically. To run the import process manually:

- 1 Navigate to the {DPIPE\_HOME}/scripts directory.
- 2 Type trend\_proc -f ATM\_importdata.pro to run import.

The import process runs automatically at 4:00 a.m. If you do not want to use the default time, you can change the time that the daily import process runs.

When the import process runs, ee\_collect accesses the PropertyData directory and looks for property data files. If there are no files in the directory, the import process stops. If there are files to read, OVPI populates a set of temporary *property data tables*. These tables are truncated (replaced) daily. Once the temporary property data tables are populated, an SQL update script uses values in the temporary property tables to update the permanent property tables.

Updating a property table can mean overwriting existing information or adding new information. When a row in a temporary property data table has an exact match with a row in a permanent property table, the update script overwrites the row in the property table. When a row in the temporary table has no corresponding match in a property table, two things happen:

- The datapipe (specifically, ee\_collect) adds a new row to the property table.
- The update script adds values to the row.

Old property data files move to the Archive directory, leaving the PropertyData directory empty. It remains empty until you export files from OVPI.

#### **Property Data Tables and Property Tables**

The following table indicates which property data table and which property tables are updated by each import file.

Property Data File	Property Data Table	Property Table
ATM_PVC_Property.dat	Ratm_pvc_property	K_atm_pvc K_atm_pvc_exec
		K_atm_pvc_exec_region

Property Data File	Property Data Table	Property Table
ATM_Port_Property.dat	Ratm_port_property	K_atm_port K_atm_port_exec K_atm_port_exec_region
ATM_SVC_Property.dat	Ratm_port_svc	K_atm_svc K_atm_svc_exec K_atm_svc_exec_region

## **Changing the Default Run Time**

The default run time for the automatic import process is 4:00 a.m. To change the default setting, do this:

- 1 Open the *trendtimer\_sched* file in the *OVPI/lib* directory.
- 2 In the line that defines the interval and offset for the trend\_proc that executes the ATM\_importdata.pro command, change the offset indicator (the number after the '+' sign). For example, if you change 04:00 to 18:00, the import utility will run every day at 6:00 p.m.

Changing the Default Run Time

## **Using Change Forms**

ATM 3.0 provides the following change forms:

- Update ATM PVC Cell Parameters
- Update ATM QoS Parameters
- Update Port Information

You cannot assign PVCs or ports to customers or locations that Common Property Tables does not already recognize. Add customers and locations to Common Property Tables using the **Create New Customer** form, the **Create New Location** form, or by using the batch-mode property import that comes with Common Property Tables. For details, see the *Common Property Tables 3.0 User Guide*.

## **Update ATM PVC Cell Parameters**

Follow these steps to update PVC cell parameters:

- 1 Select HP OpenView > Performance Insight > Management Console.
- 2 Click **Objects**, then navigate to and select the interface you want to update. (Alternatively, you can select a device in order to update all interfaces on that device.) The Update ATM PVC Cell Parameters form is listed under **Object Specific Tasks**.
- 3 Double-click Update ATM PVC Cell Parameters. The form opens.
- 4 Modify cell parameters. Click **Apply** to save changes, **OK** to save changes and close the form, or **Cancel** to close the form without saving changes.

## **MTA**



#### UPDATE PVC CELL PARAMETERS

Use this form to update ATM cell related information.

VPI - PVC Virtual Path Identifier VCI - PVC Virtual channel Identifier

SCR - Sustained cell rate in the egress direction
PCR - Peak cell rate in the egress direction
MCR - Minimum cell rate in the ingress direction
RevPCR - Peak cell reate in the ingress direction
RevPCR - Minimum cell rate on the egress direction

MBS - Maximum burst size CLR - Cell loss ratio
CDVT - Cell delay variation tolerance CTD - Cell transfer delay

#### **PVC Current Cell Pameters**

Target Name	PortName	VPI	VCI	SCR	RevSCR	PCR	RevPCR	MCR	RevMCR	MBS	CLR	CDVT	CTD	
172.28.128.4	78	7.00	32.00											
5.24	1-11-1-10.32	10.00	32.00											Н
5.2	1-12-1-10.32	10.00	32.00					89.00						ш
5.7	2-11-3-0.34	0.00	34.00											п
5.1	1-5-2-0.35	0.00	35.00											п
5.1	1-5-2-0.62	0.00	62.00											п
5.2	1-12-1-10.100	10.00	100.00											
60	4 40 4 40 404	40.00	404.00											17

SCR	RevSCR	PCR	RevPCR
MCR	RevMCR	MBS	CLR

## **Update ATM QoS Parameters**

Follow these steps to update QoS parameters:

- 1 Select HP OpenView > Performance Insight > Management Console.
- 2 Click **Objects**, then navigate to the interface you want to update, and select it. You may also select a device, if you want to update all the interfaces on that device. The forms appear under **Object Specific Tasks**.
- 3 Double-click Update ATM QoS Parameters. The form opens.
- 4 Modify QoS parameters. Click **Apply** to save changes, **OK** to save changes and close the form, or **Cancel** to close the form without saving changes.

## MTA

## (P)

#### UPDATE ATM PVC QoS Parameters

Use this for to update the ATM GoS parameters

VPI - ATM PVC Virtual Path Identifier VCI - ATM PVC Virtual Channel Identifier
PortName - Port associated with the PVC end point.
ATMQOS - Class name of the ingress QoS RevATMQOS - Class name of the egress QoS
ATMQOSNumber - Enumerated Class name value [ingress] RevATMQOSNumber - Enumerated Class name value [egress]

#### Current ATM PVC QoS Parameters

Target Name	PortName	VPI	VCI	ATMQoS	Revatmoos	ATMQoSNumber	RevATMQoSNumber	pvc,
172.28.128.4	78	7.00	32.00					77.
5.24	1-11-1-10.32	10.00	32.00			-2.00	-2.00	-2.
5.2	1-12-1-10.32	10.00	32.00			-2.00	-2.00	-2.
5.7	2-11-3-0.34	0.00	34.00			-2.00	-2.00	-2.
5.1	1-5-2-0.35	0.00	35.00			-2.00	-2.00	-2.
5.1	1-5-2-0.62	0.00	62.00			-2.00	-2.00	-2.

ATMQoS RevATMQoS

ATMQoSNumber RevATMQoSNumber

WARNING - When you press "Apply" or "OK", all the parameters will be updated. If you do not wish to peform an update press "Cancel" button.

## **Update Port Information**

Follow these steps to update port information:

- 1. Select HP OpenView > Performance Insight > Management Console.
- 2. Click **Objects**, then navigate to and select the interface you want to update or the device for which you want to update one or more interfaces. The Update Port Information form is listed under **Object Specific Tasks**.
- 3. Double-click **Update Port Information**. The form opens.
- 4. Modify port information. Click **Apply** to save changes, **OK** to save changes and close the form, or **Cancel** to close the form without saving changes.

## ATM

Target Name



PortSpeed

#### UPDATE PORT INFORMATION

Use this form for the upd	ation of ATM	Port Information
---------------------------	--------------	------------------

PortName

Port Name - The port on which the PVC endpoint resides.

PortDescription

Port Description - Description for the Port.

Port ID - The port number on which this logical port is configured.

Slot ID - The slot number of which this logical port is configured.

Port Type - Port type [ UNI, NNI, ICI, etc ] for the ingress direction.

Port Speed - Port speed in bits per second for the ingress direction.

#### Current ATM Port Settings

SlotiD

PortType

RevPortType

PortID

172.28.128.4	74			0.00
172.28.128.4	78			0.00
5.1	1-10-1			0.00
5.1	1-11-1			0.00
5.1	1-5-1			0.00
5.1	1-5-2			0.00
Port Name		Port Description		
hand IB		Statis		
Port ID		Slot ID		
Port ID		Slot ID		

RNING - When you press "Apply" or "OK" all the parameters will get updated. If you do not wish to update data press the "Cancel" button.

## The PVC Reports

The PVC folder contains the following reports:

- 1 Availability
- **2** Capacity Planning: PCR Utilization (2 reports: daily and monthly)
- **3** Capacity Planning: SCR Utilization (2 reports: daily and monthly)
- **4** Executive Summary by Customer (2 reports: daily and monthly)
- **5** Executive Summary by Region (2 reports: daily and monthly)
- 6 Endpoint Configuration (2 reports: daily and monthly)
- 7 Forecast: PCR Utilization
- 8 Forecast: SCR Utilization
- **9** Hot Spots (2 reports: daily and monthly)
- 10 QuickView (3 reports: daily, monthly, and Near Real Time)
- 11 Snapshot (3 reports: daily, monthly, and Near Real Time)
- 12 Top Ten

As mentioned earlier in Chapter 1, Overview, the demo package contains fully populated samples of every report in the PVC folder. This chapter contains samples of the following reports:

- Capacity Planning: PCR Utilization Daily
- Hot Spots Daily
- Availability
- Executive Summary by Customer: Daily
- Top Ten
- · QuickView Near Real Time
- Forecast: PCR Utilization

# ATM PVC Endpoint PCR Utilization Capacity Planning

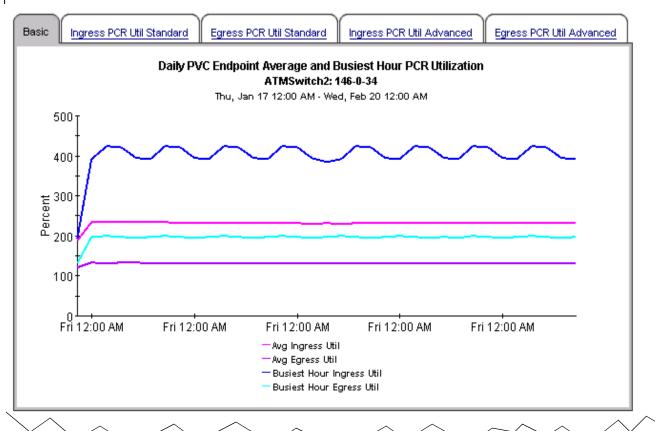


Designed for CTOs, network planners, and network managers, the Capacity Planning report details the most over-and under-utilized PVC Endpoints based on a 30 day forecast. Baseline and forecasted values are based on the busiest hour of the day. These reports can indicate opportunities for load balancing to improve service levels without additional investment.

#### Overutilized PVC Endpoints with a 30 Day Forecasted Value for Utilization > 60%

Utilization is Based on the Peak Cell Rate (PCR)

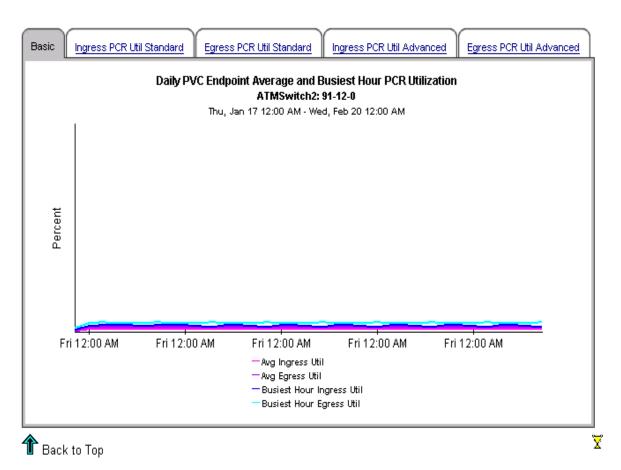
Device	PVC	PVC Description	QoS	PVC Type	Day of Week	Ingress Baseline Util		30/60/90 Day Ingress Forecast	Egress Baseline Util	DT <sup>*</sup> Egre Uti
ATMSwitch2	146-0-34	New York to Pari	s VBR-RT	ATM Channel	Thu	370.45	-64.00	639.55 / 823.02 / 1006.5	5 184.63	-78J
ATMSwitch2	146-0-34	New York to Pari	s VBR-RT	ATM Channel	Mon	403.93	-922.00	420.58 / 431.93 / 443.20	3 197.80	-2116
ATMSwitch2	146-0-34	New York to Pari	s VBR-RT	ATM Channel	Sun	414.92	-6656.00	417.27 / 418.87 / 420.4	3 198.04	
ATMSwitch2	146-0-34	New York to Pari	s VBR-RT	ATM Channel	Tue	398.75	-7472.00	400.75 / 402.11 / 403.4	7 196.45	
ATMSwitch2	146-0-34	New York to Pari	s VBR-RT	ATM Channel	Fri	398.00	-7455.00	400.00 / 401.36 / 402.73	2 197.29	
ATMSwitch2	146-0-34	New York to Pari	s VBR-RT	ATM Channel	Wed	410.09		389.09 / 374.78 / 360.40	6 197.92	



#### Underutilized PVC Endpoints with a 30 Day Forecasted Value for Utilization < 10%

Utilization is based on the Peak Cell Rate (PCR)

Device	PVC	PVC Description	QoS	РVС Туре	Day of Week	Ingress Baseline Util	DTT Ingress Util	30/60/90 Day Ingress Forecast	Egress Baseline Util
ATMSwitch2	91-12-0	New York to Los Angeles	UBR	ATM Path	Mon	0.00	1000.00	0.00 / 0.00 / 0.00	0.00
ATMSwitch2	91-12-0	New York to Los Angeles	UBR	ATM Path	Sun	0.00	1000.00	0.00 / 00.00 / 00.00	0.00
ATMSwitch2	91-12-0	New York to Los Angeles	UBR	ATM Path	Sat	0.00		0.00 / 0.00 / 0.00	0.00
ATMSwitch2	91-12-0	New York to Los Angeles	UBR	ATM Path	Wed	0.00		0.00 / 0.00 / 0.00	0.00
ATMSwitch2	91-12-0	New York to Los Angeles	UBR	ATM Path	Fri	0.00		0.00 / 0.00 / 0.00	0.00
ATMSwitch2	91-12-0	New York to Los Angeles	UBR	ATM Path	Tue	0.00		0.00 / 0.00 / 0.00	0.00
ATMSwitch2	91-12-0	New York to Los Angeles	UBR	ATM Path	Thu	0.00	1000.00	0.01 / 0.01 / 0.01	0.00
ATMSwitch2	65-0-63	New York to San Francisco	ABR	ATM Channel	Sat	0.01		0.01 / 0.01 / 0.01	0.01
ATMSwitch2	65-0-63	New York to San Francisco	ABR	ATM Channel	Wed	0.01		0.01 / 0.01 / 0.01	0.01
ATMSwitch2	65-0-63	New York to San Francisco	ABR	ATM Channel	Sun	0.01		0.01 / 0.01 / 0.01	0.01
4									Þ



47

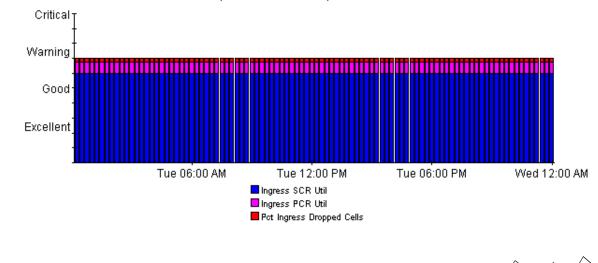
# ATM PVC Endpoint Hot Spots



The Hot Spots report gives network managers and members of the NOC team a listing of ATM PVC Endpoints that have exceeded threshold conditions during the previous day. Offending PVC Endpoints are ranked by total number of exceptions. Drilldown reports show as polled data to help identify possible trouble spots. Exception Thresholds: Ingress SCR Utilization > 100 % Egress SCR Utilization > 100 % Ingress PCR Utilization > 60 % Percentage of Ingress Dropped Cells > 1 %

	PVC Endpoint Hot Spots for the Previous Day Number of Exceptions for the Day are Shown for Each Statistic - Sorted by Total Exceptions Tue, Feb 12, 2002									
Device	PVC	PVC Description	QoS	PVC Type	Total Exceptions	Ingress SCR Util	Egress SCR Util	Ingress PCR Util	PIR	Pct Ingress Dropped Cells
ATMSwitch2	64-0-33	New York to Houston	ABR	ATM Channel	192	96	96	0	0	0
ATMSwitch1	50-0-34	Torrance to the U.K.	VBR-RT	ATM Channel	191	95	96	0	0	0
ATMSwitch2	146-0-34	New York to Paris	VBR-RT	ATM Channel	153	81	72	0	0	0
ATMSwitch2	145-0-34	New York to Boston	CBR	ATM Channel	81	81	0	0	0	0
ATMSwitch2	121-0-33	New York to D.C.	VBR-NRT	ATM Channel	74	37	37	0	0	0
ATMSwitch1	126-0-37	Torrance to Atlanta	UBR	ATM Channel	36	18	18	0	0	0
4										F

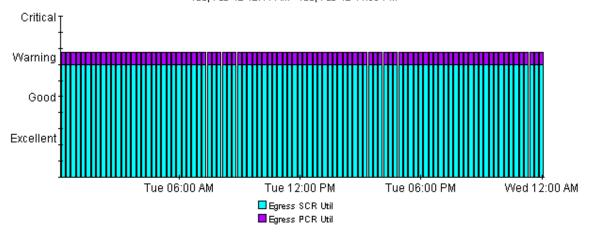
#### PVC Ingress Grade of Service ATMSwitch2: 64-0-33





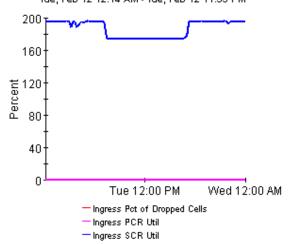
#### PVC Egress Grade of Service ATMSwitch2: 64-0-33

Tue, Feb 12 12:14 AM - Tue, Feb 12 11:59 PM

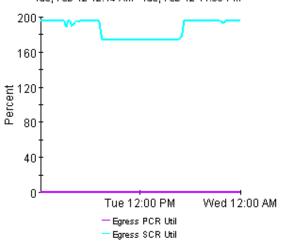


#### Ingress SCR and PCR Utilization ATMSwitch2: 64-0-33

Tue, Feb 12 12:14 AM - Tue, Feb 12 11:59 PM



#### Egress SCR and PCR Utilization ATMSwitch2: 64-0-33

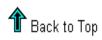




## Exception Detail - Exception Values for the Statistics

#### ATMSwitch2: 64-0-33

Time Period of Exception	Ingress SCR Util	Ingress PCR Util	Pct Ingress Dropped Cells	Egress SCR Util	Egress PCR Util
Tue Feb 12 12:14 AM	195.68	0.46	0.00	195.68	0.46
Tue Feb 12 12:29 AM	195.73	0.46	0.00	195.72	0.46
Tue Feb 12 12:44 AM	195.70	0.46	0.00	195.70	0.46
Tue Feb 12 12:59 AM	195.73	0.46	0.00	195.72	0.46
Tue Feb 12 01:14 AM	195.72	0.46	0.00	195.72	0.46
Tue Feb 12 01:29 AM	195.70	0.46	0.00	195.70	0.46
Tue Feb 12 01:44 AM	195.73	0.46	0.00	195.73	0.46
Tue Feb 12 01:59 AM	195.50	0.46	0.00	195.50	0.46
Tue Feb 12 02:14 AM	195.70	0.46	0.00	195.70	0.46
Tue Feb 12 02:29 AM	195.73	0.46	0.00	195.72	0.46
Tue Feb 12 02:44 AM	196.12	0.46	0.00	196.12	0.46
Tue Feb 12 02:59 AM	195.72	0.46	0.00	195.72	0.46





## ATM **PVC Endpoint Availability**



The ATM PVC Endpoint Availability report informs executives, network managers, end users, and customers on daily and monthly PVC endpoint availability. Select a PVC endpoint from the table to see availability over the previous day.

#### **Daily PVC Endpoint Availability**

Sun, Dec 2, 2001

Device	PVC	PVC Description	QoS	PVC Type	Availability	
ATMSwitch2	65-0-63	New York to San Francisco	ABR	ATM Channel	70.00	
ATMSwitch1	124-0-34	Torrance to Dallas	ABR	ATM Channel	86.11	-9

#### **Hourly PVC Endpoint Availability** ATMSwitch2: 65-0-63

Sun, Dec 2 12:00 AM - Sun, Dec 2 11:00 PM



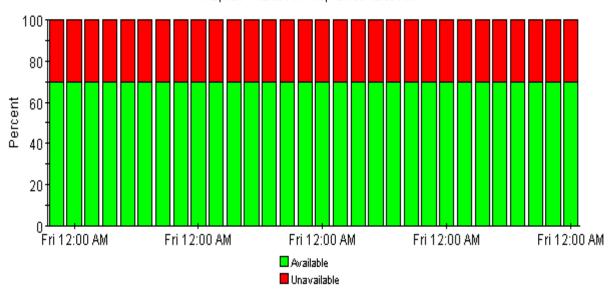
#### **Monthly PVC Endpoint Availability**

Nov 2001

Device	PVC	PVC Description	QoS	PVC Type	Availability	
ATMSwitch2	65-0-63	New York to San Francisco	ABR	ATM Channel	70.00	
ATMSwitch1	124-0-34	Torrance to Dallas	ABR	ATM Channel	86.11	<del>-4-</del>

#### Daily PVC Endpoint Availability ATMSwitch2: 65-0-63

Thu, Nov 1 12:00 AM - Fri, Nov 30 12:00 AM



# ATM PVC Daily Executive Summary by Customer



This report provides CFOs, CIOs and other managers an overview of the performance of their ATM PVCs. Each chart shows key metrics aggregated for all PVCs, for each customer. Key indicators of performance are shown including total volume by QoS type, utilization, and percentage of dropped cells.

#### **Daily Customer Summaries**

Sun, Dec 2, 2001

#### Summary for All Acme PVCs

Summary for All DeskTalk PVCs

Summary for All Network PVCs

Summary for All Unassigned Customer PVCs



# Mon, Nov 26 12:00 AM - Sun, Dec 2 12:00 AM 7G 5G 4G 3G

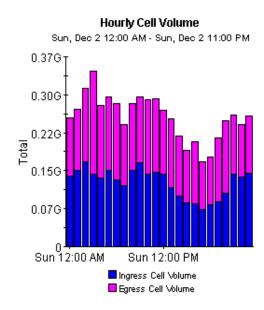
Fri 12:00 AM

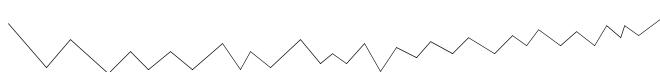
■ Ingress Cell Volume

■ Egress Cell Volume

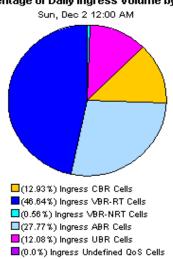
Mon 12:00 AM

**Daily Cell Volume** 

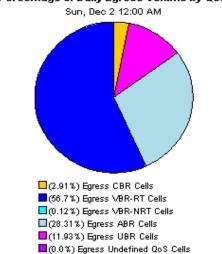




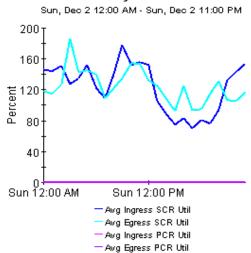
#### Percentage of Daily Ingress Volume by QoS



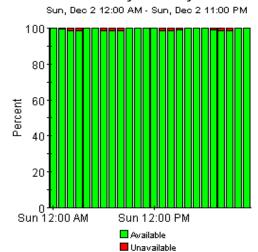
#### Percentage of Daily Egress Volume by QoS

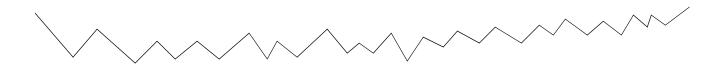


#### **Hourly Utilization**



#### Hourly Availability





#### **Hourly Exception Counts** Hourly Percentage of Ingress Dropped Cells Sun, Dec 2 12:00 AM - Sun, Dec 2 11:00 PM Sun, Dec 2 12:00 AM - Sun, Dec 2 11:00 PM 30 T 24 Percent 12 0 4 Sun 12:00 AM Sun 12:00 PM ■ Ingress SCR Util ☐ Egress SCR Util ☐ Ingress PCR Util Sun 12:00 AM Sun 12:00 PM Egress PCR Util ■Ingress Dropped Cells —Awg Pot Ingress Dropped Cells $\overline{\underline{X}}'$ 🏗 Back to Top

## ATM PVC Endpoint Top Ten



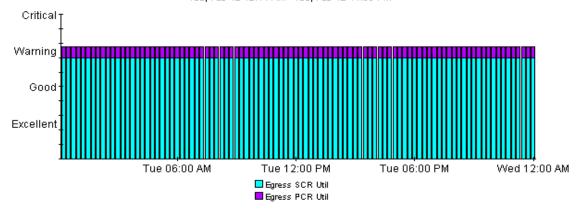
The Top Ten report lists the ten top utilized PVC endpoints based on highest utilized direction. These reports show ingress and egress average and peak utilization based on SCR and PCR cell rates for yesterday and last month.

#### Daily Top Ten PVC Endpoints Based on Highest Average SCR Utilization in Either Direction

Sun, Dec 2, 2001 - Sun, Dec 2, 2001

Device	PVC	PVC Description	QoS	PVC Type	SCR	Reverse SCR	_	_	Peak Ingress SCR Util	_
ATMSwitch1	50-0-34	Torrance to the U.K.	VBR-RT	ATM Channel	3642	3642	483.42	595.12	1020.86	1090.97
ATMSwitch2	146-0-34	New York to Paris	VBR-RT	ATM Channel	3642	3642	254.03	143.74	509.75	233.61
ATMSwitch2	64-0-33	New York to Houston	ABR	ATM Channel	3642	3642	186.64	186.64	196.17	196.16
ATMSwitch2	145-0-34	New York to Boston	CBR	ATM Channel	3642	3642	134.05	30.63	226.20	71.16
ATMSwitch2	121-0-33	New York to D.C.	VBR-NRT	ATM Channel	3642	3642	131.64	131.64	236.30	236.29
ATMSwitch2	54-0-33	New York to Toronto	VBR-NRT	ATM Channel	3642	3642	84.13	84.13	84.31	84.31
ATMSwitch1	129-0-33	Torrance to Portland	CBR	ATM Channel	3642	3642	84.13	0.00	84.31	0.00
ATMSwitch1	71-0-34	Torrance to San Jose	ABR	ATM Channel	3642	3642	84.13	84.13	84.31	84.31
ATMSwitch1	126-0-37	Torrance to Atlanta	UBR	ATM Channel	3642	3642	54.35	54.35	329.48	329.48
ATMSwitch1	143-0-34	Torrance to Cotati	VBR-RT	ATM Channel	3642	3642	7.83	38.14	20.92	99.15

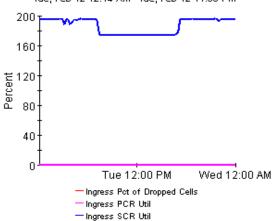
#### PVC Egress Grade of Service ATMSwitch2: 64-0-33





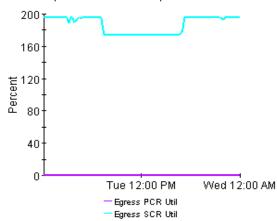
#### Ingress SCR and PCR Utilization ATMSwitch2: 64-0-33

Tue, Feb 12 12:14 AM - Tue, Feb 12 11:59 PM



#### Egress SCR and PCR Utilization ATMSwitch2: 64-0-33

Tue, Feb 12 12:14 AM - Tue, Feb 12 11:59 PM



#### Exception Detail - Exception Values for the Statistics ATMSwitch2: 64-0-33

Tue, Feb 12 12:14 AM - Tue, Feb 12 11:59 PM

Time Period of Pct Ingress Ingress SCR Util Ingress PCR Util Egress PCR Util Egress SCR Util Exception **Dropped Cells** Tue Feb 12 12:14 AM 195.68 0.46 0.00 195.68 0.46 Tue Feb 12 12:29 AM 195.73 0.00 195.72 0.46 0.46 0.00 195.70 0.46 Tue Feb 12 12:44 AM 195.70 0.46 Tue Feb 12 12:59 AM 195.73 0.46 0.00 195.72 0.46 Tue Feb 12 01:14 AM 195.72 0.46 0.00 195.72 0.46 Tue Feb 12 01:29 AM 195.70 0.46 0.00 195.70 0.46 Tue Feb 12 01:44 AM 195.73 0.46 0.00 195.73 0.46 Tue Feb 12 01:59 AM 195.50 0.46 0.00 195.50 0.46 Tue Feb 12 02:14 AM 195.70 0.00 195.70 0.46 0.46 Tue Feb 12 02:29 AM 195.73 0.46 0.00 195.72 0.46 Tue Feb 12 02:44 AM 196.12 0.00 196.12 0.46 0.46 Tue Feb 12 02:59 AM 195.72 0.46 0.00 195.72 0.46





# ATM PVC Endpoint NRT QuickView

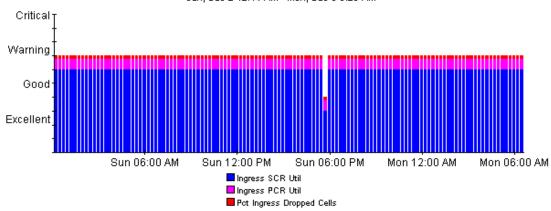


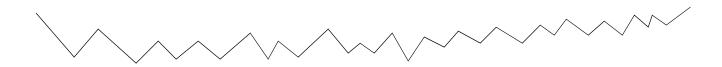
This report gives network managers and members of the NOC team ATM PVC endpoints statistics in near real time. Statistics in the "PVC Selection List" chart are averages over the last 6 hours of polling. Drilldowns show utilization, percentage of dropped cells, cell volume, and GOS for the previous 24 hours of polled data.

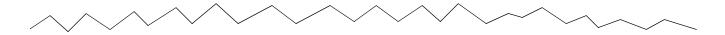
		PVC Endpoint Select		Sorted by Hi	_	•	Cells pe	r Second	I (CPS)	_
Device	PVC	PVC Description	QoS	PVC Type	SCR	Ingress SCR Util	Egress SCR Util	Avg Ingress CPS	Peak Ingress CPS	Avg Egres: CPS
ATMSwitch1	50-0-34	Torrance to the U.K.	VBR-RT	ATM Channel	3642	555.63	736.09	20236.19	31693.49	26808.5
ATMSwitch2	146-0-34	New York to Paris	VBR-RT	ATM Channel	3642	379.63	193.29	13826.15	18565.20	7039.7'_
ATMSwitch1	126-0-37	Torrance to Atlanta	UBR	ATM Channel	3642	269.10	269.10	9800.65	11999.53	9800.5
ATMSwitch2	64-0-33	New York to Houston	ABR	ATM Channel	3642	195.08	195.08	7104.96	7143.54	7104.9
ATMSwitch2	121-0-33	New York to D.C.	VBR-NRT	ATM Channel	3642	183.37	183.37	6678.27	8605.92	6678.2
ATMSwitch2	65-0-65	New York to Raleigh	UBR	ATM Channel	96000	6.62	6.62	6355.95	6369.05	6355.9:
ATMSwitch2	145-0-34	New York to Boston	CBR	ATM Channel	3642	160.84	28.67	5857.79	7171.58	1044.2
ATMSwitch2	91_12_0	New York to Los Angeles	LIAR	ATM Path	353208	0.73	1 54	2591 36	6162.63	5451 2

#### PVC Ingress Grade of Service ATMSwitch1: 50-0-34

Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM

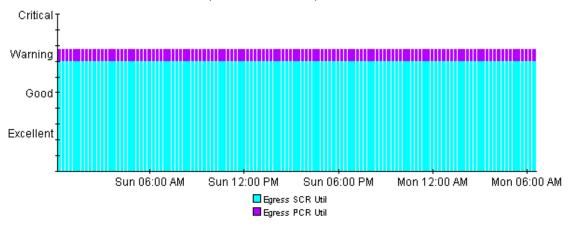






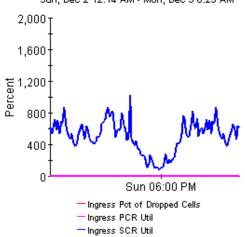
#### PVC Egress Grade of Service ATMSwitch1: 50-0-34

Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM



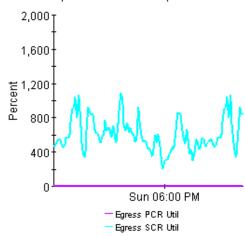
#### Ingress SCR and PCR Utilization ATMSwitch1: 50-0-34

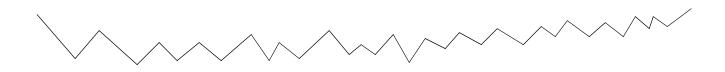
Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM

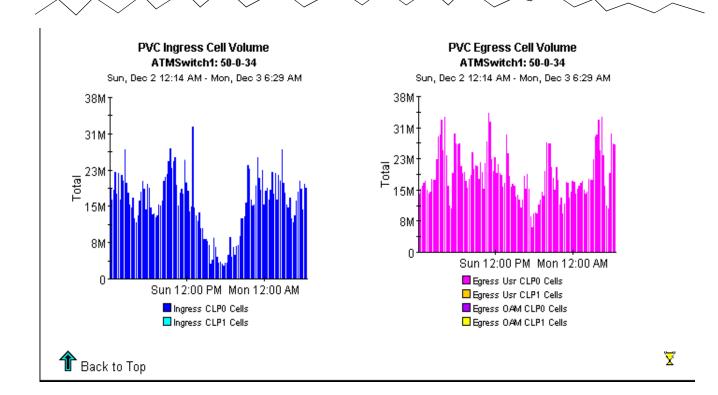


#### Egress SCR and PCR Utilization ATMSwitch1: 50-0-34

Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM







# ATM PVC Endpoint PCR Utilization Forecast

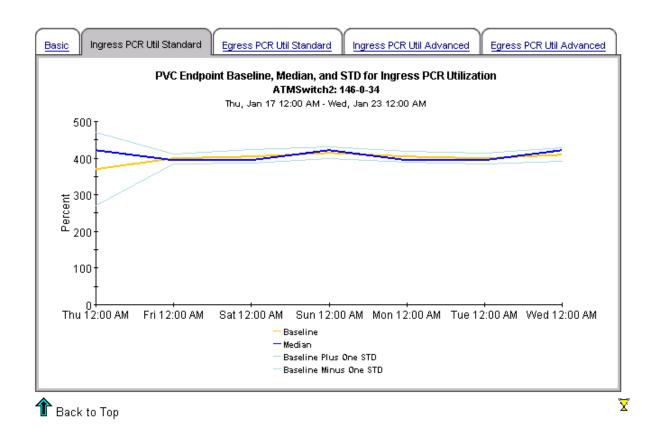


Designed for CTOs, network planners, and network managers, the Forecast report details the ports with the greatest ratio of change between the baseline utilization and the 30 day forecast. Baseline and forecast values are based on the busiest hour of the day. Drilldown reports show baseline, median, STD; and 30, 60, and 90 day forecasts of utilization.

#### PVC Endpoints with a 90 Day Forecasted Utilization Value > 60% Sorted by Greatest Growth Ratio

Utilization is based on the Peak Cell Rate (PCR)

Device	PVC	PVC Description	QoS	РУС Туре	Day of Week	Ingress Baseline Util		30/60/90 Day Ingress Forecast	Ingress Ratio	Egre: Basel Util
ATMSwitch2	146-0-34	New York to Paris	VBR-RT	ATM Channel	Thu	370.45	-64.00	639.55 / 823.02 / 1006.5	1.73	184.£
ATMSwitch2	146-0-34	New York to Paris	VBR-RT	ATM Channel	Mon	403.93	-922.00	420.58 / 431.93 / 443.28	1.04	197.8
ATMSwitch2	146-0-34	New York to Paris	VBR-RT	ATM Channel	Sun	414.92	-6656.00	417.27 / 418.87 / 420.48	1.01	198.0
ATMSwitch2	146-0-34	New York to Paris	VBR-RT	ATM Channel	Fri	398.00	-7455.00	400.00 / 401.36 / 402.72	1.01	197.1
ATMSwitch2	146-0-34	New York to Paris	VBR-RT	ATM Channel	Tue	398.75	-7472.00	400.75 / 402.11 / 403.47	1.01	196.4



## **The Port Reports**

The Port folder contains the following reports:

- 1 Availability
- 2 Configuration
- 3 Capacity Planning
- **4** Executive Summary by Customer (2 reports: daily and monthly)
- **5** Executing Summary by Region (2 reports: daily and monthly)
- **6** Forecast
- 7 Hot Spots
- 8 QuickView (3 reports: daily, monthly and Near Real Time)
- 9 Snapshot (3 reports: daily, monthly, and Near Real Time)
- 10 Top Ten: Daily

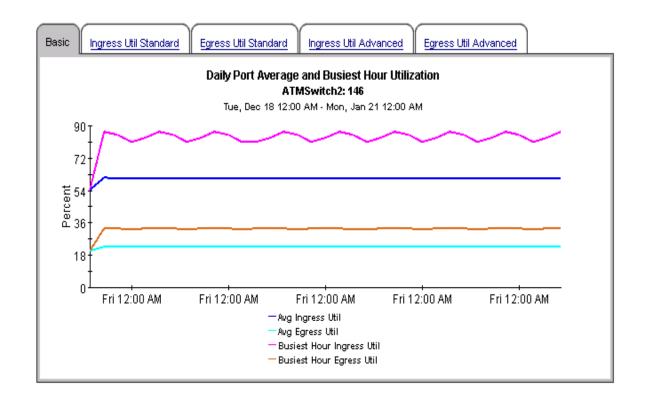
As mentioned earlier in Chapter 1, Overview, the demo package contains fully populated samples of every report in the Port folder. This chapter contains samples of the following reports:

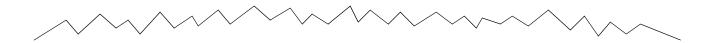
- Capacity Planning
- Availability
- Forecast
- Hot Spots
- · QuickView Near Real Time
- QuickView Daily
- Executive Summary by Customer Daily
- Top Ten

## ATM Port Capacity Planning

Designed for CIOs, network planners, and network managers, the Capacity Planning report details the most over- and under-utilized ports based on a 30 day forecast. Baseline and forecasted values are based on the busiest hour of the day. These reports can indicate opportunities for load balancing to improve service levels without additional investment.

		Overutili	zed Po		-	Forecasted Value for 01 - Mon. Dec 24, 2001	Utilizatio	n > 80%	
Device	Port	Description	Day of Week	Ingress Baseline	DTT	30/60/90 Day Ingress	Egress Baseline Util	DTT Egress Util	30/60/90/Day Egi Forecast
ATMSwitch2	146	New York to Paris	Tue	77.26	-10	112.47 / 136.47 / 160.47	30.11	133	45.14 / 55.38 / 6
ATMSwitch2	64	New York to Houston	Tue	70.79	32	79.63 / 85.65 / 91.68	65.49	4	101.01 / 125.22 / 1
ATMSwitch2	121	New York to D.C.	Tue	59.18	16	90.08 / 111.14 / 132.21	68.52	69	74.66 / 78.85 / 8
ATMSwitch2	90	New York to Tokyo	Tue	14.42	319	23.10 / 29.02 / 34.93	57.36	17	89.71 / 111.77 / 1
ATMSwitch2	146	New York to Paris	Mon	84.14	-73	87.20 / 89.28 / 91.37	32.79	1000	32.96 / 33.08 / 3
ATMSwitch2	146	New York to Paris	Thu	84.77	-209	85.85 / 86.58 / 87.31	32.90	1000	33.07 / 33.19 / 3
ATMSwitch2	146	New York to Paris	Fri	83.04	-70	85.42 / 87.03 / 88.65	32.68	1000	33.01 / 33.25 / 3
ATMSwitch2	146	New York to Paris	Sun	84 47		84 00 / 83 68 / 83 36	32 75		32 45 / 32 24 / 3

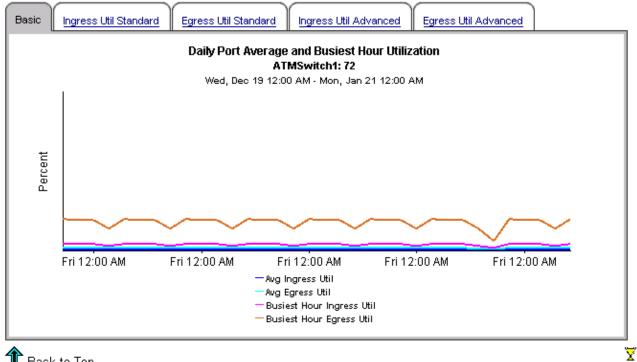




#### Underutilized Ports with a 30 Day Forecasted Value for Utilization < 10%

Tue, Dec 18, 2001 - Mon, Dec 24, 2001

Device	Port	Description	of Week	Ingress Baseline I Util	DII Ingress Util	30/60/90 Day Ingress Forecast	Egress Baseline Util	Egress Util	30/60/90/Da Egress Fore
ATMSwitch1	72	Torrance to Reston	Wed	0.00		0.00 / 0.00 / 0.00	0.02		0.00 / 0.00 /
ATMSwitch1	72	Torrance to Reston	Sun	0.00		0.00 / 0.00 / 0.00	0.02		0.01 / 0.01 /
ATMSwitch1	72	Torrance to Reston	Fri	0.00		0.00 / 0.00 / 0.00	0.02		0.02 / 0.01 /
ATMSwitch1	72	Torrance to Reston	Thu	0.00	1000	0.00 / 0.00 / 0.00	0.02	1000	0.02 / 0.02 /
ATMSwitch1	72	Torrance to Reston	Mon	0.00	1000	0.00 / 0.00 / 0.00	0.02	1000	0.02 / 0.02 /
ATMSwitch1	72	Torrance to Reston	Sat	0.00	1000	0.01 / 0.01 / 0.01	0.02	1000	0.03 / 0.03 /
ATMSwitch2	91	New York to Los Angeles	Wed	0.75		0.75 / 0.75 / 0.75	0.77		0.76 / 0.75 /
ATMSwitch2	91	New York to Los Angeles	Sun	0.75		0.75 / 0.75 / 0.75	N 77		0.76 / 0.75 / <b>*</b>



🏗 Back to Top

## ATM Port Availability



The ATM Port Availability report informs executives, network managers, end users, and customers on daily and monthly port availability. Select a port from the table to see availability over the previous day or month.

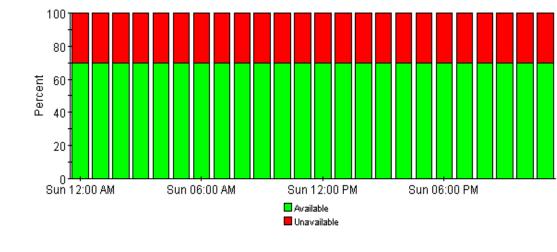
#### **Daily Port Availability**

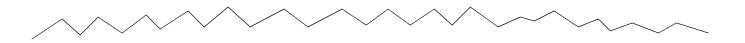
Sun, Dec 2, 2001

Device	Port	Description	Availability	
ATMSwitch2	65	New York to San Francisco	70.00	
ATMSwitch1	124	Torrance to Dallas	86.11	

#### Hourly Port Availability ATMSwitch2: 65

Sun, Dec 2 12:00 AM - Sun, Dec 2 11:00 PM





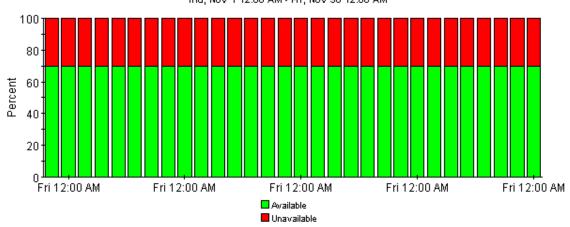
#### **Monthly Port Availability**

Nov 2001

Device	Port	Description	Availability	
ATMSwitch2	65	New York to San Francisco	70.00	
ATMSwitch1	124	Torrance to Dallas	86.11	===

#### Daily Port Availability ATMSwitch2: 65

Thu, Nov 1 12:00 AM - Fri, Nov 30 12:00 AM



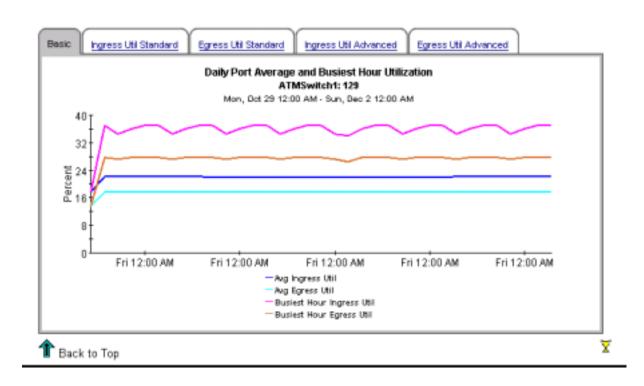




## ATM Port Forecast



				Ports wi	Sorte	ay Forecasted Utilizat d by Greatest Growth Oct 29, 2001 - Sun, Nov 4, 2	Ratio	e > 80%		
Device	Port	Description	Day of Week	Ingress Baseline Util	DTT Ingress Util	30/60/90 Day Ingress Forecast	Ingress Ratio	Egress Baseline Util	DTT Egress Util	30/60/9i Fc
ATMSwitch1	129	Torrance to Portland	Mon	32.22	74	56.11 / 72.40 / 88.69	1.74	24.72	124.00	42.37 /
ATMSwitch2	146	New York to Paris	Mon	79.59	-13	106.54 / 124.92 / 143.29	1.34	30.11	126.00	45.90 /
ATMSwitch2	145	New York to Boston	Mon	48.35	48	70.95 / 86.36 / 101.77	1.47	21.87	212.00	33.19 /
ATMSwitch2	90	New York to Tokyo	Mon	15.10	544	20.23 / 23.72 / 27.22	1.34	57.59	21.00	86.18 / 1
ATMSwitch2	64	New York to Houston	Mon	69.16	4	96.15 / 114.55 / 132.95	1.39	67.22	5.00	97.56 / 1
ATMSwitch2	121	New York to D.C.	Mon	59.28	16	90.19 / 111.26 / 132.33	1.52	66.39	11.00	90.61 / 1
ATMSwitch1	50	Torrance to the U.K.	Mon	41.36	86	58.43 / 70.07 / 81.71	1.41	24.72	397.00	30.65 /



## ATM Port Hot Spots

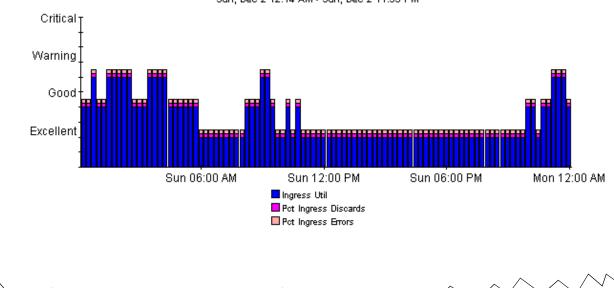


The Hot Spots report gives network managers and members of the NOC team a listing of ATM ports that have exceeded threshold conditions during the previous day. Offending ports are ranked by total number of exceptions. Drilldown reports show as polled data to help identify possible trouble spots. Exception Thresholds: Ingress Utilization > 80 % Egress Utilization > 80 % Pct Ingress Errors > 5 % Pct Egress Errors > 5 % Pct Ingress Discards > 5 % Pct Egress D

		Number of Exceptions		Spots for the		-	hv Total	Excenti	nns		
		names of Endopsion		Sun, Dec 2,			<b>.,</b>	Lincopii			
Device	Port	Description	Port Speed	Total Exceptions	Ingress Util	Egress Util	_	_	Pct Ingress Discards	_	
ATMSwitch2	146	New York to Paris	20352000	15	15	0	0	0	0	0	
ATMSwitch1	72	Torrance to Reston	40704000	7	0	0	7	0	0	0	=
ATMSwitch2	64	New York to Houston	20352000	5	3	2	0	0	0	0	=
ATMSwitch2	121	New York to D.C.	20352000	3	1	2	0	0	0	0	=
ATMSwitch2	65	New York to San Francisco	20352000	3	0	0	3	0	0	0	=
ATMSwitch2	90	New York to Tokyo	20352000	2	0	2	0	0	0	0	1

#### Ingress Grade of Service ATMSwitch2: 146

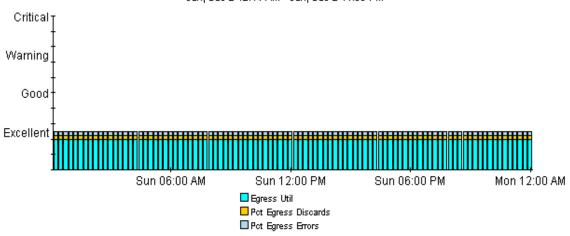
Sun, Dec 2 12:14 AM - Sun, Dec 2 11:59 PM





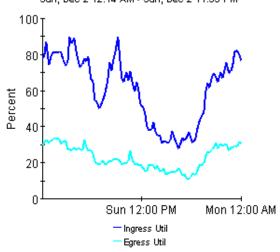
#### Egress Grade of Service ATMSwitch2: 146

Sun, Dec 2 12:14 AM - Sun, Dec 2 11:59 PM



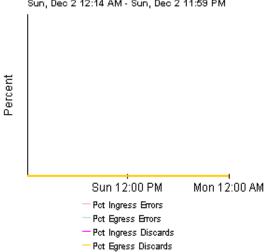


Sun, Dec 2 12:14 AM - Sun, Dec 2 11:59 PM



#### Pct Ingress and Egress Errors and Discards ATMSwitch2: 146

Sun, Dec 2 12:14 AM - Sun, Dec 2 11:59 PM



#### Exception Detail - Exception Values for the Statistics ATMSwitch2: 146

Sun, Dec 2 12:44 AM - Sun, Dec 2 11:44 PM

Time Period of Exception	Ingress Util	Egress Util	Pct Ingress Errors	Pct Egress Errors	Pct Ingress Discards	Pct Egress Discards
Sun Dec 02 12:44 AM	86.82	32.74	0.00	0.00	0.00	0.00
Sun Dec 02 01:29 AM	81.02	32.52	0.00	0.00	0.00	0.00
Sun Dec 02 01:44 AM	80.96	33.92	0.00	0.00	0.00	0.00
Sun Dec 02 01:59 AM	80.97	32.98	0.00	0.00	0.00	0.00
Sun Dec 02 02:14 AM	81.28	33.02	0.00	0.00	0.00	0.00
Sun Dec 02 02:29 AM	80.76	30.59	0.00	0.00	0.00	0.00
Sun Dec 02 03:29 AM	89.70	27.74	0.00	0.00	0.00	0.00
Sun Dec 02 03:44 AM	85.60	26.71	0.00	0.00	0.00	0.00
Sun Dec 02 03:59 AM	89.10	28.13	0.00	0.00	0.00	0.00





## ATM Port NRT QuickView



This report gives network managers and members of the NOC team ATM Port statistics in near real time. Statistics in the "Port Selection List" chart are averages over the last 6 hours of polling. Drilldowns show utilization, percentage of errors, percentage of discards, and GOS for the previous 24 hours of polled data.

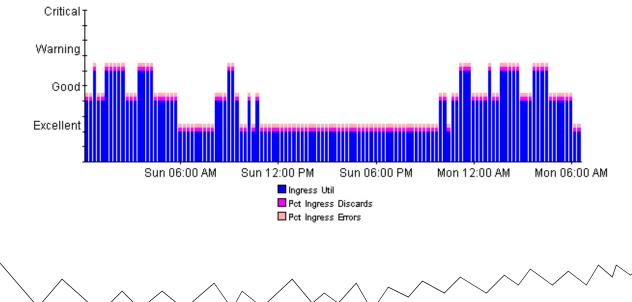
#### Port Selection List - Sorted by Highest Average Cells per Second (CPS)

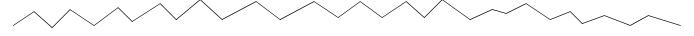
Mon, Dec 3 6:28 AM - Mon, Dec 3 6:29 AM

Device	Port	Description	Port Speed	Ingress Util	Egress Util	Ingress CPS	Egress CPS	
ATMSwitch2	146	New York to Paris	20352000	77.38	28.19	37141.59	13530.02	
ATMSwitch1	50	Torrance to the U.K.	40704000	36.20	23.86	34750.52	22907.82	4
ATMSwitch1	129	Torrance to Portland	40704000	32.56	26.44	31261.47	25379.11	4
ATMSwitch2	64	New York to Houston	20352000	62.02	51.52	29767.75	24727.71	4
ATMSwitch2	121	New York to D.C.	20352000	46.15	56.71	22149.79	27219.64	<b>-</b> 4
ATMSwitch2	90	New York to Tokyo	20352000	12.85	49.83	6170.36	23919.36	×
ATMSwitch1	71	Torrance to San Jose	40704000	21.30	21.60	20448.86	20734.82	×
ATMSwitch2	145	New York to Boston	20352000	36.82	19.28	17673.06	9252.35	×
ATMSwitch1	64	Torrance to New York	40704000	4.34	10.50	4165.01	10079.40	*

#### Ingress Grade of Service ATMSwitch2: 146

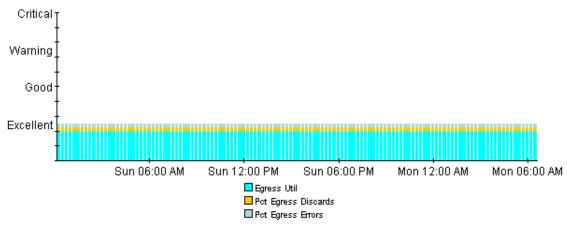
Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM





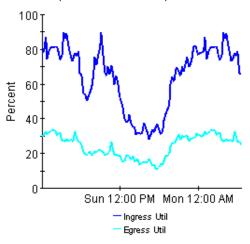
#### Egress Grade of Service ATMSwitch2: 146

Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM

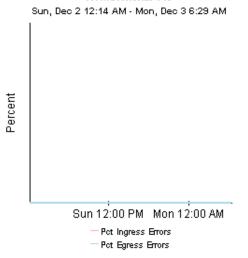


#### Ingress and Egress Utilization ATMSwitch2: 146

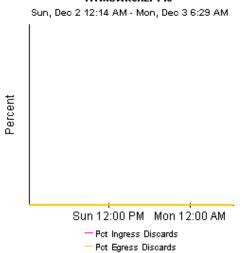
Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM



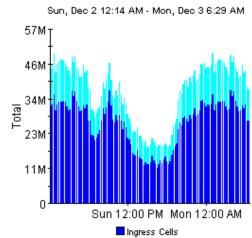
#### Percentage of Ingress and Egress Errors ATMSwitch2: 146



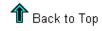
#### Percentage of Ingress and Egress Discards ATMSwitch2: 146



#### Ingress and Egress Cell Counts ATMSwitch2: 146



☐ Egress Cells





# ATM Port Daily QuickView

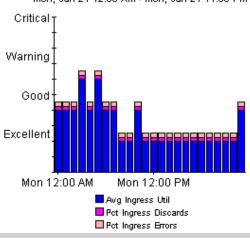


The ATM Daily Port Quick/New gives the network management staff a detailed look at the performance of a single port when just the facts are needed. Drilldowns show utilization, GOS, percentge of errors, and percentage of discarded cells.

#### Daily Top Ten Ports Based on Highest Avg Utilization in Either Direction Mon, Jan 21, 2002 Pct Pct Pct Pct Port Ingress Egress Device Port Description Ingress Egress Ingress Egress Speed Util Util Discards Discards Errors Errors ATMSwitch2 146 New York to Paris 20352000 60.75 22.83 0.00 0.00 0.00 0.00 ATMSwitch2 New York to Houston 20352000 49.33 45.09 0.00 0.00 0.00 0.00 64 ATMSwitch2 121 New York to D.C. 20352000 39.86 45.35 0.00 0.00 0.00 0.00 ATMSwitch2 90 New York to Tokyo 20352000 9.30 40.42 0.00 0.00 0.00 0.00 ATMSwitch2 20352000 38.60 17.79 0.00 0.00 0.00 0.00 145 New York to Boston ATMSwitch1 40704000 31.78 0.00 0.00 0.00 0.00 50 Torrance to the U.K. 20.21 0.00 0.00 ATMSwitch1 Torrance to Portland 40704000 22.03 17.66 0.00 0.00 129 ATMSwitch1 Torrance to San Jose 40704000 11.22 12.88 0.00 0.00 0.00 0.00 71

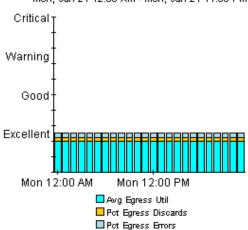
#### Hourly Ingress Grade of Service ATMSwitch2: 146

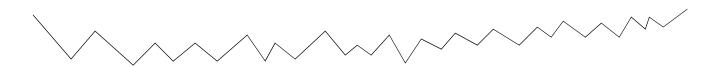
Mon, Jan 21 12:00 AM - Mon, Jan 21 11:00 PM



#### Hourly Egress Grade of Service ATMSwitch2: 146

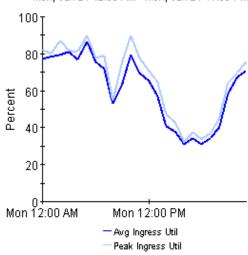
Mon, Jan 21 12:00 AM - Mon, Jan 21 11:00 PM





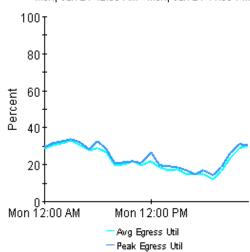
#### Hourly Ingress Utilization ATMSwitch2: 146

Mon, Jan 21 12:00 AM - Mon, Jan 21 11:00 PM



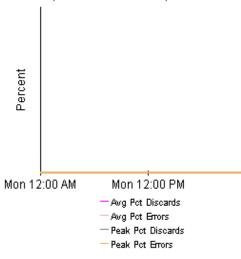
#### Hourly Egress Utilization ATMSwitch2: 146

Mon, Jan 21 12:00 AM - Mon, Jan 21 11:00 PM



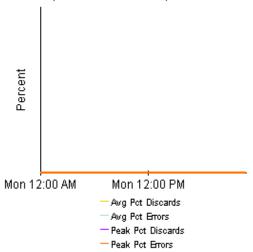
#### Hourly Ingress Pct Errors and Errors ATMSwitch2: 146

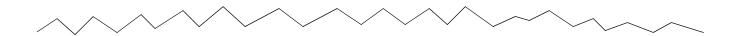
Mon, Jan 21 12:00 AM - Mon, Jan 21 11:00 PM



#### Hourly Egress Pct Errors and Discards ATMSwitch2: 146

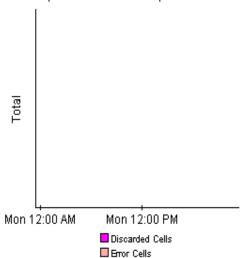
Mon, Jan 21 12:00 AM - Mon, Jan 21 11:00 PM





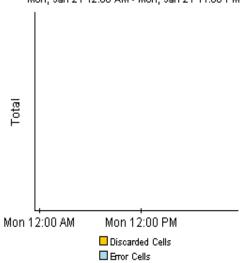
#### Hourly Ingress Total Errors and Discards ATMSwitch2: 146

Mon, Jan 21 12:00 AM - Mon, Jan 21 11:00 PM



#### Hourly Egress Total Errors and Discards ATMSwitch2: 146

Mon, Jan 21 12:00 AM - Mon, Jan 21 11:00 PM







# ATM Port Daily Executive Summary by Customer



This report provides CFOs, CIOs and other managers an overview of the performance of their ATM ports. Each chart shows key metrics aggregated for all ports for each customer. Key indicators of performance are shown including total volume, utilization, and percentage of errors and discards.

#### **Daily Customer Summaries**

Mon, Dec 10, 2001

#### Summary for All Acme Ports

Summary for All DeskTalk Ports

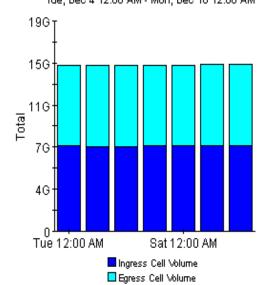
Summary for All Network Ports

Summary for All Unassigned Customer Ports



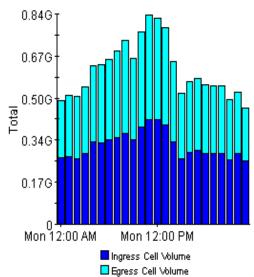
#### **Daily Cell Volume**

Tue, Dec 4 12:00 AM - Mon, Dec 10 12:00 AM



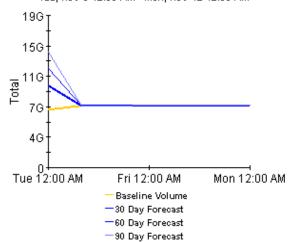
#### **Hourly Cell Volume**

Mon, Dec 10 12:00 AM - Mon, Dec 10 11:00 PM

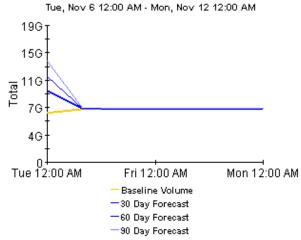


### Day of Week Baseline and Forecast Ingress Volume

Tue, Nov 6 12:00 AM - Mon, Nov 12 12:00 AM

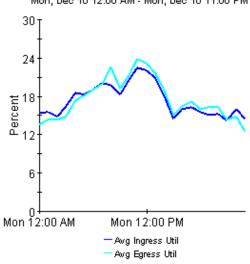


#### Day of Week Baseline and Forecast Egress Volume



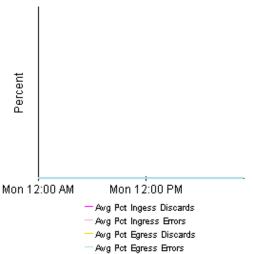
#### **Hourly Utilization**

Mon, Dec 10 12:00 AM - Mon, Dec 10 11:00 PM

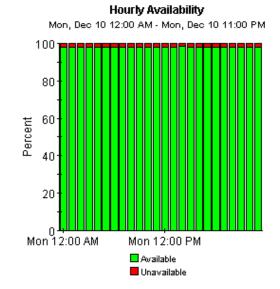


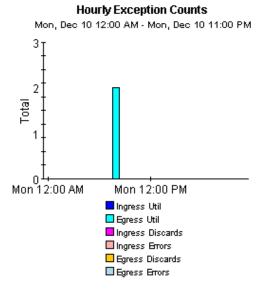
#### Hourly Percentage of Errors and Discards

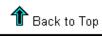
Mon, Dec 10 12:00 AM - Mon, Dec 10 11:00 PM











 $\overline{\mathbf{X}}$ 

# ATM Port Top Ten



The Top Ten report lists the ten top utilized ports based on highest utilized direction. These reports show ingress and egress average and peak utilization for yesterday and last month. Drilldowns show PVC endpoint utilization for each PVC endpoint connected to the port.

		Daily Top Ten Ports		<b>Highest</b> <i>i</i> Mon, Jan 21,	-	ation in Ei	ther Direc	tion		
Device	Port	Description	Port Speed	Ingress Util	Egress Util	Pct Ingress Discards	Pct Egress Discards	Pct Ingress Errors	Pct Egress Errors	
ATMSwitch2	146	New York to Paris	20352000	60.75	22.83	0.00	0.00	0.00	0.00	
ATMSwitch2	64	New York to Houston	20352000	49.33	45.09	0.00	0.00	0.00	0.00	<b>-4</b>
ATMSwitch2	121	New York to D.C.	20352000	39.86	45.35	0.00	0.00	0.00	0.00	<del>-</del> 4
ATMSwitch2	90	New York to Tokyo	20352000	9.30	40.42	0.00	0.00	0.00	0.00	<b>-</b> 40
ATMSwitch2	145	New York to Boston	20352000	38.60	17.79	0.00	0.00	0.00	0.00	<del>-49</del>
ATMSwitch1	50	Torrance to the U.K.	40704000	31.78	20.21	0.00	0.00	0.00	0.00	*
ATMSwitch1	129	Torrance to Portland	40704000	22.03	17.66	0.00	0.00	0.00	0.00	×
ATMSwitch1	71	Torrance to San Jose	40704000	11.22	12.88	0.00	0.00	0.00	0.00	×

### PVC Endpoints Associated with the Selected Port Sorted by Highest SCR Utilization in Either Direction

Mon, Jan 21 12:00 AM

Device	PVC	PVC Description	QoS	PVC Type	SCR	Reverse SCR	Avg Ingress SCR Util	Avg Egress SCR Util	
ATMSwitch2	146-0-34	New York to Paris	VBR-RT	ATM Channel	3642	3642	254.33	144.35	



#### Monthly Top Ten Ports Based on Highest Avg Utilization in Either Direction Dec 2001 Pct Pct Pct Pct Port Ingress Egress Device Description Ingress Egress Ingress Egress Port Speed Util Util Discards Discards Errors Errors ATMSwitch2 146 New York to Paris 20352000 60.22 22.66 0.00 0.00 0.00 0.00 ATMSwitch2 64 New York to Houston 20352000 50.14 44.68 0.00 0.00 0.00 0.00 ATMSwitch2 New York to D.C. 20352000 39.73 46.36 0.00 0.00 0.00 0.00 121 0.00 ATMSwitch2 90 New York to Tokyo 20352000 9.21 39.97 0.00 0.00 0.00 0.00 0.00 0.00 ATMSwitch2 145 New York to Boston 20352000 38.15 17.59 0.00 0.00 ATMSwitch1 50 Torrance to the U.K. 40704000 20.11 0.00 0.00 0.00 31.52 ATMSwitch1 129 Torrance to Portland 40704000 21.62 17.26 0.00 0.00 0.00 0.00 0.00 ATMSwitch1 71 Torrance to San Jose 40704000 10.92 12.61 0.00 0.00 0.00

# PVC Endpoints Associated with the Selected Port

Sorted by Highest Monthly SCR Utilization in Either Direction

Sat, Dec 1 12:00 AM

Device	PVC	PVC Description	QoS	PVC Type	SCR	Reverse SCR	Avg Ingress SCR Util	Avg Egress SCR Util	
ATMSwitch2	146-0-34	New York to Paris	VBR-RT	ATM Channel	3642	3642	252.25	144.49	





# **The SVC Reports**

The SVC folder contains the following reports:

- 1 Executive Summary by Customer (2 reports: daily and monthly)
- **2** Executing Summary by Region (2 reports: daily and monthly)
- 3 QuickView (3 reports: daily, monthly, and Near Real Time)
- 4 Snapshot (3 reports: daily, monthly, and Near Real Time)
- 5 Top Ten

As mentioned earlier in Chapter 1, Overview, the demo package contains fully populated samples of every report in the SVC folder. This chapter contains samples of the following reports:

- QuickView Daily
- Executive Summary by Customer Daily
- QuickView Near Real Time
- Top Ten

# ATM SVC Daily QuickView



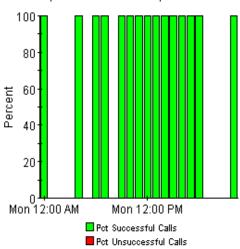
The ATM Daily SVC Endpoint Quick/New gives the network management staff a detailed look at the performance of a single SVC port when just the facts are needed. Drilldowns show percentage of successful calls, number of call attempts, number of rejections, and calls per second.

### Daily Top Ten SVC Ports by Call Attempts Mon, Jan 21, 2002

		Mon, Jan :	21, 2002			
Device	Description	Avg # of Active SVC	Attempts	Success Ratio - Originating	Success Ratio Terminating	-
ATMSwitch2	New York to Boston	25.73	177702.00	100.00	100.00	
ATMSwitch2	New York to San Jose	41.57	54023.00	100.00	100.00	4
ATMSwitch1	Torrance to Atlanta	28.47	32848.00	100.00	100.00	4
ATMSwitch1	Torrance to Nashua	1.07	31837.00	100.00	99.47	<b>⊸</b>
ATMSwitch1	Torrance to London	68.79	7542.00	100.00	99.91	<b>⊸⊈</b>
ATMSwitch1	Torrance to Los Angeles	40.44	7137.00	100.00	99.24	*
ATMSwitch1	Torrance to New York	34.73	6992.00	100.00	100.00	*
ATMSwitch2	New York to Paris	17.68	2342.00	100.00	100.00	*
ATMSwitch2	New York to Toronto	16.72	2340.00	100.00	100.00	*

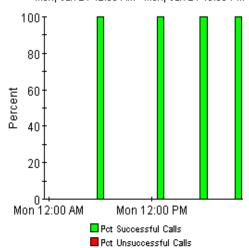
#### Hourly Success Ratio - Originating Port ATMSwitch2: 68

Mon, Jan 21 12:00 AM - Mon, Jan 21 10:00 PM

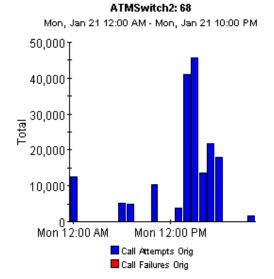


#### Hourly Success Ratio - Terminating Port ATMSwitch2: 68

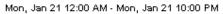
Mon, Jan 21 12:00 AM - Mon, Jan 21 10:00 PM

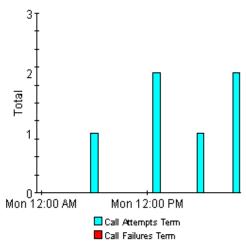


# Originating Hourly Call Attempts and Failures



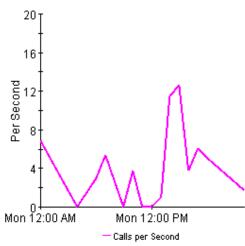
#### Terminating Hourly Call Attempts and Failures ATMSwitch2: 68





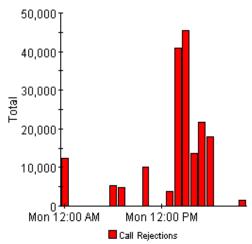
#### Hourly Calls per Second ATMSwitch2: 68

Mon, Jan 21 12:00 AM - Mon, Jan 21 10:00 PM



#### Hourly Call Rejections ATMSwitch2: 68

Mon, Jan 21 12:00 AM - Mon, Jan 21 10:00 PM







# ATM SVC Daily Executive Summary by Customer



This report provides CFOs, CIOs, and other managers an overview of the performance of their ATM SVCs. Each chart shows key metrics aggregated for all SVCs for each customer by. Key indicators of performance are shown including percentage of successful calls, calls per second, and number of failed calls.

#### **Daily Customer Summaries**

Sun, Dec 2, 2001

#### Summary for All Acme SVC Ports

Summary for All DeskTalk SVC Ports

Summary for All Network SVC Ports

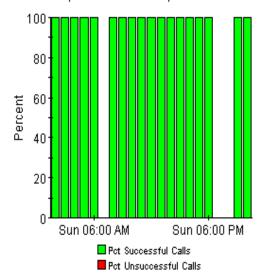
Summary for All Unassigned Customer SVC Ports





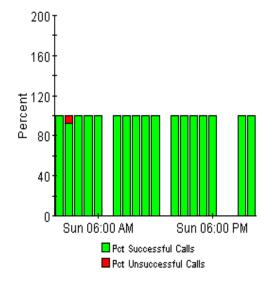
# Hourly Success Ratio Call Attempts Originating from These Ports

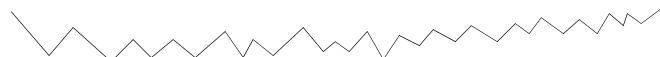
Sun, Dec 2 2:00 AM - Sun, Dec 2 10:00 PM



# Hourly Success Ratio Call Attempts Terminating on These Ports

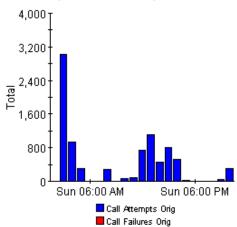
Sun, Dec 2 2:00 AM - Sun, Dec 2 10:00 PM





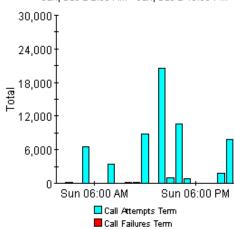
#### Hourly Call Attempts and Failures Originating from These Ports

Sun, Dec 2 2:00 AM - Sun, Dec 2 10:00 PM



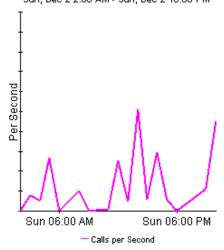
#### Hourly Call Attempts and Failures Terminating on These Ports

Sun, Dec 2 2:00 AM - Sun, Dec 2 10:00 PM

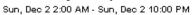


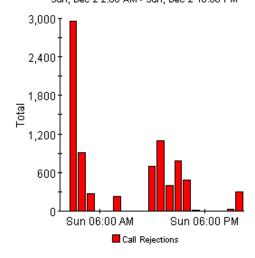
#### **Hourly Calls per Second**

Sun, Dec 2 2:00 AM - Sun, Dec 2 10:00 PM



#### **Hourly Call Rejections**









# ATM SVC NRT QuickView

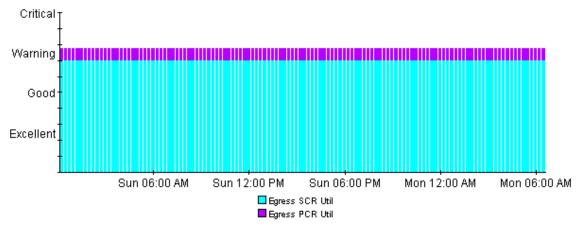


This report gives network managers and members of the NOC team ATM SVC port statistics in near real time. Statistics in the "SVC Selection List" chart are averages over the last 6 hours of polling. Drilldowns show "as polled" data including percentage of successful calls, calls per second, and call rejections.

SVC Port Selection List - Sorted by Call Attempts  Mon, Dec 3 4:43 AM					
Device	Description	Call Attempts	Success Ratio - Originating	Success Ratio - Terminating	
ATMSwitch2	New York to Boston	9989	100.00	100.00	
ATMSwitch1	Torrance to Atlanta	8964	100.00	99.99	<del>-4</del>
ATMSwitch2	New York to San Jose	5506	100.00	99.98	<b>-⊈</b>
ATMSwitch1	Torrance to Nashua	4804	100.00	99.13	<b>-</b> ⊈
ATMSwitch1	Torrance to London	2971	100.00	99.38	<b>-4</b>
ATMSwitch1	Torrance to Chicago	1911	100.00	No Call Attempts	*
ATMSwitch1	Torrance to Los Angeles	472	100.00	98.53	*
ATMSwitch1	Torrance to New York	386	100.00	No Call Attempts	×
ATMSwitch1	Torrance to Boston	162	100.00	85.71	<b>×</b>

#### PVC Egress Grade of Service ATMSwitch1: 50-0-34

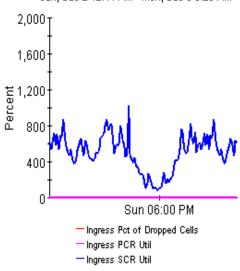
Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM





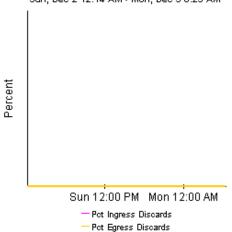
# Ingress SCR and PCR Utilization

ATMSwitch1: 50-0-34 Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM



#### Percentage of Ingress and Egress Discards ATMSwitch2: 146

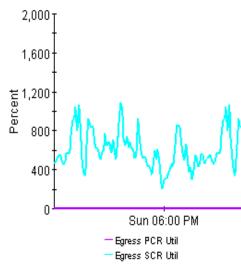
Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM



### 1 Back to Top

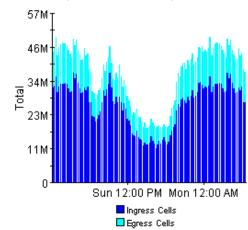
#### Egress SCR and PCR Utilization ATMSwitch1: 50-0-34

Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM



#### Ingress and Egress Cell Counts ATMSwitch2: 146

Sun, Dec 2 12:14 AM - Mon, Dec 3 6:29 AM



 $\overline{\mathbf{X}}$ 

# ATM SVC Top Ten



The Top Ten report shows the top ten SVC ports based on call attempts and calls per second on a daily and monthly basis. These reports help network managers determine which SVC ports are being used the most.

#### Daily Top Ten SVC Ports by Call Attempts

Mon, Jan 21, 2002

Device	Description	Avg # of Active SVC	Attempts	Success Ratio - Originating	Success Ratio - Terminating
ATMSwitch2	New York to Boston	25.73	177708	100.00	100.00
ATMSwitch2	New York to San Jose	41.57	54058	100.00	100.00
ATMSwitch1	Torrance to Atlanta	28.47	33324	100.00	100.00
ATMSwitch1	Torrance to Nashua	1.07	32026	100.00	99.47
ATMSwitch1	Torrance to London	68.79	9429	100.00	99.91
ATMSwitch1	Torrance to Los Angeles	40.44	7269	100.00	99.24
ATMSwitch1	Torrance to New York	34.73	7000	100.00	100.00
ATMSwitch2	New York to Toronto	16.72	2367	100.00	100.00
ATMSwitch2	New York to Paris	17.68	2348	100.00	100.00
ATMSwitch1	Torrance to Chicago	56.51	1943	100.00	0.00

#### Monthly Top Ten SVC Ports by Call Attempts

Dec 2001

Device	Description	Avg # of Active SVC	Attempts	Success Ratio - Originating	Success Ratio - Terminating
ATMSwitch2	New York to Boston	25.67	2300217	100.00	100.00
ATMSwitch2	New York to San Jose	41.51	697276	100.00	100.00
ATMSwitch1	Torrance to Atlanta	28.46	429874	100.00	100.00
ATMSwitch1	Torrance to Nashua	1.06	416620	100.00	99.49
ATMSwitch1	Torrance to London	68.50	119827	100.00	99.91
ATMSwitch1	Torrance to Los Angeles	40.44	94055	100.00	99.28
ATMSwitch1	Torrance to New York	34.72	90616	100.00	100.00
ATMSwitch2	New York to Toronto	16.69	30631	100.00	100.00
ATMSwitch2	New York to Paris	17.66	30380	100.00	100.00
ATMSwitch1	Torrance to Chicago	56.51	23577	100.00	0.00



### Daily Top Ten SVC Ports by Calls Per Second

Mon, Jan 21, 2002

Device	Description	Avg # of Active SVC	Calls per Second	Success Ratio - Originating	Success Ratio - Terminating
ATMSwitch2	New York to Boston	25.73	4.94	100.00	100.00
ATMSwitch2	New York to San Jose	41.57	3.00	100.00	100.00
ATMSwitch1	Torrance to Atlanta	28.47	0.43	100.00	100.00
ATMSwitch1	Torrance to Nashua	1.07	0.37	100.00	99.47
ATMSwitch1	Torrance to London	68.79	0.28	100.00	99.91
ATMSwitch1	Torrance to New York	34.73	0.19	100.00	100.00
ATMSwitch1	Torrance to Los Angeles	40.44	0.10	100.00	99.24
ATMSwitch1	Torrance to Chicago	56.51	0.07	100.00	0.00
ATMSwitch2	New York to Toronto	16.72	0.07	100.00	100.00
ATMSwitch2	New York to Paris	17.68	0.07	100.00	100.00

### Monthly Top Ten SVC Ports by Calls Per Second

Dec 2001

Device	Description	Avg # of Active SVC	Calls per Second	Success Ratio - Originating	Success Ratio - Terminating
ATMSwitch2	New York to Boston	25.67	4.94	100.00	100.00
ATMSwitch2	New York to San Jose	41.51	3.01	100.00	100.00
ATMSwitch1	Torrance to Atlanta	28.46	0.43	100.00	100.00
ATMSwitch1	Torrance to Nashua	1.06	0.37	100.00	99.49
ATMSwitch1	Torrance to London	68.50	0.28	100.00	99.91
ATMSwitch1	Torrance to New York	34.72	0.19	100.00	100.00
ATMSwitch1	Torrance to Los Angeles	40.44	0.10	100.00	99.28
ATMSwitch2	New York to Toronto	16.69	0.07	100.00	100.00
ATMSwitch2	New York to Paris	17.66	0.07	100.00	100.00
ATMSwitch1	Torrance to Chicago	56.51	0.06	100.00	0.00



₩

# **Editing Tables and Graphs**

Any table or graph can be viewed in several ways. While the default view is usually adequate, you can easily change to a different view. If you are using the Report Viewer application, right-click the object and select a different view. If you are looking at a report using the Web Access Server, click the **Edit Table** or **Edit Graph** icons.

## **View Options for Tables**

Right-clicking a table, or selecting **Edit Table**, opens a list of table view options.

				-	
Device	Interface	ЕÆ	Customer	Descr.	Baseline Avg.
24.13.17.1	5	F	Concert	Cable5/0	In:2 Out:5
24.13.17.1	5	F	Concert	Cable5/0	In:2 Out:5
24.13.17.1	5	F	Concert	Cable5/0	In:3 Out:5
24.13.17.1	5	F	Concert	Cable5/0	In:2 Out:5
24.13.17.1	5	F	Concert	Cable5/0	In:2 Out:4
24.13.17.1	6	F	Concert	Cable6/0	Set Time Period,
24.13.17.1	5	F	Concert	Cable5/0	
24.13.17.1	6	F	Concert	Cable6/0	Change Constraint Values
24.13.17.1	6	F	Concert	Cable6/0	Select Nodes/Interfaces
24.13.17.1	6	F	Concert	Cable6/0	Change Max Rows
					View in new Frame
					Print Table
					Export Element as CSV
					Delete Table

Select **Set Time Period** to alter the relative time period (relative to now) or set an absolute time period. The Set Time Period window opens.

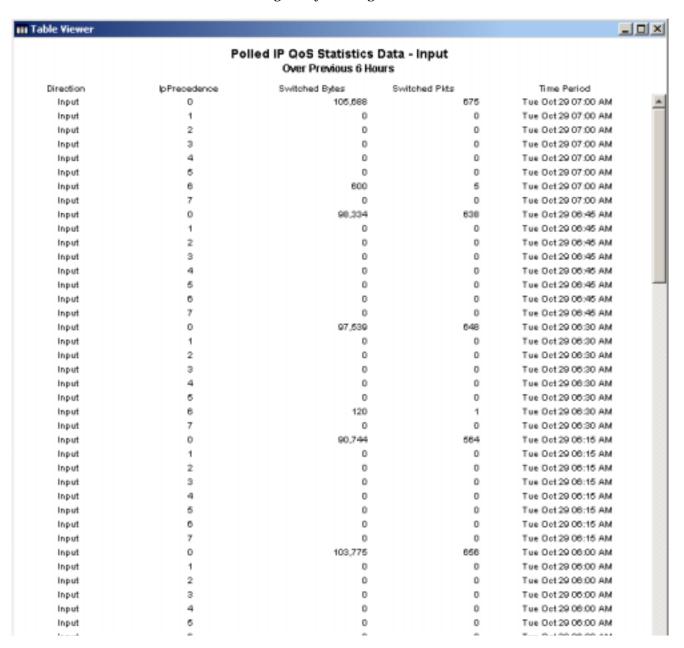
You may shorten the period of time covered by the table from, for example, 42 days to 30 days or to 7 days. If you are interested in a specific period of time that starts in the past and stops *before* yesterday, click **Use Absolute Time** and select a Start Time and an End Time.

Select **Change Constraint Values** to loosen or tighten a constraint, thereby raising or lowering the number of elements that conform to the constraint. The Change Constraint Values window opens. To loosen a constraint, set the value lower; to tighten a constraint, set the value higher.

The **Select Nodes/Interfaces** allows you to change the scope of the table by limiting the table to specific nodes, specific interfaces, or a specific group of nodes or interfaces. The Select Node Selection Type window opens.

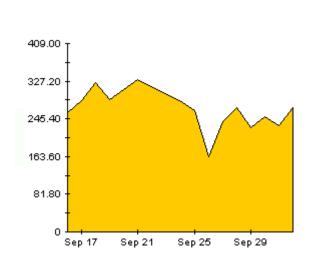
Change Max Rows increases or decreases the number of rows in a table. The default is 50. If you expand the default, the table may take more time to open. If you are trending a large network, using the default ensures that the table opens as quickly as possible.

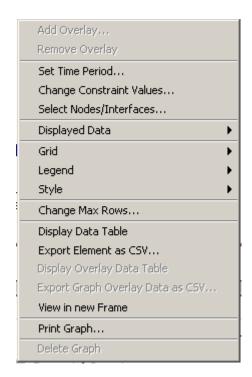
**View in new Frame** opens the table in a Table Viewer window, shown below. If necessary, make the data in the table more legible by resizing the window.



# **View Options for Graphs**

Right-click any graph to open a list of view options.





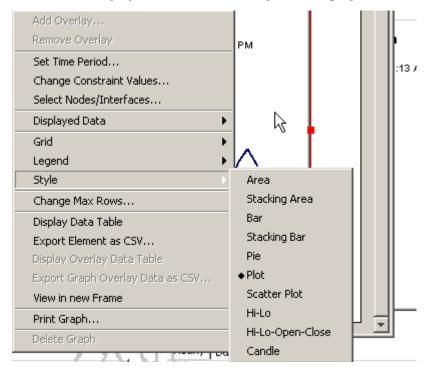
The following table provides details about each option.

Option	Function
Set Time Period	Same as the table option shown above.
Change Constraint Values	Same as the table option shown above.
Select Nodes/Interfaces	Same as the table option shown above.
Displayed Data	For every point on a graph display data in a spreadsheet.
Grid	Add these to the graph:
	X axis grid lines
	Y axis grid lines
	X and Y axis grid lines
Legend	Delete or reposition the legend.
Style	See the illustrations below.
Change Max Rows	Same as the table option shown above.
Display Data Table	See below.

Option	Function		
Export Element as CSV	Same as the table option shown above.		
View in New Frame	Opens graph in a Graph Viewer window.		
Print Graph	Same as the table option shown above.		

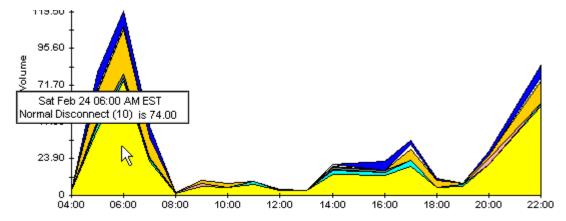
## **Style Options**

Select **Style** to display a list of seven view options for graphs.



#### Style > Area

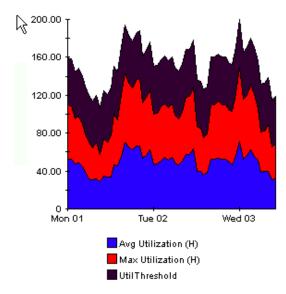
The plot or bar chart changes to an area graph. While relative values and total values are easy to view in this format, absolute values for smaller data types may be hard to see. Click anywhere within a band of color to display the exact value for that location



To shorten the time span of a graph, press SHIFT+ALT and use the left mouse button to highlight the time span you want to focus on. Release the mouse button to display the selected time span.

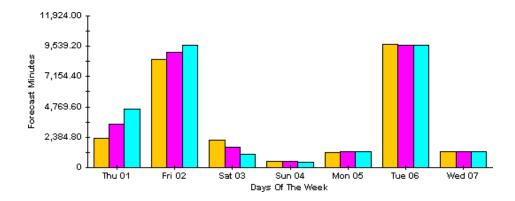
#### Style > Stacking Area

The area or plot graph changes to a stacking area graph. This view is suitable for displaying a small number of variables.



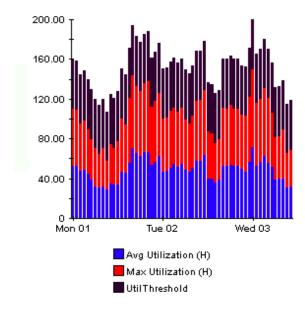
### Style > Bar

The graph changes to a bar chart. This view is suitable for displaying relatively equal values for a small number of variables. There are three variables in the graph below.



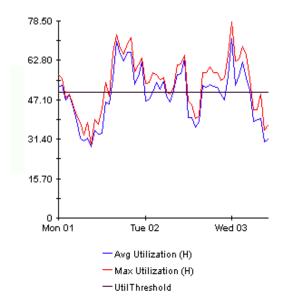
### Style > Stacking Bar

The plot or area graph changes to a stacking bar chart. If you increase the width of the frame, the time scale becomes hourly. If you increase the height of the frame, the call volume shows in units of ten.



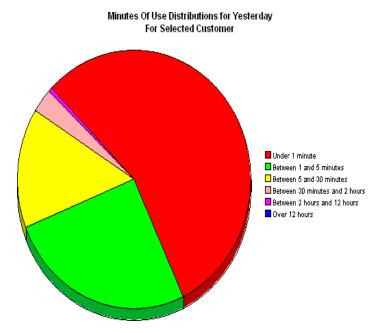
### Style > Plot

Bands of color in an area graph change to lines. If you adjust the frame width, you can make the data points align with hour; if you adjust the frame height, you can turn call volume into whole numbers.



### Style > Pie

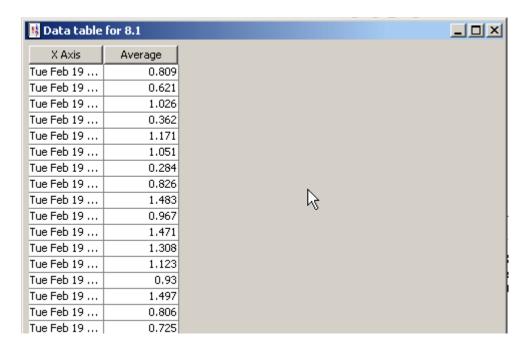
An area graph becomes a pie chart. Bands in an area graph convert to slices of a pie and the pie constitutes a 24-hour period. This view is helpful when a small number of data values are represented and you are looking at data for one day.



If you are looking at data for more than one day, you will see multiple pie graphs, one for each day.

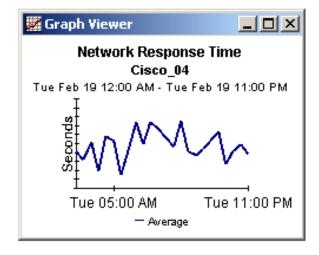
### **Display Data Table**

This option changes a graph into a spreadsheet.



#### **View in New Frame**

The graph opens in a Graph Viewer window. Improve legibility by resizing the window.



# Index

A	G
ATM ifEntry Datapipe 1.0, 8	generic reports Availability, 9 Capacity Planning, 9 Configuration, 9 Executive Summary, 9 Forecast, 9 Hot Spots, 9 QuickView and NRT QuickView, 9 Top Ten, 9 graph view options, 93 grid options, 95 group filters, 10
ATM MIB2 Interfaces Datapipe 2.0, 8	
capacity planning, 9 Change Interface Customer (form), 43 Change Interface Description (form), 44 Change Interface Location (form), 43 Change Interface Properties (form), 41 change max rows option, 95 Common Property Tables, 15	
customer-specific reports, <b>10</b>	1
default import process run time, 39 default run time, 39 default source directory path, 32 demo package, 11, 15, 21 discovery, 31 Display Data Table, 95 displayed data option, 95 distributed systems, 13, 20  E export process for property data, 30 extracting packages from the distribution CD, 21	importing properties, 11 import process for property data, 30 installing Interface Reporting 3.0, 20, 21 IR_DevPort_Hourly_Process.pro, 26  L launching reports from NNM, 10 legend options, 95  N Network Node Manager, 10  O OVPI Timer, 17, 22  P PCR (peak cell rate), 11, 29
	гск (реак сеп гате), <b>11</b> , <b>29</b>

```
property data files
   creating the files manually, 32
   editing guidelines, 31
   example of, 32
   export command, 31
   exporting from a network provisioning system,
   format of ATM_Port_Property.dat, 36
   format of ATM_SVC_Property.dat, 37
   generating the files, 29
   import command, 38
   names of, 29
   required utilization values, 33
   reserved values, 37
property import datapipe, 11, 29
provisioning, 11, 29
R
removing Interface Reporting 3.0, 23
report parameters, 10
S
SCR (sustained cell rate), 11, 29
service level management, 9
SHIRDevPorts table, 27
style options for graphs, 95
Т
Table Manager, 27
table view options, 93
U
updating property information, 30, 38
upgrading Common Property Tables, 20
upgrading the Interface Reporting package, 15
Use Absolute Time, 93
V
version history, 8
view in new frame, 94
```