Tivoli Netcool/Proviso 4.3-Y

Document Revision R2E1

IBM

ADVA Optical Metro Ethernet 2.2.0.0 Technology Pack

User Guide

> **Note**
>
> Before using this information and the product it supports, read the information in Notices on page 19.

Contents

Chapter 1: Introduction

This manual describes the IBM® Tivoli® Netcool®/Proviso® ADVA Optical Metro Ethernet Technology Pack. Specifically, the manual describes the reports that display information about the devices and technologies that operate in the ADVA Optical Metro Ethernet environment.

Audience

The audiences for this manual are the network administration engineers at IBM customer sites who will install, configure, and use the ADVA Optical Metro Ethernet Technology Pack as part of their Tivoli Netcool/Proviso installation. IBM Professional Services engineers may also find this manual useful.

To install and use the ADVA Optical Metro Ethernet Technology Pack, you should have a working knowledge of the following subjects:

- Tivoli Netcool/Proviso DataMart

- TCP/IP networks

- Telecommunications network management

- Administration of the operating system

The audiences should also be familiar with the specific technology that the ADVA Optical Metro Ethernet Technology Pack deals with, in this case ADVA Optical Metro Ethernet.

Organization

This guide is organized as follows:

- Chapter 1, *Introduction*

  Provides a general introduction to technology packs.

- Chapter 2, *Devices and Services*

  Provides an overview of the device technology supported by the technology pack.

- Chapter 3, *Supported reports*

  Provides information about the reporter sets and key performance indicators (KPIs) that the ADVA Optical Metro Ethernet Technology Pack provides for each device operating in the ADVA Optical Metro Ethernet environment.

- Chapter 4, *Configuration*

  Describes how to configure the ADVA Optical Metro Ethernet Technology Pack.
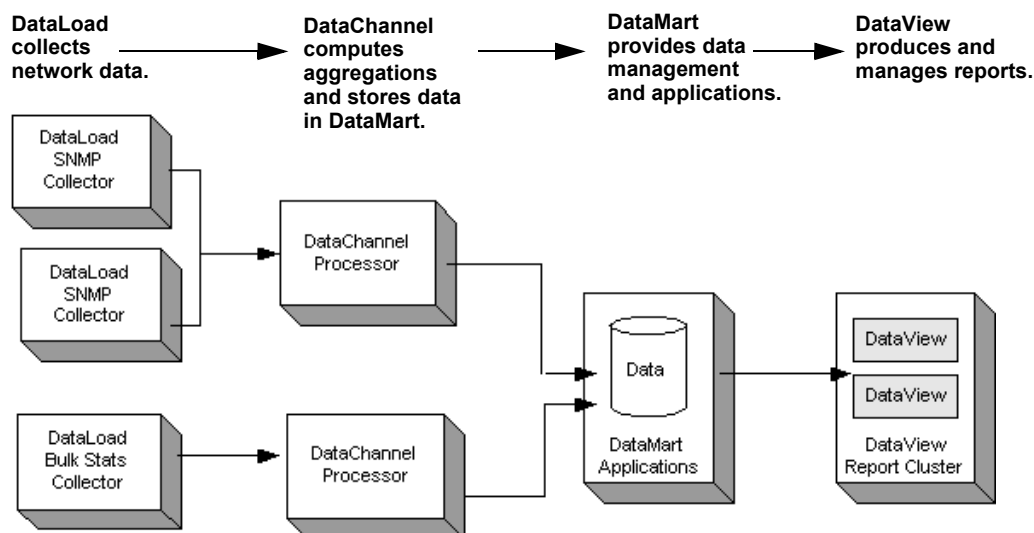
The Tivoli Netcool/Proviso product suite

Tivoli Netcool/Proviso is made up of the following components:

- **Tivoli Netcool/Proviso DataMart** is a set of management, configuration and troubleshooting GUIs that the Tivoli Netcool/Proviso system administrator uses to define policies and configuration, as well as to verify and troubleshoot operations.

- **Tivoli Netcool/Proviso DataLoad** provides flexible, distributed data collection and data import of SNMP and non-SNMP data to a centralized database.

- **Tivoli Netcool/Proviso DataChannel** aggregates the data collected through Tivoli Netcool/Proviso DataLoad for use by the Tivoli Netcool/Proviso DataView reporting functions. It also processes on-line calculations and detects real-time threshold violations.

- **Tivoli Netcool/Proviso DataView** is a reliable application server for on-demand, web-based network reports.

- **Tivoli Netcool/Proviso Technology Packs** extend the Tivoli Netcool/Proviso system with service-ready reports for network operations, business development, and customer viewing.

Figure 1 shows the different Tivoli Netcool/Proviso modules.

Figure 1: Tivoli Netcool/Proviso modules

Tivoli Netcool/Proviso documentation

IBM provides the following Tivoli Netcool/Proviso documentation:

- release notes
- configuration recommendations
- user guides
- technical notes
- online help

Chapter 2: Devices and Services

This chapter discusses the following topics:

Overview

This chapter provides a summary of the ADVA Optical Metro Ethernet device technology and the associated Management Information Bases (MIBs), which the ADVA Optical Metro Ethernet Technology Pack is designed to support.

> **Note:** *The ADVA Optical Metro Ethernet Technology Pack operates with ADVA Optical Metro Ethernet devices running Version 3.4.1 of the operating system.*

Summary of Device Technology

Metro Ethernet Services using Ethernet technology deliver cost-effective, high-speed connectivity for metropolitan-area network (MAN) and wide-area network (WAN) applications. This technology might be of interest to customers who are already using Ethernet throughout their local-area networks (LANs). Metro Ethernet Services provide scalable bandwidth in flexible increments with simplified management and faster, lower-cost provisioning.

The ADVA Optical Metro Ethernet Technology Pack is designed to work with the ADVA Optical Metro Ethernet by reporting on the following categories of metrics:

- Ethernet Virtual Circuit (EVC)
- LAN Port
- WAN Port

> **Note:** *It is impractical and beyond the scope of this Technology Pack User Guide to provide exhaustive descriptions and explanations of the ADVA Optical Metro Ethernet technology. See the documentation that ships with the previously listed devices and associated services for detailed information on the capabilities and features of the devices and services.*

Supported MIBs

The ADVA Optical Metro Ethernet Technology Pack uses the following MIBs for inventory and data collection:

— `ETHERNET-PB-SERVICES-MIB` (located in the `etherServicesPB.my` file)

— `IF-MIB`

> **Note:** *The ADVA Optical Metro Ethernet Technology Pack makes use of the RFC1213-MIB (located in the file named* `rfc1213-MIB-II`*), which is a standard MIB used to describe general objects related to TCP/IP management information. More specifically, the ADVA Optical Metro Ethernet Technology Pack uses objects from the RFC1213-MIB in its SNMP collection formulas.*

Chapter 3: Supported reports

This chapter discusses the following topics:

Overview

The ADVA Optical Metro Ethernet Technology Pack supplies a set of reports to display information about the devices and activity associated with the ADVA Optical Metro Ethernet environment.

The reports contain metrics that are generated by the formulas that this technology pack provides. The metric names are the same as the names of the formulas that generate them. For information about a metric that is listed for a particular report, see the description of the associated formula in the Collection Formulas section of the *IBM Tivoli Netcool/Proviso ADVA Optical Metro Ethernet 2.2.0.0 Technology Pack Reference*.

For information about how to navigate to a particular report on the DataView portal, see the NOC Reporting tree in the Subelement Groups section of the *IBM Tivoli Netcool/Proviso ADVA Optical Metro Ethernet 2.2.0.0 Technology Pack Reference*. Note, however, that some reports are not explicitly deployed on the portal navigation path. You can display such a report by drilling down to it from other reports.

For information about understanding report types, creating reports, configuring reports, viewing and working with reports, and deploying reports, see the *IBM Tivoli Netcool/Proviso DataView User's Guide*. This Technology Pack User Guide assumes an understanding of the report-related topics discussed in the *IBM Tivoli Netcool/Proviso DataView User's Guide*.

Reporter sets

A reporter set contains a group of reporters that together provide information about a specific technology or vendor device. Technology pack developers use the Reporter Set Wizard to choose the type of template on which to base the reporter set. Technology packs use reporter sets as the framework for defining reports.

The ADVA Optical Metro Ethernet Technology Pack reports display, on a Web portal, the collected information about the devices and technologies that operate in the ADVA Optical Metro Ethernet environment.

Table 1 shows a summary of the reports in each reporter set provided by the ADVA Optical Metro Ethernet Technology Pack.

Table 1: Reporter set summary

Reporter set	Dashboard	Group	Resource	Detail	Threshold
EVC	0	1	1	1	0
LAN Port	0	2	2	2	0
LAN/WAN	0	1	1	1	0
QoS	0	1	1	1	0
TOTALS	**0**	**5**	**5**	**5**	**0**

See the *IBM Tivoli Netcool/Proviso DataView User's Guide* for more information about reporter sets and the Reporter Set Wizard.

Reporter set tree

The ADVA Optical Metro Ethernet Technology Pack provides the following reporter sets, which are listed as they appear in the DataView Navigator tree structure:

```
AP Adva Optical Metro Ethernet
    QoS
    Port
        LAN Port
        LAN/WAN
    EVC
```

Reporter set contents

This section describes the contents of the reporter sets provided in the ADVA Optical Metro Ethernet Technology Pack, including the key performance indicators (KPIs) for each report.

QoS

QOS Summary Resource

KPIs

- Bytes Tail Dropped
- Bytes Sent
- Tail Dropped Throughput (bps)
- Sent Throughput (bps)
- Frames Dequeued
- Frames Tail Dropped

QOS Summary Group

KPIs

- Bytes Tail Dropped
- Bytes Sent
- Tail Dropped Throughput (bps)
- Sent Throughput (bps)
- Frames Dequeued
- Frames Tail Dropped

QOS Summary Details

KPIs

- Bytes Tail Dropped
- Bytes Sent
- Tail Dropped Throughput (bps)
- Sent Throughput (bps)
- Frames Dequeued
- Frames Tail Dropped

Charts

- Bytes Tail Dropped
- Tail Dropped Throughput (bps)
- Sent Throughput (bps)
- Bytes Sent

- Frames Tail Dropped
- Frames Dequeued

Port

LAN Port

LAN Port Drops and Discards Summary Resource

KPIs

- Egress Yellow Frame Discards
- Egress Red Frame Discards
- Ingress Yellow Frame Discards
- Egress Tail Dropped Octets
- Egress Tail Dropped Frames
- Ingress Tail Dropped Octets
- Ingress Tail Dropped Frames
- Ingress Red Frame Discards

LAN Port Drops and Discards Summary Group

KPIs

- Egress Yellow Frame Discards
- Egress Red Frame Discards
- Ingress Yellow Frame Discards
- Egress Tail Dropped Octets
- Egress Tail Dropped Frames
- Ingress Tail Dropped Octets
- Ingress Tail Dropped Frames
- Ingress Red Frame Discards

LAN Port Drops and Discards Summary Details

KPIs

- Egress Yellow Frame Discards
- Egress Red Frame Discards
- Ingress Yellow Frame Discards
- Egress Tail Dropped Octets
- Egress Tail Dropped Frames
- Ingress Tail Dropped Octets
- Ingress Tail Dropped Frames
- Ingress Red Frame Discards

Charts

- Egress Red Frame Discards
- Egress Tail Dropped Frames
- Ingress Yellow Frame Discards
- Ingress Red Frame Discards
- Egress Yellow Frame Discards
- Egress Tail Dropped Octets
- Ingress Tail Dropped Octets
- Ingress Tail Dropped Frames

LAN Port Traffic Management Summary Details

KPIs

- Egress Yellow Frame Count
- Ingress Green Frame Count
- Ingress Dequeued Frames
- Egress Green Frame Count
- Ingress Yellow Frame Count
- Egress Dequeued Frames

Charts

- Ingress Green Frame Count
- Ingress Yellow Frame Count
- Egress Yellow Frame Count
- Egress Green Frame Count
- Egress Dequeued Frames
- Ingress Dequeued Frames

LAN Port Traffic Management Summary Resource

KPIs

- Egress Yellow Frame Count
- Ingress Green Frame Count
- Ingress Dequeued Frames
- Egress Green Frame Count
- Ingress Yellow Frame Count
- Egress Dequeued Frames

LAN Port Traffic Management Summary Group

KPIs

- Egress Yellow Frame Count
- Ingress Green Frame Count

- Ingress Dequeued Frames
- Egress Green Frame Count
- Ingress Yellow Frame Count
- Egress Dequeued Frames

LAN/WAN

Port Throughput Summary Group

KPIs

- Inbound Broadcast (pps)
- Inbound Multicast (pps)
- Inbound Unicast (pps)
- Inbound Throughput (bps)
- Outbound Broadcast (pps)
- Outbound Multicast (pps)
- Outbound Unicast (pps)
- Outbound Throughput (bps)

Port Throughput Summary Resource

KPIs

- Inbound Broadcast (pps)
- Inbound Multicast (pps)
- Inbound Unicast (pps)
- Inbound Throughput (bps)
- Outbound Broadcast (pps)
- Outbound Multicast (pps)
- Outbound Unicast (pps)
- Outbound Throughput (bps)

Port Throughput Summary Details

KPIs

- Inbound Broadcast (pps)
- Inbound Multicast (pps)
- Inbound Unicast (pps)
- Inbound Throughput (bps)
- Outbound Broadcast (pps)
- Outbound Multicast (pps)
- Outbound Unicast (pps)
- Outbound Throughput (bps)

EVC

EVC Traffic Summary Details

KPIs

- Ingress Dropped Yellow Frames
- Ingress Yellow Frames
- Ingress Tail Dropped Frames
- Ingress Dropped Red Frames
- Egress Dropped Yellow Frames
- Egress Yellow Frames
- Egress Tail Dropped Frames
- Egress Dropped Red Frames

Charts

- Egress Dropped Red Frames
- Egress Yellow Frames
- Ingress Dropped Yellow Frames
- Ingress Dropped Red Frames
- Egress Dropped Yellow Frames
- Egress Tail Dropped Frames
- Ingress Tail Dropped Frames
- Ingress Yellow Frames

EVC Traffic Summary Group

KPIs

- Ingress Dropped Yellow Frames
- Ingress Yellow Frames
- Ingress Tail Dropped Frames
- Ingress Dropped Red Frames
- Egress Dropped Yellow Frames
- Egress Yellow Frames
- Egress Tail Dropped Frames
- Egress Dropped Red Frames

EVC Traffic Summary Resource

KPIs

- Ingress Dropped Yellow Frames
- Ingress Yellow Frames
- Ingress Tail Dropped Frames

- Ingress Dropped Red Frames
- Egress Dropped Yellow Frames
- Egress Yellow Frames
- Egress Tail Dropped Frames
- Egress Dropped Red Frames

Key performance indicators

Table 2 lists all of the key performance indicators (KPIs) supported by the ADVA Optical Metro Ethernet Technology Pack.

Table 2: Key performance indicators

KPI	Comment
Bytes Sent	The number of Bytes Transmitted
Bytes Tail Dropped	The number of Bytes Tail Dropped
Egress Dequeued Frames	Only applicable when port is in connection-oriented, TLS mode. The number of Frames Dequeued (FD) in the Egress direction
Egress Dropped Red Frames	Frames Marked Red and Dropped - Received on the Flow in the Egress direction
Egress Dropped Yellow Frames	Frames Marked Yellow and Dropped - Received on the Flow in the Egress direction
Egress Green Frame Count	Only applicable when Port is in Connection-oriented, TLS mode. The number of Frames Marked Green in the Egress direction.
Egress Red Frame Discards	Only applicable when Port is in Connection-oriented, TLS mode. The number of Frames Marked Red and Discarded in the egress direction.
Egress Tail Dropped Frames	Frames Tail Dropped - Received on the Flow in the Egress direction
Egress Tail Dropped Octets	Only applicable when Port is in Connection-oriented, TLS mode. The Bytes Tail Dropped in the egress direction.
Egress Yellow Frame Count	Only applicable when Port is in Connection-oriented, TLS mode. The number of Frames Marked Yellow in the egress direction.
Egress Yellow Frame Discards	Only applicable when Port is in Connection-oriented, TLS mode. The number of Frames Marked Yellow and Discarded in the egress direction.
Egress Yellow Frames	Frames Marked Yellow - Received on the Flow in the Egress direction
Frames Dequeued	The number of Frames Dequeued
Frames Tail Dropped	The number of Frames Tail Dropped
Inbound Broadcast (pps)	Number of packets received on an interface and delivered to a higher layer that were addressed to a broadcast address at this layer
Inbound Multicast (pps)	Number of packets received on an interface and delivered to a higher layer that were addressed to a multicast address at this layer.
Inbound Throughput (bps)	Average rate, in bits per second, of inbound traffic on this resource during the last measurement interval.
Inbound Unicast (pps)	Number of packets received on an interface and delivered to a higher layer, excluding packets addressed to a multicast or broadcast address at this layer.
Ingress Dequeued Frames	Only applicable when port is in connection-oriented, TLS mode. The number of Frames Dequeued (FD) in the ingress direction
Ingress Dropped Red Frames	Frames Marked Red and Dropped - Received on the Flow in the Ingress direction
Ingress Dropped Yellow Frames	Frames Marked Yellow and Dropped - Received on the Flow in the Ingress direction

Table 2: Key performance indicators

KPI	Comment
Ingress Green Frame Count	Only applicable when Port is in Connection-oriented, TLS mode. The number of Frames Marked Green in the ingress direction.
Ingress Red Frame Discards	Only applicable when Port is in Connection-oriented, TLS mode. The number of Frames Marked Red and Discarded in the ingress direction.
Ingress Tail Dropped Frames	Frames Tail Dropped - Received on the Flow in the Ingress direction
Ingress Tail Dropped Octets	Only applicable when Port is in Connection-oriented, TLS mode. The number of Bytes Tail Dropped (BTD) in the ingress direction.
Ingress Yellow Frame Count	Only applicable when Port is in Connection-oriented, TLS mode. The number of Frames Marked Yellow in the ingress direction.
Ingress Yellow Frame Discards	Only applicable when Port is in Connection-oriented, TLS mode. The number of Frames Marked Yellow and Discarded in the ingress direction.
Ingress Yellow Frames	Frames Marked Yellow - Received on the Flow in the Ingress direction
Outbound Broadcast (pps)	Number of packets presented to an interface for transmission, including those that were not transmitted, and that were addressed to a broadcast address at this layer.
Outbound Multicast (pps)	Number of packets presented to an interface for transmission, including those that were not transmitted, and that were addressed to a multicast address at this layer.
Outbound Throughput (bps)	Average rate, in bits per second, of outbound traffic on this resource during the last measurement interval.
Outbound Unicast (pps)	Number of packets delivered to an interface for transmission, including those that were not transmitted, and excluding packets addressed to a multicast or broadcast address at this layer.
Sent Throughput (bps)	Bytes transmitted throughput in bits per second
Tail Dropped Throughput (bps)	Bytes Tail Dropped throughput in bits per second

Chapter 4: Configuration

This chapter explains how to configure the ADVA Optical Metro Ethernet Technology Pack and consists of the following topics:

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Overview

The ADVA Optical Metro Ethernet Technology Pack is a MIB-based, SNMP pack, and its configuration is relatively straightforward.

Before you begin

Before configuring the ADVA Optical Metro Ethernet Technology Pack, ensure that you:

• Have the following software and documentation for your version of Tivoli Netcool/Proviso:

— Release notes for the current technology pack release.

— *Netcool/Proviso Installation Guide.*

— *Netcool/Proviso Upgrade Guide* (if performing an upgrade).

— *Netcool/Proviso DataMart Configuration Guide.*

   Important: *You will need to refer to this guide in order to create an inventory profile and initiate a discovery.*

— Access to the Tivoli Netcool/Proviso DataMart server.

— An X Window server on the DataMart server.

   Note: *(Pre-443 Tivoli Netcool/Proviso) If there is no graphics card on the DataMart server, you can install the Xvfb virtual frame buffer package to provide X Window services, as described in the* Netcool/Proviso Installation Guide.

— Access to the SilverStream server.

— Access to the DataChannel server.

- Have completed the following tasks:

  — Reviewed the release notes for the current technology pack.

    Important: *Release notes contain important information you need to consider before installing a technology pack. They also contain information on specific patches that need to be installed before you configure a technology pack.*

  — Installed the current version of the Tivoli Netcool/Proviso components, as described in the *Netcool/Proviso Installation Guide.*

  — Installed the MIB-II technology pack

    Note: *Starting with **version 4.3-T**, the MIB-II Technology Pack no longer resides in the single bundled jar file. It is a stand-alone technology pack that is contained in its own jar file.*

  — Installed the ADVA Optical Metro Ethernet Technology Pack.

    Note: *Installation instructions for a technology pack can be found in the Appendices of the Netcool/Proviso Installation Guide (covers core and technology packs).*
    Upgrade instructions for a technology pack can be found in Chapter 3 of the Netcool/Proviso Upgrade Guide (covers core and technology packs).

  — Configured at least one DataChannel.

  — Configured an SNMP Collector subchannel.

Configure the technology pack

Important: *Localization is now done automatically during installation of the technology pack and requires no manual steps to configure.*

1. Load the DataMart environment.

   To load the shell with the DataMart environment, follow these steps:

   1-a. Log in to the DataMart server as `pvuser`.

   1-b. Change your working directory to the DataMart home directory (`/opt/datamart`, by default), using the following command:

   ```
   cd /opt/datamart
   ```

   1-c. Load the shell with the DataMart environment, by sourcing the `dataMart.env` file, as follows:

   ```
   . /opt/datamart/dataMart.env
   ```

   Note: *After you load the DataMart environment into the shell, the PVMHOME variable is set to the DataMart home directory, /opt/datamart by default. These instructions assume that this variable has been set.*

2. Activate data collection requests.

   During installation of the technology pack, all predefined data collection requests are promoted to the database and set to inactive (that is, **idle** displays in the **Active** column of the Tivoli Netcool/Proviso DataMart Request Editor). You need to activate these predefined data collection requests using the Request Editor.

   To set data collection requests to active, follow these steps:

2-a. Change your working directory to `$PVMHOME/bin` (`/opt/datamart/bin`, by default) on the DataMart server.

2-b. Invoke the DataMart GUI by entering the following command and pressing **Enter**:

```
pvm
```

2-c. Click the **Configuration** tab, then click **Request Editor** to open the Request Editor.

2-d. Click the **Collection** tab.

2-e. Click **Refresh**.

The predefined data collection requests are loaded into the Request Editor from the database.

2-f. Click the **Inactive** button in the **Filter** group box to display only idle requests.

2-g. In the **Sub-Element Groups** pane, select all idle data collection requests in the following group or groups:

```
Root->Sub-Element Collect->Metro Ethernet->Adva

Root->Sub-Element Collect->Interfaces
```

2-h. Click the **Active** box under **Details**. The Request Editor toggles the idle setting for these data collection requests from **idle** to **active** in the **Active** column.

2-i. Click **Save**.

3. Merge the technology pack's sub-element inventory text files.

Sub-element inventory control rules for the ADVA Optical Metro Ethernet Technology Pack are contained in the file `adva_ethernet_inventory_subelements.txt`, which is installed in the following directory on the DataMart server:

```
$PVMHOME/APFiles/adva_ethernet/datamart/conf
```

You must merge the contents of this file with the file `inventory_subelements.txt` located in `$PVMHOME/conf` (`/opt/datamart/conf`, by default) on the DataMart server:

To merge the sub-element inventory control rules for the ADVA Optical Metro Ethernet Technology Pack, follow these steps:

3-a. Change your working directory to `$PVMHOME/conf` by entering the following command:

```
cd $PVMHOME/conf
```

3-b. Copy `adva_ethernet_inventory_subelements.txt` to the `$PVMHOME/conf` directory, by entering the following command:

```
cp $PVMHOME/APFiles/adva_ethernet/datamart/conf/adva_ethernet_inventory_subelements.txt .
```

3-c. Make a backup copy of the `inventory_subelements.txt` file by entering the following command:

```
cp inventory_subelements.txt inventory_subelements.txt.ORIG
```

3-d. Append the contents of `adva_ethernet_inventory_subelements.txt` to `inventory_subelements.txt`, by entering the following command:

```
cat adva_ethernet_inventory_subelements.txt >> inventory_subelements.txt
```

Important: *Ensure that you use two forward brackets (>>); otherwise, the original contents of inventory_subelements.txt will be overwritten.*

3-e. Perform a `diff` on the backed-up file and the appended file to ensure that the merge succeeded, as shown in the following example:

```
diff inventory_subelements.txt inventory_subelements.txt.ORIG
```

4. (Requires the *Netcool/Proviso DataMart Configuration Guide*) Run the initial SNMP inventory and initiate a discovery.

    An inventory collects data about the network resources that the technology pack monitors. After you install an SNMP technology pack, you must create an inventory profile using the **Inventory Tool Wizard** and then initiate a discovery by executing the inventory profile using the **Inventory Tool**.

    Running the initial inventory against SNMP objects is an intricate task and unfortunately beyond the scope of this configuration appendix. For instructions on using the **Inventory Tool Wizard** to create an inventory profile and the **Inventory Tool** to execute the inventory profile, see the *Netcool/Proviso DataMart Configuration Guide*.

5. Deploy reports.

    After the technology pack installation completes, the rules for the new device are automatically loaded into the database. The inventory process uses those rules to group elements and sub-elements. You must manually deploy (auto-group) the reports by associating them with groups in the DataMart Resource Editor's NOC Reporting tree.

    To deploy the ADVA Optical Metro Ethernet Technology Pack reports, follow these steps:

    5-a. Open the Tivoli Netcool/Proviso DataMart Resource Editor.

    5-b. Click the **ReportSEGroup** tab.

    5-c. Move the cursor to the left pane and scroll up to select any group under the **SUB-ELEMENTS->NOC Reporting** tree.

    5-d. Right-click and select the **AutoGrouping** option from the menu. The **AutoGrouping** option places the reports in dynamically generated groups created during inventory.

    5-e. Click **Yes** to continue.

    5-f. Click **Close** to exit the message box, or click **Details** to view a description of any errors.

    5-g. (Optional) You can also deploy reports on a regular basis by creating a cron entry that makes use of the `inventory` CLI command and the `-reportGrouping` option. This option instructs the inventory command to run the report grouping rules and update the deployed reports stored in the database. Report grouping rules must first have been created before this option can be used. For information on creating report grouping rules, see the *Netcool/Proviso DataMart Configuration Guide*.

    The following example shows a cron entry that periodically performs the deploy report operation:

    ```
    0 * * * * . /opt/datamart/dataMart.env && inventory -noX -reportGrouping
    ```

    See the *Netcool/Proviso Command Line Interface Guide* for more information about the `inventory` command.

Verifying resources

Use the Tivoli Netcool/Proviso DataMart Resource Editor to determine if the technology pack's resources (elements, sub-elements, properties, and so forth) were successfully discovered and created in the database during inventory.

See the *Netcool/Proviso DataMart Configuration Guide* for information on using the Tivoli Netcool/Proviso DataMart Resource Editor.

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Regex 1.1a

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