



**IBM Tivoli Training
Netcool/Proviso 4.4.3**

Configuring an inventory profile



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This IBM Education Assistant module describes how to configure an inventory profile.

Objectives

Upon completion of this module, you should be able to:

- Start the inventory wizard
- Configure a Simple Network Management Protocol (SNMP) inventory profile

Upon completion of this module, you should be able to start the inventory wizard, which is part of the DataMart inventory tool. You will also be able to configure a Simple Network Management Protocol, or SNMP, inventory profile.

Assumptions

Before configuring an inventory profile:

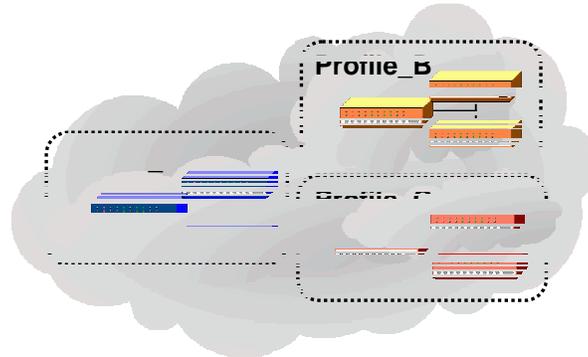
- You must have Netcool/Proviso 4.4.3 installed and running
- You must log in to the DataMart host as **pvuser**

Before configuring an inventory profile: you must have Netcool/Proviso version 4.4.3 installed and running, and you must log in to the DataMart host with the **pvuser** UNIX® login.

Inventory profiles

Large networks are divided in to smaller segments by inventory profiles.

Inventory profiles are used to manage discovery and collection of the resources within the network segment.



The purpose of an inventory profile is to separate a large network into manageable sections. This spreads the tasks of discovery and collection across several DataLoad collectors. An inventory profile can divide a network:

- By network device area (such as core, backbone, edge, or customer premise).
- By geographical location.
- By IP address range.
- Or by any other logical separation.

Inventory profile configuration tasks



Inventory is configured in three phases: discovery, synchronization, and grouping.

During discovery, the DataLoad collector sends discovery formulas to network devices. Responses to the discovery formulas are stored in the DataMart file structure.

During synchronization, the results of the discovery are compared to previously discovered resources. Additions or changes to the network are loaded into the database.

During grouping, relationships between resources are inspected using grouping rules. If new relationships are established or existing relationships are changed, they will be loaded into the database.

Starting the inventory tool

To start the inventory tool:

1. Set the **DISPLAY** environment variable
2. Set the DataMart variables in to the environment of **pvuser** using the **dataMart.env** file
3. Start the inventory tool with the command **inventory &**

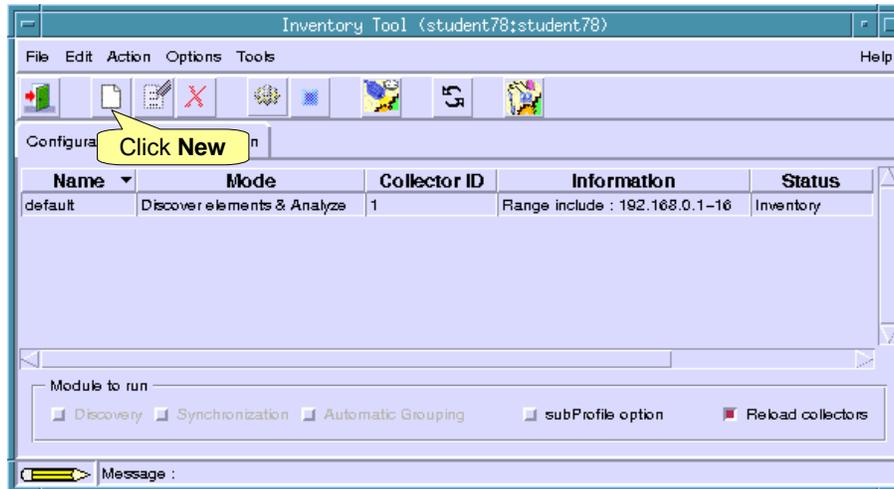
To start the inventory tool:

Set the **DISPLAY** environment variable.

Set the DataMart variables into the environment of **pvuser** using the **dataMart.env** file. This file is found by default in the **/opt/datamart/** directory.

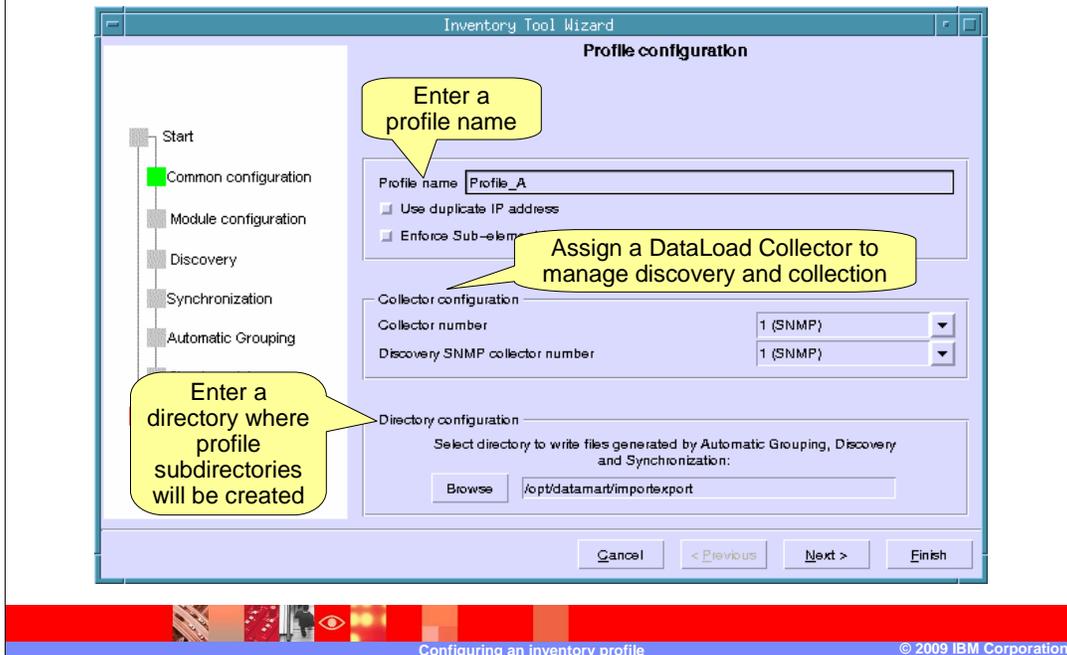
Start the inventory tool with the DataMart command **inventory**, followed by the ampersand character.

Creating a new inventory profile



To create a new profile, click the **New** button, or click **Edit>New Profile** in the inventory tool menu.

Profile configuration



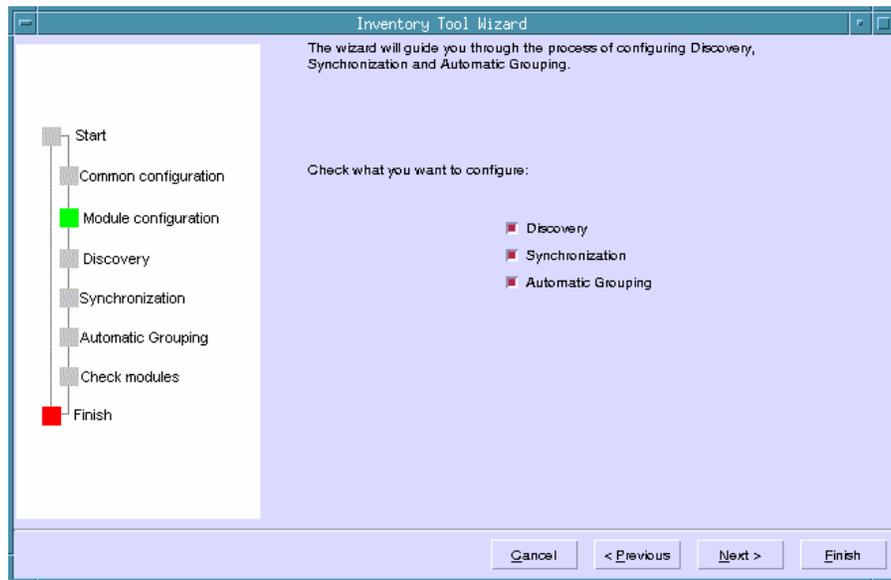
Enter a name for the profile. The name can not contain spaces.

All SNMP DataLoads are listed in the collector configuration options. Select the DataLoad that will manage collection and discovery.

This profile will create directories and files in the DataMart file system. Enter the directory where these files will be created.

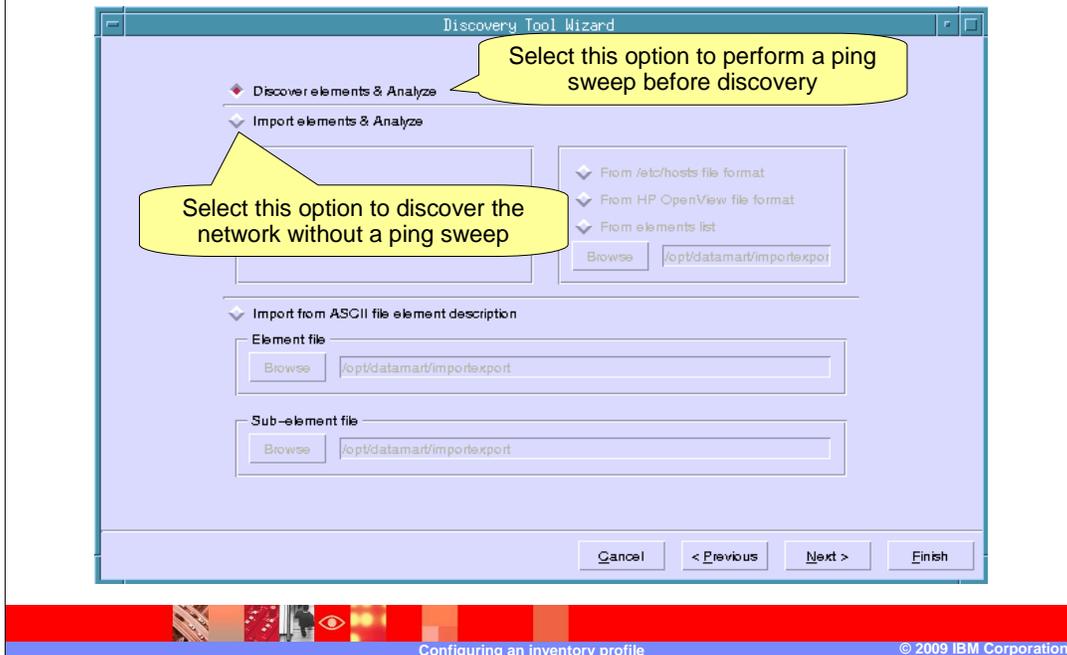
Click **Next**.

Configuration options



Select the inventory modules you want to configure with the wizard. Click **Next**.

Network discovery options



This window contains three discovery options.

The first option, **Discover elements & Analyze**, performs a ping sweep on the network devices before SNMP discovery formulas are issued.

The second option, **Import elements & Analyze**, will issue SNMP discovery formulas to a list of devices without performing a ping sweep. You can specify the format of the device list, such as a plain text list of devices or a hosts file.

The third option, **Import from ASCII file element description**, is not used for SNMP inventory.

Select a discovery option, then click **Next**.

IP address entry

Discovery Tool Wizard

IP address include area

Specific elements: ARP Query

IP address entry: 192.168.14.64-65

<< Clear Clear >>

<< Add Add >>

Modify Delete

IP address ranges:

IP address exclude area

Specific elements:

IP address ranges:

Add the IP address range to the left side to be included in the discovery

This window allows you to define your IP address filter using the format x.x.x.x with 1 < x < 254 or x equivalent to a range. Example: 192.5.52.2-56.

Add the IP address range to the right side to be excluded from the discovery

Cancel < Previous Next > Finish

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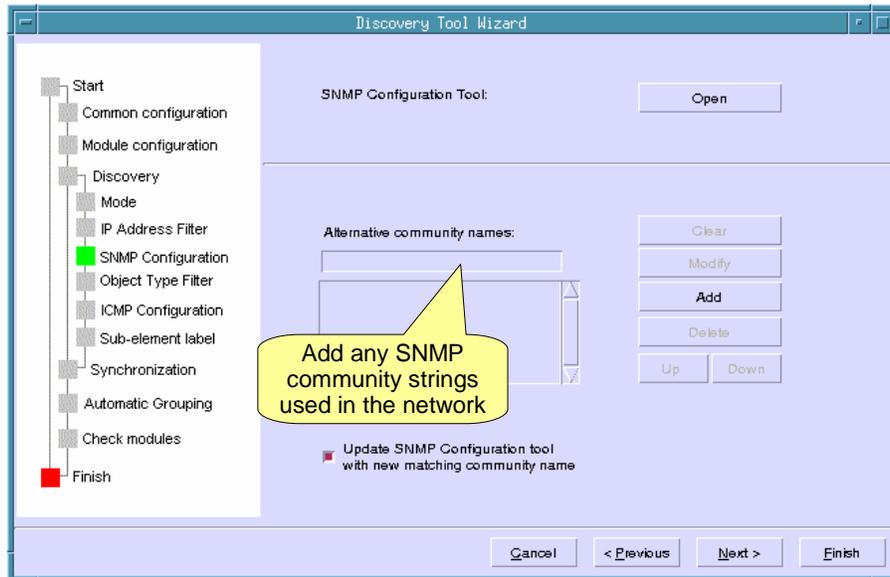
Use the **IP address entry** field in the top center of the window to add a single IP address or a range of IP addresses. After an IP address is entered, it can be included or excluded from the inventory profile.

Use the left **Add** button to include the address or addresses.

Use the right **Add** button to exclude the address or addresses.

Click **Next** to continue.

SNMP configuration options



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Enter any SNMP read only community strings that are used in the target network in the **Alternate community names** field, then click **Add**. Click **Next** to proceed to the next window.

Ping sweep configuration

Discovery Tool Wizard

Network type

Fast LAN LAN WAN Slow WAN

ICMP values

Message data size (bytes)	32
Tries	1
Time out (seconds)	2.0
Ping interval (milliseconds)	10

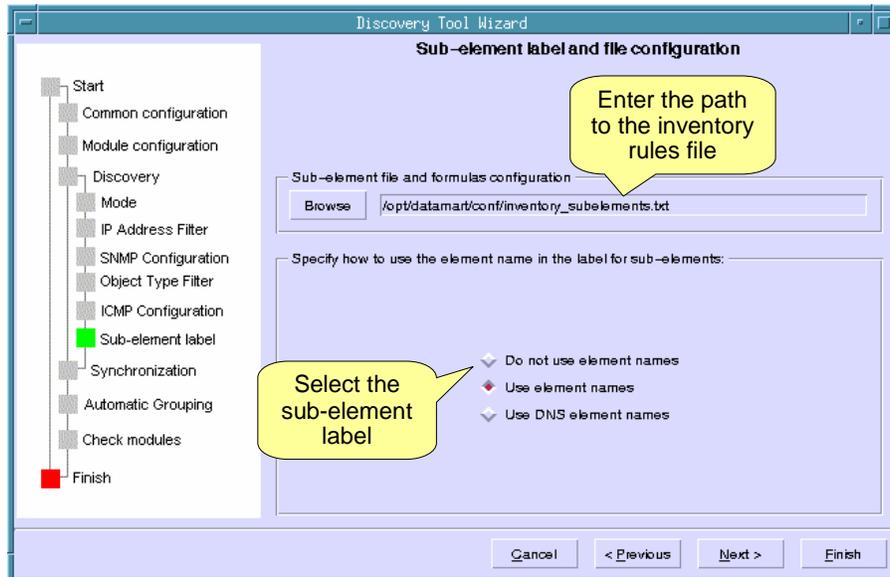
Ping window configuration

Window interval (seconds)	1
Window size (number of pings)	0

Cancel < Previous Next > Finish

Select a network type to change the parameters of the ping sweep, or edit the parameters directly. If you chose to discover the network without a ping sweep, this window will not be shown in the wizard. Click **Next**.

Inventory rules file



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Enter the path to the `inventory_subelement.txt` file that will be used for this profile.

Select the style of sub-element label that will be added to the database and used in reports. Click **Next**.

Synchronization source

Synchronization Wizard

Synchronization configuration

These parameters allow you to configure the source of the synchronization.

Select data source:

- From database
- From file

Element file:

Browse... /opt/datamart/importexport

Sub-element file, without invariant:

Browse... /opt/datamart/importexport

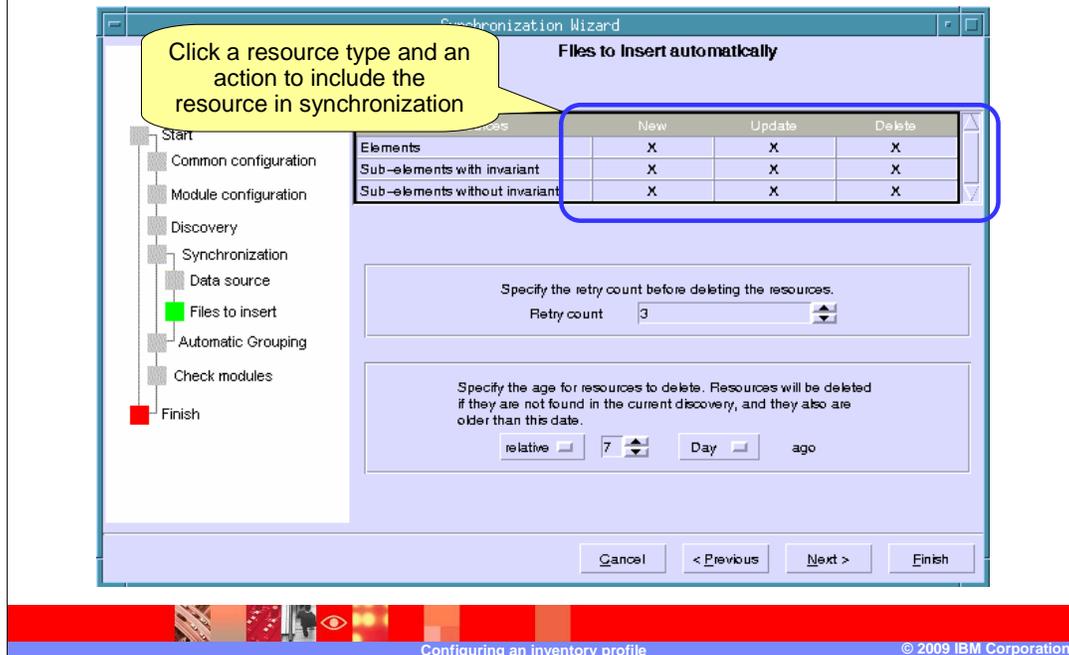
Sub-element file, with invariant:

Browse... /opt/datamart/importexport

Cancel < Previous Next > Finish

Select **From database** at this window. Click **Next**.

Synchronization options



Click the intersection of a resource and an action to include the resource in the database synchronization.

The **New** action adds resources that were found during the most recent discovery.

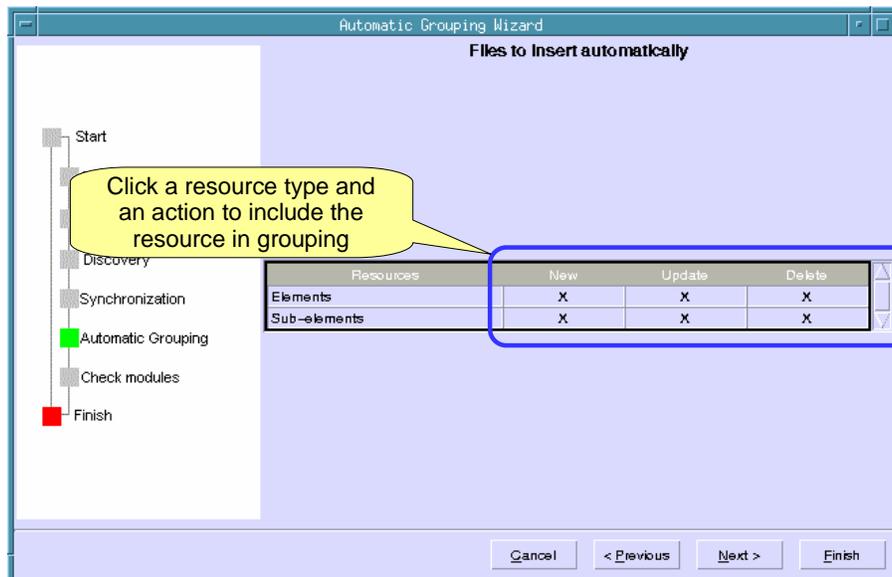
The **Update** action updates the existing resource data with additional data found during the most recent discovery.

The **Delete** action deactivates resources that have been disconnected during the most recent discovery.

The **Specify the retry count** and **Specify the age for resources** fields determine when disconnected resources are retired from reports. If both conditions are met as the inventory profile is periodically run, the removed subelement is retired in the database.

Click **Next**.

Grouping options



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Click the intersection of a resource and an action to include the resource in the grouping process.

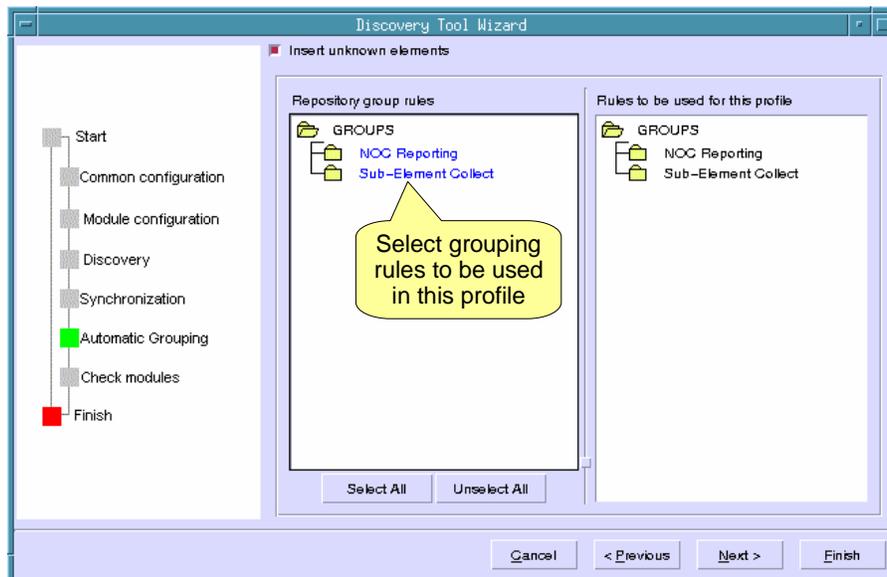
The **New** action adds links between resources and groups to the database.

The **Update** action updates existing relationships between resources and groups.

The **Delete** action deletes relationships between resources and groups in the database.

Click **Next** to continue.

Grouping rules selection



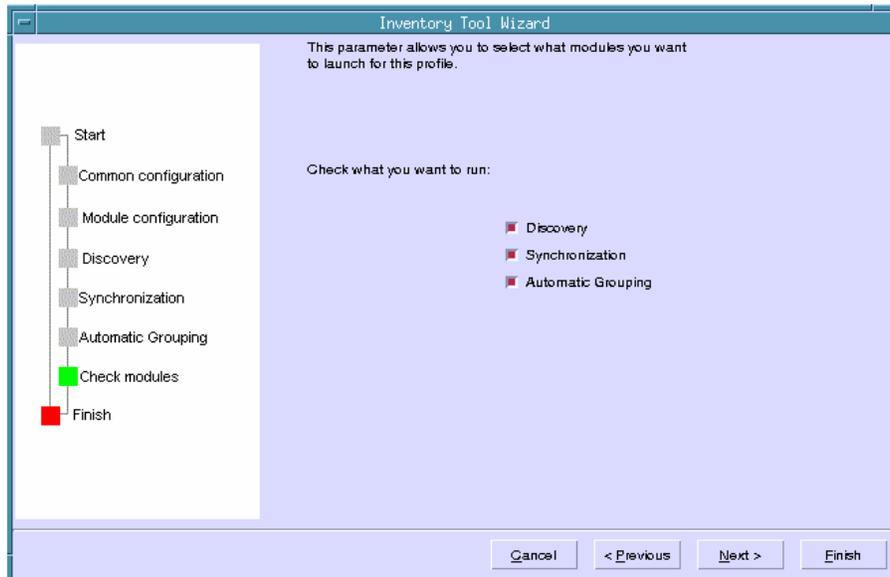
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This window is used to include or exclude rules that will sort resources into groups. Select the grouping rules at the left that will sort resources discovered by the profile.

Click **Next**.

Inventory modules to run

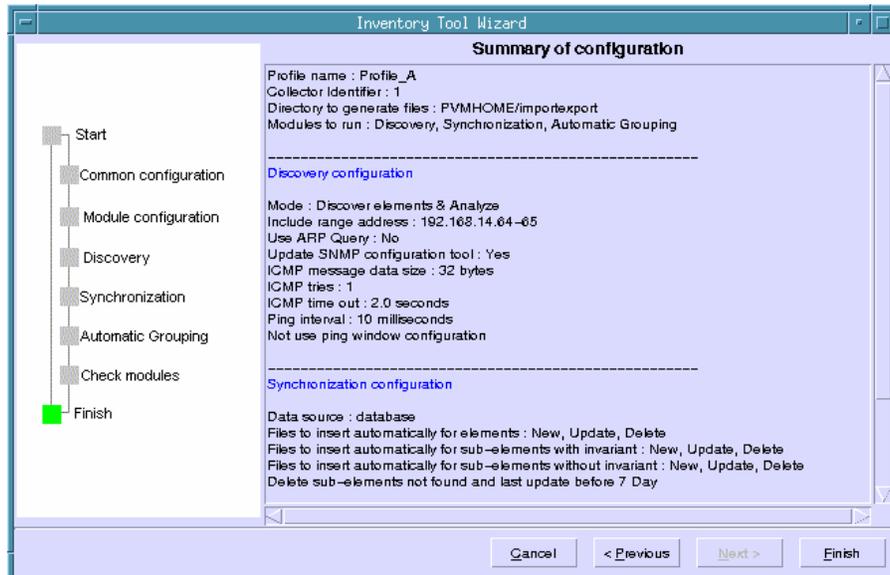


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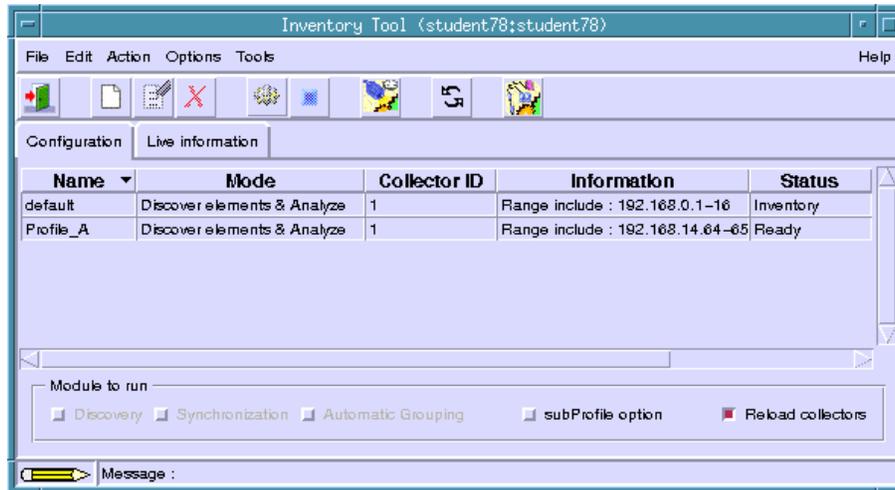
Select the inventory modules that will run with the profile. This selection can be changed later, when the profile is run. Click **Next**.

Inventory profile summary



Confirm the profile settings at the final summary window. Click **Previous** to edit the profile. Click **Finish** to exit the inventory tool wizard.

Completed inventory profile



The new profile is displayed in the inventory tool. It can now be run.

Summary

You should now be able to:

- Start the inventory wizard
- Configure a Simple Network Management Protocol (SNMP) inventory profile

You should now be able to start the inventory wizard and configure an SNMP inventory profile.

Training Roadmap for *Netcool/Proviso*

http://www.ibm.com/software/tivoli/education/edu_prd.html

Use this link to explore the training roadmap for IBM Tivoli Netcool/Proviso.

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