# HP OpenView Management Portal Using Radia

for the UNIX operating system

Software Version: 1.3

## Installation and Configuration Guide

Manufacturing Part Number: T3424-90100

June 2005



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### **About this Guide**

#### Who this Guide is for

This book is for Radia systems administrators who want to use the Radia Management Portal to streamline the management of their existing Radia infrastructures.

You should have a good understanding of the various pieces of your Radia infrastructure before using this guide.

#### What this Guide is about

The Radia Management Portal Guide describes:

- How to install and use the Radia Management Portal 1.3 for UNIX.
- How to perform administrative tasks to prepare the Radia Management Portal for use by administrators and operators in your organization.
- The tasks that you can use in the Radia Management Portal to initiate jobs on the devices in your infrastructure.
- How to troubleshoot.

## **Summary of Changes**

#### **Note to Windows Users**

This guide covers UNIX-specific platform information. For Windows-specific information, see the *Radia Management Portal Guide for Windows*.

## Chapter 2: Installing the Radia Management Portal

- Page 24, *System Requirements and Recommendations*: This section now includes specific system recommendations for HP-UX and Solaris systems; new recommendations regarding UNIX Kernel tuning to support Network Discovery; and expanded Trusted Host Environments that include SCP and SSH.
- Page 25, Radia Management Portal Access Requirements: added the sentence: "The security for a Microsoft Internet Explorer browser must be set no higher than medium."
- Page 25, Installing the Radia Management Portal for UNIX: added a caution: "This 1.x version of the Radia Management Portal for UNIX does not include the Zone-based architecture and features that are available with the 2.x version of the Radia Management Portal for Windows. HP recommends installing the 2.x version, whenever possible."
- Page 27, Installing the Radia Management Portal for UNIX: In the procedure To install the Radia Management Portal for UNIX step 4, added text to read and accept the End-User License Agreement.
- Pages 32 to 34, *Installing the Radia Management Portal for UNIX*: In the procedure *To install the Radia Management Portal for UNIX* Steps 9, 11 and 13, added text for valid entries, default values, and paragraphs for equivalent rmp.cfg parameters.
- Page 45, *Accessing the Radia Management Portal*: expanded step 2 to show hostname option in syntax when connecting to the portal.
- Page 48, Changing Passwords: For security purposes, this release no longer displays an encrypted user's password in the **Person Properties** dialog box. Use the **Modify Person** dialog box to enter or change a password.

## **Chapter 3: Basic Functions**

Page 56, *Banner*: Click the information icon to obtain product release and version

- information.
- Page 62, *Model Administration Task Group*: new task, **Move Device**. Use this task to move one or more devices within a Radia-managed Infrastructure container to another, pre-existing container.
- Page 63, Model Administration Task Group: new task, Restart Failed Jobs.
- Page 64, Operations Task Group: new task, Manage Proxy Assignment
- Page 65, Operations Task Group: new task Refresh Management Agent.
- Page 67, Authority Toolbar: Use the **Status** drop-down list on the **Authority** toolbar to view jobs by status. Use the alphanumeric buttons on the toolbar to filter objects by name.

### **Chapter 4:**

#### **Administrative Functions**

- Page 84, *Table 4.1 ~ Parameters to Configure Network Discovery*: updated definition of NETSCAN POLL.
- Page 89, Adding Groups of Devices: new section. The Add Group of Devices task is available from the new container Radia Managed Groups under Novadigm-managed Infrastructure. Use Add Group of Devices to define a group of computers (you can input the list from a text file or a text input box) to efficiently perform Radia Management Portal operations on the entire group.
- Page 92, Adding Groups of Devices from a Query: In the procedure To add groups of devices from a query of the infrastructure step 6, modified the note to explain the optional use of syntax to search for more than one pattern in the **Common Name** field.
- 1.2 Page 100, Modifying Groups of Devices: new section.
- Page 106, Dynamic Job Scheduling Against Groups of Devices: new section.
- Page 144, *Backup Filenames and Maintenance*: new section. The Radia Management Portal automatically appends the date and time of a directory backup to the user-assigned filename.
- Page 164, *Modifying Job Groups*: added a throttling default of 30 for **Jobs running at any time** (the maximum jobs to run at any time). Previously, the default was the lesser of 10 or the number of devices in a group.
- Page 165, Querying Jobs or Job Groups: this section replaces Querying Job Groups. The Query Jobs task now permits you to query the Jobs container for jobs meeting selective criteria, such as a specific job status.
- Page 167, Restarting Failed Jobs in a Job Group: new section discusses new Model Administration tasks, **Restart Failed Jobs**. Failed jobs can be restarted using this task.

## **Chapter 5: Operations Functions**

- Page 195, *Notifying an Audience*: added a sentence "A group of devices can be selected as the audience for the Notify task."
- Page 196, *Notifying an Audience*: In the procedure *To notify an audience* in examples of code changed **radpinit.exe** to **radskman.exe** and added code (,cat=y) to the end of both lines of code.
- Page 206, Creating Custom Notify Commands: Added step 11 and Table 5.1 ~ Notify Job Completion Options to define the Complete When field in the Add Options dialog box.
- Page 209, *Installing the Radia Management Agent:* modified discussion of port assignment. The Radia Management Agent can communicate with the Radia Management Portal using either a dynamically assigned or static port number.
- Page 209, Choosing a Dynamic or Static Port Assignment for the Radia Management Agent, new topic.
- Page 210, To set the Install Radia Management Agent task options: new procedure. The Install Management Agent task now includes an option to force the re-install of an RMA when one is already registered on a remote machine. By default, this option is turned on to facilitate the deployment of a newer rma.tkd to all machines.
- Page 211, *Installing the Radia Management Agent*: A group of devices may be selected as the audience (target) of the Install Management Agent task.
- Page 212, *To install the Radia Management Agent*, replaced Figures 5.27 and 5.28 and added Steps 7 and 8. The steps discuss selecting a client port type of dynamic or static.
- Page 214, Refreshing the Radia Management Agent: New section to discuss the Refresh Management Agent task. This task performs an immediate status update on the Radia Management Agent (RMA) services associated with the selected node. Normally, these status updates are performed on a set schedule. The Refresh Management Agent task also removes the registration of services that have been uninstalled since the previous registration.
- Page 216, *Installing the Radia Client*: added a note to highlight the new option to deploy clients from assigned proxy servers by using the **Manage Proxy Assignment** task.
- Page 216, *Installing the Radia Client*: A group of devices may be selected as the audience (target) of the Install Client task.
- Page 218, Installing the Radia Client: In the procedure To install the Radia 3.x Clients with the Radia Management Portal, Step 7. The Install Client task honors the entries in an associated .ini file.
  - Step 11 of the **Install Client** task supports the option to **Perform a Silent Install**. Steps 14 and 15 support the selection of a **Dynamic** or **Static Port** for communication with the Radia Management Agent on the Client.

- Page 219, Managing Proxy Assignments: new section explains how to use the new Manage Proxy Assignments task to deploy Radia Clients from assigned Radia Proxy Servers. Use this option to distribute the workload of deploying Radia Clients among preassigned Radia Proxy Servers, instead of deploying all clients from the Radia Management Portal. The Manage Proxy Assignment dialog box is used to assign a Radia Proxy Server to managed nodes. When a proxy-assigned managed node is later selected for a Remote Client install, the Radia Management Portal synchronizes with the assigned proxy server to deliver the client payload (using delta transfer), and then the clients connect to the assigned proxy server in lieu of the Radia Management Portal to obtain the client installation scripts.
- Page 232, *Installing the Radia Proxy Server*: The **Install Proxy Server** task will prompt you to select a specific CFG file, if multiple ones exist.
- Page 233, *Installing the Radia Proxy Server*: A group of devices may be selected as the audience (target) of the Install Proxy Server task.
- Page 236, Preparing and Locating Configuration Files for Proxy Server Installs: new section that explains how to prepare pre-configured RPS.CFG files for use with the Radia Management Portal's Install Proxy Server task.
- Page 237, Synchronizing the Radia Proxy Server: A group of devices may be selected as the audience (target) of the Synchronize Proxy Server task.
- Page 238, Synchronizing the Radia Proxy Server: The Synchronize Proxy Server task was enhanced. The job processing for the Synchronize Proxy Server task now reports on both the submission of the job request to the Proxy Server, as well as the start of the session between the Proxy Server and the Radia Configuration Server (for preloading the files to the static cache on the Radia Proxy Server).
- Page 239, Purging the Dynamic Cache of the Radia Proxy Server: A group of devices may be selected as the audience (target) of the Purge Dynamic Cache task.
- Page 251, Customizing the Start Viewer Task Properties: new section that discusses a new Remote Control Windowing Option. When starting a VNC Remote Control Session, you can choose to view the Remote Control terminal in a separate window or in the Radia Management Portal workspace.

## Chapter 6: Troubleshooting

- Page 262, Setting Trace Levels: Modified the procedure To change the trace level for the logs.
- Page 265, Collecting Information for Technical Support: added step 4.
- Page 266, Viewing the Version Information Window: shows the new window that displays the current version and build level of your Radia Management Portal component modules.

Page 268,  $Managing\ the\ Portal\ Directory\ (RMP.MK)\ File$ : new section. The  ${\bf Compress}$ 1.2  $\mathbf{Directory}$  job will run automatically when the rmp.mk file reaches 1.5 GB.

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Contents



## Introduction

## At the end of this chapter, you will:

- Understand the benefits of the Radia Management Portal.
- Be familiar with the product architecture.
- Understand the core capabilities of the Radia Management Portal.

### **Overview**

The Radia Management Portal (RMP)—a friendly, Web-based interface that you can use to manage your Radia infrastructure—is the latest addition to the Radia product line. Whether you are already using Radia, or are just beginning, you can use the Radia Management Portal to view and manage your existing infrastructure, or add new Radia infrastructure products and applications.

The Radia Management Portal provides the following benefits:

#### **■** Consistency

A simple, consistent user experience reduces the learning curve for your administrators. When using the Radia Management Portal, administrators select tasks to manage the infrastructure. Each task follows the same general procedure. Therefore, even if an administrator's role changes, the overall procedure remains the same.

#### **■** Web-based administration

Use a browser from anywhere to administer your Radia infrastructure. See *System Requirements and Recommendations* on page 24.

#### ■ A single view into a complex environment

View and manage your Radia infrastructure and applications from a single administrative environment.

#### **■** Role-based entitlement

Administrators can view and manage only those objects in the infrastructure for which they are responsible.

#### ■ Security

Administrators are authenticated against the Radia Management Portal Directory.

#### **■** Extensibility

You can update your existing Radia Management Portal with the latest administration functionality as the Radia Management Portal evolves.

The Radia Management Portal reduces administrative and support costs, and quickly proves to be a valuable tool in organizations using Radia infrastructure products.

### **About the Product Architecture**

Although you will be working with the Radia Management Portal in your Web browser, you may want to be familiar with the base architecture for this product.

The Radia Management Portal consists of the following:

- The **Portal Run-time** is the run-time technology that integrates Radia infrastructure services. This is made up of the Radia Integration Server (RIS) and the RMP.TKD (in the Radia Integration Server's /modules directory).
- The **Portal Directory**, rmp.mk (in the Radia Integration Server's **/etc** directory), contains configuration and entitlement information for the Radia Management Portal as well as infrastructure and status information.
- The **History Directory**, history.mk(in the Radia Integration Server's /etc directory), contains daily logs of all executed jobs.
- The Radia Management Agent (RMA), installed on the remote device, performs tasks on behalf of the Radia Management Portal. See *Installing the Radia Management Agent* on page 209 for more information.

Additional services are available, such as the Radia Inventory Manager. See *Radia Services* starting on page 275 or contact your HP sales representative for more information.

## **About the Core Capabilities**

After installing the Radia Management Portal, you can perform administrative and operational tasks on any piece of your Radia infrastructure. The core capabilities of the Radia Management Portal are:

#### ■ Network Discovery

The Radia Management Portal automatically discovers your network.

#### ■ Authentication

Use the Radia Management Portal Directory to authenticate administrators.

#### **■** Delegated Administration

Create roles in the Radia Management Portal so that your administrators will have access only to the tasks that are relevant to them and their roles.

#### ■ Remote Installations of Radia Infrastructure Components

Use the Radia Management Portal for UNIX to install Radia infrastructure products to remote devices running HP-UX or Solaris, as well as Windows NT, 2000, XP or Server 2003. Remote devices with Windows operating systems must have a pre-installed Radia Management Agent that is registered to the Radia Management Portal for a UNIX machine.

#### **■** Remote Administration

Use the Radia Management Portal to manage Radia Management Infrastructure products. For example, you can start or stop services on your remote devices or browse client logs from a central location.

#### ■ Discovery of Subscriber Information

The Radia Management Portal captures information about your subscribers and stores it in the Radia Management Portal Directory.

#### ■ Notify

Use the Notify task to perform an action on the target devices that you select.

#### ■ Scheduling

Use the scheduling feature to execute and track the progress of any task.

#### ■ Querying

Use the query feature to extract information from the Radia Management Portal Directory.

#### ■ Auditing/Logging

Use the auditing and logging features to view information about administrators and the activities they performed within the Radia Management Portal. All audit events will be stored in the log generated by the Radia Management Portal.

## **Summary**

- The Radia Management Portal is a Web-based interface used to manage your Radia infrastructure.
- The Radia Management Portal consists of the Portal Run-time, the Radia Management Portal Directory, and the Radia Management Agent (RMA).
- You can perform administrative and operational tasks on objects in your infrastructure.
- Additional functionality is available via Radia services.

Introduction

# Installing the Radia Management Portal

### At the end of this chapter, you will:

- Know the system requirements and recommendations for installing the Radia Management Portal onto UNIX platforms.
- Be able to install the Radia Management Portal.
- Be able to log on to the Radia Management Portal.
- Be able to change your password.
- Be able to access and apply updates to bring the product up to the latest level.

## **System Requirements and Recommendations**

#### UNIX Server Recommendations

Here are the system requirements and recommendations for installing and running the Radia Management Portal on UNIX platforms.

Table 2.1 ~ HP-UX System Recommendations			
Server Component	Recommend	ation	
Operating System and CPU	Required: Recommended:	HP-UX Version 10.20 or above, PA RISC CPU PA-RISC 1.1	
Processor Speed	800 MHz		
Memory	1 GB		
Virtual Memory	2 GB		
UNIX Kernel Tuning	Set maximum per	process space at 500 MB (1 GB is best)	

Table 2.2 ~ Solaris System Recommendations			
Server Component	t Recommendation		
Operating System and CPU	Required: Recommended:	Solaris Version 2.5.1 or above, SPARC CPU Solaris Version 2.7 or greater, SPARC Server	
Processor Speed	800 MHz		
Memory	1 GB		
Virtual Memory	2 GB		
UNIX Kernel Tuning	Set maximum per	process space at 500 MB (1 GB is best)	

#### ■ Network Discovery Requirements

- The number of nodes discovered by the Radia Management Portal for UNIX has an upper limit based on the kernel's tuning for process size. For optimum Radia Management Portal performance, we recommend that you set the maximum per process space of the UNIX kernel to at least 500 MB (1 GB is best).
- If using DNS, the device must have DNS and connectivity to a DNS server.
- If using NIS or NIS+ for network discovery, the device must have:
  - ♦ An NIS or NIS+ client installed.
  - Connectivity to an NIS or NIS+ server.

#### ■ Trusted Host Environment

- RCP or RSCP
- REXEC or RSH or SSH

#### Note

To use SSH, see Configuring the Radia Management Portal for SSH on page 37.

■ Radia Management Portal Access Requirements: Any network machine running Microsoft Internet Explorer 4.0 or higher or Netscape 4.0 or higher with cookies enabled. The security for a Microsoft Internet Explorer browser must be set no higher than medium.

## **Preparing for Installation**

#### Note

This 1.x version of the Radia Management Portal for UNIX does not include the Zone-based architecture and features that are available with the 2.x version of the Radia Management Portal for Windows. HP recommends installing the 2.x version, whenever possible.

- **1.** Before you begin, locate your license file. You need this license file to install the products that you have purchased. If you need assistance, contact HP Technical Support (see Support on page 4).
- **2.** Assemble the following set of Radia CD-ROMs that are used during a complete Radia Management Portal install:
  - Management Infrastructure CD-ROM
  - Management Applications CD-ROM
  - Publications CD-ROM

#### **Note to HP users**

In order for Radia to be installed correctly on HP-UX platforms, you must mount the Radia CD-ROMs using pfs\_mount.

The Radia CD-ROMs are created using the Rock Ridge format. Since the HP-UX standard mount procedure is incompatible with the Rock Ridge file system type, HP has made available the PFS package (Portable File System) that allows their workstations to recognize this format. Specific instructions follow:

Insert the CD-ROM and mount by typing:

```
/usr/sbin/pfs mount -v -x unix /cdrom/mnt
```

where /cdrom is your physical CD-ROM device.

To un-mount, type:

```
/usr/sbin/pfs_umount /mnt
```

See your local UNIX systems administrator and UNIX man pages for more information.

- **3.** Review the README file delivered with the product for the latest information.
- **4.** After installing the product from the Radia Management Infrastructure CD-ROM, check the HP OpenView web site to see if a maintenance Service Pack is needed to bring the product to the latest level.

## **Installing the Radia Management Portal for UNIX**

#### **Caution**

We strongly recommend that you install and run as root. Root authority is required to apply owner and group designators to managed resources.

#### To install the Radia Management Portal for UNIX

- **1.** On the Management Infrastructure CD-ROM, go to the directory appropriate for your operating system:
  - For HPUX, go to extended\_infrastructure/management\_portal/hpux
  - For Solaris, go to extended\_infrastructure/management\_portal/solaris
- **2.** Type ./install and press Enter.

The installation uses /tmp/rmp\_install as a temporary directory. If the directory cannot be created, or there is not enough disk space available, an error appears and the installation will be cancelled.

The Radia Management Portal Install window opens.

3. Click Next.

The Radia Management Portal End-User License Agreement window opens.

**4.** After reading and accepting the license agreement, click **Accept**.

The Radia Management Portal Location window opens.

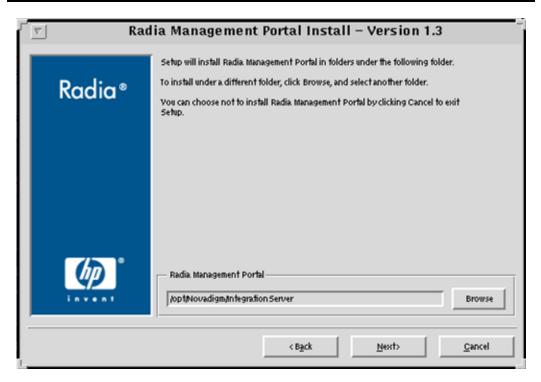


Figure 2.1 ~ Radia Management Portal Location window.

**5.** Use the **Radia Management Portal Location** window to select the folder where you want to install the Radia Management Portal.

Click **Next** to accept the default installation folder specified in the window.

#### $\mathbf{OR}$

Click **Browse** to select a different folder and then click **Next**.

The Select License File window opens.

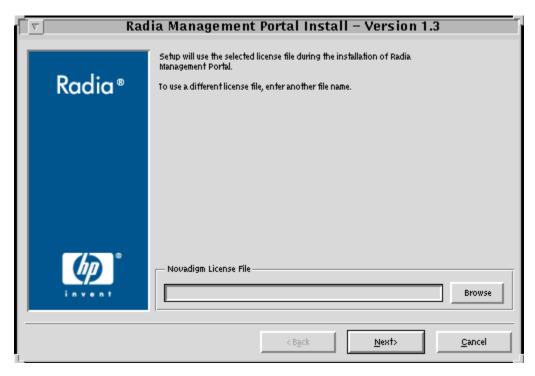


Figure 2.2 ~ Select License File window.

**6.** Browse to or type the name of your license file in the text box. You must enter a valid license file to continue the installation. If necessary, the installation will rename the license file to **license.nvd**. Then, it will copy the license file into the Radia Integration Server's **/modules** directory.

The Enable Network Discovery window opens.

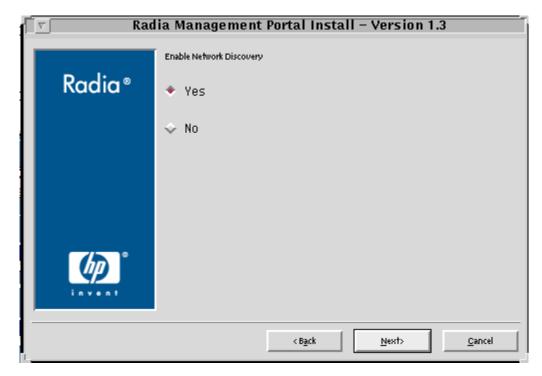


Figure 2.3 ~ Enable Network Discovery window.

**7.** Click **Yes** to enable Network Discovery (*recommended*). This option enables the Radia Management Portal to automatically discover all devices in your environment that you can manage.

#### OR

Click **No** to disable Network Discovery. This option is best used if you are testing the Radia Management Portal and want to prevent the automatic discovery of all machines in your environment from occurring.

Click Next.

The Select Network Discovery Method window opens.

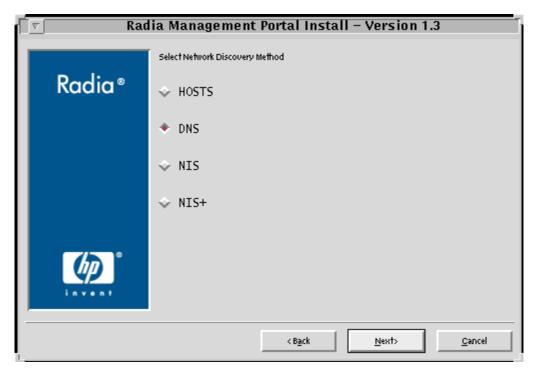


Figure 2.4 ~ Select Network Discovery Method window.

**8.** Select the network discovery method that most accurately represents your environment. The default method is **DNS**.

The Network Discovery Interval window opens.

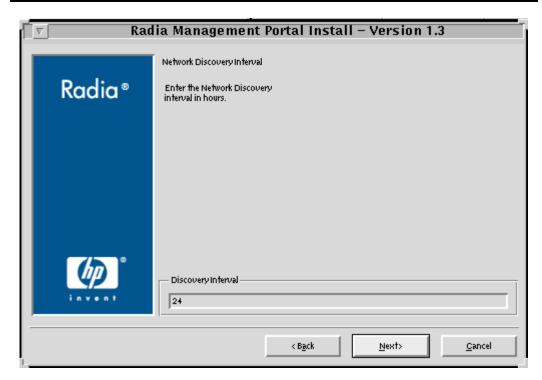


Figure 2.5 ~ Network Discovery Interval window.

- **9.** In the **Discovery Interval** text box, type how often (in hours) you want the network discovery job to run. Valid entries are **1** to **24**. The default is **24** hours.
  - To modify this Network Discovery Interval after installation, edit the **NETSCAN\_POLL** parameter in the Configuration File. For details, see *Configuring Network Discovery* on page 82.
- 10. Click Next.

The Discovery Delay between Nodes window opens.

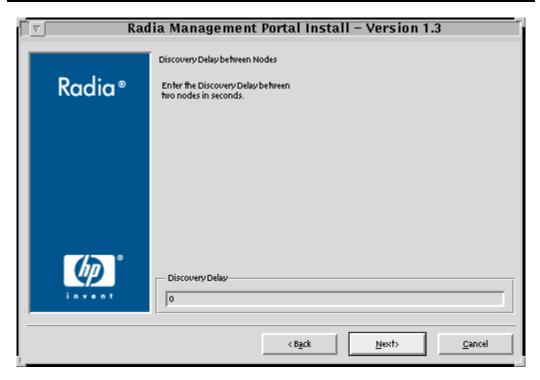


Figure 2.6 ~ Discovery Delay between Nodes window.

**11.** In the **Discovery Delay** text box, type the length of the delay (in seconds) between the discoveries of two nodes. For example, if you set the Discovery Delay to 2 seconds, RMP will discover machine A, then wait 2 seconds, and then it will discover machine B. The default is 0 seconds, or no delay.

To modify the Discovery Delay after installation, edit the **NETSCAN\_DELAY** parameter in the RMP Configuration File. For details, see *Configuring Network Discovery* on page 82.

#### 12. Click Next.

The **Discovery Start Delay** window opens.

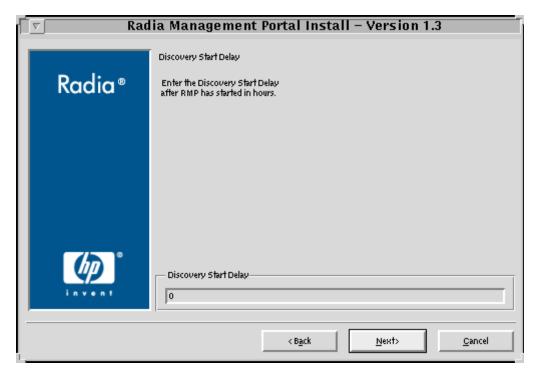


Figure 2.7 ~ Discovery Start Delay window.

- 13. In the Discovery Start Delay text box, type how long you want to wait (in hours) after the Radia Management Portal starts before starting network discovery. This delay applies each time the Radia Management Portal is started. Valid entries are 0 to 24 hours. The default is 0 hours, which means Network Discovery starts after the Radia Management Portal starts.
  - To modify the Discovery Start Delay after installation, edit the **NETSCAN\_START\_DELAY** parameter in the Configuration File. For details, see *Configuring Network Discovery* on page 82.
- 14. Click Next.
- **15.** If you selected DNS as your discovery method:
  - In the DNS Server IP Address window, type the appropriate IP address and then click Next.
  - In the **DNS Domain Zone** window, type the appropriate domain and then click **Next**.

A summary of the installation information opens.

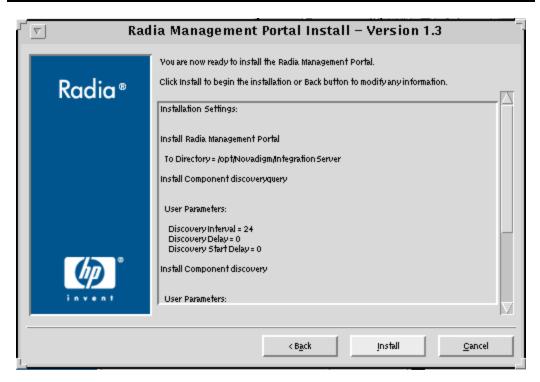


Figure 2.8 ~ Installation Settings window.

#### **16.** Click **Install** to begin the installation.

A progress window opens. When the installation is finished, a message box prompts you to copy the modules used to perform remote installations of the Radia infrastructure components.

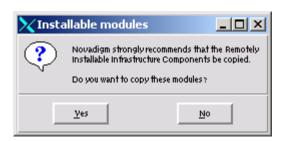


Figure 2.9 ~ Prompt to copy modules for infrastructure components.

- **17.** Click **Yes**. The modules are copied from the Management Infrastructure CD-ROM to the Radia Integration Server's **/media** directory.
- 18. If prompted, select the location for the Remotely Installable Infrastructure Components.
- 19. Click Next.

A message box prompts you to copy the Radia Client modules to be used for remote installations.

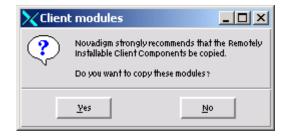


Figure 2.10 ~ Prompt to copy the Radia Client modules for remote installations.

#### 20. Click Yes.

If necessary, remove the Infrastructure CD-ROM and insert the Management Applications CD-ROM.

- **21.** In the Client Modules Location window, select the location of the Management Applications CD-ROM for the Client modules.
- 22. Click Next.

The Radia Client modules are copied to the Radia Integration Server's /media directory. Then, a message box prompts you to install the Documentation (Radia Publications Library).



Figure 2.11 ~ Prompt to install the Radia Publications Library.

23. Click Yes.

If necessary, remove the current CD-ROM and insert the Publications CD-ROM.

- **24.** In the **Publications Location** window, select the location where the documentation source is stored.
- 25. Click Next.

The Radia Publications Library is installed to the Radia Management Portal.

**26.** Click **Finish** when the installation is complete.

### **Notes**

- To apply Product Updates at this time, see Applying Product Updates on page 51.
- To configure the Radia Management Portal for SSH at this time, see Configuring the Radia Management Portal for SSH on page 37.
- **27.** To start the Radia Integration Server, go to the directory where you installed the Radia Management Portal, and type ./nvdkit httpd.tkd.
- 28. Open your Web browser.
- **29.** In the Address bar, type http:// <*IP\_Address or Hostname*> :3466,
  - <IP\_Address or Hostname is the IP address or Hostname of the computer where the Radia Management Portal is installed.
  - 3466 is the port number of the Radia Management Portal.

# Configuring the Radia Management Portal for SSH

The Radia Management Portal supports a trusted host environment using SSH (Secure Shell program). If you want the Radia Management Portal to deploy the Radia Management Agent using SSH, you need to add the following line to the rmp::init section of the <code>/etc/rmp.cfg</code> file:

Detailed steps follow.

# To configure the Radia Management Portal for RMA deployment using SSH

- **1.** If necessary, stop the **Radia Integration Server** service.
- **2.** Use a text editor to open the Radia Management Portal configuration file, rmp.cfg, located by default in **/opt/Novadigm/IntegrationServer/etc**.

Figure 2.12 ~ Sample rmp.cfg file with USE\_SSH parameter enabled.

- **3.** Insert the USE\_SSH parameter into this file before the finishing curly bracket () as shown in *Figure 2.12* ~ *Sample rmp.cfg file with USE\_SSH parameter enabled* above. Use a space to separate the parameter and its value:
  - Type **USE\_SSH** 1 to enable SSH.
  - Type **USE\_SSH 0** to disable SSH (default setting).
- **4.** Save and close the file.
- **5.** Start the Radia Integration Service to start the Radia Management Portal. For details, see *Specifying the IP Address for a Remote Radia Management Portal* below.

# Specifying the IP Address for a Remote Radia Management Portal

If you are installing the Radia Management Portal on a different computer than where your Radia Configuration Server is installed, you must verify that ZTASKEND contains required lines for the Radia Management Portal, and you must modify the file .edmprof file on the Radia Configuration Server to specify the IP address and port for the Radia Management Portal.

### Note

This modification also requires Build 37 or higher of the **radish.exe** on the Radia Configuration Server. To check the build number of the radish program, see *Gathering Version Information for RADISH.EXE* on page 267.

Complete the tasks below for verifying the contents of ZTASKEND and configuring .edmprof.

# **Verifying the Contents of ZTASKEND**

# To verify ZTASKEND contains required lines for the Radia Management Portal

**1.** On the computer running the Radia Configuration Server, locate **ZTASKEND** in the /rexx/Novadigm folder of where the Radia Configuration Server is installed.

By default, **ZTASKEND** is located in:

/opt/Novadigm/ConfigurationServer/rexx/Novadigm.

This directory stores all the REXX scripts.

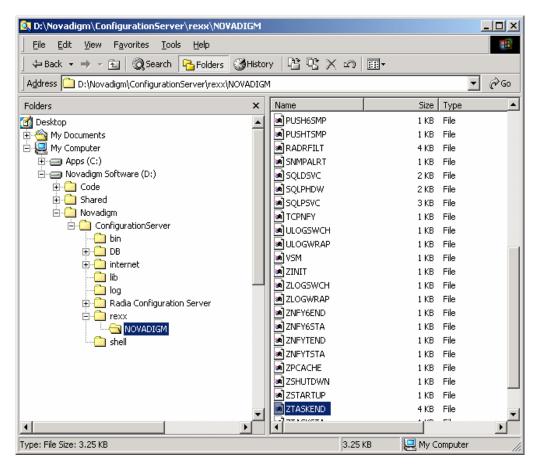


Figure 2.13  $\sim$  ZTASKEND, located in the /rexx/Novadigm folder on the Radia Configuration Server.

**2.** Copy **ZTASKEND** and paste it into the /rexx directory.

# **Caution**

If you do not copy the ZTASKEND REXX script to this directory, it may be overwritten if you update your Radia Database.

**3.** Open **ZTASKEND** (in the /rexx directory) with a text editor, such as WordPad.

**4.** When the Manager has the Radia Management Portal installed, the lines shown in *Figure* 2.14 ~ Lines added to ZTASKEND when the Manager is installed for the Radia Management Portal below are added to ZTASKEND:

Figure 2.14 ~ Lines added to ZTASKEND when the Manager is installed for the Radia Management Portal.

- **5.** Verify the lines in Figure 2.14 ~ Lines added to ZTASKEND when the Manager is installed for the Radia Management Portal exist in your ZTASKEND.
- **6.** If necessary, modify the **ADDRESS EDMLINK** line so that the order of the parameters matches the order shown in *Figure 2.14* and below.

```
ADDRESS EDMLINK "radish post: -section MGR_RMP /proc/rcs SESSION ZCONFIG ZMASTER APPEVENT ZSTATUS";
```

**7.** Close the file and save any changes.

### Note

Do not save the ZTASKEND as a text file. Be sure to save this file without an extension.

# **Configuring** .edmprof

The [MGR\_RMP] section of the .edmprof file specifies the HTTP HOST for the Radia Management Portal. As shipped, the .edmprof file is set up to have the Radia Management Portal and the Radia Configuration Server running on the same computer. The **.edmprof** file is located on the **home** directory of the UNIX user ID that installs, starts, stops, and maintains the Radia Configuration Server.

If the Radia Management Portal is running on a different computer than the one running the Radia Configuration Server, you must edit the [MGR\_RMP] section of the .edmprof file to direct the HOST and PORT to the proper URL.

The default settings are:

```
HTTP_HOST = localhost
HTTP_PORT = 3466

The format for this edit is:
HTTP_HOST= HOST NAME
HTTP_PORT= 3466

OR
HTTP_HOST= IPADDRESS
HTTP_PORT= 3466
```

To edit the .edmprof file, use the procedures below.

### To edit the .edmprof file

- **1.** Locate the .edmprof file. It is found in the **home** directory of the UNIX user ID that installs, starts, stops, and maintains the Radia Configuration Server.
- **2.** As a routine precaution, make a backup copy of .edmprof file before you edit it.
- **3.** Using a text editor of your choice, open the **.edmprof** file, and locate the [MGR\_RMP section, which is shown in  $Figure\ 2.15 \sim [MGR_RMP]$  section of the .edmprof file below.

Figure 2.15 ~ [MGR\_RMP] section of the .edmprof file.

**4.** Replace the **localhost** entry for HTTP\_HOST with the host name or the IP address of the Radia Management Portal host machine.

For example, Figure 2.16 below specifies the Radia Management Portal **host** using an **IP address** of 11.11.11.11. The **port** number of 3466 is the default port number attended by the Radia Management Portal.

```
[MGR_RMP]
HTTP_HOST = 11.11.11.11
HTTP_PORT = 3466
```

Figure 2.16 ~ Sample Host and Port entry to specify the Radia Management Portal.

# **5.** Save your changes and exit the text editor.

The Radia Configuration Server is now configured to use the remotely installed Radia Management Portal, as specified in .edmprof.

# Note

To verify that the Radia Configuration Server is using the specified Radia Management Portal, you can either monitor the posts in the RCS log or check the clients in the Radia Management Portal (since each client will show the services that you deployed under the Radia Subscribers section).

# **Starting and Stopping the Radia Management Portal**

# To start the Radia Management Portal

Go to the directory where you installed the Radia Management Portal, and type ./nvdkit httpd.tkd.

# To stop the Radia Management Portal

# Note

The following are general guidelines and the commands are examples that may vary slightly depending on the UNIX type you are using.

**1.** Obtain the process ID for the Radia Management Portal server by listing all the UNIX processes and extracting the process ID for nvdkit.

```
ps -f | grep nvdkit | sed /grep/d | awk '{ print $2 }'
```

**2.** Run the following command.

kill <PID>

# **Accessing the Radia Management Portal**

### To access the Radia Management Portal

- **1.** Open your Web browser.
- **2.** In the Address bar, type http://<*IP\_Address or Hostname*>:3466, where:
  - IP\_Address is the IP address of the computer where the Radia Management Portal is installed
  - Hostname is the hostname of the computer where the Radia Management Portal is installed.
  - 3466 is the Port Number of the Radia Management Portal.

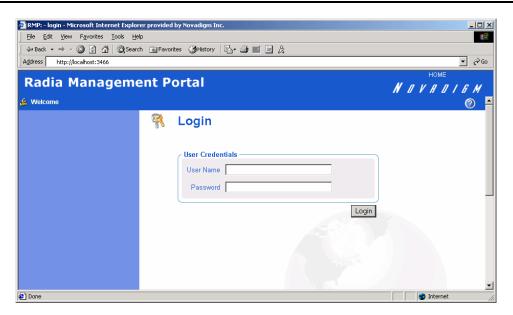


Figure 2.17 ~ Radia Management Portal Login page.

### Note

If the Radia Inventory Manager, Radia Policy Manager, or Publications Library is installed on the same computer as the Radia Management Portal, links will be available in the banner area above the NOVADIGMlogo.

For example, in Figure 7.1 on page 276, click INVENTORY in the banner area to access the Radia Inventory Manager.

# **Logging On**

# To log on to the Radia Management Portal

**1.** In the **User Name** text box, type a user name.

### • Admin

Type **Admin** to log on with complete access to the Radia Management Portal. We recommend that you do not modify this ID.

The password is **secret**.

# **Caution**

Be sure to change your password before moving the Radia Management Portal into your production environment.

See Changing Passwords on page 48 for more information.

### • Guest

Type **Guest** to log on as an unauthenticated user without access to tasks.

No password is necessary.

### • Operator

Type Operator to log on as a user with access to basic operations.

No password is necessary.

### • Test

Type **Test** to log on as a test user with very limited access. You can log on as the Portal Administrator and modify the entitlement options for the Test User. Then, log on as Test to view the results of your changes.

No password is necessary.

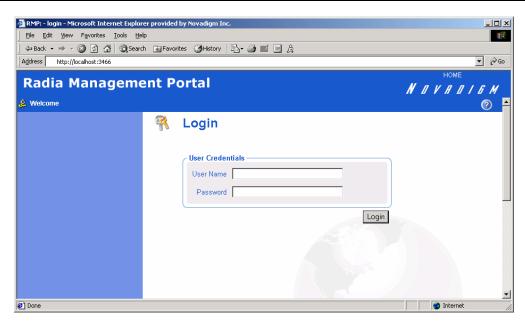


Figure 2.18 ~ Login page for the Radia Management Portal.

- **2.** If necessary, in the **Password** text box, type a password. The password is case-sensitive. The password for the Admin ID is *secret*. No password is necessary for the other IDs.
- 3. Click Login.

### OR

Press Enter on your keyboard.

Your User ID appears in the banner area (the top, left area of the interface) and the highest-level representation of your infrastructure appears in the workspace. See *About the Radia Management Portal Interface* on page 55 for more information.

# To log off the Radia Management Portal

■ In the banner area, click **Logout**.

# **Changing Passwords**

Changing your password requires familiarity with the user interface and the basics of performing a task. Do this in the **Modify Person** dialog box for the specific user.

- For information about the Radia Management Portal user interface, see *About the Radia Management Portal Interface* on page 55.
- For information about performing any task, see *Performing Any Task in the Radia Management Portal* on page 54.

# To change your password

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Administrators & Operators.
- **3.** In the workspace, select the person whose password you want to change, such as the **Portal Administrator**.

The properties for the person appear.

### Note

The **User Password** field is not displayed in the **Properties** dialog box, but is changed on the **Modify Properties** dialog box for that user.

 $\textbf{4.} \quad \text{In the $Model Administration} \ task \ group, \ click \ \textbf{$Modify}.$ 

The **Modify Person** dialog box opens.

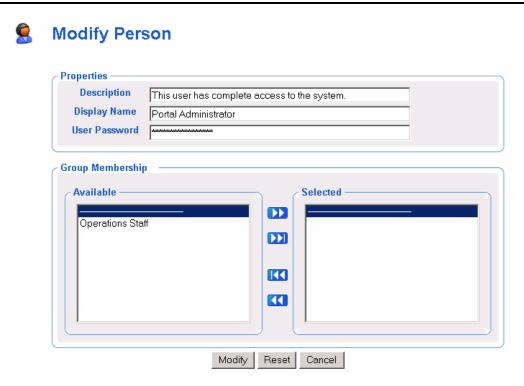


Figure 2.19 ~ Modify Person dialog box.

- **5.** In the **User Password** text box, select all asterisks masking the old entry, and then type the new password.
- 6. Click Modify.

The **Person Properties** dialog box for the Portal Administrator opens.





Figure 2.20 ~ Portal Administrator Person Properties dialog box.

The password is changed, but is not displayed for security purposes.

# **Applying Product Updates**

Product updates for licensed users of the Radia Management Portal are available for download from the HP OpenView web site:

- Check this site after installing the product from the Radia Infrastructure CD-ROM to see if updates are available to bring the product to the latest level.
- Check this site on a regular basis to llok for available product maintenance.

# **Summary**

- Install the Radia Management Portal for UNIX.
- Log on to the Radia Management Portal.
- Click **Logout** in the banner area to log off the Radia Management Portal.
- Change your password before moving the Radia Management Portal into your production environment.
- Obtain and apply the latest updates to the Radia Management Portal.

# Using the Radia Management Portal

# At the end of this chapter, you will:

- Be familiar with the Radia Management Portal user interface.
- Understand how to complete a task in the Radia Management Portal.
- Be familiar with the task groups and tasks available in the Radia Management Portal.
- Be familiar with the icons that represent the objects in your infrastructure.
- Be familiar with the key containers that exist at the highest level of the directory.

# Performing Any Task in the Radia Management Portal

One of the benefits to using the Radia Management Portal is consistency. Because of this consistency, you can use the same basic procedure whether you are notifying devices in your infrastructure or installing the Radia Proxy Server on remote computers.

# To perform any task in the Radia Management Portal

- **1.** Use the **Authority** navigation aid to select where, in your infrastructure, you want to perform a task.
- **2.** From the **Group of Tasks** taskbar, select a task.
- **3.** In the workspace, enter the information needed to complete the task, such as the audience that you want to perform the task on or information about when the job should execute. See *About the Task Lifecycle* on page 179 for detailed information on completing tasks.

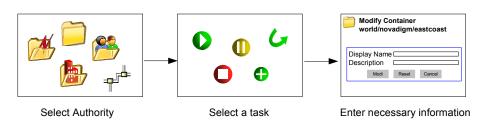


Figure 3.1 ~ Performing tasks in the Radia Management Portal.

# Note

For detailed information about the Radia Management Portal user interface, see *About the Radia Management Portal Interface* on page 55.

For detailed information about specific tasks, see the *Administrative Functions* and *Operations Functions* chapters.

# **About the Radia Management Portal Interface**

The Radia Management Portal user interface contains several distinct areas.

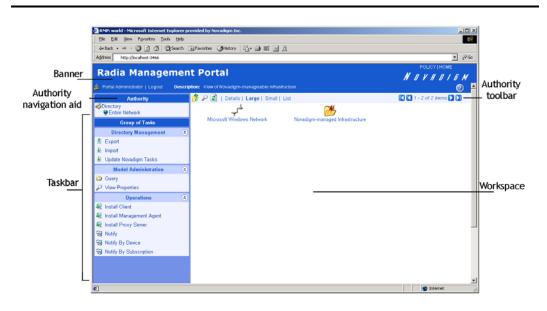


Figure 3.2 ~ Radia Management Portal user interface.

# **Banner**

The banner area contains descriptive information about where you are in the infrastructure, displays version information for the product, and contains several links.

- Click **Logout** to log off the Radia Management Portal (RMP).
- Click **HOME** to return to the RMP home page.
- Rest the mouse pointer on the button to display the Radia Management Portal version number. For example, a display of PMP V1.3 indicates the Radia Management Portal Version 1.3.
- After logging in, click the ② button to view detailed version and build level information for the Radia Management Portal component modules. This information is helpful when you are contacting HP OpenView technical support. For more information, see *Viewing the Version Information Window* on page 266.

# Note

If the Radia Inventory Manager or Radia Policy Manager are installed on the same computer, click the appropriate link (**INVENTORY** or **POLICY**) in the banner of the Radia Management Portal to access them.

If the Radia Publications Library is installed on this computer, click the **PUBS** link in the banner of the Radia Management Portal to access the library.

# **Authority Navigation Aid**

Use the **Authority** navigation aid to browse your infrastructure and to select the place where you want to perform a task. It is important that you understand that every task you select in the Radia Management Portal is performed within the selected Authority.

Below is an example of how to select an authority in your discovered network.

### To use the Authority navigation aid

In the Authority navigation aid, click Directory.
 The highest-level objects in your infrastructure appear in the workspace.

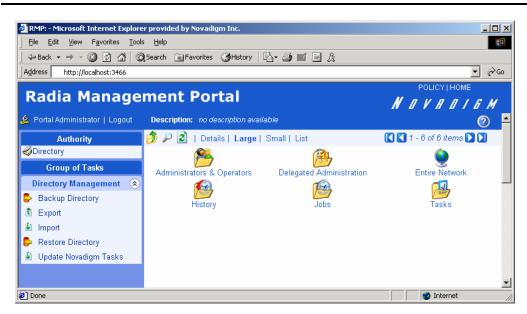


Figure 3.3 ~ Authority-Directory.

**2.** In the workspace, click **Entire Network**.

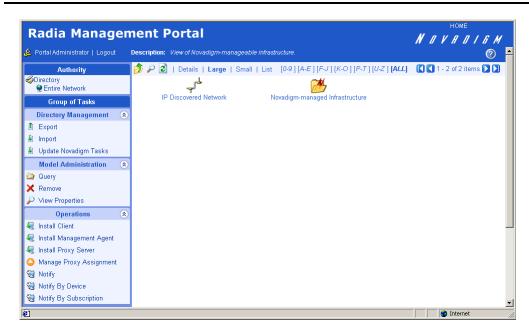


Figure 3.4 ~ Authority-Entire Network.

Notice that the Authority navigation aid now lists **Directory**, **Entire Network**. This is your selected Authority.

Also notice the Taskbar now lists new tasks and Task Groups. The toolbar dynamically changes to reflect the tasks available at any given selected Authority.

**3.** In the workspace, click **IP Discovered Network**.

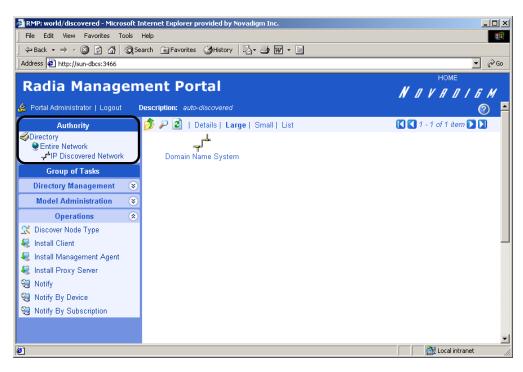


Figure 3.5 ~ Authority—IP Discovered Network.

In the example shown in *Figure 3.5* ~ *Authority—IP Discovered Network* above the selected Authority is the **IP Discovered Network**. This container holds all devices auto-discovered in your UNIX environment.

**4.** In the workspace, click on a discovered object in your network.

# Notes In Figure 3.5 ~ Authority—IP Discovered Network, we can click **Domain Name System**. Your auto-discovered objects will differ based on your discovery method and your UNIX environment. See UNIX and Network Discovery on page 74 for details about the objects representing your UNIX environment.

**5.** In the **Authority** navigation aid, click **Directory** to return to the highest level of Authority.

# **Taskbar**

When you use the Authority navigation aid to access your infrastructure, the Taskbar appears. The Taskbar contains logical groups of tasks (called *task groups*). A *task* is an activity that a person performs to initiate a job. The tasks that are available vary based on the selected Authority, as well as your role.

The standard task groups are:

- Directory Management
- Model Administration
- Operations
- Inventory Management

See *Configuring Task Groups* on page 112 for information about adding, modifying, or removing task groups.

Click v to maximize or to minimize a group of tasks.

# **Directory Management Task Group**

Use the **Directory Management** task group to manage the Radia Management Portal Directory.



Figure 3.6 ~ Sample Directory Management task group.

- Backup Directory
  - Click **Backup Directory** to backup the entire Radia Management Portal Directory. See *Creating a Backup of the Portal Directory* on page 144 for more information.
- Export Click Export to export a subset of your Radia Management Portal Directory to an LDIF (LDAP Data Interchange Format) file. See Exporting Data from the Portal Directory on page 153 for more information.

# ■ Import ፟

Click **Import** to import an LDIF (LDAP Data Interchange Format) file into your Radia Management Portal Directory. See *Importing Data into the Portal Directory* on page 154 for more information.

# Restore Directory

ctory 🛩

Click **Restore Directory** to restore a backup of the entire Portal Directory. See *Restoring the Portal Directory* on page 147 for more information.

# Update Novadigm Tasks

Click **Update Novadigm Tasks** when you receive a new build of the Radia Management Portal to update the tasks available to you. See *Updating Novadigm Tasks* on page 159 for more information.

# **Model Administration Task Group**

Use the Model Administration task group to manage the Radia Management Portal Directory.



Figure 3.7 ~ Sample Model Administration task group.

The following is a list of all potential Model Administration tasks available in the Radia Management Portal. Remember, the available tasks vary based on your selected Authority; therefore, Figure 3.7 above may not contain all the tasks described here.

- Add *object-type* Click an **Add** task to create an object in your selected Authority, such as a container, group of devices, organization, server, person, group, delegated administration, or task group.
- **Disable** □ Click **Disable** to prevent a job or job group from being processed. See *Disabling Jobs or Job Groups* on page 169 for more information.
- Enable Click Enable to restart a job or job group the next time it is scheduled to run. See *Enabling Jobs or Job Groups* on page 169 for more information.
- Modify Click Modify to change an object. For example, you might want to change the areas of the Radia Management Portal that an administrator can access, or change a job group's schedule. See Modifying Objects on page 109 or Modifying Job Groups on page163 for more information.
- Move Device <sup>\*\*</sup>
  Click Move Device to move one or more devices within a Novadigm-managed Infrastructure

container to another, pre-existing container. This task is only available in **Entire Network, Novadigm-managed Infrastructure**. This task is helpful for regrouping devices after using **Add Groups of Devices**. See *Moving Devices within Novadigm-managed Infrastructure* on page 102 for more information.

- Query 📮
  - Click **Query** to extract information from the directory tree or to narrow the scope of a job. For example, you might want to search for a specific audience for whom you want to schedule a task. See *Performing Queries* on page 180 for more information.
- Query Jobs ☐ Click Query Jobs to locate existing jobs, review their status, and make changes to them. See *Querying Jobs or Job Groups* on page 165 for more information.
- Query User's Delegated Administration Click Query User's Delegated Administration to display information about a user's role. See Querying a User's Delegated Administration on page 131 for more information.
- Remove Click Remove to remove an object and all of its children from the Radia Management Portal Directory. See *Removing Objects* on page 111 or *Removing Jobs or Job Groups* on page 170 for more information.
- Restart Failed Jobs C Click Restart Failed Jobs to restart the failed jobs displayed in the current Job Group. See Restarting Failed Jobs in a Job Group on page 166 for more information.
- Stop Click Stop to stop an active job group from running. See Stopping Job Groups on page 168.
- View Properties Click View Properties to display the properties of an object. See Viewing Properties on page 172 for more information.

# **Operations Task Group**

Use the **Operations** task group to select tasks to initiate jobs.



Figure 3.8 ~ Sample Operations task group.

The following describes all of the operations available in the Radia Management Portal. Remember, the tasks available to you vary based on your selected Authority; therefore Figure 3.8 above may not contain all the tasks described here.

# Discover Node Type



Click Discover Node Type to retrieve more information about a node in your UNIX environment. See UNIX and Network Discovery on page 74 for more information.

- Install Client 🔩

Click Install Client to install the Radia Clients on remote devices. See Installing the Radia Client on page 216 for more information.

Install Management Agent 🔩



Click Install Management Agent to install the Radia Management Agent on remote devices. See Installing the Radia Management Agent on page 209 for more information.

Install Proxy Server



Click Install Proxy Server to install the Radia Proxy Server on remote devices. See Installing the Radia Proxy Server on page 232 for more information.

Manage Proxy Assignment 🤤



Click Manage Proxy Assignment to have a Radia Proxy Server in your infrastructure assigned to handle the deployment of client installation scripts for a specific set of designated nodes. For more information, see Managing Proxy Assignments on page 219.

# Notify 😼

Click Notify to perform an action on the selected audience. See Notifying an Audience on page 195 for more information.

# Notify by Device 💐



Click Notify by Device to quickly identify a target audience based on the characteristics of a device, such as operating system or IP address. See Notifying an Audience by Device Characteristics on page 186 for more information.

# Notify by Subscription

Click Notify by Subscription to quickly identify a target audience based on the applications currently being managed by Radia. See Notifying an Audience by Subscription on page 191 for more information.

# Pause 🕛



Click Pause to temporarily suspend the execution of a service. The service continues to run, but does not perform any action.

# Purge Dynamic Cache 😴



Click Purge Dynamic Cache to purge the dynamic cache of the Radia Proxy Server. See Purging the Dynamic Cache of the Radia Proxy Server on page 239 for more information.

# Refresh Management Agent 💈



Click Refresh Management Agent to have the selected Management Agent immediately update its registered Radia services with the Radia Management Portal. See Refreshing the Radia Management Agent on page 214 for more information.

# Restart 💭

Click Restart to stop a service and then start it again. See Managing Services on page 240 for more information.

### Resume 💟



Click Resume to resume execution of a service that has been paused. See Managing Services on page 240 for more information.

# Set Password



Click Set Password to set the VNC Authentication password prior to the first time you use remote control to access a VNC Server on a Radia Client. See Using Remote Control on page 245 for more information.

# Start 🔘



Click Start to run a service. See Managing Services on page 240 for more information.

# Start Viewer



Click Start Viewer to start a VNC session on a remote Radia Client. See Using Remote Control on page 245 for more information.

### Stop 🖵



Click **Stop** to stop a service. See *Managing Services* on page 240 for more information.

Synchronize Proxy Server Click Synchronize Proxy Server to force the Radia Proxy Server to connect to the Radia Configuration Server to preload the files to the static cache on the Radia Proxy Server. See Synchronizing the Radia Proxy Server on page 237 for more information.

# **Inventory Management Task Group**

This list is available only when the Radia Inventory Manager is installed on the same computer as the Radia Management Portal.

■ Notify via Inventory Manager Click Notify via Inventory Manager to notify an audience based on information reported to the Radia Inventory Manager. See *Notify via Radia Inventory Manager* on page 276 for more information.

# **Authority Toolbar**

The Authority toolbar appears at the top of the workspace when you are viewing objects in your infrastructure, such as a list of all computers in your network. This toolbar appears if you are browsing your infrastructure or viewing the results from a query.

- Click to go up one level in the infrastructure.
- Click to view the properties for the object selected in the Authority navigation aid.
- Click to refresh the information displayed in the workspace.

Several formats are available for viewing most objects.

- Click **Details** for a list of the objects with descriptive information.
- Click **Large** to view large icons.
- Click **Small** to view small icons.
- Click **List** to view a simple list of the objects.

Use the **Status** drop-down list box to view only jobs that meet the selected status. Job status options include:

- All
- Waiting to Start
- Successful
- Failed
- Active
- Disabled

Use the following buttons to quickly navigate to objects according to the first character of their display name. Click a button to view that subset of objects for a given Authority. The default display is [ALL]. The current object display is shown in bold.

- Click [0-9] to view only objects whose display names begin with a number.
- Click [A-E] to view only objects whose names begin with A through E.
- Click [F-J] to view only objects whose display names begin with F through J.
- Click **[K-O]** to view only objects whose display names begin with K through O.
- Click [P-T] to view only objects whose display names begin with P through T.
- Click **[U-Z]** to view only objects whose display names begin with U through Z.
- Click [ALL] to return to viewing all objects for the given authority.

Use the following buttons to navigate through multiple pages of objects.

- Click to go to the beginning of the list of objects.
- Click \( \square\) to go to the previous page in the list of objects.
- Click to go to the next page in the list of objects.

■ Click to go to the last page in the list of objects.

# Workspace

The workspace is the main work area and will change based on your actions.

# **Navigating the Infrastructure**

Once you are familiar with the Radia Management Portal user interface, you need to understand how to access the key areas of the infrastructure that you want to manage. However, first you must be familiar with the objects that represent the infrastructure in the Radia Management

A tree view is used to organize these objects. The tree consists of the following icons, which represent the infrastructure objects:

# Containers =



A container is a logical grouping of objects used to limit the scope of influence that an administrator can have over the entire infrastructure.

# Servers 3



A server is a physical device that is running a piece of the infrastructure (service) that you want to manage via the Radia Management Portal. A server must be addressable by an IP address. An example of a server would be an NT Server that is running a Radia Configuration Server.

# Services 🐪



A service is an application running on a server such as a Radia Configuration Server or Radia Proxy Server.

# **About the Infrastructure Representation**

When you are at the highest level of the infrastructure, several containers appear in the workspace. If necessary, click **Directory** in the **Authority** navigation aid to access these containers.

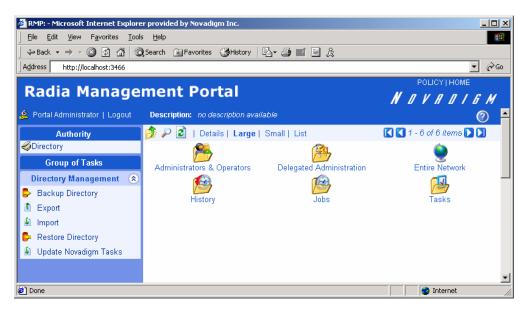


Figure 3.9 ~ Highest level of the Radia Management Portal.

Note

Click **Details** in the **Authority** toolbar to view descriptive information about the containers.

It is important to understand what these key containers represent.

### ■ Administrators & Operators (Who)

Stores authentication information for the administrators accessing the Radia Management Portal.

### ■ Delegated Administration (Why)

Stores objects that define entitlement policies such as WHO can perform WHAT tasks, and WHERE these tasks may be performed.

### **■** Entire Network (World)

Displays a dynamic view of your network infrastructure.

### ■ History

Stores daily histories of all jobs executed through the Radia Management Portal. The daily job histories are organized by date and time in reverse chronological order.

### ■ Jobs (When)

Stores objects that represent all of the current and scheduled jobs in the system. Once-time jobs remain for four days after execution.

### ■ Radia Subscriber Information

Stores configuration, application, and connection information for Radia subscribers.

### ■ Tasks (What)

Stores all of the possible tasks or groups of tasks (called roles) within the Radia Management Portal.

Now that you are familiar with the Radia Management Portal user interface and the key containers, you are ready to begin managing your infrastructure.

# **Summary**

- The Radia Management Portal has a consistent user interface, which means that you can follow the same basic procedure to complete any task.
- The Radia Management Portal user interface has a banner area, Authority navigation aid, Taskbar, Authority toolbar, and workspace.
- Every task is performed within the selected Authority.
- The task groups and tasks vary based on your selected Authority and your role.
- Your organization's infrastructure is represented by a series of objects in a tree view.
- The representation of the infrastructure is made up of objects that represent containers, servers, and services.

# **Administrative Functions**

# At the end of this chapter, you will:

- Understand network discovery and how to add devices to the Novadigm-managed infrastructure.
- Be able to add, modify, or remove task groups and objects in the infrastructure.
- Be able to add groups of devices within the Novadigm-managed Infrastructure container from a query of the Portal database, an input list, or in imported file.
- Be able to create and configure delegated administration roles.
- Be able to add administrators and operators to the Radia Management Portal Directory.
- Be able to backup the Radia Management Portal Directory.
- Be able to restore the Radia Management Portal Directory from a backup.
- Be able to query the Radia Management Portal Directory.
- Be able to export a subset of your Radia Management Portal Directory.
- Be able to import information into your Radia Management Portal Directory.
- Be able to modify, disable, enable, or remove a job or job group.
- Be able to query on jobs or job groups by scheduled time, status, and other criteria.
- Be able to stop jobs or job groups, or restart all failed jobs for a job group.
- Be able to view executed jobs from the history container.
- Be able to view the properties for any object in the Radia Management Portal.

Several administrative functions are available for configuring and managing your organization's Novadigm-managed infrastructure. Administrative functions allow you to prepare your Radia Management Portal for use by the administrators and operators in your organization, as well as to handle general administrative functions such as creating a backup of the Radia Management Portal Directory.

# **Understanding Network Discovery**

The Radia Management Portal discovers the resources on your network.

- If you are using the Radia Management Portal for UNIX, it discovers both your UNIX and Windows networks. Note that at the current time you cannot manage the Windows infrastructure using the Radia Management Portal for UNIX. Use the Authority navigation aid to go to **Directory**, **Entire Network**, **IP Discovered Network** to view your UNIX nodes. You must request further discovery to these nodes in order to begin managing your UNIX environment. See *UNIX* and *Network Discovery* below, for more information.
- If you install the Radia Management Portal for Windows, the Windows network is automatically discovered. Use the Authority navigation aid to navigate to **Directory**, **Entire Network**, **Microsoft Windows Network** to view the Windows devices that you can manage.

# **UNIX and Network Discovery**

The Radia Management Portal for UNIX uses the network discovery method that you specified during installation. The discovery of network resources in UNIX is generic and will discover all the resources including, but not limited to, printers and routers. Later, you will target the segments of the network that you want to manage and discover more information about the target devices. When you discover more information about the target devices, an icon will be created in the Novadigm-managed infrastructure container. If you want to perform any operations on the devices in your UNIX environment, they *must* appear in the Novadigm-managed infrastructure container.

You can view the nodes in your network by host name or by host number (IP address). An example of how to use the Radia Management Portal to navigate the UNIX environment and perform discovery follows.

### To add UNIX devices to the Novadigm-managed infrastructure container

- 1. In the Authority navigation aid, go to Directory, Entire Network.
- 2. Click IP Discovered Network.

The IP Discovered Network container represents the UNIX discovered network.

#### **Note**

In the following figures, the Directory Management and Model Administration Task Groups have been minimized.

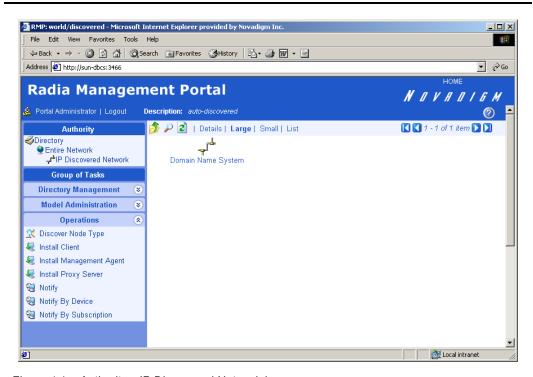


Figure 4.1 ~ Authority—IP Discovered Network.h

- **3.** Click **Domain Name System**. The name of the container in your workspace may differ based on the discovery method that you are using.
- 4. Click IP Host Name.

### Note

You can view your UNIX environment by IP Host Name or by IP Host Number (IP address).

Note that there may not be a one-to-one correlation between the listings in each of these containers. For example, one machine may have more than one IP address and therefore would have two separate listings in the IP Host Number container.

Your workspace may look similar to Figure 4.2 below.

- **Com** represents one of the top-level domain names and contains nodes that have a fully qualified name. Other top-level domain names include, but are not limited to, .gov, .edu, .net, and .org.
- Local is a container that contains hosts whose names are not fully qualified.

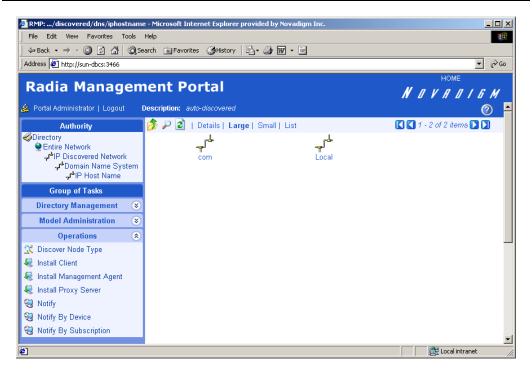


Figure 4.2 ~ Authority—top level domains.

- 5. Click com.
- **6.** Click **novadigm** to see the list of hosts with fully qualified names.

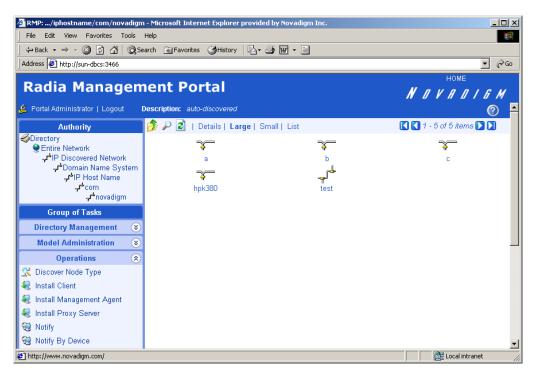


Figure 4.3 ~ Authority—hosts with fully qualified names.

**7.** In the **Operations** task group, click **Discover Node Type**. Use this task to retrieve more information about the nodes that have been discovered.

The Query window opens.

- **8.** Specify criteria to narrow the scope of the job. See *Performing Queries* on page 180 for more information.
- 9. Click Next.

The **Select** window opens.

- **10.** Select the audience from the **Available** list, and then click to add it to the **Selected** list. See *Selecting an Audience* on page 182 for more information.
- 11. Click Next.

The **Discover-node** window opens.

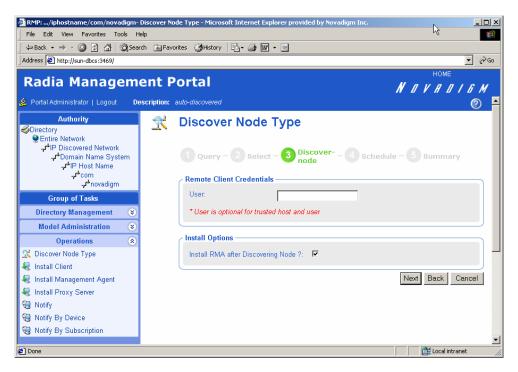


Figure 4.4 ~ Discover Node Type—Discover-node window.

- **12.** If necessary, in the **User** text box, type the user name for the trusted host environment.
- **13.** Select the **Install RMA after Discovering Node?** check box if you want RMA to be installed. Alternatively, you can install RMA later. See *Installing the Radia Management Agent* on page 209 for more information.

RMA will not be installed on devices such as printers.

14. Click Next.

The **Schedule** window opens.

- **15.** In the **Schedule** window, specify when you want this job to run. For more information, see *Scheduling Jobs* on page 184.
- 16. Click Next.

The Summary window opens.

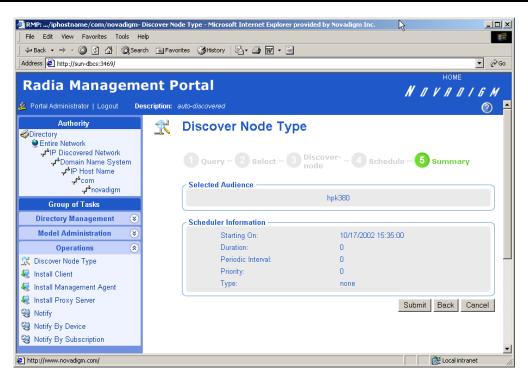


Figure 4.5 ~ Discover Node Type—Summary window.

#### 17. Click Submit.

The **Job Status** window opens with a list of the jobs. This window automatically refreshes every 60 seconds.

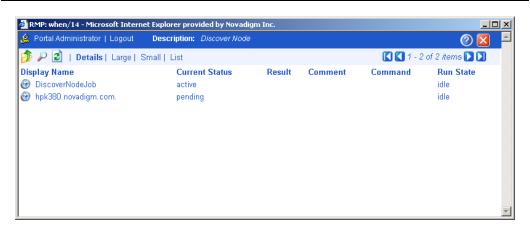


Figure 4.6 ~ Job Status window.

- Click to display the latest status.
- Click to view detailed information, such as the status of the installation.
- **18.** When you are done viewing the job status, click to close the **Job Status** window, and return to the Radia Management Portal.
- **19.** In the **Authority** navigation aid, go to **Directory**, **Entire Network**, **Novadigm-managed infrastructure**.

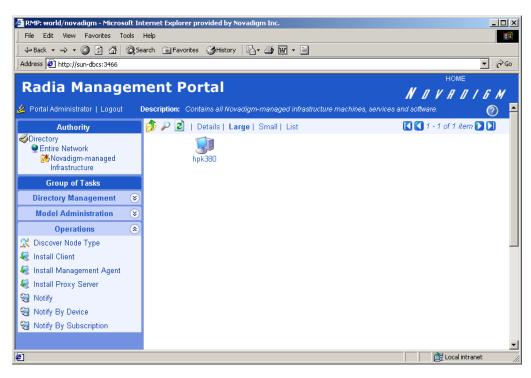


Figure 4.7 ~ Discovered devices.

**20.** Click the device that you discovered, such as **hpk380**, for more information.

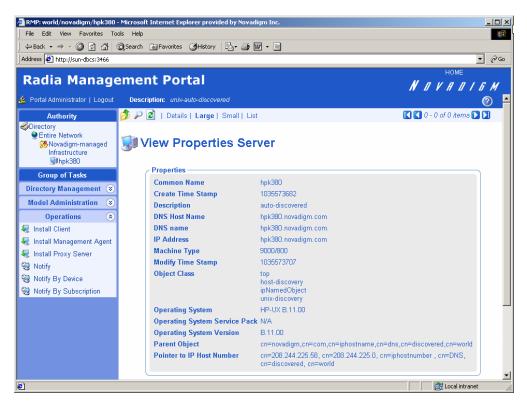


Figure 4.8 ~ View Properties Server window.

21. Now you can use the Radia Management Portal to manage this device.

# **Configuring Network Discovery**

In some environments, you may want to configure your network discovery so that you have more control over network discovery, especially in environments with large networks.

### Note

The number of nodes able to be discovered by the Radia Management Portal in a UNIX environment is dependent upon the per process size allocated by the UNIX kernel. For details, see the Network Discovery requirements given in the topic *System Requirements and Recommendations* on page 24.

### To configure network discovery

- 1. Stop the Radia Integration Server service.
- **2.** Use a text editor to open the Radia Management Portal configuration file, rmp.cfg, located by default in **/opt/Novadigm/IntegrationServer/etc**.

Figure 4.9 ~ Sample rmp.cfg file.

- **3.** You can insert any of the parameters in *Table 4.1* ~ *Parameters to Configure Network Discovery* on page 84 into this file before the finishing curly bracket () as shown in *Figure 4.9* ~ *Sample rmp.cfg file.* above.
- **4.** Use a space to separate the parameter and its value.

Parameters	Explanation
NETSCAN	Enables or disables network discovery.
	• Type NETSCAN 0 to disable network discovery.
	• Type NETSCAN 1 to enable network discovery (default setting).
NETSCAN_DELAY	The time to wait, in seconds, before discovering the next device, which enables throttling (default setting is 0).
NETSCAN_START_DELAY	The time to wait (in seconds) before starting network discovery when the Radia Management Portal starts up. If the Radia Management Portal directory (rmp.mk) does not exist, this parameter is ignored so that the directory can be created (default setting is 15 minutes = 900 seconds).
	You can specify this value as:
	NETSCAN_START_DELAY 900
	Another way to specify this value is by using a Tcl expression, which would read as follows:
	<pre>NETSCAN_START_DELAY {15*60}</pre>
	where 15 is the number of minutes. When multiplied by 60 seconds, the value becomes 900 seconds.
NETSCAN_POLL	Network Discovery Interval (in seconds). Default setting is 1440 seconds.
	You can specify this value using a Tcl expression. To specify 24 hours, for
	example, you can specify:  NETSCAN POLL {24*60*60}
	where 24 is the number of hours, multiplied by 60 minutes, multiplied by 60
	seconds. The value becomes 86,400 seconds.
NETSCAN_LIMIT	Limits the number of objects to be discovered. The default setting is <b>0</b> , which means that there is no set limit. A setting of <b>0</b> means as many nodes will be discovered as possible, given the kernel's tuning for process size. For Windows, a setting of <b>0</b> means all objects will be discovered.
NETSCAN_DOMAIN_LIST	Limits the NETSCAN to selected domains. List domains, space separated, within curly braces. For example, {domain1 domain2 domain3}.
	Default is no limitation by domain.
NETSCAN_USE_SSH	Enables the use of SSH and SCP during the Discover Node and Install Node tasks. If set to 1, SSH and SCP are used instead of RSH and RCP. If set to 0, RSH and RCP are used. Default is 0.
NETSCAN_PING	Requires a successful ping verification before adding a discovered node to the IP host schema. If set to 1, the node entry is added to IP host schema only after a successful ping is done to the node. If set to 0, no ping is executed and all nodes listed by the discovery method are added to the IP host schema. Default is 0.

- **5.** Save and close the file.
- **6.** Restart the Radia Integration Server and open the Radia Management Portal.

# **Configuring the Infrastructure Model**

The Radia Management Portal has the ability to automatically discover your network. In a Windows environment, the Radia Management Portal relies on the Windows API to perform this discovery. Should a device not appear in your Windows Explorer, that device will also not be represented in the Radia Management Portal through its automatic network discovery. Therefore, you may decide to manually add the object to your infrastructure model so you can perform tasks on this device.

To manually add an object to your infrastructure model, you can use several tasks in the **Model Administration** task group. Remember, the tasks that are listed vary based on your selected Authority. For example, you can only add a service if you have selected a server in the Authority navigation aid.

This release also permits you to create groups of devices within the authority of Novadigmmanaged Infrastructure and Radia Managed Groups. For more information, see *Adding Groups of Devices* on page 89.

# **Adding Containers**

Containers organize the objects in your infrastructure. Use the **Add Container** task in the **Model Administration** task group to create containers at locations in your infrastructure where you want to organize objects. For example, prior to adding groups of devices to your Radia Managed Infrastructure manually, add a container within this authority to store any new devices.

#### To add a container

**1.** Use the **Authority** navigation aid to go to the place in your infrastructure where you want to add a container.



Figure 4.10 ~ Sample Selected Authority for Adding a Container.

2. In the Model Administration task group, click Add Container.

The Add Container dialog box opens.



Figure 4.11 ~ Add Container dialog box.

**3.** In the **Common Name** text box, type a name for the container object.

### **Caution**

The common name for the object must be unique. If you attempt to create an object with a name that has already been used, an error appears in the workspace indicating that the object already exists.

- **4.** In the **Display Name** text box, type a name for the container that will appear in the infrastructure representation.
- **5.** In the **Description** text box, type a description that will appear in the Details view of the infrastructure representation.
- 6. Click Add.

The new container is listed in the **Authority** navigation aid.

# **Adding Organizations**

## To add an organization

**1.** Use the **Authority** navigation aid to go to the place in your infrastructure where you want to add an organization.



Figure 4.12 ~ Sample Authority – Novadigm-managed infrastructure.

**2.** In the Model Administration task group, click Add Organization. The Add Organization dialog box opens.



# Add organization



Figure 4.13 ~ Add Organization dialog box.

**3.** In the **Organization** text box, type a name for the object.

## **Caution**

The name of the Organization must be unique. If you attempt to create an object with a name that has already been used, an error appears in the workspace indicating that the object already exists.

- **4.** In the **Display Name** text box, type a name for the organization that will appear in the infrastructure representation.
- **5.** In the **Description** text box, type a description that will appear in the Details view of the infrastructure representation.
- 6. Click Add.

The new organization is listed in the Authority navigation aid.

# **Adding Groups of Devices**

The **Add Group of Devices** task is available on the **Model Administration** task group from the following authority:



Figure 4.14 ~ Required Authority to add a group of devices.

Use **Add Group of Devices** to define a specific group of devices so you can efficiently perform operations on the entire group. The **Add Group of Devices** task is very flexible and powerful: it gives you various methods of specifying the potential members of the group. To specify the potential members of a group, you can:

- Query the existing infrastructure.
- Input all devices in a text box (copy and paste is supported). The list may contain both existing and new objects to the infrastructure.
- Name an existing text file that is located in the **/etc/group** folder of the Radia Integration Server location. This file may contain both existing and new objects.

Any new objects contained in an input device list or input device text file are immediately added to a container. This container must exist in the authority of Novadigm-managed Infrastructure or Radia Managed Groups prior to performing the Add Group of Devices task.

The operations you can perform on all devices in a predefined Radia Managed Group include the tasks:

- Install Client
- Install Management Agent
- Install Proxy Server
- Manage Proxy Assignment
- Notify
- Synchronize Proxy Server
- Purge Dynamic Cache (Proxy Server)

When creating a group of devices for use with a task that requires Administrative authority (log on and password), limit the members of a group to devices with the same administrative access.

Otherwise, submitting the task for the entire group will start the jobs for all members, but jobs will fail for any members for which the authorization failed.

The procedures for adding groups of devices vary according to whether you are selecting members of the group from a query of the existing infrastructure, or whether you are adding members of a group from an input list of a prepared text file.

- *Adding Groups of Devices from a Query* begins below.
- Adding Groups of Devices from an Input List or File begins on page 95.

# Adding Groups of Devices from a Query

Use this method when you want to create a group of devices from a query of the *existing* objects in the infrastructure. For example, the objects may exist within a specific container or authority, or be selectable by their name.

#### To add groups of devices from a guery of the infrastructure

- 1. Go to the authority of Entire Network, Novadigm-managed Infrastructure, Radia Managed Groups.
- 2. From the Model Administration task group, click Add Group of Devices.
  The Add Group of Devices dialog box opens, prompting you to select in input method.



Figure 4.15 ~ Select input method from Add Group of Devices dialog box.

**3.** Choose **Query** to create the list of group members by querying your current infrastructure. The **Query** dialog box for **Add Group of Devices** opens.



# Add Group of Devices

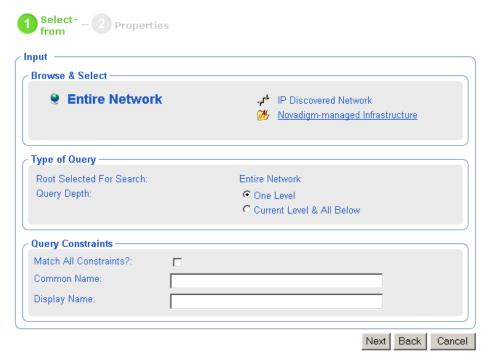


Figure 4.16 ~ Add Group of Devices after selecting Input from Query.

**4.** In the **Browse & Select** area, navigate to the location in your network that contains all potential members of the group, for example, a specific container or domain. This becomes the root selected for your search.

### Note

This is one of the few times that you are allowed to change your authority after starting a task in the Radia Management Portal.

- **5.** In the **Type of Query** area, select the **Query Depth**.
  - One Level

    Queries one level below the selected Authority.
  - Current Level & All Below
    Queries the current level and all levels below the selected Authority.

**6.** If you want to constrain your query, type the appropriate information in the text boxes listed in the **Query Constraints** area.

#### **Notes**

You can use wildcards in these text boxes. For example, if you want to search for all devices beginning with the letter **a**:

- 1. In the Query Depth area, select Current Level & All Below.
- 2. In the Common Name text box, type a\*.

A list of all devices beginning with the letter **a** is returned.

You can also search for more than one pattern in the **Common Name** text box by typing the following characters directly between each wildcard pattern (do not use spaces): **)(cn=.** For example, if you want to search for all devices that begin with either the letter **a** or the letter **o**:

- 1. In the Query Depth area, select Current Level & All Below.
- 2. In the Common Name text box, type a\*)(cn=o\*.

A list of devices beginning with the letters  ${\bf a}$  or  ${\bf o}$  is returned.

- **7.** Select **Match All Constraints?** if you want the results of your query to match all of the specifications that you typed in the **Query Constraints** area.
- **8.** Click **Next** to initiate the query.

The **Add Group of Devices – Properties** dialog box opens with all potential members based on the results of your query placed in the **Available** column.

Fill in the **Properties** and select the members to add to the group using the following steps.



## Add Group of Devices

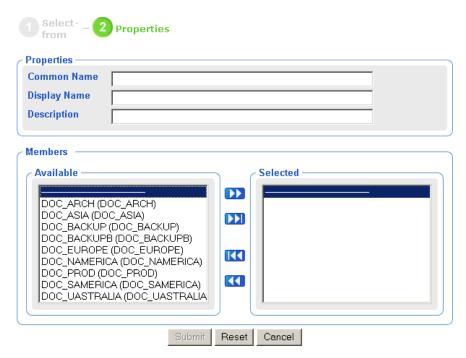


Figure 4.17 ~ Add Group of Devices – Properties dialog box.

**9.** In the **Common Name** text box, type a name for the object.

### **Caution**

The Common Name for the object must be unique. If you attempt to create an object with a name that has already been used, an error appears in the workspace indicating that the object already exists.

- **10.** In the **Display Name** text box, type a name for the server that will appear in the infrastructure representation.
- **11.** In the **Description** text box, type a description that will appear in the **Details** view of the infrastructure representation.
- **12.** Modify the **Members** in the **Selected** column using the set of arrow icons. The **Members** in the **Selected** column will be added to the group when you click **Submit**.

If you want to remove devices from the **Selected** member list, select the appropriate devices from the **Selected** list and then click ...

#### OR

Simply click to remove all of the devices from the **Selected** list to the **Available** list, and then use the button to add selected devices back to the **Selected** list. See *Selecting an Audience* on page 182 for more information.

**13.** When the desired members for the group are in the **Selected** list, click **Submit**.

The member devices are added to the group. The **View Properties Group of Devices** dialog box opens, which lists the names of each member device in the group.

Existing devices in the infrastructure are identified, and their properties are updated with the group membership information.



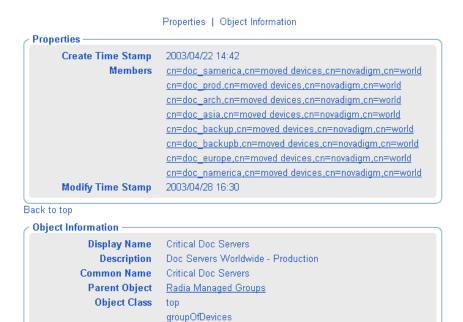


Figure 4.18 ~ Viewing the Critical Doc Servers Group of Devices Properties.

Back to top

Once a group is added, you can select the group as the target of the group-supported operations. These are listed in the beginning of *Adding Groups of Devices* on page 89.

You can also modify a group, as discussed in *Modifying Groups of Devices* on page 100.

## Adding Groups of Devices from an Input List or File

Use this method when you want to create a group of devices from a prepared list or text file. This method allows you to have new objects automatically created in the first steps of the task. For example, this method is an efficient way to build your infrastructure by adding objects as you create the groups, then use the **Install Client** task to deploy clients to all devices in that group.

### To add groups of devices from an input list or text file

**1.** Outside the Radia Management Portal, prepare a text-based list or text file of the devices to be added to the group.

#### Note

You can modify the group member later. However, portal operations can only be performed on the entire group (not a subset). Thus, plan your groups accordingly.

- **2.** You can cut and paste entries from your prepared list into the text box available in Step 6 on page 96, or you can input the entire list. To automatically input the entire file during this task, place the \*.txt file in the /etc/group folder of the Radia Integration Server location. By default, this location is:
  - /opt/Novadigm/IntegrationServer/etc/group
- 3. From the Radia Management Portal, locate or create a container to hold the object definitions for any new devices (not known to your current infrastructure). The container must exist at the authority of Entire Network, Novadigm-managed Infrastructure, and optionally Radia Managed Groups. For details on creating a container, see Adding Containers on page 85.
- **4.** Go to the authority of **Entire Network**, **Novadigm-managed Infrastructure**, **Radia Managed Groups**.
- 5. From the Model Administration task group, click Add Group of Devices.
  The Add Group of Devices dialog box opens, prompting you to select an input method.

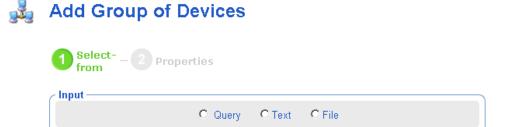


Figure 4.19 ~ Select input method from Add Group of Devices dialog box.

- **6.** Choose how you want to input the members of the group using one of the following methods:
  - Select **Query** to create the list of group members by querying your current infrastructure. Procedures for this method are found in *To add groups of devices from a query of the infrastructure* on page 90.
  - Select **Text** to type (or cut and paste) the members of your group into a text box in the next dialog box. The following dialog box opens.



Figure 4.20 ~ Add Group of Devices after selecting input from list.

Use the **Input Text** box to type (or cut and paste in) the members of the group. Enter hostnames for the devices separated by one or more spaces. You can remove members from this source input list in the next step.

• Click **File** to select a \*.txt file you have prepared and placed in the **/etc/group** folder. The following dialog box opens.



# Add Group of Devices



Figure 4.21 ~ Add Group of Devices after selecting input from list.

Use the **Input File** list to select the text file to serve as the source of the group members. You can remove members from this source list in the next step.

#### Caution

As soon as you click **Next**, all new devices from the input list or text file are created as devices in your infrastructure in the selected container.

- **7.** Select a container from the **Create Devices in Container** drop-down list to hold definitions for any new devices you have in your input file. The list includes existing containers at the authority levels of:
  - Novadigm-managed infrastructure
  - Radia Managed Groups
- **8.** Click **Next** to add any new devices you input to the infrastructure container selected, and continue with the addition of the devices to the group.

The **Add Group of Devices** – **Properties** dialog box opens with all member devices (input from the previous text box or file) placed in the **Selected** column, by default. Fill in the **Properties** and select the members to add to the group using the following steps.



Figure 4.22 ~ Add Group of Devices - Properties dialog box.

**9.** In the **Common Name** text box, type a name for the object.

### **Caution**

The Common Name must be unique. If you attempt to create an object with a name that has already been used, an error appears in the workspace indicating that the object already exists.

- **10.** In the **Display Name** text box, type a name for the server that will appear in the infrastructure representation.
- **11.** In the **Description** text box, type a description that will appear in the **Details** view of the infrastructure representation.

**12.** Modify the members in the **Selected** column using the set of arrow icons. The **Members** in the **Selected** column will be added to the group when you click **Submit**.

If you want to remove devices from the **Selected** member list, select the appropriate devices from the **Selected** list and then click ...

#### OR

Simply click to remove all of the devices from the **Selected** list to the **Available** list, and then use the button to add selected devices back to the **Selected** list. See *Selecting an Audience* on page 182 for more information.

**13.** When the desired members for the group are in the **Selected** list, click **Submit**.

The member devices are added to the group. The **View Properties Group of Devices** dialog box opens, which lists the names of each member device in the group.

- New devices are placed in the container specified during the task.
- Existing devices in the infrastructure are identified, and their properties are updated with the group membership information.

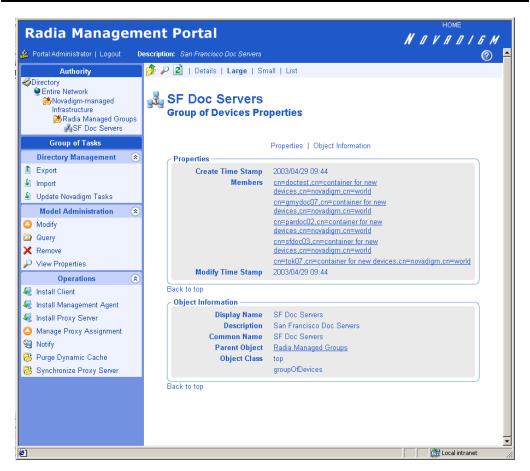


Figure 4.23 ~ New Group of Devices Properties.

Once a group is added, you can select the group as the target of the group-supported operations. These are listed in the beginning of *Adding Groups of Devices* on page 89.

To split the group of devices into different containers, see *Moving Devices within Novadigm-managed Infrastructure* on page 102.

**14.** You can also modify a group, as discussed in *Modifying Groups of Devices* below.

# **Modifying Groups of Devices**

Use the **Modify** task to change the members of an existing group. The procedures are very similar to those for adding groups of devices (see *Adding Groups of Devices* on page 89).

If you modify the members of a group that has been scheduled for a job, but not yet executed, the job will execute against the modified group members. See *Dynamic Job Scheduling Against Groups of Devices* on page 106.

### To modify a group of devices

- 1. Go to the authority of Entire Network, Novadigm-managed Infrastructure, Radia Managed Groups.
- **2.** Select the group of devices you want to modify.
  - The View Properties Group of Devices dialog box opens.
- 3. From the Model Administration task group, click Modify.
  - The Modify Group of Devices dialog box opens, prompting you to select an input method.

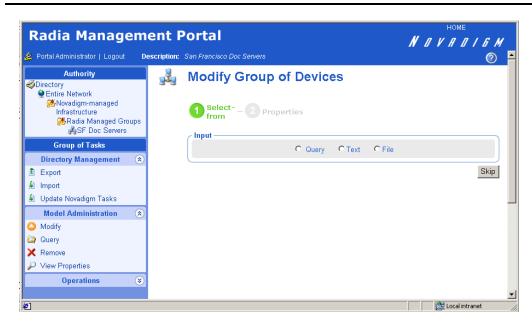


Figure 4.24 ~ Select input method from Modify Group of Devices dialog box..

**4.** Choose a method for adding members to the group.

#### OR

Click **Skip** if you want to simply remove members from the group.

- **5.** The rest of the dialog boxes and procedures parallel those discussed in the topic *Adding Groups of Devices*.
  - If you select **Query**, continue with Step 3 from *To add groups of devices from a query of the infrastructure* starting on page 90.

- If you select **Text** or **File**, continue with Step 5 from *To add groups of devices from an input list or text file* starting on page 95.
- If you select **Skip**, continue with Step 7 from *To add groups of devices from an input list* or text file starting on page 95.
- **6.** After you submit your changes, the **View Properties Group of Devices** dialog boxes displays the revised members of the group.

# Moving Devices within Novadigm-managed Infrastructure

Use the **Move Device** task to move one or more devices within your **Entire Network**, **Novadigm-managed Infrastructure** authority to another, existing container in that authority. Use this to split devices into manageable containers after they were added in bulk using the task **Add Groups of Devices**, as discussed on page 89.

#### To move devices in your Novadigm-managed Infrastructure to a different container

#### **SUMMARY OF STEPS:**

- **1.** Have the destination container ready within the Novadigm-managed Infrastructure Authority.
- **2.** Go to the Novadigm-managed Infrastructure authority and select **Move Device** from the Model Administration task group.
- **3.** Follow the dialogs to query for the devices to be moved.
- **4.** From the query results, select specific devices to be moved.
- **5.** Select the destination container for the move.
- **6.** View moved devices in their new container.

#### **DETAILED STEPS:**

- **1.** Create or locate the destination container for the moved devices. This container must exist within the Novadigm-managed Infrastructure authority. For details on creating a container, see *Adding Containers* on page 85.
- 2. Go to the authority of Entire Network, Novadigm-managed Infrastructure.
- 3. From the Model Administration task group, click Move Device.
  The Query dialog box for Move Device opens, prompting you to specify all devices to be moved.

# **Move Device**

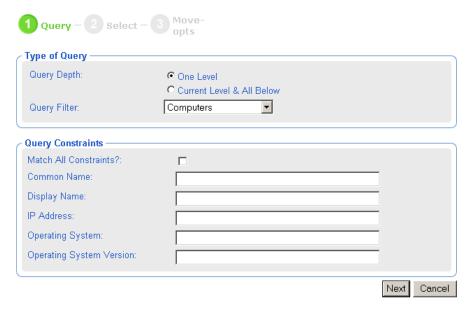


Figure 4.25 ~ Enter a query to specify devices to be moved.

- **4.** In the **Type of Query** area, first select the **Query Depth**.
  - One Level

    Queries one level below the selected Authority.
  - Current Level & All Below
     Queries the current level and all levels below the selected Authority.
- **5.** In the **Type of Query** area, also select a **Query Filter**. Use the drop-down list box to specify an object type, if desired.
- **6.** If you want to constrain your query, type the appropriate information in the text boxes listed in the **Query Constraints** area.

#### **Notes**

You can use wildcards in these text boxes. For example, if you want to search for all devices beginning with the letter  $\mathbf{a}$ :

- 1. In the Query Depth area, select Current Level & All Below.
- 2. In the Common Name text box, type a\*.

A list of all devices beginning with the letter **a** is returned.

You can also search for more than one pattern in the **Common Name** text box by typing the following characters directly between each wildcard pattern (do no use spaces): **)(cn**= For example, if you want to search for all devices beginning with either the letter **a** or the letter **o**:

- 1. In the Query Depth area, select Current Level & All Below.
- 2. In the Common Name text box, type a\*)(cn=o\*.

A list of all devices beginning with the letters **a** or **o** is returned.

- **7.** Select **Match All Constraints?** if you want the results of your query to match all of the specifications that you entered in the **Query Constraints** area.
- **8.** Click **Next** to initiate the query.

The **Move Device – Select** dialog box opens with all potential members based on the results of your query placed in the **Available** column.

Select the members to be moved using the following steps.

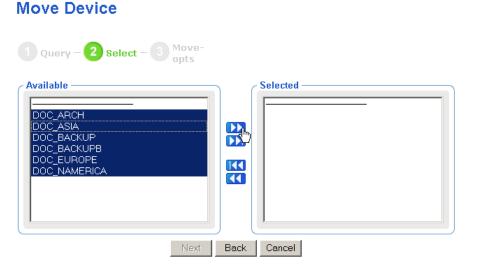


Figure 4.26 ~ Move Device – Select dialog box.

**9.** Place all devices to be moved to another container in the **Selected** column using the set of arrow icons. The **Members** in the **Selected** column will be moved to another container in the next step.

If you want to move all devices to the **Selected** member list, click **DI**. **OR** 

To move individual members, select the members in the **Available** list and click . See *Selecting an Audience* on page 182 for more information.

**10.** When the desired members for the group are in the **Selected** list, click **Next**.

The **Move Device** – **Move Options** dialog box opens, which lists the names of each member device selected for the move, and permits you to browse and select the destination container for the devices.



Figure 4.27  $\sim$  Move Device – Move Options dialog to select the destination container for the move.

**11.** Browse through the objects listed on the *right*-side of the **Browse & Select Destination** group area to browse and select the destination container. Only containers within the **Novadigm-managed Infrastructure** can be selected. Click on a container listed on the right to select it as a destination. This moves it to the left-side of the **Browse & Select Destination** group box.

The **text** on the bottom of the Browse area summarizes the selected container for the move destination. In Figure 4.27, the container named **Moved Devices** is the selected destination.

**12.** When the destination container is correctly selected, click **Move.** 

The devices are moved to the destination container, whose Authority is displayed by the Radia Management Portal.

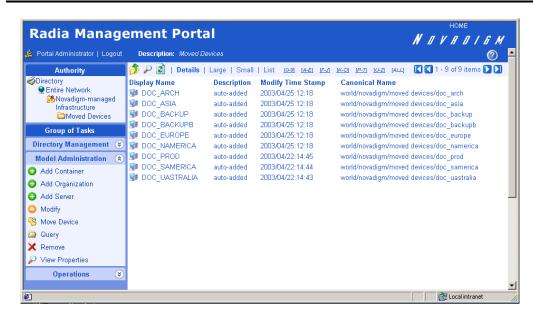


Figure 4.28 ~ Viewing Authority of destination container at end of Move Device task.

You will see all moved devices listed in the authority of the destination container at the end of the Move Device task.

# **Dynamic Job Scheduling Against Groups of Devices**

Jobs scheduled for the following Operations tasks are dynamic when used against a group of devices:

- Install Client
- Install Management Agent
- Install Proxy Server
- Synchronize Proxy Server
- Purge Dynamic Cache (of Proxy Server)

This means the target list is recalculated against the group each time the job is initiated, as opposed to when the job is scheduled.

This dynamic feature can be used to notify a series of devices, for example, with minimal effort. You can create a group of devices and schedule a daily Notify against the group. By changing the members in the group of devices between executions, the job continues to notify the new group members each day.

# **Adding Servers**

### To add a server

**1.** In the **Authority** navigation aid, go to the place in your infrastructure where you want to add a server.



Figure 4.29 ~ Sample Authority – Novadigm-managed infrastructure.

**2.** In the **Model Administration** task group, click **Add Server**. The **Add Server** dialog box opens.



## Add server

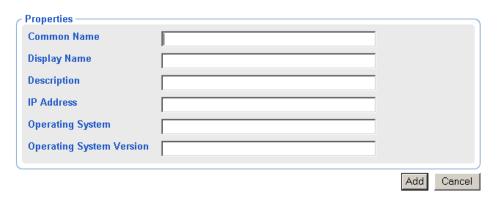


Figure 4.30 ~ Add Server dialog box.

**3.** In the **Common Name** text box, type a name for the object.

#### **Caution**

The Common Name for the object must be unique. If you attempt to create an object with a name that has already been used, an error appears in the workspace indicating that the object already exists.

- **4.** In the **Display Name** text box, type a name for the server that will appear in the infrastructure representation.
- **5.** In the **Description** text box, type a description that will appear in the Details view of the infrastructure representation.
- **6.** In the **IP Address** text box, type the IP address for the server.

#### **Caution**

This address must match the IP address of the computer exactly.

- 7. In the **Operating System** text box, type the name of the operating system that is running on the server
- **8.** In the **Operating System Version** text box, type the version of the operating system.
- **9.** Click **Add** to add the server to your infrastructure.

The new server is listed in the **Authority** navigation aid.

# **Modifying Objects**

Use the **Modify** task in the **Model Administration** task group to make changes to any object in the representation of your infrastructure.

## To modify an object

- 1. In the Authority navigation aid, go to the object that you want to modify.
- **2.** In the **Model Administration** task group, click **Modify**.

The Modify Container dialog box opens.



Figure 4.31 ~ Modify Container dialog box.

- **3.** Make the necessary changes.
- **4.** Click **Modify** to save your changes.

## $\mathbf{OR}$

Click **Reset** to undo the changes that you made.

## OR

Click Cancel to cancel the modify task.

## **Removing Objects**

Use the **Remove** task in the **Model Administration** task group to remove an object and all its children from the infrastructure. For example, if you remove a domain object from your network discovery, all infrastructure objects in that domain are also removed.

#### Caution

Prior to removing an object with children, you may want to navigate through the childobjects to make sure you want everything removed.

## To remove an object and its children

- **1.** In the **Authority** navigation aid, go to the appropriate object.
- 2. In the Model Administration task group, click Remove.

A confirmation appears in the workspace.



Are you sure you want to remove this object? 🗸 🗶

Figure 4.32 ~ Remove Object Message.

**3.** Click ✓ to confirm that you want to remove the object from the Radia Management Portal Directory.

#### OR

Click X to indicate that you do not want to remove the object.

**4.** The remove is completed if the object has no children.

If the object you want to remove has children, a notification and confirmation appears in the workspace.



"pathxptest" has children

Are you sure you want to remove this object and all its children? 

X

Figure 4.33 ~ Remove Object with Children message.

5. Click ✓ to confirm that you want to remove the object and all its children from the Radia Management Portal Directory.

#### OR

Click X to indicate that you do not want to remove the object and its children. The remove is cancelled; none of the objects are removed.

# **Configuring Task Groups**

The Taskbar contains logical groups of tasks (called *task groups*). A *task* is an activity that a person performs to initiate a job. The available tasks vary based on the selected Authority, as well as your role. In addition to the standard task groups (see *Taskbar* on page 60 for more information) you can create your own task groups.

## **Adding Task Groups**

## To add a task group

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Tasks.

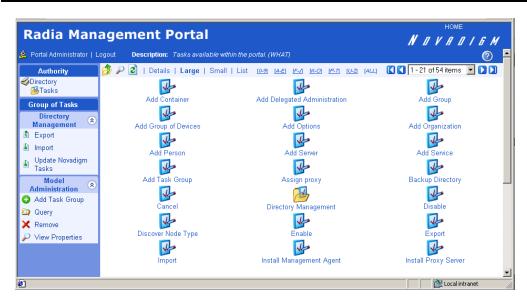


Figure 4.34 ~ Authority - Tasks.

**3.** In the Model Administration task group, click Add Task Group. The Add Task Container dialog box opens.

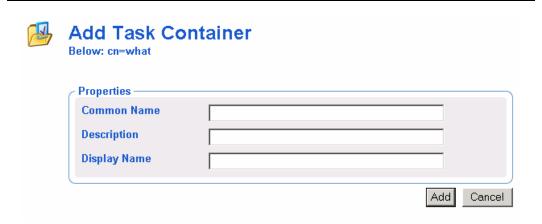


Figure 4.35 ~ Add Task Container dialog box.

**4.** In the **Common Name** text box, type a name for the task group object.

## **Caution**

The Common Name for the object must be unique. If you attempt to create an object with a name that has already been used, an error appears in the workspace indicating that the object already exists.

- **5.** In the **Description** text box, type a description that will appear in the **Details** view.
- **6.** In the **Display Name** text box, type a name for the task group.
- 7. Click Add.

The Modify Task Container dialog box opens.

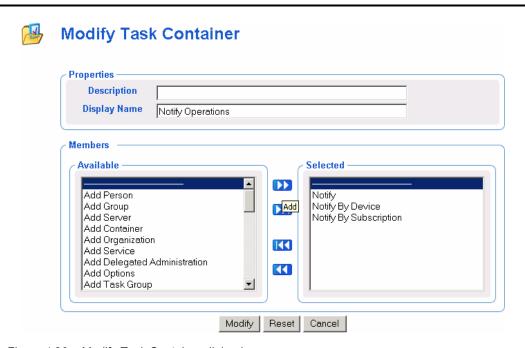


Figure 4.36 ~ Modify Task Container dialog box.

- **8.** From the **Available** list, select one or more tasks to add to the task group.
- **9.** Click to add the selected groups to the **Selected** list.
- 10. Click Modify.

The Notify Operations, Task Container Properties dialog box opens.



#### Properties | Object Information **Properties** 2003/04/29 10:25 **Create Time Stamp** Members Notify Notify By Device Notify By Subscription **Modify Time Stamp** 2003/04/29 10:27 Back to top **Object Information** Display Name Notify Operations Description **Notify Operations** Common Name Notify Operations Parent Object <u>Tasks</u> **Object Class** groupOfNames nvdTaskGroup Back to top

Figure 4.37 ~ Task Container Properties for Notify Operations.

11. In the Authority navigation aid, go to Directory, Entire Network.

In the Taskbar, your new task group, such as **Notify Operations**, is available. Task Groups are listed alphabetically.

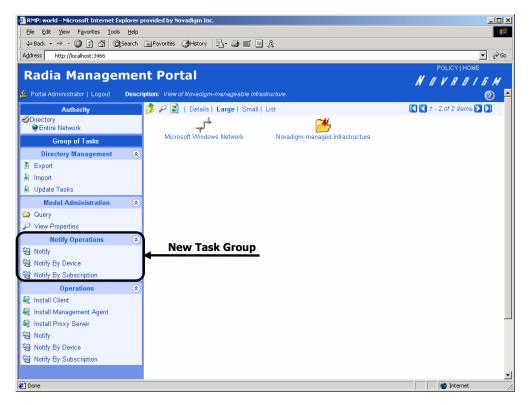


Figure 4.38 ~ New task group.

If you would like to configure the Radia Management Portal so that only some administrators can access this task group, see *Configuring Delegated Administration* on page 119 for more information.

# **Modifying Task Groups**

## To modify a task group

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Tasks.
- **3.** Select the task group that you want to modify.
- **4.** In the **Model Administration** task group, click **Modify**. The **Modify Task Container** dialog box opens.

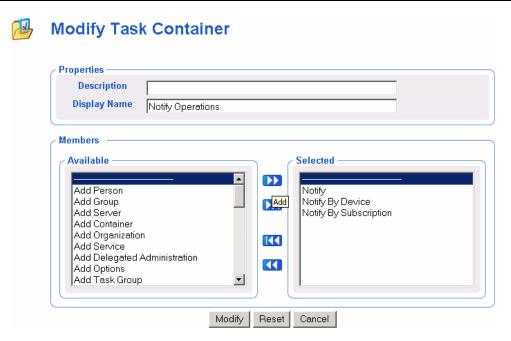


Figure 4.39 ~ Modify Task Container dialog box.

- **5.** Make any necessary changes. For detailed information about configuring task groups, see *Adding Task Groups* on page 112 for more information.
- **6.** Click **Modify** to save your changes.

### OR

Click **Reset** to undo the changes that you made to this role.

#### OR

Click Cancel to close this dialog box without saving your changes.

The View Properties Task Container dialog box opens and you can see your changes.

# **Removing Task Groups**

## To remove a task group

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Tasks.
- **3.** Select the task group that you want to remove.
- **4.** In the **Model Administration** task group, click **Remove**.

The Remove Task Container dialog box opens.



Are you sure you want to remove this object? 🗸 🗶

Figure 4.40 ~ Remove Task Container dialog box.

**5.** Click ✓ to confirm that you want to remove the task group from the Radia Management Portal Directory.

#### OR

Click X to indicate that you do not want to remove the task group.

# **Configuring Delegated Administration**

Use the Radia Management Portal to configure delegated administration information so that your administrators can access only the *tasks* that are relevant to them and their *roles*. A *task* is a single operational function, or an action, that is performed on the selected target audience. A *role* is a logical grouping of tasks that defines an administrative function. In other words, you will configure *who* can do *what*, and specify *where*, in the infrastructure, they may do it.

The Radia Management Portal contains several standard roles. To view the existing roles click **Directory** in the **Authority** navigation aid. Then, in the workspace, click **Delegated Administration**. The following roles appear:

#### ■ Global Default Policy

Allows the Radia Management Portal administrator to access Model Administration and Operations tasks in the following Scopes of Action—Entire Network, Administrators & Operators, and Tasks.

#### **■** Operations Policy

Allows operations staff to access Operations tasks in the following Scopes of Action—Entire Network, Administrators & Operators, and Tasks.

## ■ System-Wide Access

Allows the Radia Management Portal administrator to access all tasks in all Scopes of Action.

#### Note

This role cannot be modified in order to prevent you from being locked out of the Radia Management Portal.

#### **■** Test Global Policy

Allows you to experiment with entitlement options.

In the workspace, click any of these delegated administration roles to view the properties for the role.

## **Adding Delegated Administration Roles**

Adding new delegated administration information for your administrators is a three-step process. First, you will assign administrators and operators to the role. Next, you will specify what tasks the administrators or operators will be able to perform. And, finally, you will select where, in the infrastructure, the administrators or operators can perform these tasks.

#### To add a delegated administration role

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Delegated Administration.

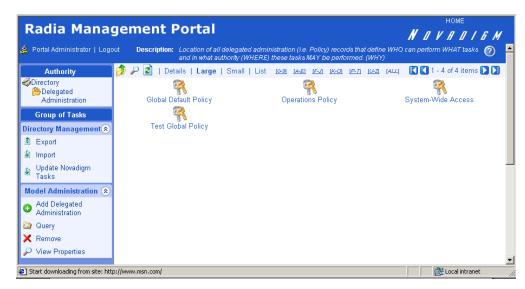


Figure 4.41 ~ Authority – Delegated Administration.

**3.** In the Model Administration task group, click Add Delegated Administration. The Add Delegated Administration dialog box opens.

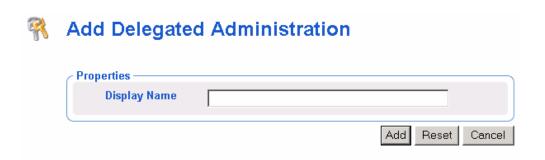


Figure 4.42 ~ Add Delegated Administration dialog box.

- **4.** In the **Display Name** text box, type a name for the role.
- 5. Click Add.

The **Modify Delegated Administration** dialog box opens. First, you will select the administrators and operators that you want to assign to this role.



Figure 4.43 ~ Modify Delegated Administration dialog box – Administrators & Operators.

- **6.** In the **Browse & Select** area of the dialog box, make sure that **Administrators & Operators** is selected. Selected text is bold.
- 7. Click next to the each of the administrators and operators that you want to add.

  Notice that as you select administrators and operators, they appear in the **Selected** area of the dialog box under the **Admin/Operators** column.

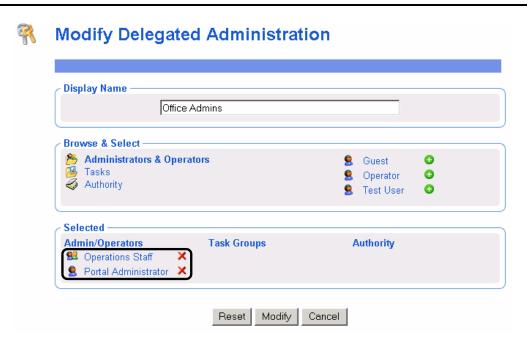


Figure 4.44  $\sim$  Modify Delegated Administration dialog box – selecting Administrators & Operators.

If you want to remove an administrator or operator from the list of selected items, click X. Next, select the tasks that you want to include in this role.

**8.** In the Browse & Select area of the dialog box, click Tasks.

The **Browse & Select** area updates to allow you to select *what* groups of tasks to include in this role.



Figure 4.45 ~ Modify Delegated Administration dialog box – selecting Tasks.

- **9.** Click below the list, if you do not see the container that you want to select. If there are five or more task groups to select from, you can click the appropriate range of letters above the list to narrow it.
- **10.** Click next to the each of the task groups that you want to add.

  Notice that as you select task groups, they appear in the **Selected** area of the dialog box under the **Task Groups** column.



Figure 4.46 ~ Modify Delegated Administration dialog box – selecting Task Groups.

If you want to remove a Task Group from the list of selected items, click X.

Next, select the areas in the infrastructure that administrators and operators assigned to this

**11.** In the **Browse & Select** area of the dialog box, click **Authority**.

role are entitled to manage.

The **Browse & Select** area updates to allow you to select *where*, in the infrastructure, the administrators and operators assigned to this role are entitled to manage.



Figure 4.47 ~ Modify Delegated Administration dialog box – selecting Authority.

- **12.** Click below the list, if you do not see the container that you want to select. If there are five or more task groups to select from, you can click the appropriate range of letters above the list to narrow it.
- **13.** If necessary, you can browse the containers on the right to limit the Authority further. To do this, click the name of the container that you want to browse, such as **Entire Network**.



Figure 4.48 ~ Modify Delegated Administration dialog box – browsing for an Authority in a container.

Notice that the list of items that you can add to the delegated administration role narrows as you browse further into a specific container. For example, click Microsoft Windows Network, or, in a UNIX environment, click **IP Discovered Network**.



Figure 4.49 ~ Modify Delegated Administration dialog box – browsing for an Authority in a domain.

Now, you can browse to a specific domain, such as the BETADOMAIN. This allows you to limit the administrator's access to a very specific area of your network.

At any time, you can click an item on the left (such as Entire Network) to return to a broader authority.

**14.** Click onext to the items that you want to add.

Notice that as you select an Authority, it appears in the **Selected** area of the dialog box under the **Authority** column.

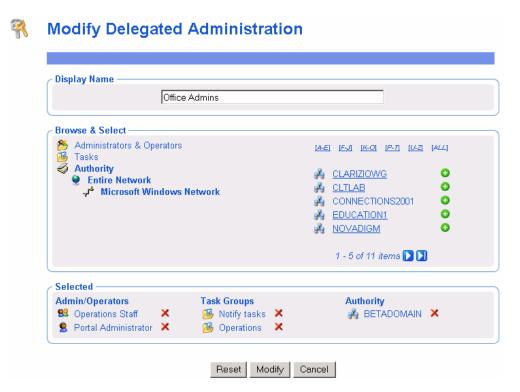


Figure 4.50 ~ Modify Delegated Administration dialog box – selecting the Authority.

If you want to remove an Authority from the list of selected items, click X.



## 15. Click Modify.

The View Properties Delegated Administration dialog box opens.



Figure 4.51 ~ View Properties Delegated Administration dialog box.

## **Modifying Delegated Administration Roles**

## To modify a delegated administration role

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click **Delegated Administration**.
- **3.** Select the delegated administration role that you want to modify.
- **4.** In the **Model Administration** task group, click **Modify**. The **Modify Delegated Administration** dialog box opens.

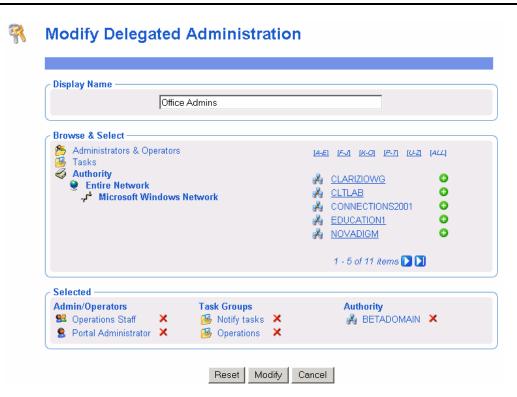


Figure 4.52 ~ Modify Delegated Administration dialog box.

- **5.** Make any necessary changes. For detailed information about configuring delegated administration roles, see *Adding Delegated Administration Roles* on page 120.
- **6.** Click **Modify** to save your changes.

OR

Click **Reset** to undo the changes that you made to this role.

OR

Click Cancel to close this dialog box without saving your changes.

The **View Properties Delegated Administration** dialog box opens and you can review your changes.

## **Removing Delegated Administration Roles**

#### To remove a delegated administration role

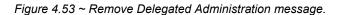
- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click **Delegated Administration**.
- **3.** Select the delegated administration role that you want to remove.
- **4.** In the **Model Administration** task group, click **Remove**.

The Remove Delegated Administration message opens.



## **Remove Delegated Administration**

Are you sure you want to remove this object? 🗸 🗶



OR

Click X to indicate that you do not want to remove the Delegated Administration role.

# **Querying a User's Delegated Administration**

Use the **Query User's Delegated Administration** task in the **Model Administration** task group to display information about the selected user's role.

## To query a user's delegated administration

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Administrators & Operators.
- **3.** Select the appropriate user.
- **4.** In the **Operations** task group, click **Query User's Delegated Administration**. A table similar to the following appears.



Figure 4.54 ~ View Properties Delegated Administration dialog box for a user.

**5.** Click any link in the table to view the properties for that object.

# **Configuring Administrators and Operators**

The Administrators & Operators container in the Radia Management Portal Directory stores authentication information. Every administrator must be added at the top level of this container. After adding administrators and assigning them to groups, you can assign them to the appropriate delegated administration policies. See *Modifying Delegated Administration Roles* on page 129 for more information.

## **Adding Users**

When adding a user, assign the person a unique user ID and password. You can also assign the user to groups.

## To add a user

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Administrators & Operators.

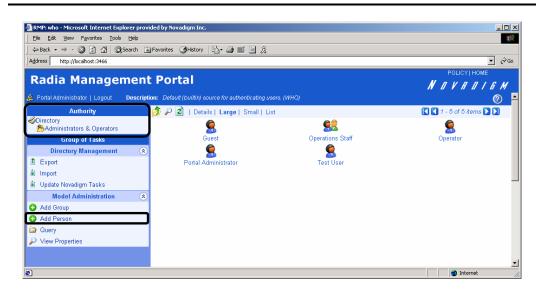


Figure 4.55 ~ Authority is Administrators and Operators.

**3.** In the **Model Administration** task group, click **Add Person**.

## The Add Person dialog box opens.

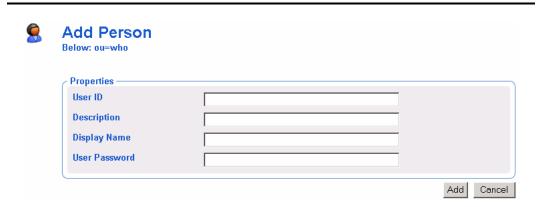


Figure 4.56 ~ Add Person dialog box.

**4.** In the **User ID** text box, type the user name.

## **Caution**

The User ID for the object must be unique. If you attempt to create an object with a user ID that has already been used, an error appears in the workspace indicating that the object already exists.

- 5. In the **Description** text box, type a description that will appear in the Details view.
- **6.** In the **Display Name** text box, type a name for the user that will appear in the Radia Management Portal.
- **7.** In the **User Password** text box, type the user's password.
- 8. Click Add.

The Modify Person dialog box opens.

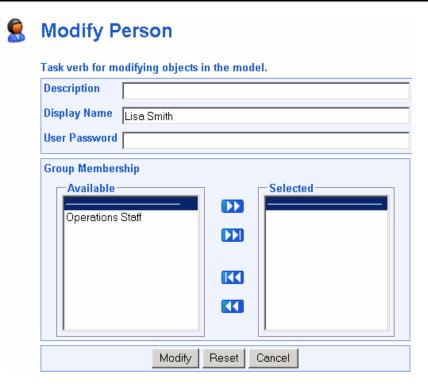


Figure 4.57 ~ Modify Person dialog box.

- **9.** From the **Available** list, select one or more groups to add the user to.
- **10.** Click **\rightarrow** to add the selected groups to the **Selected** list.

## OR

If you want to select all of the groups in the list, you do not need to select anything from the **Available** list. Simply click to add all of the groups to the **Selected** list. See *Selecting an Audience* on page 182 for more information about how to use this dialog box.

11. Click Modify.

The View Properties Person dialog box opens.



Figure 4.58 ~ View Properties Person dialog box.

# **Modifying Users**

## To modify a user

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Administrators & Operators.
- **3.** Select the user that you want to modify.
- **4.** In the **Model Administration** task group, click **Modify**. The **Modify Person** dialog box opens.

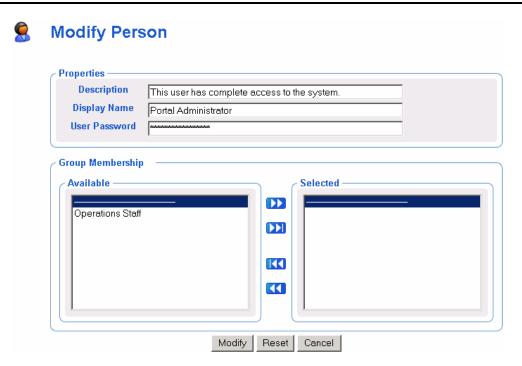


Figure 4.59 ~ Modify Person dialog box.

- **5.** Make any necessary changes. For detailed information about configuring users, see *Adding Users* on page 132.
- **6.** Click **Modify** to save your changes.

## $\mathbf{OR}$

Click **Reset** to undo the changes that you made to this role.

## $\mathbf{OR}$

Click Cancel to close this dialog box without saving your changes.

The View Properties dialog box opens and you can review your changes.

# **Removing Users**

## To remove a user

- **1.** In the **Authority** navigation aid, go to **Directory**.
- **2.** In the workspace, click **Administrators & Operators**.
- **3.** Select the user that you want to remove.
- **4.** In the **Model Administration** task group, click **Remove**.

The Remove Person message opens.



## **Remove Person**

Are you sure you want to remove this object? 🗸 🗶



Figure 4.60 ~ Remove Person message.

Click 

✓ to confirm that you want to remove the user from the Radia Management Portal Directory.

## OR

Click X to indicate that you do not want to remove the user.

# **Adding Groups**

## To add a group

- **1.** In the **Authority** navigation aid, go to **Directory**.
- **2.** In the workspace, click **Administrators & Operators**.

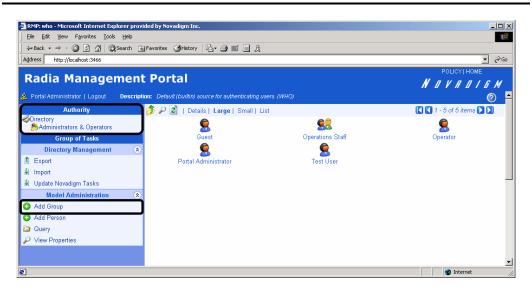


Figure 4.61 ~ Authority is Administrators & Operators.

**3.** In the Model Administration task group, click Add Group.

## The Add Group dialog box opens.

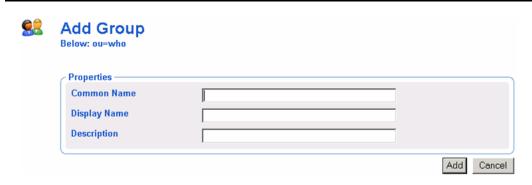


Figure 4.62 ~ Add Group dialog box.

**4.** In the **Common Name** text box, type a name for the container object.

## **Caution**

The Common Name for the object must be unique. If you attempt to create an object with a name that has already been used, an error appears in the workspace indicating that the object already exists.

- **5.** In the **Display Name** text box, type a name for the group that will appear in the Radia Management Portal.
- **6.** In the **Description** text box, type a description that will appear in the Details view.
- 7. Click Add.

The **Modify Group** dialog box opens.

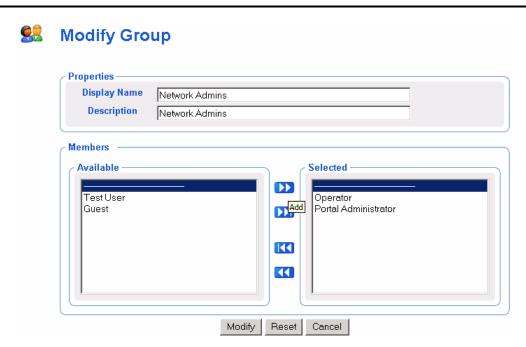


Figure 4.63 ~ Modify Group dialog box.

- **8.** From the **Available** list, select the users and groups that you want to assign to this group.
- **9.** Click to add the selected users to the **Selected** list.

#### $\mathbf{OR}$

If you want to select all of the users in the list, you do not need to select anything from the **Available** list. Simply click to add all of the users to the **Selected** list. See *Selecting an Audience* on page 182 for more information about how to use this dialog box.

10. Click Modify.

The Group Properties dialog box opens and you can review your changes.



## Properties | Object Information Properties -2003/04/29 11:37 Create Time Stamp Members uid=operator,ou=who uid=admin,ou=who Modify Time Stamp 2003/04/29 11:37 Back to top **Object Information** Display Name Network Admins **Description** Full Access Common Name Network Admins Parent Object ou=who Object Class top groupOfNames Back to top

Figure 4.64 ~ Group Properties dialog box.

## **Modifying Groups**

## To modify a group

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Administrators & Operators.
- **3.** Select the group that you want to modify.
- **4.** In the **Model Administration** task group, click **Modify**. The **Modify Group** dialog box opens.

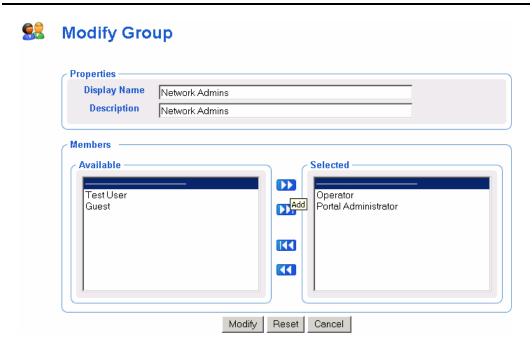


Figure 4.65 ~ Modify Group dialog box.

- **5.** Make any necessary changes. For detailed information about configuring users, see *Adding Groups* on page 138.
- **6.** Click **Modify** to save your changes.

## OR

Click **Reset** to undo the changes that you made to this role.

## OR

Click Cancel to close this dialog box without saving your changes.

The View Properties dialog box opens and you can review your changes.

## **Removing Groups**

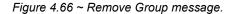
## To remove a group

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Administrators & Operators.
- **3.** Select the group that you want to remove.
- **4.** In the **Model Administration** task group, click **Remove**.

The Remove Group message opens.



Are you sure you want to remove this object? 🗸 🗶



**5.** Click ✓ to confirm that you want to remove the group from the Radia Management Portal Directory.

#### OR

Click X to indicate that you do not want to remove the group.

# **Managing the Portal Directory**

The Radia Management Portal Directory, rmp.mk, contains configuration and entitlement information for the Radia Management Portal, as well as infrastructure and status information. This section describes how to backup, restore, or query the Radia Management Portal Directory, as well as how to import and export subsets of the Radia Management Portal Directory.

For related topics on the Portal Directory, see *Managing the Portal Directory (RMP.MK) File* on page 268 and *Modifying the Compress Portal Directory Job Group* on page 269.

## Creating a Backup of the Portal Directory

Use the **Backup Directory** task to create a backup copy of the entire Radia Management Portal Directory. If you are entitled to create backups, this task is available when the selected Authority is Directory. If you would like to export a portion of the Radia Management Portal Directory, see *Exporting Data from the Portal Directory* on page 153 for more information.

#### Tip

Create a Radia Management Portal backup job to run periodically to ensure that you back up data. If you create a daily backup with the same filename, the appended dates and times will keep the files unique. The Radia Management Portal keeps up to seven backup files with the same initial filename, then automatically deletes the oldest one when the next one is saved.

## **Backup Filenames and Maintenance**

The Radia Management Portal automatically appends the date and time of a directory backup to the user-assigned filename. This makes it easy to identify the appropriate backup file for a restore. Specifically, when a directory backup is performed, the user assigns a filename, the creation date and time are appended to this name, and then the file is saved with the extension \*.mk. Thus, the full name of a backup file includes the format:

<filename>.YYYYMMDD-HHMM.mk

#### where:

- *<filename>* is the Filename entered for the backup file.
- YYYYMMDD is the backup date in year, month, and day format.
- **HHMM** is the backup time in hours and minutes.
- **mk** is the assigned file extension.

For example, a backup file with the name **abc.20030523-1348.mk** was created in 2003, on May 23 at 1:48 PM, and named abc by the user.

#### **Note**

Prior to Radia Management Portal Version 1.3, the backup process employed a different method and produced an \*.LDIF file. The filenames of these \*.LDIF backup files did not have the date and time of the backup appended to the assigned filenames.

The Radia Management Portal automatically saves up to seven copies of backup files with the same assigned-name. After that, it deletes the oldest one when a new one is saved. If you assign the same name to a daily backup file, this allows you to keep seven days of backups. If you assign another name to a backup file once a week, this means you can keep seven weeks of backups.

### To backup the Radia Management Portal Directory

- **1.** In the **Authority** navigation aid, go to **Directory**.
- In the Directory Management task group, click Backup Directory.
   The Submit Backup—Backup Opts dialog box opens.



Figure 4.67 ~ Submit Backup—Options dialog box.

- **3.** In the **Filename** text box, type a filename for the backup to be saved in the default backup directory. The creation date and time of the backup will be appended to this filename, and the file is saved with the extension \*.mk. Thus, the full name of the backup file will be: **<filename>.YYYYMMDD-HHMM.mk**. For details, see *Backup Filenames and Maintenance* on page 144.
- Click Next.
  - The **Schedule** dialog box opens.
- **5.** In the **Schedule** dialog box, specify when you want this job to run. Backups may be scheduled once or periodically. For more information, see *Scheduling Jobs* on page 184.

### 6. Click Next.

The Submit Backup—Summary dialog box opens.

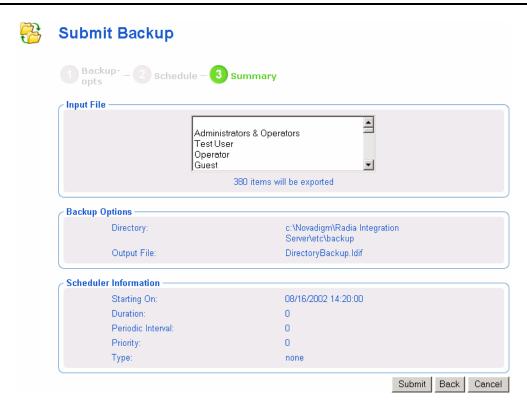


Figure 4.68 ~ Submit Backup—Summary dialog box.

### 7. Click Submit.

A list of the jobs appears. Now, you can use the **View Properties** task to view detailed information, such as the status of the job. See *Viewing Properties* on page 172 for more information.

**8.** Go to **/opt/Novadigm/IntegrationServer/etc/backup** to access the backup files for the Radia Management Portal Directory.

The Radia Management Portal maintains up to seven backup files with the same initial <filename>, then automatically purges the oldest one if an eighth one is created. This allows you to keep seven daily backup files with the same name, and keep seven weekly backup files with the same name.

### **Restoring the Portal Directory**

Use the **Restore Directory** task to restore a backup of the entire Radia Management Portal Directory. The Restore Directory task will restore either an \*.mk backup file produced from this version of the Radia Management Portal, or an \*.LDIF backup file produced from an earlier version of the Radia Management Portal..

### To restore the Radia Management Portal Directory

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the Directory Management task group, click Restore Directory.

  The Submit Restore—File dialog box opens.

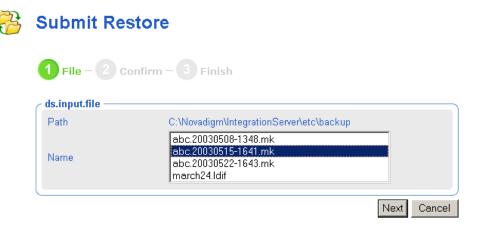


Figure 4.69 ~ Submit Restore—File dialog box.

**3.** From the **Name** list, select the file that you want to restore. The selection list may include \*.mk backup files, as well as any \*.LDIF backup files created from earlier versions of the Radia Management Portal.

Use the appended date-time stamps of the \*.mk backup files to select a backup file based on its creation date. The format of the date-time stamp used is: YYYYMMDD-HHSS, which indiates the Year Month Day – Hours Minutes. For example, the name **abc.20030515-1641.mk** represents a backup created in the year 2003 on May 15 at 16:41, or 4:41 PM.

4. Click Next.

A confirmation dialog box opens.





Are you sure you want to restore from file abc.20030515-1641.mk? 🗸 🗶

Figure 4.70 ~ Submit Restore—Confirm dialog box.

**5.** Click  $\checkmark$  to confirm that you want to restore the Radia Management Portal Directory. **OR** 

Click X to indicate that you do not want to restore the Radia Management Portal Directory.

**6.** After a confirmation of an \*.mk backup file, the **Finish** dialog box opens when the restore is complete. Click **Finish** to continue.



Restore complete Finish

Figure 4.71 ~ Submit Restore—Finish dialog box for an .mk backup file.

After the confirm of an \*.LDIF backup file, the **Finish** dialog box opens and includes messages on how to continue.





Restore complete Finish



The Radia Management Portal must be restarted to activate the restored directory.



If you do not want to activate the restored directory, delete etc/rmp.mk.restore.

Figure 4.72 ~ Submit Restore—Finish dialog box.

### **Caution**

If you decide that you do not want to restore the Radia Management Portal Directory, you can go to the Radia Integration Server's **\etc** folder and delete the file **rmp.mk.restore**. This must be done before clicking **Finish** and restarting the Radia Management Portal.

**7.** If you restored an \*.LDIF backup file, click **Finish** and then restart the Radia Management Portal to activate the restored directory.

### **Querying the Portal Directory**

Use the **Query** task in the **Model Administration** task group to locate objects in the Radia Management Portal Directory. You may use the results of the query to view information, or to select the authority for a job.

### To perform a query

- **1.** Use the **Authority** navigation aid to go to the place in your infrastructure where you want to perform a query.
- **2.** In the **Model Administration** task group, click **Query**.

The Query Directory dialog box opens.

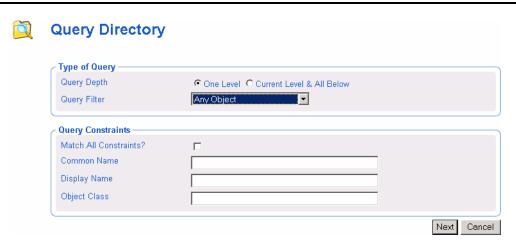


Figure 4.73 ~ Query Directory dialog box.

- **3.** In the **Type of Query** area, select the **Query Depth**.
  - One Level

    Queries one level below the selected Authority.
  - Current Level & All Below
     Queries the current level and all levels below the selected Authority.
- **4.** From the **Query Filter** drop-down list, select the type of object that you want to find. For example, if your selected authority is **Administrators & Operators**, you might select **Users** from this drop-down list so that your query results contain only the users that match your criteria.
  - The fields in the Query Constraints area change based on this selection.
- **5.** If you want to constrain your query, type the appropriate information in the text boxes listed in the **Query Constraints** area.

#### **Notes**

You can use wildcards in these text boxes. For example, if you want to search for all Administrator & Operator users and groups beginning with the letter **a**:

- 1. Select Current Level & All Below in the Query Depth area.
- 2. Select Administrators & Operators from the Query Filter drop-down list.
- In the Common Name text box, type a\*.

A list of all Administrator & Operator users and groups beginning with the letter  ${\bf a}$  is returned

You can also search for more than one pattern in the **Common Name** text box by typing the following characters directly between each wildcard pattern (do not use spaces): **)(cn**= For example, if you want to search for all users and groups beginning with either the letter **a** or the letter **o**:

- **1.** Repeat steps 1 and 2, above.
- 2. In the Common Name text box, type a\*)(cn=o\*.

A list of all Administrator & Operator users and groups beginning with the letters  ${\bf a}$  or  ${\bf o}$  is returned.

- **6.** Select **Match All Constraints?** if you want the results of your query to match all of the specifications that you typed in the **Query Constraints** area.
- **7.** Click **Next** to initiate the query.

The results of the query appear in the workspace.

#### **Caution**

The query results contain information intended only for viewing.

If you want to perform a task on an object in the query results, click the object to set the Authority. Then, select the appropriate task from the task group.

For example, if you searched the current level and below of the Microsoft Windows Network for all objects with a common name of N\*, the results might appear as shown in Figure 4.74 on page 152.

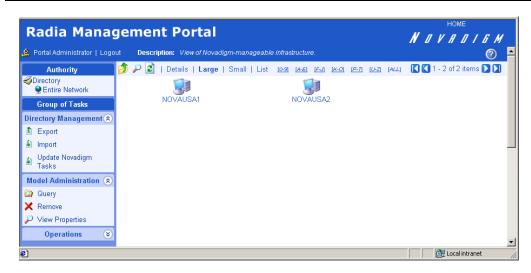


Figure 4.74 ~ Results of query.

### Reminder

If you want to perform a task on an object in the query results, you must click the object to set the Authority.

### **Exporting Data from the Portal Directory**

Use the **Export** task to export a subset of your Radia Management Portal Directory to an LDIF (LDAP Data Interchange Format) file. LDIF is a standard format that allows you to transfer data between LDAP-compliant directory services in ASCII format.

The default export location is the Radia Integration Server's /etc/export directory.

### To export the Radia Management Portal Directory

- **1.** Use the **Authority** navigation aid to select the place in your infrastructure that you want to export.
- **2.** In the **Directory Management** task group, click **Export**.
  - The Query dialog box opens.
- **3.** Specify criteria to narrow the scope of the job. See *Performing Queries* on page 180 for more information.
- 4. Click Next.
  - The **Select** dialog box opens.
- **5.** Select the audience from the **Available** list, and then click to add it to the **Selected** list. See *Selecting an Audience* on page 182 for more information.
- 6. Click Next.

The Submit Export—Exp-opts dialog box opens.



Figure 4.75 ~ Submit Export—Options dialog box.

- 7. In the Name text box, type a name for the LDIF file that will be saved in the directory.
- Click Next.

The **Schedule** dialog box opens.

- **9.** In the **Schedule** dialog box, specify when you want this job to run. For more information, see *Scheduling Jobs* on page 184.
- 10. Click Next.

The Submit Export—Summary dialog box opens.

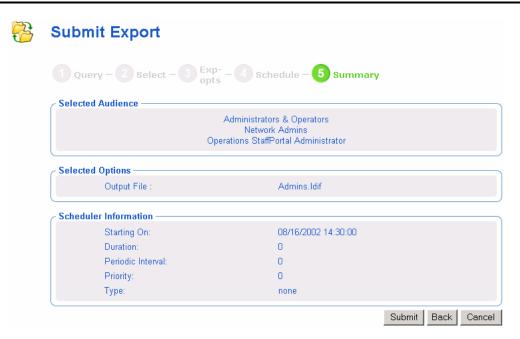


Figure 4.76 ~ Submit Export—Summary dialog box.

#### 11. Click Submit.

A list of the jobs appears. Now, you can use the **View Properties** task to view detailed information, such as the status of the job. See *Viewing Properties* on page 172 for more information.

**12.** Go to /opt/Novadigm/IntegrationServer/etc/export to access the LDIF file that you exported from the Portal Directory.

### Importing Data into the Portal Directory

Use the **Import** task to import an LDIF file into your Radia Management Portal Directory. For example, if you prefer to modify the Radia Management Portal Directory manually, in a text file,

rather than through the Radia Management Portal user interface, you can make your modifications, and then import the file into the Radia Management Portal Directory.

### **Caution**

Be sure to back up your Radia Management Portal Directory before importing any data. See *Creating a Backup of the Portal Directory* on page 144 for more information.

### To import the Radia Management Portal Directory

- 1. Use the **Authority** navigation aid to select the place in your infrastructure where you want to import the data.
- 2. In the Directory Management task group, click Import.

The **Submit Import**—**Pick File** dialog box opens and contains a list of the files stored in the default export location (the Radia Integration Server's /etc/export directory).

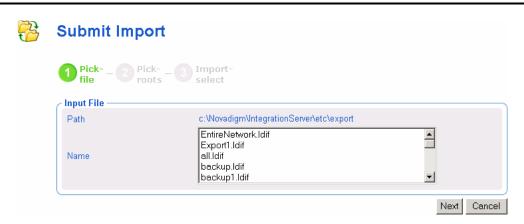


Figure 4.77 ~ Submit Import—Pick File dialog box.

- **3.** Click the file that you want to import.
- 4. Click Next.
- **5.** The **Submit Import—Pick roots** dialog box opens. Use this dialog box to select which pieces (or, root domain names) of the imported LDIF file to compare to the existing Portal directory. For example, if you exported the entire directory, then made changes to only one area of the directory, such as Administrators & Operators, you would select Administrators & Operators as the "root" during the import. The rest of the LDIF file will be ignored.



Figure 4.78 ~ Submit Import—Pick roots dialog box.

### 6. Click Next.

The **Submit Import—Import select** dialog box opens. This dialog box displays the differences between the LDIF file that you are importing and the Portal directory.

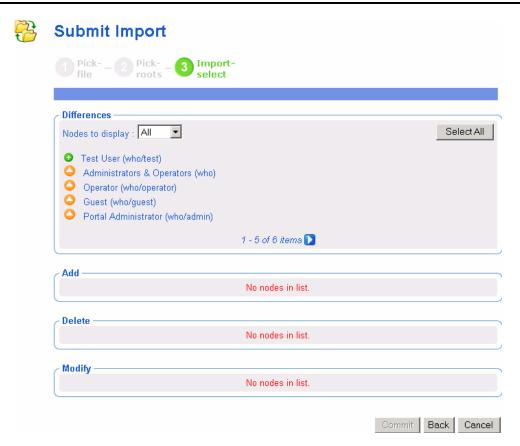


Figure 4.79 ~ Submit Import—Import Select dialog box.

- **7.** If necessary, use the **Nodes to display** drop-down list to limit the information that appears in the Differences area.
  - Select **All** to review all items changes to the LDIF file at once.
  - Select Add to review only those items that have been added to the LDIF file.
  - Select **Delete** to review only those items that have been removed from the LDIF file.
  - Select Modify to review only those items that have been modified in the LDIF file.
- **8.** In the **Differences** area, click the items that you want to accept as changes. For example, if you want to add **Test User** to the Portal Directory, click .

#### OR

If you want to accept all of the changes, click Select All.

The items that you selected are added to the appropriate list below. If you want to remove an item from the list, click its name.

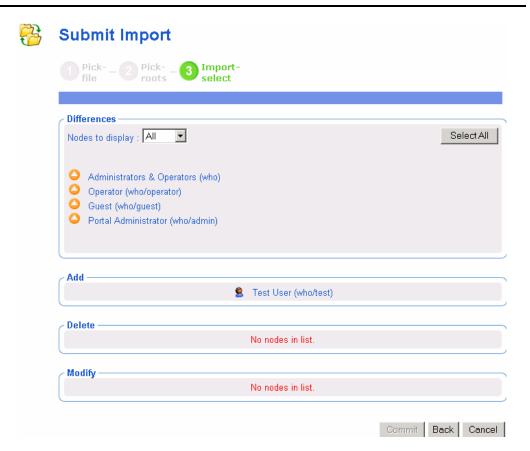


Figure 4.80 ~ Submit Import—Import Select dialog box.

### 9. Click Commit.

The items are added to the Portal directory.

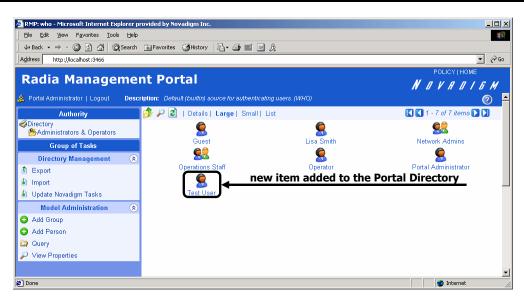


Figure 4.81 ~ Result of import to Portal directory.

### **Updating Novadigm Tasks**

Use **Update Novadigm Tasks** to update the tasks available to you when you receive a new build of the Radia Management Portal.

### To update tasks

- **1.** Stop the Radia Management Portal. See *Starting and Stopping the Radia Management Portal* on page 44 for more information.
- 2. Copy the new **rmp.tkd** into the **/modules** folder of your Radia Integration Server directory (by default **opt/Novadigm/IntegrationServer/modules**).
- **3.** Start the Radia Management Portal. See *Starting and Stopping the Radia Management Portal* on page 44 for more information.
- **4.** Use the **Authority** navigation aid to select **Directory**.
- 5. In the Directory Management task group, click Update Novadigm Tasks.
- **6.** The **Update tasks Select** dialog box opens.

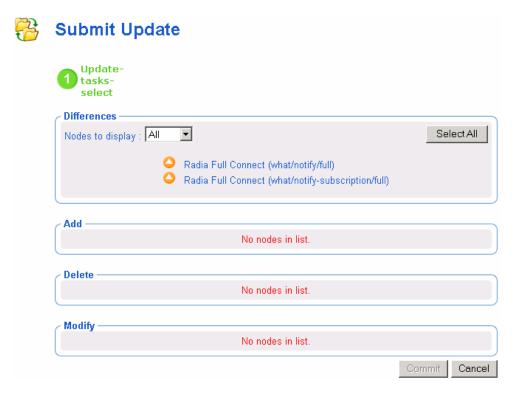


Figure 4.82 ~ Update tasks - Select dialog box.

- **7.** If necessary, use the **Nodes to display** drop-down list to limit the information that appears in the Differences area.
  - Select All to review all task changes at once.
  - Select Add to review only those tasks that can be added to the Radia Management Portal.
  - Select **Delete** to review only those tasks that can be removed from the Radia Management Portal.
  - Select **Modify** to review only those tasks that can be changed in the Radia Management Portal.
- **8.** In the **Differences** area, click the items that you want to accept as changes.

#### OR.

If you want to accept all of the changes, click Select All.

The tasks that you selected are added to the appropriate Add, Delete, or Modify list. If you want to remove a task from the list, click its name.

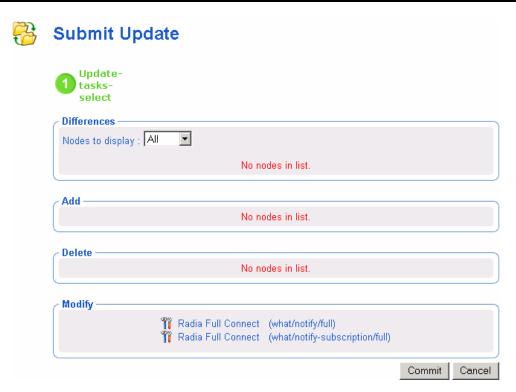


Figure 4.83 ~ Update tasks – Select dialog box.

### 9. Click Commit.

The selected tasks (shown in the Add, Delete, and Modify areas) are updated in the Radia Management Portal.

# **Managing Jobs**

The Jobs container in the Radia Management Portal Directory stores objects that represent all of the current jobs in the system, and jobs completed within the past four days.

### Note

Jobs can be viewed in the History Container as soon as they are executed. See *Viewing Job History* on page 171.

### Filtering Job Groups or Jobs by Status

Use the **Status** list box on the Authority toolbar to quickly filter a Jobs container display by job status. For example, if you are viewing all Jobs (that is, a list of all Job Groups), select a Status of **Failed** to view only the Job Groups having one or more failed jobs. Or, if you are viewing a specific Job group, you can select a status of **Waiting to Start** to see how many jobs in the group have yet to run.

### Note

Use the Query Jobs task to further locate a set of jobs that meet additional criteria, such as a scheduled start time or period, the target audience, and who submitted the job or job group. For details, see *Querying Jobs or Job Groups* on page 165.

### To filter jobs by status

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click **Jobs**.
- 3. From the Authority toolbar, open the Status drop-down list, and click a job status.



Figure 4.84 ~ Viewing Jobs for a selected Status.

The workspace displays only the jobs with the selected status.

4. To return to a view of all jobs in the container, open the Status list box, and select ALL.

### **Modifying Job Groups**

Use the Modify task to make changes to job groups that are not currently in progress.

### To modify a job group

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Jobs.
- **3.** Select the job group that you want to modify.
- **4.** In the **Model Administration** task group, click **Modify**. The **Modify Job Group** dialog box opens.

### Modify Job Group

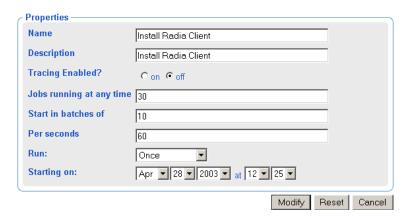


Figure 4.85 ~ Modify Job Group dialog box.

- **5.** Modify the job as necessary.
  - In the Name text box, change the name of the job group.
  - In the **Description** text box, change the description of the job group.
  - In the **Tracing Enabled?** field, select the **on** option so that additional messages are written to the log about the execution of the job group. It is recommended that you leave this option set to **off** unless otherwise instructed by HP OpenView technical support.
  - In the **Jobs running at any time** text box, type the total number of jobs that can be active at any time within this job group. An entry of 0 means there is no limit. The default is 30.
  - In the **Start in batches of** text box, type the number of jobs that can start within a specified time period, as defined by the following **Per seconds** field. An entry of 0 means there is no limit.
  - In the **Per seconds** text box, specify the time period (in seconds) to wait before starting the next batch of jobs. An entry of 0 means there is no limit. The default is one batch per minute, or per 60 seconds.
  - In the **Run** drop-down list box, change how often the job group runs.
  - In the **Starting on** drop-down list box, change the date and time when the job group should start.
- **6.** When you are done making changes, click **Modify**.

The changes are saved and the Job Group is the selected Authority.

### **Querying Jobs or Job Groups**

Use the **Query Jobs** task in the **Model Administration** task group to locate existing jobs or job groups, review their status, and make changes to the job groups. You can focus your query on jobs or job groups or both, and limit your query to a scheduled start time or period, a specific job status (such as Failed), the target audience, and who submitted the job or job group. For example, you can query all jobs that failed in the last 12 or 24 hours.

### To perform a query for a job or job group

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Jobs.
- **3.** In the **Model Administration** task group, click **Query Jobs**. The **Query Job** dialog box opens.

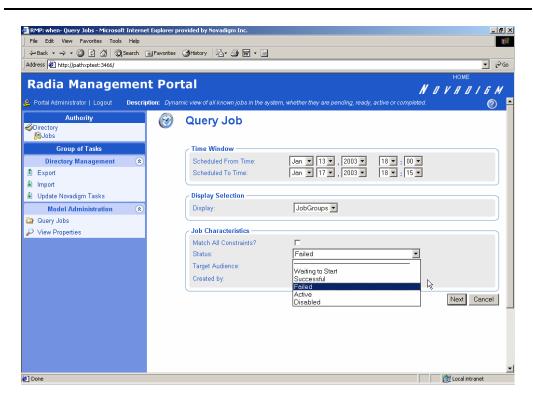


Figure 4.86 ~ Query Job Group dialog box.

Use the **Time Window** fields to limit your query to those jobs or job groups scheduled to start between the dates and times you select.

- **4.** In the **Scheduled From Time** drop-down lists, select the earliest date and time when the job or job group was scheduled to start.
- **5.** In the **Scheduled To Time** drop-down lists, select the latest date and time when the job or job group is scheduled to start.
  - Use the **Display Selection** field to specify whether you want to limit your query to Jobs, to Job Groups, or to both Jobs and Job Groups.
- **6.** In the **Display** drop-down list, select **Jobs or Job Groups**.

Note

If you want to restart failed jobs, query for **Job Groups**. **Restart Failed Jobs** is only available at the level of a **Job Group**.

Use the **Job Characteristics** fields to further limit your query.

- **7.** Select **Match All Constraints?** if you want the results of your query to match all of the specifications that you will set in the fields below.
- **8.** In the **Job Status** drop-down list, optionally select a specific job status to limit the query to jobs or job groups with that status. Specific job statuses include **Waiting to Start**, **Successful**, **Failed**, **Active**, or **Disabled**.
- **9.** In the **Target Audience** text box, optionally type the name of the computer on which the job or job group is being performed. You can use the asterisk (\*) as a wildcard in your entry.
- **10.** In the **Created By** text box, optionally type the logon ID of the user who scheduled the job or job group. You can use the asterisk (\*) as a wildcard in your entry.
- 11. Click Next.

A list of the jobs or job groups that match the criteria opens.



Figure 4.87 ~ Results of a query for failed job groups.

### Restarting Failed Jobs in a Job Group

1. Go to the **Jobs** container, and display a job group containing one or more failed jobs.

#### **Notes**

See *Querying Jobs or Job Groups* on page 165 for details on how to locate job groups with one or more failed jobs.

If the jobs failed due to an incorrect User log on or Password, restarting and/or modifying the job will not fix the problem. You must create a new job with the correct Administrator-authorized User and Password entries.

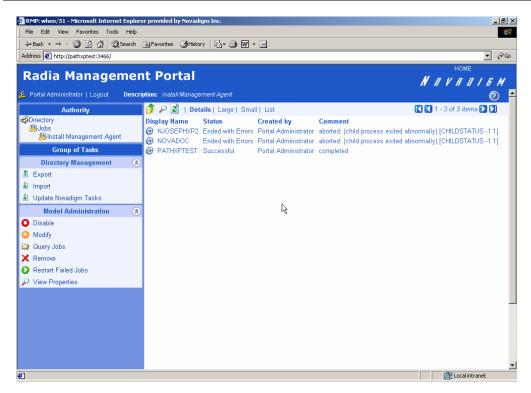


Figure 4.88 ~ Install Management Agent Job Group shows 2 of 3 jobs ended with errors.

**2.** Click **Restart Failed Jobs** from the **Model Administration** task group to restart the failed jobs in this job group.

The jobs are restarted immediately, as shown in the Active Jobs page (see *Figure 4.89* ~ *Restarted failed jobs of Install Management Agent show active status* on page 168).



Figure 4.89 ~ Restarted failed jobs of Install Management Agent show active status.

**3.** Close the job status page when the restarted jobs finish.

### **Stopping Job Groups**

Use the **Stop** task to stop an active job group from running. If the job group is set to recur, it will run as scheduled in the future.

Note

This task applies to job groups only and is not available for individual jobs.

### To stop job groups

- 1. In the Authority navigation aid, click Directory, and then click Jobs.
- **2.** Click the job group that you want to stop.
- $\textbf{3.} \quad \text{In the $Model Administration} \ task \ group, \ click \ \textbf{Stop}.$

A confirmation appears in the workspace.



Figure 4.90 ~ Stop Job Group message.

**4.** Click **✓** to confirm that you want to stop the job group.

OR

Click X to indicate that you do not want to stop the job group.

### **Disabling Jobs or Job Groups**

Use the **Disable** task to prevent a job or job group from being processed. You must use the Enable task to reinstate processing of a disabled job or job group.

### To disable jobs or job groups

- 1. In the Authority navigation aid, click Directory, and then click Jobs.
- **2.** Click the job or job group that you want to disable.
- **3.** In the **Model Administration** task group, click **Disable**.

A confirmation appears in the workspace.



Are you sure you want to disable Radia Full Connect? 🗸 🗶

Figure 4.91 ~ Disable Job Group message.

**4.** Click **✓** to confirm that you want to disable the job or job group.

ΩR

Click X to indicate that you do not want to disable the job or job group.

### **Enabling Jobs or Job Groups**

Use the **Enable** task to restart a disabled job or job group the next time it is scheduled to run.

### To enable jobs or job groups

- 1. In the Authority navigation aid, click Directory, and then click Jobs.
- **2.** Click the job or job group that you want to enable.
- 3. In the Model Administration task group, click Enable.

A confirmation appears in the workspace.



Are you sure you want to enable Radia Full Connect? 🗸 🗶

Figure 4.92 ~ Enable Job Group message.

**4.** Click **✓** to confirm that you want to enable the job or job group.

OR

Click X to indicate that you do not want to enable the job or job group.

### **Removing Jobs or Job Groups**

Use the **Remove** task to completely disable a job or job group and remove it from the list of jobs.

### To remove jobs or job groups

- 1. In the Authority navigation aid, click Directory, and then click Jobs.
- **2.** Click the job or job group that you want to remove.
- **3.** In the **Model Administration** task group, click **Remove**. A confirmation appears in the workspace.



Are you sure you want to remove this object? 🗸 🗶

Figure 4.93 ~ Remove Job Group message.

**4.** Click ✓ to confirm that you want to remove the job or job group.

OR

Click X to indicate that you do not want to remove the job or job group.

### **Viewing Job History**

The History Container stores daily histories of all executed jobs, displayed in reverse date and time order. Jobs are written to the current day's history file as soon as execution stops (with or without errors).

### To view job history

- **1.** In the **Authority** navigation aid, click **Directory**.
- **2.** In the workspace, click **History**.

  Job histories are listed in reverse chronological order by date and time. History files include the date in the format: YYYYMMDD.
- **3.** Click the history file for the date whose jobs you want to review.

Note

Click **Details** to view a concise summary of the job groups for that day.

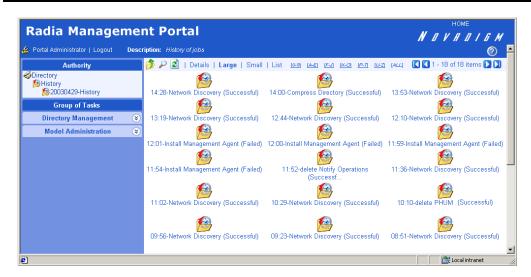


Figure 4.94 ~ History file for jobs on April 29, 2003.

- **4.** Click a specific job group from those displayed in the workspace. The workspace lists the jobs that ran in that job group.
- Click a job in the workspace.The Job Properties dialog box displays the details of the job.

### **Viewing Properties**

Use the **View Properties** task in the **Model Administration** task group to display the properties for an object. You can also click in the **Authority** toolbar to display the properties for an object. The properties that appear vary based on the selected object.



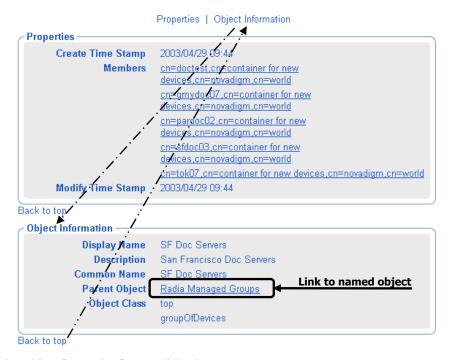


Figure 4.95 ~ View Properties Person dialog box.

Most Properties pages will display the group areas shown in Figure 4.95: **Properties** and **Object Information**.

To navigate a Properties page:

- Click one of the top links to jump to that group area.
- Click on a **Back to top** link to return to the top of the page.

Any items <u>underlined</u> on a Properties page represent an active link to that object. For example, in the previous figure, all Members listed in the Properties area and the Parent Object in the Object Information area are underlined.

Click on any underlined object to jump to that object's Properties.

# **Summary**

- Run **Update Novadigm Tasks** when you receive a new build of the Radia Management Portal to update the tasks available to you.
- You can add, modify, and remove task groups.
- Adding delegated administration roles is a three step process that consists of:
  - Assigning administrators and operators to a role.
  - Specifying which tasks the administrators and operators in the role can access.
  - Selecting where, in the infrastructure, the administrators and operators can perform the tasks.
- Use the **Backup Directory** task to backup the entire Radia Management Portal Directory. The creation date and time is appended to the given filename to make it easy to select the appropriate backup file for a restore.
- Use the **Restore Directory** task to restore a backup of the entire Radia Management Portal Directory.
- Use the **Export** task to export a subset of your Radia Management Portal Directory to an LDIF file.
- Use the **Import** task to import an LDIF file into your Radia Management Portal Directory.
- The Radia Management Portal for UNIX automatically discovers objects in both your UNIX and Windows networks. Note that at the current time you cannot manage the Windows infrastructure using the Radia Management Portal for UNIX. If an object is not automatically discovered in your network you can add it manually.
- Network discovery of devices is generic; all nodes (servers, printers and routers) are placed in the IP Discovered Network container. UNIX devices can then be managed after running Discover Node and having them placed in the Novadigm-managed Infrastructure container. Only devices in this container can be managed from the Radia Management Portal for UNIX.
- Use the **Add Group of Devices** task to easily establish preset groups for ease in performing operations on the entire group. To specify the members of the group, you can query the network, or enter (cut and paste), or point to a prepared text file. When creating new groups, the Radia Management Portal automatically adds new objects from your list to a container within the authority of Radia Managed infrastructure or Radia Managed Groups.
- Use the **Move Devices** task to move devices in your Novadigm-managed Infrastructure into different containers.
- Use the **Query Jobs** task to locate existing jobs or job groups, or both, by scheduled start time, status, submitter, or target audience. From the results of the query, you can view job properties and even make changes to a job or job group.
- Use the **Modify**, **Disable**, **Enable**, **Remove**, and **Stop** tasks to manage your jobs or job groups.
- Use the **Restart Failed Jobs** task to restart all failed jobs in a job group.

- Use the **History container** to review jobs already executed.
- Use the **View Properties** task to display the properties for any object. From any Properties page, you can use the links available with a member or parent object's listing to jump to the properties page from that object.

# **Operations Functions**

### At the end of this chapter, you will:

- Be familiar with the lifecycle of every task.
- Be familiar with the basic procedures that you will follow for every task.
- Be able to notify an audience.
- Be able to install the Radia Clients, either directly from the Radia Management Portal, or indirectly from Radia Proxy Servers.
- Be able to use the Manage Proxy Assignment task to have Radia Proxy Servers assigned to deploy the client installation scripts to specific nodes.
- Be able to install the Radia Management Agent.
- Be able to install the Radia Proxy Server.
- Be able to synchronize the Radia Proxy Server.
- Be able to use Remote Control to manage Radia Clients.

The Radia Management Portal offers several core tasks. A *task* is an activity that a person performs to initiate a job. A *job* is a unit of work performed by the computer that is initiated by a person (via a task) or a scheduled operation.

### Note

This chapter discusses the operational details of how to perform these tasks using the Radia Management Portal and assumes that you have an understanding of how to use the Radia product suite.

If you are not familiar with the operations, please refer to the HP OpenView web site for more information.

The core tasks in the Radia Management Portal are:

### ■ Install Client

Click **Install Client** to install the Radia Client on remote computers. See *Installing the Radia Client* on page 216 for more information.

#### **■** Install Management Agent

Click **Install Management Agent** to install the Radia Management Agent on remote computers. See *Installing the Radia Management Agent* on page 209 for more information.

### ■ Install Proxy Server

Click **Install Proxy Server** to install the Radia Proxy Server on remote computers. See *Installing the Radia Proxy Server* on page 232 for more information.

#### ■ Notify

Use the **Notify** tasks to perform an action on the selected audience. See *Using the Notify Tasks* on page 186 for more information.

### ■ Synchronize Proxy Server

Click **Synchronize Proxy Server** to force the Radia Proxy Server to connect to the Radia Configuration Server to preload the files to the static cache on the Radia Proxy Server. See *Synchronizing the Radia Proxy Server* on page 237 for more information.

#### ■ Purge Dynamic Cache

Click **Purge Dynamic Cache** to purge the dynamic cache of the Radia Proxy Server. See *Purging the Dynamic Cache of the Radia Proxy Server* on page 239 for more information.

## **About the Task Lifecycle**

Each task follows a similar lifecycle, as shown in Figure 5.1 below.

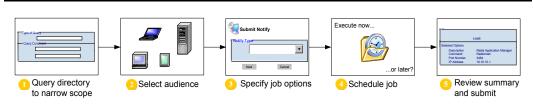


Figure 5.1 ~ The Task Lifecycle.

### 1. Query the Portal Directory.

Perform a query to narrow the scope of the job. For example, if your selected Authority is **Administrators & Operators**, you can query the directory for a list of only the groups in your Radia Management Portal Directory.

### **Important Note**

The query does *not* check status information because the environment may change in the time between when the query is performed, and when the job runs.

### 2. Select the audience.

The audience is the group of devices on which you want to perform some action.

#### 3. Specify job options.

The options vary depending on the selected task. For example, if you are performing a notify task, specify the command line that you want to run on the target devices.

### **4.** Specify scheduling options.

Specify when you want the job to run.

#### **5.** Review the summary.

When you are done specifying the information for the job, a summary of your selections opens. When you are done viewing the summary, submit the job.

### **Basic Procedures**

Because the task lifecycle is the same for each task, you will encounter several basic procedures every time you want to perform some action. When you select a task, these basic procedures appear as a series of dialog boxes in the workspace of the Radia Management Portal. When you finish entering the necessary information, a job is created.

This section covers these basic procedures in detail.

### **Performing Queries**

Use the **Query** window to narrow the scope of the job. For example, if you want to export information about all computers that begin with the letter "N", use the Query dialog box to search for a list of all of the computers discovered in the Portal Directory that begin with the letter **N**.

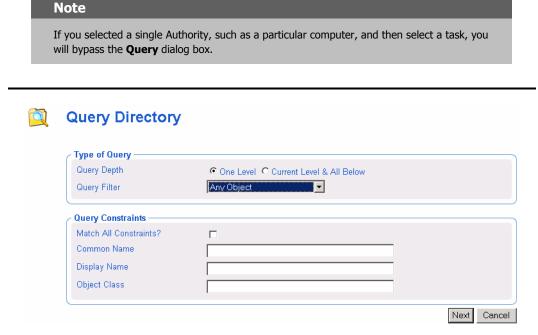


Figure 5.2 ~ Query dialog box.

### To perform a query

- **1.** In the **Type of Query** area, select the **Query Depth**.
  - One Level
     Queries one level below the selected Authority.
  - Current Level & All Below

    Queries the current level and all levels below the selected Authority.
- **2.** From the **Query Filter** drop-down list, select the type of object that you want to find.

For example, if your selected Authority is **Administrators & Operators**, you might select **Users** from this drop-down list so that your query results contain only the users that match your criteria.

The fields in the **Query Constraints** area changes based on this selection.

**3.** If you want to constrain your query, type the appropriate information in the text boxes listed in the **Query Constraints** area.

### **Notes**

You can use wildcards in these text boxes. For example, if you want to search for all Administrator & Operator users and groups beginning with the letter a:

- 1. Select Current Level & All Below in the Query Depth area.
- 2. Select Administrators & Operators from the Query Filter drop-down list.
- **3.** In the **Common Name** text box, type **a\***.

A list of all **Administrator & Operator** users and groups beginning with the letter **a** is returned.

You can also search for more than one pattern in the **Common Name** text box by typing the following characters directly between each wildcard pattern (do not use spaces): **)(cn**= For example, if you want to search for all users and groups beginning with either the letter **a** or the letter **o**:

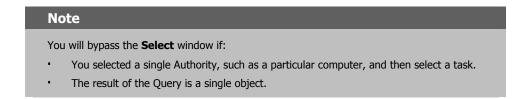
- **1.** Repeat steps 1 and 2, above.
- 2. In the Common Name text box, type a\*)(cn=o\*.

A list of all Administrator & Operator users and groups beginning with the letters  ${\bf a}$  or  ${\bf o}$  is returned.

- **4.** Select **Match All Constraints?** if you want the results of your query to match all of the specifications that you typed in the **Query Constraints** area.
- **5.** Click **Next** to initiate the query and to move to the next step in the task.

## **Selecting an Audience**

Use the **Select** dialog box to select your audience. An *audience* is a group of devices on which you want to perform some action.



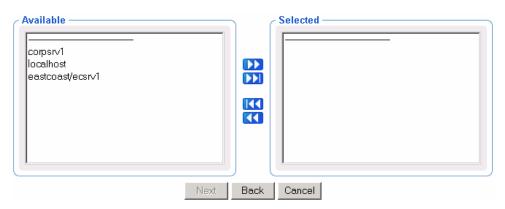


Figure 5.3 ~ Select dialog box.

This window displays the potential audience based on your selected Authority. Therefore, if your selected Authority is the **Entire Network**, the potential audience is much greater than if your selected Authority is the Accounting workgroup.

### To select an audience

- 1. From the Available list, select one or more devices.
- **2.** Click to add the selected devices to the **Selected** list.

OR

If you want to select all of the devices in the list, you do not need to select anything from the **Available** list. Simply click to add all of the devices to the **Selected** list.

**3.** If you want to remove devices from the audience list, select the appropriate devices from the **Selected** list and then click ...

OR

If you want to remove all of the devices from the list, simply click to remove all of the devices from the **Selected** list.

**4.** Click **Next** to move to the next step in the task.

### Note

The next step in the task is to specify the job options. The information that you need to enter in this window varies depending on the specific task. See the instructions for the task that you are performing for detailed information.

## **Scheduling Jobs**

Use the **Schedule** window to set the scheduling options for the job. By default, a job will begin immediately and run only once. However, you can modify these settings.

Jobs are organized in a tree view. At the highest level is the Scheduler, which is used to schedule and dispatch jobs. The next level contains Job Groups, which contain groupings of jobs. For example, you might have a job group that is intended to notify 10 computers. Below this job group 10 jobs are listed—one for each computer to be notified.

Job groups are scheduled to run within a specified time frame. In order to run, the job group has to get permission from the Scheduler. Similarly, a job must get permission to run from its job group. Therefore, all jobs receive permission to run from their parent object—whether that is a job group or the Scheduler.

The Scheduler sorts jobs based on their priorities. So, if two jobs are set to run at the same time, the one with the highest priority will receive permission to run first. If the time period expires and the Scheduler has not been able to run a job, it will be cancelled.

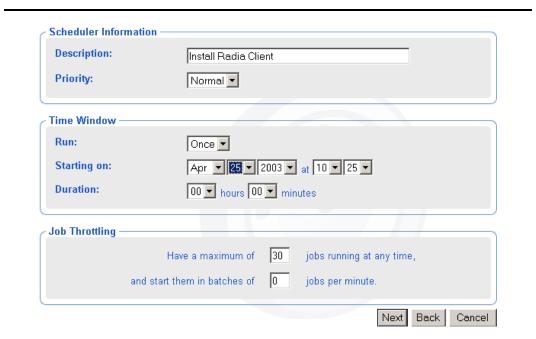


Figure 5.4 ~ Submit Notify—Schedule dialog box.

### To schedule a job

**1.** In the **Description** text box, type a description for the scheduled job. The description appears in the **View Properties** dialog box for the job.

- **2.** In the **Priority** drop-down list, select the priority for the job. The Scheduler sorts all of the jobs scheduled to run at a specific time by priority.
- **3.** In the **Run** drop-down list, specify how often you want the job to run.
- **4.** The other scheduling options change based on the schedule type that you selected.
  - In the **On Day** drop-down list, select which day of the week the job should run on. (*Applies only to jobs set to run Every Week*)
  - In the **Starting on** drop-down lists, select:
    - The date when you want the job to run.
    - The time (in hours and minutes) when you want the job to run.
    - lack How often you want the job to run (in days or hours). (Applies only to jobs set to run Every n Days or Every n Hours)
  - In the **Duration** drop-down lists, indicate how long (in hours and minutes) you want the job to run. When the duration expires, the job is cancelled.
- **5.** Click **Next** to view the **Summary** dialog box for the job.

The **Summary** dialog box contains a summary of the job. Review the summary and then click **Submit** to save the job.

## **Core Tasks**

The Radia Management Portal contains a core set of tasks. Use this section to learn how to use each of the core tasks.

## **Using the Notify Tasks**

Several Notify tasks are available to help you quickly identify a target audience.

### ■ Notify by Device

Allows you to quickly identify a target audience based on the characteristics of a device, such as operating system or IP address.

### ■ Notify by Subscription

Allows you to quickly identify a target audience based on the applications currently being managed by Radia.

### ■ Notify

Allows you to perform an open-ended query to create the target audience that you want to notify.

See *Notify via Radia Inventory Manager* on page 276 for details on the Notifying via the Radia Inventory Manager.

See the *Radia Application Manager Guide* or *Radia Software Manager Guide* for more information about notifying Radia Clients.

### **Notifying an Audience by Device Characteristics**

In the **Operations** task group, use the **Notify by Device** task to quickly identify a target audience based on the characteristics of a device, such as operating system or IP address.

### To perform a Notify operation based on the characteristics of a device

- **1.** Use the **Authority** navigation aid to select the authority.
- **2.** From the **Operations** task list, click **Notify by Device**.

The Submit Notify Device—Select Device dialog box opens.

T.	Submit Notify Device		
	1 Select - 2 Select - 3 Request - 4 Schedule - 5 Summary		
	C Device Characteristics		
	Match All Constraints?		
	Computer Name		
	IP Address		
	Operating System		
	Service Pack		
		Next Cancel	

Figure 5.5 ~ Submit Notify Device—Select Device dialog box.

- **3.** Specify the criteria to narrow the scope of the job.
  - In the **Computer Name** text box, type the name of the computer that you want to target. You can use the asterisk (\*) as a wildcard in your entry.
  - In the **IP Address** text box, type the IP address of the computer that you want to target. You can use the asterisk (\*) as a wildcard in your entry.
  - In the **Operating System** list box, select the operating systems that you want to target.
  - In the **Service Pack** list box, select the service packs that you want to target.
- **4.** Select the **Match All Constraints?** check box to match all of the criteria that you specified.
- 5. Click Next.
  - The **Select** dialog box opens.
- **6.** Select the audience from the **Available** list, and then click to add it to the **Selected** list. See *Selecting an Audience* on page 182 for more information.
- 7. Click Next.

The Submit Notify Device—Request dialog box opens.

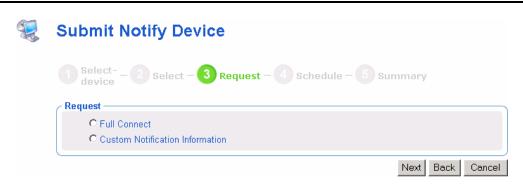


Figure 5.6 ~ Submit Notify Device—Request dialog box.

**8.** Use this dialog box to indicate whether you want to do a full connect to verify your applications and update all mandatory applications or perform a custom notify.

### **Caution**

If you modify this task (see *Setting Default Options for Notify Commands* on page 199), remember that any modifications that you make affect the actual task. For example, if you remove a particular Notify operation from the task, such as **Full Connect**, this will no longer work properly when you select this option in the task. The common names (cn) for each of the operations that might be affected are noted below.

- If you select **Full Connect** (cn=full), go to step 13.
- If you select **Custom Notification Information**, a new dialog box opens in the workspace.



Figure 5.7 ~ Submit Notify Device—Custom Notification Request dialog box.

- **9.** In the **Command** text box, type the command line for the custom notification that you want to perform.
- **10.** In the **Port number** text box, type the port number that the Notify daemon will be listening on. By default, the port number is 3465.
- 11. If necessary, in the User text box, type the user name for the target device.
- **12.** If necessary, in the **User Password** text box, type the password for the target device.
- 13. Click Next.
  - The **Schedule** dialog box opens.
- **14.** In the **Schedule** dialog box, specify when you want this job to run. For more information, see *Scheduling Jobs* on page 184.
- 15. Click Next.

The Submit Notify Device—Summary dialog box opens.



Figure 5.8 ~ Submit Notify Device—Summary dialog box.

### 16. Click Submit.

The **Job Status** page opens with list of the jobs. This page automatically refreshes every 60 seconds.



Figure 5.9 ~ Job Status window .

- Click to refresh the page to display the latest status.
- Click P to view detailed information, such as the status of the installation.
- **17.** When you are done viewing the job status, click to close the **Job Status** page, and return to the Radia Management Portal.

## **Notifying an Audience by Subscription**

In the **Operations** task group, use the **Notify by Subscription** task to quickly identify a target audience based on the applications currently being managed by Radia.

Note

Before you use the **Notify by Subscription** task, be sure to set the default notify options. You will not be able to modify the command line within this task.

See *Setting Default Options for Notify Commands* on page 199 for more information.

### To perform a Notify operation based on subscriptions

- **1.** Use the **Authority** navigation aid to select the Authority.
- 2. From the Operations task list, click Notify by Subscription.

  The Submit Notify Subscription—Select Subscription dialog box opens.

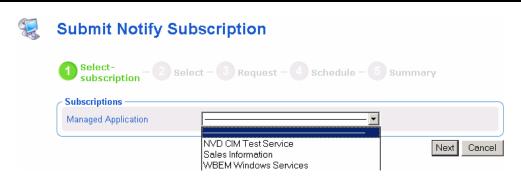


Figure 5.10 ~ Select Notify Subscription—Select Subscription dialog box.

- **3.** From the **Managed Application** drop-down list, select the application that you want to target. The list of Managed Applications is based on the applications that have been installed using Radia. If you have not installed any applications using Radia, this list will be empty.
- 4. Click Next.
  - The **Select** dialog box opens.
- **5.** Select the audience from the **Available** list, and then click to add it to the **Selected** list. See *Selecting an Audience* on page 182 for more information.
- 6. Click Next.

The Submit Notify Subscription—Request dialog box opens.



Figure 5.11 ~ Submit Notify Subscription—Request dialog box.

**7.** Select the appropriate request.

### **Caution**

If you modify this task (see *Setting Default Options for Notify Commands* on page 199), remember that any modifications that you make affect the actual task. For example, if you remove a particular Notify operation from the task, such as **Verify Application**, this will no longer work properly when you select this option in the task. The common names (cn) for each of the operations that might be affected are noted below.

- Select **Verify Application** (cn=verify) to verify that an application is working.
- Select **Update Application** (cn=update) to update the application.
- Select **Full Connect** (cn=full) to verify your applications and update all mandatory applications.
- 8. Click Next.

The **Schedule** dialog box opens.

- **9.** In the **Schedule** dialog box, specify when you want this job to run. For more information, see *Scheduling Jobs* on page 184.
- 10. Click Next.

The Submit Notify Subscription—Summary dialog box opens.



Figure 5.12 ~ Submit Notify Subscription—Summary dialog box.

### 11. Click Submit.

The **Job Status window** opens with list of the jobs. This dialog box automatically refreshes every 60 seconds.

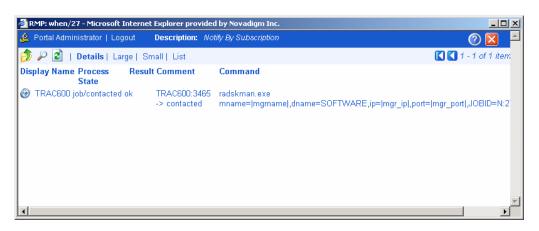


Figure 5.13 ~ Job Status window.

- Click if you want to refresh the window to display the latest status.
- Click to view detailed information, such as the status of the installation.
- **12.** When you are done viewing the job status, click to close the **Job Status** page, and return to the Radia Management Portal.

## **Notifying an Audience**

Use the Notify task to perform an action on the target devices that you select.

A group of devices can be selected as the audience for the Notify task.

### Note

The Radia Management Portal has embedded support for Wake-on-LAN (WOL). If you attempt to notify a machine that is not "awake" and the machine supports the Wake-on-LAN capability, the Notify job will send a WOL message to wake up the machine and will subsequently try to notify the machine two more times at intervals of 120 seconds. The WOL message is sent only if the MAC address of the targeted machine is available in the machine properties.

### To notify an audience

- **1.** Use the **Authority** navigation aid to select the Authority.
- **2.** From the **Operations** task group, click **Notify**.

### Note

If you selected a single Authority, such as a particular computer, and then select a task, you will bypass the **Select** dialog box. Go to step 5.

The **Query** dialog box opens.

- **3.** Specify criteria to narrow the scope of the job. See *Performing Queries* on page 180 for more information.
- 4. Click Next.

The **Select** dialog box opens.

- **5.** Select the audience from the **Available** list, and then click to add it to the **Selected** list. See *Selecting an Audience* on page 182 for more information.
- 6. Click Next.

The Submit Notify—Notify Opts dialog box opens.

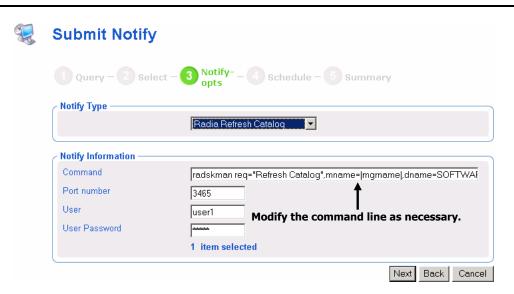


Figure 5.14 ~ Submit Notify—Notify Opts dialog box.

**7.** In the **Notify Type** drop-down list, select the type of Notify that you would like to perform. The **Command** text box changes based on your selection.

In the **Command** text box, modify the command line as necessary. For example, if you select **Radia Refresh Catalog** in the **Notify Type** drop-down list, the **Command** text box is prefilled with the following command line:

```
radskman.exe req="Refresh Catalog",mname=|mgrname|,dname=SOFTWARE,
ip=|mgr_ip|,port=|mgr_port|,cat=y
```

You must replace information between the pipes (|) with the necessary information to perform the notification. For example, you might modify the command line above to read:

```
\verb|radskman.exe| req="Refresh Catalog", mname=EastCoast, dname=SOFTWARE, ip=10.10.10.1, port=3464, cat=y|
```

### Note

If you repeat a Notify operation often, you may want to modify the appropriate Notify task so that it has default options that pertain to your organization. See *Setting Default Options for Notify Commands* on page 199 for more information.

- **8.** In the **Port number** text box, type the port number that the Notify daemon will be listening on. By default, the port number is 3465.
- **9.** If necessary, in the **User** text box, type the user name for the target device.
- **10.** If necessary, in the **User Password** text box, type the password for the target device.
- 11. Click Next.

The **Schedule** dialog box opens.

- **12.** In the **Schedule** dialog box, specify when you want this job to run. For more information, see *Scheduling Jobs* on page 184
- 13. Click Next.

The Summary dialog box opens.

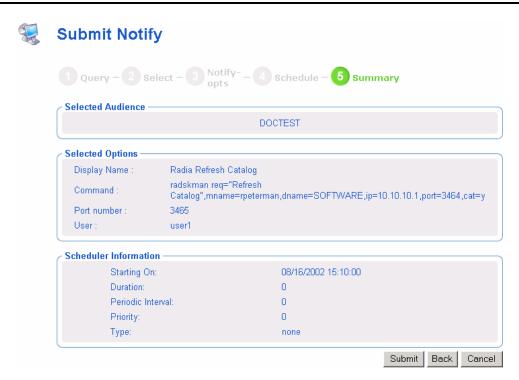


Figure 5.15 ~ Summary dialog box.

### 14. Click Submit.

The **Job Status window** opens with list of the jobs. This dialog box automatically refreshes every 60 seconds.

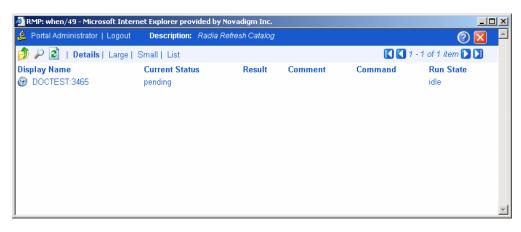


Figure 5.16 ~ Job Status window.

- Click to refresh the dialog box to display the latest status.
- Click by to view detailed information, such as the status of the installation.
- **15.** When you are done viewing the job status, click to close the **Job Status** window, and return to the Radia Management Portal.

## **Setting Default Options for Notify Commands**

If you often repeat a Notify operation, you may want to modify the appropriate Notify task so that it has default options that pertain to your organization. To do this, you will modify the appropriate type of Notify.

### **Caution**

When modifying the **Notify by Device** or **Notify by Subscription** tasks, remember that any modifications that you make affect the actual task. For example, if you remove a particular Notify operation from the task, such as **Radia Update Service**, this will no longer work properly when you select this option in the task.

### To set default options for Notify commands

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click **Tasks**.
- **3.** In the workspace, click the Notify task that you want to modify, such as **Notify**.

### Tip

Use the alphanumeric tabs on the Authority toolbar to page to the objects whose names start with those letters. For example, click **[K-O]** to quickly page to the **N**otify tasks.



Figure 5.17 ~ Select Notify task as the Authority.

**4.** In the workspace, click the type of Notify operation for which you want to set defaults, such as **Radia Refresh Catalog**.





Figure 5.18 ~ Options Properties dialog box.

5. In the Model Administration task group, click Modify.
The Modify Options dialog box opens.

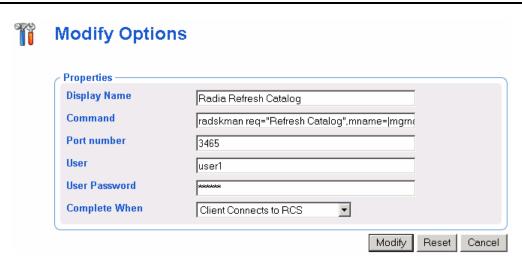


Figure 5.19 ~ Modify Options dialog box.

- **6.** Modify the fields as necessary.
  - In the **Display Name** text box, change the display name of the task.
  - In the **Command** text box, change the default command line for the Notify that you want to perform.
  - In the **Port number** text box, change the default port number that the Notify daemon will be listening on.
  - If necessary, in the **User** text box, type the default user name for the target device.
  - If necessary, in the **User Password** text box, type the default password for the target device.
  - From the **Complete When** drop-down list, indicate when the Notify is considered completed. See the Hp OpenView web site for detailed information about the Radia Client and the Application Event (APPEVENT) object. If you are unsure about which option to select, select **Client Contacted**.
- 7. Click Modify.

The **Options Properties** dialog box opens and you can review your changes.

### Note

The command line  $in \ Figure \ 5.20 \sim Options \ Properties \ after \ modifications$ , is used as an example, only.

## Radia Refresh Catalog Options Properties

### Properties | Object Information **Properties** Command radskman req="Refresh Catalog",mname=rpeterman,dname=SOFTWARE,ip=10.10.1.1,port=3464,cat=y Complete When adhoc Create Time Stamp 2003/05/05 17:34 Modify Time Stamp 2003/05/06 12:51 Port number 3465 User user1 Back to top Object Information Display Name Radia Refresh Catalog Common Name catalog Parent Object Notify Object Class top ${\sf nvdTaskOptions}$

Figure 5.20 ~ Options Properties after modifications.

Back to top

The next time you initiate a Notify and select the notification type that you modified, such as **Radia Refresh Catalog**, the new default settings appear in the **Submit Notify—Notify Opts** dialog box. For example, notice that the properties specified in *Figure 5.20* ~ *Options Properties after modifications* on page 203 match the default settings for the fields in Figure 5.21 below.

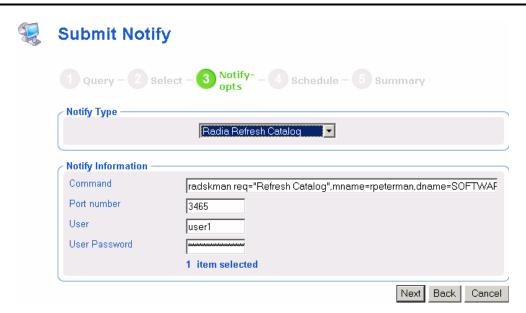


Figure 5.21 ~ Sample Submit Notify—Notify Opts dialog box.

See Notifying an Audience on page 195 for more information about the Options dialog box.

## **Creating Custom Notify Commands**

If you want to create your own Notify commands, you can use the **Add Task Options** task in the **Model Administration** task group.

### To add a new Notify command

- **1.** In the **Authority** navigation aid, go to **Directory**.
- **2.** In the workspace, click **Tasks**.
- **3.** In the workspace, click **Notify**.



Figure 5.22 ~ Authority—Notify.

**4.** In the **Model Administration** task group, click **Add Task Options**.

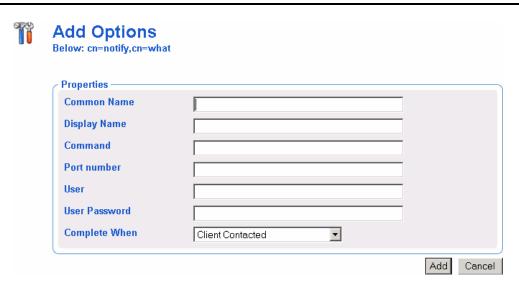


Figure 5.23 ~ Add Options dialog box .

**5.** In the Common Name text box, type a name for the custom Notify task.

### **Caution**

The Common Name for the object must be unique. If you attempt to create an object with a name that has already been used, an error appears in the workspace indicating that the object already exists.

- **6.** In the **Display Name** text box, type a name for the Notify task that will appear in the infrastructure representation.
- **7.** In the **Command** text box, type the Radia command line that you want to run on the selected target devices.
- **8.** In the **Port number** text box, type the port that the Notify daemon is listening on.
- **9.** In the **User** text box, type the administrator ID to obtain administrative authority on the target device's domain.
- **10.** In the **User Password** text box, type the administrator password to obtain administrative authority on the target device's domain.
  - If you do not enter the password and administrative authority is required, the job may fail. Check the job status for specific information.
- **11.** In the **Complete When** drop-down list, select the client action that is to indicate this notify task is complete. The following table shows how your selection is reported on a **Task Property** or **Job Property** dialog box.

Table 5.1 ∼ Notify Job Completion Options		
"Complete When" Selection	"Completed When" Entry on Property Options Window and Job Reports	
Client contacted	Adhoc	
Client connects to RCS	Radia/catalog	
Client sends APP event	Radia/service	

### 12. Click Add.

The **Options Properties** dialog box opens.



#### Properties | Object Information **Properties** Command c:\notepad.exe Complete When adhoc Create Time Stamp 2003/05/06 13:01 Modify Time Stamp 2003/05/06 13:01 Port number 3465 User user1 Back to top **Object Information Display Name** Open Notepad Open Notepad **Common Name** Parent Object Notify Object Class nvdTaskOptions

Figure 5.24 ~ Options Properties dialog box.

The next time you initiate a Notify, the new command appears in the **Notify Type** drop-down list on the **Submit Notify—Notify Opts** dialog box. See *Notifying an Audience* on page 195 for more information about this dialog box.

# **Deploying Radia Management Infrastructure Products and Applications**

Use the Radia Management Portal to install Radia infrastructure products and applications to remote devices.

## **Requirements for Remote Installations**

In order to install Radia Infrastructure products, you must be aware of the following requirements.

■ For Windows, the remote computer must be running Windows NT, 2000, XP, or Server 2003.

### Note

In some cases, Windows XP may need to be configured to support a remote installation. See the HP OpenView web site for more information.

- For HP-UX, the remote computer must be running the HP-UX operating system Version 10.20 or above, PA Risc CPU.
- For Solaris, the remote computer must be running the Solaris operating system Version 2.5.1 or above, SPARC CPU.
- The installation files for the Radia product must be stored in the Radia Integration Server's /media directory. If during the installation you elected to copy the Remotely Installable components (See Figure 2.9 on page 35 and Figure 2.10 on page 36), the Radia Management Portal installation program copies these files automatically. See *Installing the Radia Management Portal for UNIX* on page 27 for more information.

If you did not use the installation program to copy the files, you must manually copy these files from the appropriate CD-ROM to the Radia Integration Server's /media directory. The directory structure of the /media directory should mirror the CD-ROM layout.

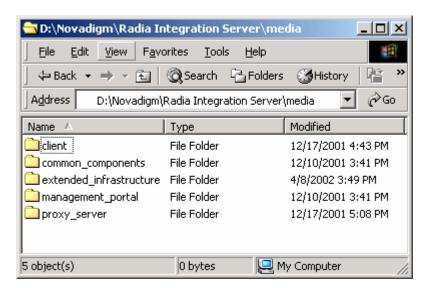


Figure 5.25 ~ Directory structure for /media directory.

A packing list, which contains a list of the files to be transferred across the network, must exist in the directory with the installation files. The Radia Management Portal creates the packing list when you launch the remote installation. Specific instructions about how to use the Radia Management Portal to perform each remote install follows.

## **Installing the Radia Management Agent**

Use the **Install Management Agent** task to install, and optionally re-install, the Radia Management Agent to remote devices.

You can use the Radia Management Portal to perform operational and administrative tasks on the Radia infrastructure; however, the Radia Management Portal cannot always perform these tasks remotely. Therefore, the Radia Management Agent, which is a thin delegate, is installed on the remote device to perform these tasks on behalf of the Radia Management Portal. It cannot perform any tasks on its own.

When you use the Radia Management Portal to install Radia management services or applications, the Radia Management Agent is automatically installed on the same device. Use the **Install Management Agent** task to explicitly install, and optionally re-install, the Radia Management Agent to remote devices.

The Radia Management Agent can communicate with the Radia Management Portal using either a dynamically assigned or static port number. For details on which to choose, see *Choosing a Dynamic or Static Port Assignment for the Radia Management Agent* on page 209.

The Radia Management Agent is installed as a Windows Service on Windows NT, 2000, XP and Server 2003 systems and can be configured to contact the Radia Management Portal at regular intervals in order to make its presence known. The Radia Management Agent will notify the Radia Management Portal when normal operations, such as system shut down or restarts, occur.

The following is a list of some, but not all, of the tasks that the Radia Management Agent can handle on on behalf of the Radia Management Portal.

- Starting or stopping services.
- Performing remote installations.
- Discovering the services that are currently running on the device, such as the Notify daemon, Radia Client Scheduler, and the Radia Integration Service and sub-services.

## Choosing a Dynamic or Static Port Assignment for the Radia Management Agent

For all tasks that install the Radia Management Agent, you can specify whether the Radia Management Portal should communicate with the Radia Management Agent using a dynamically assigned or static port number.

- Using a dynamic port assignment for the Radia Management Agent reduces the risk of security attacks on well-known ports.
- Using a static port assignment for the Radia Management Agent is available to communicate to an Agent that is behind a firewall.

### To set the Install Radia Management Agent task options

To facilitate the deployment of newer versions, the **Install Management Agent** task includes an option to force a re-install of the Radia Management Agent. This option is turned on, by default. To review or turn off this option, access the **Modify Install Management Agent Options** dialog box.

- 1. Go to the Authority of Directory, Tasks, Install Management Agent, and then Install Management Agent Options.
- 2. Click Modify in the Model Administration task group.
  The Modify Install Management Agent Options dialog box opens.

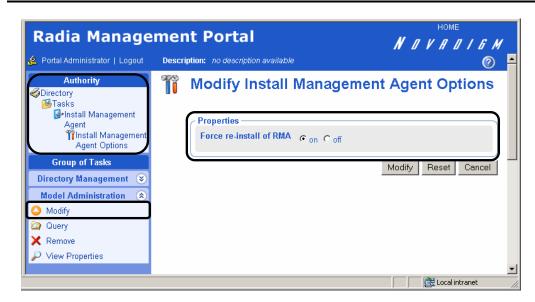


Figure 5.26 ~ Modifying task option to force a re-install of the Radia Management Agent.

**3.** Click the desired option for the **Force re-install of RMA** property. If set to **on**, you can push out a newer version of the RMA.TKD to a machine with an existing one. If set to **off**, machines with existing RMA.TKDs will not have the Radia Management Agents updated using the **Install Management Agent** task.

### To install the Radia Management Agent

### **Caution**

Be sure to read *Requirements for Remote Installations* on page 207 before performing this procedure.

**1.** Use the **Authority** navigation aid to select the place in your infrastructure where you want to install the Radia Management Agent.

### Note

A group of devices may be selected as the audience (target) of the Install Management Agent task. If you choose a group of devices, the **Query** dialog box is bypassed.

- 2. From the Operations task group, click Install Management Agent.
  - The Query dialog box opens.
- **3.** Specify criteria to narrow the scope of the job.
- 4. Click Next.
  - The **Select** dialog box opens.
- **5.** Select the audience from the **Available** list, and then click to add them to the **Selected** list.
- 6. Click Next.

The Install Management Agent — Install Opts dialog box opens.



Figure 5.27 ~ Install Radia Management Agent—Remote Options dialog box.

In order to install a Windows service on a remote device, you may need to obtain administrative authority on the target device's domain. Use this dialog box to type the user name and password necessary to obtain access.

### Note

If you are installing the Radia Management Agent on the same computer as the Radia Management Portal, delete **Administrator** from the **User** text box.

- **7.** Use the **Select Client Port** radio buttons to specify whether the Radia Management Portal should communicate with the Radia Management Agent using a dynamically assigned port number or a static port number.
  - Using a dynamic port assignment reduces the risk of security attacks on well-known ports.
  - Using a static port assignment is available to communicate to an Agent that is behind a
    firewall.
- **8.** If you selected a Client Port type of **Static**, type the port number in the **Port Number** text box.
- **9.** In the **User** text box, type the administrator ID to obtain administrative authority on the target device's domain.
- **10.** In the **User Password** text box, type the administrator password to obtain administrative authority on the target device's domain.

If you do not enter the password and administrative authority is required, the job may fail. Check the job status for specific information.

11. Click Next.

The Schedule dialog box opens.

- **12.** In the **Schedule** dialog box, specify when you want this job to run.
- 13. Click Next.

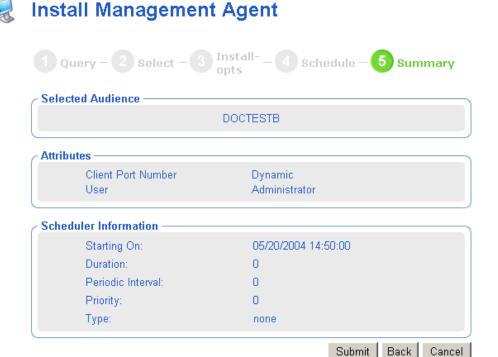


Figure 5.28 ~ Install Management Agent—Summary dialog box.

### 14. Click Submit.

The **Job Status** page opens with list of the jobs. This window automatically refreshes every 60 seconds.

- Click to refresh the page to display the latest status.
- Click P to view detailed information, such as the status of the installation.
- **15.** When you are done viewing the job status, click to close the **Job Status** page, and return to the Radia Management Portal.

Below is an example of the Radia Management Agent (RMA) service that has been installed on a remote computer. You can see that the RMA discovers and registers the Radia Integration Server (RIS) sub-services installed on the remote computer.

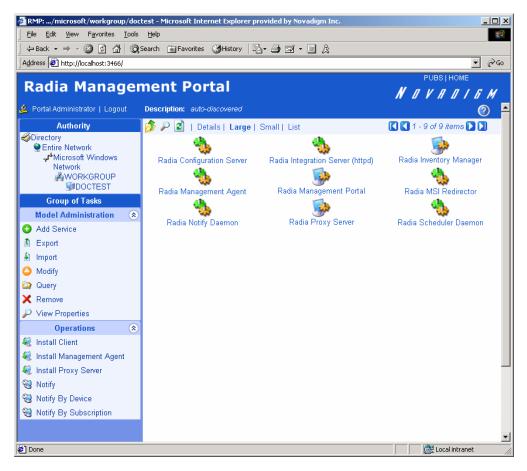


Figure 5.29 ~ Radia Management Agent installed.

When the Radia Management Agent is installed to the remote device and the service is started, a log (rma.log) is created in the directory where the RMA is installed. The RMA is installed to /opt/Novadigm/ManagementAgent.

## Refreshing the Radia Management Agent

An installed Radia Management Agent discovers and registers the Radia Integration Server (RIS) sub-services installed on the remote computer. If additional RIS sub-services are installed on the remote computer after the Radia Management Agent's last discovery, use the **Refresh Management Agent** task from the **Operations** task group to immediately update the registered sub-services on the Radia Management Portal.

The **Refresh Management Agent** task will also remove the registration of services that have been uninstalled since the previous registration. For example, if a Radia Client has been removed from a computer since the previous registration, running the Refresh Management Agent task will remove the machine's client-related services, such as the Radia Notify daemon and the Radia Scheduler daemon, from the Radia Management Portal's registry.

### To refresh a Radia Management Agent's sub-service discovery

**1.** In the **Authority** navigation aid, navigate to the appropriate computer object whose Management Agent service discovery needs to be refreshed.



2. From the Operations task group, click Refresh Management Agent.

The **Job Status** page opens to show the Refresh Management Agent job. This window automatically refreshes every 60 seconds.

Click to refresh the page to display the latest status.



Figure 5.30 ~ Refresh Management Agent Job page.

- **3.** When the job is completed, click to close the **Job Status** page, and return to the Radia Management Portal.
- **4.** Click to refresh the Workspace area of the Radia Management Portal. You'll see the newly registered Radia services and sub-services for the object.

## **Installing the Radia Client**

Use the **Install Client** task to install the Radia Clients—Radia Application Manager, Radia Software Manager, and the Radia Inventory Manager—to remote devices. The Radia Client installation program uses the Microsoft MSI format for Windows Installer. The program consists of one MSI package, with three feature sets—Radia Application Manager, Radia Software Manager, and the Radia Inventory Manager.

### Note

Use the **Manage Proxy Assignment** task prior to the **Install Client** task if you want to deploy a set of Radia Clients from pre-assigned Radia Proxy Servers, instead of directly from the Radia Management Portal. This option allows for existing Radia Proxy Servers in your infrastructure to handle some or all of the client deployment workload, instead of requiring the Radia Management Portal to do all the work. For details, see *Managing Proxy Assignments* on page 219.

### To install the Radia 3.x Clients with the Radia Management Portal

### **Cautions**

Be sure to read *Requirements for Remote Installations* on page 207 before performing this procedure.

See the *Radia Application Manager Guide for Windows* or the *Radia Software Manager Guide for Windows* on the HP OpenView web site for detailed information such as system requirements and customization options for the installation.

1. Use the **Authority** navigation aid to select the place in your infrastructure where you want to install the Radia Clients.

### Note

A group of devices may be selected as the audience (target) of the Install Client task. If you choose a group of devices, the **Query** dialog box is bypassed.

**2.** From the **Operations** task group, click **Install Client**.

The Query dialog box opens.

- **3.** Specify criteria to narrow the scope of the job. See *Performing Queries* on page 180 for more information.
- 4. Click Next.

The **Select** dialog box opens.

- **5.** Select the audience from the **Available** list, and then click to add it to the **Selected** list. See *Selecting an Audience* on page 182 for more information.
- 6. Click Next.

The Install Client—Client Opts dialog box opens.

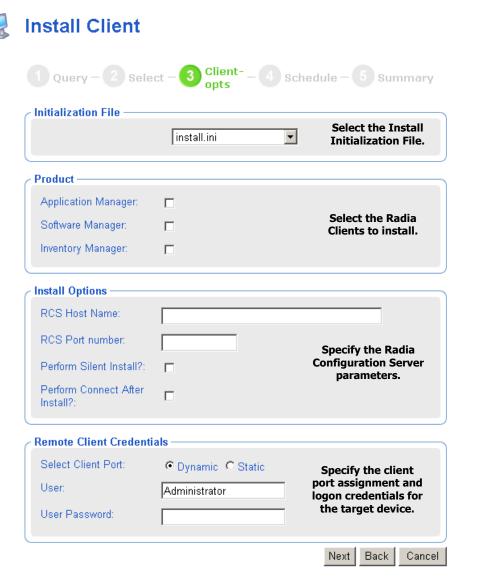


Figure 5.31 ~ Install Client—Opts dialog box.

- **7.** In the **Initialization File** area, select the appropriate installation INI file from the drop-down list. This file contains parameters necessary for the Radia Client to run, such as the IP address of the Radia Configuration Server.
  - The Radia Management Portal will honor settings placed in a customized \*.INI file when it installs the client.
- **8.** In the **Product** area, select the clients that you want to install on the target devices.

#### **Caution**

Be sure to install only the clients for which you have licenses. If you install a client that you do not have a license for, the client will not authenticate with the Radia Configuration Server.

- **9.** In the **RCS Host Name** text box, type the IP address or name that the Radia Client will use to access the Radia Configuration Server.
- **10.** In the RCS Port number text box, type the port number that the Radia Client will use to access the Radia Configuration Server.
- 11. Select the **Perform Silent Install?** check box if you want to install a client without any user interface.
- **12.** Select the **Perform Connect After Install?** check box if you want the client computer to connect to the Radia Configuration Server after the installation. This allows the client computer to register with the Radia Configuration Server. See the *Radia Application Manager Guide* for more information.

When the client computer connects to the Radia Configuration Server, the Radia Management Portal also captures information about your subscribers and stores it in the Radia Management Portal Directory. See *Discovering Radia Subscriber Information* on page 226 for more information.

- **13.** Using the **Select Client Port** radio buttons, select whether to communicate with the Radia Management Agent on the Client using a Dynamic or Static port number.
  - Using a dynamic port assignment reduces the risk of security attacks on well-known ports.
  - Using a static port assignment is available to communicate to an Agent that is behind a
    firewall.
- **14.** If you selected a Client Port type of **Static**, type the port number in the **Port Number** text box.
- **15.** In the **User** text box, type the administrator ID to obtain administrative authority on the target device's domain.
- **16.** In the **User Password** text box, type the administrator password to obtain administrative authority on the target device's domain.

If you do not enter the password and administrative authority is required, the job may fail. Check the job status for specific information.

#### 17. Click Next.

The **Schedule** dialog box opens.

- **18.** In the **Schedule** dialog box, specify when you want this job to run. For more information, see *Scheduling Jobs* on page 184.
- 19. Click Next.

The Install Client—Summary dialog box opens.

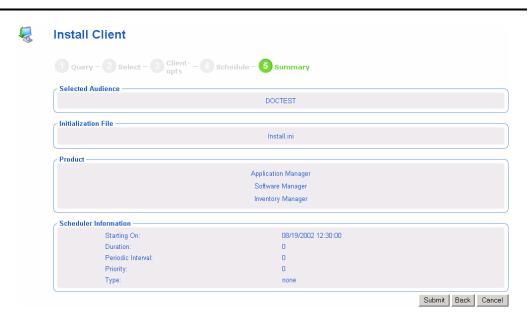


Figure 5.32 ~ Install Client—Summary dialog box.

#### 20. Click Submit.

The **Job Status** page opens with list of the jobs. This page automatically refreshes every 60 seconds.

# **Managing Proxy Assignments**

Use the **Manage Proxy Assignments** task to designate Radia Proxy Servers in your infrastructure to handle the deployment of client installation scripts for designated nodes. The set of nodes to be assigned to the selected Radia Proxy Server can be either:

■ All nodes in a predefined group of devices (see *Adding Groups of Devices* on page 89).

■ Selected nodes from a dynamic query of the infrastructure (see *Performing Queries* on page 180).

Repeat the **Manage Proxy Assignment** task for each Radia Proxy Server receiving node assignments.

After making all Radia Proxy Server assignments, you can use the **Install Client** task from the Radia Management Portal to schedule the installation of the clients. If a node that is scheduled for a client installation has a Radia Proxy Server assigned to it, the Radia Management Portal will first synchronize with the Radia Proxy Server, and then the Radia Proxy Server will complete the client installation on the node.

To change or remove proxy assignments, repeat the same Manage Proxy Assignment steps used to assign nodes to the Radia Proxy Server.

## **Requirements for Managing Proxy Assignments**

- One or more previously installed Radia Proxy Servers.
- For each Radia Proxy Server, an installed Radia Management Agent that has also successfully discovered the Radia Proxy Server service.

If these requirements have been met, when you navigate to each computer object in your infrastructure containing the RMA-discovered Radia Proxy Server, the Radia Proxy Server icon will display in the Workspace of the Radia Management Portal. For example,  $Figure\ 5.33 \sim Radia$   $Proxy\ Server\ discovered\ by\ the\ Management\ Agent\ on\ DOCTEST$  on page 221 shows the Radia Proxy Server installed and discovered by the Radia Management\ Agent\ on\ the\ computer\ DOCTEST.

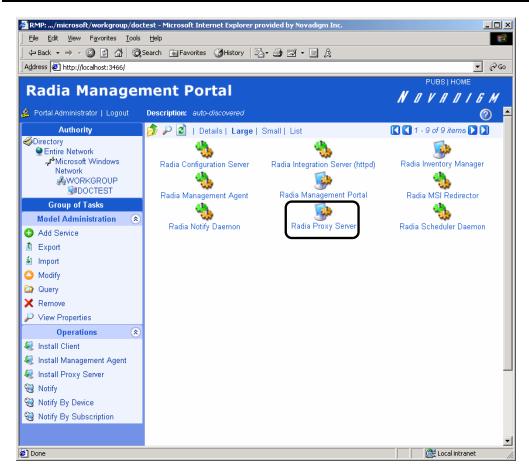


Figure 5.33 ~ Radia Proxy Server discovered by the Management Agent on DOCTEST.

#### To assign nodes to a Radia Proxy Server

- **1.** Use the **Authority** navigation aid to select the place in your infrastructure containing the nodes for which you want to make proxy assignments.
  - You can start at a high-level or low-level in your network. For example, you can navigate to a specific domain if your object is to assign all nodes from one domain to the same proxy server.
- 2. From the Operations task group, click Manage Proxy Assignment.
  - The Manage Proxy Assignment Select proxy dialog box opens.

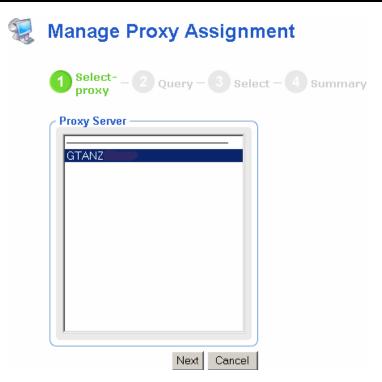


Figure 5.34 ~ Select Proxy step of Manage Proxy Assignment dialog box.

- **3.** Select a Proxy Server from the list to handle the client deployment for the set of nodes to be specified in the next steps.
- 4. Click Next.

The  $\bf Manage\ Proxy\ Assignment$  -  $\bf Query\ dialog\ box\ opens.$ 

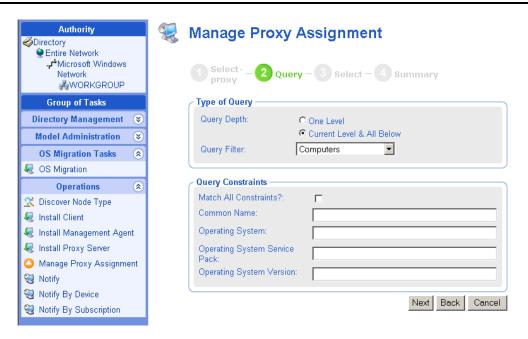


Figure 5.35 ~ Manage Proxy Assignment – Query dialog for all computers within the WORKGROUP domain.

- **5.** Complete the Query fields to select an audience of nodes that contain all the nodes you want to assign to the previously selected Proxy Server. The Query is limited to the nodes in the currently selected Authority (that is, the place in your infrastructure from which you selected the Manage Proxy Assignments task).
- 6. Click Next.

The Manage Proxy Assignments - Select dialog box opens.

- The **Available** list includes all *unassigned* nodes that meet your query criteria of the previous step.
- The **Selected** list includes all nodes that meet your query criteria that have been *previously assigned* to the selected Proxy Server.

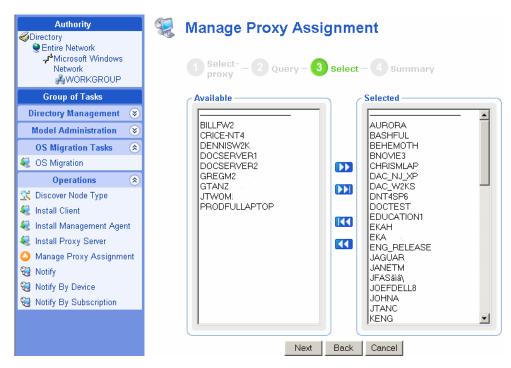


Figure 5.36 ~ Manage Proxy Assignment – Select dialog box with selected nodes for proxy assignment.

- **7.** Select the nodes to assign to the proxy server from the **Available** list using the set of arrow icons.
  - Click to add any currently selected devices from the Available list to the Selected list.

    OR
  - Simply click to add all of the devices from the **Available** list to the **Selected** list.
- **8.** If you want to remove devices from the **Selected** audience list, select the appropriate devices from the **Selected** list and then click .

#### OR

- Simply click to remove all of the devices from the **Selected** list.
- **9.** When the desired nodes for assignment to the Proxy Server are in the **Selected** list, click **Next**.
  - The Manage Proxy Assignment Summary dialog box opens.

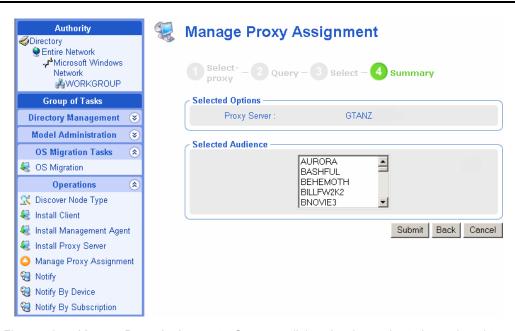


Figure 5.37  $\sim$  Manage Proxy Assignment – Summary dialog showing nodes to be assigned to Proxy Server GTANZ.

- **10.** Click **Submit** to save the proxy assignment of nodes to the selected server.
- **11.** After completing all proxy assignments, run the **Install Client** task from the Radia Management Portal **Operations** task group as discussed in *Installing the Radia Client* on page 216. If a proxy-assigned node is selected for the Client Install, the Radia Proxy Server performs the client script deployment, as opposed to the Radia Management Portal.

# **Discovering Radia Subscriber Information**

The Radia Management Portal captures information about your subscribers and stores it in the Radia Management Portal Directory.

When the Radia client computer connects to the Radia Configuration Server, the Radia Management Portal captures the information stored in the Radia Database in the following objects—ZCONFIG, ZMASTER, APPEVENT, and ZSTATUS. See the Hp OpenView web site for more information about each of these objects.

Use the **Authority** navigation aid to access the client computer. The captured information is stored in containers below the object.

#### Note

If the object representing the client computer could not be found, the captured information is stored in the **Radia Subscriber Information** container located at the top of the Directory structure.

#### To access the Radia Subscriber Information container

- 1. In the Authority navigation aid, click Directory.
- 2. In the workspace, click Radia Subscriber Information.

Information that could not be matched with an object in the Radia Management Portal directory is stored here.

In the following example, the Radia Client was installed on a remote client computer named DOCTEST. Then, a sample application was installed on the client computer using Radia.

#### To view Radia subscriber information

1. In the Authority navigation aid, navigate to the appropriate object, such as DOCTEST.

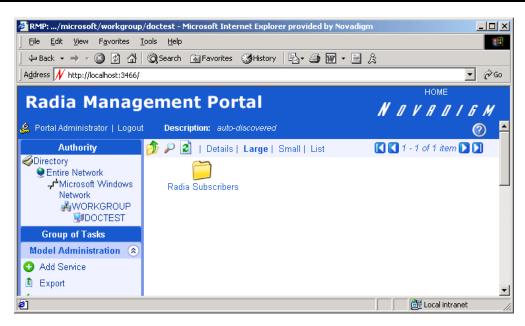


Figure 5.38 ~ Select the Authority.

**2.** In the workspace, click **Radia Subscribers**. Several containers appear; each represents a subscriber who has connected to the Radia Configuration Server from the selected computer.

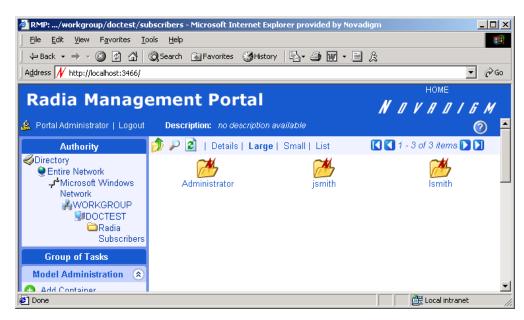


Figure 5.39 ~ A list of subscribers who have connected to the Radia Configuration Server.

**3.** In the workspace, click the name of the subscriber for whom you want to view information, such as **Administrator**. If the subscriber has not installed any applications, a window opens in the workspace with general information about the client's connection to the Radia Configuration Server.

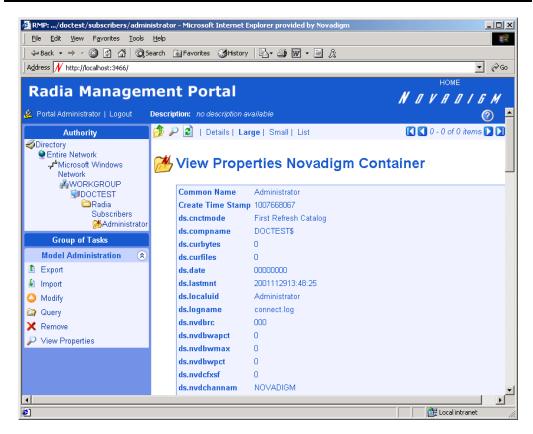


Figure 5.40 ~ View Properties Container window.

If the subscriber, such as **lsmith**, has installed one or more applications with Radia, a container appears in the workspace.

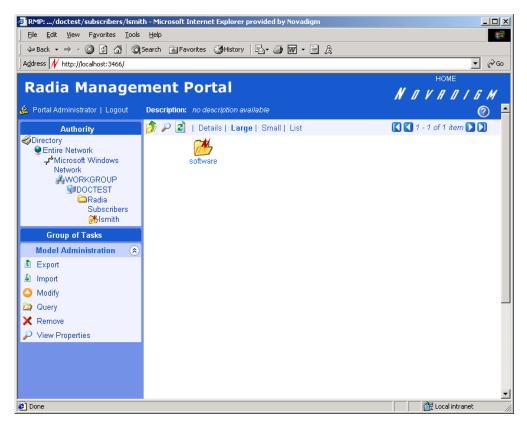


Figure 5.41 ~ Software container.

**4.** In the workspace, click **software**.

A list of the installed services appears.

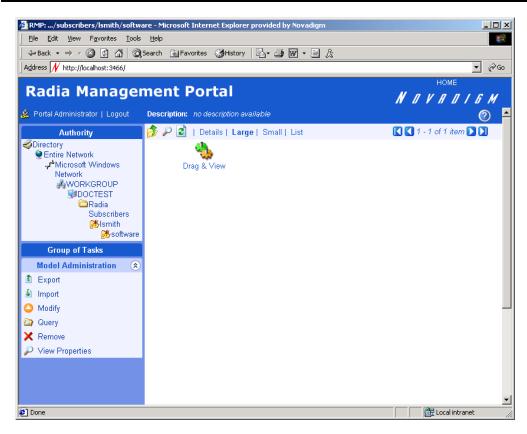


Figure 5.42 ~ List of Radia-managed services.

**5.** In the workspace, click a service for more information. In the example below, you can see that the subscriber, **lsmith**, successfully installed the application **Drag & View** on the **DOCTEST** computer.

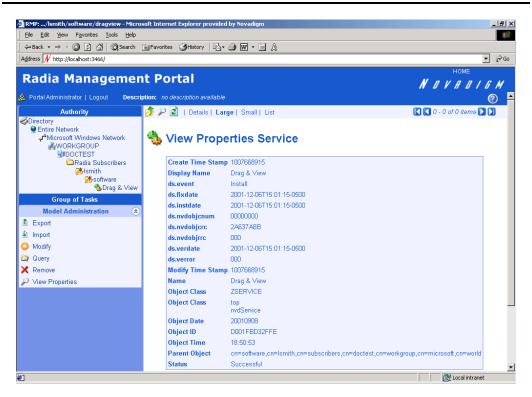


Figure 5.43 ~ View Properties Service window.

# **Installing the Radia Proxy Server**

Use the **Install Proxy Server** task to install the Radia Proxy Server to remote devices. During the installation, you will receive status information and if the installation fails, it can be rescheduled. The Install Proxy Server Task will prompt you to select a specific CFG file, if multiple ones exist.

See the Radia Proxy Server Guide for more information.

See  $Preparing\ and\ Locating\ Configuration\ Files\ for\ Proxy\ Server\ Installs$  on page 236 for details on preparing and locating customized CFG files for this task.

## To install the Radia Proxy Server

## **Caution**

Be sure to read  $\it Requirements$  for  $\it Remote Installations$  on page 207 before performing this procedure.

You may also want to check the HP Openview web site for the latest information on this topic.

**1.** Use the **Authority** navigation aid to select the place in your infrastructure where you want to install the Radia Proxy Server.

## Note

A group of devices may be selected as the audience (target) of the Install Proxy Server task. If you choose a group of devices, the Query dialog box is bypassed.

**2.** From the **Operations** task group, click **Install Proxy Server**.

The Query dialog box opens.

- **3.** Specify criteria to narrow the scope of the job. See *Performing Queries* on page 180 for more information.
- 4. Click Next.

The Select dialog box opens.

- **5.** Select the audience from the **Available** list, and then click to add it to the **Selected** list. See *Selecting an Audience* on page 182 for more information.
- 6. Click Next.

The Install Proxy Server—RPS Options dialog box opens.

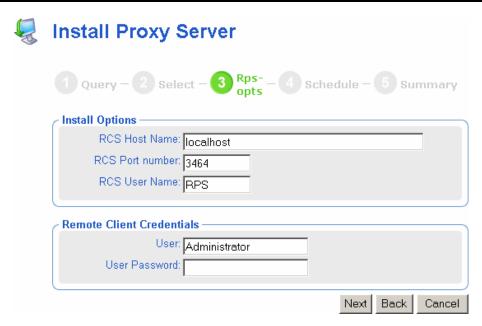


Figure 5.44 ~ Install Proxy Server—Install Options dialog box.

- 7. In the RCS Host Name text box, type the name or IP address for the Radia Configuration Server.
- 8. In the RCS Port number text box, type the port number for the Radia Configuration Server.
- **9.** In the RCS User Name text box, type the user ID to connect to the Radia Configuration Server.
- **10.** In the **User** text box, type the administrator ID to obtain administrative authority on the target device's domain.

Tip

In order to take advantage of the Install Radia Proxy Server task, consider creating a standard administrator ID across the domains in your network.

**11.** In the **User Password** text box, type the administrator password to obtain administrative authority on the target device's domain.

If you do not enter the password, and administrative authority is required, the job may fail. Check the job status for specific information.

12. Click Next.

The **Schedule** dialog box opens.

- **13.** In the **Schedule** dialog box, specify when you want this job to run. For more information, see *Scheduling Jobs* on page 184.
- 14. Click Next.

The Install Proxy Server—Summary dialog box opens.

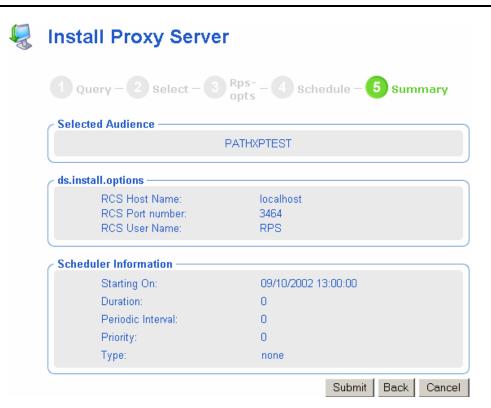


Figure 5.45 ~ Install Proxy Server—Summary dialog box.

#### 15. Click Submit.

The **Job Status** page opens with list of the jobs. This page automatically refreshes every 60 seconds.



Figure 5.46 ~ Job Status page.

- Click to refresh the page to display the latest status.
- Click P to view detailed information, such as the status of the installation.
- **16.** When you are done viewing the job status, click to close the **Job Status** page, and return to the Radia Management Portal.

# **Preparing and Locating Configuration Files for Proxy Server Installs**

Use these procedures to prepare one or more fully configured PRS.CFG files for the **Install Proxy Server** task. The CFG files must be placed in a specific media location for the Radia Management Portal to use them. When you run the Install Proxy Server task from the Radia Management Portal, the task will prompt you to select a specific CFG file, if multiple ones exist. Select your pre-configured CFG file, and the installed Radia Proxy Server will be installed fully configured and ready to go.

## To prepare a pre-configured RPS.CFG file for use the Install Proxy Server task

- **1.** Prepare a fully configured RPS.CFG file.
  - Perform a local installation of the Radia Proxy Server on a test machine that is the same platform as the intended Radia Proxy Server platform. Edit the resulting rps.cfg file using the directions given in the *Radia Proxy Server Guide* in the section *Configuring the Radia Proxy Server*.
- 2. Place the configured rps.cfg file in a specific Radia Management Portal media directory.
  - The appropriate location of a configured rps.cfg file will vary according to the platform on which you are installing the Radia Proxy Server: win32, hpux, or solaris. For example, the location for an HP-UX Radia Proxy Server installation is similar to this:
  - $\verb|/opt/Novadigm/IntegrationServer/media/extended_infrastructure/proxy_server/hpux/media/etc|\\$
  - **a.** Go to the directory where the Radia Management Portal is installed. The default is: /opt/Novadigm/Integration Server
  - **b.** Go to the following folder location in the Radia Management Portal directory:

/media/extended infrastructure/proxy server/<platform>/media

where *<platform>* is win32, hpux, or solaris, according to which platform you are installing the Radia Proxy Server on.

- **c.** Add an /etc folder to the /media directory.
- **d.** Copy the rps.cfg file to this platform-specific /media/etc folder. For example, if the Radia Management Portal is installed on

/opt/Novadigm/IntegrationServer

and the Radia Proxy Server will be installed on an HP-UX platform, then place the rps.cfg file in the following location

/opt/Novadigm/IntegrationServer/media/extended\_infrastructure/proxy\_serve r/hpux/media/etc

3. Run the Install Proxy Server task from the Radia Management Portal. Use the Radia Management Portal to run the Install Proxy Server task, as usual. The installation task will also transfer the fully configured rps.cfg file.

# Synchronizing the Radia Proxy Server

Use the **Synchronize Proxy Server** task to force the Radia Proxy Server to connect to the Radia Configuration Server to preload the files to the static cache on the Radia Proxy Server. See the *Radia Proxy Server Guide* for more information.

#### To synchronize the Radia Proxy Server

**1.** Use the **Authority** navigation aid to select the Radia Proxy Server that you want to synchronize.

#### Note

A group of devices may be selected as the audience (target) of the Synchronize Proxy Server task. If you choose a group of devices, the **Query** dialog box is bypassed.

- **2.** In the **Operations** task group, click **Synchronize Proxy Server**.
  - The **Schedule** dialog box opens.
- **3.** In the **Schedule** dialog box, specify when you want this job to run. For more information, see *Scheduling Jobs* on page 184.
- 4. Click Next.

The Submit Synchronize—Summary dialog box opens.



Figure 5.47 ~ Submit Synchronize—Summary dialog box.

## 5. Click Submit.

A list of the jobs appears. Now, you can use the **View Properties** task to view detailed information, such as the status of the job.

The status of the synchronize proxy job will report the following events:

- Submission of the job request to the Radia Proxy Server
- Start of session between Radia Proxy Server and Radia Configuration Server (for preloading the files to the static cache on the Radia Proxy Server).
- Job successful.

See Viewing Properties on page 172 for more information.

# **Purging the Dynamic Cache of the Radia Proxy Server**

Use the **Purge Dynamic Cache** task to purge the dynamic cache of the Radia Proxy Server. See the *Radia Proxy Server Guide* for more information.

## To purge the dynamic cache of the Radia Proxy Server

**1.** Use the **Authority** navigation aid to select the Radia Proxy Server whose cache you want to purge.

## Note

A group of devices may be selected as the audience (target) of the Purge Dynamic Cache task. If you choose a group of devices, the Query dialog box is bypassed.



Figure 5.48 ~ The Authority of a device's Radia Proxy Server.

- **2.** In the **Operations** task group, click **Purge Dynamic Cache**.
  - The Schedule dialog box opens.
- **3.** In the **Schedule** dialog box, specify when you want this job to run. For more information, see *Scheduling Jobs* on page 184.
- 4. Click Next.

The Submit Purge—Summary dialog box opens.



Figure 5.49 ~ Submit Purge—Summary dialog box

#### 5. Click Submit.

A list of the jobs appears. Now, you can use the **View Properties** task to view detailed information, such as the status of the job. See *Viewing Properties* on page 172 for more information.

# **Managing Services**

Use the Radia Management Portal to manage services. For example, you can start or stop services on your remote devices.

## To manage services

- 1. In the Authority navigation aid, select the service that you want to manage.
- **2.** In the **Operations** task group, click the appropriate action.
  - Click **Pause** to temporarily suspend the execution of a service. The service continues to run, but does not perform any action.
  - Click **Restart** to stop a service and then start it again.
  - Click Resume to resume execution of a service that has been paused.
  - Click **Start** to run a service.
  - Click **Stop** to stop a service.



- **3.** The **Job Status** page opens. This page automatically refreshes every 60 seconds.
  - Click to refresh the page to display the latest status.
  - Click P to view detailed information, such as the status of the installation.
- **4.** When you are done viewing the job status, click to close the **Job Status** page, and return to the Radia Management Portal.

# Remote Control (Windows Clients Only)

Use Radia's Remote Control to manage Radia Clients running on a supported Windows platform with TightVNC: Enhanced VNC Distribution through the Radia Management Portal. TightVNC: Enhanced VNC Distribution is a freely re-distributable solution that allows you to control Radia Clients from a remote location. The source code for TightVNC is available for download from http://www.tightvnc.org or by mail order from HP for a nominal distribution fee.

# **System Requirements**

- The remote device must be running Windows NT, 2000, or XP.
- The Radia Management Agent must be installed on the remote device.
- A Web browser that supports Java applets.

## **Prerequisites**

- Ability to use the Radia System Explorer.
- Ability to distribute applications (with the Radia Client or using a Notify operation).
- In the ZSERVICE class of the Radia Database, the service installation methods (such as ZCREATE and ZDELETE) must be set to a length of at least 57 characters to prevent values from being truncated during the import.
- Ability to connect the Remote Control Service to the appropriate users. See *Connecting the Remote Control Service to Users* below for more information.
- Distribute the Remote Control service to the devices to be managed by Radia. Some examples of ways to do this are to use the Radia Client or the Notify task in the Radia Management Portal.

# **Connecting the Remote Control Service to Users**

Use the Radia System Explorer on the Radia Administrator's Workstation to connect the Remote Control Service to the appropriate users, servers, or groups, representing the devices to be managed by Radia. Make a service connection between the Application (ZSERVICE). Remote

Control service and the appropriate class instance in the PRIMARY.POLICY domain, such as a USER, DEPT, or WORKGRP class instance.

#### To connect the Remote Control Service to Users

- 1. Use the Radia System Explorer and go to the PRIMARY.POLICY domain.
- **2.** Navigate to the appropriate **DEPT**, **USER**, or **WORKGRP** class instance you want connected to the Remote Control Service. *Figure 5.50* ~ *POLICY.DEPT.Sales Instance and Show Connections dialog box for SOFTWARE domain* on page 243 uses the Sales Department instance as an example.
- **3.** Right-click the selected instance (in the tree view) and select **Show Connections**. The **POLICY.DEPT Connections** dialog box opens. This dialog box displays a list of classes you can connect the selected instance to.

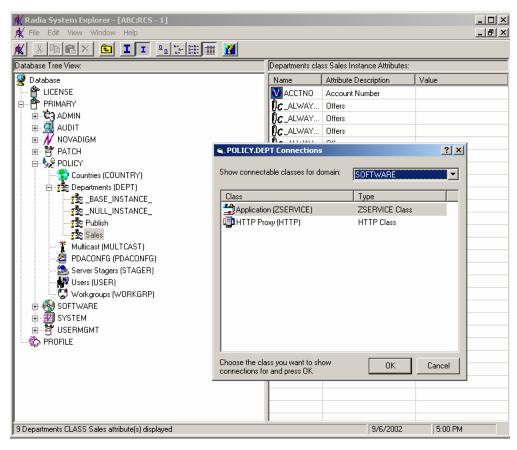


Figure 5.50 ~ POLICY.DEPT.Sales Instance and Show Connections dialog box for SOFTWARE domain.

- **4.** From the **Show connectable classes for domain** drop-down list, select **SOFTWARE**, then select **Application (ZSERVICE)**, and then select **Remote Control**.
- **5.** Drag the **Remote Control** instance to the appropriate POLICY instance (in this example, **DEPT.Sales**). When your cursor turns to a paper clip, release the mouse button.

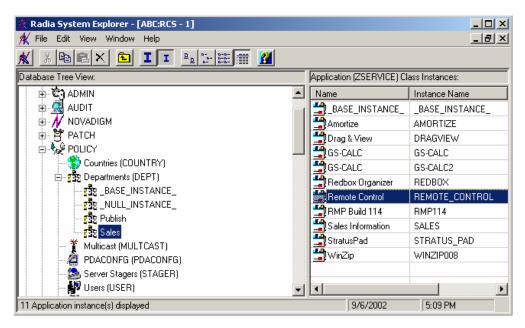


Figure 5.51 ~ Connect (Drag) Remote Control Service to Sales instance.

- **6.** Click **COPY** to create the connection from Department Sales to Application.Remote Control.
- **7.** Click **Yes** to confirm the connection.
- **8.** Click **OK** when you receive the confirmation message that "Sales has been connected to Remote Control."
- **9.** Notice that Remote Control is listed under the Sales department instance, which indicates that the entire department is now authorized to receive the Remote Control application.

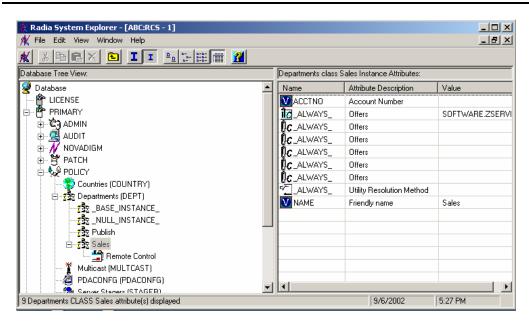


Figure 5.52 ~ Remote Control Service authorized for Sales Department.

Now you can distribute the Remote Control service to the devices to be managed using the Radia Client or the Notify task.

# Using Remote Control (Windows Clients Only)

After using the Radia Client or the Notify task to distribute the Remote Control service to the remote device, you can use Remote Control to manage the Radia Clients using TightVNC.

## To use the remote administration capabilities

- 1. In the Authority navigation aid, select a device that has the VNC server installed.
- 2. Click the VNC Server.

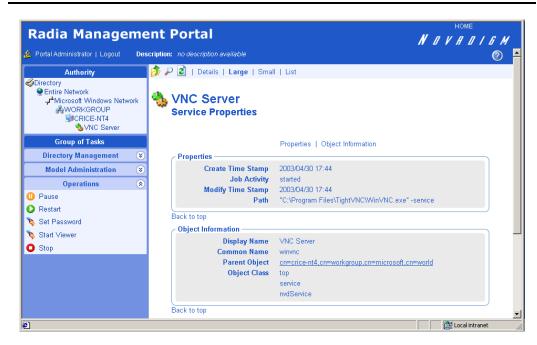


Figure 5.53 ~ VNC Server properties.

**3.** If this is your first time using the VNC Server, go to the **Operations** task list and click **Set Password**. (If this is not your first time, go to step 8.)

The **Set Password** dialog box opens.



Figure 5.54 ~ Set Password dialog box.

- **4.** In the **User Password** text box, type the password for the VNC session.
- 5. Click Submit.





Figure 5.55 ~ VNC Server properties.

**6.** In the **Operations** task list, click **Start** to start the VNC server.

The **Job Status** page opens with list of the jobs. This page automatically refreshes every 60 seconds.

- Click if you want to refresh the page to display the latest status.
- Click P to view detailed information, such as the status of the installation.

When you are done viewing the job status, click to close the **Job Status** page, and return to the Radia Management Portal.

**7.** In the workspace, click to refresh the view and see that the service started.





Figure 5.56 ~ VNC Server has started.

**8.** In the **Operations** task list, click **Start Viewer** to start the VNC session. A prompt for VNC authentication opens.

## Note

If your Web browser does not support Java applets, you may see this message "Refresh this page for remote authentication" prompt. Be sure to install the Java component.

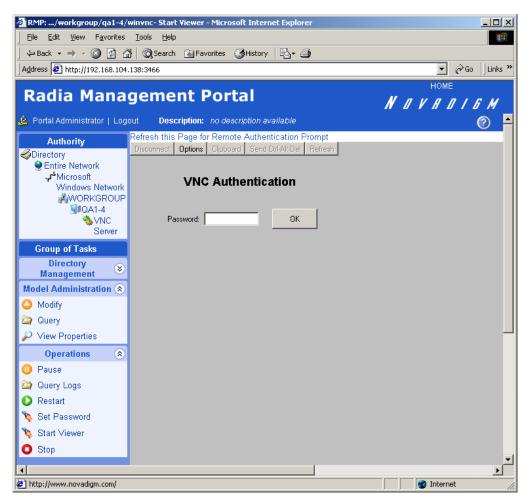


Figure 5.57 ~ VNC Authentication page.

- **9.** In the **Password** text box, type the password for the VNC session.
- **10.** Click **OK**.

Now, you can control the Radia Client from the remote location.

## Note

You can customize the **Start Viewer** task to have the VNC session open a new window, or display the VNC session in the Workspace area of the Radia Management Portal. For details, see the topic *Customizing the Start Viewer Task Properties* on page 251.



Figure 5.58 ~ Controlling a remote client.

Note

The initial request temporarily uses Port 5800. The connection uses Port 5900.

## To disconnect the VNC session

**1.** At the top of the workspace, click **Disconnect** to disconnect the session. If you browse to another page in the RMP, the session will automatically be disconnected.

2. Click **Stop** in the **Operations** task group to stop the VNC server. You may need to click stop to refresh the view and see that the service started.

# **Customizing the Start Viewer Task Properties**

You can customize the Start Viewer task of the Radia Management Portal to display the remote session in a new window, as opposed to displaying the remote session within the Radia Management Portal workspace area (the default). To do this you will modify the Start Viewer task from the Radia Management Portal before you begin the VNC session.

## To customize the Start Viewer Task from the Radia Management Portal

- **1.** In the **Authority** navigation aid, go to **Directory**.
- 2. In the workspace, click Tasks.
- 3. Browse to and select the Start Viewer task, then select Custom Viewer.

The View Properties Options dialog box opens.





Figure 5.59 ~ Custom Viewer Options Properties dialog box and settings.

The **Open new window** property can be set to **No** (the default) or **Yes**. **No** means the VNC Remote Control session is displayed within the Workspace of the Radia Management Portal. **Yes** means the remote session is displayed in a new, separate window.

**4.** To modify the **Open new window** property, click **Modify** in the **Model Administration** task group.

The **Modify Options** dialog box opens. Use this dialog box to change the value for the **Open new window** property.



Figure 5.60 ~ Modify Options dialog box used to set the Open new window property.

- **5.** Select **Yes** or **No** from the **Open new window** drop-down selection list. **No** means the VNC Remote Control session is displayed within the Workspace of the Radia Management Portal. **Yes** means the remote session is displayed in a new, separate window.
- **6.** Click **Modify** to save your selection.

### **Configuring Remote Control**

You can configure several parameters in the Remote Control Service to control the server's behavior. To do this you will use the Registry Editor in the Radia System Explorer.

#### To configure Remote Control parameters

- 1. Go to Start, Programs, Radia Administrator, Radia System Explorer.
- 2. In the Radia System Explorer Security Information dialog box, type your User ID and Password, and then click OK.
- 3. Go to PRIMARY, SOFTWARE, Application (ZSERVICE), Remote Control.
- **4.** Double-click **TightVNC** and then double-click the registry resource for **TightVNC** (the last one).

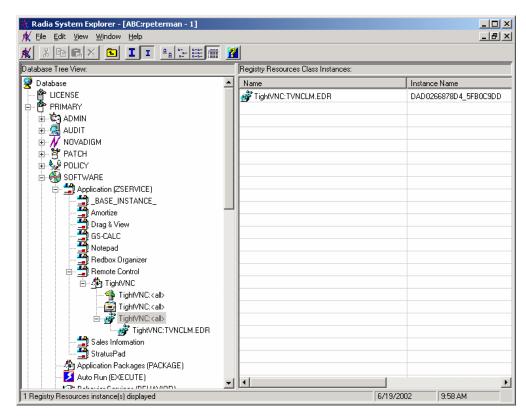


Figure 5.61 ~ Registry Resources for Remote Control.

- **5.** Right-click **TightVNC:TVNCLM.EDR** and select **Edit Registry Resource**.
- **6.** Navigate to **WinVNC3** to view the local machine-specific settings.

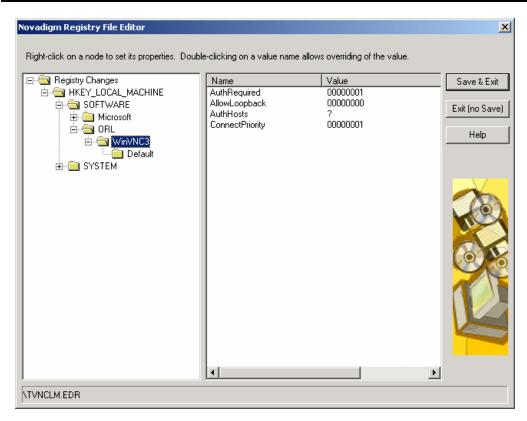


Figure 5.62 ~ Registry File Editor.

<b>Table 5.2</b> <i>c</i>	<ul> <li>Local Machine-Specific Settings for TightVNC Service</li> </ul>
Property	Description
AuthRequired	Set AuthRequired = 1 (default) to ensure that a password is set when you start the service.
	Set AuthRequired = 0 to disable null password checking by WinVNC. Use DWORD format.
AllowLoopback	Set AllowLoopback = 0 to disable the ability to remote control the local machine.
	Set AllowLoopback = 1 to allow the ability to remote control the local machine. Use DWORD format.
AuthHosts	Specifies a set of IP address templates that incoming connections must match in order to be accepted. By default, the template is empty and connections from all hosts are accepted. Three settings are available:
	- IP address - Specifies a range of IP addresses that are not authorized to connect.
	? IP address - Specifies a range of IP addresses that you want to be prompted for.
	+ IP address - Specifies a range of IP addresses that are authorized to connect.
	<b>Example</b> : +192.10,-192.10.12
	This parameter is used in conjunction with the QuerySettings parameter. Use STRING format.
ConnectPriority	By default, the TightVNC server disconnects existing connections when a non-shared connection authenticates.
	You can change this behavior by setting this value to:
	0 - to disconnect all existing connections
	1 - to continue all existing connections.
	2 - to refuse any new connections.
	Use DWORD format.

 $\textbf{7.} \quad \text{Click } \textbf{Default} \text{ to see the local default user properties that you can set.}$ 

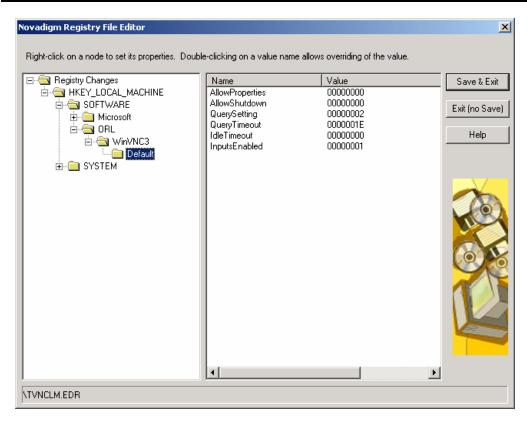


Figure 5.63 ~ Registry File Editor.

Table 5.3 ∼ Local Default User Properties for TightVNC Service		
Property	Description	
AllowProperties	Set AllowProperties = 0 to prevent your users from accessing the Properties dialog box to modify settings.  Set AllowProperties = 1 to allow your users to access the Properties dialog box and modify settings.  Use DWORD format.	
AllowShutdown	Set AllowShutdown = $0$ to prevent your users from shutting down the TightVNC server. Set AllowShutdown = $1$ to allow your users to shut down the TightVNC server. Use DWORD format.	
QuerySetting	Sets whether you want to prompt the user about an incoming connection. This setting must be used in conjunction with AuthHosts.  Set this value to:  0 or 1 – Does not prompt on incoming connection.  2 – Prompts on incoming connection (default).  Use DWORD format.	
QueryTimeout	Specifies how long (in seconds) the prompt panel appears to the user when you begin a remote control session. This panel prompts the user to accept the session.  Use DWORD format.	
IdleTimeout	Indicates how long (in seconds) a VNC client can remain idle for before being disconnected. If this is blank or set to 0, a timeout is not enforced.  Use DWORD format.	
InputsEnabled	Allows incoming connections to send input.  If InputsEnabled = 1 you can interact with the remote computer.  If InputsEnabled = 0 you can view the remote computer, but cannot interact with it.  Use DWORD format.	

## **Summary**

- Each task in the Radia Management Portal follows a similar lifecycle.
- You will encounter a series of dialog boxes that you must complete in order to create the job. These dialog boxes are used to perform a query on the Radia Management Portal Directory in order to narrow the scope of the job, select the audience, specify job options, specify scheduling information, and review a summary of the job.
- Use the Notify tasks to perform an action on a set of target devices.
- Before performing remote installations, you must copy the appropriate files to the Radia Management Portal's media directory.
- The Radia Management Portal creates a packing list, which contains a list of the files to be transferred across the network.
- Use the **Install Management Agent** task to deploy the Radia Management Agent on remote devices.
- Use the **Install Client** task to deploy the Radia Clients to remote devices, either directly from the Radia Management Portal or indirectly from a pre-assigned Radia Proxy Server.
- Use the **Manage Proxy Assignment** task to assign a set of nodes to a Radia Proxy Server, which will assist the Radia Management Portal in deploying the Radia Client install scripts.
- Use the **Install Proxy Server** task to deploy the Radia Proxy Server to remote devices.
- Use the **Synchronize Proxy Server** task to preload files from the Radia Configuration Server to the static cache on the Radia Proxy Server.
- Use the **Purge Dynamic Cache** task to purge the dynamic cache of the Radia Proxy Server.
- You can use the **Start**, **Stop**, **Pause**, **Restart**, and **Resume** tasks to manage remote infrastructure products.
- You can use Remote Control to manage Radia Clients with TightVNC from a remote location.

# Troubleshooting

## At the end of this chapter, you will:

- Be familiar with the Radia Management Portal log files.
- Be familiar with the common message types.
- Be familiar with the information that you need to collect for HP OpenView technical support.
- Be familiar with the Portal Directory (RMP.MK) file compression and backup utilities.

## **About the Log Files**

The Radia Management Portal writes several logs, which can be used to track progress and diagnose problems. The log files are stored by default in /opt/Novadigm /IntegrationServer/logs for the Radia Management Portal for UNIX.

The log files are:

#### ■ httpd-port.log

This is the main log for the Radia Management Portal. It contains information about the actions that you perform in the Radia Management Portal, as well as the version and build number of the Radia Management Portal.

Replace port with your port number, for example, httpd-3466.log.

Each time you start the Web server a new log is written. The old log is saved as httpdport.nn.log.

#### ■ httpd-port.YY.MM.DD.log

This log contains the Web server activity for each day. If the log is empty, it means that there was no activity that day.

#### ■ httpd-3466.error.txt

This log contains messages written to any logs that contain the prefix ERROR. This allows you to view all errors in a single location.

### **Setting Trace Levels**

By default the trace level is set to 3, which is the informational tracing level. This displays INFO, WARNING, and ERROR messages. See *Common Message Types* on page 264 for more information.

#### To change the trace level for the logs

1. Open the file /opt/Novadigm/IntegrationServer/etc/httpd.rc which is located on the computer that is running the Radia Management Portal. The following is an excerpt from this file.

```
# Config Array
# Element
             Default
# ======
             ======
# HOST
              [info hostname]
# PORT
              3466
# DEBUG
# DOCROOT
              [file join $home htdocs]
# IPADDR
              { }
             support@novadigm.com
# WEBMASTER
# UID
              50
# GID
              100
# NAME
              $tcl service
# LOG_LEVEL
              3
# LOG_LIMIT
Overrides Config {
    PORT
              <u>346</u>6
  (Re) Initialize Logging
Log_Init
```

Figure 6.1 ~ Excerpt of httpd.rc showing LOG\_LIMIT increased to level 4

**2.** Type LOG\_LEVEL and the appropriate trace level, space delimited, within the **Overrides Config** starting and ending brackets { }. Select the appropriate trace level, as follows.

Table 6.1 ∼ Trace Levels		
Trace Level	Description	
0	No logging.	
1	Logs errors only.	
2	Logs warnings and errors.	
3	Logs informational messages, warnings, and errors.  Recommended trace level setting for customers.	
4	Logs all debug information.  Recommended for experienced customers only.	
5 - 9	Full trace.  Not recommended for customer use.	

- **3.** Save the file changes.
- 4. Restart the Radia Integration Server service.

## **Common Message Types**

The following message types are used in the main Radia Management Portal log (httpd-port.log).

Table 6.2 ∼ Common Message Types		
Message Type	Description/Example	
Info	Provides general information. For example:  • 20010913 12:37:55 Info: LdifImport/4: BEGIN Indicates that a job to import an LDIF has begun.  • 20010913 12:37:55 Info: RMP: Starting Scheduler Indicates that the RMP Scheduler service is started.  • 20010913 12:37:55 Info: RMP: Radia Management Portal ready Indicates that the Radia Management Portal is up and running.	
Audit/success	Indicates a successful change to an object in your Radia Management Portal Directory.  For example:  • 20010913 12:46:43 Audit/success: RMP: (who/admin) add: uid=jbanks, cn=opsys,ou=who Indicates that a new user was added.	
Audit/failure	Indicates an unsuccessful change to an object in your Radia Management Portal Directory.  For example:  • 20010913 16:26:31 Audit/failure: RMP: (who/admin) add: uid=Guest, ou=who, object "uid=guest,ou=who" already exists  Indicates that you were not able to add a user with the ID Guest to the organizational unit "who" because it already exists.	
Error	Indicates a critical problem.	
Warning	<pre>Indicates a non-critical problem. • 20010913 16:20:42 Warning: to: output to 1 job- create-reply 2 resume: no gate</pre>	

## **Collecting Information for Technical Support**

If you need to contact technical support for assistance, be sure to collect the following information:

- **1.** The **logs** directory, stored by default in the following location:
  - /opt/Novadigm/IntegrationServer/logs
- **2.** Version information for nvdkit.exe.
- **3.** The rmp.mk and history.mk files, stored by default in the following location:
  - /opt/Novadigm/IntegrationServer/etc
  - See About the Product Architecture on page 19 for information about these files.
- **4.** The **etc** directory files (no subdirectories), stored by default in the following location:
  - /opt/Novadigm/IntegrationServer/etc

## **Viewing the Version Information Window**

After logging into the Radia Management Portal, click the Information button ② on the banner area to open the Version Information Window, shown in the following Figure.

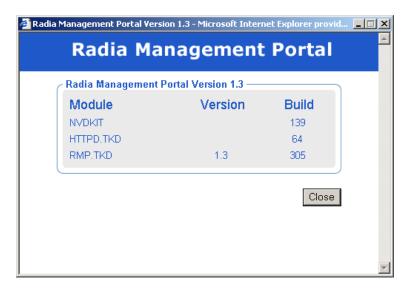


Figure 6.2 ~ Sample Radia Management Portal Version Information Window.

This window displays the installed Module, Version, and Build levels for the Radia Management Portal, including NVDKIT.EXE, HTTPD.EXE, and RMP.TKD components.

## **Gathering Version Information for NVDKIT.EXE**

Use this command-line method of obtaining version information for NVDKIT.EXE as an alternative to viewing it from the Version Information window of an active Radia Management Portal session.

#### To gather the version information for NVDKIT.EXE

- 1. Open a command prompt.
- **2.** Navigate to the location of nvdkit.exe (by default, /opt/Novadigm /IntegrationServer).
- **3.** Type **nvdkit version**, and press ENTER.

  Below is an example of the version information.

Figure 6.3 ~ Example of version information for nvdkit.exe.

Note

The httpd-*port*.log also contains version and build information.

### **Gathering Version Information for RADISH.EXE**

Radish.exe runs on the Radia Configuration Server. Its build (version) information can be found using this procedure.

#### To gather the version information for RADISH.EXE

- **1.** Locate the directory of your radish.exe on the machine running the Radia Configuration Server. The default is **/opt/Novadigm/ConfigurationServer/bin**.
- **2.** Open a command prompt and change to the directory for radish.
- **3.** Type **radish version**, and press ENTER. Below is an example of the version information.

Figure 6.4 ~ Example of version information for radish.exe, (which is given by the build number of module nvdmtcl).

**4.** The build number for **radish.exe** is actually given in the build number for module **nvdmtcl** (its predecessor's name) in the line:

```
module nvdmtcl, build xx <date> <time>
```

For example, Figure 6.4 ~ Example of version information for radish.exe illustrates a Radia Configuration Server running Build 44 of radish (which is shown as module **nvdmtcl**, **build** 44 in the output).

Note

Radish.exe replaced an earlier program named nvdmtcl.

## Managing the Portal Directory (RMP.MK) File

The **Portal Directory**, RMP.MK (in the Radia Integration Server's **\etc** directory), contains configuration and entitlement information for the Radia Management Portal as well as infrastructure and status information. The RMP.MK file has an upper limit of 2 GB. The Compress Directory job is used to maintain the RMP.MK file. By default, the Compress Directory job is scheduled to run:

- Every 24 hours at 2:00 AM.
- Whenever the RMP.MK directory size reaches 1.5 GB.

Specifically, the Compress Directory job first backs up the RMP.MK file to RMP.BAK.MK, and then compress the RMP.MK file. If the Compress Directory job is disabled and the RMP.MK file were to exceed its 2 GB limit, you may experience corruption of the portal directory.

You should monitor the size of the rmp.mk file in a large or demanding environment. If you realize the Compress Directory job is running automatically due to the rmp.mk file reaching 1.5 GB, then you can schedule the Compress Directory job to run more frequently by modifying the properties of the Compress Portal Directory job group.

### **Modifying the Compress Portal Directory Job Group**

By default, the Compress Directory job is scheduled to run daily at 2:00 AM and whenever the RMP.MK file reaches 1.5 GB. Use the following procedure to change the default schedule for running the Compress Directory job.

#### To change the Compress Directory schedule

Use the **Modify** task in the **Administrative Tasks** group to increase the frequency of the Compress Directory task to ensure the RMP.MK file does not exceed 2 GB.

- **1.** In the **Authority** navigation aid, go to **Directory**.
- In the workspace, click Jobs.The Job Group page opens.
- **3.** Optionally, click **Details** to display the job details.

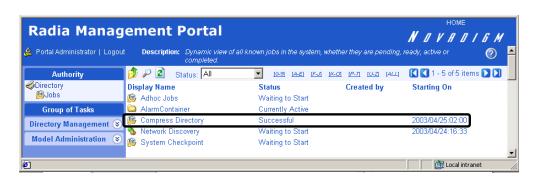


Figure 6.5 ~ Compress Directory in the Jobs listing.

- **4.** Locate the **Compress Directory** job listing. If necessary, you can query by the last date and time that it was run. For information on querying, see *Querying Jobs or Job Groups* on page 165.
- **5.** Double-click on the **Compress Directory** job listing to select it.

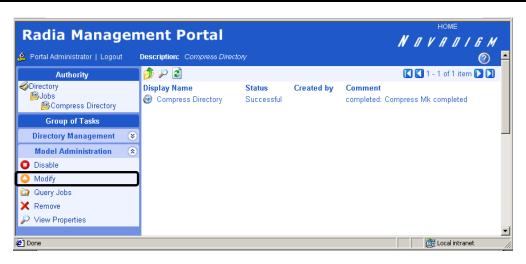


Figure 6.6 ~ Select the Compress Directory Job Group to modify it.

**6.** Click **Modify** from the **Model Administration** task group.

The **Modify Job Group** dialog box opens where you can change the **Compress Directory** job properties.



### **Modify Job Group**

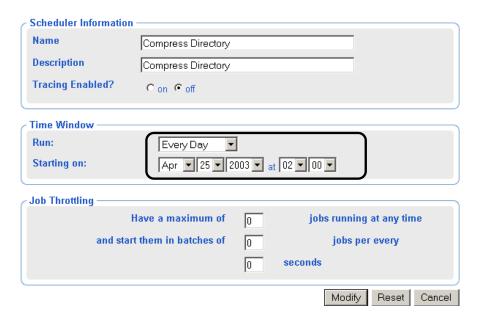


Figure 6.7~ Modifying the Compress Directory Job – Default is Every Day at 2 AM.

**7.** Use the information in *Table 6.3*  $\sim$  *Modifying the Compress Directory Job Group* below.

Table 6.3 ~ Modifying the Compress Directory Job Group			
Field	Description and Options	Default	
Name	Job name.	Compress Directory	
Description	Description of the job.	Compress Directory	
Tracing Enabled?	Not Applicable. Tracing is not available for the Compress directory job.	off	
Job Limit	Not Applicable. Compress directory is a single job.	0	
Throttling Job Limit	Not Applicable. Compress directory is a single job.	0	
Throttling Time Period	Not Applicable. Compress directory is a single job.	0	
Run	Frequency of scheduling the job.	Every Day	
Starting on [date] and [time]	Next date and time to schedule the job for the given frequency.	Next day at 2:00 A.M.	

Table 6.3 ~ Modifying the Compress Directory Job Group			
Field	Description and Options	Default	
Starting after every <i>nn</i> hours	Scheduled frequency in hours to run Compress Directory. Displays when Run is set to Every $n$ Hours.	Not displayed due to Run default set to Every Day	

By default, the compress job is set to run every 24 hours at 02:00AM in the morning. If you want the directory to be compressed more frequently, reschedule the job to run more often (for example, every 12 hours).

**8.** In the **Run** option drop-down list, select the desired schedule:



Figure 6.8 ~ Run Option drop-down list.

**9.** In the **Starting on** fields, select the start date and time to run the job.

If you select **Every n Hours** for the **Run** frequency, also select how often (in hours) you want the job to be run in the **After every nn hours** field. An example of setting the frequency to every 12 hours starting at 2:00 AM is given in the following figure.



### **Modify Job Group**

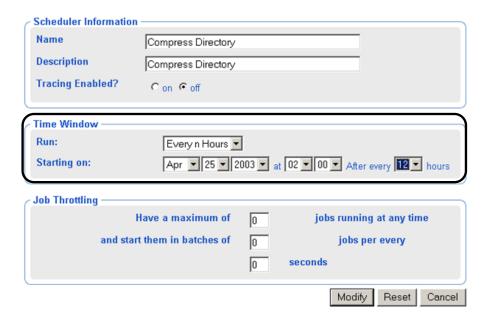


Figure 6.9 ~ Compress Directory Job Group scheduled for every 12 hours at 2:00 AM and PM.

**10.** Click **Modify** to save the new properties to the Compress Directory job group. The compress job will run at the next scheduled time with the modified properties.

## **Summary**

- The httpd-*port*.log is the main log for the Radia Management Portal.
- The default trace level is set to 3, which tracks informational messages, warnings, and errors.
- Collect your logs and version information if requesting technical support.
- Version and build information can be found by clicking ② on the Radia Management Portal's banner area after logging on. Alternatively, from a command prompt you can run "nvdkit version" on the client side, and "radish version" on the Manager (Configuration Server) side.
- Adjust the schedule for the Compress Directory job group if you want to the RMP.MK file scheduled for compression more frequently than once a day.

## Radia Services

## At the end of this chapter, you will:

- Be familiar with other products you can purchase to extend the functionality of the Radia Management Portal.
- Be familiar with the Radia Inventory Manager.
- Know how to perform a Notify via the Radia Inventory Manager.

In addition to the core product, you can purchase additional functionality for the Radia Management Portal. Contact your HP sales representative for more information about these services.

## **Radia Inventory Manager**

The Radia Inventory Manager discovers configuration information on remote computers. It enables centralized reporting and administration based upon the discovery results. See the *Radia Inventory Manager Guide*.

If the Radia Inventory Manager is installed on the same computer as the Radia Management Portal, a link is available in the banner of the Radia Management Portal.

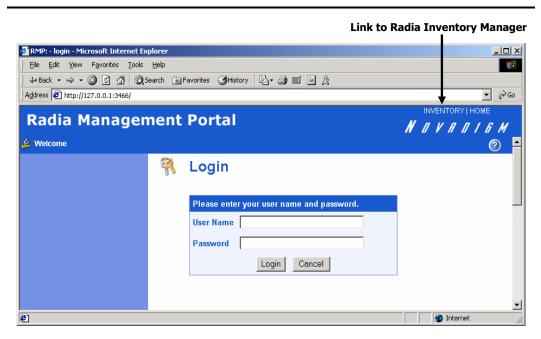


Figure 7.1 ~ Link to the Radia Inventory Manager in the Radia Management Portal banner.

When you use the Radia Inventory Manager with the Radia Management Portal, the Notify via Radia Inventory Manager task is also available. As with any other task in the Radia Management Portal, this is available based on your selected Authority and entitlement policies.

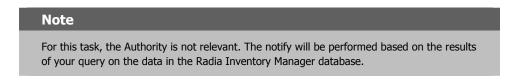
Use this section to learn about the task available with the Radia Inventory Manager service.

### **Notify via Radia Inventory Manager**

In the **Radia Inventory Manager** task group, click **Notify via Inventory Manager** to notify an audience based on the information reported to the Radia Inventory Manager.

#### To perform a notify via the Radia Inventory Manager

1. In the Inventory Management task group, click Notify via Inventory Manager.



The **Submit Notify—RIM Query** dialog box opens.

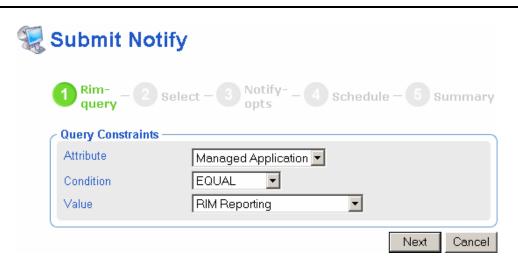


Figure 7.2 ~ Submit Notify—Query dialog box.

**2.** Use the **Query Constraints** area to set up your initial query. For example, you might want to perform a query to retrieve a list of subscribers whose application, Amortize, is being managed by Radia.

The format is Attribute is EQUAL to or NOT EQUAL to the Value.

- From the **Attribute** drop-down list, select the attribute that you want to query on, such as **Managed Applications**.
- From the Condition drop-down list, select whether you want the attribute to be EQUAL TO or NOT EQUAL TO the Value.
- From the **Value** drop-down list, select the value for the attribute, such as **RIM Reporting**.
- 3. Click Next.

The fields in the **Submit Notify—Rim Query** dialog box are updated so that you can select **Additional Filtering** options. For example, you might want to retrieve a list of subscribers whose operating system is Windows NT Version 5.0 and whose application, RIM Reporting, is being managed by Radia.

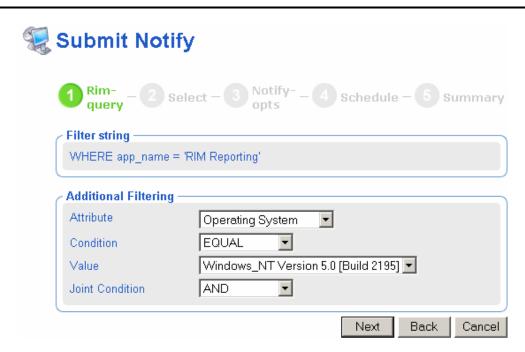


Figure 7.3 ~ Additional Filtering in the Submit Notify—Query dialog box.

- From the **Attribute** drop-down list, select the attribute that you want to query on, such as Operating System.
- From the **Condition** drop-down list, select whether you want the attribute to be EQUAL TO or NOT EQUAL TO the **Value**.
- From the Value drop-down list, select the value for the attribute, such as Windows NT Version 5.0.
- From the **Joint Condition** drop-down list, select whether you want the results to include both values (AND), or whether you want the results to include at least one of the values (OR).

For example, do you want to find information about subscribers that are running Windows NT 5.0 *and* have the Amortize application managed for them by Radia? Or, do you want to find information about subscribers that are running Windows NT 5.0 *or* have the Amortize application managed for them by Radia?

#### 4. Click Next.

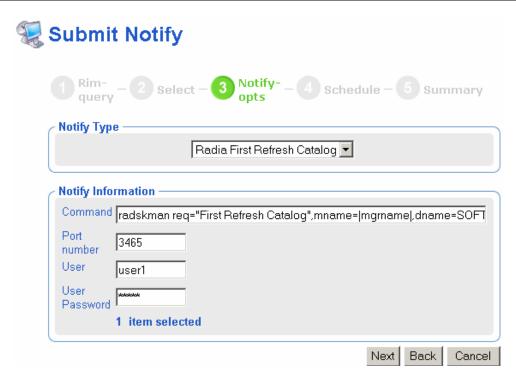


Figure 7.4 ~ Submit Notify—Options dialog box.

- **5.** In the **Notify Type** drop-down list, select the type of Notify that you would like to perform. The **Command** text box changes based on your selection.
- **6.** In the **Command** text box:

Type the command line that you want to run on the selected target devices.

#### OR

If the **Command** text box has pre-filled information, modify the command line as necessary. For example, if you select **Radia First Refresh Catalog** in the **Notify Type** drop-down list, the **Command** text box is pre-filled with the following command line:

```
radskman.exe req="First Refresh Catalog",mname=|mgrname|,dname=SOFTWARE,
ip=|mgr_ip|,port=|mgr_port|,cat=prompt,ulogon=n
```

You must replace information between the pipes (|) with the necessary information to perform the notification. For example, you might modify the command line above to read:

radskman.exe req="First Refresh Catalog",mname=EastCoast,dname=SOFTWARE, ip=10.10.10.1,port=3464,cat=prompt,ulogon=n

- 7. In the **Port Number** text box, type the port number that the Notify daemon will be listening on
- **8.** If necessary, in the **User** text box, type the user name for the target device.
- 9. If necessary, in the User Password text box, type the password for the target device.
- 10. Click Next.
  - The **Schedule** dialog box opens.
- **11.** In the **Schedule** dialog box, specify when you want this job to run. For more information, see *Scheduling Jobs* on page 184.
- 12. Click Next.

The Submit Notify—Summary dialog box opens.

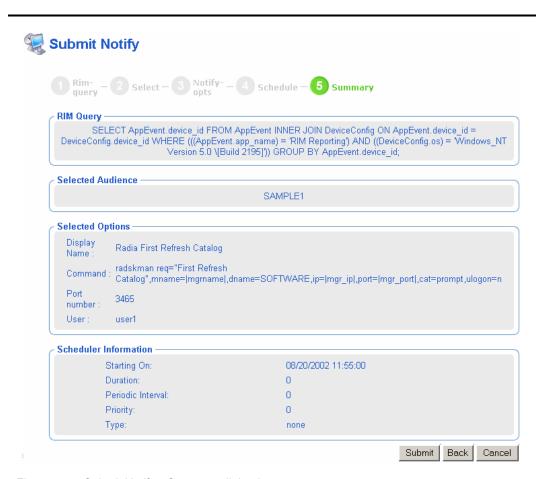


Figure 7.5 ~ Submit Notify—Summary dialog box.

#### 13. Click Submit.

A list of the jobs appears. If the job is scheduled to run immediately, click  $\square$  if you want to review the state of the job.

You can also use the **View Properties** task to view detailed information, such as the status of the installation. See *Viewing Properties* on page 172 for more information.

## **Summary**

- You can purchase additional products to extend the functionality of the Radia Management Portal.
- If the Radia Inventory Manager is installed on the same computer as the Radia Management Portal, a link is available in the banner of the Radia Management Portal.
- Use Notify via the Radia Inventory Manager from the Radia Management Portal to notify an audience based on a query of the Radia Inventory Manager database.



#### audience

An **audience** is a group of devices on which you want to perform some action.

An example of an audience would be all of the computers in your Accounting department.

#### authority

Authority is your selected level within the Radia infrastructure. Use the Authority navigation aid to browse your infrastructure and to select the place where you want to perform a task. Every task you select in the Radia Management Portal is performed within the selected authority.

#### **Authority navigation aid**

The authority navigation aid of the Radia Management Portal user interface allows you to browse your infrastructure objects and select the place where you want to perform a task.

#### banner area

The banner area runs across the top of the Radia Management Portal user interface. It includes a Logout command, a description of your current authority, links to related installed components, such as HOME, PUBS, and INVENTORY, and an online Help button.

#### computer

A **computer** is a physical device that is running a piece of the infrastructure that you want to manage via the Radia Management Portal. A computer must be addressable by an IP

An example of a computer would be a computer that is running the Radia Client software.

#### container

A **container** is a logical grouping of objects used to limit the scope of influence that an administrator can have over the entire infrastructure.

#### directory

In computer networks, a **directory** is a collection of objects organized in a hierarchical tree structure. The objects contain information about users, network resources, and what network resources users can access.

One type of directory is a standards-based directory, such as LDAP (Lightweight Directory Access Protocol). An LDAP directory is organized in a tree structure containing the root directory, countries, organizations, organizational units, and individuals. An example of an LDAP directory is Windows Active Directory or Novell NDS.

#### distinguished name (DN)

The **distinguished name** is a unique name for an object in a directory that includes the name of the domain where the object is stored, as well as the path to the object.

#### entitlement

**Entitlement** is a policy that grants users (WHO) access to tasks (WHAT) to a specific subset of the infrastructure (WHERE). Use entitlement to limit your administrators' access to the tasks that are relevant to their jobs.

#### job

A **job** is a unit of work performed by the computer that is initiated by a person (via a task) or a scheduled operation.

### job group 열

A **job group** is an object representing a set of jobs. The job group definition includes information about the priority of the job group, the number of jobs that can run concurrently within the job group, the number of jobs that can be released in a specified time period, and where this job group falls within the hierarchy of job groups.

#### LDAP

An **LDAP** (Lightweight Directory Access Protocol) directory is a directory that is organized in a tree structure containing the root directory, countries, organizations, organizational units, and individuals. An example of an LDAP directory is Windows Active Directory.

#### network discovery

Network discovery is the Radia Management Portal job that automatically discovers all Windows network devices and the UNIX network nodes in your environment that you can manage.

#### object

An object is a storage unit consisting of properties whose values describe the object.

### organization (o) b

An **organization** is typically the top-most entry in your directory, often representing a company or a business partner.

### organizational unit (ou) 芦

An **organizational unit** organizes objects into logical administrative groups such as users, groups, computers, or business units such as departments or divisions. An organizational unit entry represents a collection of objects within a branch of a directory.

#### person

Also called a user.

A **person** is someone within your organization who has an account to access the system.

#### **Radia Configuration Server**

The Radia Configuration Server distributes applications to client computers. It runs on the server and maintains the Radia Database, which stores information that the Radia Configuration Server needs to manage digital assets for distribution to client computers.

#### **Radia Integration Server**

The Radia Integration Server is the foundation for a number of Radia infrastructure components, including: the Radia Management Portal, the Radia Policy Server, the Radia Inventory Manager, and the Radia Proxy Server. The Radia Integration Server integrates these component modules; they use the same core Radia Integration Server files, run under the same process, and share a single entry point for all HTTP (Web based) requests.

#### role

A **role** is a logical grouping of tasks that define an administrative function. For example, a role called "Policy Admin" might include tasks such as configuring Policy Managers, starting and stopping Policy Managers, and assigning policy.

### server 😻

A **server** is a physical device that is running a piece of the infrastructure that you want to manage via the Radia Management Portal. A server must be addressable by an IP address.

An example of a server would be an NT Server that is running a Radia Configuration Server.



A **service** within the Radia Management Portal is an application running on a server such as a Radia Configuration Server or Radia Proxy Server.

A **service** within the Radia database represents a group of related packages that define the content to be managed by: Radia.

#### target device

See audience.

#### task

A task is an activity that a person performs to initiate a job.

#### task group

A task group is a logical group of tasks.

#### taskbar

When you use the authority navigation aid to access your infrastructure, the taskbar appears along the left side of the Radia Management Portal user interface. The Taskbar contains logical groups of tasks (called *task groups*). The available tasks vary based on the selected authority, as well as your role.

#### user

See person.

#### workspace

The workspace is the large center area of the Radia Management Portal user interface, which displays the infrastructure objects for the selected authority and the windows for a selected task.

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