HP OpenView Configuration Server and Management Portal Using Radia

Radia Getting Started Guide

Radia Configuration Server Software Version: 4.5.4 for the MVS, UNIX, and Windows operating systems

> Radia Management Portal Software Version: 1.3 for the UNIX operating system and Software Version: 2.0 for the Windows operating system



Manufacturer Part Number: T3424-90063

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There you will find contact information and details about the products, services, and support that HP OpenView offers.

The support site includes:

Downloadable documentation Troubleshooting information Patches and updates Problem reporting Training information Support program information



Preface

5

About this Guide

Who this Guide is for

The *Radia Getting Started Guide* is for authorized Radia systems administrators who will be installing and using the *Radia Configuration Server* (RCS) and *Radia Management Portal* (RMP) to manage a Radia enterprise.

What this Guide is about

This book will guide Radia administrators through the installations of the Radia Configuration Server and Radia Management Portal, educate Radia administrators on the system requirements for these components, and show them how to log on to the RMP to browse the Radia infrastructure and view Radia publications.

Within this Guide

Documentation Map

Table P.1 ~ Documentation Map provides an overview of this book so that specific information about the Radia Configuration Server and Radia Management Portal can be easily located.

Table P.1 ~ Documentation Map			
To learn more about:	Go to:		
The contents of this guide, including: <i>an overview of the Radia installation media</i> ; <i>and an overview of the various Radia components</i>	Chapter 1: Introduction		
Installing the RCS and RMP in a UNIX environment, including: <i>system requirements</i> , <i>logging on to the RMP</i> , and <i>viewing a Radia publication via the RMP</i>	Chapter 2: UNIX Installations		

Table P.1 ~ Documentation Map			
To learn more about:	Go to:		
Installing the RCS and RMP in a Windows environment, including: <i>system</i> requirements; logging on to the RMP, and viewing a Radia publication via the RMP	Chapter 3: Windows Installations		
Installing the RCS in an MVS environment, including: <i>preparing the RCS installation files on a Windows machine</i> ; and <i>transferring the files to the MVS mainframe</i>	Chapter 4: MVS Installation		
UNIX Kernel resource allowances in relation to the RCS, including: <i>parameters on the different UNIX operating systems</i> , and <i>RCS configuration based on concurrent tasks and cache management</i>	Appendix A: UNIX Kernel Tuning		

Summary of Changes

This version of the *Radia Getting Started Guide* details the installations of the **Radia Configuration Server** for MVS, UNIX, and Windows; and the installations of the **Radia Management Portal** for UNIX and Windows.

Product Changes

Radia Configuration Server

AIX, HP-UX (PA-RISC 1.1 and 2.0), Solaris, and Windows

- Multiple updates were made to the ZEDMAMS utility in order to improve the functionality of the verbs. Two of the more notable updates are:
 - The CHANGE_OBJECTID verb was updated to correctly handle blank object IDs.
 - EXPORT_CLASS and EXPORT_INSTANCE have been modified so that they no longer export the _NULL_INSTANCE_.
- When inaccurate and unsuccessful object resolutions occur, the client task will be terminated.
- The database verification has been updated to recognize lowercase international characters in the resource header.
- The license utility, ZLICUTIL, has been modified to correctly delete licenses that do not meet template-size criteria.

AIX, HP-UX (PA-RISC 1.1 and 2.0), and Solaris

- The **version.nvd** file has been implemented on UNIX platforms to aid in determining the version of the RCS.
- Support has been added for the ZLOGSWCH and ZLOGWRAP REXX methods to include RCS log information when run asynchronously via the REXX Manager.
- Support has been added for the execution of UNIX shell commands from a REXX method.

Windows

- The Intel Pentium 4 processor is now correctly recognized. (It is no longer incorrectly read as Xeon Processor, Model 1, Stepping 2.)
- The EDMSIGNR method has been updated to include Microsoft Windows security code changes.

For more information on the Radia Configuration Server, refer to the Radia Configuration Server Guide.

Radia Management Portal

Windows (version 2.0)

This release introduces several new features, including.

- This version of the Radia Management Portal introduces RMP **zones**—and zone-related features. Zones accommodate large enterprises that require multiple Radia Management Portal sites.
- Accessibility to existing directory structures within an enterprise has been added.
- Self-managed, cross-referenced groups can be used to perform an operation on all devices that have the similar properties, such as hardware and operating system level.
- Administrative tasks can be scheduled and managed on any RMP Zone from a central **master** RMP.
- Non-RMP directories (such as Microsoft Active Directory and the Radia Database) in an enterprise can be defined and connected to.

HP-UX and Solaris (version 1.3)

This release does not introduce new features.

For more information on the Radia Management Portal, refer to the Radia Management Portal Guide.

Documentation Changes

This printing of the *Radia Getting Started Guide* contains the following changes to information and procedures as detailed in this section.

Chapter 1: Introduction

This section has been revised.

Chapter 2: UNIX Installations

This section has been revised; it now includes the installations of the Radia Configuration Server and Radia Management Portal.

Chapter 3: Windows Installations

• This section has been revised; it now includes the installations of the Radia Configuration Server and Radia Management Portal.

Chapter 4: MVS Installation

This is a new chapter. It details the installation of the Radia Configuration Server on an MVS mainframe, and includes preparing the RCS files on a Windows PC before transferring them to the mainframe.

Appendix A: UNIX Kernel Tuning

This is a new section that provides information about the Kernel configuration parameters of the various UNIX systems; it serves as an appendix to the Radia Configuration Server installation that is documented in *Chapter 2: UNIX Installations*.

Editorial Improvements

In addition to the changes listed, this version might contain editorial and style updates to the chapters, sections, and indices.

Conventions

Table P.2 lists the documentation styles that are used in this book to reference various elements, such as other documents and window buttons.

Table P.2 ~ Styles			
Element	Style	Example	
References	Italic	See the Publishing Applications and Content chapter in this book.	
Dialog boxes and windows	Bold	The Radia System Explorer Security Information dialog box opens.	
Code	Andale Mono	radia_am.exe	
ل	Arial Unicode MS	When displaying lines of code that extend beyond the defined margins of the manuscript, this symbol indicates that the code continues uninterrupted and indented on the next line.	
		Radskman ip=< RadiaConfigurationServerIPAddress>,	
		port= <radiaconfigurationserverport></radiaconfigurationserverport>	
Selections	Bold	Open the \Admin directory on the installation CD-ROM.	

Table P.3 lists the editorial *style conventions* that are used in this book to reference Radia Database elements, and directory paths.

Table P.3 ~ Usage			
Element	Style	Example	
Drives (system, mapped, CD)	Italicized placeholder	<i>SystemDrive</i> :\Program Files\Radia might refer to C:\Program Files\Radia on your computer.	
		<i>CDDrive</i> :\client\radia_am.exe might refer to D:\client\radia_am.exe on your computer.	
Files	All uppercase	PRIMARY	
(in the Radia Database)		May also be referred to as the PRIMARY file.	
Domains All uppercase PRIMARY.SOFT		PRIMARY.SOFTWARE	
(in the Radia Database)		May also be referred to as the SOFTWARE domain in the PRIMARY file.	
Classes	All uppercase	PRIMARY.SOFTWARE.ZSERVICE	
(in the Radia Database)		May also be referred to as the ZSERVICE class in the SOFTWARE domain in the PRIMARY file.	



Table P.3 ~ Terminology describes terms that might be used interchangeably throughout this book.

Table P.3 ~ Terminology* * Depends on the context. May not always be able to substitute. Term Term Application software, service Client Radia Application Manager and/or Radia Software Manager Computer workstation, server NOVADIGM domain PRDMAINT domain Note: As of the 4.0 release of the database, the NOVADIGM domain is being renamed the PRDMAINT domain. Therefore, if you are using an earlier version, you will see the NOVADIGM domain in the database. Manager, Active Component Server Radia Configuration Server Radia Database Radia Configuration Server Database

Radia Documentation

Table P.4 presents a list of Radia publications that are associated with the various Radia products, and which might be referenced in this manual.

Table P.4 ~ Radia Documentation			
Radia Component	Radia Manual		
Radia Configuration Server	Radia Configuration Server Guide		
	Radia Configuration Server Messages Guide		
	Radia Getting Started Guide		
Radia Integration Server	Radia Inventory Manager Guide		
Radia Client	Radia Software Manager Guide		
	Radia Inventory Manager Guide		
	Radia Application Manager Guide		
Additional Titles	Radia Management Portal Guide		
	Radia REXX Programming Guide		
	Radia System Explorer Guide		



Contents

eface	,
About this Guide5 Who this Guide is for	5 5 5 5
Summary of Changes	, , , 33
Conventions) <u>></u>
Introduction17	,
About Radia	3
Overview of this Guide	3
Installation Media 18 hp OpenView Radia v4 configuration server CD 19 hp OpenView Radia v4 infrastructure CD 19 hp OpenView Radia v4 applications CD 20 hp OpenView Radia v4 publications CD 20 hp OpenView Radia v4 configuration server CD Components 20 hp OpenView Radia v4 configuration server CD Components 21 Radia Configuration Server 21 Radia Administrator Workstation 22 Radia Extensions for Windows Installer 23 Radia Distributed Configuration Server 23 hp OpenView Radia v4 infrastructure CD Components 24 Radia Adapter for SSL 24	3 9 9 0 0 L L 2 3 3 4 4
	Aface 5 About this Guide 5 Who this Guide is for 5 What this Guide is about 5 Within this Guide 5 Documentation Map 5 Summary of Changes 7 Product Changes 7 Radia Configuration Server 7 Radia Configuration Server 7 Radia Management Portal 8 Documentation Changes 6 Conventions 10 Radia Documentation 12 Introduction 12 Introduction 12 Installation Media 18 hp OpenView Radia v4 configuration server CD 16 hp OpenView Radia v4 configuration server CD 12 hp OpenView Radia v4 configuration server CD 20 hp OpenView Radia v4 configuration server CD Components 21 Radia Administrator Workstation 22 Radia Administrator Workstation 22 </th

Radia Policy Server	24
Radia Publishing Adapter	24
Radia Distributed Configuration Server	25
Radia Inventory Manager	25
Radia Management Portal	25
Radia Multicast Server	25
Radia Proxy Server	25
Radia Staging Server	25
Radia Configuration Analyzer	26
Radia Knowledge Base Manager	26
Radia Reporting Server	26
Radia Messaging Server	26
Radia Adapter for HP OVO	26
Radia Adapter for HP OpenView	26
hp OpenView Radia v4 applications CD Components	27
Radia Application Manager	27
Radia Software Manager	27
Radia Inventory Manager	27
Radia Implementation Overview	28
Summary	29

2	UNIX Installations	
	Chapter Overview	32
	Radia Configuration Server Installation	
	Installation Types	
	Radia Configuration Server Directories	
	System Recommendations for UNIX	
	UNIX Pre-Installation Checklist	
	UNIX Pre-Installation Tips	35
	UNIX Pre-Installation Notes	35
	All UNIX Platforms	35
	HP-UX Notes	35
	UNIX Environment Variables	
	The Setup-Configuration File	
	Installing the RCS	
	Silent Installation	
	GUI Installation	40
	UNIX Post-Installation Notes	
	Starting, Stopping, Identifying, and Cleaning up the Radia Configuration Server	54

Radia Management Portal Installation	57
System Recommendations for UNIX	57
UNIX Pre-Installation Checklist	58
UNIX Pre-Installation Tips	58
UNIX Pre-Installation Notes	
Network Discovery Requirements	
Trusted Host Environment	
Access Requirements	59
Installing the RMP	59
IP Address for a Remote Radia Management Portal	75
Verifying the Contents of ZTASKEND	75
Configuring the EDMPROF File	76
Starting and Stopping the Radia Management Portal	77
Accessing and Logging on to the Radia Management Portal	77
Accessing the Radia Publications	79
Summary	80

3 Windows Installations......81

Chapter Overview	82
Radia Configuration Server Installation	82
Installation Types	82
Radia Configuration Server Directories	83
System Recommendations for Windows	84
Windows Pre-Installation Checklist	85
Windows Pre-Installation Tips	85
The Setup-Configuration File	86
Installing the RCS	87
Silent Installation	87
GUI Installation	87
The Radia Configuration Server as an NT Service	102
NT Service Options	102
Using the Windows Event Viewer with the Radia Configuration Server	103
Accessing the Event Viewer	103
Filtering for Radia Configuration Server Messages	103
Radia Configuration Server Messages in Event Viewer	104
Radia Management Portal Installation	105
System Recommendations for Windows	105
Windows Pre-Installation Checklist	105
Windows Pre-Installation Tips	106

Windows Pre-Installation Notes	106
Server Notes	106
Client Notes	106
Directory Size of a Single Zone	
Co-Resident Radia Integration Server Services	
Access Requirements	
Installing the RMP	
IP Address for a Remote Radia Management Portal	121
Verifying the Contents of ZTASKEND	
Configuring the EDMPROF File	
Starting and Stopping the Radia Management Portal	
Accessing and Logging on to the Radia Management Portal	
Accessing the Radia Publications	
Summany	126
Summary	

4	MVS Installation	
	Chapter Overview	
	Radia Configuration Server Installation	
	System Recommendations for MVS	
	Windows Platforms for MVS File Preparation	
	Windows PC Pre-Installation Checklist	
	Transferring the License File	
	MVS Pre-Installation Tips	
	Preparing and Installing the RCS	

A UNIX Kernel Tuning......145

Lists	
Figures	
Tables	
Procedures	
Index	



Introduction

At the end of this chapter, you will:

- Be familiar with the components of the Radia product suite.
- Know which hp OpenView Radia v4 CD-ROM contains the installation files for each Radia component.
- Have a high-level understanding of the function of the various Radia components.

About Radia

Radia manages the distribution of software packages via connections to the Internet or an intranet. Radia systems administrators publish packages of software and assign users to the packages that they need.

Overview of this Guide

This version of the *Radia Getting Started Guide* is designed in such a way that a Radia administrator can use it to quickly become familiar with:

- The organization of the Radia installation media (see Installation Media, starting below), and
- The logical grouping and functionality of all the Radia components.

This guide also documents the installation of the principal Radia infrastructure components— Radia Configuration Server and Radia Management Portal—thereby enabling Radia users to quickly set up and begin using a Radia environment. Additionally, the library of Radia publications can be installed so that it is available to assist in the installations of additional Radia components—in accordance with product licensing.

Note

For detailed information on other components of the Radia product suite, see the guides referenced in this chapter.

Installation Media

The installation media for the Radia components are located on four CD-ROMs, which are organized by Radia product type, and contain all of the products that are needed to set up a Radia-managed infrastructure. The CD-ROM designations are:

- hp OpenView Radia v4 configuration server
- hp OpenView Radia v4 infrastructure
- hp OpenView Radia v4 applications
- hp OpenView Radia v4 documentation





hp OpenView Radia v4 configuration server CD

This CD-ROM contains the installation files for the Radia components listed in Table 1.1.

Table 1.1 \sim hp OpenView Radia v4 configuration server CD Components		
Management Infrastructure	Radia Administrator Workstation	
	Radia Configuration Server	
	Radia Extensions for Windows Installer	
Extended Infrastructure	Radia Distributed Configuration Server (DMA), version 4.6.10	

For a description of the components that are on this CD, see *hp OpenView Radia v4 configuration* server CD Components on page 21.

hp OpenView Radia v4 infrastructure CD

This CD-ROM contains the installation files for the Radia components listed in Table 1.2.

Table 1.2 ~ hp OpenView Radia v4 infrastructure CD Components		
Management Extensions	Radia Adapter for SSL	
	Radia Policy Server	
	Radia Publishing Adapter	
Extended Infrastructure	Radia Distributed Configuration Server (DMA), version 4.7	
	Radia Inventory Manager Server	
	Radia Management Portal	
	Radia Multicast Server	
	Radia Proxy Server	
	Radia Staging Server	
	Radia Configuration Analyzer	

Table 1.2 ~ hp OpenView Radia v4 infrastructure CD Components		
	Radia Knowledge Base Manager	
	Radia Reporting Server	
	Radia Messaging Server	
Adapters	Radia Adapter for HP OVO	
	Radia Adapter for HP OpenView	

For a description of the components that are on this CD, see hp OpenView Radia v4 infrastructure CD Components on page 24.

hp OpenView Radia v4 applications CD

This CD-ROM contains the installation files for the Radia components listed in Table 1.3.

Table 1.3 ~ hp OpenView Radia v4 applications CD Components		
Management Applications	Radia Application Manager	
	Radia Inventory Manager	
	Radia Software Manager	

For a description of the components that are on this CD, see hp OpenView Radia v4 applications CD Components on page 27.

hp OpenView Radia v4 publications CD

The Radia Publications CD-ROM contains an extensive list of Radia documentation in Portable Document Format (pdf). This library can be installed into the Radia Management Portal, and then viewed with the Adobe Acrobat Reader.

Table 1.4 lists the Radia publications that are on the hp OpenView Radia v4 publications CD.

Table 1.4 ~ List of Radia Publications			
Radia Adapter for HP OpenView	Radia Adapter for HP OpenView Operations (OVO)	Radia Application Manager Guide (Macintosh OS/X)	
Radia Application Manager Guide (UNIX)	Radia Application Manager Guide (Windows)	Radia Configuration Analyzer Guide	
Radia Configuration Server Guide	Radia Configuration Server Messages Guide	Radia Database Reference Manual	

Table 1.4 ~ List of Radia Publications			
Radia Distributed Configuration Server Guide	Radia Essentials Guide	Radia Extensions for Windows Installer Getting Started Guide	
Radia Extensions for Windows Installer Guide	Radia Getting Started Guide	Radia Inventory Manager Guide (Macintosh OS/X)	
Radia Inventory Manager Guide (UNIX)	Radia Inventory Manager Guide (Windows)	Radia Knowledge Base Manager Guide	
Radia Management Applications Messages and Codes Guide	Radia Management Portal Guide (UNIX)	Radia Management Portal Guide (Windows)	
Radia Messaging Server Guide	Radia Mobile Management Guide	Radia Multicast Server Guide	
Radia OS Manager Guide	Radia Patch Manager Guide	Radia Policy Server Guide	
Radia Proxy Server Guide	Radia Publisher Guide	Radia Publishing Adapter Guide	
Radia Reporting Server Guide	Radia REXX Programming Guide	Radia Software Manager Guide (UNIX)	
Radia Software Manager Guide (Windows)	Radia SSL Adapter Guide	Radia Staging Server Guide	
Radia System Explorer Guide	Radia Usage Manager Guide		

Note

The *Radia Application Manager Guide* and the *Radia Software Manager Guide* include information about the Radia Publisher and publishing Windows Installer applications.

These publications will help a Radia administrator prepare the digital assets that are needed to manage all of the computers in an enterprise. Be sure to periodically check the HP Web site for additional technical-support articles and new or updated publications.

hp OpenView Radia v4 configuration server CD Components

Radia Configuration Server

The Radia Configuration Server resides on a single server or several can be installed across a network of servers. Applications and information about the subscribers and client computers are stored in the Radia Database on the Radia Configuration Server. The Radia Configuration Server distributes application packages based on the policies that are established by a Radia administrator. For more information, see the *Radia Configuration Server Guide*.

Radia Administrator Workstation

The Radia Administrator Workstation contains a set of tools (shown in Figure 1.1) for basic administrative functions. Use these tools to manage the Radia Database, prepare applications, view Radia Client objects, and customize a computing environment.



Figure 1.1 ~ The Radia Administrator Workstation tools.



The Radia Administrator Workstation includes the following tools.



Radia Packager

Use to create component groups called *packages*. See the *Radia Application Manager Guide* or the *Radia Software Manager Guide* for more information.

Radia Publisher

Use to publish packages to the Radia Configuration Server. For more information, see the *Radia Publisher Guide*.

Radia System Explorer

Use to create new users and groups of users, assign users to groups, and assign users and groups to application packages. See the *Radia System Explorer Guide*.

Radia Client Explorer

Use to manipulate local Radia objects.

Radia Screen Painter

Use to create custom dialog boxes.

Radia Extensions for Windows Installer

The *Radia Extensions for Windows Installer* (REfWI) is a management system that is designed to automate and simplify the enterprise application integration laboratory process. Use it to build, test, maintain, deploy, and troubleshoot Windows Installer applications and installation packages. For more information, see the *Radia Extensions for Windows Installer Guide*.

Radia Distributed Configuration Server

The *Radia Distributed Configuration Server* (Radia DCS) is the new name of the former *Distributed Manager Adapter* (DMA). It allows multiple Radia Configuration Servers to share information about policies and managed applications, and the enhanced functionality provides improved scalability, flexibility, and extensibility. For more information, see the *Radia Distributed Configuration Server Guide*.

hp OpenView Radia v4 infrastructure CD Components

Note

The Radia Management Portal, Radia Proxy Server, Radia Policy Server, and Radia Inventory Manager are each composed of modules that reside in IntegrationServer/modules.

Prior to the level 3.0 release of Radia, each of these components installed its own service in this directory. Starting with the common infrastructure-installation format of Radia version 3.0, these components use the same core *Radia Integration Server* (RIS) files, nvdkit and httpd.tkd, and run under the same process.

Now, if more than one of these version-3.0 Radia products is installed, the most recent version of the RIS service will prevail. (This pertains only to RIS services running on port 3466, the default port of the RIS service.)

Radia Adapter for SSL

The Radia Adapter for SSL generates the requests for the server certificates and private keys that are needed by each Radia Configuration Server to support SSL communications. For more information, see the *Radia Adapter for SSL Guide*.

Radia Policy Server

The *Radia Policy Server* (also known as the Radia Policy Manager) is a plug-in to the *Radia Integration Server* (RIS). It can be used for administrative tasks such as mapping services to users, and it can be used to leverage LDAP-based directory services, like Active Directory and SQL-based databases. For more information, see the *Radia Policy Server Guide*.

Radia Publishing Adapter

The *Radia Publishing Adapter* is a command-line driven alternative to the Radia Publisher. It provides an automated, repeatable process, whereas the Radia Publisher must be monitored from start to finish. Its focus is distributing updates rather than initial application packaging. The Radia Publishing Adapter can easily be integrated with third-party configuration-management and packaging products. See the *Radia Publishing Adapter Guide* for more information.

Note

For more information about each Radia product, see the *Radia Essentials Guide* and the individual product guides.

Radia Distributed Configuration Server

The *Radia Distributed Configuration Server* (Radia DCS) is the new name of the former *Distributed Manager Adapter* (DMA). It allows multiple Radia Configuration Servers to share information about policies and managed applications, and the enhanced functionality provides improved scalability, flexibility, and extensibility. For more information, see the *Radia Distributed Configuration Server Guide*.

Radia Inventory Manager

The *Radia Inventory Manager* (RIM) has two parts, *Server* and *Client*. The RIM Server enables centralized reporting and administration based upon the results of discovery. The RIM Client discovers configuration information on remote computers, and reports the results to the RIM Server. For more information, see the *Radia Inventory Manager Guide*.

Radia Management Portal

The *Radia Management Portal* (RMP) is a Web-based interface that can be used to manage a Radia environment. One of the more useful features is the ability to create a graphical representation of the Radia infrastructure. See the *Radia Management Portal Guide* for more information.

Radia Multicast Server

The Radia Multicast Server enhances and simplifies data-transmission by reducing the number of transmissions and maximizing the use of network bandwidth. Multicasting enables a Radia administrator to simultaneously transmit one stream of data to multiple recipients. See the *Radia Multicast Server Guide* for more information.

Radia Proxy Server

Radia Proxy Servers (RPS) are beneficial when numerous client computers are requesting the same resources from the same location. Data can be cached on the RPS, thereby decreasing the demand on the Radia Configuration Server, which in turn allows it to allocate more resources to other tasks. By placing Radia Proxy Servers at strategic points in a network, the rate at which data is transferred increases. See the *Radia Proxy Server Guide* for more information.

Radia Staging Server

The Radia Staging Server also helps decrease the demand on the Radia Configuration Server by allowing a Radia administrator to off-load a portion of the work that is required to deliver application software. Typically, a Radia Staging Server is "closer" to client computers—that is, the connection between them is more efficient than the connection between the Radia Client and RCS. For more information, see the *Radia Staging Server Guide*.

Radia Configuration Analyzer

The Radia Configuration Analyzer simplifies application management. It is backed by a database, wherein imported *state files* keep a detailed history of all of the resources that are needed by an application. It performs integration- and management-analysis functions, and with it, Radia administrators can profile applications, initiate application comparisons, and analyze applications. For more information, see the *Radia Essentials Guide*.

Radia Knowledge Base Manager

The Radia Knowledge Base Manager is used with the Radia Configuration Analyzer. It populates the Radia Knowledge Base with data in the form of state files, which consist of data that represent the current state of an application. For more information, see the *Radia Essentials Guide*.

Radia Reporting Server

The web-based Radia Reporting Server allows the querying of data in the Radia Inventory Manager, Radia Patch Manager, and Radia Usage Manager databases and the creation of detailed reports. It also provides a way to use Radia SQL data for reporting and overall environmental assessment. For more information, see the *Radia Essentials Guide*.

Radia Messaging Server

The Radia Messaging Server is a generic messaging service that can be used with several of the Radia Infrastructure components. It continually monitors a predefined data queue, and dynamically routes data objects to external destinations. On a Radia Configuration Server, the Radia Messaging Server operates with the QMSG executable to transfer reporting data from clients to the appropriate external Radia Integration Server, where it can then be mapped to the appropriate reporting database. For more information, see the *Radia Essentials Guide*.

Radia Adapter for HP OVO

Radia Adapter for HP OVO (OpenView Operations) is a *Smart Plug-In* (SPI) for an OVO infrastructure. It provides pre-configured applications, monitors, and actions for immediate use in managing the operational and administrative environment of Radia servers and clients.

Radia Adapter for HP OpenView

The Radia Adapter for HP OpenView integrates with *Network Node Manager* (NNM) for Radia Inventory Manager access and *Simple Network Management Protocol* (SNMP) events. This integration uses SNMP in NNM, as well as the Radia Inventory Manager database.

hp OpenView Radia v4 applications CD Components

Note

These three OpenView Radia *applications* products comprise the line of **Radia Clients**.

Radia Application Manager

A Radia administrator controls the distribution and maintenance of mandatory applications throughout the enterprise. For more information, see the *Radia Application Manager Guide*.

Radia Software Manager

End users control the installation, removal, and updating of the optional applications that are available to them in a service list. For more information, see the *Radia Software Manager Guide*.

Note The Radia Application Manager and Radia Software Manager can be co-resident on an enduser's machine. In this situation, the Radia administrator still determines:

- · Whether an application is mandatory or optional, and
- Who will control the installation.

Radia Inventory Manager

This client product allows a Radia administrator to collect hardware information and send it to the Radia Inventory Manager server component for inventory reporting. See the *Radia Inventory Manager Guide* for details.

on uses SNMP in NNM, as well as the Radia Inventory Manager database.

Radia Implementation Overview

This guide describes the installation of the Radia Configuration Server, the Radia Management Portal, and the Radia library. For a functional Radia infrastructure, the RCS and RMP *must* be installed. (Installing the Radia library will facilitate a Radia administrator's search for information about other Radia components.)

Once the RCS and RMP are installed, additional Radia components can be installed, in accordance with license agreements. With the Radia infrastructure in place, all of the digital assets in the enterprise can now be managed by Radia.

Figure 1.2 provides an overview of a functional Radia implementation.



Figure 1.2 ~ Creating and maintaining a functioning Radia environment.

Summary

- In order to install the Radia components, the proper license file is required.
- All Radia implementations must include the Radia Configuration Server and the Radia Management Portal.
- The three Radia Clients are Radia Software Manager, Radia Application Manager, and Radia Inventory Manager.
- The Radia library can be installed directly into the Radia Management Portal; it should be reviewed for each Radia component installation.

Introduction

2

UNIX Installations

At the end of this chapter, you will have:

- An understanding of the Radia Configuration Server and Radia Management Portal system requirements for a UNIX environment
- Installed the Radia Configuration Server (either silently or via a *graphical user-interface* [GUI]) in a UNIX environment
- Installed the Radia Management Portal in a UNIX environment
- Installed the Radia publications on the Radia Management Portal
- Logged on to the Radia Management Portal
- Viewed a Radia publication via the Radia Management Portal

Chapter Overview

This chapter details the installations of the Radia Configuration Server (version 4.5.4) and Radia Management Portal (version 1.3) for the following UNIX platforms.

Table 2.1 ~ RCS and RMP Supported UNIX Platforms		
Platform	RCS	RMP
AIX, version 4.3 and greater	\checkmark	
HP-UX (PA-RISC 1.1 and 2.0), version 10.20 and greater, 800 MHz	\checkmark	\checkmark
Linux, Enterprise Server, version 2.0 and greater	\checkmark	
Solaris, SPARC Server, version 2.7 and greater, 128 MB	\checkmark	\checkmark

In addition to the installations, sections in this chapter show how to log on to the RMP and, once there, how to view Radia publications.

Radia Configuration Server Installation

This section provides instructions for installing the Radia Configuration Server, as well as reviewing the system requirements for the various UNIX platforms.

Installation Types

There are two installation types, Silent and User Interface.

■ Silent

A hands-off, command-line invoked installation that has pre-determined databaseconfiguration parameters. It will install the Radia Database and

- The TCP/IP communications protocol, configured on port 3464
- Three TCP/IP Notify Managers
- Default caching and SNMP configurations
- Default Internet settings for the RCS
- User Interface (GUI)

A graphical installation that requires a Radia administrator to specify a variety of parameters in order to customize the Radia environment. It has some pre-determined database configuration parameters, and will install the Radia Database and the following configurable parameters:

- The TCP/IP communications protocol and port
- TCP/IP Notify Managers



- Caching and SNMP configurations
- Internet settings for the RCS

Radia Configuration Server Directories

Table 2.2 lists the directories that are automatically created during the Radia Configuration Server installation.

Table 2.2 ~ Radia Configuration Server Directories		
Directory	Contents	
bin	Shell scripts that enable you to start, stop, clean up, and query the Radia Configuration Server	
DB	Radia Configuration Server database files	
exe	Executables and methods for the Radia Configuration Server	
internet	Internet HTML and graphics files	
log	Radia Configuration Server log	
rexx	REXX methods	
shell	Batch and application files, such as the un-install and query scripts	

System Recommendations for UNIX

Table 2.3 lists the amount of space that is required on the UNIX platforms for the installation and operation of the Radia Configuration Server and the various elements that are associated with it. It is recommended that these limits be allocated on the system on which the RCS is being installed.

Important Note

These recommendations represent typical, minimum operating system estimates. Adjust them based on the environment in which the Radia Database is being installed.

Table 2.3 ~ Space Requirements for UNIX Installations of RCS		
Component All	l Platforms	
Memory 512	2 MB	
Swap 2 G	βB	

Table 2.3 ~ Space Requirements for UNIX Installations of RCS		
Component	All Platforms	
Radia Configuration Server Directory Important Note : This space recommendation does not include estimates for additional applications that will be managed by the Radia Configuration Server.	75 MB	
Radia Database *	see Note*	
Radia Configuration Server Logs	50 MB	

Note

* The size of the database depends on the size and number of applications that the Radia Configuration Server is going to manage. HP recommends this be estimated as roughly 50 percent of the size of the applications to be managed.

Adjust these recommendations based on the environment in which the Radia Database is being installed.

UNIX Pre-Installation Checklist

Prior to beginning the installation, make sure that:

- The user that is performing the installation has:
 - Adequate rights on the UNIX workstation to create and update the target installation directory.
 - A home directory on the UNIX workstation, and is *not* logged in as **root**.
- This installation program is run from within UNIX.
- If the SNMP process is running, stop it.

Prior to starting the Radia Configuration Server installation:

- All other applications, including anti-virus programs are closed.
- All other tasks and operations that are executing are stopped.

UNIX Pre-Installation Tips

Table 2.4 ~ Radia Configuration Server Installation Tips

- Have the license file easily accessible for the installation.
- Click Cancel in any window to exit the installation. If Cancel is clicked accidentally, a confirmatory prompt enables the return to the installation program.
- Click **Back** at any time to return to previous windows. All the information entered thus far will remain unchanged.
- Most windows have associated error messages. If specifications are invalid, an error message will appear. Click OK and enter the correct information.
- This installation program displays default values when applicable. It is recommend that all defaults be accepted; however, they can be overridden by specifying the parameters for your environment.

UNIX Pre-Installation Notes

All UNIX Platforms

Directory Permissions

The user that is installing the Radia Configuration Server must have:

- a **/tmp** directory under the **root**, and
- *write* permissions for the directory.

HP-UX Notes

Sub-Directories

There are two HP sub-directories in the /configuration_server directory of the hp OpenView Radia v4 configuration server CD-ROM; be sure to navigate to the correct sub-directory.

- For PA-RISC 2.0 chipsets, the installation media is in /hprisc2.
- For PA-RISC 1.1 chipsets, the installation media is in /hprisc1.

Mounting the CD

The **hp OpenView Radia v4 configuration server** CD-ROM must be mounted using **pfs_mount** on HP-UX platforms because the CD-ROM is created using the Rock Ridge format. The HP-UX standard mount procedure is incompatible with the Rock Ridge file system type, so HP has made available the *Portable File System* (PFS) package that allows their workstations to recognize this format. Specific instructions are:



- Insert the CD-ROM and mount by typing: /usr/sbin/pfs_mount -v -x unix /cdrom/mnt (replace cdrom with the physical CD-ROM device)
- To un-mount, type:

/usr/sbin/pfs_umount /mnt

When installing the Radia Configuration Server on HP-UX platforms, the CD-ROM drive must be mounted to display lowercase filenames, as shown in the following sample mount command:

mount -o cdcase /dev/<cdrom device> /cdrom

If the CD-ROM drive is not mounted with the **cdcase** parameter, filenames on the CD-ROM will be displayed in uppercase and the installation will fail.

Notes

For more information, consult your local UNIX systems administrator and UNIX man pages.

After installing the Radia Configuration Server, be sure to periodically check the HP product support Web site for service packs, updates, and fixes associated with this version.

UNIX Environment Variables

The **LIBRARY PATH** environment variable must include the current working directory, represented by the period (.) in the following example, followed by the path to the operating system's shared library files.

```
LD_LIBRARY_PATH=/lib:.:/usr/lib
```

Also, ensure that the PATH environment variable includes the absolute path to the directory that contains the operating system's Bourne shell executable (the executable, **sh**, is located in **/usr/bin** on most UNIX systems), as well as the current working directory, represented by the period (.) in the example that follows.

PATH=/bin:/usr/bin/:.:/usr/bin/X11

HP recommends that these environment variables be added to the log-on scripts of the UNIX user ID who installs, and will maintain, the Radia Configuration Server.

Table 2.5, on page 37, presents examples of these environment variables being specified for the four platforms on which the Radia Configuration Server can be installed.

Notes

In the Table 2.5, the *current working directory* is represented by \$XXXXX and \$YYYYY. Be sure to specify your current working directory, rather than these sample fillers.


Table 2.5 ~ Environment VariablesPlatformExampleAIXLIBPATH = /lib:\$XXXX:\$YYYYY:\$LIBPATH
PATH = /bin:/usr/bin:\$XXXX:\$YYYYY:\$PATHHP-UXSHLIB_PATH = /lib:\$XXXX:\$YYYYY:\$SHLIB_PATH
PATH = /bin:/usr/bin:\$XXXX:\$YYYYY:\$PATHLinuxLD_LIBRARY_PATH = /lib:\$XXXX:\$YYYYY:\$LD_LIBRARY_PATH
PATH = /bin:/usr/bin:\$XXXX:\$YYYYY:\$PATHSolarisLD_LIBRARY_PATH = /lib:\$XXXX:\$YYYYY:\$LD_LIBRARY_PATH
PATH = /lib:\$XXXX:\$YYYYY:\$LD_LIBRARY_PATH

Note

The Radia Configuration Server service (**ztoptask**) should always be started with the help of the **startmgr** script because it dynamically adds the real path of the RCS binaries to the user-path environment variable.

The Setup-Configuration File

The default parameters for the Radia Configuration Server installation are contained in the **setup.cfg** file (shown in Figure 2.1). HP recommends viewing this file prior to beginning the Silent installation.

```
# $Revision:
              1.3 $
#
source comprcsf.tcl
SelectComprcs patchmanager 1
SelectComprcs usagemanager 0
SelectComprcs osmanager
                                 0
SelectComprcs mgr
                          1
Variable
             HP_product_name "HP Radia Configuration Server"
# Windows Set
#Variable
            MGRROOT
                          "C:\\HP\\ConfigurationServer"
                          "C:\\HP\\ConfigurationServer\\DB"
#Variable
            DESTDB
#Variable
            LICENSEFILE
                          "C:\\license.nvd"
# UNIX Set
Variable
             MGRROOT
                          "/opt/HP/ConfigurationServer"
                          "/opt/HP/ConfigurationServer/DB"
Variable
             DESTDB
Variable
             LICENSEFILE
                          "~/.license.nvd"
                          "3464"
Variable
             MGRPORT
                          .....
Variable
             LICEMAIL
                          "001"
Variable
             MGRID
                          "RCS"
Variable
             MGRNAME
Variable
             global_GUID 000
Variable
             enable_debug 0
Variable
             uninstalldata_numlines 0
Variable
             WinShortcuts 1
Variable
             DOBACKUP
                          1
Variable
             startrcs
                          1
Figure 2.1 ~ The RCS Installation's Setup Configuration file for UNIX.
```

Installing the RCS

This section contains instructions for installing the Radia Configuration Server. Before starting this installation, be sure to review the section, *UNIX Pre-Installation Notes*, starting on page 35.

To start the installation of the RCS on a UNIX machine, type

./install

and on the command line, specify the full path of the target installation directory.

Silent Installation

Notes

By default, this Silent installation will back up an existing Radia Database.

In order to turn off this feature, open the **setup.cfg** file (see *Figure 2.1* on page 38) and change **DOBACKUP** to **0**.

To run the Radia Configuration Server's Silent installation

- **1.** Open a UNIX shell window at the console, or through an X-Windows emulator, logged on as the UNIX user ID who will be running the installation program.
- **2.** Insert the **hp OpenView Radia v4 configuration server** CD-ROM into the CD-ROM drive.
- **3.** Change the current directory to the CD-ROM directory that contains the platform-specific installation program. For example:

If installing the Radia Configuration Server on a Solaris machine, navigate to: cd /cdrom/cdrom0/management_infrastructure/configuration_server/solaris If installing the Radia Configuration Server on an HP-UX platform, navigate to:

cd /mnt/cdrom/management_infrastructure/configuration_server/hprisc2

4. Type:

./nvdkit setup.exe -mode silent

and press ENTER.

The Radia Configuration Server will be automatically installed to the locations, and with the predefined parameters, that are contained in the **setup.cfg** file.

GUI Installation

To run the Radia Configuration Server's GUI installation

- **1.** Open a UNIX shell window at the console, or through an X-Windows emulator, logged on as the UNIX user ID who will be running the installation program.
- **2.** Insert the **hp OpenView Radia v4 configuration server** CD-ROM into the CD-ROM drive.
- **3.** Change the current directory to the CD-ROM directory in which the installation program is located. For example:

If installing the Radia Configuration Server on a Solaris machine, navigate to: cd /cdrom/cdrom0/management_infrastructure/configuration_server/solaris

4. Type:

./nvdkit setup.exe

and press ENTER.

The GUI installation begins with the **Hewlett-Packard Radia Configuration Server Installation Welcome** window.

Kewlett Packard Ra	adia Configuration Server Install Image: Configuration Server Install Welcome to Hewlett Packard Radia Configuration Server Setup program. This program will install Hewlett Packard Radia Configuration Server on your computer.
	It is strongly recommended that you have system administrator priviledges and exit all desktop programs before running this Setup Program. Click Cancel to quit Setup and close any programs you have running. Click Next to continue with the Setup program.
	WARNING: This program is protected by copyright law and international treaties. Unauthorized reproduction or distribution of this program, or any portion of it, may result in severe civil and criminal penalties, and will be prosecuted to the maximum extent possible under the law.
	<back <u="">Next> <u>C</u>ancel</back>

Figure 2.2 ~ The Radia Configuration Server Installation Welcome window.

(At any time during the installation, click **Cancel** to exit the installation.) The **HP Software License Agreement** window opens.

Padia®	The End User Licensing Agreement must be accepted before the Hewlett Packard Radia Configuration Server can be installed.	
Kuulu	Click Accept to begin the installation.	
	HP SOFTWARE LICENSE TERMS	76
(ha)°	Upon payment of the applicable License Fee as set forth in the applicable HP quotation and/or invoice, your right to store, load, install, execute, or display (collectively, "Use") the enclosed Software will be governed by the terms and conditions of the Software License terms that have been previously executed by you and Hewlett – Packard Company ("HP") as well as third party license terms ("Third Party License Terms") accompanying the Software. In the event you have not executed such terms with HP, then HP is willing to license the enclosed Software to you subject to these Software License terms and the applicable HP Warranty Statement accompanying the Software as well as the Third Party License Terms.	
42	You acquire no rights to the Software other than those expressly granted in this Software License Lindstes upgrades and other	
		- 7

Figure 2.3 ~ The HP Software License Agreement window.

6. Click Accept.





The Directory Specifications window opens.

🔀 Hewlett Packard Ra	dia Configuration Server Install	
Radia ®	Setup will install Hewlett Packard Radia Configuration Server in folders under the following folder. Click Browse to install Hewlett Packard Radia Configuration Server under a different folder.	
	Click Cancel to exit the setup. Radia Configuration Server - root installation directory /opt/Novadigm/Configuration Server	Browse
	DataBase installation directory for Radia Configuration Server	Browse Cancel

Figure 2.4 ~ The Radia Configuration Server Directory Specifications window.

7. Accept the default **root installation directory** that is displayed, or click **Browse** to navigate to a different repository for the Radia Configuration Server's *executable*, *log*, *Internet*, and *REXX* files.

Accept the default **database installation directory** that is displayed, or click **Browse** to navigate to a different repository for the Radia Database files.



1	2
4	-2

If a previous version of the Radia Configuration Server and Radia Database are in the default directories, *and* **OK** (to continue with the update) was selected at the a **Directory Update** message, the **Radia Configuration Server Backup Directory** window opens.

New Backup directory under the main RCS installation path:	
Backup_20040812160659 • Yes	
↓ №	

Figure 2.5 ~ The Radia Configuration Server Backup Directory window.

In this window:

• Accept the default (**Yes**) to have the installation program create a backup of the existing files, or

(This directory's name is determined by the default UNIX Shell command returning the date and time values of the machine's default time zone.)

- Select No, which will result in the existing files being deleted.
- 9. Click Next.

The Select Components to Install window opens.



Figure 2.6 ~ The Radia Configuration Server Select Components to Install window.

In this window:

- The Radia Configuration Server option is selected and disabled—it will be installed.
- Select **Patch Manager**, **Usage Manager**, and/or **OS Manager** to automatically include those product installations.

Note

If **Patch Manager**, **Usage Manager**, and/or **OS Manager** are selected, the **Radia Configuration Server** installation will not be affected, nor will there be additional dialog boxes.

The RCS post-Installation Start window opens.

Radia [®]	This installation program can start Radia Configuration Server after it is installed. Do you want to start the Server after installation?	

Figure 2.7 ~ The Radia Configuration Server post-Installation Start window.

In this window:

- Accept the default (**Yes**) to have the RCS automatically start when the installation completes, or
- Select **No** to avoid having the RCS automatically start at the completion of the installation.

Note

See *Starting, Stopping, Identifying, and Cleaning up the Radia Configuration Server*, starting on page 54.

4	5
	-

The Location of License File window opens.

Hewlett Packard R	adia Configuration Server Install	_0
- ·	Setup will use the selected license file during the installation of Hewlett Packard Radia Configuration Server.	
Radia®	To use a different license file, enter another file name.	
	hand been free of ferrors. Class	
	— input location of license file.	
(P)		
	Avork2/tclinst/license.nvd	Browse
	Avork2/tclinst/license.nvd	Browse



In this window:

- If the location that is displayed in the **Input location of license file** window reflects the location of the license file, click **Next**. Otherwise,
- Specify the correct location, or click **Browse** to navigate to the license file.

The E-mail Address window opens.

Radia*	E-mail address at which to receive license warnings: Enter e-mail address at which to receive license warnings:

Figure 2.9 ~ The Radia Configuration Server E-mail Address window.

This window offers the option of specifying an e-mail address to which license-expiration notifications will be sent.



The Radia Configuration Server ID window opens.

Badia Configu	uration Server ID

Figure 2.10 ~ The Radia Configuration Server ID window.

In this window, specify a three-character ID for the Radia Configuration Server. Valid values are within the hexadecimal (0-9 and A-F) range of **001** to **EFF**. (This ID is used as a prefix in the Radia Configuration Server's log file.)

This field is required.

The Radia Configuration Server Name window opens.

	Radia Configuration Server Name	
Radia [®]	Radia Configuration Server Name (up to 32 Char, for example RCSSERVER).	
<i>ه</i>	Badia Configuration Server Name	

Figure 2.11 ~ The Radia Configuration Server Name window.

In this window, specify a name (maximum of $32\ {\rm characters})$ for the Radia Configuration Server.

This field is required.

15. Click Next.

The TCP/IP Port window opens.

ewlett Packard	Radia Configuration Server Install
Radia®	TCP/IP Port for Radia Configuration Server Specify TCP/IP Port for Radia Configuration Server



This window displays the communications port that the Radia Configuration Server will use.

- Accept the default port (3464) that is specified in this window. (Recommended)
- Or specify a different port for Radia Configuration Server communications.



Radia®	adra Configuration Server Install Management Portal Zone Name The Zone Name must point to a Zone Name associated with an instance of a Management Portal.	
Ø	Specify the Zone Name]

The Zone Name for Radia Management Portal window opens.

Figure 2.13 ~ The Radia Configuration Server Zone Name for RMP window.

In this window, specify a Zone Name that is associated with an instance of the Radia Management Portal.

This field is optional.

The Summary of Installation Input window opens.

D	You are now ready to install the Hewlett Packard Radia. Configuration Server.
Radia®	Click Install to begin the installation or Back button to modify any information.
	Install Hewlett Packard Radia Configuration Server
	To Directory = /opt/HP/ConfigurationServer/exel [®] To Directory = /opt/HP/ConfigurationServer/excl [®] To Directory = /opt/HP/ConfigurationServer/excl [®] To Directory = /opt/HP/ConfigurationServer/lik/ [®] To Directory = /opt/HP/ConfigurationServer/lik/patch [®] To Directory = /opt/HP/ConfigurationServer/lik/patch [®] To Directory = /opt/HP/ConfigurationServer/lik/patch [®]
(p)°	User Parameters: E-mail address =
invent	Radia Configuration Server ID = 001



This window presents all the information that was specified during the Radia Configuration Server installation. This is the final opportunity to review and modify the specified settings.

• If you discover any errors, or wish to modify any of the entries, click **Back** until you reach the appropriate windows, and make the necessary changes.

The information that was entered in the other windows will not be affected. After making the changes, click **Next** repeatedly, until you arrive back at the **Summary of Input** window.

18. Click Install.

The Installation in Progress window opens.

When the installation is complete, the **Radia Configuration Server Installation Finish** window opens.

ewlett Packard R	adia Configuration Server Install	<u>_ ×</u>
	Hewlett Packard Radia Configuration Server has been successfully installed.	
Kaala®	Press the Finish button to exit this installation.	
1 20°		
49		
	<back <u="">Finish ></back>	Cancel

Figure 2.15 ~ The Radia Configuration Server Installation Finish window.

The Radia Configuration Server for UNIX has been successfully installed.

UNIX Post-Installation Notes

■ Refer to *Appendix A*: *UNIX Kernel Tuning*, starting on page 145, for important information about tuning kernel parameters in order to accommodate the Radia Configuration Server's use of memory, communications, and *inter-process communications* (IPC).



Starting, Stopping, Identifying, and Cleaning up the Radia Configuration Server

Throughout the next four sets of instructions, the Radia Configuration Server is referred to as "Manager." In order to execute these four tasks, a Radia administrator must be logged on to the system as the UNIX user ID that installed the Radia Configuration Server.

To start the Radia Configuration Server

1. Change to the Radia Configuration Server bin directory by typing:

cd /opt/HP/ConfigurationServer/bin

and press ENTER.

2. Type:

./startmgr

and press ENTER.

The Radia Configuration Server will start, and a series of start-up messages will display.

Note

An optional, numerical parameter can be added to the ./startmgr command.

This parameter specifies (in seconds) the length of time to wait before verifying that the Radia Configuration Server has started. The default for this is **100** (seconds).

This parameter is useful when caching much of the database, if the processor is slow, or if there are many system tasks running. In the example below, 40 seconds would elapse before any verification is made.

./startmgr 40

Note

If the RCS is running and a 'start' is attempted, the following message will display: Manager already started with USER-ID=[user id] and PID=[ztoptask process id]

To stop the Radia Configuration Server

- To change to the Radia Configuration Server bin directory, type: cd /opt/HP/ConfigurationServer/bin and press ENTER.
- **2.** Type:
- 54

./killmgr

and press ENTER.

The following shutdown message is displayed:

Killing Manager with USER-ID=[user id] in 30 seconds. Please wait.

Caution

Running ./killmgr explicitly calls the script ./clean_ipc. Neither of these scripts should be run as *root*, since all ipc resources utilized by root would be removed.

If the Radia Configuration Server is not running, the following message will display:

Manager is not running with USERID=[user id]...do nothing

To identify the Radia Configuration Server

Note

The Radia Configuration Server must be running.

- To change to the Radia Configuration Server bin directory, type: cd /opt/HP/ConfigurationServer/bin and press ENTER.
- **2.** Type:
 - ./whatmgr and press ENTER.

Note

The user ID and the respective TCP/IP port number, database path, log paths, and method path are displayed for currently active Radia Configuration Servers running on this system. No response is returned if there are no active Radia Configuration Servers.

To clean up the Radia Configuration Server

1. To change to the Radia Configuration Server **bin** directory, type:

cd /opt/HP/ConfigurationServer/bin and press ENTER.

2. Stop the Radia Configuration Server.



3. Type:

./clean_ipc

and press ENTER.

Issuing this command will remove messages, shared memory, and semaphores from the last session of the Radia Configuration Server.

Caution

We strongly recommend that you do not run the ./clean_ipc command when the Radia Configuration Server is running. Furthermore, Novadigm recommends that you do not run the ./clean_ipc command when logged on as root.

Radia Management Portal Installation

This section provides instructions for installing the Radia Management Portal, as well as reviewing the system requirements for the various UNIX platforms.

System Recommendations for UNIX

Table 2.6 lists the system requirements for the installation and operation of the Radia Management Portal. It is recommended that these requirements be strictly considered before installing the RMP on a UNIX system.

Note

These recommendations represent typical, minimum operating system estimates.

Table 2.6 \sim System Recommendations for UNIX Installations of RMP		
Component	Recommendation	
Operating System and CPU	Required: Recommended:	HP-UX Version 10.20 or above, PA RISC CPU PA-RISC 1.1
	Required: Recommended:	Solaris Version 2.5.1 or above, SPARC CPU Solaris Version 2.7 or greater, SPARC Server
Memory	1 GB	
Virtual Memory	2 GB	
Processor Speed	800 MHz	
UNIX Kernel Tuning	Minimum: Recommended: Note: See Netv	500 MB 1 GB <i>vork Discovery Requirements</i> , on page 58,

Important Note

It is strongly recommended that the RMP be installed and run as **root**. Root authority is required to apply owner and group designators to managed resources.

UNIX Pre-Installation Checklist

Prior to beginning the installation, make sure that:

- □ Locate the license file that is associated with this product installation.
- Assemble the following CD-ROMs (these are used during a complete Radia Management Portal installation):
 - hp OpenView Radia v4 infrastructure
 - hp OpenView Radia v4 applications
 - hp OpenView Radia v4 documentation
- Review the README file that was delivered with the product.
- After installing the Radia Management Portal, visit the HP Technical Support Web site to check for a Service Pack.

UNIX Pre-Installation Tips

Table 2.7 ~ Radia Management Portal Installation Tips

- Have the license file easily accessible for the installation.
- Click **Cancel** in any window to exit the installation. If **Cancel** is clicked accidentally, a confirmatory prompt enables the return to the installation program.
- Click **Back** at any time to return to previous windows. All the information that has been entered thus far will remain unchanged.
- Most windows have associated error messages. If specifications are invalid, an error message will appear. Click **OK** and enter the correct information.
- This installation program displays default values when applicable. It is recommend that all defaults be accepted; however, they can be overridden by specifying the parameters for your environment.

UNIX Pre-Installation Notes

Network Discovery Requirements

The number of nodes discovered by the Radia Management Portal for UNIX has an upper limit that is based on the kernel's tuning for process size (see *Appendix A*: *UNIX Kernel Tuning*,



starting on page 145). For optimum RMP performance, HP recommends that the maximum perprocess space of the UNIX kernel be set to at least 500 MB—although 1 GB is best.

- If using a *Domain Name System* (DNS) for network discovery, the device must have:
 - DNS
 - Connectivity to a DNS server
- If using a *Network Information Service* (NIS) or a *Network Information Service Plus* (NIS+) for network discovery, the device must have:
 - A NIS or NIS+ client installed
 - Connectivity to a NIS or NIS+ server

Trusted Host Environment

- *Remote File Copy* (RCP) or *Secure Copy* (SCP)
- *Remote Execution* (REXEC) or *Remote Shell* (RSH) or *Secure Shell* (SSH)

Access Requirements

In order to access the Radia Management Portal, a machine must be on the same network as the RMP host machine and must be running Microsoft Internet Explorer, version 4.0 or later, or Netscape Navigator, version 4.0 or later, *with cookies enabled*.

Installing the RMP

This section contains instructions for installing the Radia Management Portal. Before starting this installation, be sure to review the section, *UNIX Pre-Installation Notes*, starting on page 58.

To start the installation of the RMP on a UNIX machine, type ./install, and specify on the command line, the full path of the target installation directory.

Note Depending on how the UNIX operating system mounts the CD-ROM, the installation program might have to be specified in UPPERCASE letters, as in: ./INSTALL.SH

To install the Radia Management Portal

- **1.** Open a UNIX shell window at the console, or through an X-Windows emulator, logged on as the UNIX user ID who will be running the installation program.
- 2. Insert the hp OpenView Radia v4 infrastructure CD-ROM into the CD-ROM drive.

3. Change the current directory to the CD-ROM directory that contains the installation program for the platform on which the RMP is being installed. For example:

If installing the Radia Management Portal on a Solaris machine, navigate to:

cd /cdrom/cdrom0/extended_infrastructure/management_portal/solaris

4. Type ./install and press Enter.



The Radia Management Portal Install Welcome window opens.



Figure 2.16 ~ The Radia Management Portal Installation Welcome window.

5. Click Next.

(At any time during the installation, click Cancel to exit the installation.)



The License Agreement window opens.

Radia ®	The End User Licensing Agreement nust be accepted before the Radia. Nanagement Portal can be installed. Click Accept to begin the installation.
	HP SOFTWARE LICENSE TERMS Upon payment of the applicable License Fee as set forth in the applicable HP quotation and/or invoice, your right to store, load, install, essecute, or display (collectively, "Use") the enclosed Software will be governed by the terms and conditions of the Software License terms that have been previously executed by you and Hewlett - Packard Company ("HP") as well as third party License terms ("third Party License Terms") accompanying the Software, in the event you have not executed such terms with HP, then HP is willing to license the enclosed Software to you subject to these Software License terms and the applicable HP Warranty Statement
Ø	accompanying the Software as well as the Third Party License Terms. You acquire no rights to the Software other than those expressly granted in this Software License. Updates, upgrades and other enhancements for the Software are only available under HP support agreements.
	The Third Party License Terms are located on the nedia CD labeled

Figure 2.17 ~ The HP Software License Agreement window.

6. Click Accept.





The Radia Management Portal Location window opens.

<u>v</u> Ke	idia Management Portal Install – Version 1.3
	Setup will install Radia Management Portal in folders under the following folder.
Radia®	To install under a different folder, click Browse, and select another folder.
	You can choose not to install Radia. Management Portal by clicking Cancel to exit Setup.
Leven t [®]	Radia Management Portal jopt/Novadigm/integrationServer Browse
	-

Figure 2.18 ~ The Radia Management Portal Location window.

In this window:

- Accept the default **Radia Management Portal** installation directory that is displayed, or
- Click **Browse** to navigate to a different repository for the Radia Management Portal's files
- 7. Click Next.



The License File window opens.

v Ra	dia Management Portal Install – Version 1.3
	Setup will use the selected license file during the installation of Radia. Nanagement Portal.
Radia®	To use a different license file, enter another file name.
(h)	- Novadigm License File
invent	Browse
	< Back Next> Cancel

Figure 2.19 ~ The Radia Management Portal License File window.

In this window:

- Specify the location and name of the license file, or
- Click **Browse** to navigate to the license file

If necessary, the installation will rename the license file to **license.nvd**. It will then copy the license file into the Radia Integration Server's **/modules** directory

Note

If a valid license file is not specified, the installation will cancel.

8. Click Next.

The Enable Network Discovery window opens.

_⊽ Ra	Radia Management Portal Install – Version 1.3	
	Enable Network Discovery	
Radia®	♦ Yes	
<u>up</u>		
	< Back Next> Cancel	

Figure 2.20 ~ The Radia Management Portal Enable Network Discovery window.

In this window:

• Click Yes to enable Network Discovery. (Recommended)

The Radia Management Portal will be able to automatically discover all the devices in the UNIX environment that can be managed by Radia.

• Click **No** to not enable Network Discovery.

This is preferred if the Radia Management Portal is being tested and the automatic discovery feature is not wanted.



The Network Discovery Method window opens.

Radia Management Portal Install - Version 1.3		
	Select Network Discovery Method	
Radia®	↓ HOSTS	
	◆ DNS	
	↓ NIS	
	↓ NIS+	
(p)		
	< Back Next> Cancel	

Figure 2.21 ~ The Radia Management Portal Network Discovery Method window.

In this window:

- Accept the default Network Discovery Method, DNS, or
- Select a different network discovery method that more accurately represents your environment

Notes	
If the default (DNS) is selected, there will be two additional windows (DNS Server IP Address and Domain Zone) after the Discovery Start Delay window (see page 68).	



The Network Discovery Interval window opens.

Radia®	Network Discovery Enter the Network Discovery interval in hours.
	Discovery Interval



In this window, specify the length of time (in hours) for the network-discovery job to run:

- Accept the default Discovery Interval of 24 hours, or
- Specify a different length of time (valid values are 1 through 24)



Radia Management Portal Install – Version 1.3		
Radia °	Discovery Delay between Nodes Enter the Discovery Delay between two nodes in seconds.	
	Discovery Delay	
	< Back <u>N</u> ext> <u>C</u> ancel	

The Discovery Delay between Nodes window opens.

Figure 2.23 ~ The Radia Management Portal Discovery Delay between Nodes window.

In this window, specify the delay (in seconds) between the discoveries of two nodes:

- Accept the default **Discovery Delay** of 0 seconds, or
- Specify a different delay interval

The Discovery Start Delay window opens.

Radia [®]	Discovery Start Delay Enter the Discovery Start Delay
nacia	after RMP has started in hours.
Ø	Discovery Start Delay
	0

Figure 2.24 ~ The Radia Management Portal Discovery Start Delay window.

In this window, specify the interval (in hours) after the Radia Management Portal has started before it starts network discovery:

- Accept the default **Discovery Start Delay** of **0** seconds, or
- Specify a different delay interval (valid values are 0 through 24)
- This delay applies each time the Radia Management Portal is started.

If $\ensuremath{\textbf{DNS}}$ was selected as the discovery method:

• In the **DNS Server IP Address** window, specify the appropriate IP address and click **Next**. (See Figure 2.25)

Radia Management Portal Install – Version 1.3				
Radia °	DNS Server IP Address In order to support DNS Discovery, the IP address of the Domain Name Server is required. Please specify the address in dotted decimal format. For example: 192.168.0.100			
	DINS IP Address CBack Next> Cancel			

Figure 2.25 ~ The Radia Management Portal DNS Server IP Address window.

• In the **DNS Domain Zone** window, specify the appropriate domain and click **Next**. (See Figure 2.26)

r _ Rae	dia Management Portal Install – Version 1.3
Radia*	DNS Domain Zone In order to support DNS Discovery, the DNS Zone of the Domain Name Server is required.
(p)°	DNS Domain Zone
	c Back Next> Cancel

Figure 2.26 ~ The Radia Management Portal DNS Domain Zone window.

The Summary of Installation Input window opens.

	Vou are now ready to install the Radia Management Portal.
Radia®	Click Install to begin the installation or Back button to modify any information.
Ruulu	Installation Settings:
	Install Radia Management Portal
	To Directory = JoptAlovadigmAntegration Server
	Install Component discoveryquery
	User Parameters:
	Discovery Interval = 24 Discovery Delays 0
	Discovery Start Delay = 0
(m) i	Install Component discovery
invent	User Parameters
	L []

Figure 2.27 ~ The Radia Management Portal Summary of Installation Input window.

This window presents all the information that was specified during the Radia Management Portal installation. This is the final opportunity to review and modify the specified settings.

• If you discover any errors, or wish to modify any of the entries, click **Back** until you reach the appropriate windows, and make the necessary changes.

The information that was entered in the other windows will not be affected. After making the changes, click **Next** repeatedly, until you arrive back at the **Summary of Input** window.

14. Click Install.

The Installation in Progress window opens.

There will be a prompt to copy the modules that can be used for remote installations of the Radia infrastructure components.

15. Click Yes.



The Installable Components window opens.

Radia®	dia Management Portal Install – Version 1.3 Setup will install the Renotebrinstallable Infrastructure Components from the specified location. If the Installable Infrastructure Components are being Installed from a CD, Insert the CD now.	
	Select the location of the Installable Components	•

Figure 2.28 ~ The Radia Management Portal Installable Components location window.

In this window, click **Browse** to navigate to the location on the **hp OpenView Radia v4 infrastructure** CD-ROM in which the Remotely Installable Infrastructure Components are located.

These files will be copied to the Radia Integration Server's /media directory.

16. Click Next.

There will be a prompt to copy the modules that will be used for remote Radia Client installations.

17. Click Yes.

If necessary, remove the current CD-ROM and insert the **hp OpenView Radia v4** applications CD-ROM.


The Client Modules window opens.

J Ra	dia Management Portal Install – Version 1.3
	Setup will install the Client Modules from the specified location.
Radia®	If the Client Modules are being installed from a CD, Insert the CD now.
(IP)	- Select the location of the Client Hodules
invent	l Browse
	and Next Consul

Figure 2.29 ~ The Radia Management Portal Radia Client modules location window.

In this window, click **Browse** to navigate to the location on the **hp OpenView Radia v4 applications** CD-ROM in which the Client Modules are located.

These files will be copied to the Radia Integration Server's ${\it /media}$ directory.

18. Click Next.

The Radia Client modules are copied to the Radia Integration Server's **/media** directory. There will be a prompt to install the Radia documentation.

19. Click Yes.

If necessary, remove the current CD-ROM and insert the **hp OpenView Radia v4** documentation CD-ROM.

UNIX Installations

The Radia Publications window opens.

	Setup will install Documentation from the specified location.
Radia ®	If the Documentation is being installed from a CD, Insert the CD now.
<i>ل</i> ه	Select the location of the Documentation
invent	ji Brows

Figure 2.30 ~ The Radia Management Portal Radia Publications location window.

In this window, click **Browse** to navigate to the location on the **hp OpenView Radia v4 documentation** CD-ROM in which the Client Modules are located.

20. Click Next.

The Radia library of publications is installed to the Radia Management Portal.

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

IP Address for a Remote Radia Management Portal

If the Radia Management Portal was installed on a machine other than that which houses a Radia Configuration Server, the RCS REXX method, ZTASKEND must be checked to ensure that it contains the lines that are needed for the RMP. Additionally, the RCS edmprof file must be modified to contain the IP address and port of the RMP.

The following sections detail how to complete these tasks.

Verifying the Contents of ZTASKEND

To verify ZTASKEND contains Radia Management Portal-required lines

1. On the Radia Configuration Server host machine, locate ZTASKEND in the /rexx/Novadigm folder of the directory in which the RCS is installed.

The default is /opt/HP/ConfigurationServer/rexx/Novadigm.

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

Caution

Do not edit the ZTASKEND REXX script in /rexx/Novadigm.

If the Radia Database is updated, all customizations will be overwritten.

- **3.** Open **ZTASKEND** (in the /rexx directory) with a text editor, such as WordPad.
- **4.** Verify that the following lines are in ZTASKEND.

```
/* Object post to Radia Management Portal */
IF ZCVT.RMP = "ENABLED" THEN DO;
   SAY "**<>** RADIA MANAGEMENT PORTAL ENABLED CALLING RADISH POST:
ROUTINE"
   SESSION.REASON = SUBWORD(MYPARM, 2, 1)
   ADDRESS EDMLINK "radish post: -section MGR_RMP /proc/rcs SESSION ZCONFIG
      ZMASTER APPEVENT ZSTATUS";
```

END:

5. Save the changes and close the file.

Note

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

Configuring the EDMPROF File

In addition to the ZTASKEND REXX method being modified, the RCS edmprof file must be modified. By default, the edmprof file is configured to have the Radia Management Portal coresident with the Radia Configuration Server. Therefore, if the RMP is running on a computer other than that which is hosting the RCS, it is necessary to revise the MGR_RMP section of the edmprof.

Table 2.8 lists the default settings of the MGR_RMP section, as well as the values that can be specified in order for the RCS to use the remotely installed RMP.

Table 2.8 ~	MGR_RMP	9 Settings	
Settings	Default	Alternative #1	Alternative #2
HTTP_HOST	localhost	< <i>host_name</i> > of the RMP's host	<ip_address> of the RMP's host</ip_address>
HTTP_PORT	3466	3466	3466

To edit the edmprof file

The edmprof file is located in the **home** directory of the UNIX user ID that installed and maintains the Radia Configuration Server.

- 1. Make a backup copy of edmprof file before editing it.
- 2. Using a text editor, open the edmprof file and locate the MGR_RMP section.
- 3. Replace the HTTP_HOST value with either of the alternatives that are shown in Table 2.8.
- 4. Save the changes and close the edmprof file.

The Radia Configuration Server is now configured to use the remotely installed Radia Management Portal.

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 in which the Radia Management Portal was installed and type: ./nvdkit httpd.tkd.
- **2.** Verify that the RMP started.

To stop the Radia Management Portal

Note

The following are general guidelines and the commands are examples that might vary depending on the UNIX operating system.

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>

3. Verify that the RMP stopped.

Accessing and Logging on to the Radia Management Portal

To access and log on to the Radia Management Portal

1. Open a Web browser and in the **Address** bar, type:

http://<IP_address>:3466.

<IP_address> is that of the Radia Management Portal's host computer.

The Radia Management Portal Login page (Figure 2.31) opens.

adia Management Portal ba	anner	INVENTORY button
RMP: - login - Microsoft Interne	t Explorer provided by Novadigm	
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> o	ols <u>H</u> elp	
🗢 Back 🔹 🤿 🚽 🙆 🕼 🕴	Search 👔 Favorites 🎯 History 🛛 🛃 🗸	😂 🖸 📲
Address 🛃 http://localhost:3466		🔽 🔽 🖉 Go 🗍 Links 🎽
Radia Manage	ement Portal	INVENTORY PUBS HOME
z Welcome		
H.	Login	
	Please enter your user name and	password.
	User Name	
	Password	
	Login Cancel	
		•
		Main and Schwarzh

Figure 2.31 ~ Login page for the Radia Management Portal.

2. In the User Name and password fields, specify one of the following combinations.

• Admin

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

The password is *secret*.

• Guest

Use this ID to log on as an unauthenticated user without access to tasks. No password is necessary.

• Operator

Use this ID to log on as a user with access to basic operations. No password is necessary.

• Test

Use this ID to experiment with entitlement options.

No password is necessary.

- **3.** Click **Login** (or press ENTER on the keyboard).
- 78

The logon-user ID appears in the banner area and the highest-level representation of the infrastructure appears in the workspace.

To learn more about the Radia Management Portal and the Radia Management Agent, refer to the *Radia Management Portal Guide*.

Accessing the Radia Publications

The Radia Management Portal provides access to the Radia library—a comprehensive list of Radia documentation in *Portable Document Format* (pdf).

To access the Radia publications via the Radia Management Portal

- **1.** Access the Radia Management Portal as instructed in the section, *Accessing and Logging on to the Radia Management Portal*, on page 77.
- In the upper right corner of the Login page, click PUBS. The Radia Publications home page opens.
- **3.** Select a publication to view and double-click on it. The publication will open in its own window.

Summary

- The Radia Configuration Server and Radia Management Portal can easily be installed and incorporated into a UNIX environment.
- The Radia Configuration Server and Radia Management Portal can be started and stopped.
- The Radia Management Portal can be accessed using varying levels of authority.
- The Radia Publications can be installed on, and viewed via, the Radia Management Portal.

⁸⁰



Windows Installations

At the end of this chapter, you will have:

- An understanding of the Radia Configuration Server and Radia Management Portal system requirements for a Windows environment
- Installed the Radia Configuration Server (either silently or via a *graphical user-interface* [GUI]) in a Windows environment
- Installed the Radia Management Portal in a Windows environment
- Installed the Radia Publications on the Radia Management Portal
- Logged on to the Radia Management Portal
- Viewed a Radia Publication via the Radia Management Portal



Chapter Overview

This chapter details the installations of the Radia Configuration Server (version 4.5.4) and Radia Management Portal (version 2.0) for the following Windows platforms.

Table 3.1 ~ RCS and RMP Supported Windows Platforms		
Platform	RCS	RMP
NT 4.0 Server, with Service Pack 6	\checkmark	\checkmark
2000 Server, with Service Pack 1	\checkmark	\checkmark
XP Professional	\checkmark	\checkmark
2003 Server	\checkmark	\checkmark

In addition to the installations, sections in this chapter show how to log on to the RMP and, once there, how to view Radia publications.

Radia Configuration Server Installation

This section provides instructions for installing the Radia Configuration Server, as well as reviewing the system requirements for the various Windows platforms.

Installation Types

There are two installation types, Silent and User Interface.

Silent

A hands-off, command-line invoked installation that has pre-determined databaseconfiguration parameters. It will install the Radia Database and

- The TCP/IP communications protocol, configured on port 3464
- Three TCP/IP Notify Managers
- Default caching and SNMP configurations
- Default Internet settings for the RCS
- User Interface (GUI)

A graphical installation that requires a Radia administrator to specify a variety of parameters in order to customize the Radia environment. It has some pre-determined database configuration parameters, and will install the Radia Database and the following configurable parameters:

- The TCP/IP communications protocol and port
- TCP/IP Notify Managers



- Caching and SNMP configurations
- Internet settings for the RCS

Radia Configuration Server Directories

The following table presents a list of the directories that will be automatically created during the Radia Configuration Server installation.

Table 3.2 ~ Radia Configuration Server Directories	
Directory	Contents
bin	Radia Configuration Server binary files, and the edmprof.dat
DB	Radia Database files
internet	Internet HTML and graphics files
log	Radia Configuration Server log
Radia Configuration Server	Batch and application files that coincide with the Radia Configuration Server options available from the Start menu
rexx	Radia Configuration Server REXX methods
rexx\Novadigm	Novadigm REXX methods
	Note: See the <i>Caution</i> that follows.
shell	Batch and application files, such as the uninstall and query scripts

Caution

Altering the RCS methods that are in the **ConfigurationServer\rexx\Novadigm** directory could adversely effect Radia processing.

Therefore, it is recommended that a method be copied up one level, to the **ConfigurationServer\rexx** directory, before being modified.

System Recommendations for Windows

Table 3.3 lists the system recommendations for installing and operating the Radia Configuration Server in a Windows environment.

Important Note

These recommendations represent typical, minimum, operating system estimates. Adjust these recommendations based on the environment in which the Radia Database is being installed.

Table 3.3 ~ Space Requirements for Windows Installations of RCS

Component	All Platforms
Memory	512 MB
Virtual Memory	2 GB
Radia Configuration Server Directory Important Note : This space recommendation does not include estimates for additional applications that will be managed by the Radia Configuration Server.	75 MB
Radia Database *	see Note*
Radia Configuration Server Logs	50 MB

Note

* The size of the database depends on the size and number of applications that the Radia Configuration Server is going to manage. HP recommends this be estimated as roughly 50 percent of the size of the applications to be managed.

Adjust these recommendations based on the environment in which the Radia Database is being installed.



Windows Pre-Installation Checklist

Prior to beginning the installation, make sure that:

- The user that is performing the installation is included in the Administrator group. If not, the Radia Configuration Server will not be installed properly.
- □ If a previous version of the Radia Configuration Server is running, shut it down.
- ☐ If the SNMP process is running, stop it.

Note: If the Startup Type for SNMP is AUTOMATIC, change it to MANUAL and reboot the machine before proceeding.

- Prior to starting the Radia Configuration Server installation:
 - All other applications, including anti-virus programs are closed.
 - All other tasks and operations that are executing are stopped.

Note

The installation media might contain products for which licenses have not been granted. Install only those products for which you purchased a license.

Windows Pre-Installation Tips

Table 3.4 ~ Radia Configuration Server Installation Tips

- Have the license file easily accessible for the installation.
- Click Cancel in any window to exit the installation. If Cancel is clicked accidentally, a confirmatory prompt enables the return to the installation program.
- Click **Back** at any time to return to previous windows. All the information entered thus far will remain unchanged.
- Most windows have associated error messages. If specifications are invalid, an error message will appear. Click OK and enter the correct information.
- This installation program displays default values when applicable. It is recommend that all defaults be accepted; however, they can be overridden by specifying the parameters for your environment.



The Setup-Configuration File

The default parameters for the Radia Configuration Server installation are contained in the **setup.cfg** file. HP recommends viewing this file prior to beginning the Silent installation.

```
# $Revision:
              1.3 $
#
source comprcsf.tcl
SelectComprcs patchmanager 1
SelectComprcs usagemanager 0
SelectComprcs osmanager
                                0
SelectComprcs mgr
                         1
Variable
             HP product name "HP Radia Configuration Server"
# Windows Set
             MGRROOT
                          "C:\\HP\\ConfigurationServer"
Variable
Variable
             DESTDB
                          "C:\\HP\\ConfigurationServer\\DB"
Variable
             LICENSEFILE "C:\\license.nvd"
# UNIX Set
                         "/opt/HP/ConfigurationServer"
#Variable
            MGRROOT
            DESTDB "/opt/HP/ConfigurationServer/DB"
#Variable
#Variable
            LICENSEFILE
                         "~/.license.nvd"
                         "3464"
Variable
             MGRPORT
                          .....
Variable
             LICEMAIL
                         "001"
Variable
             MGRID
Variable
             MGRNAME
                          "RCS"
Variable
             global_GUID 000
Variable
             enable_debug 0
Variable
             uninstalldata_numlines 0
Variable
             WinShortcuts 1
Variable
             DOBACKUP
                         1
Variable
                         1
             startrcs
```

Figure 3.1 ~ The RCS Installation's Setup Configuration file for Windows.

Installing the RCS

This section contains instructions for installing the Radia Configuration Server. Before starting this installation, be sure to review the *Checklist* and *Tips* sections on the preceding pages.

Silent Installation

Notes

By default, this Silent installation will back up an existing Radia Database.

In order to turn off this feature, open the **setup.cfg** file (see *Figure 3.1* on page 86) and change **DOBACKUP** to **0**.

The following steps detail the Silent installation of the Radia Configuration Server.

To run the Radia Configuration Server's Silent installation

- **1.** Insert the **hp OpenView Radia v4 configuration server** CD-ROM into the CD-ROM drive.
- **2.** Navigate to the directory that contains the RCS installation program for the Windows platforms.

cd SystemDrive:\management_infrastructure\configuration_server\win32

3. Type:

nvdkit setup.exe -mode silent and press ENTER.

The Radia Configuration Server will be automatically installed to the locations, and with the predefined parameters, that are contained in the **setup.cfg** file.

GUI Installation

The following steps detail the GUI installation of the Radia Configuration Server.

To run the Radia Configuration Server's GUI installation

1. Insert the **hp OpenView Radia v4 configuration server** CD-ROM into the CD-ROM drive.

The installation program should start automatically. If it doesn't:

- a. Use Windows Explorer to navigate to: CD_Drive:\management_infrastructure\configuration_server\win32
- **b.** Double-click **install.cmd**.



The GUI installation begins with the **Hewlett-Packard Radia Configuration Server Installation Welcome** window.



Figure 3.2 ~ The Radia Configuration Server Install Welcome window.

2. Click Next.

(At any time during the installation, click Cancel to exit the installation.)



The HP Software License Agreement window opens.

Click Accept to begin the installation. HP SOFTWARE LICENSE TERMS Upon payment of the applicable License Fee as set forth in the applicable HP quotation and/or invoice, your right to store, load, install, execute, or display (collectively, "Use") the enclosed Software will be governed by the terms and conditions of the Software License terms that have been previously executed by you and Hewlett-Packard Company ("HP") as well as third party license terms ("Third Party License Terms") accompanying the Software. In the event you have not executed such terms with HP, then HP is willing to license the enclosed Software to you subject to these Software License terms and the applicable HP Warranty Statement	Radia [®]	The End User Licensing Agreement must be accepted before the Hewlett Packard Radia Configuration Server can be installed.
Image: Solution of the second secon		Click Accept to begin the installation.
Upon payment of the applicable License Fee as set forth in the applicable HP quotation and/or invoice, your right to store, load, install, execute, or display (collectively, "Use") the enclosed Software will be governed by the terms and conditions of the Software License terms that have been previously executed by you and Hewlett-Packard Company ("HP") as well as third party license terms ("Third Party License Terms") accompanying the Software. In the event you have not executed such terms with HP, then HP is willing to license terms and the applicable HP Warranty Statement		HP SOFTWARE LICENSE TERMS
	Ø	Upon payment of the applicable License Fee as set forth in the applicable HP quotation and/or invoice, your right to store, load, install, execute, or display (collectively, "Use") the enclosed Software will be governed by the terms and conditions of the Software License terms that have been previously executed by you and Hewlett-Packard Company ("HP") as well as third party license terms ("Third Party License Terms") accompanying the Software. In the event you have not executed such terms with HP, then HP is willing to license the enclosed Software to you subject to these Software License terms and the applicable HP Warranty Statement

Figure 3.3 ~ The HP Software License Agreement window.

3. Click Accept.



The Directory Specifications window opens.

ewiett Packaru k		
- •	Setup will install Hewlett Packard Radia Configuration Server in folders under the following folder.	
Radia®		
	Click Browse to install Hewlett Packard Radia Configuration Server under a different folder.	
	Click Cancel to exit the setup.	
	- Radia Configuration Server - root installation directory-	
	C:\Novadigm\ConfigurationServer Brows	e
	· · · · ·	
	DataBase installation directory for Radia Configuration Server	
invent	C:\Novadigm\ConfigurationServer\DB Brows	æ
		-
	f	

Figure 3.4 ~ The Radia Configuration Server Directory Specifications window.

In this window:

- Accept the default **Root Installation** and default **Database Installation** directories that are displayed, or...
- Specify the locations, or click **Browse** to navigate to different repositories for the Radia Configuration Server *executable*, *log*, *Internet*, and *REXX* files, and the Radia Database files.

Note

If a previous version of the Radia Configuration Server and Radia Database are in the default directories, a **Directory Update** message will appear.

Click **OK** to continue with the update, or click **Cancel** to specify a different location.

4. Click Next.

n	Δ
э	υ

If a previous version of the Radia Configuration Server and Radia Database are in the default directories, *and* **OK** (to continue with the update) was selected at the a **Directory Update** message, the **Radia Configuration Server Backup Directory** window opens.

Hewlett Packard R	adia Configuration Server Install This installation program can create backup copies of all files replaced during the installation. These files will be used when the software is uninstalled and a rollback is requested. If	_
	backup copies are not created, you will only be able to unnistall the software and not roll the system back to a previous state. Do you want to create backups of the replaced files? New Backup directory under the main RCS installation path:	
	Backup_Tue08102004915a	
	ℱ Yes	
()	C <u>N</u> o	
	<bgck next=""></bgck>	ancel

Figure 3.5 ~ The Radia Configuration Server Backup Directory window.

In this window:

• Select **Yes** (the default) to have the installation program create a backup of the existing files.

This directory's name is determined by the operating system returning the date and time values of the machine's default time zone.

- Selecting No will result in the existing files being deleted.
- 5. Click Next.

UNIX Installations

The Select Components to Install window opens.

Radia®	Select Products to be Installed and supported by Radia Configuration Server
Radia	🔽 Hewlett Packard Radia Configuration Server
	Patch Manager
	🔲 Usage Manager
Ø	

Figure 3.6 ~ The Radia Configuration Server Select Components to Install window.

In this window:

• The Radia Configuration Server option is selected and disabled—it will be installed.

	Note
	See the section The Radia Configuration Server as an NT Service, starting on page 54.
•	Select Patch Manager , Usage Manager , and/or OS Manager to automatically in those product installations.

Note

If **Patch Manager**, **Usage Manager**, and/or **OS Manager** are selected, the **Radia Configuration Server** installation will not be affected, nor will there be additional dialog boxes.

6. Click Next.

The **Post-Installation Start** window opens.

⊙ Yes ○ <u>N</u> o
C <u>N</u> o

Figure 3.7 ~ The Radia Configuration Server Post-Installation Start window.

In this window:

- Accept the default (**Yes**) to have the RCS automatically start at the conclusion of the installation.
- Select **No** to avoid the RCS automatically starting after the installation.
- 7. Click Next.

UNIX Installations

The Location of License File window opens.

🛃 Hewlett Packard Ra	dia Configuration Server Install	_ 🗆 X
Dudtur	Setup will use the selected license file during the installation of Hewlett Packard Radia Configuration Server.	
Kaala®	To use a different license file, enter another file name.	
	- Input location of license file:	
<u>qp</u>		- 1
	C:\license.nvd	Browse

Figure 3.8 ~ The Radia Configuration Server Location of License File window.

In this window:

- If the location that is displayed in the **Input location of license file** field reflects the location of the license file, click **Next**. Otherwise,
- Specify the correct location, or click **Browse** to navigate to the license file.
- 8. Click Next.



The **E-mail Address** window opens.

E-mail address at which to receive license warnings: Enter e-mail address, at which to receive license warnings:
Enter e-mail address at which to receive license warnings:
E-mail address

Figure 3.9 ~ The Radia Configuration Server E-mail Address window.

This window offers the option of specifying an e-mail address to which license-expiration notifications will be sent.

9. Click Next.

UNIX Installations

The Radia Configuration Server ID window opens.

Hewlett Packard R	adia Configuration Server Install	<u>_ X</u>
D It a	Radia Configuration Server ID	
Kadia®	Radia Configuration Server ID (3 Hex/Digit, for example 1AF).	
(P)	Radia Configuration Server ID	
invent	001	
	dente Nach	Concel
	KBāck Nexo	Lance

Figure 3.10 ~ The Radia Configuration Server ID window.

In this window, specify a three-character ID for the Radia Configuration Server. Valid values are within the hexadecimal (0-9 and A-F) range of **001** to **EFF**. (This ID is used as a prefix in the Radia Configuration Server log file.)

This field is required.

10. Click Next.



The Radia Configuration Server Name window opens.

ewlett Packard Ra	adia Configuration Server Install
	Radia Configuration Server Name
Radia [®]	Radia Configuration Server Name (up to 32 Char, for example RCSSERVER).
(b)	

Figure 3.11 ~ The Radia Configuration Server Name window.

In this window, specify a name (32-character maximum) for the Radia Configuration Server. This field is required.

11. Click Next.

UNIX Installations

The TCP/IP Port window opens.

🛃 Hewlett Packard Ra	dia Configuration Server Install
	TCP/IP Port for Radia Configuration Server
Radia®	Specify TCP/IP Port for Radia Configuration Server
(/2)°	
49	TCP/IP Port for Radia Configuration Server
	19404
	<back next=""> Cancel</back>



This window displays the communications port that the Radia Configuration Server will use.

- Accept the default port (3464) that is specified in this window. (Recommended)
- Or specify a different port for Radia Configuration Server communications.

12. Click Next.



Radia*	Management Portal Zone Name The Zone Name must point to a Zone Name associated with an instance of a Management Portal.	

The Zone Name for Radia Management Portal window opens.

Figure 3.13 ~ The Radia Configuration Server Zone Name for RMP window.

In this window, specify a Zone Name that is associated with an instance of the Radia Management Portal.

(For information on RMP Zone Names, refer to the *Radia Management Portal Guide*.) This field is optional.

13. Click Next.

The Summary of Installation Input window opens.

Radia®	You are now ready to install the Hewlett Packard Radia Configuration Server. Click Install to begin the installation or Back button to modify
	To Directory = C:\HP\ConfigurationServer\bin* To Directory = C:\HP\ConfigurationServer\bin* To Directory = C:\HP\ConfigurationServer\rexx* To Directory = C:\HP\ConfigurationServer\rexx\ND\ADIGM*
(m)°	To Directory = C:\HP\ConfigurationServer\lb* To Directory = C:\HP\ConfigurationServer\lb\patch* To Directory = C:\HP\ConfigurationServer\lb\patch* To Directory = C:\HP\ConfigurationServer\shell* To Directory = C:\HP\ConfigurationServer\shell*
invent	User Parameters:



This window presents all the information that was specified during the Radia Configuration Server installation. This is the final opportunity to review and modify the specified settings.

• If you discover any errors, or wish to modify any of the entries, click **Back** until you reach the appropriate windows, and make the necessary changes.

The information that was entered in the other windows will not be affected. After making the changes, click **Next** repeatedly, until you arrive back at the **Summary of Input** window.

- If the Radia Configuration Server installation settings are satisfactory, click Install.
- 14. Click Install.

The Installation in Progress window opens.

When the installation is complete, the **Radia Configuration Server Installation Finish** window opens.

Kewlett Packard Radia Configuration Server Install		
D-d'-e	Hewlett Packard Radia Configuration Server has been successfully installed.	
Kaala®	Press the Finish button to exit this installation.	
D		
invent		
	<back enish=""></back>	Cancel

Figure 3.15 ~ The Radia Configuration Server Installation Finish window.

The Radia Configuration Server for Windows has been successfully installed.

Important Notes
Be sure to reset the SNMP startup type to its original setting (Automatic).
Re-boot the machine and verify that the SNMP and anti-virus services are restored.

Additionally, the Radia Configuration Server should now be present as a *service* (**ZTopTask**) in the Windows **Services** list.

The Radia Configuration Server as an NT Service

During the installation, the Radia Configuration Server was set up to run as an NT Service. Confirm this by checking the **Services** area of the Windows machine. As an NT Service, the RCS can be *started*, *stopped*, and *queried*, as described in this section.

NT Service Options

If the Radia Configuration Server is set up to run as an NT Service, it can be started, stopped, and queried, as described in this section.



Figure 3.16 ~ The Radia Configuration Server's NT Service options.

To start the Radia Configuration Server as an NT Service

- 1. Click Start, Programs, and Radia Configuration Server.
- 2. Select NT Services.
- 3. Select Start as NT Service.

The Radia Configuration Server will start. This can be verified by following the steps outlined in the query section.

To stop the Radia Configuration Server as an NT Service

- 1. Click Start, Programs, and Radia Configuration Server.
- 2. Select NT Services.
- 3. Click Stop as NT Service.

It will take approximately two minutes for the Radia Configuration Server to shut down. This can be verified by following the steps outlined in the following procedure.

To query the Radia Configuration Server as an NT Service

- 1. Click Start, Programs, and Radia Configuration Server.
- **2.** Select **NT Services**.

3. Select Query NT Service.

A command-prompt window will appear. This window will display the various aspects of the Radia Configuration Server service, such as:

- The name of the service (for the RCS, this is **ZTopTask**),
- Whether it's running, and
- It's startup-type selection (*automatic* or *manual*).

Using the Windows Event Viewer with the Radia Configuration Server

If the Radia Configuration Server is running as an NT Service, the Windows **Event Viewer** can be used to view key Radia Configuration Server messages, such as start-ups and shutdowns.

The **Event Viewer** displays three types of messages: *error*, *warning*, and *informational*. There are five **Event Viewer** messages (two informational and three errors) that deal with Radia Configuration Server processing. These are described in the section, *Radia Configuration Server Messages in Event Viewer*, on page 104.

Accessing the Event Viewer

The **Event Viewer** is invoked in a variety of ways on the various Windows operating systems. For instructions on how to access the **Event Viewer** on your operating system, refer to the documentation that was distributed with it.

Filtering for Radia Configuration Server Messages

Once the **Event Viewer** is open, locating messages that are specific to the Radia Configuration Server is easy.

To locate Radia Configuration Server messages

Note

The steps outlined below are applicable to most Windows operating systems, and are accurate as of this writing.

- **1.** Select Application.
- 2. From the Menu bar, click View and select Filter.
- 3. From the Event Source drop-down list, select ZTopTask, and click OK.



Now, the right panel of the **Event Viewer** window displays only those messages that result from Radia Configuration Server processing. Verify this by checking that **ZTopTask** is listed in all the rows of the **Source** column.

Radia Configuration Server Messages in Event Viewer

Detailed below are the five **Event Viewer** messages that deal with Radia Configuration Server processing.

Start-up Message

SERVICE HAS STARTED

The Radia Configuration Server for Windows is beginning its start-up processing by running the ZTOPTASK program.

■ Error Message 1

START SERVICE CONTROL DISPATCHER FAILED

The Radia Configuration Server for Windows failed during service initialization. Start-up processing has stopped.

■ Error Message 2

SERVICE CONTROL HANDLER REGISTRATION FAILED IN SERVICE MAIN

During second stage initialization, the Windows service controller failed to update the registry keys. Start-up processing has stopped.

■ Error Message 3

SET SERVICE FAILED IN REPORT STATUS

An attempt was made to report the status of the Radia Configuration Server for Windows start-up process to the Radia Configuration Server service. However, the Radia Configuration Server service did not receive the status report.

The Radia Configuration Server service may actually be running, or the start-up service has stopped. The Radia Configuration Server is unable to discern what the actual condition is.

■ Shut-down Message

SERVICE STOPPED BY STOP REQUEST OR SHUT-DOWN REQUEST

The Radia Configuration Server has shut down.

Radia Management Portal Installation

This section provides instructions for installing the Radia Management Portal, as well as reviewing the system requirements for the various Windows platforms.

System Recommendations for Windows

Table 3.5 lists the system requirements for the installation and operation of the Radia Management Portal. It is recommended that these requirements be strictly considered before installing the RMP on a Windows system.

Note

These recommendations represent typical, minimum operating system estimates.

Table 3.5 \sim System Recommendations for Windows Installations of RMP		
Component	Recommendation	
Memory	1 GB	
Virtual Memory	2 GB	
Processor Speed	800 MHz	

Windows Pre-Installation Checklist

Prior to beginning the installation, make sure that:

- **L**ocate the license file that is associated with this product installation.
- Assemble the following CD-ROMs (these are used during a complete Radia Management Portal installation):
 - hp OpenView Radia v4 infrastructure
 - hp OpenView Radia v4 applications
 - hp OpenView Radia v4 documentation
- **Review the README file that was delivered with the product.**
- After installing the Radia Management Portal, visit the HP Technical Support Web site to check for a Service Pack.
- □ If the *Radia Integration Server* (RIS) service (**httpd**) is running on the machine on which the Radia Management Portal is being installed, stop it.

Windows Pre-Installation Tips

Table 3.6 ~ Radia Management Portal Installation Tips

- Have the license file easily accessible for the installation.
- Click **Cancel** in any window to exit the installation. If **Cancel** is clicked accidentally, a confirmatory prompt enables the return to the installation program.
- Click **Back** at any time to return to previous windows. All the information that has been entered thus far will remain unchanged.
- Most windows have associated error messages. If specifications are invalid, an error message will appear. Click **OK** and enter the correct information.
- This installation program displays default values when applicable. It is recommend that all defaults be accepted; however, they can be overridden by specifying the parameters for your environment.

Windows Pre-Installation Notes

This release uses the new *zone* architecture and features to support multiple Radia Management Portal sites in an environment. Each RMP site that is being managed from the master RMP site must be at version 2.0.

Server Notes

The Radia Management Portal installation requires Administrator authority.

Client Notes

- Any platform that supports a Web browser.
- Any network machine running Microsoft Internet Explorer, version 4.0 or later, or Netscape Navigator, version 4.0 or later *with cookies enabled*.

Directory Size of a Single Zone

The **Portal Directory**, zone.mk (in the Radia Integration Servers **\etc** directory), loads the following information for the Radia Management Portal:

- Configuration
 Entitlement
 Devices
 - Groups Managed Infrastructure Job Status
- Network and Mounted Services Information

A single Radia Management Portal zone has an absolute limit of 10,000 devices. However, HP recommends limiting the number of devices that are managed by a single zone to:

■ Recommended: **1,000** to **2,000**

■ Maximum: **5000**

Multiple Radia Management Portal zones can be installed in order to accommodate any enterprise.

Co-Resident Radia Integration Server Services

The Radia Management Portal installs the *Radia Integration Server* (RIS) service, **httpd**. It's possible that a different Radia component (such as Radia Distributed Configuration Server), on the same machine, is running its own RIS service.

Use the following set of instructions to configure the machine to run both services.

To establish co-resident RIS services

- 1. In the Windows Services area, stop the existing RIS service.
- **2.** Remove the RIS service from the Windows **Services** by opening a command-prompt window and typing:

nvdkit httpd.tkd remove

3. Follow the steps in this guide and install the RMP.

When the directory prompt appears, specify a clean directory, such as C:/RMP_20/IntegrationServer.

This will install the RMP's httpd to a path other than the existing one.

4. Re-install the first RIS service by opening a command-prompt window and typing: nvdkit httpd.tkd install

Two RIS services are running in separate directories.

Access Requirements

In order to access the Radia Management Portal, a machine must be on the same network as the RMP host machine and must be running Microsoft Internet Explorer, version 4.0 or later, or Netscape Navigator, version 4.0 or later, *with cookies enabled*.

Installing the RMP

This section contains instructions for installing the Radia Management Portal. Before starting this installation, be sure to review the section, *Windows Pre-Installation Notes*, starting on page 106.

 Important Notes

 This version of the Radia Management Portal must be installed to a clean (empty) directory.

 Do not install it on a machine that is running an earlier version of the Radia Management Portal.

Use the following procedure to install an enterprise's first Radia Management Portal Zone.

To install the Radia Management Portal

 On the hp OpenView Radia v4 infrastructure CD-ROM, navigate to: extended_infrastructure\management_portal\win32 and double-click setup.exe.

The Radia Management Portal Install Welcome window opens.



Figure 3.17 ~ Radia Management Portal Welcome window.

- 2. Click Next.
- 108
The HP Software License Agreement window opens.

鴙 Radia Managemen	t Portal Install
Radia ®	The End User Licensing Agreement must be accepted before the Radia Management Portal can be installed.
Radia	Click Accept to begin the installation.
	HP SOFTWARE LICENSE TERMS
	Upon payment of the applicable License Fee as set forth in the applicable HP quotation and/or invoice, your right to store, load, install, execute, or display (collectively, "Use") the enclosed Software will be governed by the terms and conditions of the Software License terms that have been previously executed by you and Hewlett-Packard Company ("HP") as well as third party license terms ("Third Party License Terms") accompanying the Software. In the event you have not executed such terms with HP, then HP is willing to license the enclosed Software to you subject to these Software License terms and the applicable HP Warranty Statement accompanying the Software as well as the Third Party License Terms.

Figure 3.18 ~ End User Licensing Agreement.

3. Click Accept.



If **Accept** is not selected, the Radia Management Portal installation program will terminate.

The Radia Management Portal Location window opens.



Figure 3.19 ~ Radia Management Portal location window.

In this window:

- Accept the default **Radia Management Portal** installation directory that is displayed, or
- Click **Browse** to navigate to a different repository for the Radia Management Portal's files.
- 4. Click Next.

The License File window opens.

🚰 Radia Management Portal Install			
Radia®	Setup will use the selected license file during the installation of Radia Management Portal.		
Kaala	To use a different license file, enter another file name.		
	Novadigm License File		
invent		Browse	
		Consul I	
	<back next=""></back>	Lancel	

Figure 3.20 ~ License File window.

In this window:

- Specify the location and name of the license file, or
- Click **Browse** to navigate to it.
- 5. Click Next.

UNIX Installations

The Enable Network Discovery window opens.



Figure 3.21 ~ Enable Network Discovery window.

In this window:

• Click **Yes** to enable Network Discovery. (*Recommended*)

The Radia Management Portal will be able to automatically discover all the devices in the UNIX environment that can be managed by Radia.

• Click **No** to not enable Network Discovery.

This is preferred if the Radia Management Portal is being tested and the automatic discovery feature is not wanted.

112	2
-----	---

The Network Discovery Interval window opens.

🛃 Radia Management	Portal Install	
	Network Discovery Interval	
Radia®	Enter the Network Discovery interval in hours	
(III)	Discovery Interval	
invent	24	
	<b<u>ack <u>N</u>ext></b<u>	<u>C</u> ancel

Figure 3.22 ~ Network Discovery Interval window.

In this window, specify the length of time (in hours) for the Network-Discovery job to run:

- Accept the default **Discovery Interval** of 24 hours, or
- Specify a different length of time (valid values are 1 through 24)
- 7. Click Next.

UNIX Installations

The **Discovery Start Delay** window opens.

碞 Radia Managemen	t Portal Install	_ 🗆 X
	Discovery Start Delay	
Radia®	Enter the Discovery Start Delay after BMP has started in hours	
(P)	Discovery Start Delay	
invent	10	
	<b<u>ack <u>N</u>ext></b<u>	<u>C</u> ancel

Figure 3.23 ~ Discovery Start Delay window.

In this window, specify the interval (in hours) after the Radia Management Portal has started before it starts network discovery:

- Accept the default **Discovery Start Delay** of **0** seconds, or
- Specify a different delay interval (valid values are 0 through 24)

This delay applies each time the Radia Management Portal is started.

1	1	4

The first **Zone Information** window opens.

鴙 Radia Management	Portal Install	_ 🗆 X	
Radia ®	Zone information Each instance of the Management Portal must have a unique		
	Zone Name		
	Management Portal Zone Name		
	<b<u>ack <u>N</u>ext></b<u>	<u>C</u> ancel	

Figure 3.24 ~ Management Portal Zone Name information window.

In this window, specify a **Management Portal Zone Name** that will represent this instance of the Radia Management Portal.

- Each instance of the Radia Management Portal in an enterprise must have a unique zone name. Typically, the initial zone name identifies the infrastructure that is being managed; and later installations are names of subordinate zones.
- The **Zone Name** must adhere to the following guidelines:
 - A maximum of 64 alphanumeric characters.
 - Spaces are acceptable.
 - Special characters (such as commas, periods, and asterisks) are not acceptable.
- 9. Click Next.

UNIX Installations

The second **Zone information** window opens.

🛃 Radia Management	Portal Install		
Radia®	Zone information Enter the friendly name for your Management Portal Zone		
	Management Portal Zone Friendly Name Chicago		
	<b<u>ack <u>N</u>ext></b<u>	Cancel	

Figure 3.25 ~ Friendly Zone Name information window.

In this window, specify a **Management Portal Zone Friendly Name** for this instance of the Radia Management Portal.

- This value is optional and, if omitted, will default to the **Zone Name** that was specified in the previous step.
- The friendly name is the Zone's display name in the RMP user interface.
- 10. Click Next.

1	1	6
		~

The **Summary of Installation Input** window opens.

鴙 Radia Managemen	t Portal Install		
	You are now ready to install the Radia Management Portal.		
Radia®	Click Install to begin the installation or Back button to modify any information.		
	Installation Settings:		
	To Directory = C:\Novadigm\IntegrationServer\modules\license.nvd		
	Install Radia Management Portal		
	To Directory = C:\Novadigm\IntegrationServer		
	Install Component discoveryquery		
ゆ	User Parameters:		
invent	Dissousru latorusl = 24		
	<back cancel<="" install="" th=""></back>		

Figure 3.26 ~ The Summary of Installation Input window.

This window presents all the information that was specified during the Radia Management Portal installation. This is the final opportunity to review and modify the specified settings.

• If you discover any errors, or wish to modify any of the entries, click **Back** until you reach the appropriate windows, and make the necessary changes.

The information that was entered in the other windows will not be affected. After making the changes, click **Next** repeatedly, until you arrive back at the **Summary of Input** window.

11. Click **Install** to begin the installation.

There will be a prompt to copy the modules that can be used for remote installations of the Radia infrastructure components.

12. Click Yes.

UNIX Installations

The Infrastructure Components window opens.

🛃 Radia Management I	Portal Install	<u> </u>
Radia ®	Setup will install the Remotely Installable Infrastructure Components from the specified location.	
	Select the location of the Installable Components	Browse
	<b<u>ack <u>N</u>ext</b<u>	<u>C</u> ancel

Figure 3.27 ~ The Installable Components window.

In this window, specify a location in which to install those Radia infrastructure components that can be remotely installed.

13. Click Next.

The modules are copied to the Radia Integration Server's \mathbf{Media} directory.

There will be a prompt to copy the Radia Client modules to be used for remote installations.

14. Click Yes.



The Client Components window opens.

🛃 Radia Management I	Portal Install	_ 🗆 🗙		
	Setup will install the Client Modules from the specified location.			
Radia®	If the Client Modules are being installed from a CD, Insert the CD now.			
	- Calact the location of the Client Markulas			
	D:\ Browse			
	<b<u>ack <u>N</u>ext</b<u>	<u>C</u> ancel		

Figure 3.28 ~ Client Modules Location window.

In this window, specify the location of the Client Modules.

- If necessary, remove the current CD-ROM and insert the **hp OpenView Radia v4** applications CD-ROM.
- 15. Click Next.

The Radia Client modules are copied to the Radia Integration Server's **media** directory. There will be a prompt to install the Radia documentation.

16. Click Yes.

UNIX Installations

The **Documentation Location** window opens.



Figure 3.29 ~ Documentation Location window.

In this window, specify the location of the Documentation Files.

- If necessary, remove the current CD-ROM and insert the **hp OpenView Radia v4** documentation CD-ROM.
- 17. Click Next.

The Radia publications library is installed to the Radia Management Portal.

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

1	20	
1	20	

IP Address for a Remote Radia Management Portal

If the Radia Management Portal was installed on a machine other than that which houses a Radia Configuration Server, the RCS REXX method, ZTASKEND must be checked to ensure that it contains the lines that are needed for the RMP. Additionally, the RCS edmprof file must be modified to contain the IP address and port of the RMP.

The following sections detail how to complete these tasks.

Verifying the Contents of ZTASKEND

To verify ZTASKEND contains Radia Management Portal-required lines

1. On the Radia Configuration Server host machine, locate **ZTASKEND** in the /rexx/Novadigm folder of the directory in which the RCS is installed.

The default is /opt/HP/RCS/rexx/Novadigm.

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

Caution

Do not edit the ZTASKEND REXX script in /rexx/Novadigm.

If the Radia Database is updated, all customizations will be overwritten.

- **3.** Open **ZTASKEND** (in the /rexx directory) with a text editor, such as WordPad.
- **4.** Verify that the following lines are in ZTASKEND.

```
/* Object post to Radia Management Portal */
IF ZCVT.RMP = "ENABLED" THEN DO;
   SAY "**<>** RADIA MANAGEMENT PORTAL ENABLED CALLING RADISH POST:
ROUTINE"
   SESSION.REASON = SUBWORD(MYPARM, 2, 1)
   ADDRESS EDMLINK "radish post: -section MGR_RMP /proc/rcs SESSION ZCONFIG
      ZMASTER APPEVENT ZSTATUS";
```

END:

5. Save the changes and close the file.

Note

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

Configuring the EDMPROF File

In addition to the ZTASKEND REXX method being modified, the RCS's edmprof file must be modified. By default, the edmprof file is configured to have the Radia Management Portal coresident with the Radia Configuration Server. Therefore, if the RMP is running on a computer other than that which is hosting the RCS, it is necessary to revise the MGR_RMP section of the edmprof.

Table 3.7 lists the default settings of the MGR_RMP section, as well as the values that can be specified in order for the RCS to use the remotely installed RMP.

Table 3.7 ~	MGR_RMP	Settings	
Settings	Default	Alternative #1	Alternative #2
HTTP_HOST	localhost	< <i>host_name</i> > of the RMP's host	<ip_address> of the RMP's host</ip_address>
HTTP_PORT	3466	3466	3466

To edit the edmprof file

The edmprof file is located in the **home** directory of the UNIX user ID that installed and maintains the Radia Configuration Server.

- 1. Make a backup copy of edmprof file before editing it.
- 2. Using a text editor, open the edmprof file and locate the MGR_RMP section.
- 3. Replace the HTTP_HOST value with either of the *alternatives* that are shown in Table 3.7.
- 4. Save the changes and close the edmprof file.

The Radia Configuration Server is now configured to use the remotely installed RMP.

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 in which the Radia Management Portal was installed and type: ./nvdkit httpd.tkd.

2. Verify that the RMP started.

To stop the Radia Management Portal



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>

3. Verify that the RMP stopped.

Accessing and Logging on to the Radia Management Portal

To access and log on to the Radia Management Portal

1. Open a Web browser and in the **Address** bar, type:

http://<IP_address>:3466.

<IP_address> is that of the Radia Management Portal's host computer.

The Radia Management Portal Login page (Figure 3.30) opens.

Zone: North America/user/admin/desktop- logir	- Microsoft Internet Explorer
File Edit View Favorites Tools Help	🕂 🕹 🖓
🚱 Back 🔹 🕥 - 💌 😰 🏠 🔎 Search 🦻	≿ Favorites 🜒 Media 🧭 😥 - 🌽 🔟 - 🛄 🦓
Address 🗃 http://localhost:3466/	🔽 🔁 Go 🛛 Links 🎽 🛱
Radia Management	t Portal
😤 weicome	(V) =
%	Login
	User Credentials
	User Name
	Descured
	Password
	Login
	Local intranet



- 2. In the User Name and password fields, specify one of the following combinations.
 - Admin

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

The password is *secret*.

• Guest

Use this ID to log on as an unauthenticated user without access to tasks. No password is necessary.

• Operator

Use this ID to log on as a user with access to basic operations.

No password is necessary.

• Test

Use this ID to experiment with entitlement options. No password is necessary.

3. Click **Login** (or press ENTER on the keyboard).



The logon-user ID appears in the banner area and the highest-level representation of the infrastructure appears in the workspace.

To learn more about the Radia Management Portal and the Radia Management Agent, refer to the *Radia Management Portal Guide*.

Accessing the Radia Publications

The Radia Management Portal provides access to the Radia library—a comprehensive list of Radia documentation in *Portable Document Format* (pdf).

To access the Radia publications via the Radia Management Portal

- **1.** Access the Radia Management Portal as instructed in the section, *Accessing and Logging on to the Radia Management Portal*, on page 77.
- In the upper right corner of the Login page, click PUBS. The Radia Publications home page opens.
- **3.** Select a publication to view and double-click on it. The publication will open in its own window.

Summary

- The Radia Configuration Server and Radia Management Portal can easily be installed and incorporated into a Windows environment.
- The Radia Configuration Server and Radia Management Portal can be started and stopped.
- The Radia Management Portal can be accessed using varying levels of authority.
- The Radia Publications can be installed on, and viewed via, the Radia Management Portal.

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MVS Installation

At the end of this chapter, you will have:

- Prepared the Radia Configuration Server installation files on a Windows machine (prior to transferring them to an MVS machine)
- Transferred the installation parameters from the Windows machine to the MVS environment

Chapter Overview

This chapter details the preparation of the Radia Configuration Server installation files on a Windows machine before their eventual transfer to an MVS mainframe. After the RCS installation files have been prepped, they can be transferred to an MVS machine, which must be at the following minimum level:

■ OS/390, level 2.5

Radia Configuration Server Installation

This section provides instructions for preparing the Radia Configuration Server files on a Windows machine, and then transferring them to an MVS mainframe.

System Recommendations for MVS

Table 4.1 lists the system recommendations for installing and operating the Radia Configuration Server in an MVS environment.

Important Note

These recommendations represent typical, minimum, operating system estimates. Adjust these recommendations based on the environment in which the Radia Database is being installed.

Table 4.1 ~ Space Requirements for MVS Installation	ns of RCS
Component	Space Requirement
Recommended Space	450 cylinders
Memory	Maximum allowed
Virtual Memory	Maximum allowed
Radia Configuration Server Directory	200 cylinders
Important Note : This space recommendation does not include estimates for additional applications that will be managed by the RCS.	
Radia Database *	170 cylinders
Radia Configuration Server Logs	N/A

Note

* The size of the database depends on the size and number of applications that the Radia Configuration Server is going to manage. HP recommends this be estimated as roughly 50 percent of the size of the applications to be managed.

Adjust these recommendations based on the environment in which the Radia Database is being installed.

Windows Platforms for MVS File Preparation

HP recommends using one of the following Windows platforms for the pre-transfer preparation of the Radia Configuration Server's installation files.

- **■** '95,
- **■** '98,
- NT 4.0 Server,
- 2000 Server,
- XP Professional,
- 2003 Server

Windows PC Pre-Installation Checklist

Prior to beginning the installation, make sure that:

- If a previous version of the Radia Configuration Server is running, shut it down.
- Prior to starting the Radia Configuration Server installation:
 - All other applications, including anti-virus programs are closed.
 - All other tasks and operations that are executing are stopped.

Transferring the License File

The license file that is used on the Windows PC for the pre-transfer preparation of the RCS must be re-named and transferred from the PC to the MVS mainframe. The easiest way to do this is using the "put" command, as in:

```
Put license.nvd 'RCS.451.parmlib(licnvd)'
```



Note

The installation media might contain products for which licenses have not been granted.

Install only those products for which you purchased a license.

MVS Pre-Installation Tips

Table 4.2 ~ Radia Configuration Server Installation Tips

- Have the license file easily accessible for the installation.
- Click Cancel in any window to exit the installation. If Cancel is clicked accidentally, a confirmatory prompt enables the return to the installation program.
- Click **Back** at any time to return to previous windows. All the information entered thus far will remain unchanged.
- Most windows have associated error messages. If specifications are invalid, an error message will appear. Click **OK** and enter the correct information.
- This installation program displays default values when applicable. It is recommend that all defaults be accepted; however, they can be overridden by specifying the parameters for your environment.

Preparing and Installing the RCS

This section contains instructions for preparing the Radia Configuration Server on a Windows machine before transferring the files to the MVS mainframe to complete the installation.

- **1.** Insert the **Radia RCS Installation CD-ROM** into the CD-ROM drive of the Windows PC on which the RCS files are going to be prepped for the file transfer.
- **2.** Navigate through the **management_infrastructure\configuration_server** directory to the sub-directory **mvs**.
- 3. Double-click setup.exe.



The Radia Configuration Server installation preparation begins with the **Hewlett-Packard RCS: Manager MVS Setup Welcome** window.



Figure 4.1 ~ The RCS: Manager MVS Setup Welcome window.

4. Click Next.

(At any time during the installation, click **Cancel** to exit the installation.)

MVS Installation

The License Information window opens.

License Information	Enter your license information below.	X
	1st String:	
RADIA	2nd String:	
	Email	
	<back next=""> Cancel</back>	

Figure 4.2 ~ The License Information window.

In this window, enter the license string that was issued with the purchase of the Radia Configuration Server.

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	I A I	

Each license string is a 64-character, alphanumeric sequence with four 16-character segments that are separated by spaces.

The license strings use the numeral **0**, never the letter **0**.

Additionally, there is an option to specify an e-mail address to which license-expiration notifications will be sent.

132

The **Destination Directory** window opens.

choose a Descination	2
	The Setup program will use the following directory for the installation of the RCS:Manager for MVS.
	To install to this directory, click Next.
	To install to a different directory, click Browse and select another directory.
RADIA	
	Destination Directory C:\RCSMVS45\ Browse

Figure 4.3 ~ The Destination Directory window.

In this window, accept the default **Destination Directory** that is displayed, or click **Browse** to navigate to a different temporary repository for the Radia Configuration Server's files.

6. Click Next.

The RCS: Manager Parameters window opens.

	Modify the following to accept the defaul RCS:Manager Name	parameters, or click Next t values. RCS:Manager Userid e, RCS:Manager Type	_
	Mgr-Userid 001		
RADIA	Mgr-Name RCS		
	Mgr-Type DISTR	IBUTED	_
	<	: <u>B</u> ack <u>N</u> ext> (Cancel

Figure 4.4 ~ The RCS: Manager Parameters window.

In this window, accept the default RCS: Manager Parameters that are displayed, or:

- Specify a different 3-character RCS (Manager) ID
- Specify a different RCS (Manager) Name (32-character maximum)
- Specify an RCS type (Distributed, Stand-alone, or Server)
- 7. Click Next.

The Prefixes for MVS Datasets window opens.

	Specify yo be used to Prefixes an	ur MVS/JCL information below. This information will o create many MVS/JCL jobs. re for the RCS Libraries and VSAM files
	Libraries	RCS.V451
RADIA	VSAM	RCS.VSAM.V451

Figure 4.5 ~ The Prefixes for MVS Datasets window.

In this window, accept the default MVS Datasets parameters that are displayed, or:

- Specify a different prefix for the MVS Library files.
- Specify a different prefix for MVS **VSAM files**.
- 8. Click Next.

The MVS Job Information window opens.

Jobcard Information	Modify the jobcard parameters below as it will appear for your MVS installation job.	
	JOBCARD: jobname JOB (,), 'RCS: MANAGER INSTALL',	
RADIA	JOBCARD: =&SYSUID,TIME=(1440),MSGCLASS=X,CLASS=	×
	JOBPARM: ///JOBPARM S=XSYS	
		_
	< Back Next > Cancel	

Figure 4.6 ~ The Job Information window.

In this window, accept the default MVS Job Information parameters that are displayed, or:

- Specify different **JOBCARD** parameters.
- Specify different **JOBPARM** parameters.
- 9. Click Next.

,00

The Management Storage option window opens.

	Select a data set management option. If your site uses Data Facility System Management Storage (DFSMS), select the second option.
	Non-DFSMS
	C DFSMS
RADIA	

Figure 4.7 ~ The Dataset Management Option window.

In this window, accept the default Management Storage option of:

- **non-DFSMS**, if this is applicable to the target MVS environment. OR
- select **DFSMS** (Data Facility System Management Storage), if this is applicable to the target MVS environment



Selecting **DFSMS** will spawn a series of windows that solicit configuration information.



The **Dataset Parameters** window opens.

	Define your data set parameters below. This information used to create the MVS/JCL installation job. Defines th for the Libraries, VSAM and the Unit parameter	n will be ne Volser
	Libs-Volser RCS000	
RADIA	VSAM-Vols RCS000	
	Unit-Value SYSDA	
	< Back Next > C	ancel

Figure 4.8 ~ The Dataset Parameters window.

In this window, accept the default **Dataset Parameters** that are displayed, or:

- Define a different Volume Serial for the Library files.
- Define a different Volume Serial for the VSAM files.
- Define a different **Unit Value**.

1	2	0
1	- 1	ĸ
	~	~

The Communications Protocol window opens.

Select a Protocol		×
	Select the type of communication protocols the RCS:Manager will support.	
	🗖 LU 6.2	
RADIA		
		_
	<back next=""> Cancel</back>	

Figure 4.9 ~ The Communications Protocol window.

In this window, select the **Communications Protocol** for the RCS: Manager:

- TCP/IP or
- LU6.2 or
- both.
- 12. Click Next.

The TCP/IP Information window opens.

	Specify the TCP/IP parameters below. for a unique TCP/IP port number for the RCS Manager and TCP/IP configuration dataset for TCP/IP address space	
	Port-numbe 3460	
RADIA	Config-DS TCPIP.TCPIP.DATA	_
	< Back Next > Cano	xel

Figure 4.10 ~ The TCP/IP Information window.

In this window, accept the default \mathbf{TCP}/\mathbf{IP} parameters that are displayed, or:

- Specify a different **Port Number** for the RCS: Manager TCP/IP communications.
- Specify a different **Configuration Dataset** for the TCP/IP address space.

Note

In the **Communications Protocol** window, if **LU 6.2** had been selected in addition to (or instead of) TCP/IP, the **LU 6.2 Information** window would appear following (or instead of) the **TCP/IP Information** window.

The **File Allocation** window opens.

	Allocate these eight files on your MVS system for the file
RADIA	When allocating the file for the file transfer, use A fixed record format and these blocksizes.
	RCS.V451.INSTALL : LRECL(125), BLKSIZE(1250), SPACE(1,1,3) CYLINDEF
	RCS.V451.FBLOAD.BIN : LRECL(80), BLKSIZE(3120), SPACE(200,10) CYLINDE
	RCS.V451.FBSASC.BIN : LRECL(80), BLKSIZE(3120), SPACE(7,1) CYLINDERS
	RCS.V451.FBREXX.BIN : LRECL(80), BLKSIZE(3120), SPACE(2,1) CYLINDERS
	RCS.V451.FBEDMDB.BIN :
	X X

Figure 4.11 ~ The File Allocation window.

This window presents a list of the files (including the format and block-sizes) that must be allocated on the MVS system.

Note

HP recommends reviewing this list now, but not performing the file allocation until the file preparation is complete.



The File Transfer window opens.

RADIA	Transfer these nine files to your MVS system. Use the File Transfer Protocol to transfer these six files. Use ascii file transfer (no append, ASCII, CRLF). Send the MVS/JCL Installation Job Stream (INSTALL): C:\RCSMVS45\INSTALL.JCL into>'RCS.V451.INSTALL(C:\RCSMVS45\EDMPROF.DAT into>'RCS.V451.INSTALL Use binary file transfer (no append, no ASCII, no CRLF). Send the Manager's Load Modules File (FBL0AD): C:\RCSMVS45\FBL0AD.BIN into>'RCS.V451.FBL0AD.E Send the SAS C Runtime Library (FBSASC):
-------	--

Figure 4.12 ~ The File Transfer window.

This window presents a list of the files that must be transferred to the MVS system.

Note
HP recommends reviewing this list now, but not performing the file transfer until the file preparation is complete.

142	1	4	2
-----	---	---	---

The **post-File Transfer** window opens.

RADIA	After completing the file transfer, perform the following steps: Run the MVS/JCL installation job: RCS.V451.INSTALL(INSTALL) If the job ran successfully, perform the steps below: Verify and activate the VTAM node defined in member: RCS.V451.PARMLIB(RCSNODE) Verify and run the MVS startup job in: RCS.V451.JCL(RUNRCS) Copy into a user proclib: RCS.V451.JCL(RCSPROC) This is your Logon Applid (for LU 6.2 only): RCSAPPC6
-------	---

Figure 4.13 ~ The post-File Transfer window.

This window presents a list of the steps that must be performed following the file transfer.



16. Click Next.

The **README File** message appears.



Figure 4.14 ~ The View the README File message.

To view the README file, click Yes. (Recommended)



Figure 4.15 ~ The README File.

HP recommends printing the README file and then completing the following steps.

- 1.) On the MVS mainframe, allocate the files as instructed in the README file.
- 2.) Transfer the files using *File Transfer Protocol* (FTP), as instructed in the README file.
- 3.) On the MVS mainframe, run the jobs as instructed in the README file.

The Radia Configuration Server for MVS has been successfully installed.




UNIX Kernel Tuning

The Radia Configuration Server actively uses memory, communications, and *inter-process communications* (IPC), which require the UNIX system's Kernel configuration to make allowances for enough resources. The Kernel configuration parameters differ among UNIX operating systems. The values that are assigned can vary, depending on the RCS configuration, considering elements such as the expected number of concurrent tasks and cache management.

Essential Kernel Variables

Tables A.1 through A.3 contain the most important parameters that might need to be adjusted.

Note

These values apply to the Radia Configuration Server only; they do not take into consideration the requirements of other applications running on the machine.

Most of the Radia Configuration Server parameters are specified in the edmprof file, which was created during the RCS installation, and which is located in the RCS's home directory (see Figure 2.4 on page 42 of the RCS installation). For more information about RCS parameters, see the *Radia Configuration Server Guide, Chapter 1: Configuration Server Settings.*

Table A.1 addresses the parameters that are associated with semaphore management.



Table A.1 ~ UNIX Platform's Kernel Settings for Semaphore Management			
Kernel Parameter	RCS-related Parameter or Recommendation	AIX, HP-UX, and Linux	Solaris
Maximum number of semaphores (system-wide)	TASKLIMIT * 3	semmni	seminfo_semmni
Maximum user-accessible semaphores (system-wide)	TASKLIMIT * 3	semmns	seminfo_semmns
Enable/Disable semaphores	Enable	sema = 1	N/A
Semaphore value change limit	N/A	semaem = 16384	N/A
Size of free semaphore resource map	semmni + 2	semmap	seminfo_semmap
Maximum un-dos per semaphore	Default	semmnu = 30	seminfo_semmnu
Maximum semaphore un-dos per process	Default	semume = 10	seminfo_semume
Maximum semaphore un-dos per ID	Default	N/A	seminfo_semmsl

Table A.2 addresses the parameters that are associated with *process management*.

Table A.2 ~ UNIX Platform's Kernel Settings for Process Management			
Kernel Parameter	RCS-Related Parameter or Recommendation	AIX and HP-UX	Solaris
Maximum process data segment size	N/A	maxdsiz = 0x7b03a000	N/A
Maximum number of processes per user	TASKLIM + 20	maxuprc	N/A
Maximum number of processes (system-wide)	TASKLIM + 20 + 4	nproc = maxuprc + 4	max_nprocs

Linux Note

Use the administrative tool, **ulimit**, to configure the process-management parameters.

Table A.3 addresses the parameters that are associated with *shared memory*.

¹⁴⁶

Table A.3 ~ UNIX Platform's Kernel Settings for Shared Memory			
Kernel Parameter	RCS-Related Parameter or Recommendation	AIX, HP-UX, and Linux	Solaris
Enable/Disable shared memory	Enable	shmem	N/A
Maximum shared memory segment size	In the MGR_CACHE section of the edmprof file, operating system-dependent parameters should be set to allow for expected cache segment size.	shmmax recommended setting is: 0x40000000	shminfo_shmmax
Maximum segments on system	In combination with segment size, should allow enough memory for cache.	shmmni (The default size of 200 is adequate.)	shminfo_shmmni
Maximum segments per process	In combination with segment size, should allow enough memory for cache.	shmseg (The default size of 120 is adequate.)	shminfo_shmseg

UNIX Kernel Tuning

Lists

Figures

$\label{eq:Figure 1.1} Figure \ 1.1 \sim The \ Radia \ Administrator \ Workstation \ tools. \dots$	22
Figure $1.2 \sim \text{Creating}$ and maintaining a functioning Radia environment	28
Figure 2.1 \sim The RCS Installation's Setup Configuration file for UNIX	38
Figure 2.2 \sim The Radia Configuration Server Installation Welcome window	40
Figure 2.3 ~ The HP Software License Agreement window	41
$\label{eq:Figure 2.4} Figure \ 2.4 \sim The \ Radia \ Configuration \ Server \ Directory \ Specifications \ window. \dots$	42
Figure $2.5 \sim$ The Radia Configuration Server Backup Directory window	43
$\label{eq:Figure 2.6} Figure \ 2.6 \sim The \ Radia \ Configuration \ Server \ Select \ Components \ to \ Install \ window4$	44
$\label{eq:Figure 2.7} Figure \ 2.7 \sim The \ Radia \ Configuration \ Server \ post-Installation \ Start \ window. \ \dots \ A \ A \ A \ A \ A \ A \ A \ A \ A$	45
$\label{eq:Figure 2.8} \texttt{Figure 2.8} \sim \texttt{The Radia Configuration Server Location of License File window.}$	46
$\label{eq:Figure 2.9} \texttt{Figure 2.9} \sim \texttt{The Radia Configuration Server E-mail Address window}.$	47
Figure 2.10 \sim The Radia Configuration Server ID window	48
Figure 2.11 ~ The Radia Configuration Server Name window	49
Figure 2.12 ~ The Radia Configuration Server TCP/IP Port window	50
Figure $2.13 \sim$ The Radia Configuration Server Zone Name for RMP window	51
Figure 2.14 ~ The Radia Configuration Server Summary of Installation Input window	52
Figure $2.15 \sim$ The Radia Configuration Server Installation Finish window	53
Figure 2.16 \sim The Radia Management Portal Installation Welcome window	30
Figure 2.17 ~ The HP Software License Agreement window	31
Figure 2.18 \sim The Radia Management Portal Location window	32
Figure 2.19 \sim The Radia Management Portal License File window	33
Figure 2.20 \sim The Radia Management Portal Enable Network Discovery window	34
Figure 2.21 \sim The Radia Management Portal Network Discovery Method window	35
$\label{eq:Figure 2.22} \ensuremath{Figure 2.22}\xspace \sim \ensuremath{The Radia Management Portal Network Discovery Interval window. \ensuremath{}\xspace \ensuremath{}\xspace \ensuremath{Coversuremath{\mathsf{S}}\xspace}\xspace \ensuremath{Coversuremath{\mathsf{S}}\xspace \ensuremath{Coversuremath{\mathsf{S}}\xspace \ensuremath{Coversuremath{\mathsf{S}}\xspace \ensuremath{Coversuremath{\mathsf{S}}\xspace \ensuremath{S}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{S}}\xspace \ensuremath{Coversuremath{\mathsf{S}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{S}}\xspace \ensuremath{Coversuremath{\mathsf{S}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \ensuremath{Coversuremath{\mathsf{Coversuremath{\mathsf{C}}\xspace \$	36
$\label{eq:Figure 2.23} \mbox{ ~ The Radia Management Portal Discovery Delay between Nodes window} \mbox{ (b) }$	37

Figure 2.24 ~ The Radia Management Portal Discovery Start Delay window	68
Figure $2.25 \sim$ The Radia Management Portal DNS Server IP Address window	69
Figure 2.26 ~ The Radia Management Portal DNS Domain Zone window	
Figure 2.27 ~ The Radia Management Portal Summary of Installation Input window	71
Figure 2.28 ~ The Radia Management Portal Installable Components location window	
Figure 2.29 ~ The Radia Management Portal Radia Client modules location window	73
Figure 2.30 ~ The Radia Management Portal Radia Publications location window	74
Figure 2.31 ~ Login page for the Radia Management Portal	
Figure 3.1 ~ The RCS Installation's Setup Configuration file for Windows	
Figure 3.2 ~ The Radia Configuration Server Install Welcome window	
Figure 3.3 ~ The HP Software License Agreement window.	
Figure 3.4 ~ The Radia Configuration Server Directory Specifications window	
Figure 3.5 ~ The Radia Configuration Server Backup Directory window	91
Figure 3.6 ~ The Radia Configuration Server Select Components to Install window	
Figure 3.7 ~ The Radia Configuration Server Post-Installation Start window	93
Figure 3.8 ~ The Radia Configuration Server Location of License File window	94
Figure 3.9 ~ The Radia Configuration Server E-mail Address window	
Figure 3.10 ~ The Radia Configuration Server ID window	
Figure 3.11 ~ The Radia Configuration Server Name window	
Figure 3.12 ~ The Radia Configuration Server TCP/IP Port window	
Figure 3.13 ~ The Radia Configuration Server Zone Name for RMP window	
Figure 3.14 ~ The Radia Configuration Server Summary of Installation Input window	100
Figure 3.15 ~ The Radia Configuration Server Installation Finish window	101
Figure 3.16 ~ The Radia Configuration Server's NT Service options	
Figure 3.17 ~ Radia Management Portal Welcome window	
Figure 3.18 ~ End User Licensing Agreement	
Figure 3.19 ~ Radia Management Portal location window	
Figure 3.20 ~ License File window	111
Figure 3.21 ~ Enable Network Discovery window.	
Figure 3.22 ~ Network Discovery Interval window	
Figure 3.23 ~ Discovery Start Delay window	
Figure 3.24 ~ Management Portal Zone Name information window	
Figure 3.25 ~ Friendly Zone Name information window	
Figure 3.26 ~ The Summary of Installation Input window.	
Figure 3.27 ~ The Installable Components window	

151

Table P.1 ~ Documentation Map	5
Table P.2 ~ Styles	10
Table P.3 ~ Usage	10
Table P.3 ~ Terminology*	11
Table P.4 ~ Radia Documentation	
Table 1.1 ~ hp OpenView Radia v4 configuration server CD Components	19
Table 1.2 ~ hp OpenView Radia v4 infrastructure CD Components	
Table 1.3 ~ hp OpenView Radia v4 applications CD Components	20
Table 1.4 ~ List of Radia Publications	20
Table 2.1 ~ RCS and RMP Supported UNIX Platforms	
Table 2.2 ~ Radia Configuration Server Directories	
Table 2.3 ~ Space Requirements for UNIX Installations of RCS	
Table 2.4 ~ Radia Configuration Server Installation Tips	
Table 2.5 ~ Environment Variables	
Table 2.6 ~ System Recommendations for UNIX Installations of RMP	57
Table 2.7 ~ Radia Management Portal Installation Tips	
Table 2.8 ~ MGR_RMP Settings	
Table $3.1 \sim \mathrm{RCS}$ and RMP Supported Windows Platforms	
Table 3.2 ~ Radia Configuration Server Directories	
Table 3.3 ~ Space Requirements for Windows Installations of RCS	
Table 3.4 ~ Radia Configuration Server Installation Tips	
Table $3.5 \sim System$ Recommendations for Windows Installations of RMP	
Table 3.6 ~ Radia Management Portal Installation Tips	
Table 3.7 ~ MGR_RMP Settings	
Table 4.1 ~ Space Requirements for MVS Installations of RCS	
Table 4.2 ~ Radia Configuration Server Installation Tips	
Table A.1 ~ UNIX Platform's Kernel Settings for Semaphore Management	
Table A.2 ~ UNIX Platform's Kernel Settings for Process Management	146
Table A.3 ~ UNIX Platform's Kernel Settings for Shared Memory	147

Procedures

To run the Radia Configuration Server's Silent installation	39
To run the Radia Configuration Server's GUI installation	40
To start the Radia Configuration Server	54
To stop the Radia Configuration Server	54
To identify the Radia Configuration Server	55
To clean up the Radia Configuration Server	55
To install the Radia Management Portal	59
To verify ZTASKEND contains Radia Management Portal-required lines	75
To edit the edmprof file	76
To start the Radia Management Portal	77
To stop the Radia Management Portal	77
To access and log on to the Radia Management Portal	77
To access the Radia publications via the Radia Management Portal	79
To run the Radia Configuration Server's Silent installation	87
To run the Radia Configuration Server's GUI installation	87
To start the Radia Configuration Server as an NT Service	102
To stop the Radia Configuration Server as an NT Service	102
To query the Radia Configuration Server as an NT Service	102
To locate Radia Configuration Server messages	103
To establish co-resident RIS services	107
To install the Radia Management Portal	108
To verify ZTASKEND contains Radia Management Portal-required lines	121
To edit the edmprof file	122
To start the Radia Management Portal	122
To stop the Radia Management Portal	123
To access and log on to the Radia Management Portal	123
To access the Radia publications via the Radia Management Portal	125

154

Lists

Index

•	
/install.sh	59
./INSTALL.SH	59

A

accessing, Radia Management Portal
UNIX77
Windows123
accessing, Radia publications via RMP
UNIX
Windows125
Admin WorkstationSee Radia Administrator Workstation
administrator toolsSee Radia Administrator Workstation
Application Manager See Radia Application Manager

В

bin directory	, 83
Bourne shell	.36

С

cdcase parameter
cleaning up, Radia Configuration Server, UNIX 55
Client ExplorerSee Radia Client Explorer
Configuration Analyzer See Radia Configuration Analyzer
Configuration Server See Radia Configuration Server
configuring edmprof file for remote RMP
UNIX
Windows122
configuring MGR_RMP for remote RMP
UNIX

Windows	
co-resident RIS services	107
customer support	4

D

DB directory
Distributed Manager Adapter See Radia Distributed Configuration Server
DMA See Radia Distributed Configuration Server
DNS
documentation map5

Ε

edmprof file	145
configuring for remote RMP	
UNIX	
Windows	122
environment variables, UNIX	
Event Viewer	103
accessing	103
Application log	
Event Source	103
filtering	
messages	
Radia Configuration Server messages	
ZTopTask	
exe directory	

G

GUI installation, Radia Configuration Server	
UNIX 40	
Windows	

Index

Η

hp OpenView Radia v4 media	
product installations	
applications CD	
configuration server CD	
infrastructure CD	
publications CD	
httpd	105, 107
httpd.tkd	

I

identifying, Radia Configuration Server, UNIX 55
installation
MVS
Radia Configuration Server 128
Radia Configuration Server
MVS128
UNIX
Windows
Radia Management Portal
UNIX
Windows 105
system recommendations
MVS128
UNIX
Windows
UNIX
Radia Configuration Server
Radia Management Portal 59
Windows
Radia Configuration Server 82
Radia Management Portal 107
installation directories
Radia Configuration Server
UNIX 33
Windows 83
installation media18
Radia Configuration Server
Radia Management Portal 19
internet directory
inter-process communications145

Κ

kernel tuning	145
UNIX	145
kernel variables	145
Knowledge Base See Radia Knowledge	Base Manager
Knowledge Base Manager <i>See</i> Radia Ku Manager	nowledge Base

L

LD_LIBRARY_PATH	36
LIBPATH	36
log directory	
logging on, Radia Management Portal	
UNIX	77
Windows	123

Μ

Management Portal See Radia Management Portal
media
Radia Configuration Server installation19
Radia Management Portal installation19
Messaging ServerSee Radia Messaging Server
MGR_RMP section of edmprof
UNIX
Windows122
Multicast Server See Radia Multicast Server
MVS system recommendations
Radia Configuration Server128

Ν

network discovery requirements	58
NIS	59
NIS+	59
NT Service, Radia Configuration Server	
querying	102
querying starting	102 102
querying starting stopping	102 102 102

OVO AdapterSee Radia Adapter for HP OVO

Ρ

Packager	See Radia Packager
PFS package	
pfs_mount	
Policy Server	See Radia Policy Server
Portable File System	
post-installation notes, UNI	X53
Proxy Server	See Radia Proxy Server
Publisher	See Radia Publisher
Publishing AdapterSee H	Radia Publishing Adapter

Q

querying, Radia Configuration Server, Windows..102

R

Radia Adapter for HP OpenView	26
Radia Adapter for HP OVO	26
Radia Adapter for SSL	24
Radia Administrator Workstation	22
Radia Application Manager	
Radia Client Explorer	23
Radia Configuration Analyzer	
Radia Configuration Server	21
installation	
directories	
UNIX	
Windows	
GUI	
UNIX	
Windows	
media	19
MVS	128
setup-configuration file	
UNIX	
Windows	
silent	
Silent	
UNIX	
Windows	
UNIX	
GUI	40

setup-configuration file
Silent
Windows
Windows
setup-configuration file 86
Silent
querying as an NT Service102
starting as an NT Service102
stopping as an NT Service102
system recommendations
MVS 128
UNIX
Windows
UNIX
cleaning up55
identifying55
starting54
stopping54
UNIX platforms
Windows platforms82
Radia Configuration Server directory
Radia Distributed Configuration Server
Radia documentation
Radia Extensions for Windows Installer
Radia Inventory Manager
Radia Knowledge Base See Radia Knowledge Base Manager
Radia Knowledge Base Manager
Radia Management Portal25
access requirements
UNIX
Windows
accessing
UNIX
Windows
installation
media
UNIX
Windows
system recommendations
UNIX
Windows
UNIX

logging on77
user IDs
starting77
stopping77
UNIX platforms
Windows
logging on123
user IDs 124
starting122
stopping123
Windows platforms
Radia Messaging Server
Radia Messenger See Radia Messaging Server
Radia Multicast Server
Radia Packager
Radia Policy Server
Radia Proxy Server
Radia publications, accessing
Radia Publisher
Radia Publishing Adapter
Radia Reporting Server
Radia Screen Painter
Radia Software Manager 27
Radia Staging Server
Radia System Explorer 23
BCP 59
readme file 19.58.105
remote RMP_IP address 75
Reporting Server See Badia Benorting Server
REXEC 59
rexx directory 33 83
rexx/Novadigm directory 83
BIS service 107
RMP access requirements
UNIX 50
Windows 107
Rock Ridge format
nock muge format
1001
лоп
S

Screen Painter......See Radia Screen Painter

setup-configuration file
DOBACKUP feature
UNIX, RCS installation38
Windows, RCS installation86
shell directory
SHLIB_PATH
Silent installation, Radia Configuration Server
UNIX
Windows
SNMP
Software Manager See Radia Software Manager
SSH
SSL Adapter See Radia Adapter for SSL
Staging Server See Radia Staging Server
starting, Radia Configuration Server
UNIX54
Windows102
starting, Radia Management Portal
UNIX77
Windows122
stopping, Radia Configuration Server
UNIX54
Windows102
stopping, Radia Management Portal
UNIX77
Windows123
System Explorer See Radia System Explorer
system recommendations
MVS128
Radia Configuration Server128
UNIX33, 57
Radia Configuration Server
Radia Management Portal57
Windows
Radia Configuration Server84
Radia Management Portal105

Т

TASKLIM	146
TASKLIMIT	146
technical support	4
tools for the administrator See Radia Adm Workstation	inistrator

trusted host environment59	9
tuning, kernel	5

U

UNIX
environment variables36
installation
Radia Configuration Server
GUI40
Silent
Radia Management Portal59
post-installation notes, Radia Configuration
Server
post-RCS installation notes53
system recommendations
UNIX kernel59
UNIX kernel tuning145
process management parameters146
semaphore parameters145
shared memory parameters146
UNIX system recommendations
Radia Configuration Server

W

Windows
installation
Radia Configuration Server
GUI
system recommendations
Windows Event ViewerSee Event Viewer
Windows Installer See Radia Extensions for Windows Installer
Windows system recommendations
Radia Configuration Server
Radia Management Portal 105

Ζ

zone.mk file	106
ZTASKEND	75, 121
verifying contents	121
ZTopTask	103

Index