HP OpenView Configuration Server Using Radia

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

HP OpenView Management Portal Using Radia

for the UNIX operating system
Software Version: 1.3

for the Windows operating system
Software Version: 2.1

Getting Started Guide

Legal Notices

Support

Please visit the HP OpenView support web site at:

http://www.hp.com/managementsoftware/support

This web site provides contact information and details about the products, services, and support that HP OpenView offers.

HP OpenView online software support provides customer self-solve capabilities. It provides a fast and efficient way to access interactive technical support tools needed to manage your business. As a valuable support customer, you can benefit by using the support site to:

- Search for knowledge documents of interest
- Submit enhancement requests online
- Download software patches
- Submit and track progress on support cases
- Manage a support contract
- Look up HP support contacts
- Review information about available services
- Enter discussions with other software customers
- Research and register for software training

Most of the support areas require that you register as an HP Passport user and log in. Many also require a support contract.

To find more information about access levels, go to:

http://www.hp.com/managementsoftware/access_level

To register for an HP Passport ID, go to:

http://www.managementsoftware.hp.com/passport-registration.html

Revisions

The version number on the title page of this document indicates the software version. The print date on the title page changes each time this document is updated.

You will receive updated or new editions if you subscribe to the appropriate product support service. Contact your HP sales representative for details.

Product Changes

HP OpenView Configuration Server Using Radia

AIX, HP-UX, Linux, Solaris, and Windows

For information on the Configuration Server, including changes that are applicable to this product release, refer to the *User's Guide for the HP OpenView Configuration Server Using Radia* (*Configuration Server Guide*).

HP OpenView Management Portal Using Radia

HP-UX, Solaris, and Windows

For information on the Management Portal, including changes that are applicable to this product release, refer to the *Installation and Configuration Guide for the HP OpenView Management Portal Using Radia* (*Management Portal Guide*).

Documentation Changes

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

Chapter 1:
Introduction

- Page 25, HP OpenView RadDBUtil Using Radia (RadDBUtil), this is a new section.

- Page 32, the section HP OpenView Management Solutions Radia 4.1 Patch Manager CD Components was revised.

- Page 33, the section HP OpenView Management Solutions Radia 4.1 OS Manager CD Components was revised.

- Page 33, HP OpenView Management Solutions Radia 4.1 Server Management CD Components, this is a new section.

- Page 35, HP OpenView Management Solutions Radia 4 Usage Manager CD Components, this is a new section.

- Page 36, HP OpenView Management Solutions Radia 3 PDA Client CD Components, this is a new section.

- Page 37, HP OpenView Management Solutions Radia 3 Mac OS X CD Components, this is a new section.

Chapter 2:
UNIX Installations

- Page 42, the table, Configuration Server and Management Portal Supported UNIX Platforms, was revised.

- Page 43, the table, Configuration Server Directories, was revised.

- Page 66, The Warning note has been updated.

Chapter 3:
Windows Installations

- Page 93, the table, Configuration Server Directories, was revised.

Contents

1 Introduction

At the end of this chapter, you will:

- Be familiar with the components of the HP OpenView Using Radia product suite.

- Know which CD-ROM in the HP OpenView Using Radia media kit contains the installation files for each HP OpenView Using Radia component.

- Have a high-level understanding of the function of the various HP OpenView Using Radia components.

About HP OpenView Using Radia

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

Overview of this Guide

This version of the Getting Started Guide for the HP OpenView Configuration Server and Management Portal Using Radia (Getting Started Guide) is designed in such a way that an administrator of HP OpenView Using Radia can use it to quickly become familiar with:

- The organization of the HP OpenView Using Radia installation media, and
- The logical grouping and functionality of all the HP OpenView Using Radia components.

This guide also documents the installation of the principal HP OpenView Using Radia infrastructure components:

- HP OpenView Configuration Server Using Radia (Configuration Server) and
- HP OpenView Management Portal Using Radia (Management Portal).

These installations enable HP OpenView Using Radia administrators to quickly set up and begin using an HP OpenView Using Radia environment. Additionally, the library of HP OpenView Using Radia publications can be installed so that it is available to assist in the installations of additional HP OpenView Using Radia components—in accordance with product licensing.

> For detailed information on other components of the HP OpenView Using Radia product suite, refer to the guides that are referenced later in this chapter.

Document Map

This section provides an overview of this book so that specific information about the Configuration Server and Management Portal can be easily located.

Table 1: Document Map

Chapter	Contents
Chapter 1: Introduction	The contents of this guide, including: *an overview of the HP OpenView Using Radia installation media*; and *an overview of the various HP OpenView Using Radia components*.
Chapter 2: UNIX Installations	Installing the Configuration Server and Management Portal in a UNIX environment, including: *system requirements*; *logging on to the Management Portal*; and *viewing an HP OpenView Using Radia publication via the Management Portal*.
Chapter 3: MVS Installation	Installing the Configuration Server and Management Portal in a Windows environment, including: *system requirements*; *logging on to the Management Portal*; and *viewing an HP OpenView Using Radia publication via the Management Portal*.
Chapter 4: MVS Installation	Installing the Configuration Server in an MVS environment, including: *preparing the Configuration Server installation files on a Windows machine*; and *transferring the files to the MVS mainframe*.
Appendix A: UNIX Kernel Tuning	UNIX Kernel resource allowances in relation to the Configuration Server, including: *parameters on the different UNIX operating systems*; and *Configuration Server configuration based on concurrent tasks and cache management*.

HP OpenView Management Solutions Using Radia Supporting Documentation

This section presents a list of HP OpenView Management Solutions Using Radia publications that are associated with the HP OpenView Using Radia products that are detailed in this book. For a list of all manuals in the HP

OpenView Management Solutions Using Radia library, see Table 3 on page 19.

Table 2: HP OpenView Management Solutions Using Radia Documentation

Product	Publication
Configuration Server	*User's Guide for the HP OpenView Configuration Server Using Radia*
	Messages Guide for the HP OpenView Configuration Server Using Radia
	Database Reference Manual for the HP OpenView Configuration Server Using Radia
	REXX Programming Guide for the HP OpenView Application Manager and Configuration Server Using Radia
Management Portal	*Installation and Configuration Guide for the HP OpenView Management Portal Using Radia*

Installation Media

The installation media for the HP OpenView Management Solutions Using Radia components are located on CD-ROMs that are organized by HP OpenView Using Radia product type, and which contain all of the products that are needed to set up an infrastructure that is managed by HP OpenView Using Radia. The CD-ROM designations are:

- HP OpenView Management Solutions Radia 4.1 Applications

- HP OpenView Management Solutions Radia 4.1 Configuration Server

- HP OpenView Management Solutions Radia 4.1 Documentation

- HP OpenView Management Solutions Radia 4.1 Infrastructure

- HP OpenView Management Solutions Radia 4.1 OS Manager 2.0 using Radia

- HP OpenView Management Solutions Radia 4.1 Patch Manager 2.1 using Radia

- HP OpenView Management Solutions Radia 4.1 Server Management

- HP OpenView Management Solutions Radia 4 Usage Manager 2.1 using Radia

- HP OpenView Management Solutions Radia 3 Mac OSX Client

- HP OpenView Management Solutions Radia 3 PDA Client

> Before installing HP OpenView Management Solutions Using Radia, check the HP web site for updated product release information.
>
> Also, review any `readme` files that are included on the CD-ROMs—they might contain important product information.
>
> The installation media might contain products for which you are not licensed. Install only those products for which you purchased a license.

HP OpenView Management Solutions Radia 4.1 Documentation CD

The HP OpenView Management Solutions Radia 4.1 Documentation CD-ROM contains an extensive list of HP OpenView Using Radia documentation in *Portable Document Format* (pdf). This library can be installed into the Management Portal, and then viewed with the Adobe Acrobat Reader.

Table 3 below lists the HP OpenView Using Radia publications that are on the HP OpenView Management Solutions Radia 4.1 Documentation CD.

Table 3: HP OpenView Management Solutions Using Radia Library

Application Management Profiles Guide for HP OpenView Server Management Using Radia
Database Reference Manual for the HP OpenView Configuration Server Using Radia
Essentials Guide for HP OpenView Using Radia
Getting Started Guide for the HP OpenView Configuration Server and Management Portal Using Radia
Getting Started Guide for the HP OpenView Extensions for Windows Installer Using Radia
Installation and Configuration Guide for the HP OpenView Adapter Using Radia

Installation and Configuration Guide for the HP OpenView Adapter for SSL Using Radia

Installation and Configuration Guide for the HP OpenView Application Manager Using Radia for Macintosh

Installation and Configuration Guide for the HP OpenView Application Manager Using Radia for UNIX

Installation and Configuration Guide for the HP OpenView Application Manager Using Radia for Windows

Installation and Configuration Guide for the HP OpenView Configuration Analyzer Using Radia

Installation and Configuration Guide for the HP OpenView Distributed Configuration Server Using Radia

Installation and Configuration Guide for the HP OpenView Extensions for Windows Installer Using Radia

Installation and Configuration Guide for the HP OpenView Inventory Manager Using Radia for UNIX

Installation and Configuration Guide for the HP OpenView Inventory Manager Using Radia for Windows

Installation and Configuration Guide for the HP OpenView Knowledge Base Manager Using Radia

Installation and Configuration Guide for the HP OpenView Management Portal Using Radia for UNIX

Installation and Configuration Guide for the HP OpenView Management Portal Using Radia for Windows

Installation and Configuration Guide for the HP OpenView Messaging Server Using Radia

Installation and Configuration Guide for the HP OpenView Management Suite for PDAs Using Radia

Installation and Configuration Guide for the HP OpenView Multicast Server Using Radia

Installation and Configuration Guide for the HP OpenView Operating System Manager Using Radia for UNIX

Installation and Configuration Guide for the HP OpenView Operating System Manager Using Radia for Windows

Installation and Configuration Guide for the HP OpenView Operations Adapter Using Radia

Installation and Configuration Guide for the HP OpenView Patch Manager Using Radia

Installation and Configuration Guide for the HP OpenView Policy Server Using Radia

Installation and Configuration Guide for the HP OpenView Proxy Server Using Radia

Installation and Configuration Guide for the HP OpenView Publishing Adapter Using Radia

Installation and Configuration Guide for the HP OpenView Reporting Server Using Radia

Installation and Configuration Guide for the HP OpenView Software Manager Using Radia for Macintosh

Installation and Configuration Guide for the HP OpenView Software Manager Using Radia for UNIX

Installation and Configuration Guide for the HP OpenView Software Manager Using Radia for Windows

Installation and Configuration Guide for the HP OpenView Usage Manager Using Radia

Installation and Configuration Guide for Windows Terminal Server and Citrix Support for HP OpenView Server Management Using Radia

Messages Guide for the HP OpenView Configuration Server Using Radia

Messages and Codes Guide for the HP OpenView Management Suite for Desktops Using Radia

Publisher Guide for the HP OpenView Administrator Workstation Using Radia

REXX Programming Guide for the HP OpenView Application Manager and Configuration Server Using Radia

System Explorer Guide for the HP OpenView Administrator Workstation Using Radia

User's Guide for the Configuration Baseline Auditor for HP OpenView Server Management Using Radia

User's Guide for the Configuration File Management for HP OpenView Server Management Using Radia

User's Guide for the HP OpenView Configuration Server Using Radia

> ➤ The *Installation and Configuration Guide for the HP OpenView Application Manager Using Radia* (*Application Manager Guide*) and the *Installation and Configuration Guide for the HP OpenView Software Manager Using Radia* (*Software Manager Guide*) include information about the Publisher for the HP OpenView Administrator Workstation Using Radia (Publisher) and publishing HP OpenView Extensions for Windows Installer (Extensions for Windows Installer) applications.

These publications will help an HP OpenView Using 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 Management Solutions Radia 4.1 Configuration Server CD Components

This CD-ROM contains the installation files for the HP OpenView Management Solutions Using Radia components listed in Table 4 below.

Table 4: HP OpenView Management Solutions Radia 4.1 Configuration Server CD Components

Category	Component
Management Infrastructure	HP OpenView Administrator Workstation Using Radia
	HP OpenView Configuration Server Using Radia
Extended Infrastructure	HP OpenView Distributed Configuration Server Using Radia (DMA), version 4.6.13
Management Extensions	HP OpenView Extensions for Windows Installer Using Radia
Tools	RadDBUtil

The sections that follow offer further detail on the components that are on this CD.

HP OpenView Configuration Server Using Radia (Configuration Server)

The 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 Configuration Server. The Configuration Server distributes application packages based on the policies that are established by an administrator of HP OpenView Using Radia. For more information, refer to the *User's Guide for the HP OpenView Configuration Server Using Radia*.

HP OpenView Administrator Workstation Using Radia (Administrator Workstation)

The Administrator Workstation contains a set of tools (shown in Figure 1) for basic administrative functions. Use these tools to manage the Radia database, prepare applications, view HP OpenView Using Radia client objects, and customize a computing environment.
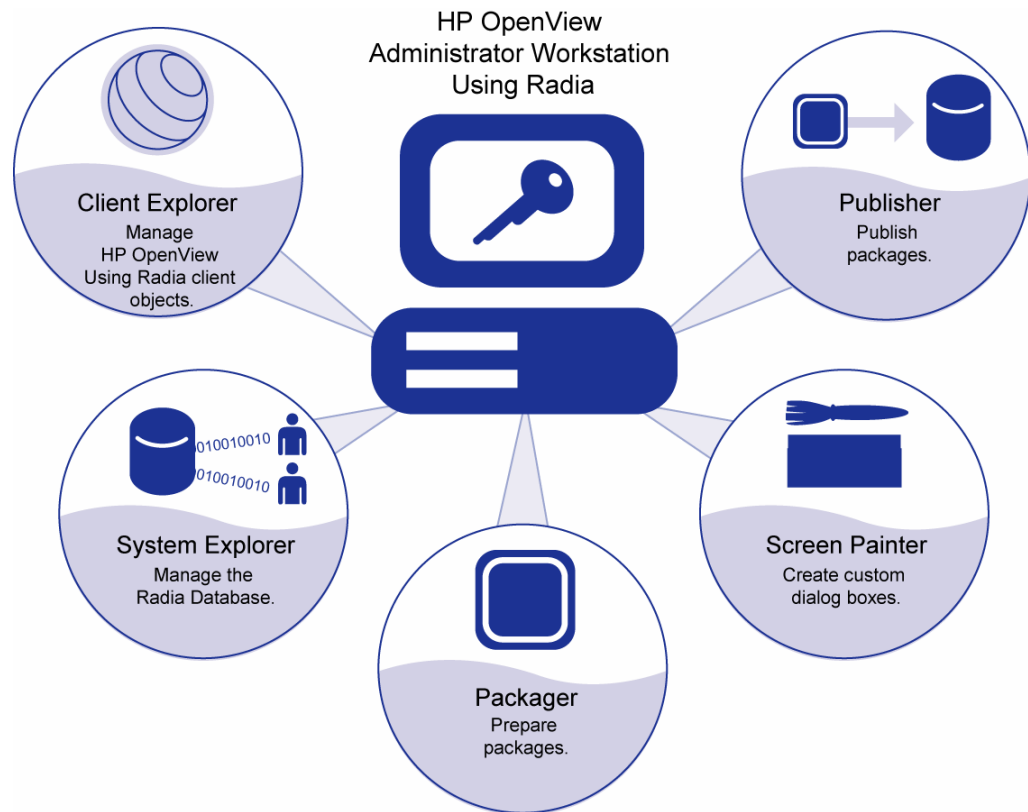
Figure 1: Tools of the HP OpenView Administrator Workstation Using Radia.

> For instructions on installing the Administrator Workstation, refer to the *Application Manager Guide*, the *Inventory Manager Guide*, or the *Software Manager Guide*.

The Administrator Workstation includes the following tools.

HP OpenView Packager Using Radia (Packager)

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

HP OpenView Publisher Using Radia (Publisher)

Use to publish packages to the Configuration Server. For more information, refer to the *Publisher Guide for the HP OpenView Administrator Workstation Using Radia*.

HP OpenView System Explorer Using Radia (System Explorer)

Use to create new users and groups of users, assign users to groups, and assign users and groups to application packages. Refer to the *System Explorer Guide for the HP OpenView Administrator Workstation Using Radia*.

HP OpenView Client Explorer Using Radia (Client Explorer)

Use to manipulate local HP OpenView Using Radia objects.

HP OpenView Screen Painter Using Radia (Screen Painter)

Use to create custom dialog boxes.

HP OpenView Extensions for Windows Installer Using Radia (Extensions for Windows Installer)

The Extensions for Windows Installer 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, refer to the *Installation and Configuration Guide for the HP OpenView Extensions for Windows Installer Using Radia*.

HP OpenView Distributed Configuration Server Using Radia (Distributed Configuration Server)

The Distributed Configuration Server is the new name of the former Distributed Manager Adapter. It allows multiple Configuration Servers to share information about policies and managed applications, and enables an administrator to synchronize multiple Radia databases. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Distributed Configuration Server Using Radia*.

HP OpenView RadDBUtil Using Radia (RadDBUtil)

RadDBUtil is the Radia database utility that manages Radia database updates (*imports*, *exports*, and *deletions*), as well as *activity logging*, *Configuration Server communications*, and *version queries*. For more information, refer to the document *Radia Database Utility: RadDBUtil for the HP OpenView Configuration Server Using Radia*.

HP OpenView Management Solutions Radia 4.1 Infrastructure CD Components

> ➤ The Management Portal, Proxy Server, Policy Server, and Inventory Manager are each composed of modules that reside in `IntegrationServer/modules`.
>
> Prior to the level 3.0 release of HP OpenView Using Radia, each of these components installed its own service in this directory. Starting with the common infrastructure-installation format of HP OpenView Using Radia version 3.0, these components use the same core Integration Server files, `nvdkit` and `httpd.tkd`, and run under the same process.
>
> Now, if more than one of these version-3.0 HP OpenView Using Radia products is installed, the most recent version of the Integration Server service will prevail. (This pertains only to Integration Server services running on port 3466, the default port of the Integration Server service.)

This CD-ROM contains the installation files for the HP OpenView Management Solutions Using Radia components listed in Table 5 below.

Table 5: HP OpenView Management Solutions Radia 4.1 Infrastructure CD Components

Category	Component
Management Extensions	HP OpenView Adapter for SSL Using Radia
	HP OpenView Policy Server Using Radia
	HP OpenView Publishing Adapter Using Radia
Extended Infrastructure	HP OpenView Distributed Configuration Server Using Radia, version 4.7.1
	HP OpenView Inventory Manager Server Using Radia
	HP OpenView Management Portal Using Radia
	HP OpenView Multicast Server Using Radia
	HP OpenView Proxy Server Using Radia
	HP OpenView Staging Server Using Radia
	HP OpenView Configuration Analyzer Using Radia
	HP OpenView Knowledge Base Manager Using Radia

Category	Component
	HP OpenView Reporting Server Using Radia
	HP OpenView Messaging Server Using Radia
Adapters	HP OpenView Adapter Using Radia
	HP OpenView Operations Adapter Using Radia

The components that are on this CD are described in further detail in the sections that follow.

HP OpenView Adapter for SSL (Adapter for SSL)

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

HP OpenView Policy Server Using Radia (Policy Server)

The Policy Server (also known as the Policy Manager) is a plug-in to the Integration Server. 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, refer to the *Installation and Configuration Guide for the HP OpenView Policy Server Using Radia*.

HP OpenView Publishing Adapter Using Radia (Publishing Adapter)

The Publishing Adapter is a command-line driven alternative to the Publisher (see HP OpenView Publisher Using Radia on page 24). It provides an automated, repeatable process, whereas the Publisher must be monitored from start to finish. Its focus is distributing updates rather than initial application packaging. The Publishing Adapter can easily be integrated with third-party configuration-management and packaging products. Refer to the *Installation and Configuration Guide for the HP OpenView Publishing Adapter Using Radia* for more information.

HP OpenView Distributed Configuration Server Using Radia (Distributed Configuration Server)

The Distributed Configuration Server is the new name of the former Distributed Manager Adapter. It allows multiple Configuration Servers to share information about policies and managed applications, and the enhanced functionality provides improved scalability, flexibility, and extensibility. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Distributed Configuration Server Using Radia*.

HP OpenView Inventory Manager Using Radia (Inventory Manager)

The Inventory Manager has two parts, *Server* and *Client*. The Inventory Manager Server enables centralized reporting and administration based on the results of discovery. The Inventory Manager Client discovers configuration information on remote computers, and reports the results to the Inventory Manager Server. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Inventory Manager Using Radia*.

HP OpenView Management Portal Using Radia (Management Portal)

The Management Portal is a web-based interface that can be used to manage an HP OpenView Using Radia environment. One of the more useful features is the ability to create a graphical representation of the HP OpenView Using Radia infrastructure. Refer to the *Installation and Configuration Guide for the HP OpenView Management Portal Using Radia* for more information.

HP OpenView Multicast Server Using Radia (Multicast Server)

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

HP OpenView Proxy Server Using Radia (Proxy Server)

Proxy Servers are beneficial when numerous client computers are requesting the same resources from the same location. Data can be cached on a Proxy

Server, thereby decreasing the demand on the Configuration Server, which in turn allows it to allocate more resources to other tasks. By placing Proxy Servers at strategic points in a network, the rate at which data is transferred increases. Refer to the *Installation and Configuration Guide for the HP OpenView Proxy Server Using Radia* for more information.

HP OpenView Staging Server Using Radia (Staging Server)

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

HP OpenView Configuration Analyzer Using Radia (Configuration Analyzer)

The 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, HP OpenView Using Radia administrators can profile applications, initiate application comparisons, and analyze applications. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Configuration Analyzer Using Radia*.

HP OpenView Knowledge Base Manager Using Radia (Knowledge Base Manager)

The Knowledge Base Manager is used with the Configuration Analyzer. It populates the 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, refer to the *Installation and Configuration Guide for the HP OpenView Knowledge Base Manager Using Radia*.

HP OpenView Reporting Server Using Radia (Reporting Server)

The web-based Reporting Server allows the querying of data in the Inventory Manager, Patch Manager, and Usage Manager databases and the creation of

detailed reports. It also provides a way to use HP OpenView Using Radia SQL data for reporting and overall environmental assessment. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Reporting Server Using Radia.*

HP OpenView Messaging Server Using Radia (Messaging Server)

The Messaging Server is a generic messaging service that can be used with several of the HP OpenView Using Radia infrastructure components. It continually monitors a pre-defined data queue, and dynamically routes data objects to external destinations. On a Configuration Server, the Messaging Server operates with the executable, QMSG, to transfer reporting data from clients to the appropriate external Integration Server, where it can then be mapped to the appropriate reporting database. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Messaging Server Using Radia*.

HP OpenView Adapter Using Radia (OpenView Adapter)

The OpenView Adapter is a *Smart Plug-In* (SPI) for an HP OpenView Using Radia infrastructure. It provides pre-configured applications, monitors, and actions for immediate use in managing the operational and administrative environment of HP OpenView Using Radia servers and clients. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Adapter Using Radia*.

HP OpenView Operations Adapter Using Radia (Operations Adapter)

The Operations Adapter integrates with *Network Node Manager* (NNM) for Inventory Manager access and *Simple Network Management Protocol* (SNMP) events. This integration uses SNMP in NNM, as well as the Inventory Manager database. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Operations Adapter Using Radia*.

HP OpenView Management Solutions Radia 4.1 Applications CD Components

This CD-ROM contains the installation files for the HP OpenView Management Solutions Using Radia components listed in Table 6 on page 31.

Table 6: HP OpenView Management Solutions Radia 4.1 Applications CD Components

Category	Component
Management Applications	HP OpenView Application Manager Using Radia
	HP OpenView Inventory Manager Using Radia
	HP OpenView Software Manager Using Radia
	HP OpenView Patch Manager Using Radia (Client component)
	HP OpenView Operating System Manager Using Radia (Client component)
	HP OpenView Server Management Using Radia (Client component)

The sections that follow provide descriptions of the components that are on this CD.

HP OpenView Application Manager Using Radia (Application Manager)

The Application Manager client allows an HP OpenView Using Radia administrator to control the distribution and maintenance of mandatory applications throughout the enterprise. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Application Manager Using Radia.*

HP OpenView Software Manager Using Radia (Software Manager)

The Software Manager allows end users to control the installation, removal, and updating of the optional applications that are available to them in a service list. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Software Manager Using Radia*.

> The Application Manager and Software Manager can be co-resident on a machine. In this situation, the HP OpenView Using Radia administrator still determines:
> - Whether an application is mandatory or optional, and
> - By whom the installation will be controlled.

HP OpenView Inventory Manager Using Radia (Inventory Manager)

The Inventory Manager client allows an administrator to collect hardware information and send it to the Inventory Manager *server* component for inventory reporting. Refer to the *Installation and Configuration Guide for the HP OpenView Inventory Manager Using Radia* for details.

> The previous three *applications* products (Application Manager, Software Manager, and Inventory Manager) comprise the **Client** line (herein, *Radia clients*) of HP OpenView Using Radia.

HP OpenView Management Solutions Radia 4.1 Patch Manager CD Components

This CD-ROM contains the installation files for the HP OpenView Management Solutions Using Radia components listed in Table 7 below.

Table 7: HP OpenView Management Solutions Radia 4.1 Patch Manager CD Components

Category	Component
Extended Infrastructure	HP OpenView Patch Manager Using Radia (Server component)

The section that follows provides a description of the component that is on this CD.

HP OpenView Patch Manager Using Radia (Patch Manager)

Patch Manager provides server provisioning and repurposing, and the migration of operating systems and applications. With it, an administrator can configure acquisition tools in order to automatically collect security patches from a vendor's web-based security-patch repository, as well as perform impact analysis and pilot testing in order to identify affected applications and devices. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Patch Manager Using Radia*.

HP OpenView Management Solutions Radia 4.1 OS Manager CD Components

This CD-ROM contains the installation files for the HP OpenView Management Solutions Using Radia components listed in Table 8 below.

Table 8: HP OpenView Management Solutions Radia 4.1 OS Manager CD Components

Category	Component
Extended Infrastructure	HP OpenView Operating System Manager Using Radia (Server component)

The section that follows provides a description of the component that is on this CD.

HP OpenView Operating System Manager Using Radia (OS Manager)

The OS Manager is comprised of client and server components. These components allow an administrator to provision operating systems on client devices. The OS Manager can deploy operating systems based on policy assignments; and prompt the user to choose an operating system based on a set of criteria. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Operating System Manager Using Radia*.

HP OpenView Management Solutions Radia 4.1 Server Management CD Components

This CD-ROM contains the installation files for the HP OpenView Management Solutions Using Radia components listed in Table 9 below.

Table 9: HP OpenView Management Solutions Radia 4.1 Server Management CD Components

Category	Component
Server Management	HP OpenView Application Management Profiles Using Radia
	HP OpenView Configuration Baseline Auditor Using Radia

Category	Component
	HP OpenView Configuration File Management Using Radia
	HP OpenView Windows Terminal Server Using Radia

The sections that follow provide descriptions of the components that are on this CD.

HP OpenView Application Management Profiles Using Radia (Application Management Profiles)

The Application Management Profiles is a set of tools that is built on top of Application Manager to enable the deployment and management of complex software products. Application Management Profiles provides tools to analyze configuration control data for targeted products, deploy and configure software to targeted devices, and report on the success of the deployment. For more information, refer to the *Application Management Profiles Guide for HP OpenView Server Management Using Radia*.

HP OpenView Configuration Baseline Auditor Using Radia (Configuration Baseline Auditor)

The Configuration Baseline Auditor is a component that allows an administrator to define a logical group of resources (known as **subsystems**) and to collect configuration information about them. For more information, refer to the *User's Guide for the Configuration Baseline Auditor for HP OpenView Server Management Using Radia*.

HP OpenView Configuration File Management Using Radia (Configuration File Management)

The Configuration File Management is a tool that enables administrators to manage configuration-file changes and to automatically implement them. For more information, refer to the *User's Guide for the Configuration File Management for HP OpenView Server Management Using Radia*.

HP OpenView Windows Terminal Server and Citrix Support Using Radia (Windows Terminal Server)

Windows Terminal Server works with Windows Terminal Services, a thin-client server that is available on some Windows operating systems, and which moves the processing of applications off a user's desktop onto a centralized server. For more information, refer to the *Installation and Configuration Guide for Windows Terminal Server and Citrix Support for HP OpenView Server Management Using Radia*.

HP OpenView Management Solutions Radia 4 Usage Manager CD Components

This CD-ROM contains the installation files for the HP OpenView Management Solutions Using Radia components listed in Table 10.

Table 10: HP OpenView Management Solutions Radia 4 Usage Manager CD Components

Category	Component
Extended Infrastructure	HP OpenView Usage Manager Using Radia

The section that follows provides a description of the component that is on this CD.

HP OpenView Usage Manager Using Radia (Usage Manager)

The Usage Manager can assess patterns of application usage in an environment. This ability allows an administrator to ensure adherence to license agreements, re-provision licenses if needed, and monitor user productivity. Additionally, it can be used to enforce corporate standards by identifying non-standard software, and to view the actual use of application resources. For more information, refer to the *Installation and Configuration Guide for the HP OpenView Usage Manager Using Radia*.

HP OpenView Management Solutions Radia 3 PDA Client CD Components

This CD-ROM contains the installation files for the HP OpenView Management Solutions Using Radia components listed in Table 11 below.

Table 11: HP OpenView Management Solutions Radia 3 PDA Client CD Components

Category	Component
Management Applications	HP OpenView Management Suite for PDAs Using Radia Mobility Server
	HP OpenView Management Suite for PDAs Using Radia Mobile Management Publisher
	HP OpenView Application Manager Using Radia
	HP OpenView Inventory Manager Using Radia

The components that are on this CD are described below and in the section, HP OpenView Management Solutions Radia 4.1 Applications CD Components, starting on page 30.

HP OpenView Management Suite for PDAs Using Radia Mobility Server (Mobility Server)

The Mobility Server, a component of the Integration Server, acts as the server for mobile-device distribution activities. HP OpenView Using Radia components that support mobile devices include the Configuration Server, the Proxy Server, and the Inventory Manager. The Mobility Server is the interface between the mobile device and the Configuration Server—on the Configuration Server, it drives resolution for mobile devices. For more information, refer to the *Mobile Manager Guide for the HP OpenView Management Suite for PDAs Using Radia (Mobile Manager Guide)*.

HP OpenView Management Suite for PDAs Using Radia Mobile Management Publisher (Mobile Management Publisher)

The Mobile Management Publisher automates the publishing of mobile device resources to the Configuration Server. For more information, refer to the *Mobile Manager Guide for the HP OpenView Management Suite for PDAs Using Radia (Mobile Manager Guide)*.

HP OpenView Management Solutions Radia 3 Mac OS X CD Components

This CD-ROM contains the installation files for the HP OpenView Management Solutions Using Radia components listed in Table 12.

Table 12: HP OpenView Management Solutions Radia 3 Mac OS X CD Components

Category	Component
Management Applications	HP OpenView Application Manager Using Radia
	HP OpenView Software Manager Using Radia

The components that are on this CD are described in the section, HP OpenView Management Solutions Radia 4.1 Applications CD Components, starting on page 30.

HP OpenView Using Radia Implementation Overview

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

Once the Configuration Server and Management Portal are installed, additional HP OpenView Using Radia components can be installed—in accordance with license agreements. With the HP OpenView Using Radia infrastructure in place, all of the digital assets in the enterprise can be managed by HP OpenView Using Radia.

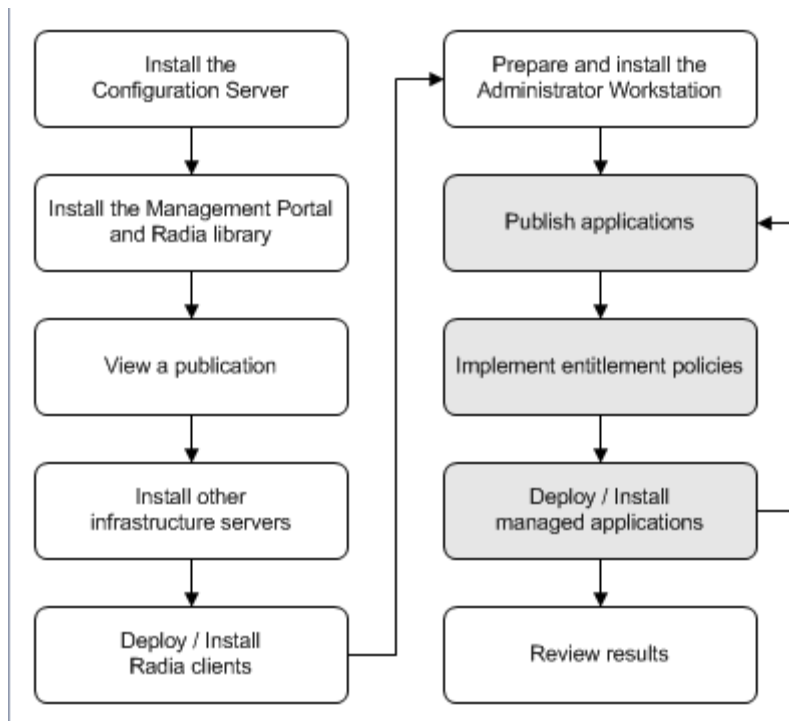Figure 2 provides an overview of a functional HP OpenView Using Radia implementation.

Figure 2: Creating and maintaining a functioning HP OpenView Using Radia environment.

Summary

- In order to install the HP OpenView Using Radia components, the proper license file is required.

- All HP OpenView Using Radia implementations must include the Configuration Server and the Management Portal.

- The three HP OpenView Using Radia **clients** are Software Manager, Application Manager, and Inventory Manager.

- The HP OpenView Using Radia library can be installed directly into the Management Portal; it should be reviewed for each HP OpenView Using Radia component installation.

2 UNIX Installations

At the end of this chapter, you will have:

- An understanding of the Configuration Server and Management Portal system requirements for a UNIX environment.

- Installed the Configuration Server (either *silently* or via a *graphical user-interface* [GUI]) in a UNIX environment.

- Installed the Management Portal in a UNIX environment.

- Installed the HP OpenView Using Radia publications on the Management Portal.

- Logged on to the Management Portal.

- Viewed an HP OpenView Using Radia publication via the Management Portal.

Chapter Overview

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

Table 13: Configuration Server and Management Portal Supported UNIX Platforms

Platform	Configuration Server	Management Portal
AIX, version 4.3 and greater	•	
HP-UX (PA-RISC 1.1 and 2.0), version 10.20 and greater, 800 MHz	•	•
Red Hat Enterprise Linux, ES Version 3.0	•	
Red Hat Enterprise SuSE Enterprise Server, Version 9.0	•	
Solaris, SPARC Server, version 2.7 and greater, 128 MB	•	•

In addition to the installations, sections in this chapter show how to log on to the Management Portal and, once there, how to view HP OpenView Using Radia publications.

Configuration Server Installation

This section provides instructions for installing the 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

database-configuration 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 Configuration Server

- **User Interface (GUI)**
  A graphical installation that requires an administrator of HP OpenView Using Radia to specify a variety of parameters in order to customize the HP OpenView Using 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 Configuration Server

Configuration Server Directories

The following table lists the directories that are automatically created during the Configuration Server installation.

Table 14: Configuration Server Directories

Directory	Contents
bin	The shell scripts that enable you to start, stop, clean up, and query the Configuration Server.
DB	The Radia database files.
exe	The Configuration Server methods and executable files.
internet	The Internet HTML and graphics files.
lib	The files for proper Configuration Server operation. **Note**: Do not modify or delete these files.
log	The Configuration Server log.

Directory	Contents
mail	The Configuration Server outgoing mail messages.
rexx	This directory is for storing customized REXX methods. **Note**: Its sub-folder, NOVADIGM, contains the default Configuration Server REXX methods.
rexx/NOVADIGM	The Hewlett-Packard REXX methods. **Note**: See the Caution that follows.
shell	This directory is empty.

> Altering the Configuration Server methods that are in the ConfigurationServer\rexx\NOVADIGM directory could adversely effect HP OpenView Using 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 UNIX

Table 15 below lists the amount of space that is required on the UNIX platforms for the installation and operation of the Configuration Server and its associated elements. It is recommended that these limits be allocated on the system on which the Configuration Server is being installed.

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

Table 15: Space Requirements for UNIX Installations of the Configuration Server

Component	All Platforms
Memory	512 MB
Swap	2 GB

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

> ➤ * The size of the database depends on the size and number of applications that the 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 Configuration Server installation:
  - Close all other applications, including anti-virus programs.
  - Stop all other tasks and operations that are executing.

UNIX Pre-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 recommended 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 Configuration Server must have:

- A `/tmp` directory under the `root`, and
- Write permissions for the directory.

HP-UX Notes

Subdirectories

There are two HP subdirectories in the `/configuration_server` directory of the HP OpenView Management Solutions Radia 4.1 Configuration Server CD-ROM; be sure to navigate to the correct subdirectory.

- 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 Management Solutions Radia 4.1 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 it 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 Configuration Server on HP-UX platforms, the CD-ROM drive must be mounted to display lowercase filenames, as in **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.

> For more information, consult your local UNIX systems administrator and UNIX *man* pages.
>
> After installing the 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 Configuration Server.

Table 16 presents examples of these environment variables being specified for the four platforms on which the Configuration Server can be installed.

> In Table 16, the *current working directory* is represented by **$XXXXX** and **$YYYYY**. Be sure to specify your current working directory, rather than these sample fillers.

Table 16: Environment Variables

Platform	Example
AIX	LIBPATH = **/lib:$XXXXX:$YYYYY:$LIBPATH**
	PATH = **/bin:/usr/bin:$XXXXX:$YYYYY:$PATH**
HP-UX	SHLIB_PATH = **/lib:$XXXXX:$YYYYY:$SHLIB_PATH**
	PATH = **/bin:/usr/bin:$XXXXX:$YYYYY:$PATH**
Linux	LD_LIBRARY_PATH = **/lib:$XXXXX:$YYYYY:$LD_LIBRARY_PATH**
	PATH = **/bin:/usr/bin:$XXXXX:$YYYYY:$PATH**
Solaris	LD_LIBRARY_PATH = **/lib:$XXXXX:$YYYYY:$LD_LIBRARY_PATH**
	PATH = **/bin:/usr/bin:$XXXXX:$YYYYY:$PATH**

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

The Setup-Configuration File

The default parameters for the Configuration Server installation are contained in the setup.cfg file (shown below). 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:\\Novadigm\\ConfigurationServer"
#Variable    DESTDB
```

```
          "C:\\Novadigm\\ConfigurationServer\\DB"
#Variable    LICENSEFILE "C:\\license.nvd"

# UNIX Set
Variable     MGRROOT      "/opt/Novadigm/ConfigurationServer"
Variable     DESTDB
         "/opt/Novadigm/ConfigurationServer/DB"
Variable     LICENSEFILE"~/.license.nvd"

Variable     MGRPORT      "3464"
Variable     LICEMAIL     ""
Variable     MGRID              "001"
Variable     MGRNAME      "RCS"

Variable     global_GUID000
Variable     enable_debug     0

Variable     uninstalldata_numlines  0
Variable     WinShortcuts     1
Variable     DOBACKUP   1
Variable     startrcs   1
```

Installing the Configuration Server

This section contains instructions for installing the Configuration Server.
Before starting this installation, be sure to review the section, UNIX Pre-
Installation Notes on page 46.

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

Silent Installation

> By default, this Silent installation will back-up an existing Radia
> database.
>
> To turn off this feature, open the setup.cfg file and change
> DOBACKUP to 0.

To run the Configuration Server 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 Management Solutions Radia 4.1 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 Configuration Server on a Solaris machine, navigate to: `cd /cdrom/cdrom0/management_infrastructure/configuration_server/solaris`. If installing the Configuration Server on an HP-UX platform, navigate to `cd /mnt/cdrom0/management_infrastructure /configuration_server/hprisc2`.

4   Type **`./nvdkit setup.exe -mode silent`** and press **Enter**.

The Configuration Server will be automatically installed to the locations, and with the pre-defined parameters, that are contained in the `setup.cfg` file.

GUI Installation

To run the Configuration Server 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 Management Solutions Radia 4.1 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 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.
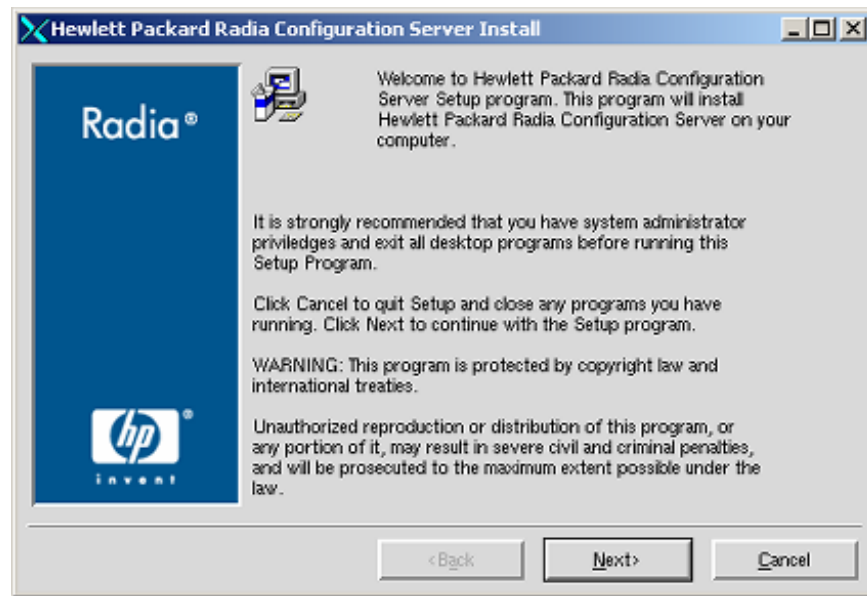
5 Click **Next**.

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

The HP Software License Agreement window opens.
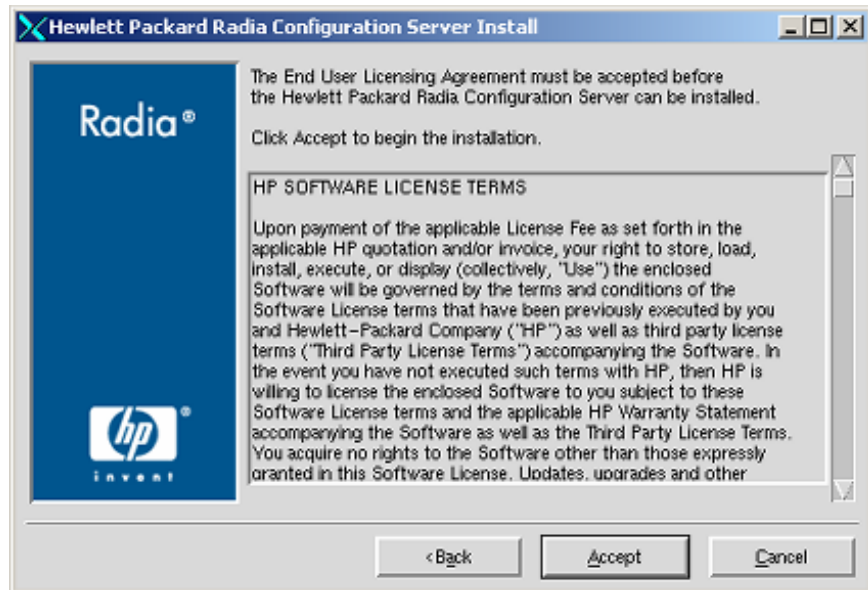
6   Click **Accept**.

> If **Accept** is not selected, the Configuration Server installation
> program will terminate.

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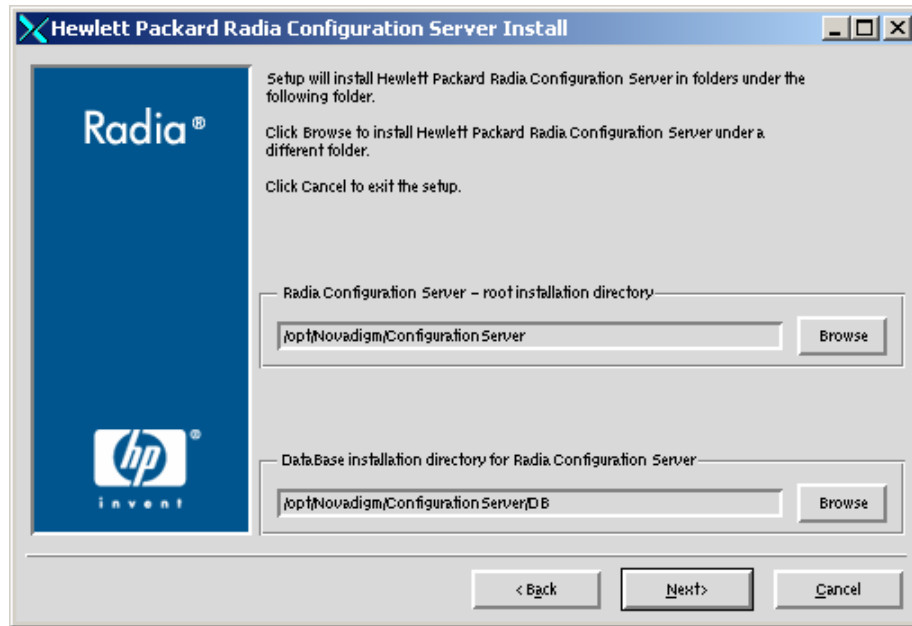
7   Accept the default *root* installation directory that is displayed, or click **Browse** to navigate to a different repository for the Configuration Server's *executable*, *log*, *Internet*, and *REXX* files.

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

> If a previous version of the 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.

8   Click **Next**.

If a previous version of the 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.

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.

> Depending on which platform the Configuration Server is being installed on, there will likely be a third choice: **OS Manager** (HP OpenView OS Manager Using Radia).

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.

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

10 Click **Next**.

The RCS post-Installation Start window opens.
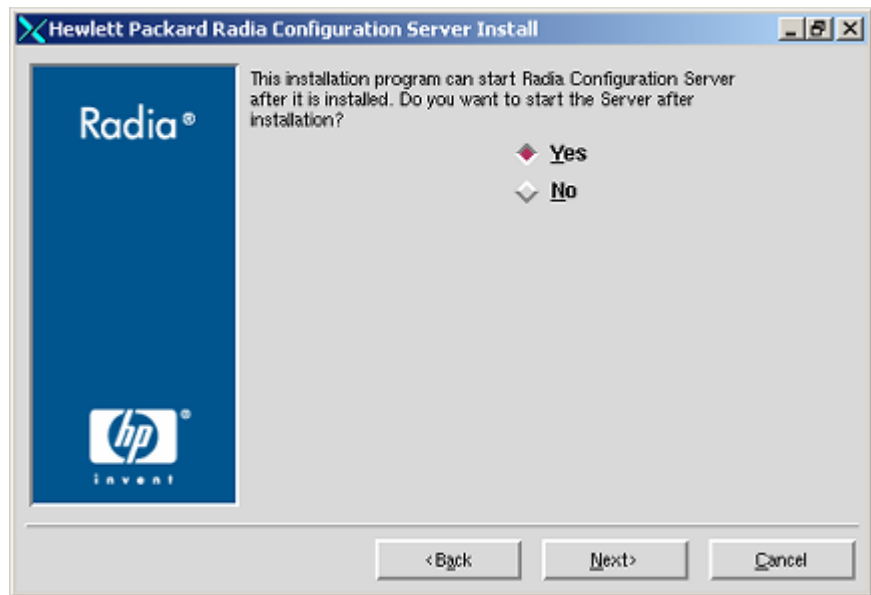
In this window:

— Accept the default (**Yes**) to have the Configuration Server automatically start when the installation completes, or

— Select **No** to avoid having the Configuration Server automatically start at the completion of the installation.

> See Starting, Stopping, Identifying, and Cleaning up the Configuration Server on page 65.

11 Click **Next**.

The Location of License File window opens.
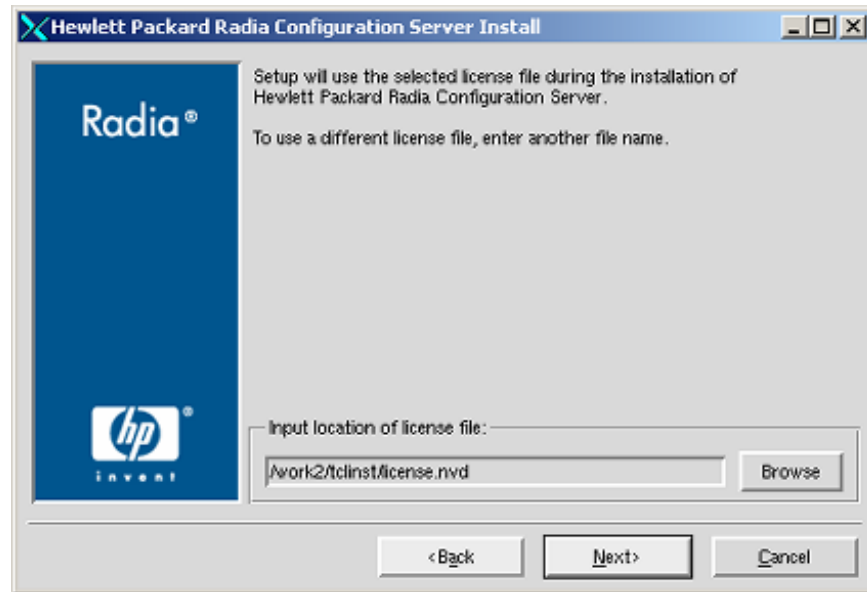
In this window:

— 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.

12 Click **Next**.

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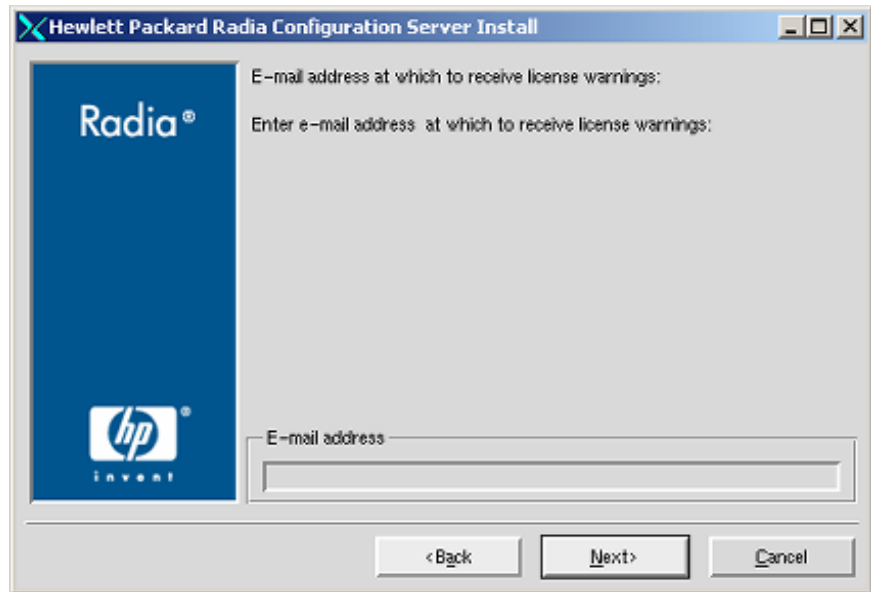
This window offers the option of specifying an e-mail address to which license-expiration notifications will be sent.

13 Click **Next**.

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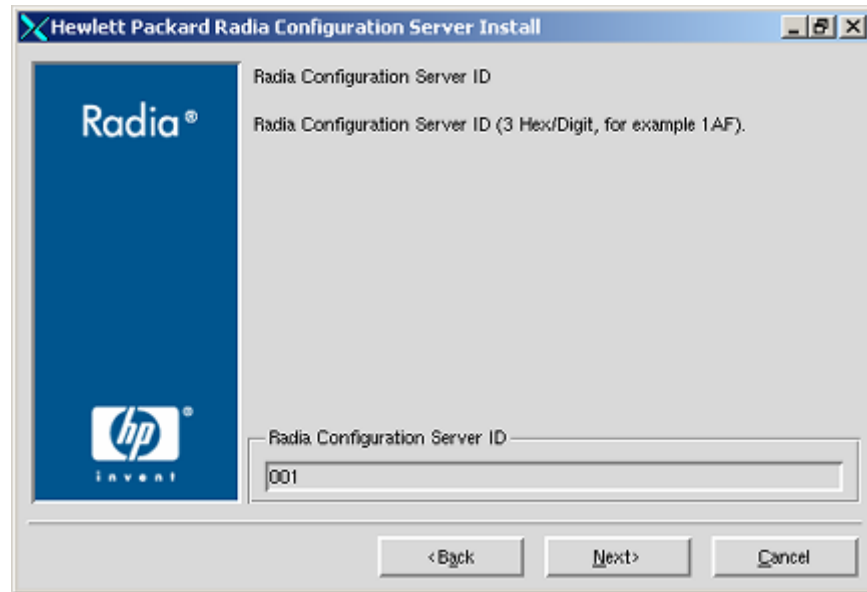
In this window, specify a three-character ID for the Configuration Server. Valid values are within the hexadecimal (0-9 and A-F) range of 001 to EFF. (This ID is used as a prefix in the Configuration Server's log file.)

This field is required.

14 Click **Next**.

The Radia Configuration Server Name window opens.
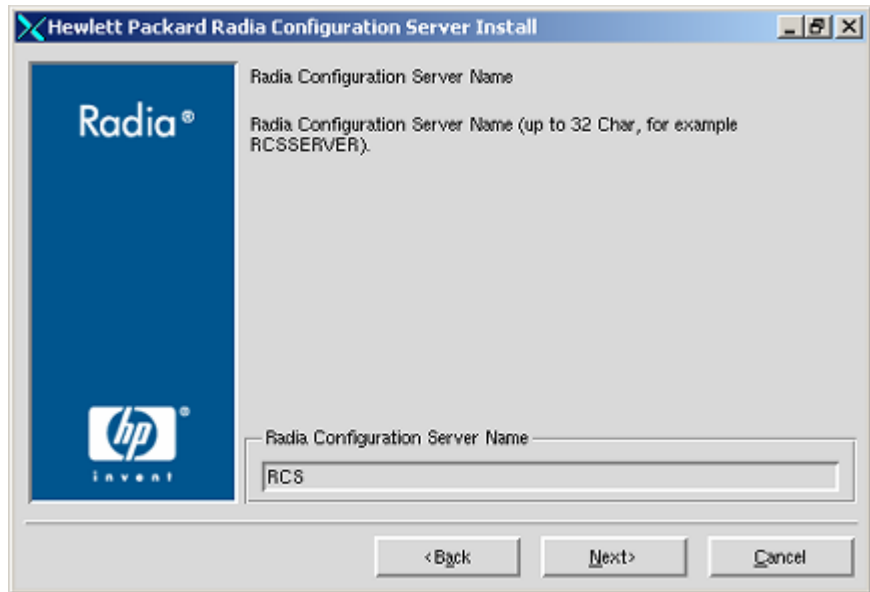
In this window, specify a name (maximum of 32 characters) for the Configuration Server.

This field is required.

15 Click **Next**.

The TCP/IP Port window opens.
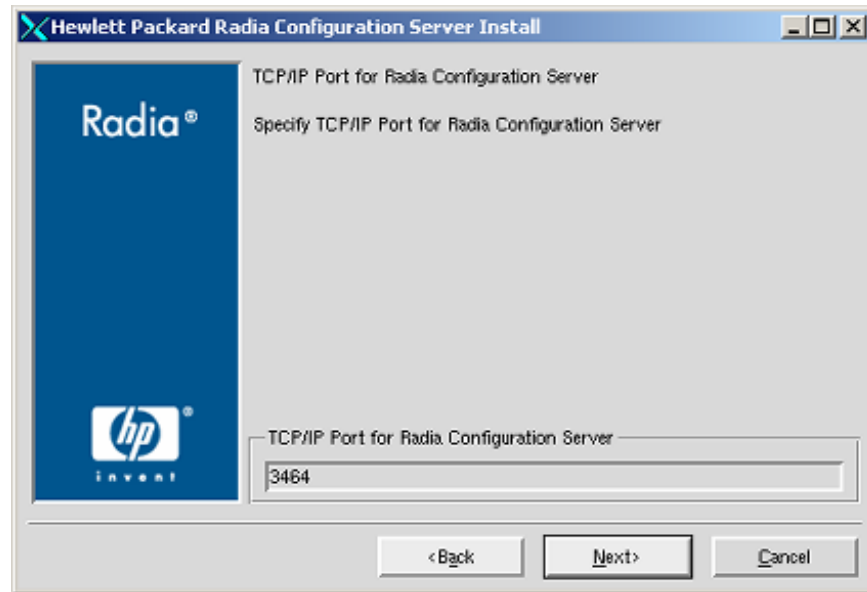
This window displays the communications port that the Configuration Server will use.

— Accept the default port (3464) that is specified in this window. (*Recommended*)

— Or specify a different port for Configuration Server communications.

16 Click **Next**.

The Zone Name for Radia Management Portal window opens.

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

This field is optional. However, if specified, adhere to the following guidelines.

— Specify a maximum of 64 characters.

— Use only letters (a-z and A-Z), numerals (0-9), and the space character.

— Do not use special characters, such as an underscores, commas, and periods.

17 Click **Next**.

The Summary of Installation Input window opens.
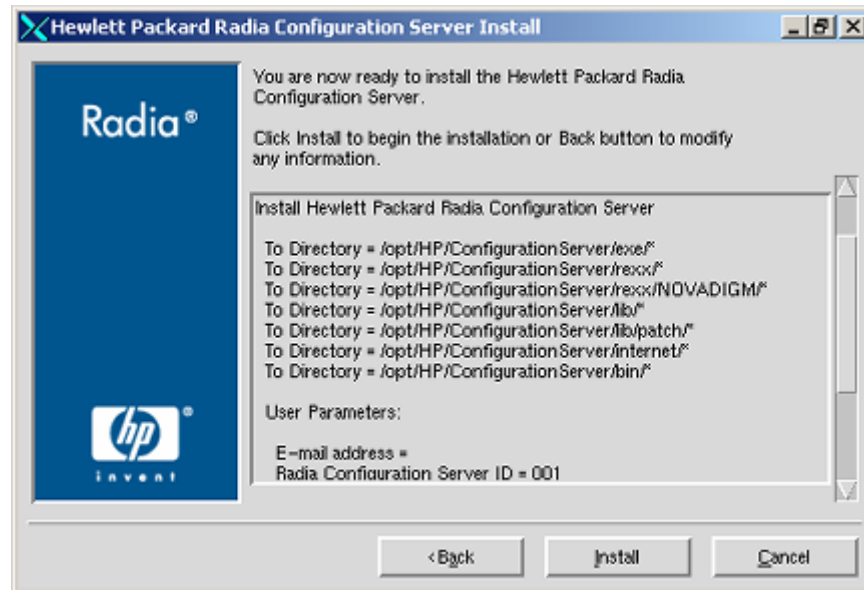
This window presents all the information that was specified during the Configuration Server installation. This is the final opportunity to review and modify the specified settings.

— 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.
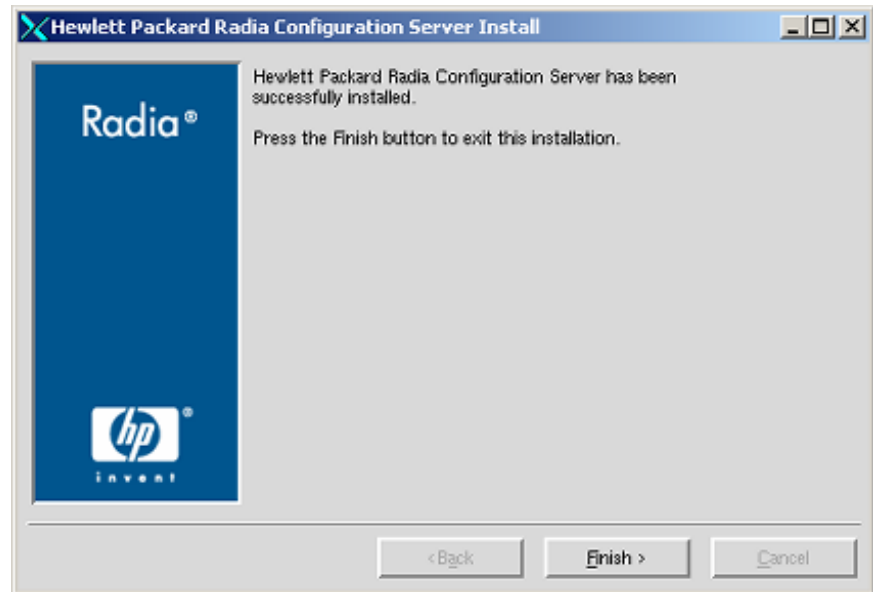
The Configuration Server for UNIX has been successfully installed.

UNIX Post-Installation Notes

- See Appendix A, UNIX Kernel Tuning, for important information about tuning kernel parameters in order to accommodate the Configuration Server's use of memory, communications, and *inter-process communications* (IPC).

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

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

To start the Configuration Server

1 Change to the Configuration Server `bin` directory by typing **cd /opt/Novadigm/ConfigurationServer/bin** and pressing **Enter**.

2 Type **./startmgr** and press **Enter**.

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

> 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 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

> If the Configuration Server 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 Configuration Server

1 To change to the Configuration Server `bin` directory, type **cd /opt/Novadigm/ConfigurationServer/bin** and press **Enter**.

2 Type **./killmgr** and press **Enter**.

The following shutdown message is displayed:

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

⚠ Running **./killmgr** explicitly calls the script **./clean_ipc**.
Neither of these scripts should be run as **root** because all IPC
resources used by **root** would be removed.

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

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

To identify the Configuration Server

▶ The Configuration Server must be running.

1 To change to the Configuration Server `bin` directory, type **cd
   /opt/Novadigm/ConfigurationServer/bin** and press **Enter**.

2 Type **./whatmgr** and press **Enter**.

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

To clean up the Configuration Server

1 To change to the Configuration Server **bin** directory, type **cd
   /opt/Novadigm/ConfigurationServer/bin** and press **Enter**.

2 Stop the 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 Configuration Server.

   ⚠ HP strongly advises *against*:
     • running **./clean_ipc** when the Configuration Server is
       running.
     • running **./clean_ipc** when logged on as **root**.

Management Portal Installation

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

> The Management Portal for UNIX installs a 1.*x* version that is not compatible with any 2.*x* version—which is available for Windows.
>
> HP recommends installing and using the 2.*x* version whenever possible.

System Recommendations for UNIX

Table 17 lists the system requirements for the installation and operation of the Management Portal. It is recommended that these requirements be strictly considered before installing the Management Portal on a UNIX system.

> These recommendations represent typical, minimum operating system estimates.

Table 17: System Recommendations for UNIX Installations of the Management Portal

Component	Recommendation
Operating System and CPU	Required: HP-UX Version 10.20 or above, PA RISC CPU Recommended: PA-RISC 1.1
	Required: Solaris Version 2.5.1 or above, SPARC CPU Recommended: Solaris Version 2.7 or greater, SPARC Server
Memory	1 GB
Virtual Memory	2 GB
Processor Speed	800 MHz
UNIX Kernel Tuning	Minimum: 500 MB Recommended: 1 GB Note: See Network Discovery Requirements on page 69.

> It is strongly recommended that the Management Portal 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, be sure to:

- Locate the license file that is associated with this product installation.
- Assemble the following CD-ROMs (these are used during a complete Management Portal installation):
  — HP OpenView Management Solutions Radia 4.1 Infrastructure
  — HP OpenView Management Solutions Radia 4.1 Applications
  — HP OpenView Management Solutions Radia 4.1 Documentation
- Review the README file that was delivered with the product.
- After installing the Management Portal, visit the HP Technical Support web site to check for a Service Pack.

UNIX Pre-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 recommended 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 that can be discovered by the 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). For optimum Management Portal performance, HP recommends that the maximum per-process 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 Management Portal, a machine must be on the same network as the Management Portal 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 Management Portal

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

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

> 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 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 Management Solutions Radia 4.1 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 Management Portal is being installed. For example, if installing the Management Portal on a Solaris machine, navigate to `cd /cdrom/cdrom0/extended _infrastructure/management_portal/solaris`.

4 Type **./install** and press **Enter**.

> The installation program uses the (temporary) directory `/tmp/rmp_install.`
>
> If the directory cannot be created or if there is insufficient disk space, an error appears and the installation will be cancelled.

The Radia Management Portal Install Welcome window opens.
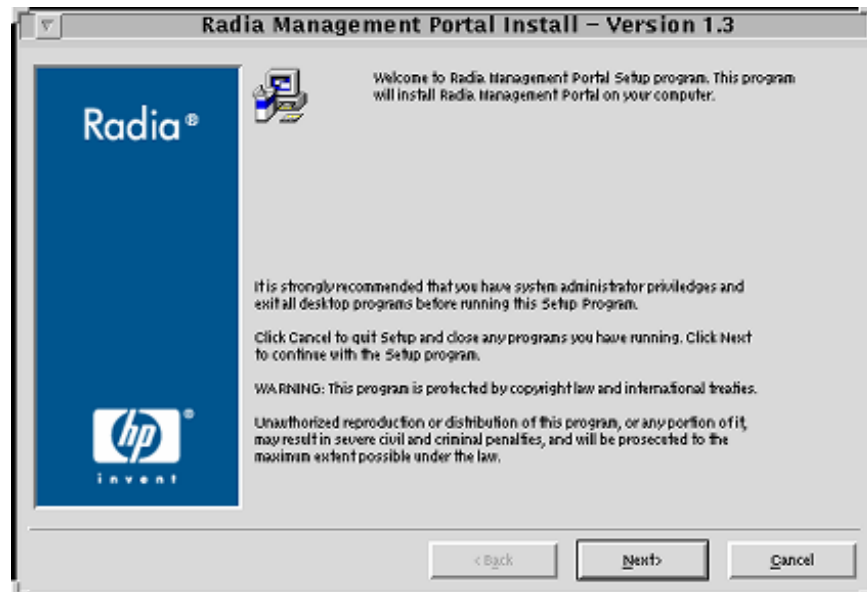
5   Click **Next**.

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

The License Agreement window opens.
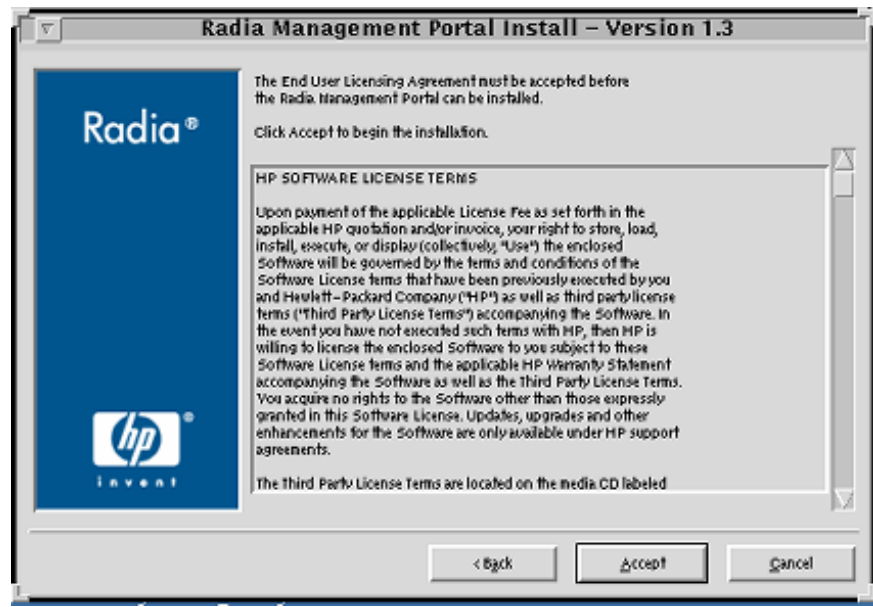
6 Click **Accept**.

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

The Radia Management Portal Location window opens.
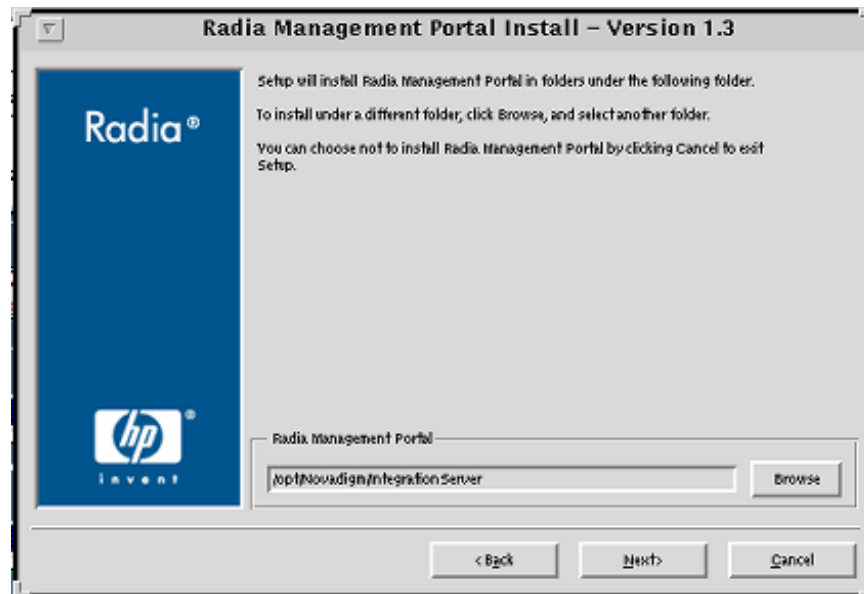
In this window:

— Accept the default **Radia Management Portal** installation directory that is displayed, or

— Click **Browse** to navigate to a different repository for the Management Portal's files.

7 Click **Next**.

The License File window opens.
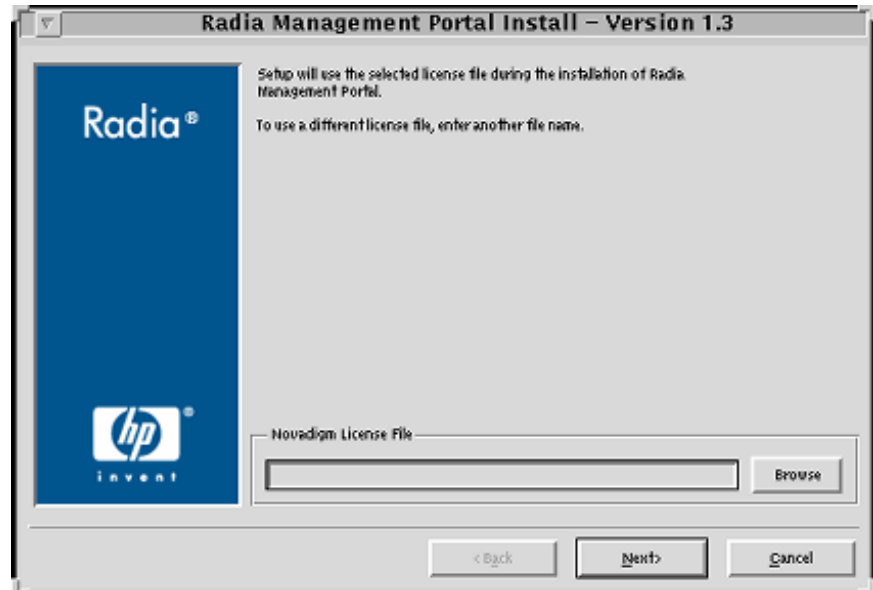
In this window:

— 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 Integration Server's /modules directory

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

8   Click **Next**.

The Enable Network Discovery window opens.
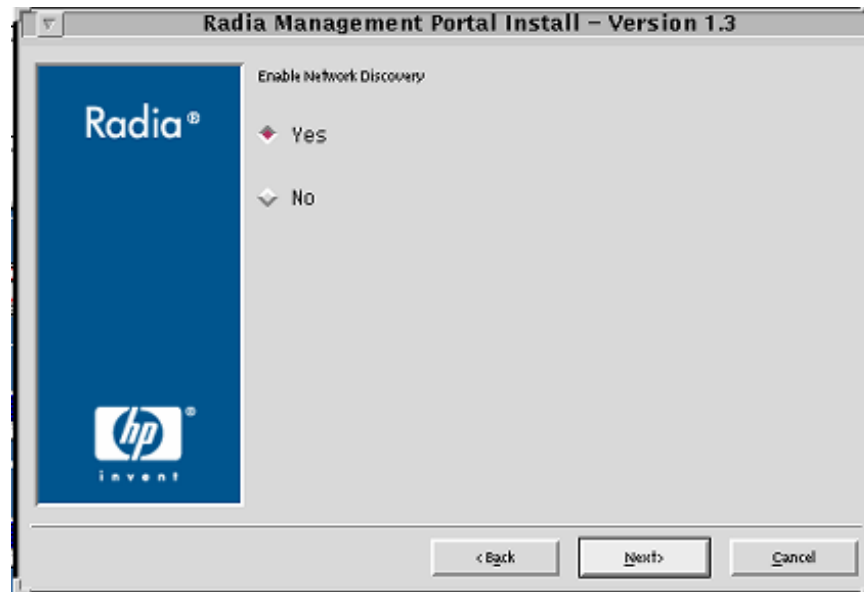
In this window:

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

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

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

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

9   Click **Next**.

The Network Discovery Method window opens.
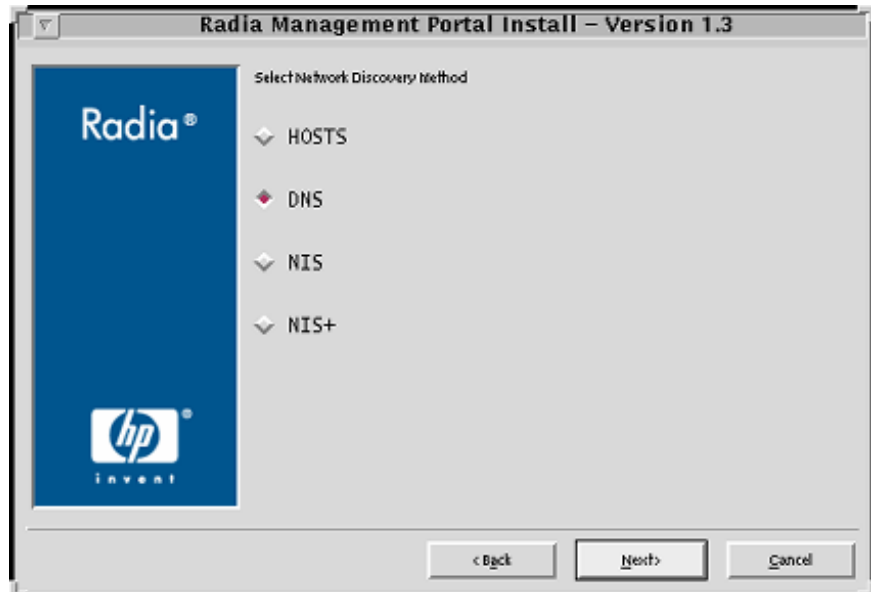
In this window:

— Accept the default Network Discovery Method, **DNS**, or

— Select a different network discovery method that more accurately represents your environment.

▶ 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.

10 Click **Next**.

The Network Discovery Interval window opens.
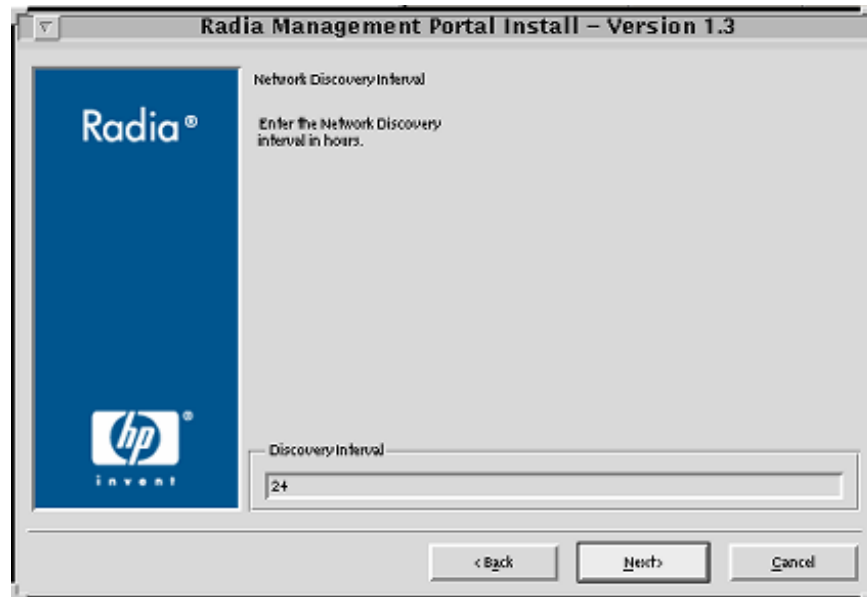
In this window, specify the length of time (in hours) for the network-discovery job to run:

— Accept the default **Discovery Interval** of 24 hours, or

— Specify a different length of time (valid values are 1 through 24)

11 Click **Next**.

The Discovery Delay between Nodes window opens.
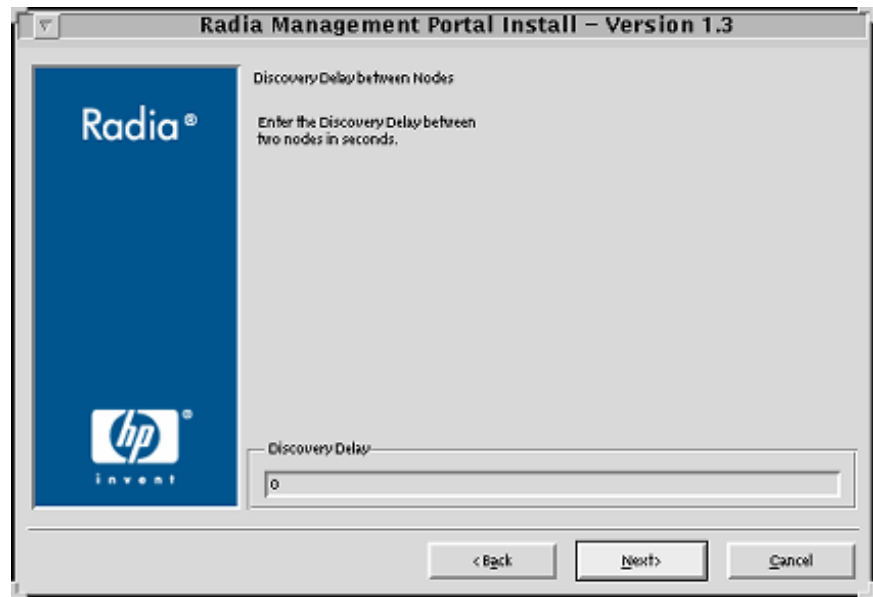
In this window, specify the delay (in seconds) between the discoveries of two nodes:

— Accept the default **Discovery Delay** of 0 seconds, or

— Specify a different delay interval

12 Click **Next**.

The Discovery Start Delay window opens.
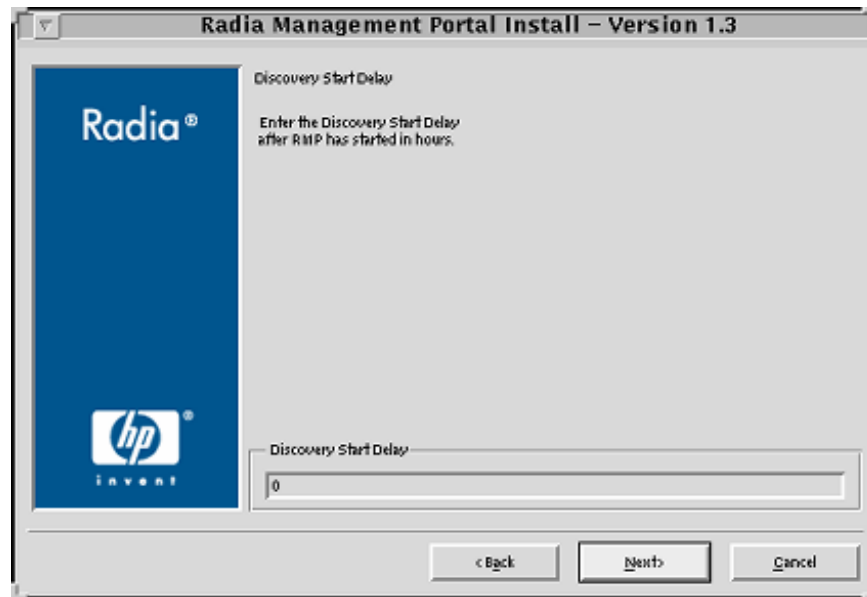
In this window, specify the interval (in hours) after the Management Portal has started before it starts network discovery:

— 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 Management Portal is started.

13 Click **Next**.

If DNS was selected as the discovery method:

— In the DNS Server IP Address window, specify the appropriate IP address and click **Next**.
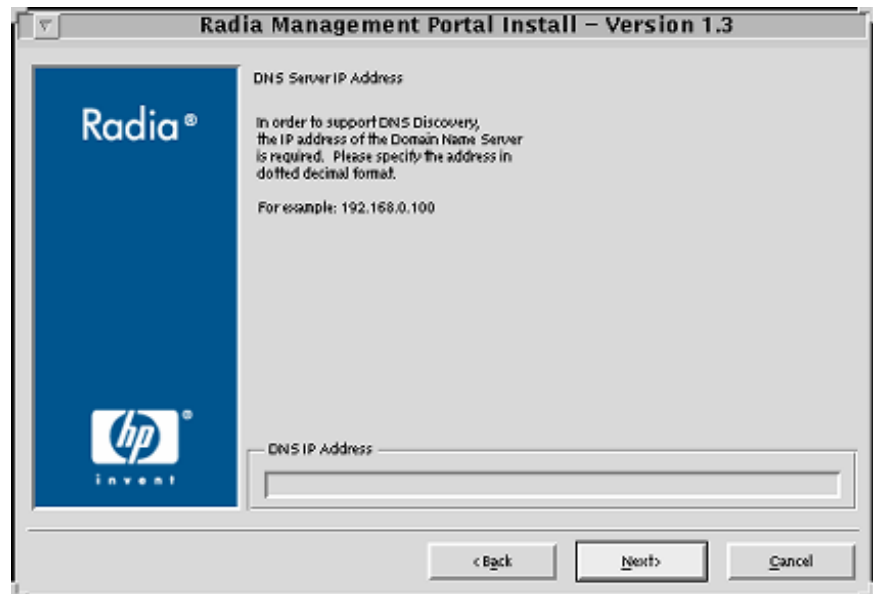
In the DNS Domain Zone window, specify the appropriate domain and click **Next**.
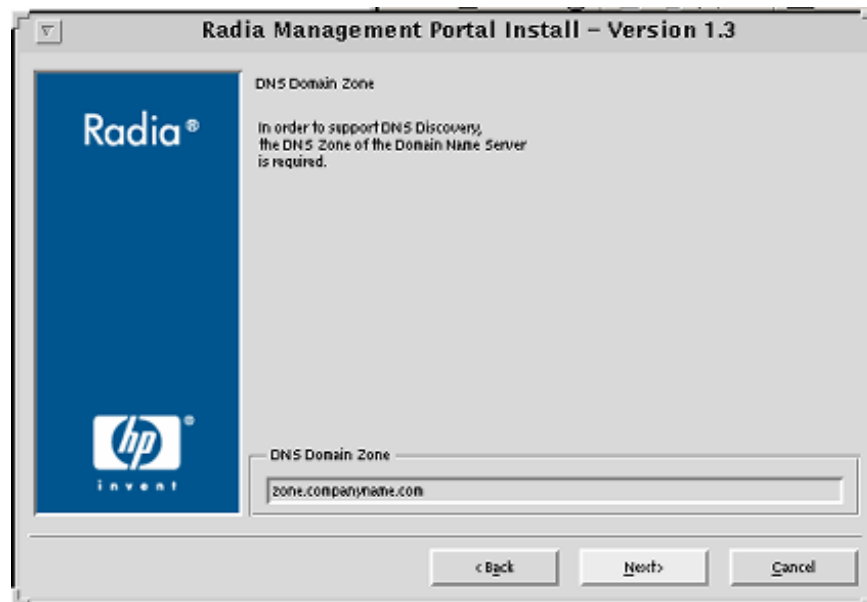
The Summary of Installation Input window opens.
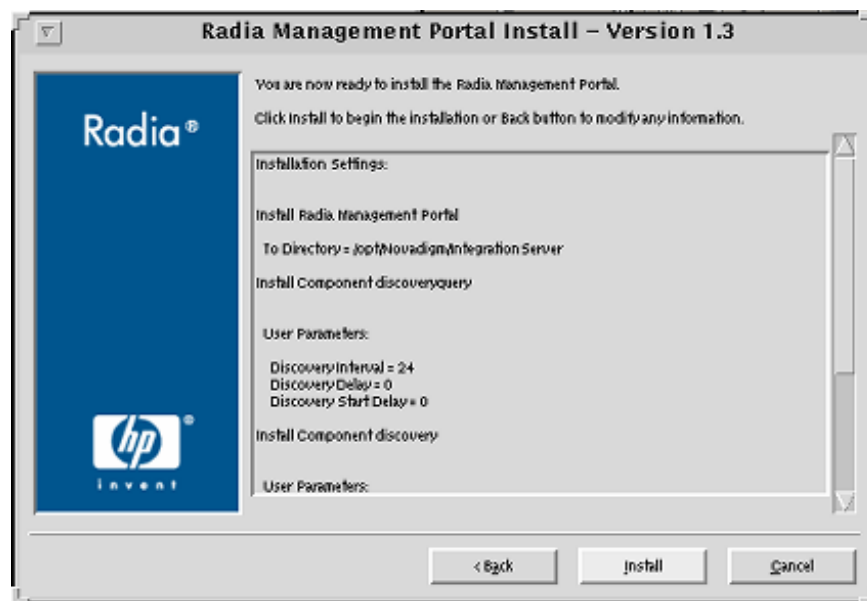
This window presents all the information that was specified during the Management Portal installation. This is the final opportunity to review and modify the specified settings.

— 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 HP OpenView Using Radia infrastructure components.

15 Click **Yes**.

The Installable Components window opens.
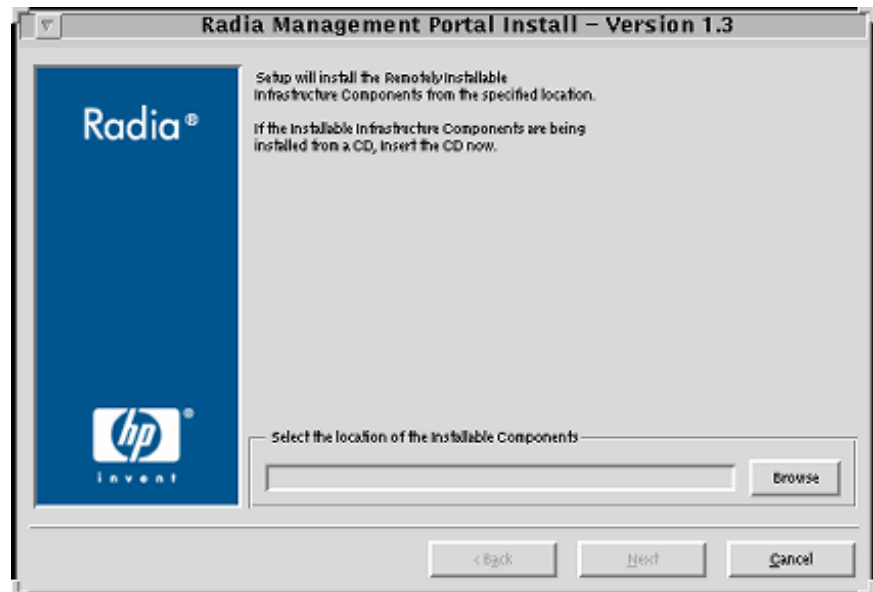
In this window, click **Browse** to navigate to the location on the HP OpenView Management Solutions Radia 4.1 Infrastructure CD-ROM in which the Remotely Installable Infrastructure Components are located.

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

16 Click **Next**.

There will be a prompt to copy the modules that will be used for remote HP OpenView Using Radia client installations.

17 Click **Yes**.

If necessary, remove the current CD-ROM and insert the HP OpenView Management Solutions Radia 4.1 Applications CD-ROM.

The Client Modules window opens.
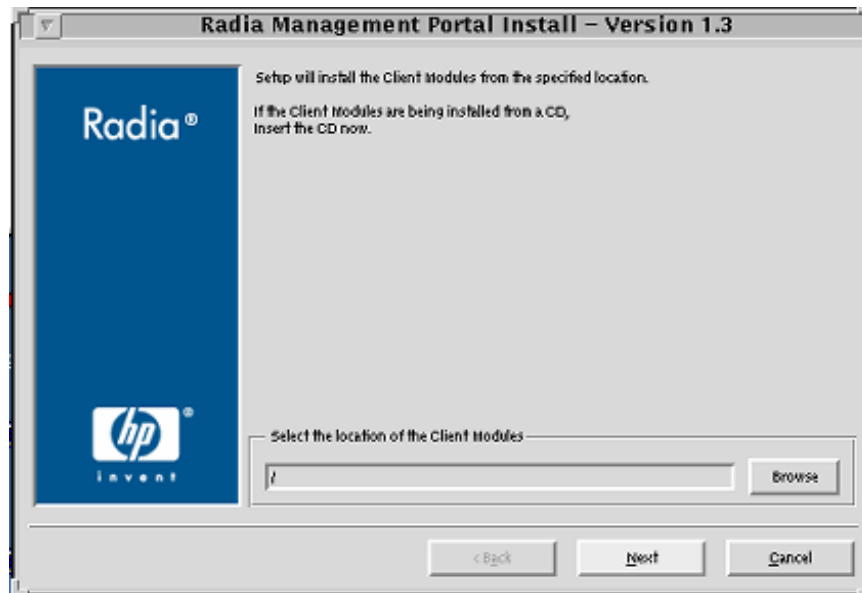
In this window, click **Browse** to navigate to the location on the CD-ROM in which the client modules are located.

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

18 Click **Next**.

The HP OpenView Using Radia client modules are copied to the Integration Server's `/media` directory.

There will be a prompt to install the HP OpenView Using Radia documentation.

19 Click **Yes**.

If necessary, remove the current CD-ROM and insert the HP OpenView Management Solutions Radia 4.1 Documentation CD-ROM.

The Radia Publications window opens.
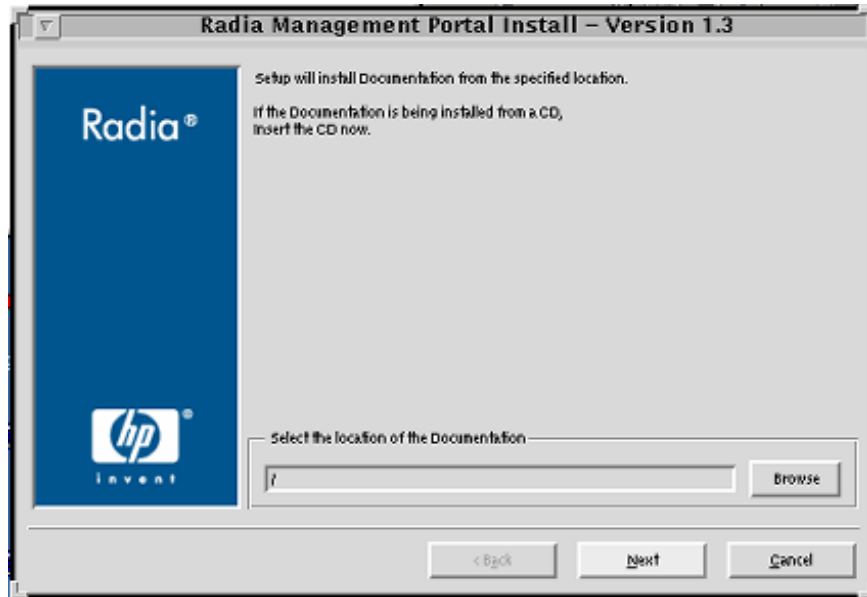
In this window, click **Browse** to navigate to the location on the CD-ROM in which the client modules are located.

20 Click **Next**.

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

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

IP Address for a Remote Management Portal

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

The following sections detail how to complete these tasks.

Verifying the Contents of ZTASKEND

> The information in this section is applicable only if your ZTASKEND method calls RADISH. If your ZTASKEND method calls QMSG, the contents do not need to be verified.
>
> For additional installation and configuration information, refer to the Management Portal Guide.

To verify ZTASKEND contains Management Portal-required lines

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

    The default is `/opt/HP/ConfigurationServer/rexx/NOVADIGM`.

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

    > *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 and close the file.

> Do not save `ZTASKEND` as a text file. Be sure to save it without an extension.

Configuring the EDMPROF File

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

Table 18 below lists the default settings of the MGR_RMP section, as well as the values that can be specified in order for the Configuration Server to use the remotely installed Management Portal.

Table 18: MGR_RMP Settings for UNIX

Settings	Default	Alternative 1	Alternative 2
HTTP_HOST	localhost	*host_name* of the Management Portal's host	*IP_address* of the Management Portal's host
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 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 value alternatives that are shown in Table 18 above.

4   Save the changes and close the `edmprof` file.

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

> To verify that the Configuration Server is using the specified Management Portal, you can either monitor the posts in the Configuration Server log or check the Radia Subscribers section of the Management Portal (here, each client shows the services that were deployed).

Starting and Stopping the Management Portal

To start the Management Portal

1   Go to the directory in which the Management Portal was installed and type **./nvdkit httpd.tkd**.

2   Verify that the Management Portal started.

To stop the Management Portal

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

1   Obtain the process ID (PID) for the 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 command, **kill <PID>**.

3   Verify that the Management Portal stopped.

Accessing and Logging on to the Management Portal

To access and log on to the Management Portal

1   Open a web browser and in the **Address** bar, type **http://*IP_address*:3466**.

    IP_address should be that of the Management Portal's host computer.

    The Radia Management Portal Login page opens.
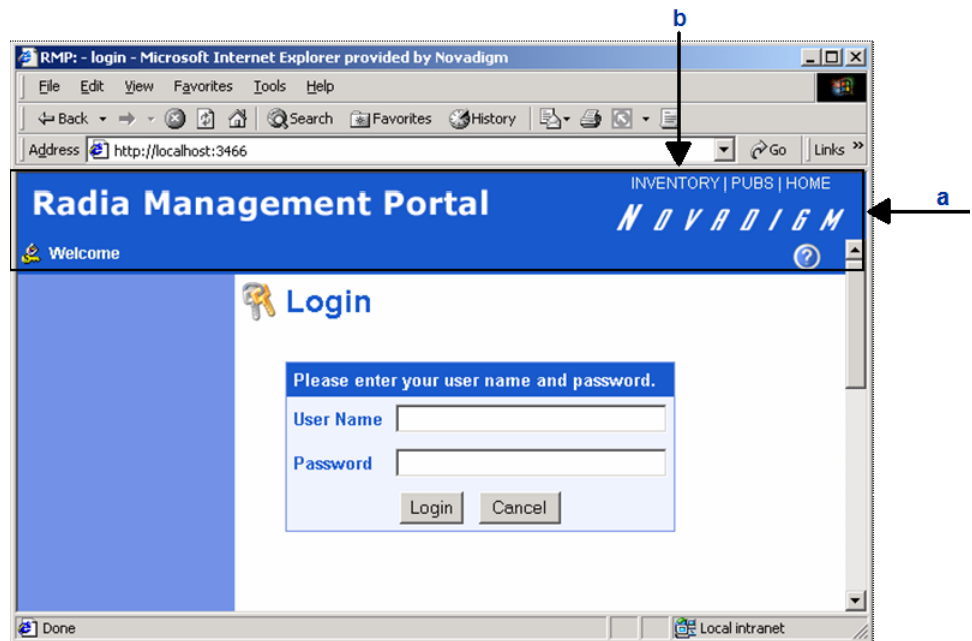
Figure 3: Login page for the Management Portal.

    a   Management Portal banner

    b   INVENTORY button

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 Management Portal. HP recommends 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**).

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 Management Portal, refer to the *Management Portal Guide*.

Accessing the HP OpenView Using Radia Publications

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

To access the HP OpenView Using Radia publications via the Management Portal

1   Access the Management Portal as instructed in the section, Accessing and Logging on to the Management Portal on page 87.

2   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 it.

The publication will open in its own window.

Summary

- The Configuration Server and Management Portal can easily be installed and incorporated into a UNIX environment.

- The Configuration Server and Management Portal can be started and stopped.

- The Management Portal can be accessed using varying levels of authority.

- The HP OpenView Using Radia library can be installed on, and viewed via, the Management Portal.

3 Windows Installations

At the end of this chapter, you will have:

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

Chapter Overview

This chapter details the installations of the Configuration Server (version 4.5.4) and Management Portal (version 2.1) for the following Windows platforms.

Table 19: Configuration Server and Management Portal Supported Windows Platforms

Platform	Configuration Server	Management Portal
NT 4.0 Server, with Service Pack 6	•	•
2000 Server, with Service Pack 1	•	•
XP Professional	•	•
2003 Server	•	•

In addition to the installations, sections in this chapter show how to log on to the Management Portal and, once there, how to view HP OpenView Using Radia publications.

Configuration Server Installation

This section provides instructions for installing the 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 database-configuration 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 Configuration Server

- **User Interface (GUI)**
  A graphical installation that requires an administrator of HP OpenView Using Radia to specify a variety of parameters in order to customize the HP OpenView Using 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 Configuration Server

Configuration Server Directories

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

Table 20: Configuration Server Directories

Directory	Contents
bin	The Configuration Server binary files and the `edmprof` file.
DB	The Radia database files.
internet	The Internet HTML and graphics files.
lib	The files for proper Configuration Server operation. **Note**: Do not modify or delete these files
log	The Configuration Server log.
mail	The Configuration Server outgoing mail messages
rexx	This directory is for storing customized REXX methods. **Note**: Its sub-folder, `NOVADIGM`, contains the default Configuration Server REXX methods.
rexx\NOVADIGM	The Hewlett-Packard REXX methods. **Note**: See the Caution that follows.

Directory	Contents
shell	The batch and application files, such as the un-install and query scripts, and the files that coincide with the Configuration Server options that are available from the **Start** menu.

Altering the Configuration Server methods that are in the `ConfigurationServer\rexx\NOVADIGM` directory could adversely effect HP OpenView Using 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 21 lists the space requirements for installing and operating the Configuration Server in a Windows environment.

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

Table 21: Space Requirements for Windows Installations of the Configuration Server

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

> ▶ * The size of the database depends on the size and number of applications that the 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 Configuration Server will not be installed properly.

- If a previous version of the Configuration Server is running, shut it down.

- If the SNMP process is running, stop it.

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

- Prior to starting the Configuration Server installation:

  — Close all other applications, including anti-virus programs.

  — Stop all other tasks and operations that are executing.

  > ▶ 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

- 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 recommended 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 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
Variable      MGRROOT    "C:\\Novadigm\\ConfigurationServer"
Variable      DESTDB
      "C:\\Novadigm\\ConfigurationServer\\DB"
Variable      LICENSEFILE"C:\\license.nvd"

# UNIX Set
#Variable     MGRROOT       "/opt/Novadigm/ConfigurationServer"
#Variable     DESTDB
      "/opt/Novadigm/ConfigurationServer/DB"
#Variable     LICENSEFILE "~/.license.nvd"

Variable      MGRPORT    "3464"
Variable      LICEMAIL   ""
Variable      MGRID            "001"
Variable      MGRNAME    "RCS"

Variable      global_GUID000
Variable      enable_debug     0

Variable      uninstalldata_numlines  0
Variable      WinShortcuts     1
Variable      DOBACKUP   1
Variable      startrcs   1
```

Installing the Configuration Server

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

Silent Installation

> 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 previous section) and change `DOBACKUP` to **0**.

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

To run the Configuration Server's Silent installation

1   Insert the HP OpenView Management Solutions Radia 4.1 Configuration Server CD-ROM into the CD-ROM drive.

2   Navigate to the directory that contains the Configuration Server installation program for the Windows platforms.

    ```
    cd SystemDrive:\management_infrastructure\
    configuration_server\win32
    ```

3   Type **nvdkit setup.exe -mode silent** and press **Enter**.

The Configuration Server will be automatically installed to the locations, and with the pre-defined parameters, that are contained in the `setup.cfg` file.

GUI Installation

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

To run the Configuration Server GUI installation

1   Insert the HP OpenView Management Solutions Radia 4.1 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.
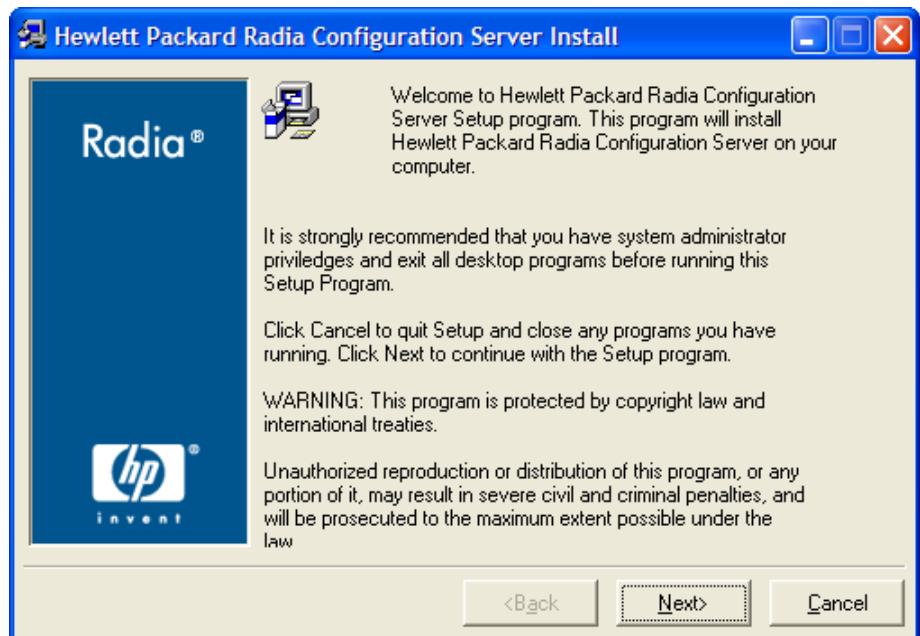
2 Click **Next**.

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

The HP Software License Agreement window opens.
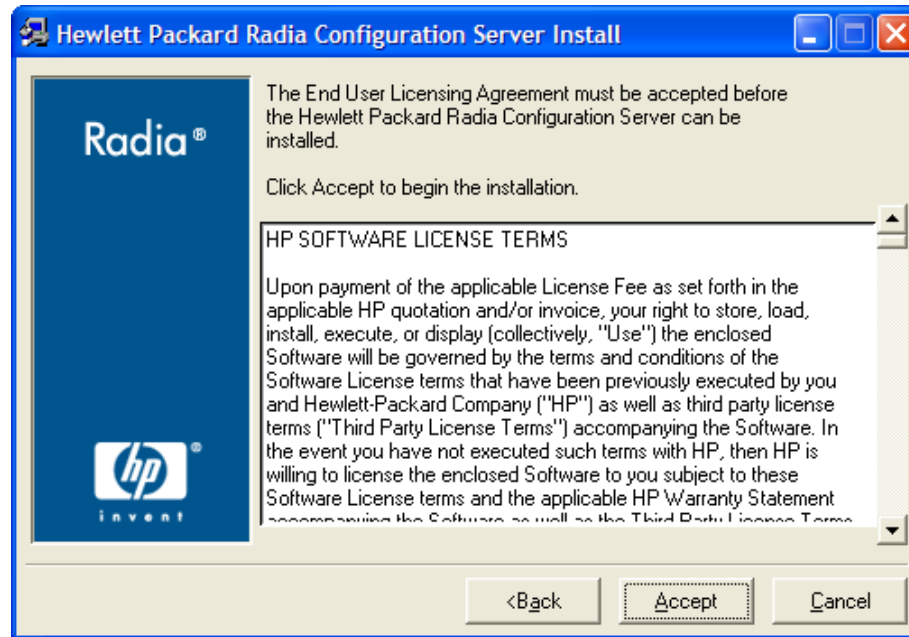
3   Click **Accept**.

> If **Accept** is not selected, the Configuration Server installation
> program will terminate.

The Directory Specifications window opens.
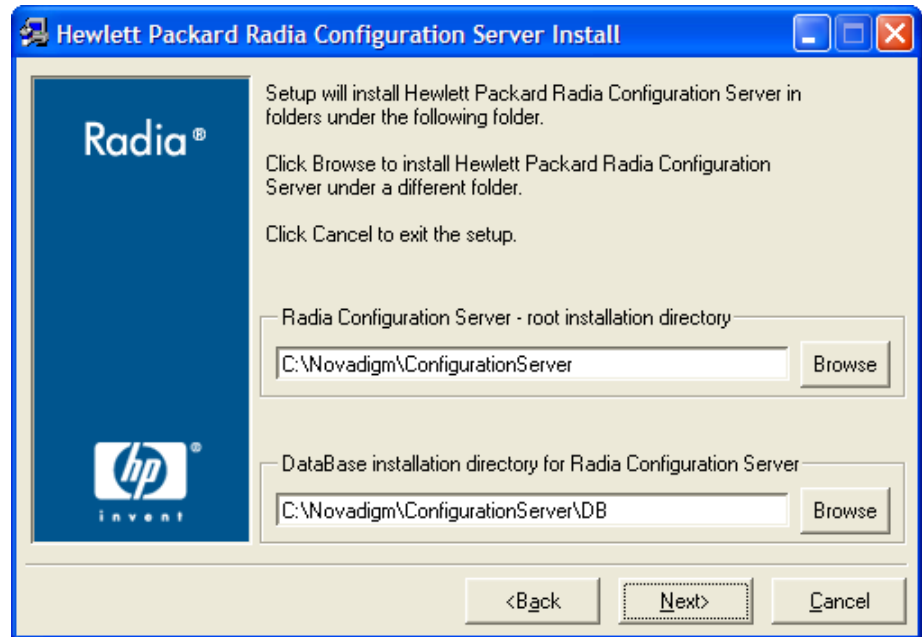
In this window:

— 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 Configuration Server *executable*, *log*, *Internet*, and *REXX* files, and the Radia database files.

> If a previous version of the 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**.

If a previous version of the 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.
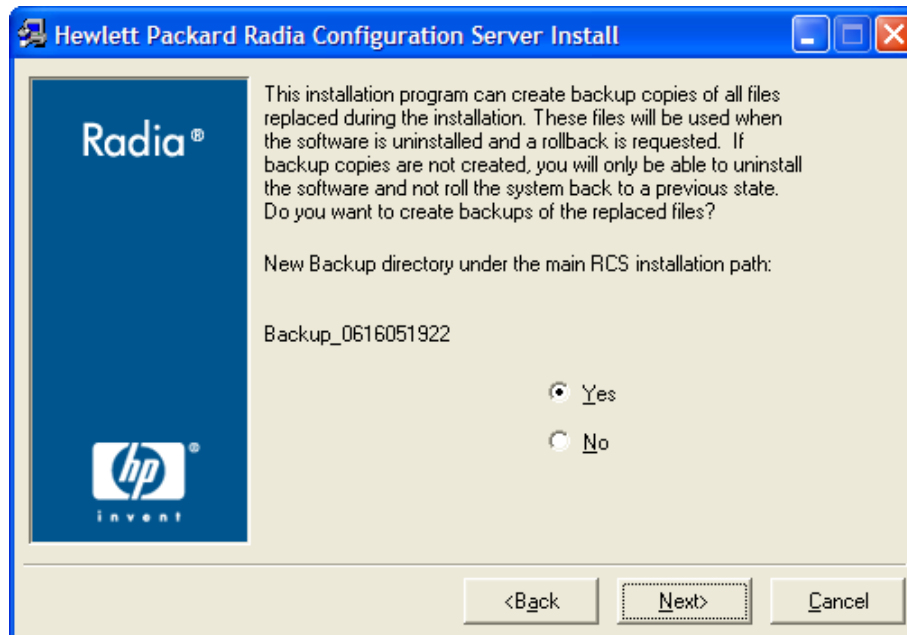
In this window:

— 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**.

The Select Components to Install window opens.
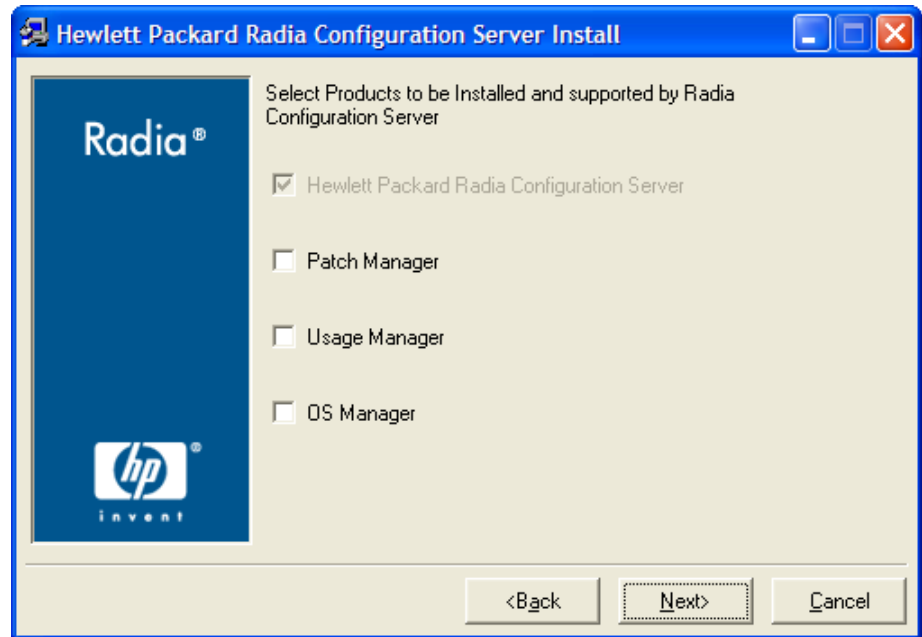
In this window:

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

▶ See The Configuration Server as an NT Service on page 112.

— Select **Patch Manager**, **Usage Manager**, and/or **OS Manager** to automatically include those product installations.

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

6   Click **Next**.

The Post-Installation Start window opens.
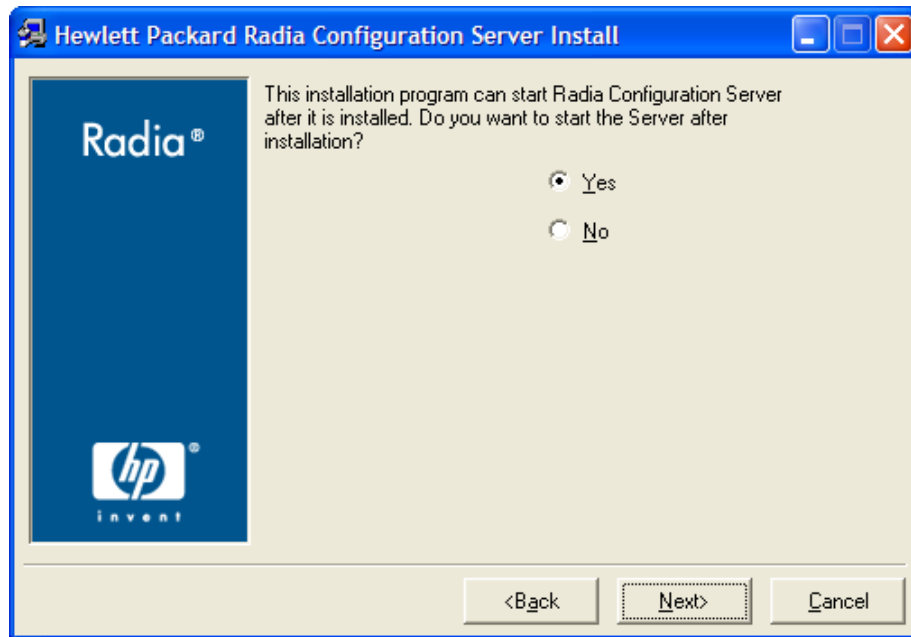
In this window:

— Accept the default (**Yes**) to have the Configuration Server automatically start at the conclusion of the installation.

— Select **No** to avoid the Configuration Server automatically starting after the installation.

7   Click **Next**.

The Location of License File window opens.
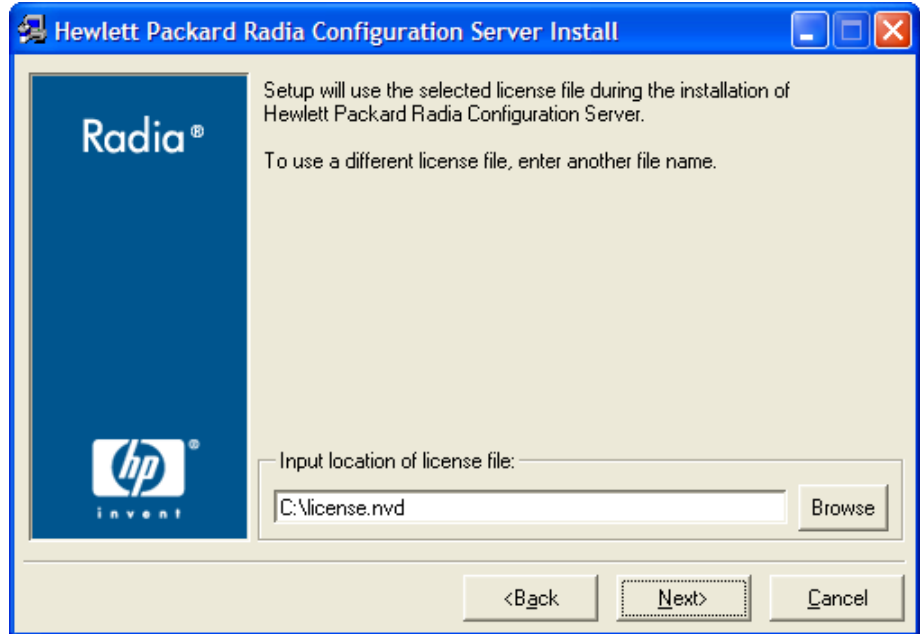
In this window:

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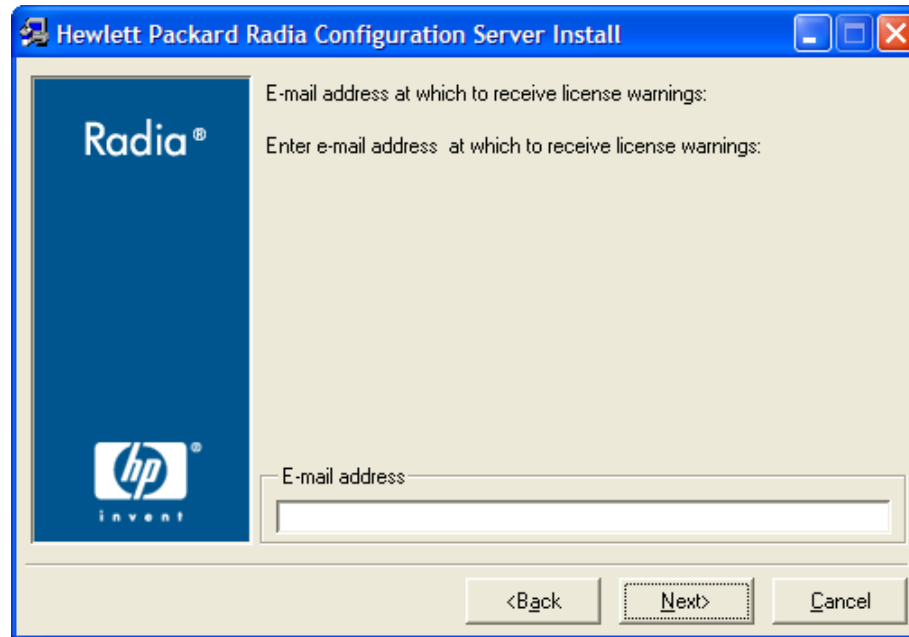
This window offers the option of specifying an e-mail address to which license-expiration notifications will be sent.

9 Click **Next**.

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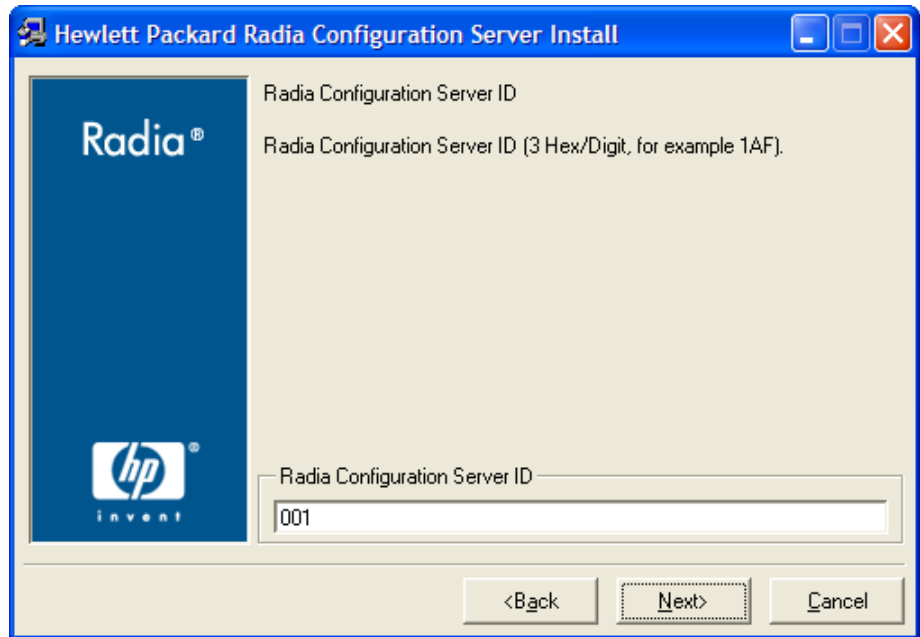
In this window, specify a three-character ID for the Configuration Server. Valid values are within the hexadecimal (0-9 and A-F) range of 001 to EFF. (This ID is used as a prefix in the Configuration Server log file.)

This field is required.

10 Click **Next**.

The Radia Configuration Server Name window opens.
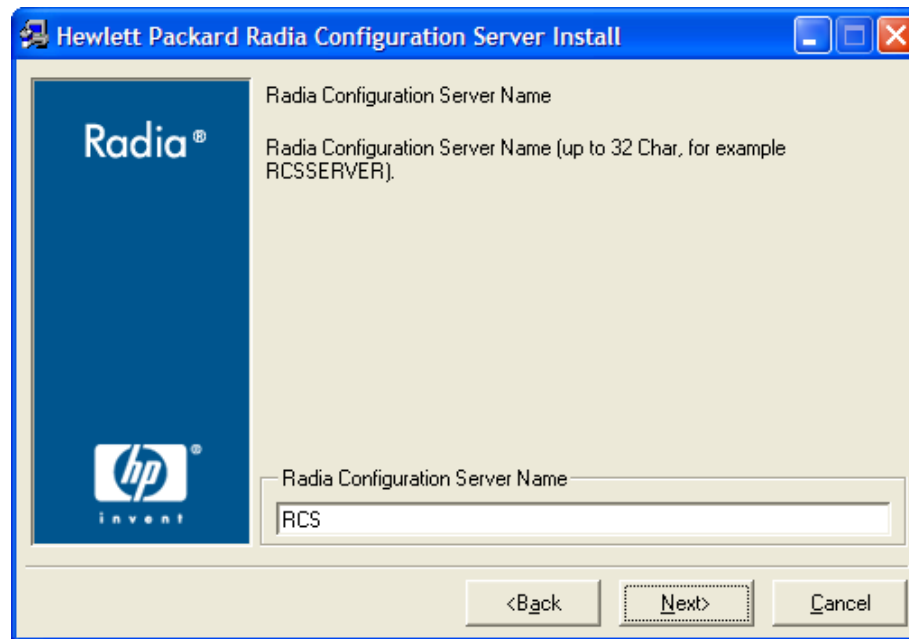
In this window, specify a name (32-character maximum) for the Configuration Server.

This field is required.

11 Click **Next**.

The TCP/IP Port window opens.
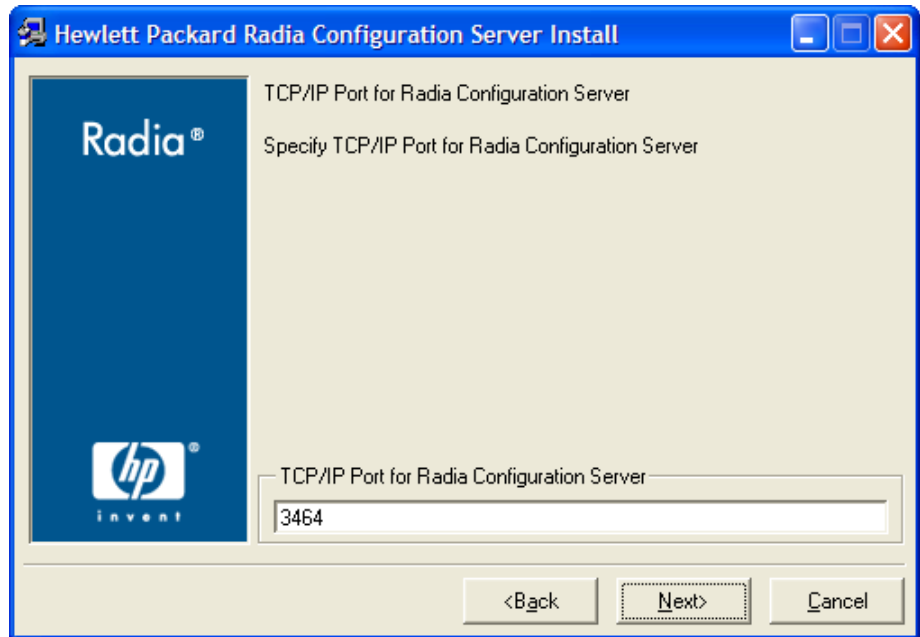
This window displays the communications port that the Configuration Server will use.

— Accept the default port (3464) that is specified in this window. (*Recommended*)

— Or specify a different port for Configuration Server communications.

12 Click **Next**.

The Zone Name for Radia Management Portal window opens.
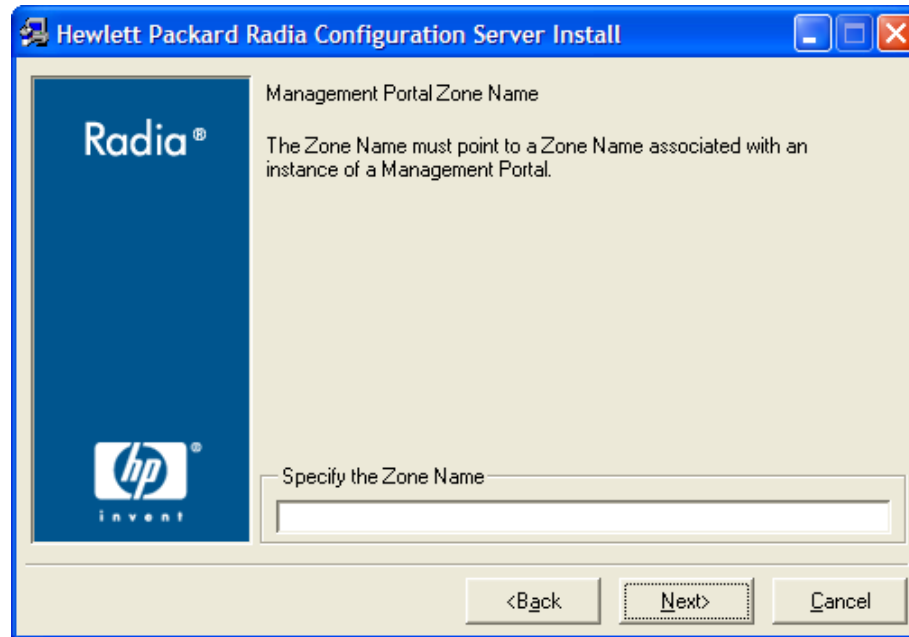
In this window, specify a Zone Name that is associated with an instance of the Management Portal. (For information on Management Portal Zone Names, refer to the *Management Portal Guide.*)

This field is optional. However, if specified, adhere to the following guidelines.

— Specify a maximum of 64 characters.

— Use only letters (a-z and A-Z), numerals (0-9), and the space character.

— Do not use special characters, such as an underscores, commas, and periods.

13 Click **Next**.

The Summary of Installation Input window opens.
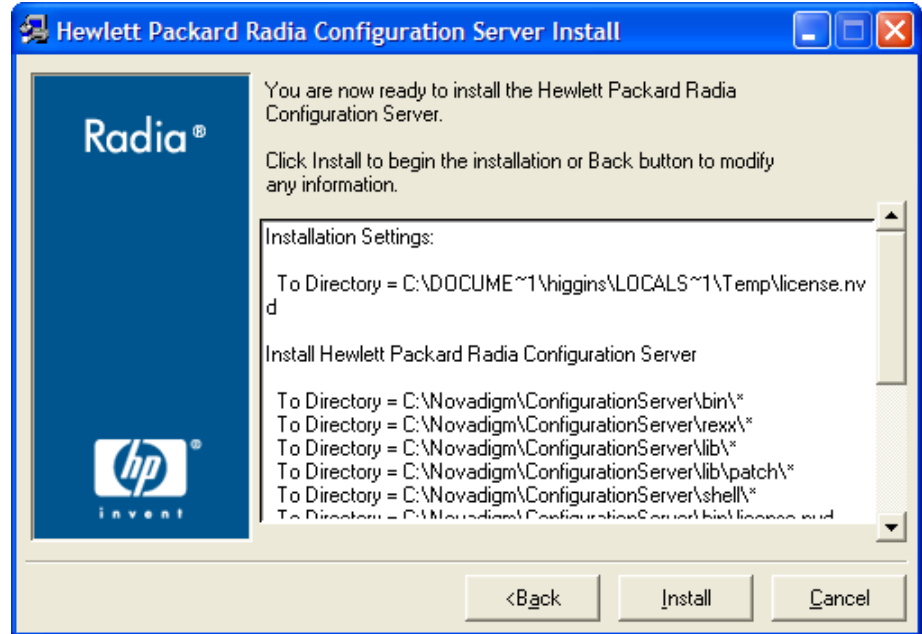
This window presents all the information that was specified during the
Configuration Server installation. This is the final opportunity to review
and modify the specified settings.

— 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 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.
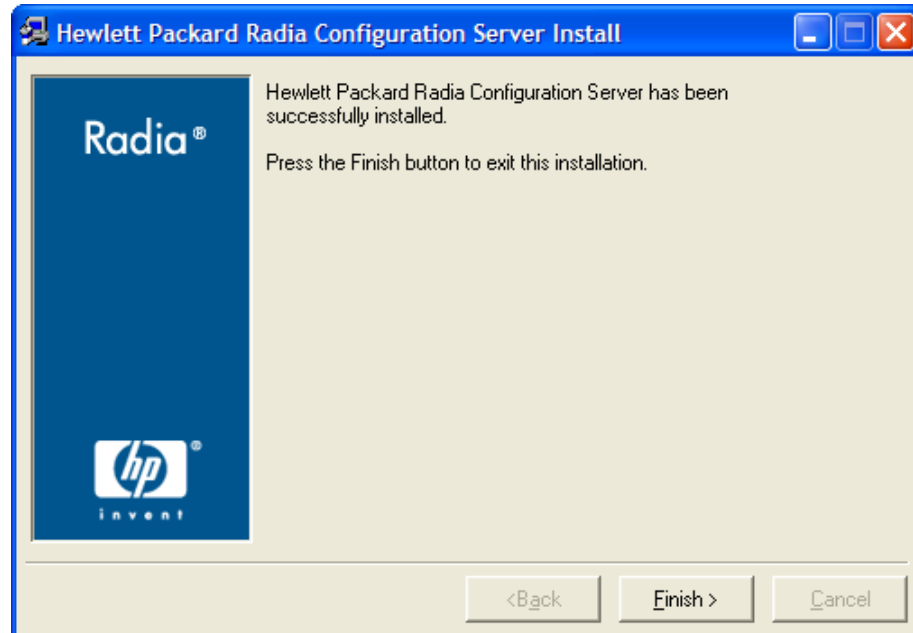
The Configuration Server for Windows has been successfully installed.

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

The Configuration Server as an NT Service

During the installation, the 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 Configuration Server can be started, stopped, and queried, as described in this section.

NT Service Options

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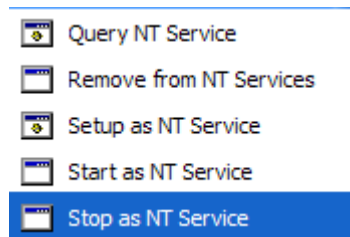
To start the Configuration Server as an NT Service

1   Click **Start**, **Programs**, and **HP Radia Configuration Server**.

2   Select **NT Services**.

3   Select **Start as NT Service**.

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

To stop the Configuration Server as an NT Service

1   Click **Start**, **Programs**, and **HP Radia Configuration Server**.

2   Select **NT Services**.

3   Select **Stop as NT Service**.

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

1 Click **Start**, **Programs**, and **HP 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 Configuration Server service, such as:

— The name of the service (for the Configuration Server, this is ZTopTask),

— Whether it's running, and

— It's startup-type selection (automatic or manual).

Using the Windows Event Viewer with the Configuration Server

If the Configuration Server is running as an NT Service, the Windows Event Viewer can be used to view key 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 Configuration Server processing. These are described in the section, Configuration Server Messages in Event Viewer.

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, consult the documentation that was distributed with it.

Filtering for Configuration Server Messages

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

> 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 Configuration Server processing. Verify this by checking that ZTopTask is listed in all the rows of the Source column.

Configuration Server Messages in Event Viewer

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

- Start-up Message

  `SERVICE HAS STARTED`

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

- Error Message 1

  `START SERVICE CONTROL DISPATCHER FAILED`

  The 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 2

  `SET SERVICE FAILED IN REPORT STATUS`

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

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

- Shut-down Message

  ```
  SERVICE STOPPED BY STOP REQUEST OR SHUT-DOWN REQUEST
  ```

  The Configuration Server has shut down.

Management Portal Installation

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

System Recommendations for Windows

Table 22 lists the system requirements for the installation and operation of the Management Portal. It is recommended that these requirements be strictly considered before installing the Management Portal on a Windows system.

> These recommendations represent typical, minimum operating system estimates.

Table 22: System Recommendations for Windows Installations of the Management Portal

Component	Recommendation
Memory	1 GB
Virtual Memory	2 GB
Processor Speed	800 MHz

Windows Pre-Installation Checklist

Prior to beginning the installation, be sure to:

- Locate the license file that is associated with this product installation.

- Assemble the following CD-ROMs (these are used during a complete Management Portal installation):

  — HP OpenView Management Solutions Radia 4.1 Infrastructure

  — HP OpenView Management Solutions Radia 4.1 Applications

  — HP OpenView Management Solutions Radia 4.1 Documentation

- Review the README file that was delivered with the product.

- After installing the Management Portal, visit the HP Technical Support web site to check for a Service Pack.

- If the Integration Server service (http) is running on the machine on which the Management Portal is being installed, stop it.

Windows Pre-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 recommended 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 Management Portal sites in an environment. Each Management Portal site that is being managed from the master Management Portal site must be at version 2.1.

Server Notes

- The Management Portal installation requires Administrator authority.

Client Notes

- Any platform that supports a web browser.

- Any network machine running Microsoft Internet Explorer, versions 4.0 and later, or Netscape Navigator, versions 4.0 and later *with cookies enabled*.

Directory Size of a Single Zone

The Portal Directory, `zone.mk` (in the Integration Server's `\etc` directory), loads the following information for the Management Portal:

- Configuration

- Devices

- Entitlement

- Groups

- Job Status

- Managed Infrastructure

- Network and Mounted Services Information

A single 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: 5,000

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

Co-Resident Integration Server Services

The Management Portal installs the Integration Server service, `httpd`. It is possible that a different HP OpenView Using Radia component (such as Distributed Configuration Server), on the same machine, is running its own Integration Server service.

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

1   In the Windows Services area, stop the existing Integration Server service.

2   Remove the Integration Server 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 Management Portal.

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

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

4   Re-install the first Integration Server service by opening a command-prompt window and typing **nvdkit httpd.tkd install**.

Two Integration Server services are running in separate directories.

Access Requirements

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

Installing the Management Portal

This section contains instructions for installing the Management Portal. Before starting this installation, be sure to review the section, Windows Pre-Installation Notes, starting on page 116.

> This version of the Management Portal must be installed to a clean (empty) directory, or to a directory that contains version 2.0 of the Management Portal.
>
> Do not install it on a machine that is running a 1.*x* version of the Management Portal. To migrate from a 1.*x* version, refer to the *Management Portal Guide*.

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

1 On the HP OpenView Management Solutions Radia 4.1 Infrastructure CD-ROM, navigate to `extended_infrastructure\management_portal\win32`, and double-click `setup.exe`.

The Radia Management Portal Install Welcome window opens.
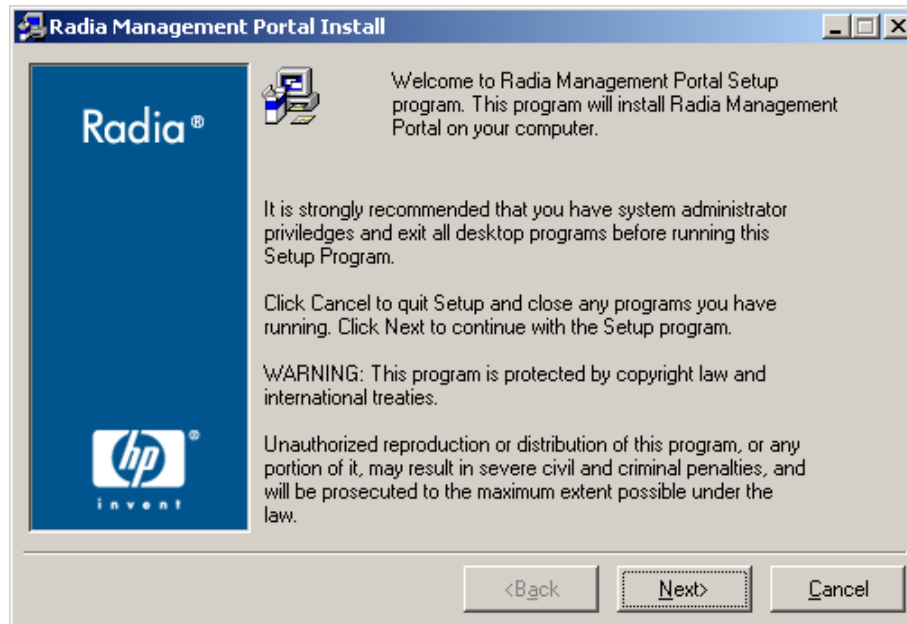
2 Click **Next**.

The HP Software License Agreement window opens.
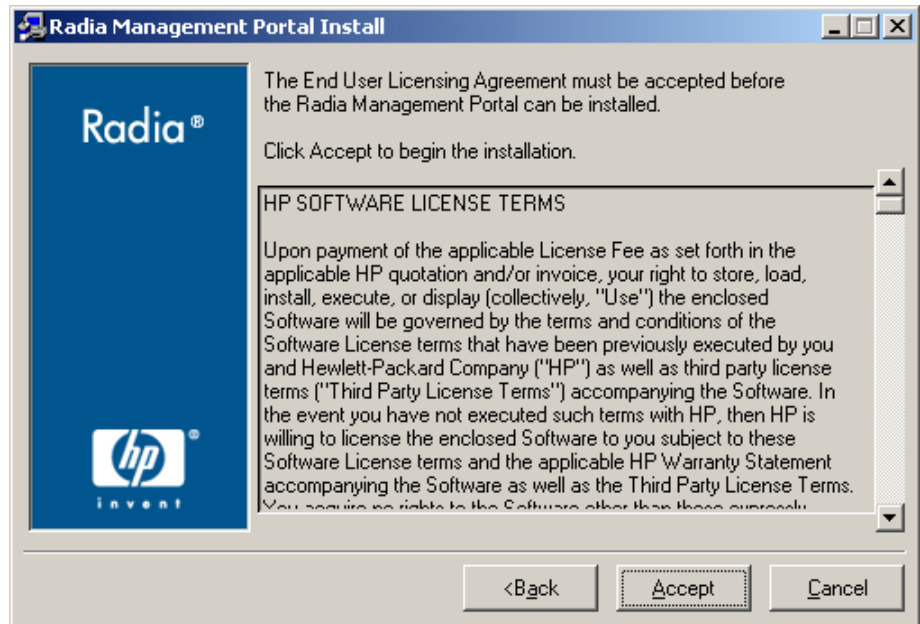
3   Click **Accept**.

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

The Files Location window opens.
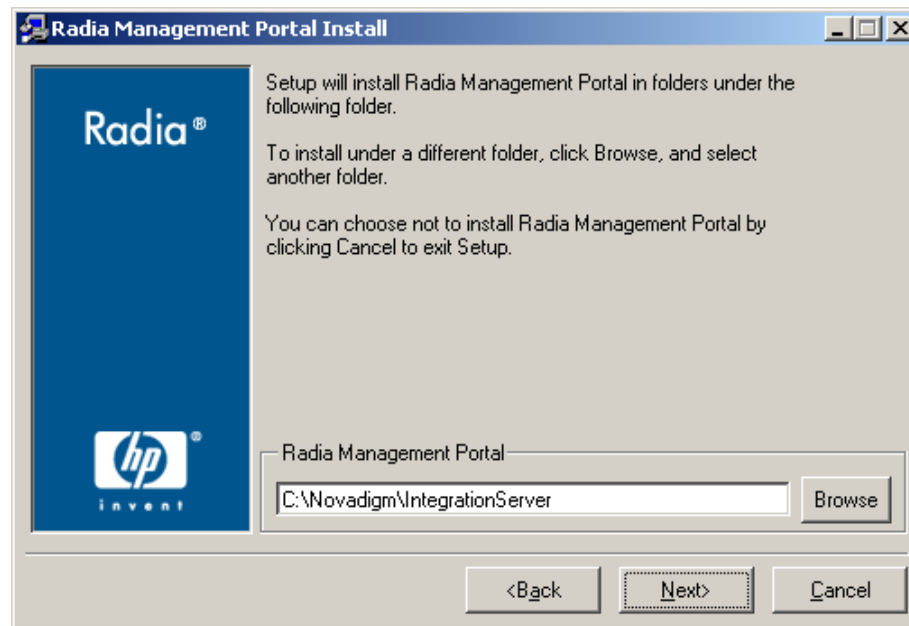
In this window:

— Accept the default installation directory that is displayed, or

— Click **Browse** to navigate to a different repository for the Management Portal's files.

4   Click **Next**.

The License File window opens.
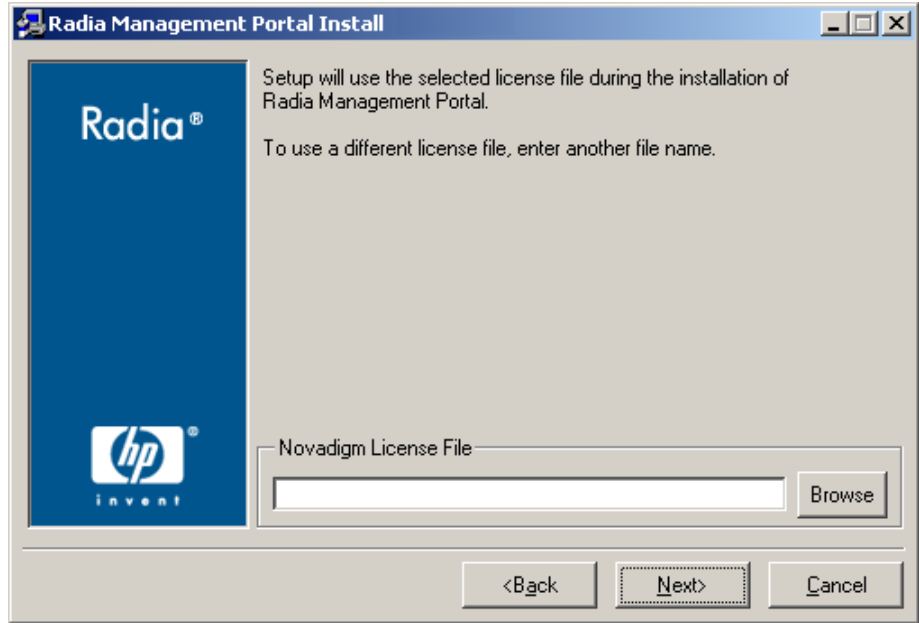
In this window:

— Specify the location and name of the license file, or

— Click **Browse** to navigate to it.

5 Click **Next**.

The Enable Network Discovery window opens.
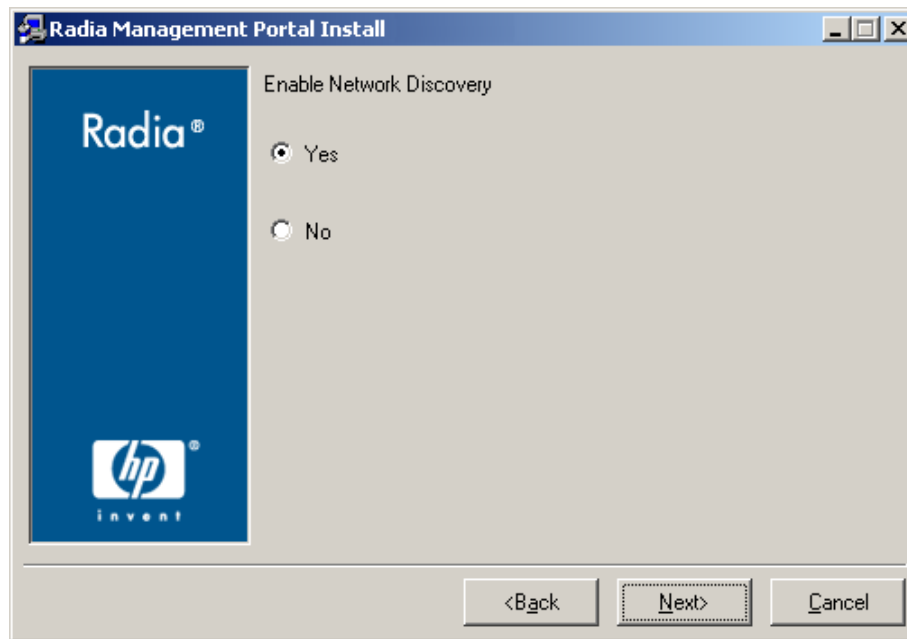
In this window:

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

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

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

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

6   Click **Next**.

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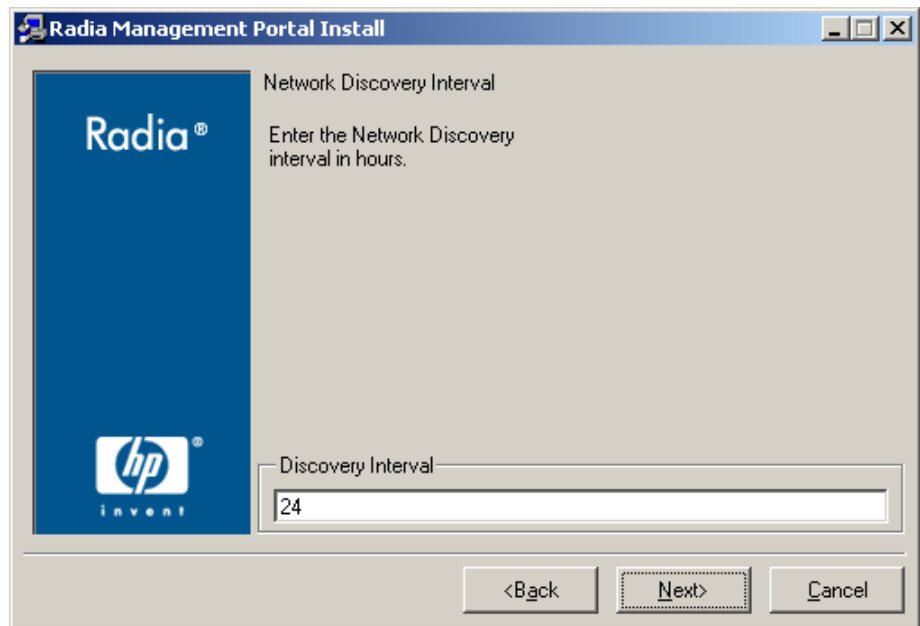
In this window, specify the length of time (in hours) for the Network-Discovery job to run:

— Accept the default **Discovery Interval** of 24 hours, or

— Specify a different length of time (valid values are 1 through 24)

7   Click **Next**.

The Discovery Start Delay window opens.
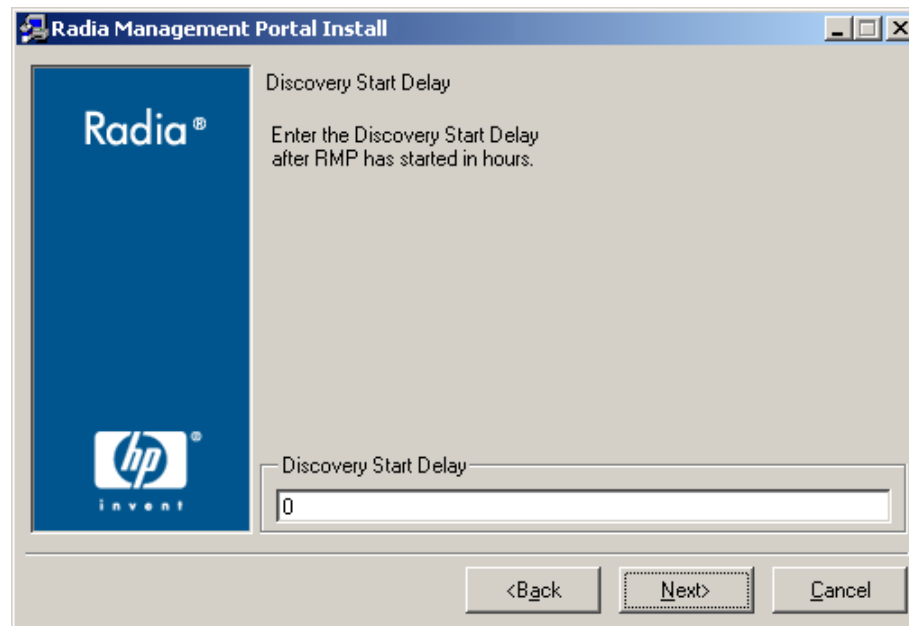
In this window, specify the interval (in hours) after the Management Portal has started before it starts network discovery:

— 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 Management Portal is started.

8   Click **Next**.

The first Zone Information window opens.
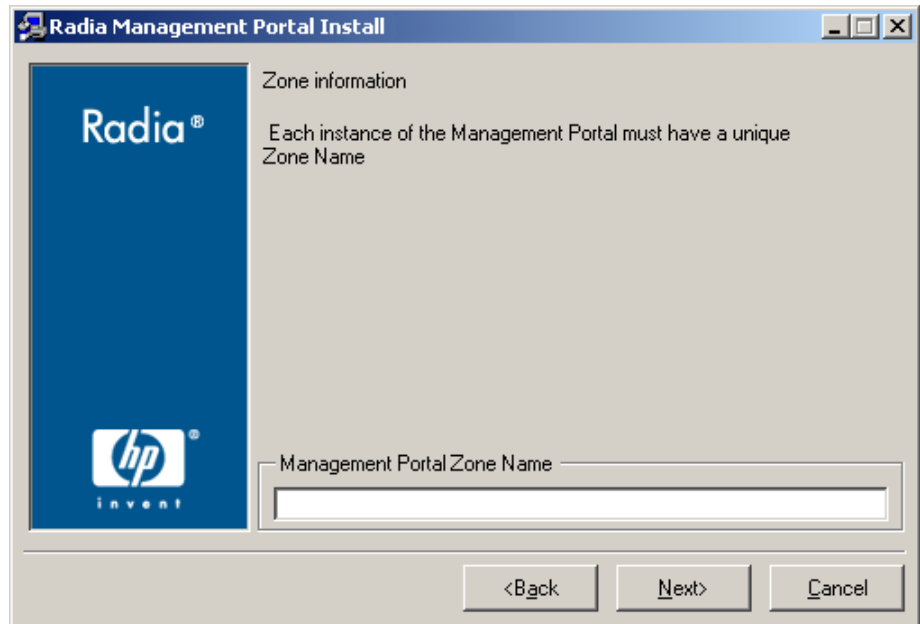
In this window, specify a **Management Portal Zone Name** that will represent this instance of the Management Portal.

— Each instance of the 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.

— Be sure to adhere to the following guidelines.

– Specify a maximum of 64 characters.

– Use only letters (a-z and A-Z), numerals (0-9), and the space character.

– Do not use special characters, such as an underscores, commas, and periods.

9 Click **Next**.

The second Zone information window opens.
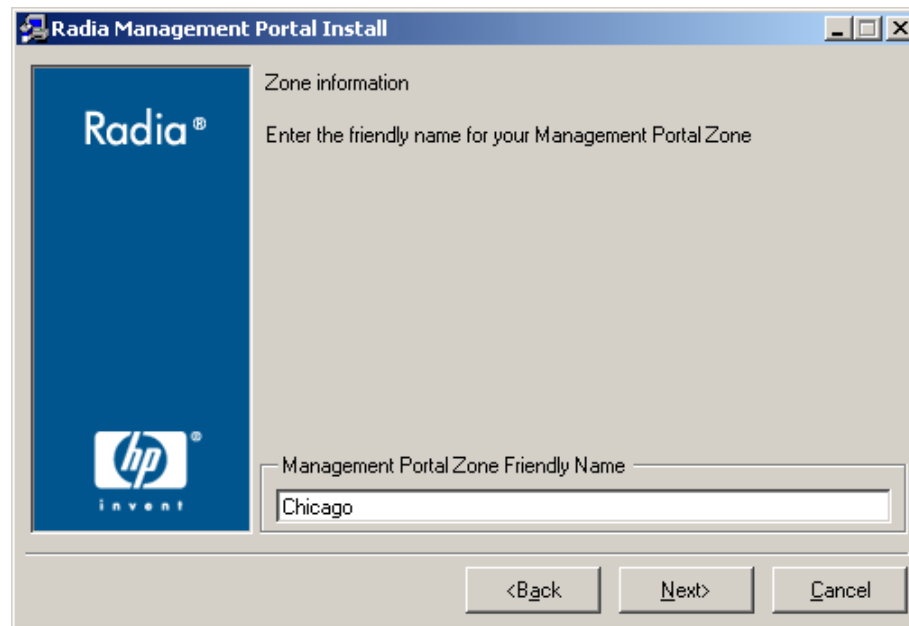
In this window, specify a **Management Portal Zone Friendly Name** for this instance of the Management Portal.

— 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 Management Portal user interface.

10 Click **Next**.

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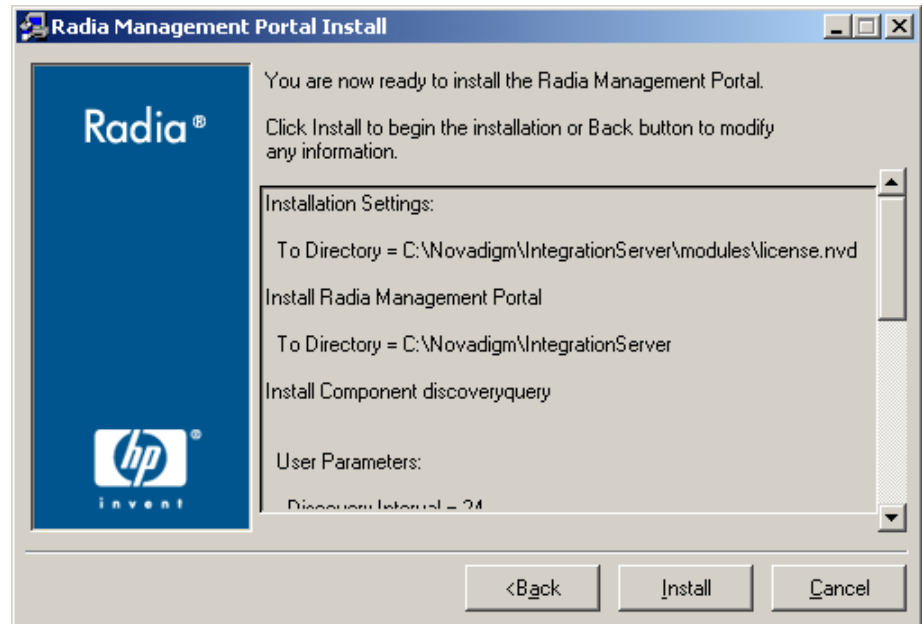
This window presents all the information that was specified during the
Management Portal installation. This is the final opportunity to review
and modify the specified settings.

— 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 HP OpenView Using Radia infrastructure
components.

12 Click **Yes**.

The Infrastructure Components window opens.
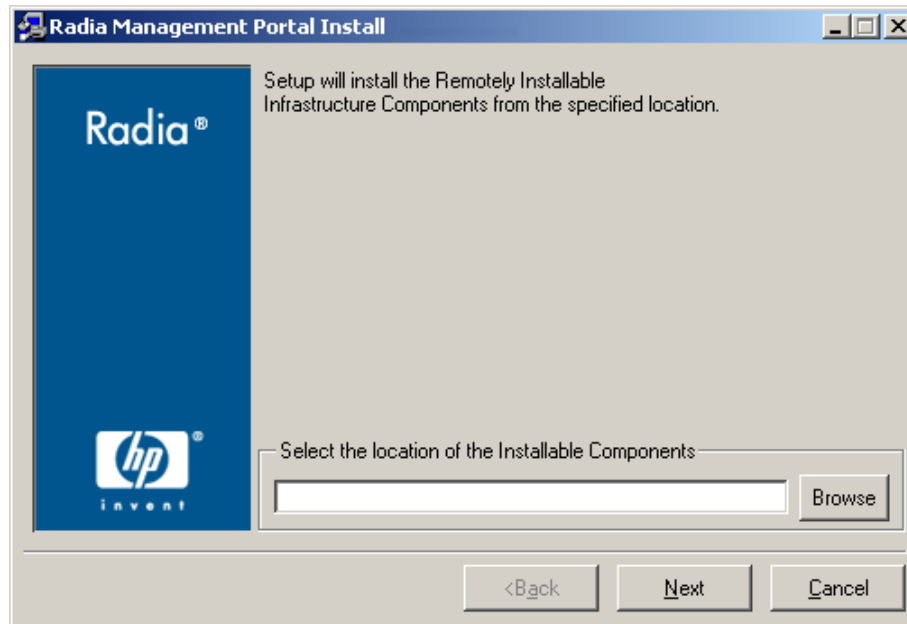
In this window, specify a location in which to install those HP OpenView Using Radia infrastructure components that can be remotely installed.

13 Click **Next**.

The modules are copied to the Integration Server's \media directory.

There will be a prompt to copy the HP OpenView Using Radia client modules to be used for remote installations.

14 Click **Yes**.

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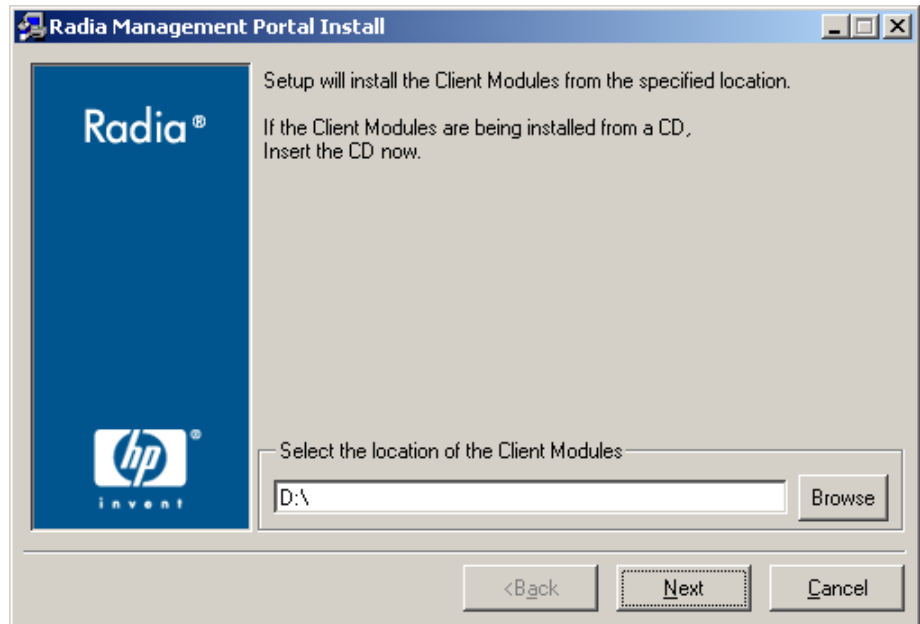
In this window, specify the location of the Client Modules.

— If necessary, remove the current CD-ROM and insert the HP OpenView Management Solutions Radia 4.1 Applications CD-ROM.

15 Click **Next**.

The HP OpenView Using Radia client modules are copied to the Integration Server's \media directory.

There will be a prompt to install the HP OpenView Using Radia documentation.

16 Click **Yes**.

The Documentation Location window opens.
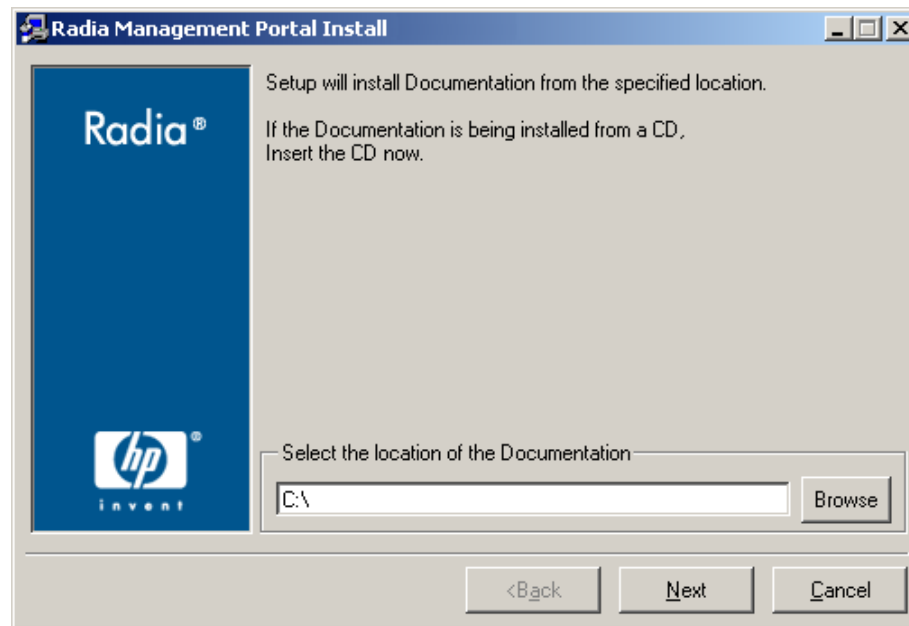
In this window, specify the location of the Documentation Files.

— If necessary, remove the current CD-ROM and insert the HP OpenView Management Solutions Radia 4.1 Documentation CD-ROM.

17 Click **Next**.

The HP OpenView Using Radia publications library is installed to the Management Portal.

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

IP Address for a Remote Management Portal

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

> The information in this section is applicable only if the ZTASKEND method calls RADISH. If the ZTASKEND method calls QMSG, the contents do not need to be verified.
>
> For additional installation and configuration information, refer to the Management Portal Guide.

The following sections detail how to complete these tasks.

Verifying the Contents of ZTASKEND

To verify ZTASKEND contains Management Portal-required lines

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

    The default is
    `SystemDrive:\Novadigm\ConfigurationServer\rexx\NOVADIGM`.

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

    > ⚠ *Do not* edit the ZTASKEND REXX script in `/rexx/NOVADIGM` because if the Radia database is then 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.

> 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
Configuration Server's edmprof file must be modified. By default, the
edmprof file is configured to have the Management Portal co-resident with
the Configuration Server. Therefore, if the Management Portal is running on
a computer other than that which is hosting the Configuration Server, it is
necessary to revise the MGR_RMP section of the edmprof file.

Table 23 lists the default settings of the MGR_RMP section, as well as the
values that can be specified in order for the Configuration Server to use the
remotely installed Management Portal.

Table 23: MGR_RMP Settings

Settings	Default	Alternative 1	Alternative 2
HTTP_HOST	localhost	*host_name* of the Management Portal's host	*IP_address* of the Management Portal's host
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 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 23.

4   Save the changes and close the `edmprof` file.

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

▶   To verify that the Configuration Server is using the specified Management Portal, monitor the posts in the Configuration Server log or check the clients in the Management Portal.

Starting and Stopping the Management Portal

To start the Management Portal

1   Go to the Windows Services section.

For example, in Windows XP, right-click **My Computer**. Then, select **Manage → Services and Applications → Services**.

2   In the Services panel, right-click **Radia Integration Server (httpd)** and select **Start**.

To stop the Management Portal

1   Go to the Windows Services section.

For example, in Windows XP, right-click **My Computer**. Then, select **Manage → Services and Applications → Services**.

2   In the Services panel, right-click **Radia Integration Server (httpd)** and select **Stop**.

Accessing and Logging on to the Management Portal

To access and log on to the Management Portal

1   Open a web browser and in the Address bar, type
http://*IP_address***:3466**.

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

The Radia Management Portal Login page (see the next figure) opens.
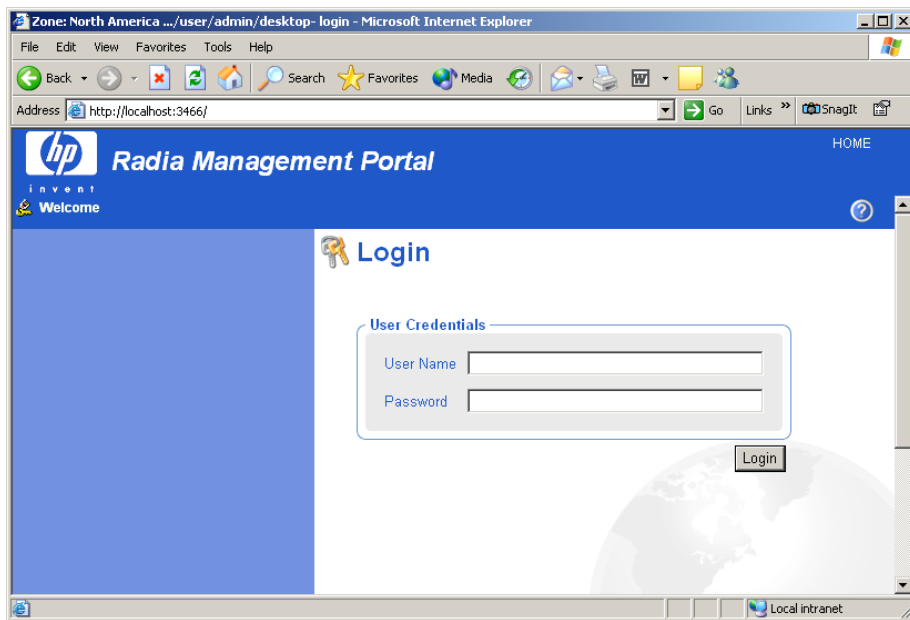
Figure 4: Login page for the Management Portal.

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 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 Management Portal and the Management Agent, refer to the *Management Portal Guide*.

Accessing the HP OpenView Using Radia Publications

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

To access the HP OpenView Using Radia publications via the Management Portal

1 Access the Management Portal as instructed in the section, Accessing and Logging on to the Management Portal, on page 87.

2 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 Configuration Server and Management Portal can easily be installed and incorporated into a Windows environment.

- The Configuration Server and Management Portal can be started and stopped.

- The Management Portal can be accessed using varying levels of authority.

- The HP OpenView Using Radia Publications can be installed on, and viewed via, the Management Portal.

4 MVS Installation

At the end of this chapter, you will have:

- Prepared the 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 Configuration Server installation files on a Windows machine before their eventual transfer to an MVS mainframe. After the Configuration Server 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**

Configuration Server Installation

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

System Recommendations for MVS

Table 24 below lists the system recommendations for installing and operating the Configuration Server in an MVS environment.

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

Table 24: Space Requirements for MVS Installations of the Configuration Server

Component	All Platforms
Recommended Space	450 cylinders
Memory	Maximum allowed
Virtual Memory	Maximum allowed
Configuration Server Directory Important Note: This space recommendation does not include estimates for additional applications that will be managed by the Configuration Server.	200 cylinders

Component	All Platforms
Radia Database *	170 cylinders

> * The size of the database depends on the size and number of applications that the 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 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 Configuration Server is running, shut it down.
- Prior to starting the Configuration Server installation:
  — Close all other applications, including anti-virus programs.
  — Stop all other tasks and operations that are executing.

Transferring the License File

The license file that is used on the Windows PC for the pre-transfer preparation of the Configuration Server must be renamed 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)'`.

> 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

- 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 recommended that all defaults be accepted; however, they can be overridden by specifying the parameters for your environment.

Preparing and Installing the Configuration Server

This section contains instructions for preparing the 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 Configuration Server files are going to be prepped for the file transfer.

2 Navigate through the `management_infrastructure\configuration _server` directory to the subdirectory `mvs`.

3 Double-click `setup.exe`.
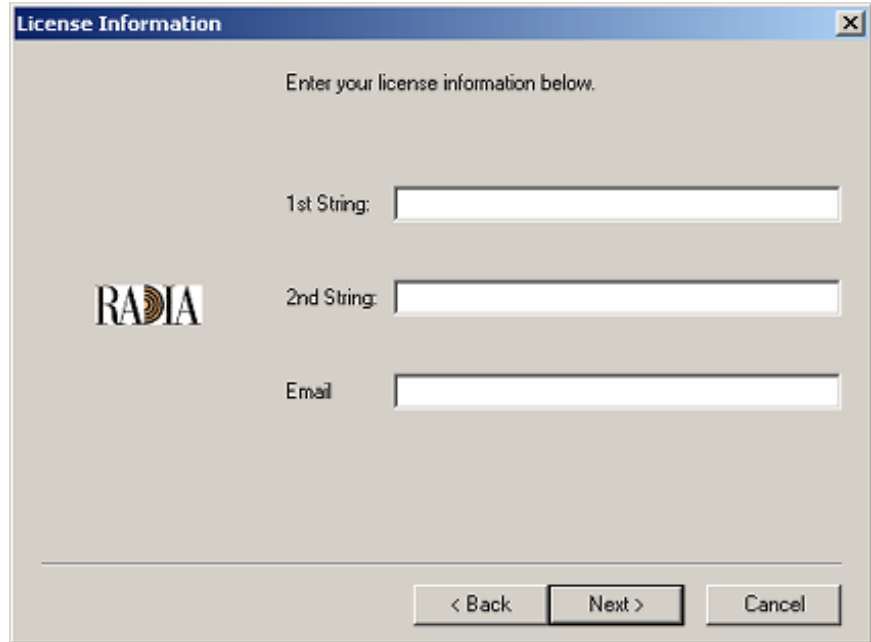
The Configuration Server installation preparation begins with the Hewlett-Packard RCS:Manager MVS Setup Welcome window.
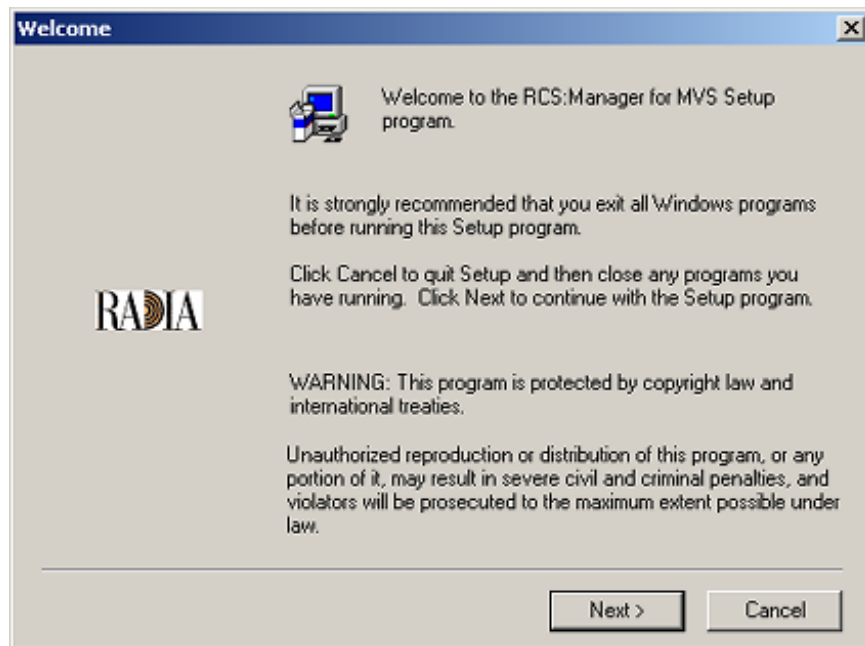
4   Click **Next**.

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

The License Information window opens.

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

> 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 **O**.

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

5   Click **Next**.

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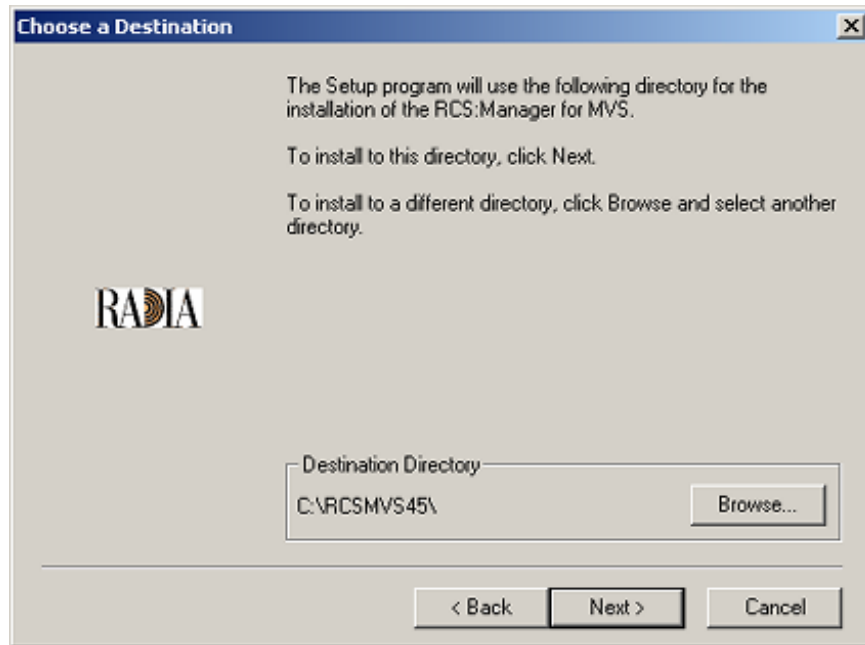
In this window, accept the default **Destination Directory** that is displayed, or click **Browse** to navigate to a different temporary repository for the Configuration Server's files.

6   Click **Next**.

The RCS:Manager Parameters window opens.

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

— Specify a different 3-character Configuration Server (Manager) ID

— Specify a different Configuration Server (Manager) Name (32-character maximum)

— Specify an Configuration Server type (Distributed, Stand-alone, or Server)

7   Click **Next**.

The Prefixes for MVS Datasets window opens.

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.

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**.

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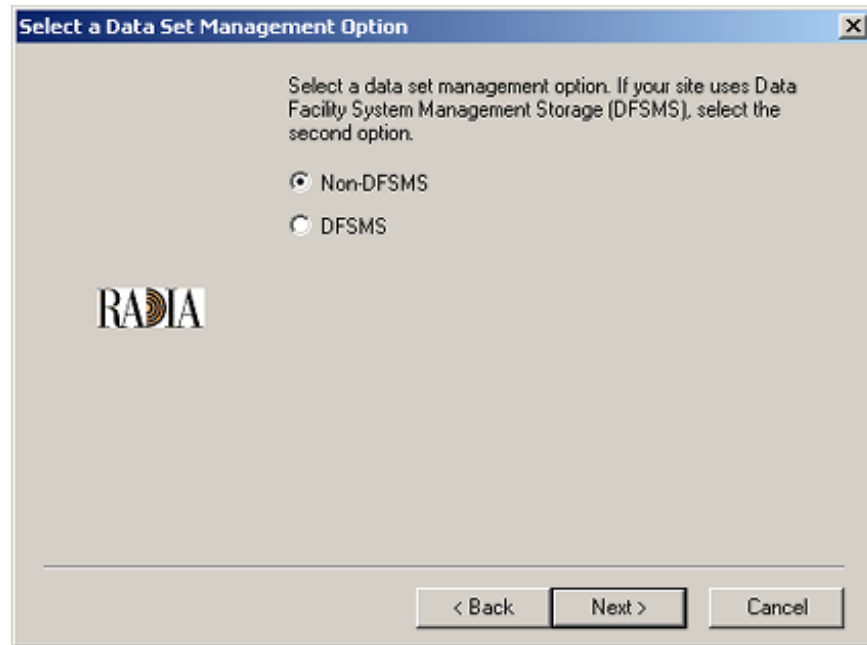
In this window, accept the default Management Storage option of:

— **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.

10 Click **Next**.

The Dataset Parameters window opens.

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.

11 Click **Next**.

The Communications Protocol window opens.
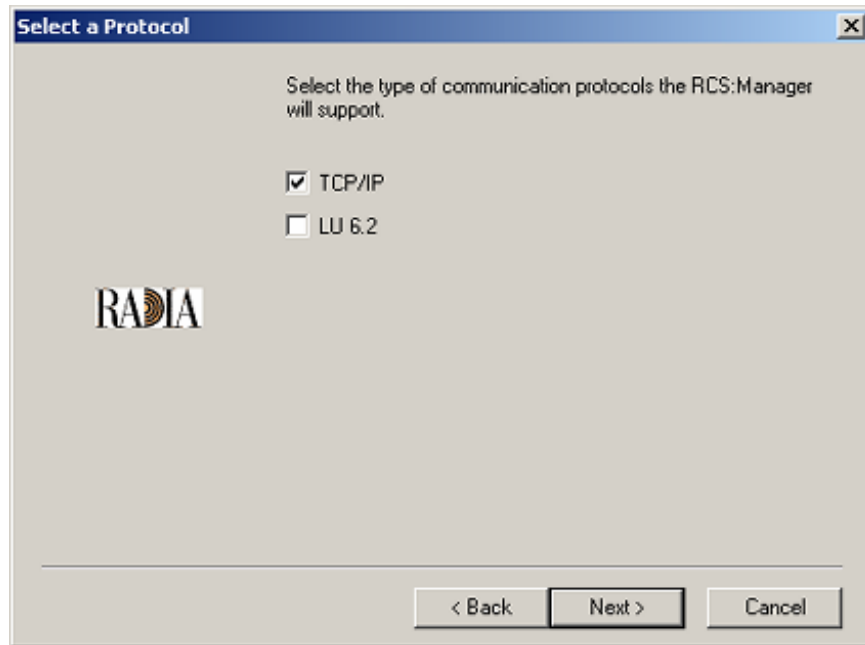
In this window, select the Communications Protocol for the RCS:Manager (Configuration Server):

— **TCP/IP** or

— **LU6.2** or

— both.

12 Click **Next**.

The TCP/IP Information window opens.

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

— Specify a different **Port Number** for the RCS Manager (Configuration Server) TCP/IP communications.

— Specify a different **Configuration DS** for the TCP/IP address space.

➤ 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.

13 Click **Next**.

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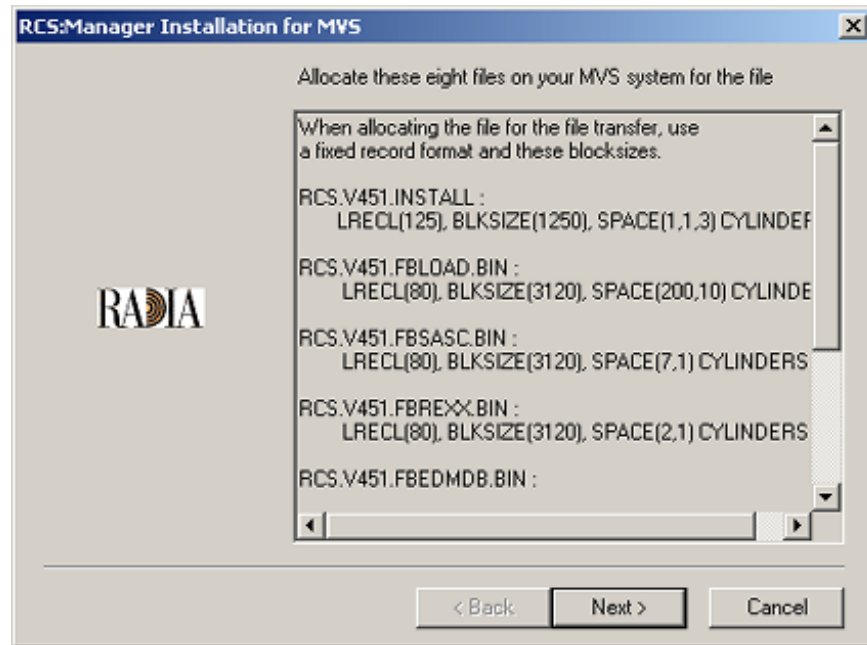
This window presents a list of the files (including the format and block-sizes) that must be allocated on the MVS system.

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

14 Click **Next**.

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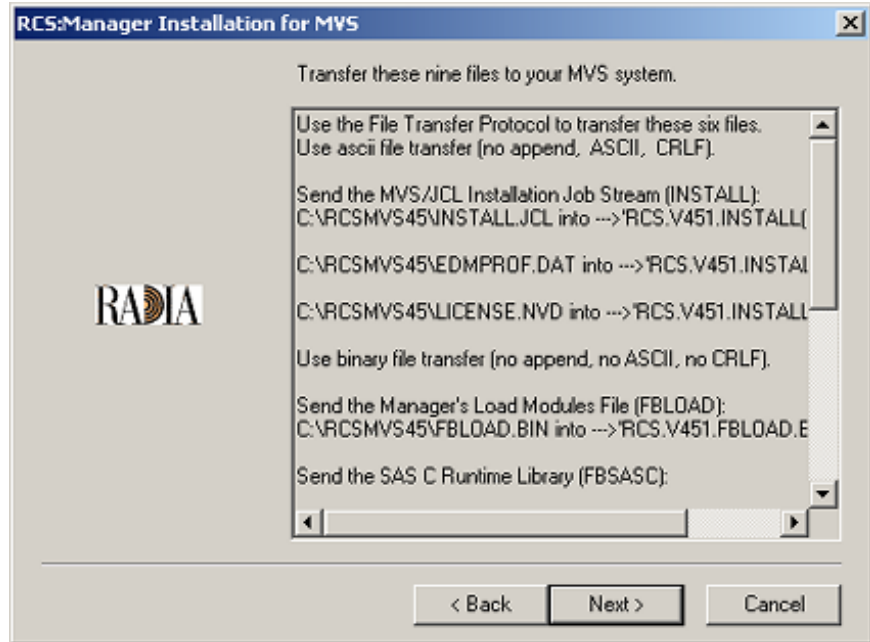
This window presents a list of the files that must be transferred to the MVS system.

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

15 Click **Next**.

The post-File Transfer window opens.
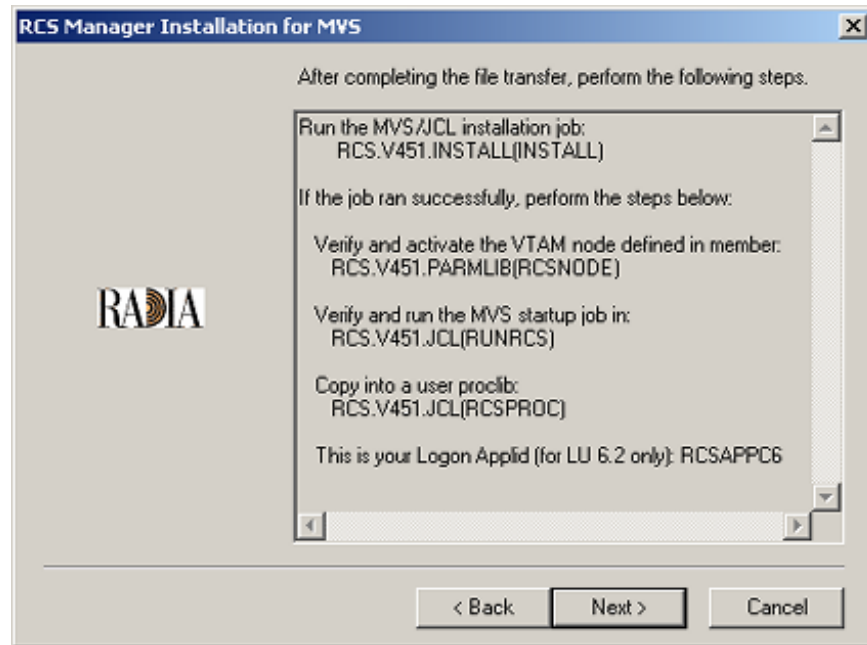
This window presents a list of the steps that must be performed following the file transfer.

> HP recommends reviewing this list now.

16 Click **Next**.

The README File message appears.
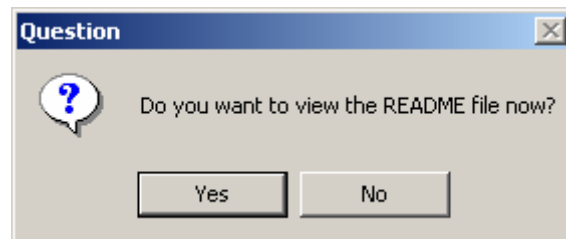
To view the README file, click **Yes**. (*Recommended*)
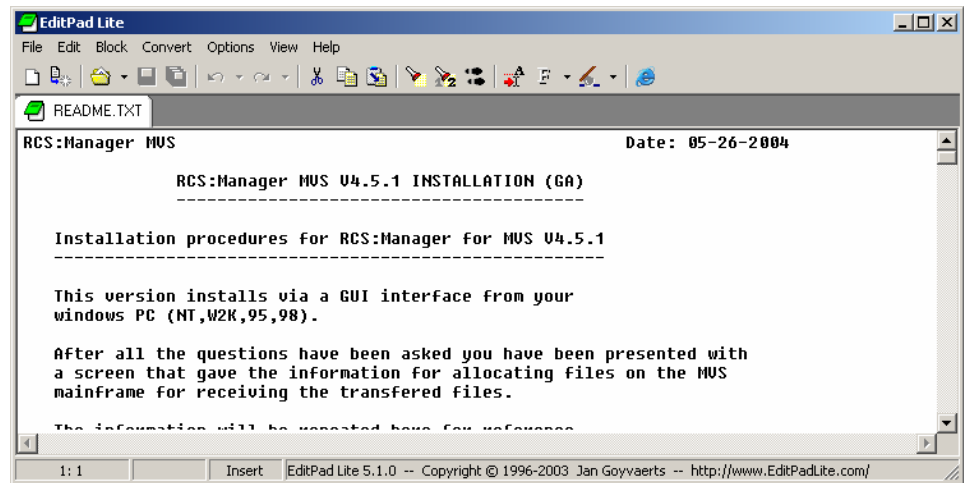
Figure 5: The README File.

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

a On the MVS mainframe, allocate the files as instructed in the README file.

b Transfer the files using File Transfer Protocol (FTP), as instructed in the README file.

c On the MVS mainframe, run the jobs as instructed in the README file.

The Configuration Server for MVS has been successfully installed.

A UNIX Kernel Tuning

The 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 Configuration Server configuration, considering elements such as the expected number of concurrent tasks and cache management.

Essential Kernel Variables

Tables 3 through 5 contain the most important parameters that might need to be adjusted.

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

Most of the Configuration Server parameters are specified in the `edmprof` file, which was created during the Configuration Server installation, and which is located in the Configuration Server's `home` directory. For more information about Configuration Server parameters, refer to the *User's Guide for the HP OpenView Configuration Server Using Radia*.

Table 25 below addresses the parameters that are associated with *semaphore management*.

Table 25: UNIX Kernel Settings for Semaphore Management

Kernel Parameter	Configuration Server-related Parameter or Recommendation	AIX, HP-UX, and Linux	Solaris
Maximum number of semaphores (system-wide)	TASKLIMIT * 3	semmni	seminfo_semmni

Kernel Parameter	Configuration Server-related Parameter or Recommendation	AIX, HP-UX, and Linux	Solaris
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 26 below addresses the parameters that are associated with *process management*.

Table 26: UNIX Kernel Settings for Process Management

Kernel Parameter	Configuration Server-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

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

Table 27 below addresses the parameters that are associated with *shared memory*.

Table 27: UNIX Kernel Settings for Shared Memory

Kernel Parameter	Configuration Server-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

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