Radia OpenView Knowledge Base Manager Using Radia

for the Windows operating system

Software Version: 4.1

Installation and Configuration Guide



Manufacturing Part Number: T3424-90099 June 2005

Legal Notices

Warranty

Hewlett-Packard makes no warranty of any kind with regard to this document, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard shall not be held liable for errors contained herein or direct, indirect, special, incidental or consequential damages in connection with the furnishing, performance, or use of this material.

A copy of the specific warranty terms applicable to your Hewlett-Packard product can be obtained from your local Sales and Service Office.

Restricted Rights Legend

Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause in DFARS 252.227-7013.

Hewlett-Packard Company United States of America

Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19(c)(1,2).

Copyright Notices

© Copyright 2005 Hewlett-Packard Development Company, L.P.

No part of this document may be copied, reproduced, or translated into another language without the prior written consent of Hewlett-Packard Company. The information contained in this material is subject to change without notice.

Trademark Notices

Linux is a registered trademark of Linus Torvalds.

Microsoft®, Windows®, and Windows® XP are U.S. registered trademarks of Microsoft Corporation.

OpenLDAP is a registered trademark of the OpenLDAP Foundation.

Acknowledgements

PREBOOT EXECUTION ENVIRONMENT (PXE) SERVER Copyright © 1996-1999 Intel Corporation.



TFTP SERVER Copyright © 1983, 1993 The Regents of the University of California.

OpenLDAP Copyright 1999-2001 The OpenLDAP Foundation, Redwood City, California, USA. Portions Copyright © 1992-1996 Regents of the University of Michigan.

OpenSSL License Copyright © 1998-2001 The OpenSSLProject.

Original SSLeay License Copyright © 1995-1998 Eric Young (eay@cryptsoft.com)

DHTML Calendar Copyright Mihai Bazon, 2002, 2003

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:

4

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

Contents

1	Introduction	7
	Defining the Knowledge Base Manager	8
	Summary	11
2	Installing the Knowledge Base Manager	13
	Overview	14
	Installing the Knowledge Base Manager	15
	System Requirements Installation Steps	15 15
	SQL Server AppLogin User ID	18
	ODBC DSN for the Knowledge Base Manager	18
	Starting and Stopping the Knowledge Base Manager	19
	Summary	20
3	Using the Knowledge Base Manager	21
	Overview	22
	Accessing the Control Panel	23
	Configuring the Import Directories	23
	Adding a Knowledge Base Creating Tasks	24 26
	Configuration Server Service Automated Import Directory	29
	Summary	30

Α	Defining a Collection Point for a UNC Shared Folder or Mapped	
	Drive	31
Inc	dex	35

1 Introduction

At the end of this chapter, you will:

- Be familiar with the Knowledge Base Manager.
- Understand how the different Radia products use the Knowledge Base Manager.

7

• Understand the Knowledge Base Manager process for populating databases.

Defining the Knowledge Base Manager

The Knowledge Base Manager populates the Radia Knowledge Base with data in the form of state files. State files consist of data that represent the current state of an application. This data is acquired by the Knowledge Base Manager from a continuously monitored user-specified directory, or collection point. When data is detected in this collection point, it is automatically transferred to the Radia Knowledge Base.

The collection point is populated by one or more Radia products including the Radia Patch Manager, Usage Manager, and Radia Packager for Windows Installer.

The endpoint for this data, the Radia Knowledge Base database, may be either a SQL Server or an Oracle database configured in your environment. From here, data analysis can take place.

Chapter 1



Figure 1: Knowledge Base Manager process.

The Knowledge Base Manager runs as a Windows service on any Windows NT-based machine (preferably Windows 2000). It communicates with the database through an ODBC system DSN and is capable of importing several types of state files including:

- Configuration Server Service/Package component extracts
- State files built by the Radia Extensions for Windows Installer components

Introduction

- Packager for Windows Installer
- Application execution traces and profiles
- Usage Manager collection files
- State files built by the Radia Patch Manager.

The Knowledge Base Manager is configured through a Control Panel that allows the administrator to define a set of automated import directories that the Knowledge Base Manager watches and manages. These are simply Windows registry settings that can be created and managed through other means if necessary.

Radia Knowledge Base Manager C	onfiguration	
Knowledge Bases		
Knowledge Base Name: Radi	Usage Manager New Modify Delete	
Task Name	Directory	New Task
		Delete Task
		Modify Task
		Save Configurations
		Revert Configurations
		Exit
Global Settings		
Log Path: 🖸	Program Files\Novadigm\Knowledge Base Manager View Log	
Log Level: Ve	rbose	
Database Reconnect (msecs): 50	00	
Import Directory Scan (msecs): 50	00	

Figure 2: Knowledge Base Manager control panel.

The Knowledge Base Manager service must be stopped and restarted for any changes to take effect.

Summary

- The Knowledge Base Manager transfers state files to an Oracle or SQL Server database.
- The Knowledge Base Manager connects to a database through an ODBC system DSN.
- Data is transferred automatically based on the settings you define in the Radia Knowledge Base control panel.

Chapter 1

2 Installing the Knowledge Base Manager

At the end of this chapter, you will:

- Understand what steps are required to set up the environment for the Knowledge Base Manager.
- Understand the Knowledge Base Manager system requirements.
- Be able to install the Knowledge Base Manager.

Overview

This chapter describes the steps you must take to set up the environment for the Knowledge Base Manager. Among other topics, it includes information about how to install the Knowledge Base Manager.

Before you can begin to use the Knowledge Base Manager, you will need to perform the following steps:

- 1 Create a SQL Server or Oracle Knowledge Base database. This is usually done by the administrator of the SQL Server or Oracle database.
- 2 Create a SQL Server logon ID (AppLogin User ID) to define the SQL Server as the DB_OWNER.
- 3 Create an ODBC DSN for the Knowledge Base Manager and connect it to the database hosting the Radia Knowledge Base.
- 4 Install the Knowledge Base Manager.
- 5 Start the Knowledge Base Manager.

Each of these steps will be discussed in the following sections.

Installing the Knowledge Base Manager

Install the Knowledge Base Manager anywhere in your environment that has connectivity to the database server you will be using.

We recommend installing the Knowledge Base Manager to the same computer that will contain your collection point.

System Requirements

- Windows NT 4.0, 2000, XP
- 128 MB RAM minimum, 512 MB or above preferred

We recommend installing the Knowledge Base Manager on a separate machine from the Database Server because of disk contentions. If you have a dedicated publishing server, you could alternatively install the Knowledge Base Manager there.

Installation Steps

To install the Knowledge Base Manager

- 1 Navigate to the Knowledge Base Manager directory in your Radia media.
- 2 Double-click **Package.msi**. The Knowledge Base Manager installation begins.

Installing the Knowledge Base Manager





3 Click Next.

🙀 Radia Knowledge Base Manager License Agreement	×
End-User License Agreement Please read the following license agreement carefully	
HP SOFTWARE LICENSE TERMS	<u> </u>
Upon payment of the applicable License Fee as set forth in the applicable HP quotation and/or invoice, your right to store, load, execute, or display (collectively, "Use") the enclosed Software v governed by the terms and conditions of the Software License to have been previously executed by you and Hewlett-Packard Control of the terms in the License Agreement C I go not accept the terms in the License Agreement	, install, vill be erms that mpany ⊾
< <u>B</u> ack <u>N</u> ext >	Cancel

4 Read and accept the HP software license terms and click Next.

🙀 Radia Knowledge Base Manager Setup	×
Installation Customization Set the following installation variable to the desired value.	\odot
Enter the path name where you want to install Novadigm applications	
C:\Program Files\Novadigm\	
	Browse
< <u>B</u> ack <u>N</u> ext >	Cancel

- 5 Type a location to install the Knowledge Base Manager or click **Browse** to navigate to it.
- 6 Click Next.

🖟 Radia Knowledge Base Manager Setup 🛛 🔀
Installation Customization Set the following installation variable to the desired value.
Enter the Novadigm Serial Number
l
< <u>B</u> ack <u>N</u> ext > Cancel

Installing the Knowledge Base Manager

7 Enter your serial number and click **Next**.



8 Click Install.

The Knowledge Base Manager is installed.

SQL Server AppLogin User ID

To process Radia Knowledge Base requests, the Knowledge Base Manager requires a SQL Server logon ID. A user ID of any name can be configured. The default is sa, which is the default system administrator ID. This ID is used to define the SQL Server as the DB_OWNER for the Radia Knowledge Base database with full permissions for administering the database. This ID is referred to as the AppLogin User ID.

ODBC DSN for the Knowledge Base Manager

The Knowledge Base Manager requires an ODBC system DSN to connect to the SQL Server or Oracle database hosting the Radia Knowledge Base. The

Chapter 2



ODBC definition must be configured on the same workstation or server on which the Knowledge Base Manager is executing.

Use the ODBC Data Source Administrator located in the Windows Control Panel to create these connections. See your system administrator or the HP OpenView support web site for more information.

		Remove
		0.000 <u></u>
		Configure.
	0.000.000.000	1000,000,000,000,000,
		_

Figure 3: ODBC Data Source Administrator.

Starting and Stopping the Knowledge Base Manager

The Knowledge Base Manager is installed as a Windows service called RadKBMgr.

Stop or start the Radia Knowledge Base service using the Administrative Tools\Services options in the Control Panel.

The Knowledge Base Manager is now installed and configured. To import data into your SQL Server or Oracle database, create specific tasks using the Knowledge Base Manager control panel, as described in Chapter 3, Using the Knowledge Base Manager.

Installing the Knowledge Base Manager

Summary

- Install the Knowledge Base Manager anywhere in your environment that has connectivity to your Radia Knowledge Base.
- Create an ODBC connection for the Knowledge Base Manager.
- The Knowledge Base Manager is installed as a Windows service called RadKBMgr.

3 Using the Knowledge Base Manager

At the end of this chapter, you will:

• Be able to define tasks using the Knowledge Base Manager control panel application.

Overview

The Knowledge Base Manager provides services to manage the Radia Knowledge Base and runs as a Windows service on a Windows 2000 or above workstation or server.

The Knowledge Base Manager performs automated import processing of Radia state files into the Radia Knowledge Base. Automated importing may be defined for two types of directory structures:

• Import Directories

Simple state file automated import directories containing Radia state files (.ISState extensions). These are typically created by the Radia Packager for Windows Installer.

• Export Directories

Configuration Server Service export directories that have required subdirectory structures that are built by the Radia Extensions for Windows Installer features which enable extraction and conversion of Radia packages contained in Radia Services to .ISState file formats.



Any directory that will be used as an export directory must include a subdirectory named varsets.

The state file export process may only occur when the Configuration Server is active, however the Knowledge Base Manager automated import server runs independently to import state files found in the automated import directories.

Configuration for the Knowledge Base Manager is controlled through the Radia KB Manager Configuration control panel.



Accessing the Control Panel

To access the Radia KB Manager Configuration Control Panel

1 Go to Start \rightarrow Settings \rightarrow Control Panel.



2 Double-click the Radia KB Manager Configuration icon.

The Knowledge Base Manager Configuration window opens.

Configuring the Import Directories

Once the Configuration window is open, you can configure the Knowledge Base Manager.

Using the Knowledge Base Manager



adia Knowledge Base Manager Configuratio	on	X
- Knowledge Bases		
Knowledge Base Name: Hadia Usage Ma	nager New Modity Delete	
Task Name	Directory	New Task
		Delete Task
		Modify Task
		Save Configurations
		Revert Configurations
		Exit
Global Settings		
Log Path: C:\Program Fil	es\Novadigm\Knowledge Base Manager View Log	
Log Level: Verbose	•	
Database Reconnect (msecs): 5000 Import Directory Scan (msecs): 5000	-	

Figure 4: Knowledge Base Manager Configuration window.

Adding a Knowledge Base

In order for the Knowledge Base Manager to connect to the right database, you have to create a Knowledge Base. Once created, you will create tasks associated with that Knowledge Base.

To add a Knowledge Base

1 Click New to add a Radia Knowledge Base.

The New Knowledge Base - Configuration window opens.



New Knowledge Base - Configuration	×
Knowledge Base Name:	
Data Source Name:: RadiaDB	OK
User Name:	Cancel
Password:	

- 2 Enter the following information:
 - Knowledge Base Name: Enter the Radia Knowledge Base name.
 - Data Source Name: Enter the Data Source Name (DSN). This is the connection to your database.
 - User Name: Type the user name for the DSN.
 - **Password:** Enter a password if required.

The Radia Knowledge Base will depend upon the Radia product you are using. Refer to the specific product guide or the HP OpenView support web site for information regarding the creation of that Radia Knowledge Base.

- 3 Click OK.
- 4 To complete the Radia Knowledge Base configuration, edit the Global Settings, located at the bottom of the Knowledge Base Manager Configuration window:
 - Sqlml Path
 The default path for importing SQLML documents.
 - Log Path

Default log path for AutoImport processing status information. All exceptions are logged as well as successful imports and \Notify file deletions after successful imports of Radia Service state files.

— Log Level (default is Errors/Other)

The log level determines how much data is logged to the Knowledge Base Manager's log file. There are three possible settings:

 Errors/Other – (Recommended) Records only errors. In large environments, recording more than errors to the log file can result in very large file sizes.

Using the Knowledge Base Manager



- **Verbose** Defines additional information on successful processing into the database.
- **Debug** Records far more information than Verbose should only be used at the request of HP Support.
- Database Reconnect (msecs) (default is 5000)
 Number of milliseconds to wait between reconnect attempts to the SQL database server.
- Import Directory Scan (msecs) (default is 5000)
 Number of milliseconds to wait between each check of the import directory for new files.
- Switch Tasks after (mins) (default is 1)
 Number of minutes to wait before switching to the next scheduled task.

A new Knowledge Base is now available. When you are finished adding a Knowledge Base, you can add Tasks that will execute against your databases.

Creating Tasks

You can create Tasks associated with each Knowledge Base to populate and modify your Radia database.

To create a Task

Click New Task.

Knowledge Base Manager - Add T	ask	×
Task Type:	Radia Usage Manager Collection Files	
Task Name:		
Import Directory:		Browse
After Import:	Archive	
	Ν	
	νζ	
	OK Cancel	

2 From the Task Type drop-down list, select one of the following:



The Task Type will depend upon the Radia product you are using. For product specific task information, refer to the specific product guide or the HP OpenView support web site.

- Radia Extensions for Windows Installer State Files Create a task of this type to define your automated import directory for state files that are collected. Refer to the *Getting Stared Guide for HP OpenView Extensions for Windows Installer Using Radia (Getting Started Guide for Extensions for Windows Installer)* for more information regarding this task type.

Configuration Server Service-to-Package Extracts When state files are built with the System Explorer using the Build State File(s) option from the context menu, a state file export directory is created based on the files in the packages associated with the services. Each service/package combination is then represented in the resulting directory structure as state files to be imported into the knowledge base. The root of the directory structure is then pointed to by this Knowledge Base Manager task. Refer to the *Getting Stared Guide for Extensions for Windows* for more information regarding this task type.

Usage Manager Collection Files

Create a task of this type to define your automated import directory for usage files that are collected. Refer to the *Installation and Configuration Guide for the HP OpenView Usage Manager Using Radia(Usage Manager Guide)* for more information.

- Configuration Server Product-to-Application Rule Extracts *For future use.*

Usage Manager Purge Criteria

Use this task to purge usage data from your database. You must define whether the purging will take place daily, monthly, or yearly. Refer to the *Usage Manager Guide* for more information.

— Radia Patch Import

Create a task of this type for use with the Radia Patch Manager. Refer to the Installation and Configuration Guide for the HP OpenViewPatch Manager Using Radia (Patch Manager Guide) for more information.

3 The type of task you select will determine what information is required in the following text boxes. Depending on the task you select, some of these text boxes may not appear.

Using the Knowledge Base Manager

— Task Name

Type a name for the task, for example **Collection Files**.

— Import Directory

Enter the path for the directory from which files will be imported. Use **Browse** to navigate to it.

— After Import

Select the action taken after import, Archive, Delete, or Leave (Leave is specific to SQLML Import Tasks only). This option allows you to remove the files from the import directory immediately after they are imported.

If you are defining an import location using a UNC shared folder name or mapped drive, you must define a null session pointer within the registry. See Appendix A, Defining a Collection Point for a UNC Shared Folder or Mapped Drive for more information.

Note to Usage Manager users: Using HTTP to define a collection point is recommended and it does not require any further configuration

4 Click **OK** and you are returned to the Knowledge Base Manager Configuration window. It now displays the information you just entered.

adia Knowledge Base Manager Configuration		_ 🗆 >
Knowledge Bases		
Knowledge Base Name: Radia Usage Manager	r New Modify Delete	
Task Name	Directory	New Task
Collection Files from RIS	C:\Novadigm\IntegrationServer\etc\usage\KB_M	Delete Task
		Modify Task
		Save Configurations
		Revert Configurations
		Exit
Blobal Settings]
Log Path: C:\Program Files\No	ovadigm\Knowledge Base Manager View Log	
Log Level: Errors / Other		
Database Reconnect (msecs): 5000		

Configuration Server Service Automated Import Directory

The Knowledge Base Manager and the Configuration Server Service conversion process automatically create the Configuration Server subdirectory structures. The Configuration Server Service automated import directory must be defined to the System Explorer state file conversion process and the directory defined to the System Explorer must match the configuration for automated importing to be successful.

Using the Knowledge Base Manager

Summary

- Knowledge Base Manager is configured through a control panel application.
- Use the control panel application to define your automated import directories.



A Defining a Collection Point for a UNC Shared Folder or Mapped Drive

The collection point is the directory where collected information is stored. The Knowledge Base Manager continuously monitors this directory for new data and when data is found, the Knowledge Base Manager delivers it to your SQL Server or Oracle database.

If your collection point is defined using either a UNC or a mapped drive, further configuration is required. We recommend defining your collection points using HTTP, which will require no further configuration.

To add a collection point destination that corresponds to a UNC connected shared folder connection, instead of an HTTP address, define the collection point name and edit the registry using the Registry Editor to add the collection point name to the registry key:

```
HKLM\System\CurrentControlSet\Services\lanmanserver\paramet
ers\NullSessionShares\
```

Refer to Microsoft Knowledge Base article Q289655 for more information.

For example,

To copy the collection file to the server folder \\machine_name \KB_Mgr1_Usage\, you would configure the collection point and registry key as follows

1 Add the collection point to the server as displayed in the next figure.

ther users on your s folder, click Share this
ther users on your s folder, click Share this
Jsers
nis Permissions
Caching

2 On the server, use the Registry Editor to configure the registry to accept null session pointers for the collection point, as displayed in the next figure. This allows for operation when the collection point may not be available.

Appendix A

Provide Eds. Two May South Online		
KSecDD Sector Sector	Autodisconnect: REG_DWORD: 0M enableforcedlogoff :REG_DWORD: 0x1 enablesecuritysignature : REG_DWORD: 0 Guid: REG_BINARY: as 520 UT3 b6 23 58 4c Lmannounce : REG_DWORD: 0 NullSessionPipes: REG_MULTI_S2: COM/NAP COM/NO NullSessionShares: REG_MULTI_S2: COM/CFG DFSs K requiresecuritysignature : REG_DWORD: 0 Size : REG_DWORD: 0x1 Multi-String Editor Data: OK Cancel Heb	DE SOL\OUERY SI

3 Test this using the registry editor on the client machine. Configure the collection point destination for the database name in the registry key as:

\HKLM\Software\Novadigm\Application Extensions\Usage Manager\Collections\

	? ×
OK	Cancel
	ΟK

Defining a Collection Point for a UNC Shared Folder or Mapped Drive

Appendix A

Index

.ISState extensions, 22 .ISState file formats, 22

A

AppLogin User ID, 18 AutoImport directories, 22, 24, 29

В

Build State File(s) option, 27

С

collection point, 8 definition, 31 destination, 31, 33 Control Panel application, 10

D

Data Source Administrator, 19 Database Reconnect, 26 DB_OWNER, 18 DSN, 18

E

export directories, 22

import directories, 22 Import Directory Scan, 26

Κ

KB Manager.cmd, 16 Knowledge Base Manager autoimport directories, 24 control panel, 10, 22, 23 installing, 15 ODBC DSN, 18 overview, 22 registering components, 16 SQL server requirements, 18 starting and stopping, 19 Windows service, 9

L

Log Path, 25

0

ODBC Data Source Administrator, 19 ODBC system DSN, 18

Ρ

prerequisites, 15 purging usage data, 28

R

Radia Configuration Server Product-to-Application Rule Extracts, 28
Radia Configuration Server Service-to-Package Extracts, 27
Radia Extensions for Windows Installer, 22 state files, 27
Radia KB Manager Configuration icon, 22
Radia Knowledge Base, 8 database, 8
Radia Packager for Windows Installer, 22
Radia packages, extraction and conversion, 22
Radia state files, 22
Radia state files, 22
Radia Usage Manager Collection Files, 27
Radia Usage Manager Purge Criteria, 28



RCS Service automated import directory, 29

S

service conversion process, 29 SQL Server logon ID, 18 state file conversion process, 29 definition, 8 directories, 22 export directory, 27 export process, 22 system requirements, 15

Т

Task Type drop-down list, 27

U

usage data, purging, 28

V

varsets, 22

W

Windows service, 9