

HP Configuration Management Knowledge Base Server

for the Windows® operating system

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Installation and Configuration Guide

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Documentation Updates

This guide's title page contains the following identifying information:

- Software Version number, which indicates the software version
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To check for recent updates or to verify that you are using the most recent edition, visit the following URL:

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Table 1 lists new features added for the Configuration Management v 5.10 release.

Table 2 lists features added for previous releases.

Table 1 Features added for Configuration Management 5.10

Chapter	Version	Changes
2	5.10	Page 18, Installation Steps , added note to indicate the CM KB Server is always installed into a folder named <code>\Knowledge Base Server</code> that is created under the user-selected installation directory.
3	5.10	Page 25, Creating Tasks , the CM KB Server Administrator includes a new task type: CM Application Usage Manager Move File(s). For failover support, this task allows you to re-import the usage files in the Archive or Error directory, or both. Use this option to recollect data if your database becomes corrupted, or to recollect usage data following a server or communication error.

Table 2 Features added for Configuration Management 5.0

Chapter	Version	Changes
Global	5.00	Updated screen captures to display latest CM KB Server.

Support

You can visit the HP Software support web site at:

www.hp.com/go/hpsoftwaresupport

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

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- Enter into 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 sign in. Many also require an active support contract. To find more information about support access levels, go to the following URL:

http://h20230.www2.hp.com/new_access_levels.jsp

To register for an HP Passport ID, go to the following URL:

<http://h20229.www2.hp.com/passport-registration.html>

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1 Introduction

At the end of this chapter, you will:

- Be familiar with the HP Configuration Management Knowledge Base Server (CM KB Server).
- Understand how the different Configuration Management (CM) products use the CM KB Server.
- Understand the CM KB Server process for populating databases.

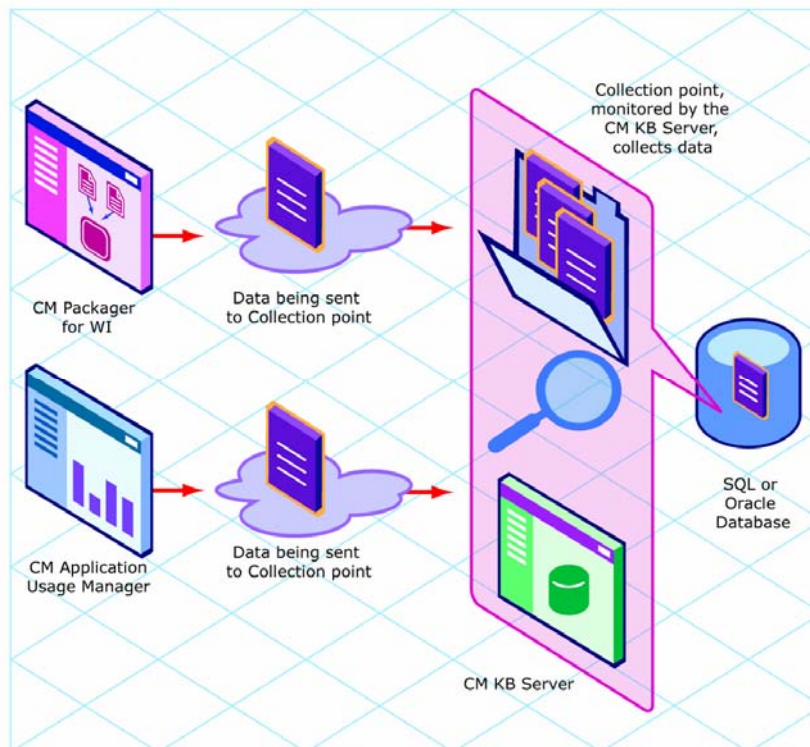
Defining the CM KB Server

The CM KB Server populates a SQL server or Oracle database 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 CM KB Server from a continuously monitored user-specified directory, or collection point. When data is detected in this collection point, it is automatically transferred to the database.

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

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

Figure 1 CM KB Server process

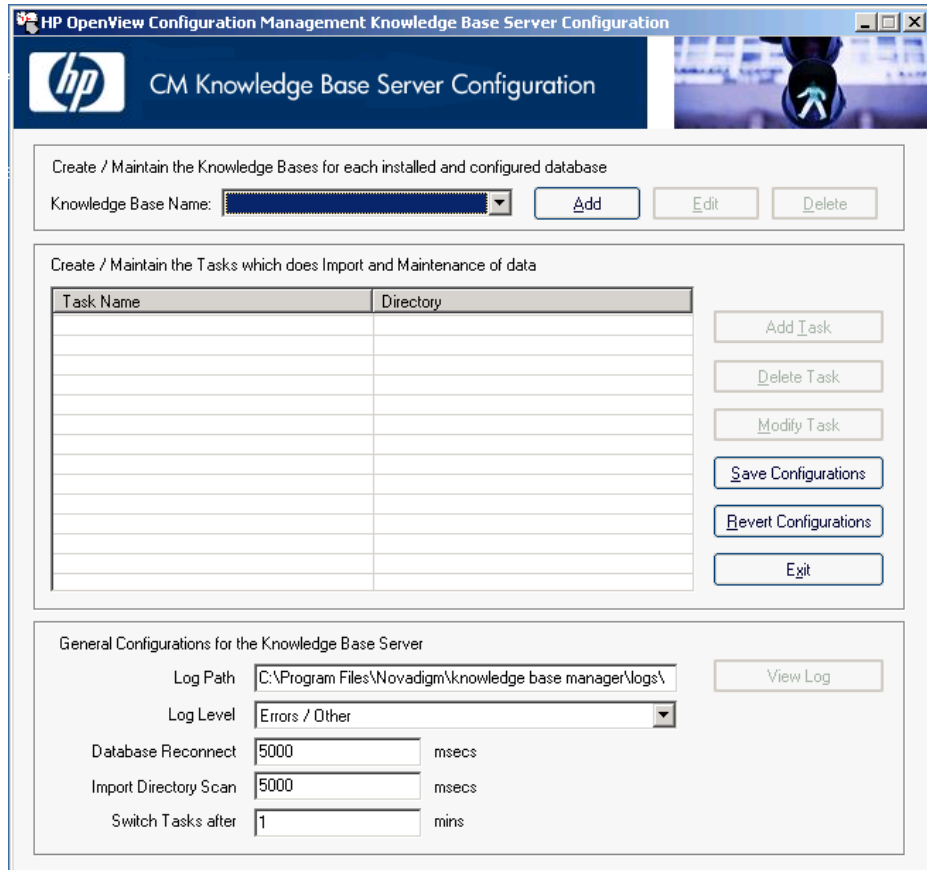


The CM KB Server runs as a Windows service that communicates with the database through an ODBC system DSN and is capable of importing several types of state files including:

- Configuration Server Service/Package component extracts
- State files built by the CM Packager for WI components
 - Packager for Windows Installer
 - Application execution traces and profiles
- Application Usage Manager collection files

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

Figure 2 CM KB Server control panel



➤ The CM KB Server service must be restarted for any changes to take effect.

Summary

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

2 Installing the CM KB Server

At the end of this chapter, you will:

- Understand what steps are required to set up the environment for the CM KB Server.
- Understand the CM KB Server system requirements.
- Be able to install the CM KB Server.

Overview

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

Before you can begin to use the CM KB Server, you will need to perform the following steps:

- 1 Create a SQL Server or Oracle database to store CM state files. This is usually done by a database administrator. Refer to the individual CM product guides for specific instructions on creating the database you require.
- 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 CM KB Server and connect it to the CM product database.
- 4 Install the CM KB Server.

SQL Server AppLogin User ID

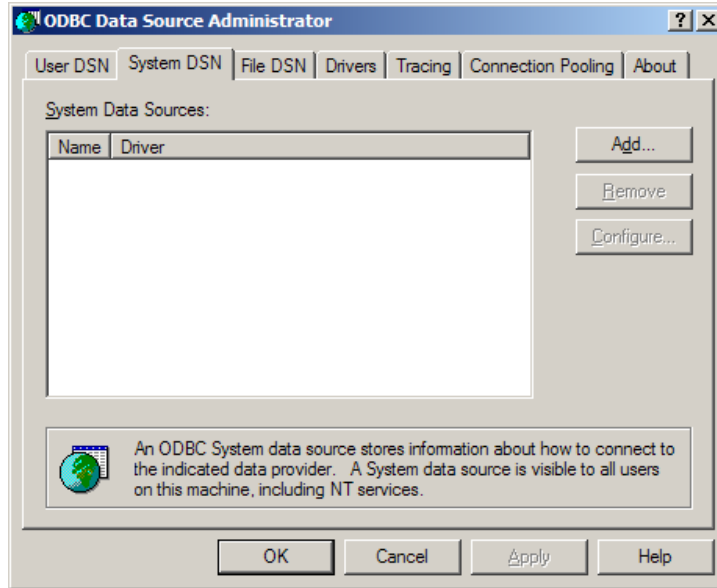
To process requests, the CM KB Server requires a SQL Server logon ID. A user ID of any name can be configured. The default is sa, which is the default system administrator ID. This ID is used to define the SQL Server as the DB_OWNER for the CM Configuration Server Database (CM-CSDB) with full permissions for administering the database. This ID is referred to as the AppLogin User ID.

ODBC DSN for the CM KB Server

The CM KB Server requires an ODBC system DSN to connect to the SQL Server or Oracle database. The ODBC definition must be configured on the same workstation or server on which the CM KB Server is executing.

Use the ODBC Data Source Administrator located in the Windows Control Panel to create these connections. See your system administrator or access the [HP Software Support](#) web site for more information.

Figure 3 ODBC Data Source Administrator



Installing the CM KB Server

Install the CM KB Server anywhere in your environment that has connectivity to the database server you will be using.

We recommend installing the CM KB Server to the same computer that will contain your collection point.

System Requirements

- 128 MB RAM minimum, 512 MB or above preferred

Platform Support

For detailed information about supported platforms, see the release note document that accompanies this release.

- ▶ We recommend installing the CM KB Server on a separate machine from the Database Server because of disk contentions. If you have a dedicated publishing server, you could alternatively install the CM KB Server there.

Installation Steps

To install the CM KB Server

- 1 Navigate to the `\infrastructure\extended_infrastructure\knowledge_base_server\` directory on your CM media.
- 2 Double-click **KnowledgeBaseServer.msi**.
- 3 The CM KB Server installation begins.
- 4 Click **Next**.
- 5 Read and accept the HP software license terms and click **Next**.
- 6 Select the installation directory and click **Next**.

- ▶ The CM KB Server will be installed into a folder named `\Knowledge Base Server` under the selected installation directory. For example, if you accept the default installation directory of:

`C:\Program Files\Hewlett-Packard\CM`

the CM KB Server will be installed into this location:

`C:\Program Files\Hewlett-Packard\CM\Knowledge Base Server`

- 7 Click **Next** to install the CM KB Server.

The CM KB Server is installed.

Starting and Stopping the CM KB Server

The CM KB Server is installed as a Windows service called **HP OpenView CM KB Server**.

Stop or start the CM KB Server service using the Administrative Tools\Services options in the Control Panel.

The CM KB Server is now installed and configured. To import data into your SQL Server or Oracle database, you need to create specific tasks using the CM KB Server control panel. For details, refer to Chapter 3, [Using the CM KB Server](#).

Summary

- Install the CM KB Server anywhere in your environment that has connectivity to your CM-CSDB.
- Create an ODBC connection for the CM KB Server.
- The CM KB Server is installed as a Windows service called HP OpenView CM KB Server.

3 Using the CM KB Server

At the end of this chapter, you will:

- Be able to define tasks using the CM KB Server control panel application.

Overview

The CM KB Server provides services to manage the CM product databases and runs as a Windows service on a Windows 2000 or above workstation or server.

The CM KB Server performs automated import processing of CM state files into a SQL or Oracle database. Automated importing may be defined for two types of directory structures:

- **Import Directories**

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

- **Export Directories**

Configuration Server Service export directories that have required subdirectory structures that are built by the CM Packager for Windows Installer features which enable extraction and conversion of CM packages contained in CM 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 CM Configuration Server is active, however the CM KB Server automated import server runs independently to import state files found in the automated import directories.

Configuration for the CM KB Server is controlled through the CM KB Server Configuration control panel.

Accessing the Control Panel

To access the CM KB Server Configuration Control Panel

- 1 Access the Windows Control Panel.
- 2 Select the **CM KB Server Configuration** icon.
The CM KB Server Configuration window opens.

Configuring the Import Directories

Use the CM KB Server control panel to configure the CM KB Server.

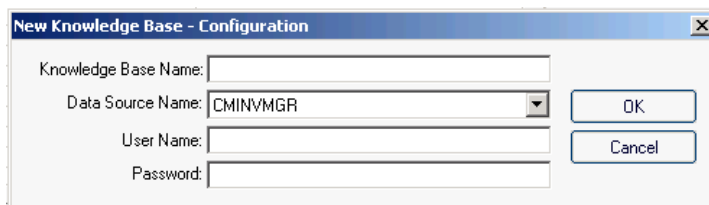
Adding a Knowledge Base

In order for the CM KB Server 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 **Add** to add a Knowledge Base.

The New Knowledge Base – Configuration window opens.



- 2 Enter the following information:
 - **Knowledge Base Name:** Enter the 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 Knowledge Base will depend upon the CM product you are using. Refer to the specific product guide or the [HP Software Support](#) web site for information regarding the creation of that Knowledge Base.

- 3 Click **OK**.
- 4 To complete the Knowledge Base configuration, edit the Global Settings, located at the bottom of the CM KB Server Configuration window:

- **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 CM Service state files.

- **Log Level** (default is **Errors/Other**)

The log level determines how much data is logged to the CM KB Server log file. There are three possible settings:

- **Errors Only** – Records only errors.
- **Errors/Other** – (Recommended) Records errors and other important information. In large environments, recording more than errors to the log file can result in very large file sizes.
- **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 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.

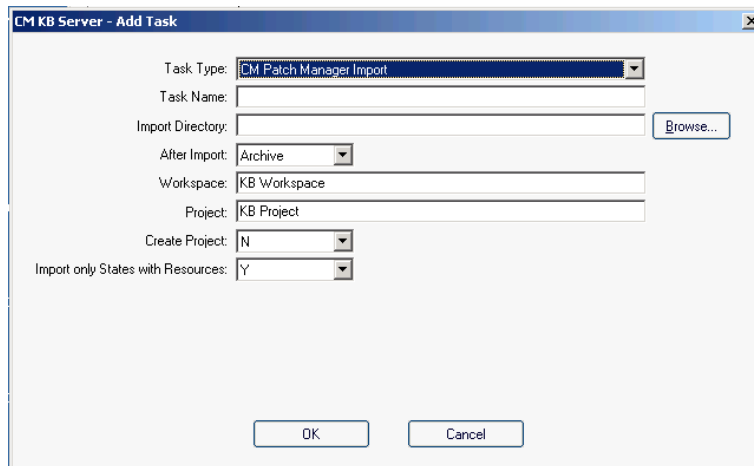
A new Knowledge Base is now available. When you are finished adding a Knowledge Base, you can add Tasks that will execute against your databases.

Creating Tasks

You can create Tasks associated with each Knowledge Base to populate and modify your CM-CSDB.

To create a Task

- 1 Click **Add Task**.



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



The Task Type will depend upon the CM product you are using. For product specific task information, refer to the specific product guide or the [HP Software Support](#) web site.

- **CM Packager for WI State Files**

Create a task of this type to define your automated import directory for state files that are collected. Refer to the *CM Packager for WI Guide* for more information.

- **CM Configuration Server DB Service-to-Package Extracts**

When state files are built with the CM Admin CSDB Editor 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 CM KB Server task. Refer to the *CM Packager for WI Guide* for more information.

— **CM Application 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 *CM Application Usage Manager Guide* for more information.

— **CM Configuration Server DB Product-to-Application Rule Extracts**

Use this task to import rules which is extracted from the CM Configuration Server. These rules are imported into the Application Usage Manager Database. Imported rules can be viewed and modified using CM Application Usage Manager Administrator and can be used in the Server Web Reports for filtering the usage data.

— **CM Application 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 *CM Application Usage Manager Guide* for more information.

— **CM Patch Manager Import**

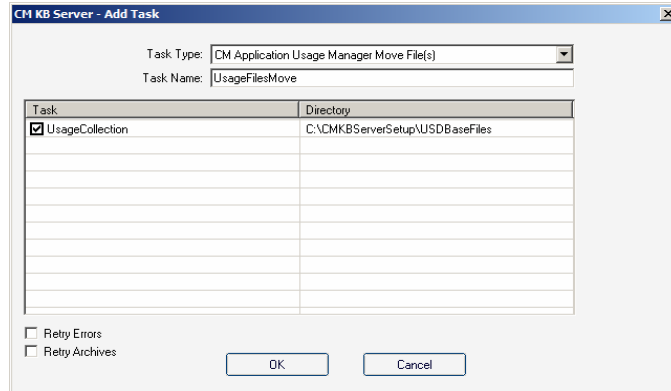
Create a task of this type for use with the previous versions of CM Patch Manager. Refer to the *CM Patch Manager Guide* for more information.



As of Patch Manager v5.10, support for the automatic generation of state files for security patches was removed. Refer to the *CM V 5.10 Release Notes* for more information.

— **CM Application Usage Manager Move File(s)**

Use this task for usage file collection failover support, to move the USDBase files from your Error directory, your Archive directory, or both, to the import directory for usage collection. Specify the Import Directory on the Add Task window. This task occurs at midnight.



- 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.

— **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 to be taken after import: Archive, Delete. This option allows you to remove the files from the import directory immediately after they are imported.

— **Retry Errors**

For the CM Application Usage Manager Move File(s) task, click Retry Errors to move all the files from the Error directory to the import directory. From this import directory the KB Server automatically imports them into the database. Use Retry Errors after a previous collection error due to a network or database communications error.

— **Retry Archives**

For the CM Application Usage Manager Move File(s) task, click Retry Archives option to move all the files from the Archive directory to the import directory. From the import directory, the KB Server automatically imports them into the database. Use Retry Archives only when your database is corrupted or new.



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 CM Application 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 CM KB Server Configuration window. It now displays the Task Name and Directory information you just entered.
- 5 Click **Save Configurations** to save all the configuration changes.
- 6 Restart the CM KB Server service.

CM Configuration Server Service Automated Import Directory

The CM KB Server and the CM Configuration Server Service conversion process automatically create the CM Configuration Server subdirectory structures. The CM Configuration Server Service automated import directory must be defined to the CM Admin CSDB Editor state file conversion process and the directory defined to the CM Admin CSDB Editor must match the configuration for automated importing to be successful.

Summary

- CM KB Server 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

At the end of this chapter, you will:

- Understand how to define a collection point for a UNC shared folder or mapped drive.

The collection point is the directory where collected information is stored. The CM KB Server continuously monitors this directory for new data and when data is found, the CM KB Server 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:

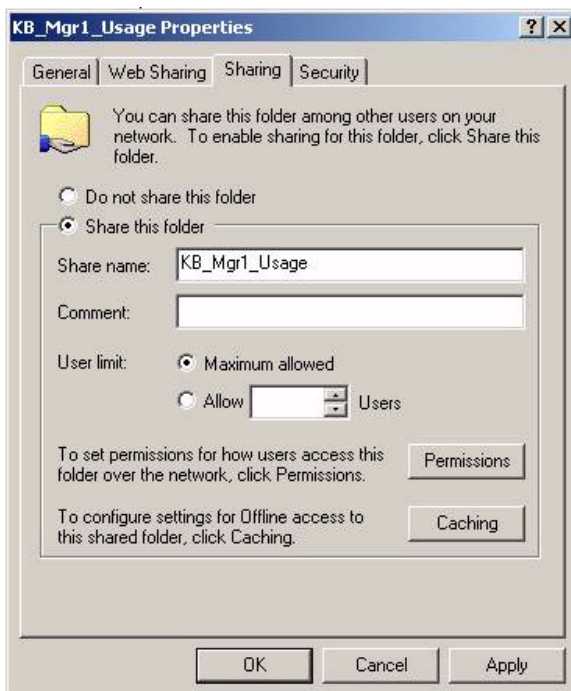
```
HKLM\System\CurrentControlSet\Services\lanmanserver\parameters\NullSessionShares\
```

Refer to [Microsoft Knowledge Base article Q289655](#) for more information.

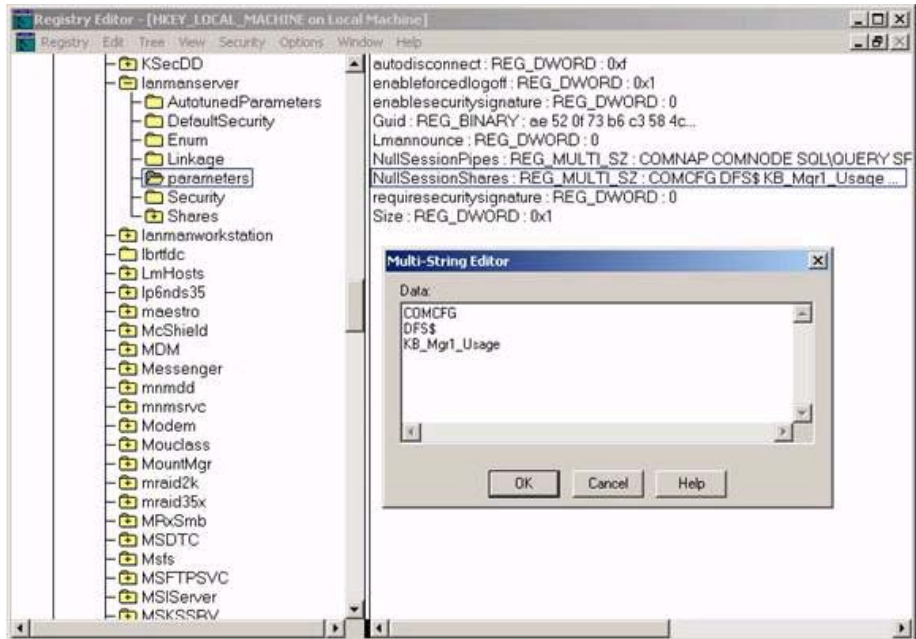
For example,

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.



- 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.



- 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\Hewlett-Packard\Application Extensions\Usage Manager\Collections\`



B Product Name Changes

If you have used Radia in the past, and are not yet familiar with the newly rebranded HP terms and product names, Table 3 below will help you identify naming changes that have been applied to the Radia brand.

Table 3 Product Name and Term Changes

New Name/Term	Old Name/Term
HP Configuration Management Knowledge Base Server	Radia Knowledge Base Manager
HP Configuration Management	Radia
HP Configuration Management Admin CSDB Editor	Radia System Explorer
HP Configuration Management Application Usage Manager	Radia Usage Manager
HP Configuration Management Patch Manager	Radia Patch Manager
HP Configuration Management Packager for Windows Installer	Radia Extensions for Windows Installer
HP Configuration Management Configuration Server	Radia Configuration Server
HP Configuration Management Configuration Server Database	Configuration Server Database, Radia Database
HP Configuration Management Inventory Manager	Radia Inventory Manager

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