

HP Configuration Management Knowledge Base Server

for the Windows® operating system

Software Version: 7.20

Installation and Configuration Guide

Manufacturing Part Number: none

Document Release Date: August 2008

Software Release Date: July 2008



Legal Notices

Warranty

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

The information contained herein is subject to change without notice.

Restricted Rights Legend

Confidential computer software. Valid license from HP required for possession, use or copying. Consistent with FAR 12.211 and 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed to the U.S. Government under vendor's standard commercial license.

Copyright Notices

© Copyright 2004-2008 Hewlett-Packard Development Company, L.P.

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

Documentation Updates

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

- Software Version number, which indicates the software version
- Document release date, which changes each time the document is updated
- Software release date, which indicates the release date of this version of the software

To check for recent updates or to verify that you are using the most recent edition, visit the following URL:

ovweb.external.hp.com/lpe/doc_serv/

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

Table 1 lists new features and document changes for recent releases.

Table 1 Document Updates

Chapter	Version	Changes
All	7.20	Many components of the HP OpenView Configuration Management components have been rebranded to HP Client Automation for Version 7.20. The KB Server and the Application Usage Manager have <i>not</i> been rebranded.
	Aug 2008	Removed “CM” from most references to products that have not been rebranded to Client Automation. For example, the guide now refers to the “CM KB Server” as just the “KB Server”.
All	7.20	The KB Server adds support for posting data to SQL Databases hosted by SQL Server 2008 or Oracle 11g.
2	5.10	Page 16, 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 23, 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.
Appendix	7.20 Aug 2008	Removed previous Appendix B, Product Name Changes, due to improved HP Self-solve search capabilities.

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.

HP Software 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 valued support customer, you can benefit by using the support site to:

- Search for knowledge documents of interest
- Submit and track support cases and enhancement requests
- Download software patches
- Manage support contracts
- Look up HP support contacts
- Review information about available services
- 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>

Contents

1	Introduction	9
	Defining the KB Server	10
2	Installing the KB Server.....	13
	Overview.....	14
	SQL Server AppLogin User ID	14
	ODBC DSN for the KB Server.....	14
	Installing the KB Server	15
	System Requirements	15
	Platform Support.....	15
	Installation Steps	16
	Starting and Stopping the KB Server	16
3	Using the KB Server	19
	Overview.....	20
	Accessing the Control Panel	21
	Configuring the Import Directories.....	21
	Adding a Knowledge Base	21
	Creating Tasks	23
	Configuration Server Service Automated Import Directory.....	26
A	Defining a Collection Point for a UNC Shared Folder or Mapped Drive.....	27
	Index	31

1 Introduction

At the end of this chapter, you will:

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

Defining the KB Server

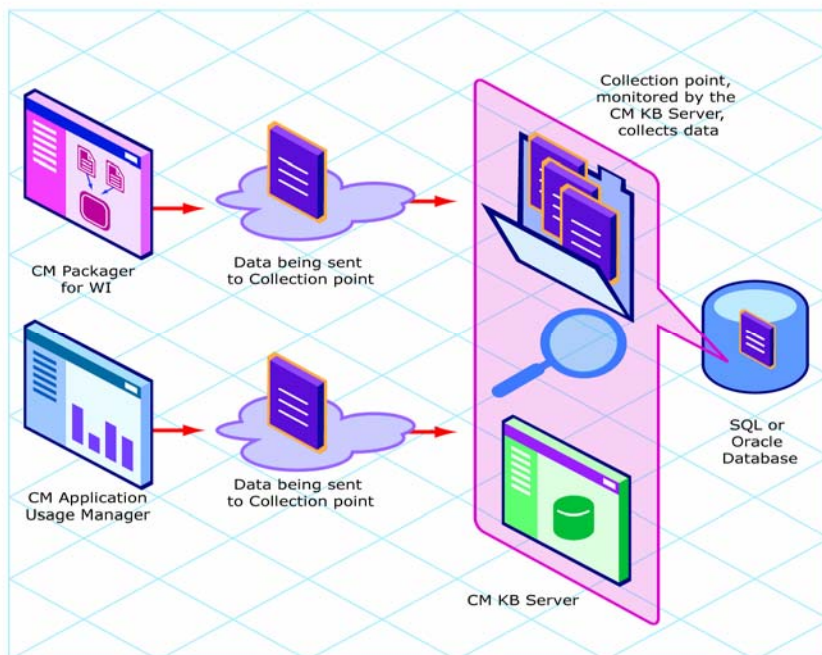
The KB Server populates a SQL server or Oracle database with data in the form of state files. State files consist of data that represent the current state of an application. This data is acquired by the KB Server from a continuously monitored user-specified directory, or collection point. When data is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

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

▶ Not all Client Automation components have been renamed from Configuration Management (CM) to Client Automation. Any references to “CM” products refer to those products that have not been renamed to Client Automation as of Version 7.20.

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 KB Server process

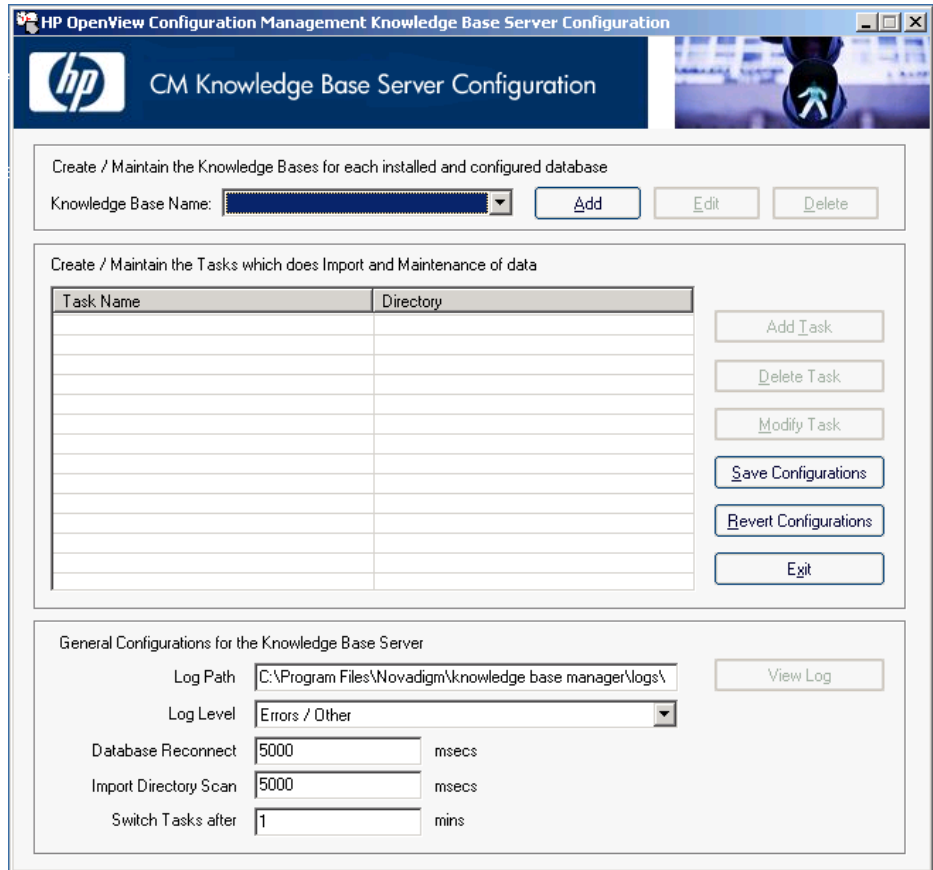


The KB Server runs as a Windows service that communicates with the database through an ODBC system DSN and is capable of importing several types of state files including:

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

The KB Server is configured through a Control Panel application named **CM KB Server Configuration**; this allows the administrator to define a set of automated import directories that the 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 Configuration control panel application



▶ The **HP OpenView CM KB Server** service must be restarted for any changes to take effect.

2 Installing the KB Server

At the end of this chapter, you will:

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

Overview

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

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

- 1 Create a SQL Server or Oracle database to store Client Automation state files. This is usually done by a database administrator. Refer to the individual Client Automation 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 KB Server and connect it to the Client Automation product database.
- 4 Install the KB Server.

SQL Server AppLogin User ID

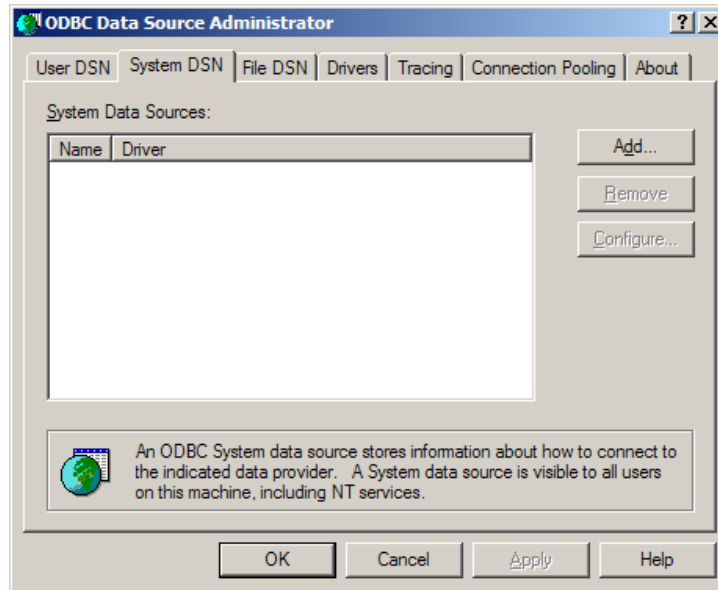
To process requests, the KB Server requires a SQL Server logon ID. A user ID of any name can be configured. The default is sa, which is the default system administrator ID. This ID is used to define the SQL Server as the DB_OWNER for the Configuration Server Database (CSDB) with full permissions for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

ODBC DSN for the KB Server

The 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 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 KB Server

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

We recommend installing the 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 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 KB Server there.

Installation Steps

To install the KB Server

- 1 Navigate to the `\infrastructure\extended_infrastructure\knowledge_base_server\` directory on your Client Automation media.
- 2 Double-click **KnowledgeBaseServer.msi**.
- 3 The 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 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 KB Server will be installed into this location:

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

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

The KB Server is installed. The Windows service display name is **HP OpenView CM KB Server**.

Starting and Stopping the KB Server

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

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

The 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 KB Server control panel. For details, refer to Chapter 3, [Using the KB Server](#).

3 Using the KB Server

At the end of this chapter, you will:

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

Overview

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

The KB Server performs automated import processing of Client Automation 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 Client Automation 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 Client Automation packages contained in Client Automation 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 KB Server automated import server runs independently to import state files found in the automated import directories.

Configuration for the 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 Configuration control panel application to configure the KB Server.

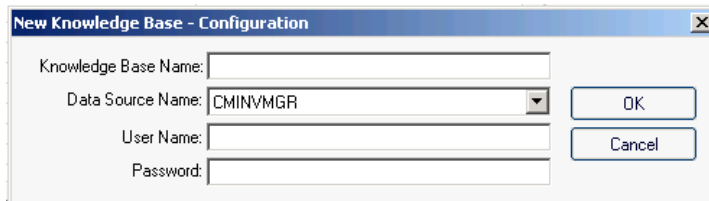
Adding a Knowledge Base

In order for the 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 Client Automation 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 Client Automation Service state files.

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

the log level determines how much data is logged to the 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.

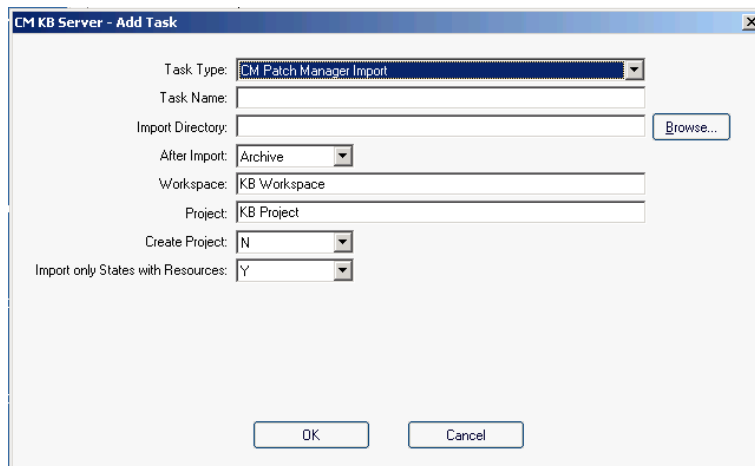
A new Knowledge Base is now available. When you are finished adding a Knowledge Base, you can add Tasks that will execute against your databases.

Creating Tasks

You can create Tasks associated with each Knowledge Base to populate and modify your Configuration Server Database (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 Client Automation product you are using. For product specific task information, refer to the specific product guide or the [HP Software Support](#) web site. Some products have not been renamed from Configuration Management (CM) to Client Automation.

- **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 Administrator 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 KB Server task. Refer to the *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 *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 Configuration Server. These rules are imported into the Application Usage Manager Database. Imported rules can be viewed and modified using the 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 *Application Usage Manager Guide* for more information.

— **CM Patch Manager Import**

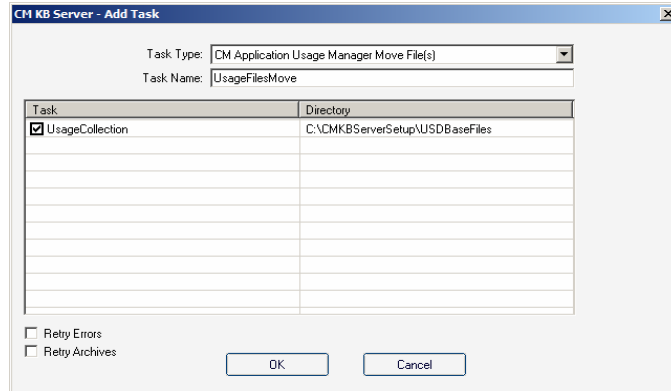
Create a task of this type for use with the previous versions of CM Patch Manager. Refer to the *Patch Manager Guide* for more information.



As of Patch Manager v 5.10, support for the automatic generation of state files for security patches was removed. Refer to the *HP OpenView Configuration Management 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](#) on page 27 for more information.

Note to 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 **HP OpenView CM KB Server** service.

Configuration Server Service Automated Import Directory

The KB Server 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 Admin CSDB Editor state file conversion process and the directory defined to the Admin CSDB Editor must match the configuration for automated importing to be successful.

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 KB Server continuously monitors this directory for new data and when data is found, the 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:

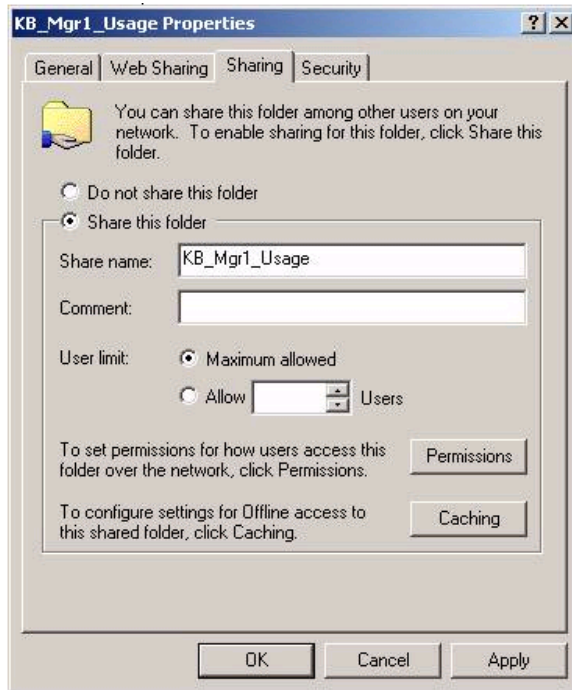
```
HKLM\System\CurrentControlSet\Services\lanmanserver\parameters\NullSessionShares\
```

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

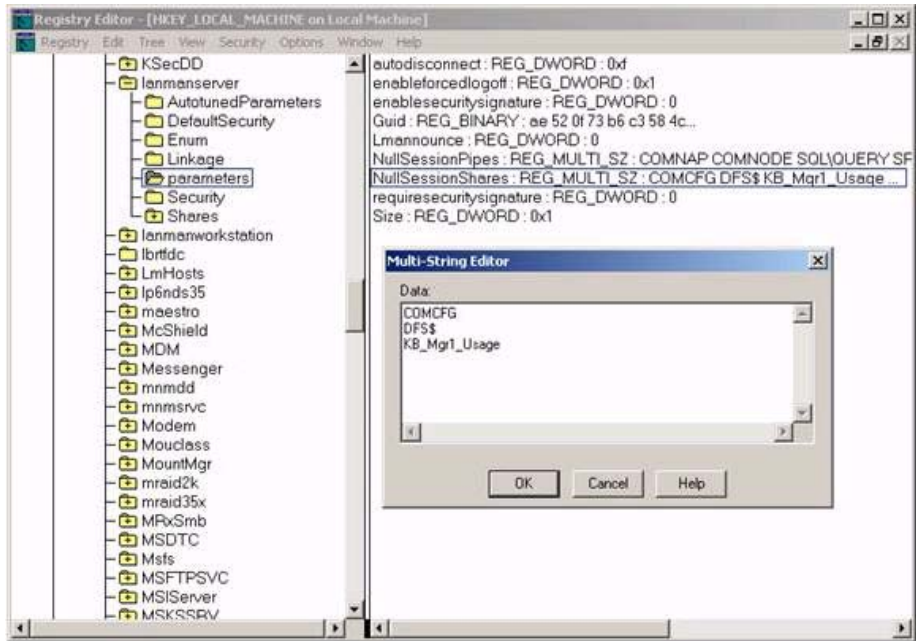
For example,

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:

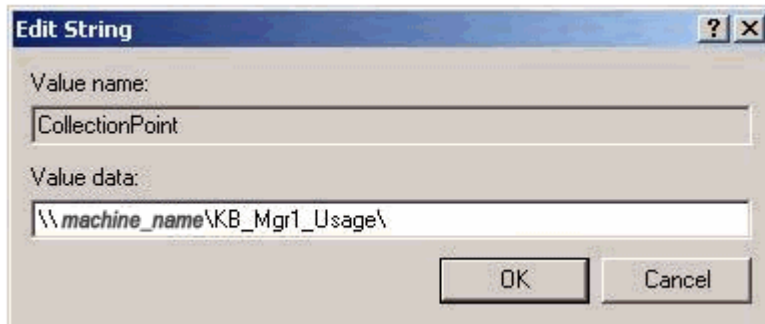
- 1 Add the collection point to the server as displayed in the next figure.



- 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\`



Index

.

.ISState extensions, 20
.ISState file formats, 20

A

AppLogin User ID, 14
AutoImport directories, 20, 21, 26

B

Build State File(s) option, 23

C

Client Automation packages, extraction and conversion, 20
Client Automation state files, 20
CM Application Usage Manager Move File(s), 24
CM KB Server Configuration
 control panel, 20, 21
CM KB Server Configuration icon, 20
CM Packager for Installer, 20
CM Packager for Windows Installer, 20
collection point, 10
 definition, 28
 destination, 28, 29
Control Panel application, 11
copyright notices, 2
customer support, 6

D

Data Source Administrator, 14
Database Reconnect, 22
DB_OWNER, 14

document changes, 4
documentation updates, 4
DSN, 14

E

export directories, 20

I

import directories, 20
Import Directory Scan, 22

K

KB Manager.cmd, 16
KB Server
 autoimport directories, 21
 installing, 16
 ODBC DSN, 14
 overview, 20
 registering components, 16
 SQL server requirements, 14
 starting and stopping, 16
 Windows service, 11

L

legal notices
 copyright, 2
 restricted rights, 2
 warranty, 2
Log Path, 22

O

ODBC Data Source Administrator, 14
ODBC system DSN, 14

P

- passport registration, 6
- prerequisites, 15
- purging usage data, 24

R

- RCS Service automated import directory, 26
- restricted rights legend, 2
- Retry Archives, 25
- Retry Errors, 25

S

- service conversion process, 26
- SQL Server logon ID, 14
- state file
 - conversion process, 26
 - definition, 10
 - directories, 20

- export directory, 23
- export process, 20

- support, 6
- system requirements, 15

T

- Task Type drop-down list, 23
- technical support, 6

U

- updates to doc, 4
- usage data, purging, 24

V

- varsets, 16, 20

W

- warranty, 2
- Windows service, 11