

HP Configuration Management

Portal

for Windows® operating systems

Software Version: 5.1x

Migration Guide

Document Release Date: March 2008

Software Release Date: February 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 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

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	Upgrading the CM Portal	7
	CM Portal Migration Overview	8
	CM Portal 5.x Path, Service and Port	8
	Supports Existing Management Agents from 2.x.....	8
	Migration Procedures	9
	Preparation Tasks	9
	Task 1 Stop any current jobs and note jobs to be recreated.....	9
	Task 2 [For RMP 2.x, only] Prepare your existing Radia Management Portal	9
	Migration Tasks	10
	Task 3 Run setup.exe to install the latest CM Portal.....	10
	Task 4 Modify the CM Portal Port Number, If Necessary	10
	Task 5 If your Management Portal also supports OS Manager, perform this task.....	10
	Task 6 Run the directory object migration script: rmp-migrate.tcl	11
	Task 7 Verify the directory object migration and them remove temporary migration folders ...	11
	Post-Migration Steps	12
	Task 8 Recreate any scheduled tasks noted in Task 1.	12
	Task 9 Optionally, enable the Self-maintenance option for CM Portal Agents (RMAs)	12
	Enabling Self-maintenance for CM Portal Agent (RMA) Upgrades on Windows and UNIX.....	12
	Self-maintenance Examples.....	14

1 Upgrading the CM Portal

 The CM Portal version 5.11 or later media is required to use the migration steps identified in this migration guide.

Use the information in this guide to upgrade your HP OpenView Configuration Management Portal (CM Portal) to the latest 5.1x version, from any of the following source versions:

- Radia Management Portal 2.x (Radia 4.x) with metakit 8.2 or 8.4 directory objects
- CM Portal 5.00 with CSD Silver OpenLDAP directory objects
- CM Portal 5.10 with CSD Gold OpenLDAP directory objects

The resulting CM Portal v 5.1x will include a migration or upgrade of the directory service to the OpenLDAP Connexitor™ Directory Services (CDS) version Gold. CDS is a binary distribution of OpenLDAP offered by Symas™.

The upgraded Gold version provides productivity enhancements and greatly expanded scalability. CM Portal 5.1x Zones can include up to 10 times more devices than before—up to 50,000 devices is the recommended maximum for a single Zone.

Also use the information in this guide to enable the Portal Agent Self-maintenance feature to upgrade the nvdkit and Agent builds on the managed-agents in your environment.

CM Portal Migration Overview

Tasks 1, 2	Tasks 3, 4, 5	Tasks 6,7	Tasks 8, 9
Prepare for migration	Run setup.exe to install latest version of the CM Portal to same server, Zone and port If Pre-5.00 – Install to a new directory If 5.xx – Install to the same directory	If upgrading from a pre-5.10 Portal, run the rmp-migrate script to convert and import directory data**	Reschedule tasks, port customizations

**The CM Portal v5.1x uses a CDS Gold version of the OpenLDAP directory. If you are migrating from a pre-5.10 CM Portal, the rmp-migrate script in Task 6 converts and imports directory data.

If you have multiple Portal Zones, repeat all migration steps for each Zone.

For additional configuration information, see the *HP OpenView Configuration Management Portal Installation and Configuration Guide*.

CM Portal 5.x Path, Service and Port

As of version 5.00, the CM Portal no longer installs into a shared Integration Server location, service or port, by default. The CM Portal installs into the stand-alone location, service, and port listed below:

Path: C:\Program Files\Hewlett-Packard\CM\ManagementPortal

Port: 3471

Service Name: HP OVCM Portal (httpd-managementportal)

In addition, the CM Portal requires additional ports for communicating with the new OpenLDAP directory.

- Listening port for OpenLDAP Directory communications: 3474 (default)
- Listening port for OpenLDAP Backup Directory: 3475 (default)

Supports Existing Management Agents from 2.x



To ensure continued registrations between the existing Management Agents and the CM Management Portal, install the CM Portal onto the *same server, zone name, and port* as an existing Management Portal V 2.x. Since the installation program does not prompt for a port number, Task 4 on page 10 explains how to adjust the port number after the new CM Portal is installed.

Migration Procedures

Preparation Tasks



Radia 4.2i - Management Portal v2.2 Migrations with Non-ASCII data

Customers migrating from Radia 4.2i with Management Portal 2.2 Build 911 may encounter a known issue with regards to migrating non-ASCII data. For details, refer to the Portal topic in the latest version of the *CM 5.1x Release Notes* posted to the HP Software Support web site.

Task 1 Stop any current jobs and note jobs to be recreated.



For CM 5.10 upgrades; skip this step.

The migration of the database objects from a pre-5.10 Portal will not recreate jobs or scheduled tasks. It will also not migrate the job history.

Note any scheduled tasks that will need to be manually recreated in the CM Portal after the upgrade.

Task 2 [For RMP 2.x, only] Prepare your existing Radia Management Portal

- 1 (Optional) Create a backup of the Radia Management Portal directory.
- 2 Open a command prompt, and navigate to the current installation directory for your existing Radia Management Portal. The default installation directory for previous versions was C:\Novadigm\IntegrationServer.
- 3 Type `sc stop httpd` to stop the Integration Server service that is hosting the Management Portal.



Perform Step 4, below, only if the Integration Server hosting the Management Portal is also hosting another infrastructure server module, such as Policy Server or Proxy Server.

Otherwise, continue with **Task 3**.

- 4 If the Radia Integration Server hosting your existing Management Portal is **also** running other, non-Management Portal components, do the following:
 - a Edit the `httpd.rc` file located in the `\IntegrationServer\etc` directory.
 - b Comment-out this line:

```
#module load rmp
```
 - c Save your changes to the `httpd.rc` file of the Integration Server.
 - d Restart the Radia Integration Service to run the non-Management Portal components. The Management Portal remains stopped.

Migration Tasks

Task 3 Run setup.exe to install the latest CM Portal

- ▶ Portal 5.x customers running OS Manager need to perform Task 5 before Task 3. That is, copy the `romad.tkd` file from the `\os_administrator` directory of the **CM OS Manager media** to the `ManagementPortal\modules` directory of your existing Portal and restart the Portal service. Then continue with Task 3.

Run `setup.exe` and enter the same zone name as your existing Portal. `Setup.exe` is included with the CM media in the following directory:

```
Infrastructure\extended_infrastructure\management_portal\win32
```

- If you are migrating from a 2.x version of the Radia Management Portal, you must install the Portal into a new install directory. You must specify the same Zone name as your existing 2.x Portal.
- If you are migrating from a 5.x version of the Portal, install the CM Portal 5.1x over your existing CM Portal. You must specify the same Zone name as your existing CM Portal.

The setup program will update your CM Portal Version 5.00 to 5.10, and install a new CSD Gold version of the OpenLDAP directory. Your existing (CM Portal 5.00) OpenLDAP objects are temporarily moved to `\ManagementPortal\migration` subdirectories for further processing.

Refer to the *CM Portal Installation and Configuration Guide* for detailed installation instructions.

Note: You will not see your existing CM Portal devices and other objects in the upgraded CM Portal at this time. Leave the Portal service running.

Task 4 Modify the CM Portal Port Number, If Necessary

If you are migrating from a CM Portal running on a Port other than 3471, use these procedures to change the installed or upgraded CM Portal 5.1x to use the same port number as your previous Portal. This ensures that the Portal Agents on existing devices are able to register with the new version of the Portal.

- 1 Stop the service for the CM Portal. It is listed in Windows Services as HP OVCM Portal (`http-managementportal`).
- 2 Edit the `httpd-managementportal.rc` file located in the `\ManagementPortal\etc` directory. Locate the `Overrides Config` entry and change the `PORT` value of 3471 to the port number used by your existing Management Portal.
- 3 Save your changes and restart the Portal Service. It will now be running on the new port number.

Task 5 If your Management Portal also supports OS Manager, perform this task.

If migrating from a 2.x Portal, copy the `romad.tkd` file from the `\os_administrator` directory of the **CM OS Manager media** to the `ManagementPortal\modules` directory, then restart the CM Portal before running the directory object migration script.

Task 6 Run the directory object migration script: rmp-migrate.tcl

► For CM 5.10 upgrades, skip this step.

If necessary, start the CM Portal service HP OVCM Portal (http-managementportal).

Following a successful install of the CM Portal 5.1x, copy all files from the `\migrate` folder of the CM Portal v5.11 media location to a new, local directory of your choice. For example, you can copy the `\migrate` folder contents to:

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

Also copy `nvdkit.exe` from the installed CM 5.1x Portal's `\ManagementPortal\` directory to the local directory where you placed the migrate files.

Run the following DOS command from your chosen local `\migrate` directory. For the `-source` and `-target` argument values, provide the fully-qualified paths, enclosed in quotes, to your old and new Portal directories. The syntax varies slightly for RMP 2.x versus 5.x migrations.

For RMP 2.x migrations:

```
.\nvdkit.exe rmp-migrate.tcl -source "<old_portal_home_dir>" -target  
"<new_cm_portal_home_dir>"
```

Example:

```
.\nvdkit rmp-migrate.tcl -source "C:\Novadigm\IntegrationServer" -target "C:\Prog  
ram Files\Hewlett-Packard\CM\ManagementPortal"
```

For Portal 5.00 migrations:

```
.\nvdkit.exe rmp-migrate.tcl -source "<Portal_home_dir>\migration" -  
target "<Portal_home_dir>"
```

Example:

```
.\nvdkit rmp-migrate.tcl -source "C:\Program Files\Hewlett-Packard\CM\  
ManagementPortal\migration" -target "C:\Program Files\Hewlett-Packard\CM\  
ManagementPortal"
```

This command migrates your existing directory objects, except for Jobs and Job History, into the latest OpenLDAP directory version installed with CM Portal 5.1x.

Notes: Sample migrations have taken 10 to 15 minutes to run; yours will depend on the starting Portal version and the number of Zone objects being migrated.

Near the end of the migration, the script stops the existing CM Portal Service to add the database objects. This takes about 5 minutes. Near the end of the script, the Portal (RMP) service is restarted, and you see the following entry

```
Database indexing in progress, starting RMP <service>
```

Starting the Portal generally takes a few minutes because it has to start several OpenLDAP directory services. Soon you will see the final migration script entry:

```
Finished.
```

Task 7 Verify the directory object migration and then remove temporary migration folders

- Login and browse the CM Portal to verify all database objects exist in the post-migrated openldap directory.

- After all objects are successfully migrated to the openldap directory, you can delete these CM Portal subdirectories, if they exist: `\migration\etc` and `\migration\openldapmigrationbackup`

Post-Migration Steps

Task 8 Recreate any scheduled tasks noted in Task 1.

► If your CM Portal also supports OS Manager, you will need to refresh the “RCS for ROM” service object that links you to the RCS Database from the CM Portal Zone Desktop:

- 1 Log in to the CM Portal as romadmin.
- 2 Delete the RCS for ROM service object from the desktop.
- 3 Go to the **Zone > Configuration > Configuration Servers > RCS Database** service (also referred to as the CM Database or CM-CS Database).
- 4 Click the **Add Desktop Shortcut** icon to add a desktop shortcut. Optionally, you can set the friendly name of the desktop shortcut to “CM-CS for ROM”.

Task 9 Optionally, enable the Self-maintenance option for CM Portal Agents (RMAs)

To automatically upgrade the RMAs on the devices in your Zone to the latest 5.1x build, enable self-maintenance using the procedures that follow.

Enabling Self-maintenance for CM Portal Agent (RMA) Upgrades on Windows and UNIX

After migrating or upgrading the CM Portal to a new version, the CM Portal Agents on managed devices also need to be upgraded with the latest `rma.tkd` version. This can be done by running the **Install CM Portal Agent** task against the devices in your Zone, or, it can be done by enabling the RMA self-maintenance feature discussed below.

CM Portal 5.x provides the ability to automatically upgrade the CM Portal Agents (also known as RMAs) on the devices it is managing. RMA self-maintenance can be applied proactively to the devices in your Zone, or applied when a register signal is received from the devices in your Zone. The maintenance can be performed as a critical (high priority) task for the Portal, or only when the Portal is not otherwise busy.

CM v5.11 changes: CM Portal 5.11 media includes enhanced support for these Agent Self-maintenance features documented in this topic:

- Adds support for Agent Self-maintenance on aix, hpux, linux, solaris, and solx86 platforms. Refer to the CM Infrastructure Platform Support matrix in the *CM 5.1x Release Notes* for details on support platforms.
- Adds support for an optional upgrade of the nvdkit build on the Agent.

Use the following manual procedures to enable this feature.

To activate self-maintenance for the CM Portal Agents (or RMAs)

- 1 Create these folders under your `\ManagementPortal` installation directory for the CM Portal Agent (RMA) upgrade:

```
\media\extended_infrastructure\management_agent
\media\extended_infrastructure\management_agent\rma
```

- 2 In the above `\management_agent\rma` folder, copy the latest `rma.tkd` from the CM Portal installation media, or as provided by HP software support.

Note: The `rma.tkd` is *not* OS-specific. To use the latest `rma.tkd` delivered with the Portal on the CM media, copy it from:

```
\Infrastructure\extended_infrastructure\management_portal\<any OS platform>\media\modules.
```

- 3 You will need the build number of the latest `rma.tkd`. (For CM Portal 5.00, the RMA Build was 1221; for CM Portal 5.10, it was 1305, for CM 5.11, it is 1405.) To obtain the build number, temporarily place the latest `rma.tkd` in the base `\ManagementPortal` directory that contains `nvdkit.exe`, and run the command:

```
nvdkit version rma.tkd
```

- 4 Optionally, you can use the Self-maintenance feature to also upgrade the `nvdkit` build on the CM Portal Agents with a critical one provided from HP software support. *The `nvdkit` executable is OS-specific.* If you don't need to upgrade `nvdkit`, skip this step.

To use this option, also create these kit subdirectories under your `\ManagementPortal` installation directory with OS-specific subfolders to hold the appropriate `nvdkit` module for your Portal Agents:

```
\media\extended_infrastructure\management_agent\kit
\media\extended_infrastructure\management_agent\kit\<OS platform>
```

The supported OS-platforms for Portal Agents include: `aix`, `hp-ux`, `linux`, `solaris`, `solx86`, and `win32`.

Copy the latest `nvdkit` executable provided by HP software support to the appropriate locations listed above.

Note: The latest `nvdkit` build supplied with CM 5.11 media is build 453.

- 5 Create a text file named **selfmaintenance** (with no file extension). The content of **selfmaintenance** needs to define these case-sensitive parameters and values.

```
criticalKitBuildNum    <Critical nvdkit build number>
criticalRMABuildNum    <Critical RMA build number>
expectedRMABuildNum    <Expected RMA build number>
proactiveupgrade       <0|1>
```

Note: Use spaces to separate the parameters and values; do not use the tab character.

Table 1 RMA self-maintenance parameters

Parameter	Explanation
criticalKitBuildNum	This parameter was added as of CM v 5.11. Optional. Use this to apply a critical nvdkit upgrade, such as one provided to you from HP support. Specify the minimum nvdkit build number that must be on the RMA device. If the specified number is greater than the build number of the nvdkit on the RMA machine, then the nvdkit will be upgraded.
criticalRMABuildNum	Specifies the minimum RMA build number that must be on a device. If a device has a lower RMA build number, its RMA will be upgraded on a priority basis . This will be done even if the CM Portal is busy. If you want to disable the processing of priority-basis RMA upgrades, set this value to 1. Note: For selfmaintenance to be applied, the build number of the <code>rma.tkd</code> in the <code>\media\extended_infrastructure\management_agent\rma</code> folder must be greater than or equal to this value.
expectedRMABuildNum	Specifies the minimum RMA build number that is expected on the devices. If a device has an earlier RMA build number, the RMA on that device will be upgraded on a non-priority basis . The RMAs will be upgraded when the CM Portal is not busy. To disable non-priority basis RMA upgrades, set this value to 0. Note: For selfmaintenance to be applied, the build number of the <code>rma.tkd</code> in the <code>\media\extended_infrastructure\management_agent\rma</code> folder must be greater than or equal to this value.
proactiveupgrade	Specifies a flag value of 0 or 1. If set to 1, the CM Portal proactively upgrades existing RMAs without waiting for register signals. If set to 0, the CM Portal upgrades older RMAs whenever a register signal is received from that device. Setting this flag to 1 can make the CM Portal busy as it attempts to upgrade RMAs proactively.

6 Place selfmaintenance in this folder:

```
\media\extended_infrastructure\management_agent
```

As soon as the `selfmaintenance` file is placed in this folder, the CM Portal begins executing the `RMAAutoUpgrade` job to perform RMA self-maintenance; the CM Portal service does not require a restart.

Self-maintenance Examples

For all examples below, `rma.tkd` for Build 1315, or above, is placed in the folder:

```
\media\extended_infrastructure\management_agent\rma
```

Example 1: These entries proactively upgrade the RMAs in the CM Portal Zone. It upgrades RMAs with Builds less than 1221, on a priority basis, and upgrades RMAs with Builds less than 1315 on a non-priority basis (when the CM Portal is not busy).

```
criticalRMABuildNum    1221
expectedRMABuildNum    1315
proactiveupgrade       1
```

Example 2: These entries upgrade RMAs with Builds less than 1315, on a priority basis, whenever the RMAs contact the CM Portal.

```
criticalRMABuildNum    1315
expectedRMABuildNum    0
proactiveupgrade       0
```

Example 3: These entries upgrade the RMAs with Builds less than 1315 if the CM Portal is not busy with other tasks when the RMAs contact the CM Portal.

```
criticalRMABuildNum    0
expectedRMABuildNum    1315
proactiveupgrade       0
```

To verify a device has the latest RMA

From the CM Portal, navigate to a device and select the **HP OpenView Configuration Management Agent**. Click the Properties icon  from the toolbar to display the service properties page, which includes the **RMA Build** number.

Troubleshooting:

- Verify that the `selfmaintenance` file does *not* include a tab character or have a `.txt` extension; remove any tab characters or file extension.
- If the CM Portal detects the `selfmaintenance` file with valid entries, it executes the “RMAAutoUpgrade” job; verify the CM Portal log file include messages with the string “RMAAutoUpgrade”.
- After the RMAAutoUpgrade job runs, the `\management_agent\rma` folder will contain files named `Packing.list` and `Package.info`.
- To verify the CM Portal is receiving registration signals from the RMA devices, review the `RMA-signals.log` file, located in the CM Portal’s `\logs` directory.

To disable the CM Portal Agent (RMA) self-maintenance feature

To turn off RMA self-maintenance, either rename or delete the `selfmaintenance` file from the `\management_agent` folder, or, set the `criticalRMABuildNum` and `expectedRMABuildNum` values to low build numbers, or 0.