

# HP Client Automation Enterprise Portal

for Windows® operating systems

Software Version: 7.20

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## Migration Guide

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# 1 Upgrading the Portal



The Client Automation Portal version 7.20 or later media is required to use the migration steps identified in this migration guide. The Configuration Management 5.1x products have been rebranded to Client Automation for this 7.20 release.

Use the information in this guide to upgrade your Management Portal to the latest Client Automation Portal 7.20 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 5.1x with CSD Gold OpenLDAP directory objects

If necessary, the resulting Portal v 7.20 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 Gold version provides productivity enhancements and greatly expanded scalability over previous versions. Portal 7.20 Zones can include up to 10 times more devices than Version 5.10 Zones—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.

# 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 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 <i>pre-5.10</i> Portal, run the rmp-migrate script to convert and import directory data**	Reschedule tasks, port customizations

\*\*The Portal v5.1x and above uses a CDS Gold version of the OpenLDAP directory. If you are migrating from a pre-5.10 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 Client Automation Portal Installation and Configuration Guide*.

## Portal Path, Service and Port

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

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

**Port:** 3471

**Service Name:** HPCA Portal (httpd-managementportal)

In addition, the Portal requires these ports for communicating with the 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 Portal, install the 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 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 *Client Automation 7.20 Release Notes* posted to the HP Software Support web site.

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



For Portal 5.10 or Portal 5.11 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 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 Portal

- ▶ Portal 5.x customers running OS Manager need to copy the `romad.tkd` file from the `\os_administrator` directory of the **Client Automation 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 Client Automation 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 Portal 7.20 over your existing Portal. You must specify the same Zone name as your existing Portal.

The setup program will update your Portal Version 5.x to 7.20, and install a new CSD Gold version of the OpenLDAP directory. Your existing Portal OpenLDAP objects are temporarily moved to `\ManagementPortal\migration` subdirectories for further processing.

Refer to the *HP Client Automation Portal Installation and Configuration Guide* for detailed installation instructions.

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

### Task 4 Modify the Portal Port Number, If Necessary

If you are migrating from a Portal running on a Port other than 3471, use these procedures to change the installed or upgraded Portal 7.20 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 Portal. It is listed in Windows Services as HPCA 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 **Client Automation OS Manager media** to the `ManagementPortal\modules` directory at this time, and then restart the Portal before running the directory object migration script.

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

► For Portal 5.10 or 5.11 upgrades, skip this step.

If necessary, start the Portal service HPCA Portal (http-managementportal).

Following a successful install of the Portal 7.20, copy all files from the \migrate folder of the Client Automation Portal v7.20 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 Client Automation 7.20 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 5.00 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 Portal 7.20.

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

- 1 Log in to the 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 HPCA-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 “HPCA-CS for ROM”.

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

To automatically upgrade the RMAs on the devices in your Zone to the latest 7.20 build, enable self-maintenance using the procedures that follow.

## Enabling Self-maintenance for Portal Agent (RMA) Upgrades on Windows and Linux

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

The Portal versions 5.x and above provide the ability to automatically upgrade the 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.

### Portal v7.20 changes:

- Supports Agent Self-maintenance on Linux and Windows platforms. Refer to the Client Automation Infrastructure Platform Support matrix in the *Client Automation 7.20 Release Notes* for details on supported platforms.
- Support 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 Portal Agents (or RMAs)

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

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

- In the above \management\_agent\rma folder, copy the latest rma.tkd from the Client Automation 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 Client Automation media, copy it from:

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

- You will need the build number of the latest rma.tkd. (For Portal 5.10, it was 1305, for Portal 5.11, it was 1405, for Client Automation 7.20, it is 1523 or greater.) 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
```

- Optionally, you can use the Self-maintenance feature to also upgrade the nvdkit build on the 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 Client Automation 7.20 media is build 461.

- 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 Portal 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.

Parameter	Explanation
criticalRMABuildNum	Specifies the minimum RMA build number that <b>must</b> be on a device. If a device has a lower RMA build number, its RMA will be upgraded on a <b>priority basis</b> . This will be done even if the Portal is busy. If you want to disable the processing of priority-basis RMA upgrades, set this value to 1. <b>Note:</b> 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 <b>non-priority basis</b> . The RMAs will be upgraded when the Portal is not busy. To disable non-priority basis RMA upgrades, set this value to 0. <b>Note:</b> 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 Portal proactively upgrades existing RMAs without waiting for register signals. If set to 0, the Portal upgrades older RMAs whenever a register signal is received from that device. Setting this flag to 1 can make the 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 Portal begins executing the `RMAAutoUpgrade` job to perform RMA self-maintenance; the Portal service does not require a restart.

## Self-maintenance Examples

For all examples below, `rma.tkd` for Build 1523, or above, is placed in the folder:

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

**Example 1:** These entries proactively upgrade the RMAs in the Portal Zone. It upgrades RMAs with Builds less than 1405, on a priority basis, and upgrades RMAs with Builds less than 1523 on a non-priority basis (when the Portal is not busy).

```
criticalRMABuildNum    1405
expectedRMABuildNum    1523
proactiveupgrade        1
```


**Example 2:** These entries upgrade RMAs with Builds less than 1405, on a priority basis, whenever the RMAs contact the Portal.

```
criticalRMABuildNum    1405
expectedRMABuildNum    0
proactiveupgrade       0
```

**Example 3:** These entries upgrade the RMAs with Builds less than 1405 if the Portal is not busy with other tasks when the RMAs contact the Portal.

```
criticalRMABuildNum    0
expectedRMABuildNum    1405
proactiveupgrade       0
```

#### To verify a device has the latest RMA

From the Portal, navigate to a device and select the **HPCA 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 Portal detects the selfmaintenance file with valid entries, it executes the “RMAAutoUpgrade” job; verify the 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 Portal is receiving registration signals from the RMA devices, review the `RMA-signals.log` file, located in the Portal’s \logs directory.

#### To disable the 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.