

HP Client Automation Enterprise

OS Manager

for Linux operating systems

Software Version: 7.20

Migration Guide

Document Release Date: July 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 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.

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.

Support

You can visit the HP OpenView support web site at:

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 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 a support contract.

To find more information about access levels, go to:

www.hp.com/managementsoftware/access_level

To register for an HP Passport ID, go to:

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

Contents

- 1 Introduction7

- 2 Migrating from Version 5.1x.....9
 - Task 1** Update the Portal.....9
 - Task 2** Update the Configuration Server.....9
 - Task 3** Update the OS Manager Server.....9
 - Task 4** Testing Considerations10

- 3 Migrating from Version 5.0 11
 - Task 1** Update the Portal.....11
 - Task 2** Update the Configuration Server.....11
 - Task 3** Update the OS Manager Server.....11
 - Task 4** Migrate Published Configuration Files12
 - Task 5** Testing Considerations14

- 4 Migrating from Version 4.2 15
 - Task 1** Update the Portal.....15
 - Task 2** Update the Configuration Server.....15
 - Task 3** Update the OS Manager Server.....15
 - Task 4** Migrate Published Configuration Files19
 - Task 5** Testing Considerations21

1 Introduction

Use this migration guide to upgrade the Client Automation Enterprise OS Manager:

- [Migrating from Version 5.1x](#)
- [Migrating from Version 5.0](#)
- [Migrating from Version 4.2](#)

This guide covers how to migrate the OS Manager only. For migration of other infrastructure product such as the Client Automation Enterprise Configuration Server and Client Automation Enterprise Portal, see the appropriate migration guides.

2 Migrating from Version 5.1x

Use the following information to upgrade your HP Client Automation OS Manager (HPCA OS Manager) environment from version 5.1x to version 7.20.

To migrate to version 7.20, you will:

- 1 Update the HPCA Portal.
- 2 Update the HPCA Configuration Server.
- 3 Update the HPCA OS Manager.
- 4 Test the new OS environment.



All of the files you will need are located on the OS Manager installation media. You must create the OS Manager installation media from the `.iso` image stored in the `\OS_Manager` folder on the HP Client Automation 7.20 media.

Task 1 Update the Portal

Use the *HPCA Portal Migration Guide* to upgrade the Portal to version 7.20.

Task 2 Update the Configuration Server

Use the *HPCA Configuration Server and Database Migration Guide* for instructions on how to update the Configuration Server and HPCA Configuration Server Database to version 7.20.

Task 3 Update the OS Manager Server

- 1 Stop the service.
- 2 Copy the following files from `\common_components`:
`expandSmbios.tkd`
`roms_udp.tkd`
`roms.tkd`
to
`opt/HP/CM/IntegrationServer/modules`
- 3 Copy the following files from `\common_components`:
`nvdcrd.tkd`
`httpd.tkd`
to
`opt/HP/CM/IntegrationServer`
- 4 Copy the following files from `\os_manager_server\<platform>\media`:
`nvdkit`
to
`opt/HP/CM/IntegrationServer`

- 5 Copy the following files from `\common_components\unix\`

```

pkg_client.sh
preinstall.tcl
sched_ram_install.sh
setup_ram.sh

```

to

```

opt/HP/CM/IntegrationServer/pkg

```
- 6 The OS Manager Server port has changed between 5.1x to 7.20. The default port is now 3469. You can continue to use the port the OS Manager Server was running on in your 5.1x setup. If you want to change this, change the port in the file `httpd.rc` located in `opt/HP/CM/IntegrationServer`.
- 7 Use a text editor to open `opt/HP/CM/IntegrationServer /etc/expandSmbios.cfg`.
- 8 If you have modified this file in your 5.1x configuration, consider these modifications carefully. The changes below reflect the default installation values for these parameters.

Change the line:

```

set EXCLUDE {CTCC301}

```

to:

```

set EXCLUDE {CTCC301 N/A}

```

And change the line:

```

set FILTER { ^F*$ ^0*$ }

```

to:

```

set FILTER { ^F*$ ^0*$ ^ÿ*$ }

```
- 9 Run HPCA Agent Remote Installation Setup using HPCA media. See an HPCA Agent guide for detailed instructions. Make sure to use “remote.cfg” when prompted for the configuration file for the remote install.
- 10 Run `pkg_client.sh` (from `/opt/HP/CM/IntegrationServer/pkg`) to create `radia.tar` and `radia_ssh.tar` (this will include new modules from the `pkg` directory and the HPCA agent 7.20).
- 11 Remove the OS Manager Server logs. You may want to take a backup of these logs before deleting them.
- 12 Restart the service.
- 13 Install the latest Configuration File Publisher (this is required to publish data into the 7.20 HPCA CS Database). Refer to the *OS Manager Guide* for detailed installation steps.

Task 4 Testing Considerations

To ensure that your OS management process is working properly, HP recommends testing your new OS management infrastructure in a test environment before implementing these changes into your production environment.

3 Migrating from Version 5.0

Use the following information to upgrade your HP Client Automation OS Manager (HPCA OS Manager) environment from version 5.0 to version 7.20.

To migrate to version 7.20, you will:

- 1 Update the HPCA Portal.
- 2 Update the HPCA Configuration Server.
- 3 Update the HPCA OS Manager.
- 4 Migrate published configuration files.
- 5 Test the new OS environment.



All of the files you will need are located on the OS Manager installation media. You must create the OS Manager installation media from the `.iso` image stored in the `\OS_Manager` folder on the HP Client Automation 7.20 media.

Task 1 Update the Portal

Use the *HPCA Portal Migration Guide* to upgrade the Portal to version 7.20.



The Zone name used for the previous installation of the Portal must be used during the version 7.20 installation.

Task 2 Update the Configuration Server

Use the *HPCA Configuration Server and Database Migration Guide* for instructions on how to update the Configuration Server and HPCA Configuration Server Database to version 7.20.

Task 3 Update the OS Manager Server

- 6 Stop the service.
- 14 Copy the following files from `\common_components`:
 `expandSmbios.tkd`
 `roms_udp.tkd`
 `roms.tkd`
 to
 `opt/HP/CM/IntegrationServer/modules`
- 15 Copy the following files from `\common_components`:
 `nvdcrd.tkd`
 `httpd.tkd`
 to
 `opt/HP/CM/IntegrationServer`

- 16 Copy the following files from `\os_manager_server\`
- ```

 nvdkit
 to
 opt/HP/CM/IntegrationServer

```
- 17 Copy the following files from `\common_components\unix\`
- ```

    pkg_client.sh
    preinstall.tcl
    sched_ram_install.sh
    setup_ram.sh
    to
    opt/HP/CM/IntegrationServer

```
- 18 Use a text editor to open `opt/HP/CM/IntegrationServer/etc/expandSmbios.cfg`.
- 19 If you have modified this file in your 5.0 configuration, consider these modifications carefully. The changes below reflect the default installation values for these parameters.
- Change the line:
- ```

 set EXCLUDE {CTCC301}

```
- to:
- ```

    set EXCLUDE {CTCC301 N/A}

```
- And change the line:
- ```

 set FILTER { ^F*$ ^0*$ }

```
- to:
- ```

    set FILTER { ^F*$ ^0*$ ^y*$ }

```
- 20 Run HPCA Agent Remote Installation Setup using HPCA media. See an HPCA Agent guide for detailed instructions. Make sure to use “remote.cfg” when prompted for the configuration file for the remote install.
- 21 Run `pkg_client.sh` (from `opt/HP/CM/IntegrationServer/pkg`) to create `radia.tar` and `radia_ssh.tar` (this will include new modules from the `pkg` directory and the HPCA agent 7.20).
- 22 Restart the service.
- 23 Install the latest Configuration File Publisher (this is required to publish data into the 7.20 HPCA CS Database). Refer to the *OS Manager Guide* for detailed installation steps.

Task 4 Migrate Published Configuration Files

Starting with the 5.10 release, the publishing model for configuration files was changed from an instance-based model to a file-based model. No interpretation is performed during the publishing and subsequent use in a deployment. This removes any prior restrictions on the configuration file content.

Files published prior to version 5.10 must be migrated to the updated model by republishing them using the latest Configuration File Publisher. This is a mandatory step for configurations that you want to use in the 7.20 environment.

A migration tool is installed with the publisher that can be used to generate a report which shows all configuration files published using a pre-5.10 model.

The migration tool accepts the following parameters:

-h	Help.
-n	No-execute mode. No report generated and no actions are taken by the migration tool.
-d	Debug mode.

To run the migration tool

- 1 Navigate to the directory where you installed the Configuration File Publisher.
- 2 Run the migration tool by typing `./migrate`
- 3 Type **y** to proceed.
- 4 Provide your Configuration Server information.
A report is generated and stored in a new `RCS-Reports` sub-directory. (No report is generated if you ran the migration tool using `-n`).
- 5 View the report to see a list of current configuration files that can be re-published or removed.


If you are unsure of what configuration file was used to deploy a specific operating system, you can consult the copy that was used to install it in the client-specific directory located on the OS Manager server.

Platform	Directory
Redhat Kickstart	<code>/var/opt/kickstart/clients</code>
SUSE AutoYaST	<code>/var/opt/autoyast/clients</code>


The directories listed above contain client-specific directories (the name is the MAC address) for the machines that have been installed. These directories contain the generated configuration files. The values above are proposed defaults; these may differ in your organization.

A number of files exist within these directories depending on the platform and deployment type. The actual configuration file that was used to install a given client is listed below.

Platform	Configuration File
Redhat Kickstart	<code>ks.cfg</code>
SUSE AutoYaST	<code>ay.xml</code>

 Important: do not use these files directly for re-publishing. Rather, they should be used as guidance so you may re-create a new copy of a configuration file to publish. The reason for this is that during pre-5.10 deployment, these files were re-constructed and modified from their original format. They contain HP-specific additions, and should therefore never be re-used as-is for new publishing sessions.

When re-publishing configuration files, follow the steps in the *OS Manager Guide*.

 To avoid re-installing clients you **must** re-use the exact same service instance name when re-publishing the configuration. Please be aware that this means the instance name of the service in the HPCA CS Database. The friendly name can be different but the service instance name must be identical.

Task 5 Testing Considerations

To ensure that your OS management process is working properly. HP recommends testing your new OS management infrastructure in a test environment before implementing these changes into your production environment.

4 Migrating from Version 4.2

Use the following information to upgrade your HP Client Automation OS Manager (HPCA OS Manager) environment from version 4.20 to version 7.20.

To migrate to version 7.20, you will:

- 1 Update the HPCA Portal.
- 2 Update the HPCA Configuration Server.
- 3 Update the HPCA OS Manager.
- 4 Migrate published configuration files.
- 5 Test the new OS environment.



All of the files you will need are located on the OS Manager installation media. You must create the OS Manager installation media from the .iso image stored in the \OS_Manager folder on the HP Client Automation 7.20 media.

Task 1 Update the Portal

Use the *HPCA Portal Migration Guide* to upgrade the Portal to version 7.20. You will also need the installation media for version 5.00, a direct migration from 4.20 to 7.20 is not supported for the Portal.



The Zone name used for the previous installation of the Portal must be used during the version 7.20 installation.

Task 2 Update the Configuration Server

Use the *HPCA Configuration Server and Database Migration Guide* for instructions on how to update the Configuration Server and HPCA Configuration Server Database to version 7.20.

Task 3 Update the OS Manager Server

- 1 Stop the service.
- 2 Copy the following files from \common_components:
expandSmbios.tkd
roms_udp.tkd
roms.tkd
to
opt/Novadigm/IntegrationServer/modules
- 3 Copy the following files from \common_components:
nvdcert.tkd
httpd.tkd
to
opt/Novadigm/IntegrationServer

- 4 Copy the following files from `\os_manager_server\<platform>\media:`

```

nvdkit
to
opt/Novadigm/IntegrationServer

```
- 5 Copy the following files from `\common_components\unix\`

```

pkg_client.sh
preinstall.tcl
sched_ram_install.sh
setup_ram.sh
to
opt/Novadigm/IntegrationServer/pkg

```
- 6 Use a text editor to open `opt/Novadigm/IntegrationServer/etc/roms.cfg`.
- 7 Add the attributes `PORTAL_UID` and `PORTAL_PASS`.
- 8 The values for `PORTAL_UID` and `PORTAL_PASS` must be encrypted. To do this, open a command prompt and go to `opt/Novadigm/IntegrationServer` and type `./nvdkit`.
- 9 Press **Enter**.
- 10 Type `% password encrypt yourPassword aes`
- 11 Copy the results into `roms.cfg` so that the value for `PORTAL_PASS` is an encrypted password. The line will look similar to the following:

```

PORTAL_PASS      {{AES256}3gMlspmbrGbqVXNPDx8tWg==}

```
- 12 Type `% password encrypt yourPUID aes`
- 13 Copy the results into `roms.cfg` so that the value for `PORTAL_UID` is encrypted. The line will look similar to the following:

```

PORTAL_UID       {{AES256}ACuqUOk5jOzI23B243dvgw==}

```
- 14 Add the following to `roms.cfg`:

```

in "roms::init" section
    WIMSHARENAME      {}
    WIMSHAREPATH      {C:\WIMSHARE}
    WS_DEBUG          0
in "namespace eval roms" section, after 'set attrlist(BEHAVIOR) {}'
    variable romlist [list \
        currls \
        currlmes \
        curros \
        discfs \
        discsbnt \
        disctime \
        evtsttk \
        jobid \

```



```

    nvdpolicy \
    osstate \
    rcshost \
    role \
    romscpuid \
    romsgateway \
    romsnettype \
    romsplatform \
    rslvdllds \
    rslvdos \
    sbbprod \
    slctdllds \
    slctdos \
    unmnngdos \
]

```

15 The `roms.cfg` file should look similar to the following when you are finished.

```

roms::init {
    CLIENTPATH      /var/opt/kickstart/clients
    DISPLAYNAME     compname
    ISVR            192.168.187.148
    LDAP_BINDDN     {}
    LDAP_HOST       {}
    LDAP_PASS       {}
    LDAP_PORT       {}
    MEDIAPATH       /opt/kickstart/rh51_server/x86
    PORTAL_PASS     {{AES256}3gMlspmbrGbqVXNPDx8tWg==}
    PORTAL_UID      {{AES256}ACuqUOk5jOzI23B243dvgw==}
    PXECFGDIR       /tftpboot/X86PC/UNDI/pxelinux/pxelinux.cfg
    RCS_ADDRESS     192.168.187.136:3464
    RIB_HOST        192.168.187.136
    RIB_PORT        3471
    RIMHOST         {}
    RMPHOST         {}
    RPS_ADDRESS     {}
    WIMSHARENAME    {}
    WIMSHAREPATH    {C:\WIMSHARE}
    WS_DEBUG        0
    ZONE            cn=hp,cn=radia
    adminid         RAD_MAST
    adminpwd        {}
    rtrdelay        900
}

```

```

}

# DO NOT CHANGE ANYTHING BELOW, FOR INTERNAL USE ONLY

namespace eval roms {

# Each class known to ROMS has a list of attributes (default empty)
which
# are NOT returned to the client (used in roms::WalkTree).

variable attrlist

set attrlist(ALL) {}
set attrlist(SMINFO) {}
set attrlist(ROMS) {}
set attrlist(DRIVEMAP) {}
set attrlist(PARTTION) {}
set attrlist(ZSERVICE) {}
set attrlist(PACKAGE) {}
set attrlist(FILE) {}
set attrlist(SYSPREP) {}
set attrlist(MACHINE) {}
set attrlist(BEHAVIOR) {}

variable romlist [list \
    currls \
    currlms \
    curros \
    dfltsvos \
    discfs \
    discsbnt \
    disctime \
    displayname \
    evntstk \
    jobid \
    nvdpolicy \
    osstate \
    rcshost \
    role \
    romscpuid \
    romsgateway \

```

```

        romsnettype \
        romsplatform \
        rslvldds \
        rslvdos \
        sbbprod \
        slctddds \
        slctdos \
        syspdata \
        unmgdos
    ]
}

#
# END OF CONFIG
#

```

16 Use a text editor to open `opt/Novadigm/IntegrationServer/etc/expandSmbios.cfg`.

17 If you have modified this file in your 4.2 configuration, consider these modifications carefully. The changes below reflect the default installation values for these parameters.

Change the line:

```
set EXCLUDE {CTCC301}
```

to:

```
set EXCLUDE {CTCC301 N/A}
```

And change the line:

```
set FILTER { ^F*$ ^0*$ }
```

to:

```
set FILTER { ^F*$ ^0*$ ^ÿ*$ }
```

18 Run HPCA Agent Remote Installation Setup using HPCA media. See an HPCA Agent guide for detailed instructions. Make sure to use “remote.cfg” when prompted for the configuration file for the remote install.

19 Run `pkg_client.sh` (from `opt/Novadigm/IntegrationServer/pkg`) to create `radia.tar` and `radia_ssh.tar` (this will include new modules from the `pkg` directory and the HPCA agent 7.20).

20 Restart the service.

21 Install the latest Configuration File Publisher (this is required to publish data into the 7.20 HPCA CS Database). Refer to the *OS Manager Guide* for detailed installation steps.

Task 4 Migrate Published Configuration Files

Starting with the 5.10 release, the publishing model for configuration files was changed from an instance-based model to a file-based model. No interpretation is performed during the

publishing and subsequent use in a deployment. This removes any prior restrictions on the configuration file content.

Files published prior to version 5.10 must be migrated to the updated model by republishing them using the latest Configuration File Publisher. This is a mandatory step for configurations that you want to use in the 7.20 environment.

A migration tool is installed with the publisher that can be used to generate a report which shows all configuration files published using a pre-5.10 model.

The migration tool accepts the following parameters:

-h	Help.
-n	No-execute mode. No report generated and no actions are taken by the migration tool.
-d	Debug mode.

To run the migration tool

- 1 Navigate to the directory where you installed the Configuration File Publisher.
- 2 Run the migration tool by typing `./migrate`
- 3 Type **y** to proceed.
- 4 Provide your Configuration Server information.

A report is generated and stored in a new RCS-Reports sub-directory. (No report is generated if you ran the migration tool using `-n`).

- 5 View the report to see a list of current configuration files that can be re-published or removed.


If you are unsure of what configuration file was used to deploy a specific operating system, you can consult the copy that was used to install it in the client-specific directory located on the OS Manager server.

Platform	Directory
Redhat Kickstart	<code>/var/opt/kickstart/clients</code>
SUSE AutoYaST	<code>/var/opt/autoyast/clients</code>


The directories listed above contain client-specific directories (the name is the MAC address) for the machines that have been installed. These directories contain the generated configuration files. The values above are proposed defaults; these may differ in your organization.

A number of files exist within these directories depending on the platform and deployment type. The actual configuration file that was used to install a given client is listed below.

Platform	Configuration File
Redhat Kickstart	<code>ks.cfg</code>
SUSE AutoYaST	<code>ay.xml</code>

 Important: do not use these files directly for re-publishing. Rather, they should be used as guidance so you may re-create a new copy of a configuration file to publish. The reason for this is that during pre-5.10 deployment, these files were re-constructed and modified from their original format. They contain HP-specific additions, and should therefore never be re-used as-is for new publishing sessions.

When re-publishing configuration files, follow the steps in the *OS Manager Guide*.

 To avoid re-installing clients you **must** re-use the exact same service instance name when re-publishing the configuration. Please be aware that this means the instance name of the service in the HPCA CS Database. The friendly name can be different but the service instance name must be identical.

Task 5 Testing Considerations

To ensure that your OS management process is working properly. HP recommends testing your new OS management infrastructure in a test environment before implementing these changes into your production environment.