## **HP Client Automation**

# **Enterprise Edition**

## Core and Satellite

for Windows® operating systems

Software Version: 7.80

## Migration Guide



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## **Documentation Updates**

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

- Software Version number, which indicates the software version
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Table 1 indicates changes made to this document for Version 7.80.

Table 1 Document Changes for this Version

Chapter	Version	Change
All	7.80	Revised for 7.80.

#### Support

You can visit the HP Software support web site at:

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# 1 System Requirements

HP Client Automation (HPCA) version 7.80 supports those database servers listed in the *HPCA Enterprise Edition Release Notes*.

If your HPCA environment uses SQL Server, you must use either SQL Server 2005 or SQL Server 2008 with HPCA version 7.80.

If you are using an older version of SQL Server, be sure to upgrade your database to either SQL Server 2005 or SQL Server 2008 before you begin the HPCA migration process described in this document. Refer to your SQL Server documentation for instructions.

# 2 Upgrading HPCA Core and Satellite Servers



Be sure that your environment meets the System Requirements described on page 6 before you begin the HPCA migration process.

This document explains how to upgrade your HP Client Automation (HPCA) Enterprise Edition environment to HPCA version 7.80 while preserving your data.



This document applies only to HPCA Enterprise Edition Core and Satellite installations; it does not apply to HPCA "classic" (component-based) installations.

To upgrade an HPCA classic installation, refer to the migration guide for each component installed.

HP does not provide any migration tools or processes to migrate from the "classic" implementation to a Core and Satellite implementation. This migration can be very complex. HP recommends that customers use HP Professional Services, or a qualified HP partner with expertise in HP Client Automation, to assist in planning, preparation, and migration. The HP support organization is prepared to answer questions about the new Core and Satellite model, but it is not prepared to actively engage in the migration process for customers. HP Support will provide standard support services to all HPCA customers under contract for both "classic" and Core and Satellite implementations.

To upgrade an HPCA Starter Edition or Standard Edition environment, refer to the *HPCA Starter and Standard Editions Migration Guide* for details.

Use these instructions to upgrade the following products to the latest version of HPCA Core and Satellite:

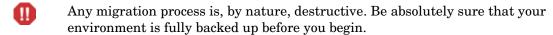
- HPCA Enterprise Edition Core and Satellite version 7.20
- HPCA Enterprise Edition Core and Satellite version 7.50

The upgrade process includes four steps:

- Step 1: Backup the Existing HPCA Server Installation
- Step 2: Upgrade to the Latest Version
- Step 3: Restore HPCA Data
- Step 4: Migrate the HPCA SQL Database



During migration, the admin password is reset to *secret*. Be sure to change this after you have completed the migration process. Any users that were created in HPCA version 7.20 will not be able log in to the HPCA console after the migration. You must first log in as admin and grant role access to these users.



## Step 1: Backup the Existing HPCA Server Installation

Backup the existing Core or Satellite server installation and database to prepare for the upgrade.

#### To backup the existing installation

- From the HPCA media, copy the migrate folder to a temporary location (for example, C:\migrate).
  - This folder must be copied—the migration scripts cannot be run directly from the HPCA media.
- From the newly copied migrate folder, run **hpcabackup.cmd** followed by the drive letter on which you want to store the backup files. Be sure to specify a drive with a large amount of free space to contain the backup.

For example, to store the files on C:, type:

#### hpcabackup C

The currently installed version is detected and, if adequate space is available, the upgrade process begins to store the backup files in C:\HPCABackup\HPCABackup.

When the process completes, you will see the following message:

All components have been successfully backed up to C:\HPCABackup

- Do NOT move the HPCABACKUP folder to another drive. If you move this folder, the restore operation will not work.
- 3 View the hpca-backup-report.html file to determine what occurred during the backup process.
- If the backup script is run again, a new backup folder is created,

  C:\HPCABackup\HPCABackup-timestamp

where timestamp is when this backup folder was created.

It is important to review all warning messages in this file, as these may indicate the need for manual intervention to ensure that settings are migrated properly.

4 As a standard precaution, also backup your existing SQL Server or Oracle database before proceeding with the migration. Review the SQL Server or Oracle documentation for details.

## Step 2: Upgrade to the Latest Version

Run the latest HPCA MSI installer to upgrade an HPCA Core or Satellite server.

- The upgrade process will update the existing HPCA database. You do not need to remove the existing database.
- The DSN information used to connect to MS SQL Server or Oracle databases must be the same as that used in the previous installation for the migration to work correctly.
- The OS Manager Boot Server was not integrated into the Core and Satellite installation in version 7.20, so it is not updated during the migration. If you had installed the Boot Server in version 7.20, any customizations made must be applied manually after you have installed the version 7.80 Core and Satellite.

#### To upgrade to the latest version

Run the latest HPCA Core or Satellite installer.

When the MSI runs, it will detect an upgrade and prompt to confirm that you have read the migration guide and completed the prerequisites steps (above) before continuing.



Failure to complete the prerequisite steps above before running the upgrade will result in data loss.

2 Click OK.

The new version is installed. The First Time Setup Wizard opens in a browser window.

3 Close this browser window.



DO NOT run the First Time Setup Wizard. Your settings are automatically applied during the upgrade process.

4 If you are prompted to reboot the server, click **Yes** to reboot.

## Step 3: Restore HPCA Data

After you have upgraded your HPCA Core or Satellite server to the latest version, restore your existing data into the new framework.

#### To restore HPCA data

From the migrate folder, run **hpcarestore.cmd** followed by the drive letter on which you stored the backup files in Step 1, above. For example, to restore the files from C:, type:

#### hpcarestore C

The data stored in the HPCABackup folder is migrated into the new HPCA framework.

If a failure occurs during restore, a subsequent restore will attempt to start where it left off. To perform a fresh restore, you must remove the HPCA-restore\* files from the HPCABackup folder.

View the hpca-restore-report.html file to determine what occurred during the restore process.

It is important to review all warning messages that occur, as these may indicate the need for manual intervention to ensure that settings are properly migrated.

It is common to receive warnings during execution of the "rms" component – the problems indicated by these warnings will be corrected when you run SQLMIGRATE in Step 4: Migrate the HPCA SQL Database.

To log in to the updated console, use a browser and go to:

http://HPCA\_host:3466

Where HPCA\_host is the server's host name.

After the HPCA server is upgraded, you will need to upgrade any deployed components. See Upgrading Deployed Components on page 12 for details.

## Step 4: Migrate the HPCA SQL Database

This step is destructive. It should only be performed by an experienced HPCA database administrator.

After you have upgraded your HPCA Core or Satellite server to the latest version and restored your data, you must migrate the HPCA SQL database. This involves the following steps:

- Export the contents of specific database tables
- Drop these tables
- Re-create these tables
- Import the data into the updated table structure

You can use the SQLMIGRATE script to perform these steps, or they can be performed manually (see Appendix B: Migrating the HPCA SQL Database Manually on page 17).

#### To migrate the HPCA SQL database

- 1 Stop the HPCA Core service.
- In your local copy of the migrate folder (see Step 1: Backup the Existing HPCA Server Installation on page 7), change to the SQL directory. For example: cd C:\migrate\SQL
- 3 Run the following command:

SQLMIGRATE DriveLetter

Here, <code>DriveLetter</code> is the drive where the script will store exported data and any error information generated during the subsequent import. Data is stored here:

DriveLetter:\HPCABackup\SQLMigrate



Be sure that ample free space is available on this drive



For large databases, this migration step can take many hours.



If the SQLMIGRATE script is run again, a new data folder is created:

DriveLetter:\HPCABackup\HPCABackup-timestamp\SQLMigrate

where timestamp indicates when the data folder was created.

- 4 If errors occurred during the migration of a particular table, the following log files are created in the C:\hpcabackup\SQLMigrate\Errors folder.
  - tablename.log contains the insert statement and any errors that occurred
  - tablename.tsv contains the rows (if any) that failed to import
  - tablename.sql is a SQL Script of any insert statements that failed

Here, tablename corresponds to the name of the pertinent database table. These files are located in the directory to which you copied the SQLMIGRATE.cmd file.

Examine any log files in this folder to ensure that the migration was successful:

See Appendix A on page 13 for a list of the tables migrated by the SQLMIGRATE script.

## Synchronize Satellites

After you migrate a Satellite server, you must synchronize it with its Core server.

#### To synchronize a Satellite server

On the Satellite server, open a browser, and go to the following URL to open the HPCA user interface:

```
http://localhost:3466
```

- 2 Login as admin.
- 3 On the Operations tab, click **Server Status**.
- 4 Click Synchronize satellite now.

# 3 Upgrading Deployed Components

These sections contain information specific to upgrading HPCA components in a Core and Satellite environment for Enterprise license customers. It also contains pointers to any appropriate component-specific migration guides. All migration guides are stored on the HPCA media.

- HPCA Administrator on page 12
- HPCA Agent on page 12

#### **HPCA** Administrator



If a previous version of the Administrator is present on this device, be sure to remove it before installing the 7.80 version.

The HPCA Administrator is automatically installed during the 7.80 HPCA Core installation.

To upgrade the Administrator installed on a device other than the Core server, use the Administrator installation file on the HPCA media in the \Media\admin\default\win32 directory.

Additional migration information is available in the *HP Client Automation Administrator Migration Guide*.

## **HPCA** Agent

The latest HPCA Agent installation software will upgrade a previously installed Agent. Deploy or install the new Agent as you would normally.

For specific Agent migration information, refer to the *HP Client Automation Agent Migration Guide*.

# A SQL Database Tables that Must be Migrated

The following tables have had schema changes that require the tables to be re-created to generate the correct primary and foreign keys for HPCA version 7.80. This process is performed automatically by the SQLMIGRATE.cmd script.

```
rWin32_WinSAT
rWin32_VideoController
rWin32_UserAccount
rWin32_USBController
rWin32_TimeZone
rWin32_SystemEnclosure
rWin32_SystemDriver
rWin32_StartupCommand
rWin32_SoundDevice
rWin32_SoftwareFeature
rWin32_SoftwareElement
rWin32_Share
rWin32_Service
rWin32_SerialPort
rwin32_quickfixengineering
rWin32_Product
rWin32_Processor
rWin32_Process
rWin32_Printer
rWin32_PortResource
rwin32_portablebattery
rWin32_PointingDevice
rWin32_PnPEntity
rWin32_PhysicalMemory
rWin32_ParallelPort
rWin32_PageFileUsage
rWin32_PageFileSetting
rWin32_PageFile
rWin32_OperatingSystem
rWin32_NetworkLoginProfile
rWin32_NetworkConnection
rWin32_NetworkAdapterConf
rWin32_NetworkAdapter
rWin32_MotherboardDevice
```

- rWin32\_MemoryDevice
- rWin32\_MemoryArray
- rWin32\_LogicalProgramGroup
- rWin32\_LogicalMemoryConf
- rWin32\_LogicalDisk
- rWin32\_LoadOrderGroup
- rWin32\_Keyboard
- rWin32\_IRQResource
- rWin32\_IDEController
- rWin32\_Group
- rWin32\_FloppyDrive
- rWin32\_FloppyController
- rWin32\_Environment
- rWin32 DMAChannel
- rWin32\_DisplayControllerConf
- rWin32\_DisplayConf
- rWin32\_DiskPartition
- rWin32\_DiskDrive
- rWin32\_DeviceMemoryAddress
- rWin32\_DesktopMonitor
- rWin32\_Desktop
- rWin32\_ComputerSystemProduct
- rWin32\_ComputerSystem
- rWin32\_CDROMDrive
- rWin32\_CacheMemory
- rWin32\_Bus
- rWin32\_BootConf
- rWin32\_BIOS
- rwin32\_baseboard
- rWiFi\_NetworkAdapter
- rRegistry
- rNVD\_WBEMStatus
- rNVD\_UserAccount
- rNVD\_SolarisPatch
- rNVD Product
- rNVD\_PDASystem
- rNVD\_NISUserAccount
- rNVD\_NISGroupAccount
- rNVD\_MulticastStatistics
- $\verb"rNVD_INSTALLED_UNINSTALL"$
- rNVD\_INSTALLED\_APPS

rNVD\_GroupMember

rNVD\_GroupAccount

rNVD\_DownloadStatistics

rMSSD\_FailurePredictStatus

rMSSD\_AttributeData

rhp\_biosstring

rhp\_biossensor

rhp\_biospassword

rhp\_biosorderedlist

rhp\_biosinteger

rhp\_biosevent

rhp\_biosenumeration

rCIM\_UnixOperatingSystem

rCIM\_UnixLocalFileSystem

rCIM\_UnixComputerSystem

rCIM\_StorageVolume

rCIM SoftwareFeatureElements

rCIM SoftwareFeature

rCIM\_SoftwareElement

rCIM\_Service

rCIM\_SCSIInterface

rCIM\_SCSIController

rCIM\_ResidesOnExtent

rCIM\_ProductSoftwareFeatures

rCIM\_Product

rCIM\_Processor

rCIM\_Process

rCIM\_ParallelController

rCIM\_OperatingSystem

rCIM\_NFS

rCIM\_MediaPresent

rCIM\_LogicalDiskBasedOnVolume

rCIM\_LogicalDisk

rCIM\_IDEController

rCIM\_HPUX\_SwBundles

rCIM\_Export

rCIM\_EthernetAdapter

rCIM\_DVDDrive

rCIM\_DiskDrive

rCIM\_Directory

rCIM\_ComputerSystem

rCIM\_CDROMDrive

DeviceUserGroup

SMBiosInfo

Query

DeviceNotify

FileAudit

DeviceZRStates

DeviceZRState

DeviceSynopsis

HDeviceStatus

DeviceStatus

HDeviceState

DeviceState

DeviceServices

DeviceMap

HDeviceErrors

DeviceErrors

Audit\_Type

Audit\_Attrs

Audit\_Event

Audit\_Cat

Audit\_AttrNames

HAppEvent

AppEvent

HAppRNPEvent

AppRNPEvent

HAppMSIEvent

AppMSIEvent

JOBTASK

HJOBSTAT

JOBSTAT

JOBPARM

ADInfo

HDeviceConfig

DeviceConfig

# B Migrating the HPCA SQL Database Manually

Instead of using the SQLMIGRATE.cmd script, you can migrate the HPCA SQL database manually after restoring your data.



This process is destructive. It should only be performed by an experienced HPCA database administrator.

The database tables listed in Appendix A: SQL Database Tables that Must be Migrated have had schema changes that require the tables to be re-created to generate the correct primary and foreign keys. Data from these tables should be exported or stored in temporary tables prior to beginning the manual migration process.

#### To migrate the HPCA SQL database manually

- 1 On the system hosting the HPCA Core, stop the HPCA Core service.
- 2 Export (or store in temporary tables) the data in the tables listed in Appendix A.
- 3 Drop the tables listed in Appendix A.
  - The order is important drop the tables in the SAME order shown in Appendix A.
- 4 Restart the HPCA Messaging Server service (to re-create the table schema).
- 5 Re-import your data into the tables.
  - The order is important import the data in the REVERSE order shown in Appendix A.

During the import process, data that violates database integrity will not be imported. Be sure to review this data to determine if it is still valid and still needed.

6 Start the HPCA Core service.