# HP Device Manager 4.7



# **Installation and Update Guide**

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# **Overview**

This document discusses the installation of HP Device Manager (HPDM) and the usage of HPDM tools in a Proof of Concept. Production installation might differ based on a number of parameters, including, but not limited to, the number of remote sites, the number of devices, LAN and WAN links, network configuration, and such. Contact your device technical consultant for more details.

HPDM consists of the following components:

- HPDM Console—The graphical application used by administrators to access the management system.
- HPDM Server—The central server, which consolidates and controls all management activities.
- HPDM Gateway—The link between HPDM Agents and the HPDM Server.
- Master Repository Controller—The content manager in the Master Repository, which synchronizes that content to
  other repositories as requested by the HPDM Server.
- HPDM Agent—Software installed on the client to enable device management.

The HDPM Console, HPDM Server, HPDM Gateway, and Master Repository Controller can be installed on the same machine or on separate machines.

## **HPDM Server preparation**

For this setup, you need either Windows Server 2003, Windows Server 2008, or Windows Server 2012 running on either a physical or virtual machine. Allocate at least 10 GB for the operating system and the HPDM files. Full server recommendations are available in the *HP Device Manager 4.7 Administrator Guide*.

This paper assumes that the HPDM Server will use a standard installation without any additional services running.

This chapter focuses on the post-installation steps of installing HPDM onto Windows Server 2008 R2. The example assume a complete HPDM installation has already been performed on the HPDM Server and that a user account for the FTP transactions has already been created.

## **FTP server configuration**

For details about FTP server configuration, see the HP Device Manager 4.7 FTP Server Configuration white paper.

## Windows Firewall settings

In Windows Server 2008 R2, the built-in firewall service helps secure your server from network threats and is enabled by default. If you use the built-in Windows Firewall, you need to configure your settings so that the HPDM and FTP traffic can pass through the firewall. Note that you need to be logged on as Administrator or as a user that has administrator privileges to configure the firewall. If not logged on as Administrator, be sure to click **Start > All Programs > Accessories > Command Prompt**, and then right-click **Command Prompt** and select **Run as Administrator**. This is required because User Account Control (UAC) in the Windows Server 2008 R2 operating system prevents non-Administrator account access to the firewall settings.

#### **Firewall settings for FTP**

You must configure an exception for both the control channel (port 21) and the port range for the passive data channel. This can be done in the GUI for the Windows Firewall, but it is easier to add these rules from the command line.

To configure the Windows Firewall setting for FTP using the command line:

- 1. Click Start > All Programs > Accessories > Command Prompt. If not logged on as Administrator, be sure to right-click Command Prompt and select Run as Administrator.
- 2. To add an inbound rule for the command channel and to allow connections to port 21, enter the following command and then press **Enter**:

```
netsh advfirewall firewall add rule name="FTP (non-SSL)" action=allow
protocol=TCP dir=in localport=21
```

3. To disable stateful FTP filtering so that Windows Firewall does not block FTP traffic to the passive port range, enter the following command and then press **Enter**:

netsh advfirewall set global StatefulFtp disable

#### **Firewall settings for HP Device Manager**

The basic ports used by HPDM for management traffic between the HPDM Server, HPDM Gateway, and HPDM Agent are located in the range of 40000–40009 and 40012.

To configure the necessary exceptions:

- 1. Click Start > All Programs > Accessories > Command Prompt. If not logged on as Administrator, be sure to right-click Command Prompt and select Run as Administrator.
- To add an inbound rule to allow UDP traffic on port 40000, enter the following command and then press Enter: netsh advfirewall firewall add rule name="HP Device Manager UDP IN" action=allow protocol=UDP dir=in localport=40000
- 3. To add an outbound rule to allow UDP traffic on port 40000, enter the following command and then press Enter:

netsh advfirewall firewall add rule name="HP Device Manager UDP OUT" action=allow protocol=UDP dir=out localport=40000

4. To add an inbound rule to allow TCP traffic on ports 40001–40009 and 40012, enter the following command and then press **Enter**:

```
netsh advfirewall firewall add rule name="HP Device Manager TCP IN"
action=allow protocol=TCP dir=in localport=40001-40009,40012
```

5. To add an outbound rule to allow TCP traffic on ports 40001–40009 and 40012, enter the following command and then press **Enter**:

```
netsh advfirewall firewall add rule name="HP Device Manager TCP OUT"
action=allow protocol=TCP dir=out localport=40001-40009,40012
```

After following these steps, the HPDM Server and HPDM Agents can connect to and transfer files to and from the FTP site created for the repository. Also, the ports used for HPDM traffic are opened up on the Windows Firewall. Other ports might be needed for other specific tasks. See the *HP Device Manager 4.7 Administrator Guide* for a complete list of ports used by HPDM.

## **Installing HPDM**

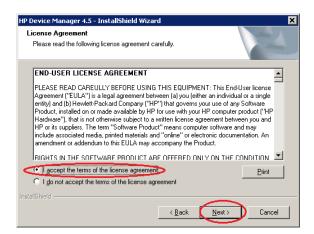
Before installing HPDM, copy the installation files to the server and see <u>HPDM Server preparation</u>. If you already have an older version of HPDM installed, see <u>Upgrading HPDM</u>.

## **Running the installation file**

1. Open the HPDM folder and double-click the HPDM setup file. If it asks to Extract or Run, select Run.

Computer + PC CO	E (C:) + HPDM4.5			• 📪 🛛	Search HPDM4.5		Ľ
Organize 👻 📑 Open 🛛 New Folder						ie • 🖬	
🚖 Favorites	A Name -		Date modified	Туре	Size		
E Desktop	HPDM_4.5	.0.16176.exe	11/21/2012 2:59 PM	Application	124,297 KB		
Downloads							
🔛 Recent Places							
词 Libraries							
Documents							
Music	-						
E Pictures							
Bubversion							
😸 Videos							
📕 Computer							
PC COE (C;)	-1						

- 2. Click Next.
- 3. Accept the license agreement and click Next.



- 4. Click Yes.
- 5. Select a setup type:
  - Complete—All components are installed with their default configurations.
  - **Custom**—Select the components to install and specify the configuration of each one.

Select the desired setup type, change the Destination Folder if desired, and then click **Next**.

#### Note

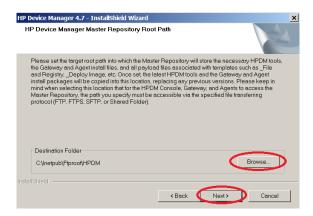
This example uses the Custom setup.

HP Device Manager 4.7 - InstallShield Wizard	×
Setup Type Select the setup type that best suits your needs.	
Please select a setup type.	
C Complete All program features will be installed. (Requires the most disk space.)	
Custom Select which program features you want installed. Recommended for ac users.	lvanced
	owse
InstallShield	
	Cancel

6. Make sure all the HPDM components are checked. Click **Next**.

HP Device Manager 4.7 - InstallShield Wizard	×
Select Features Select the features setup will install.	
Select the features you want to install, and desele Mine <b>M Console</b> Mine M Console Mine M	ct the features you do not want to install. Description The graphical application used by administrators to access HP Device Manager management system.
534.45 MB of space required on the C drive 28332.46 MB of space available on the C drive InstallShield	<back next=""> Cancel</back>

7. Accept the default root path for the Master Repository, or click **Browse** and navigate to a specific location. Click **Next**.



8. Click Install.

A progress bar is displayed. When it completes, HPDM is installed.

## **HPDM configuration**

1. An HPDM Configuration Wizard appears after HPDM is installed. Select your language, and then click Next.

(p)		×
Configuration List Language Setting Ports Checking DHCP Setting for PXE HPDM Gateway configuration Result	Language Setting Please specify the language you want to use with HPDM. After installation, if you want to change the language, you can modify the locale configuration file in the HPDM includent dood manually. Language English (United States)	
	<back next=""> Finish Cancel</back>	

- 2. Click Check to check ports, and then click Next.
- 3. Be sure that DHCP server not located on this machine is selected, and click Next.

100 - Contra de Carlos de Car Carlos de Carlos de		
Configuration List	Ports Chee	sking
Language Setting	Port	Component
Ports Checking	1099	HP Device Manager Server
DHCP Setting for PXE	40002	HP Device Manager Server
HPDM Gateway configuration	40005	HP Device Manager Server
Result		PostgreSQL
	40009	HP Device Manager Server
		HPDM Gateway Controller
	40003	HP Device Manager Gateway
	40000	HP Device Manager Gateway
	67	HP Device Manager Gateway
	<b>6</b> 9	HP Device Manager Gateway
	4011	HP Device Manager Gateway
	40012	HP Device Manager Repository Controller
	ľ	
		Check
· · · · · · · · · · · · · · · · · · ·		
		<back next=""> Finish Cancel</back>

4. Under Start PXE service when gateway is started, select No, and then click Next.

$\phi$		
Configuration List	HPDM Gateway configuration	
Language Setting Setting Checking	Server address	localhost
DHCP Setting for PXE HPDM Gateway configuration	Local NIC	Any NIC
Result	Log level	Trace
	Poll Batch	50
	Poll interval	0
	Forcibly start gateway	No
	Start PXE service when gateway is started	No
	(HPDM PXE service will always be stopped	d when HPDM Gateway is stopped)
<u>r</u> J	<back< td=""><td>Next&gt; Finish Cancel</td></back<>	Next> Finish Cancel

- 5. Click **Execute**.
- 6. Click **Finish**.

## **Creating a new database**

1. After HPDM is configured, an HP Device Manager Database Setup dialog appears. Select **Create New Database**, and then click **Next**.

HP Device Manager Database Setup     Options	
Create New Database	
C Use HP Device Manager database at existing locatio	n
C Migrate HP Device Manager database to new location	n
<back next=""> Finish Car</back>	ncel

#### Note

You must create a new database the first time you install HDPM.

HP Device Manager supports two database types:

- **PostgreSQL**—If you choose PostgreSQL, there is no need to do any other database configuration because it is embedded in HPDM
- **MS SQL Server**—If you choose MS SQL, you must first create an MS SQL Server database for you to connect to (see MS SQL Server documentation).

### Note

If you choose MS SQL Server as your HPDM database, the authentication type in the HP Device Manager Database Setup dialog must correspond to the MS SQL Server configuration, and you must be authorized to create the database. Example as follows:

- A. If you choose Windows Authentication during the database engine configuration, you must choose Window Authentication when configuring the HPDM database.
- If you choose mixed mode during the database engine configuration, you can choose either Window Β. Authentication or SQL Server Authentication when configuring the HPDM database.

O PostgreSQL		
OPostgreSQL	MS SQL Server	
Database Settings Database Settings Server Address Juernähler Plassword	Indinuk Weldows Außerblackon Bild, Server Außerblackon Weldows Außerblackon	Curcel
	Uservite P65av0r2	Userview Vestowe Juliantication Vestowe Juliantication Plasmore Indiantication Vestowe Juliantication

2. Choose your desired database type, and then click **Next**.

lf you choose Po	ostgreSQL,	you must	set a pas
柳 HP Device Mana	ger Database	Setup	_ 🗆 🗙
Database Type			
PostgreSQL	O M	S SQL Server	
Database Settings			
Database:	hpdmdb		~
Server Address:			
Username:			
Password:			
Confirm Password:			
		_	
<back< td=""><td>Next&gt;</td><td>Finish</td><td>Cancel</td></back<>	Next>	Finish	Cancel

Α. sword. B. If you choose MS SQL Server, you need to manually input the database information

🖗 HP Device Mar	nager Datal	base Set	up	_ []
Database Type				
C PostgreSQL		• MS SO	QL Server	
Database Settings	6		-	
Database:	hpdmdb			-
server Address:				
Authentication	SQL Server	Authentic	ation	-
Username:				
Password:				
			-	
<back< td=""><td>Next</td><td>~ I I</td><td>inish</td><td>Cancel</td></back<>	Next	~ I I	inish	Cancel

3. A process bar will appear. When the database creation is finished, enter and confirm the password for the root Administrator account, and then click **Finish**.

🍈 HP Device Mana	gor Databaco	Cotup	
User Settings	ger batabase	Scrup	
		- · •	
Set the administrat Server	or's password to	or Device Mana	agement
Username:	root		
1			_
Possword:			
Confirm Password:			
	1		
<back< td=""><td>Next&gt;</td><td>Finish</td><td>Cancel</td></back<>	Next>	Finish	Cancel

- 4. Click **OK**. The database was created successfully.
- 5. After the database installation is finished, a completion dialog appears. Click **Finish**.

HP Device Manager 4.5 - InstallShield Wizard		
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed HP Device Manager 4.5. Click Finish to exit the wizard.	
	< Back Finish Cancel	

You have completed the installation of HPDM.

# **Updating HPDM**

If you already have an older version of HPDM installed, you can use the new HPDM installation file to update it. Before updating HPDM, copy the installation files to the HPDM Server and see <u>HPDM Server preparation</u>.

#### Note

You do not need to install all Service Packs (SPs) when updating HPDM to the latest major version. For example, if your current HPDM version is 4.6 SP1, you can update it to 4.7 without installing 4.6 SP2 or any other SPs.

Be sure to make a backup before upgrading HPDM in case there is an installation error and you need to restore the previous version. For more details, see the *HP Device Manager 4.7 Administrator Guide*.

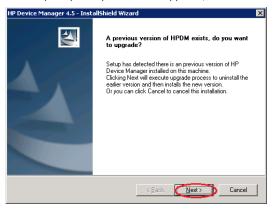
For more information, see Appendix A — Updating your HPDM version.

## Running the installation file to update HPDM

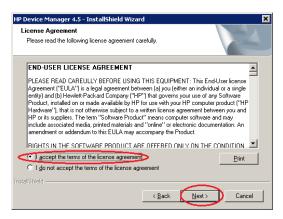
1. Open the HPDM folder and double-click the HPDM setup file. If it asks to Extract or Run, select Run.

👅 🕞 - Computer -	PC COE (C:) + HPDM4.5			👻 🌄 🔤	iearch HPDM4.5	
Drganize 👻 📆 Open New	folder					· · 🖬 🙆
🔆 Favorites	A Name		Date modified	Туре	Size	
E Desktop	E HPDM_4.5.	0.16176.exe	11/21/2012 2:59 PM	Application	124,297 KB	
🐌 Downloads						
Secent Places						
词 Libraries						
Documents						
J Music	100					
Pictures						
Subversion						
Videos						
Computer						
A PC COE (C:)	10					
P 172.16.1.100	-					
HPDM_4.5.0.161	76.exe Date modified: 11/21/201	2 2:59 PM Date creater	5: 11/21/2012 3:12 PM			
Application	Size: 121 MB					

2. When a prompt to update HPDM appears, click Next.



- 3. Click Yes.
- 4. Click Next.
- 5. Accept the license agreement, and then click Next.



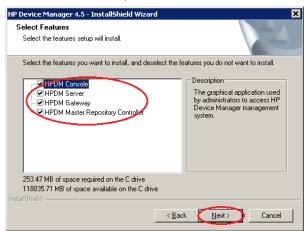
- 6. Click **Yes**.
- 7. Select the **Custom** setup, change the destination folder if desired, and then click **Next**.

HP Device Manager 4.5 - InstallShield Wizard	×
Setup Type Select the setup type that best suits your needs.	X
Please select a setup type.	
Complete All program features will be installed. (Requires the most disk Concerning Select which program features you want installed. Recommendational advanced users.	
Destination Folder C:\Program Files\HP\HP Device Manager\	Browse
InstallShield	Cancel

### Note

You can either overwrite your current HPDM directory or create a new destination folder.

8. Make sure all HPDM components are checked. Click Next.



9. Accept the default root path for the Master Repository, or click Browse and navigate to a specific location. Click Next.

HP Device Manager 4.5 - InstallShield Wizar	d	×
HP Device Manager Master Repository R	oot Path	
Please set the target root path into which the M HPDM tools, the Gateway and Agent install file templates such as _file and Registry. Deploy and the Gateway and Agent install packages w previous versions. Please keep in mind when s Console, Gateway, and Agents to access the N accessible via the specified file transferring prot	s, and all payload files assoc image, etc. Once set, the lat ill be copied into this locatioi electing this location that for faster Repository, the path y	iated with test HPDM tools n, replacing any the HPDM iou specify must be
Destination Folder		Browse
C:\Inetpub\Ptproot\HPDM	< Back	Cancel

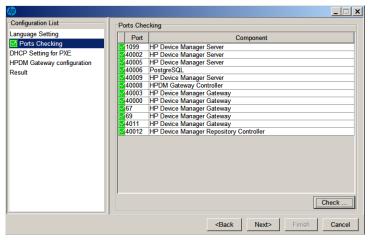
10. Click Install. HPDM is now installed.

## HPDM configuration during an update

1. After the HPDM update is installed, an HPDM Configuration Wizard appears. Select your language, and then click **Next**.

(i)	
Configuration List Language Setting Ports Checking DHCP Setting for PXE HPDM Gateway configuration Result	Language Setting Please specify the language you want to use with HPDM. After installation, if you want to change the language, you can modify the locale configuration file in the HPDM installation more manually. Language: English (United States)
	<back next=""> Finish Cancel</back>

2. Click **Check** to check the ports, and then click **Next**.



3. Be sure that DHCP server not located on this machine is selected, and then click Next.

(i)	
Configuration List Language Setting Corts Checking HICP Setting for PXE HPDM Gateway configuration Result	DHCP Setting for PXE The DHCP Server is used by the PXE boot ROM to get an IP address as well as other basic networking information (subnet mask, default gateway, etc.). DHCP Options OHCP server not located on this machine The network must be configured using DHCP to use the PXE service C DHCP server located or this machine Please add or change the following settings on your DHCP server: tag 60, type "string", content "PXEClient" tag 201, type "string", content "' <hpdm address="" gateway="" ip="">' '40003'"</hpdm>
	<back next=""> Finish Cancel</back>

4. Under Start PXE service when gateway, select No, and then click Next.

$\phi$		
Configuration List	HPDM Gateway configuration	
Language Setting Setting Checking	Server address	localhost
DHCP Setting for PXE HPDM Gateway configuration	Local NIC	Any NIC
Result	Log level	Trace
	Poll Batch	50
	Poll interval	0
	Forcibly start gateway	No
	Start PXE service when gateway is started	No
	(HPDM PXE service will always be stopped	d when HPDM Gateway is stopped)
	<back< td=""><td>Next&gt; Finish Cancel</td></back<>	Next> Finish Cancel

- 5. Click **Execute**.
- 6. Click Finish.

## Using an existing database

1. After the HPDM update is configured, an HP Device Manager Database Setup dialog opens. Select **Use HP Device Manager database at existing location**, then click **Next**.

柳 HP Device Manager Database Setup	
Options	
C Create New Database	
Use HP Device Manager database at existing location	on
Migrate HP Device Manager database to new location	on
	. 1
<back next=""> Finish Ca</back>	ncel

#### Note

The option **Use HP Device Manager database at existing location** means that HPDM uses the existing database instead of creating a new one. For example, if you have HP Device Manager 4.6 and you want to update to 4.7, you can use the existing version 4.6 database.

If you want to create a new database, you can choose Create New Database (see Creating a new database).

If you want to migrate an existing database to a new location, you can choose Migrate HP Device Manager database to new location (see <u>Migrate an existing database to a new location</u>).

A processing dialog is displayed while a connection is made to the existing database. Then, a dialog appears notifying you that the connection was successful. HPDM is now upgraded.

2. If a dialog appears notifying you that there was a problem connection to the existing database, click **OK** to specify the database manually.



- 3. Select a configuration mode:
  - A. **Import**—You can import an existing database configuration file: for example, hibernate.properties.
  - B. Setting Database—You configure the database manually.

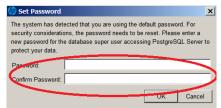
The following example uses the Import option. Select **Import**, and then click **Browse**.

C Setting Database	Browse
C Setting Database	
C MS SQL S	ierver
Database Settings	
Database: hpdmdb	~
Server Address:	
Username:	
Password:	
Directory Settings	
Installation Path of last installed HP Device N	fanager:
	Browse
-	

4. Go to the HPDM directory ... / Server / conf, select the **hibernate.properties** file, and then click **Open**.

		2 0 00	8
- mail	e properties		
Recent Items			
Jesktop			
My icuments			
euments			
cuments			
euments	hibernate.properties		Open

A. If the existing database is PostgresSQL with a default password, a dialog prompts you to set new password for PostgreSQL. Enter your **Password**, enter the same password in **Confirm Password**, and then select **OK**.



After you reset your password, the database information automatically populates the Database Settings fields.

🕼 HP Device Manager Database Setup 📃 🗖 🗙	柳 HP Device Manager Database Setup 📃 🗖 🗙
Configuration Mode	Configuration Mode
· Import	Import
lava\Main\Server\hibernate.properties Browse	ager\Server\conf\hibernate.properties Browse
C Setting Database	O Setting Database
PostgreSQL     O MS SQL Server	PostgreSQL     O MS SQL Server
Database Settings	Database Settings
Database. hpdmdb	Database: bode di
Server Address:	ServerAddress: 127.0.0.1:1433
Username: postgres	Authentication Windows Authentication
Password: *	Start Server Service using this account:
Directory Settings	Username: SH\chen.si
Installation Path of last installed HP Device Manager:	Password
Browse	Directory Settings
	Installation Path of last installed HP Device Manager:
	Browse
<back next=""> Finish Cancel</back>	<back next=""> Finish Cancel</back>

B. If you need to enter the Database Settings information manually, select **Setting Database**, select the database type, and then enter the database information under **Database Settings**.

HP Device Manager Database Setup	K 🕼 HP Device Manager Database Setup
Configuration Mode	Configuration Mode
C Import	C Import
lava\Main\Server\hibernate.properties Browse	ava\Main\Server\hibernate.properties Browse
• Setting Database	Setting Database
C MS SQL Server	C PostgreSQL © MS SQL Server
Database Settings	Database Settings
Database: hpdmdb	Database: hpdmdb
Server Address:	Server Address: 192.168.1.11
Username:	Authentication SQL Server Authentication
Password: *****	Username: sa
Directory Settings	Password:
Installation Path of last installed HP Device Manager:	Directory Settings
Browse	Installation Path of last installed HP Device Manager:
	Browse
<back next=""> Finish Cancel</back>	<back next=""> Finish Cancel</back>

5. Click **Browse**, select the installation path of the last installed HPDM, and then click **Next**.

柳 HP Device Manager Database Setup 📃 🗖 🔉
Configuration Mode
O Import
lava\Main\Server\hibernate.properties Browse
<ul> <li>Setting Database</li> </ul>
PostgreSQL     O MS SQL Server
Database Settings
Database: hpdmdb
Server Address:
Username:
Password: *****
Directory Settings
Installation Path of last installed HP Device Manager:
C:\HP\HP Device Manager_old Browse
<back next=""> Finish Cancel</back>

6. Enter and confirm the password for the root Administrator account, and then click **Finish**.

柳 HP Device Mana	jer Dat	abase	Setup	_ 🗆 🗙
User Settings				
Set the administrate Server	or's pass	sword fo	r Device Ma	nagement
Username:	root			
Prosword:				
Confirm Password:				$ \rightarrow $
	_			
<back< td=""><td>Ne</td><td>xt&gt;</td><td>Finish</td><td>Cancel</td></back<>	Ne	xt>	Finish	Cancel

- 7. Click **OK**. The existing database is now being used.
- 8. After the database installation is finished, a completion dialog appears. Click **Finish**.

You have completed the HPDM update.

## Migrate an existing database to a new location

If you choose Migrate HP Device Manager database to new location, do the following:

1. Select Migrate HP Device Manager database to new location, then click Next.

柳 HP Device Manager Database Setup	_ 🗆 🗙
Options	
C Create New Database	
O Use HP Device Manager database at existing	location
Migrate HP Device Manager database to new	location
$\sim$	
<back next=""> Finish</back>	Cancel

 Specify the source database. Select the last installed HPDM directory, choose the database type, and then the database settings (stored in a hibernate.properties file), except for the password, are automatically loaded into Database Settings.

柳 HP Device Manager Database Setup 📃 🔲 🗙
Specify the source database:
Directory Settings
Installation Path of last installed HP Device Manager
k\DeviceManager\trunk\Source\Java\Main Browse
Database Type
PostgreSQL     O MS SQL Server
Database Settings
Database: hpdmdb
Server Address:
Username: postgres
Password: *****
<back next=""> Finish Cancel</back>

3. Enter your password.

If the previously installed version of HPDM is lower than 4.7 and the source database type is PostgreSQL, then the password is also automatically loaded.

柳 HP Device Mar	ager Data	abase S	etup	_		×
Specify the source	database:					
Directory Settings						
Installation Path	of last insta	lled HP I	Device Man	ager:	_	
k\DeviceManage	\trunk\Sou	rce\Java\	Main B	rowse		
Database Type						
PostgreSQL		C MS	SQL Serve	r		
Database Settings						
Database:	hpdmdb				-	
Server Address:						
Username:	postgres					
Password:	*****	****				
<back< th=""><th>Nex</th><th>d&gt;</th><th>Finish</th><th>Car</th><th>icel</th><th></th></back<>	Nex	d>	Finish	Car	icel	

- 4. Click Next.
- 5. Specify the destination database, choose the database type, and then click **Next**. The following example uses MS SQL Server.

🐌 HP Device Man	ager Database Setup	_ 🗆 ×
Specify the destinat	ion database:	
Database Type		
C PostgreSQL	MS SQL Server	
Database Settings		
Database	hpdmdb	<b>.</b>
Server Address:	192.168.22.12	
Authentication	SQL Server Authentication	-
deername:	sa	_/
Password	*****	
<back< td=""><td>Next&gt; Finish</td><td>Cancel</td></back<>	Next> Finish	Cancel

### Note

The source database and destination database cannot both be PostgreSQL.

6. After the database is migrated, enter and confirm the password for the root Administrator account, and then click **Finish**.

User Settings         Set the administrator's password for Device Management         Server         Username:         Poesword:         Confirm Password:			
Set the administrator's password for Device Management Server Username: root Prosword:	柳 HP Device Mana	ger Database Setup	_ 🗆 🗙
Server Username: root Presword: Confirm Password:	User Settings		
Username: root Possword: confirm Password:		or's password for Device Man	agement
Prosword:	Server		
Confirm Password:	Username:	root	
	Prosword:		
<back next=""> Finish Cancel</back>	Confirm Password:		<u>―</u> ノ
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	<back< td=""><td>Next&gt; Finish</td><td>Cancel</td></back<>	Next> Finish	Cancel

7. Click **OK**. The database is now migrated.

# **HPDM tools**

## **Configuring the HPDM Server**

This section explains each parameter in the HPDM Server configuration file.

### Accessing the Server configuration file

1. Open the file explorer and find the installation folder for HPDM.

퉬 conf							
Comput	er ▼ Local Disk (C:) ▼ Pro	gran	n Files 🔻 HP 🔻 HP D	evice Manager 🝷 Se	erve	r 🕶 conf	
File Edit View Tools	Help						
🕘 Organize 👻 📗 Views	s 🔻 🧾 Open 🔻 🄇	🕑 Bu	um				
Favorite Links	Name 🔺	-	Date modified	- Type	-	Size	- Tags
_	aua 🖉		12/3/2010 6:57 AM	M CONF File		1 K	в
Documents	ibernate 🖉		12/2/2010 9:33 PM	1 PROPERTIES File		1 K	в
Pictures	locale 🖉		12/2/2010 9:30 PN	1 CONF File		1 K	в
Nusic	📄 netmaskmap		12/3/2010 6:00 AM	M CONF File		1 K	в
Recently Changed	server 💽		12/2/2010 9:40 PM	1 CONF File		2 K	в
Searches	🖹 serverconf		12/9/2010 6:05 PN	4 XML Document		4 K	в
Dublic	wrapper		12/3/2010 6:01 AM	4 CONF File		7 K	в

2. Right-click the file server.conf, select **Open With**, and then select **Notepad**.

Now you have a Notepad file displaying the content of server.conf, and you can modify some of the parameters in it.

#### **Thread settings**

The HPDM Server creates a thread pool to contain all services.

Parameter	Description
hpdm.thread.poolSize=400	This parameter indicates the maximum amount of thread used by the HPDM Server. The default value is 400.
hpdm.thread.maxNum.task=100	This parameter indicates the maximum amount of thread for tasks.
hpdm.thread.maxNum.report=200	This parameter indicates the maximum amount of thread for processing reports.
hpdm.thread.maxNum.gatewayWalker=20	This parameter indicates the maximum amount of thread for walking HPDM Gateways.

## Port settings

The following ports are used to communicate with the HPDM Gateway.

Parameter	Description
hpdm.poll.port=40000	This parameter indicates the port that the HPDM Server uses to poll an HPDM Gateway.
hpdm.task.port=40003	This parameter indicates the port that the HPDM Server uses to send tasks to an HPDM Gateway.
hpdm.report.port=40005	This parameter indicates the port that the HPDM Server uses to receive reports from an HPDM Gateway.

## **Poll settings**

The HPDM Server can be set to poll HPDM Gateways periodically and to refresh their status with the polling results.

Parameter	Description
hpdm.poll.enabled=false	This parameter indicates whether the HPDM Server needs to poll the HPDM Gateways periodically.
hpdm.poll.batchNumber=10	This parameter indicates how many HPDM Gateways to poll at a time. This takes effect only if poll.enabled is set to true.
hpdm.poll.batchInterval=60	This parameter indicates how long in seconds the HPDM Server should wait before polling another batch of HPDM Gateways. This takes effect only if poll.enabled is set to true and the total HPDM Gateway amount is larger than poll.batchNumber.
hpdm.poll.roundInterval=600	This parameter indicates how long in seconds the HPDM Server should wait before starting a new round of HPDM Gateway polling. This takes effect only if poll.enabled is set to true.
hpdm.poll.retryTimes=5	This parameter indicates how many times the HPDM Server should retry when failing to connect to an HPDM Gateway when polling it. This takes effect only if poll.enabled is set to true.
hpdm.poll.retryInterval=180	This parameter indicates how long in seconds the HPDM Server should wait before retrying polling an HPDM Gateway when the last connection failed. This takes effect only if poll.enabled is set to true.

#### Task settings

<b>j</b> -		
Parameter	Description	
hpdm.task.SSL.enabled=true	This parameter indicates whether the HPDM Server sends a task to an HPDM Gateway with SSL- encrypted communication. Available values are true and false.	
hpdm.task.retry=true	This parameter indicates whether the HPDM Server retries when failing to send a task to HPDM Gateway. If set to false, the HPDM Server drops the task and mark it as a failure.	
hpdm.task.retryInterval=60	This parameter indicates how long in seconds the HPDM Server retries sending tasks. It only takes effect when hpdm.task.retry is set to true.	

#### SSL settings

Parameter	Description
hpdm.ssl.downwardcompatible=false	This parameter indicates whether the SSL protocol HPDM Server employs is backward compatible or not. Available values are true and false.

## Log settings

The HPDM Server outputs logs to a rolling file named hpdm-server.log.

Parameter	Description
hpdm.log.level=WARN	This parameter indicates the log levels to write into the log file. The log levels in the HPDM Server are:
	DEBUG = 1: Logs for developer debugging.
	INFO = 2: Logs of running information, not errors.
	WARN = 3: Logs with warning if something unexpected happened.
	FATAL = 4: Logs of fatal errors or what must be logged, such as server start.
	Setting the log level makes the HPDM Server write specified logs of no lower than the specified level to the log file. For example, when setting the log level to INFO, the HPDM Server writes INFO, WARN, and FATAL logs after the next start.
hpdm.log.dailyRolling=false	This parameter specifies whether the log is appended with a daily rolling. If set to true, the following two configurations (hpdm.log.maxBackupIndex and hpdm.log.maxFileSize) are ignored.
hpdm.log.maxBackupIndex=10	This parameter indicates the maximum number of log files the HPDM Server keeps.
hpdm.log.maxFileSize=5MB	This parameter indicates the maximum size of each log file.
hpdm.log.gateway=false	This parameter indicates whether the HPDM Server should write logs about communicating with an HPDM Gateway.
hpdm.log.console=false	This parameter indicates whether the HPDM Server should write logs about communicating with the HPDM Console.
hpdm.log.task=false	This parameter indicates whether the HPDM Server should write logs about tasks.
hpdm.log.taskQueueInterval	This parameter indicates how often (in seconds) the HPDM Server writes a log about the tasks in the queue. Set to 0 to disable the HPDM Servers from writing logs about tasks.
hpdm.log.db=false	This parameter indicates whether the HPDM Server should write logs about database operations.
hpdm.log.masterController	This parameter indicates whether the HPDM Server should write logs about communication with the Master Controller.
hpdm.log.audit	This parameter indicates whether the HPDM Server should write logs about auditing the HPDM Console. Set to <b>true</b> to write HPDM Console logon information to log, set to <b>false</b> to not write auditing information, and set to <b>all</b> to write every HPDM Console request to log.
hpdm.log.auditFile	This parameter indicates the location of the auditing file log.
hpdm.hibernate.debug	This parameter indicates whether the HPDM Server should write logs about advanced database query details.

#### **Cache settings**

Parameter	Description
hpdm.cache.enabled=true	This parameter indicates whether the HPDM Server should keep a cache in memory to speed up its reaction to HPDM Consoles.

## **Configuring the HPDM Gateway**

1. After the HPDM Gateway is installed, its tray icon is displayed in the system taskbar. Right-click the icon, and then select Configure Device Management Gateway. The HPDM Gateway Configuration window opens.

G HPDM Gateway Config	juration X			
Gateway Version:	4.7.3630.22429			
Server address	192.168.22.1			
Local NIC	192.168.22.140			
Log Level	TRACE			
Poll batch	50			
Poll interval (seconds)	0			
Forcibly start gateway				
Start PXE service when Gateway is started				
(PXE service will always be stopped when gateway is stopped)				
	OK Cancel			

- 2. Move the mouse over the input field of any item and, after a moment, a hint is displayed. Every hint includes two parts:
  - Value scope
  - o Explanation of the item

Configure the settings as desired, using the hints.

- 3. After the settings are configured, click **OK** to save them. A prompt to restart the HPDM Gateway appears.
- 4. Click **OK** to exit the HPDM Gateway Configuration window. Restart the HPDM Gateway for changes to take effect.

#### **HPDM Gateway parameters**

- Server address—Indicates the HPDM Server address.
- Local NIC—Indicates the network card for an HPDM Gateway to send and receive tasks and reports.
- Log Level—Indicates the log level for the HPDM Gateway log file.
- Poll batch—Indicates the number of HPDM Agents that are polled by HPDM Gateway in a batch.
- **Poll interval**—Indicates the interval in seconds between polling HPDM Agents.
- Forcibly start gateway—Forcibly starts the HPDM Gateway even if another HPDM Gateway is on the same subnet.
- Start PXE service when Gateway is started—Set to Yes to capture/deploy images with PXE

#### **HPDM Gateway tray icon colors**

- Green—HPDM Gateway is running.
- Yellow—HPDM Gateway is stopping or starting.
- Red—HPDM Gateway is stopped.
- Red & Yellow—HPDM Gateway has found another HPDM Gateway running on the same subnet.

#### **HPDM Gateway tray icon menu**

- Start Device Management Gateway—Starts HPDM Gateway.
- Stop Device Management Gateway—Stops HPDM Gateway.
- Configure Device Management Gateway—Opens the HPDM Gateway Configuration window.
- Forcibly Start Device Management Gateway—Forcibly starts HPDM Gateway.
- Restart Device Management Gateway—Restarts HPDM Gateway.
- Exit—Exits the HPDM Gateway control program, which means the tray icon is no longer be shown.

## **Configuring DHCP tags**

For information about configuring DHCP tags, see the HP Device Manager 4.7 Configuring DHCP Tags white paper.

## **Configuring the HPDM Agent**

## Configuring HP WES/XPe/CE clients

- 1. Log on to the device as Administrator.
- 2. Open the Control Panel and double-click HPDM Agent. The Configure HP Device Management Agent dialog appears.

gent Version:	4.3.3660.10576	
ettings		
urrent Gateway:	192.168.55.20	
ackup Gateway:	<u>I</u>	
'ull Interval:	1 minute	•
og Level:	Infomation	•
elay Scope:	No Delay	-

There are two tabs in this dialog. The General tab contains all parameters for HPDM Agent settings. The Groups tab is used to set special grouping information for HPDM Console and HPDM Server use.

Group Name Value
Manual Group my Manual Gr Add
Edit
Delete

There are two options in the Groups tab. Select **Get Pre-Assign Groups from DHCP Tag** to make the HPDM Agent report with grouping values to get from the DHCP server. Select **Use Static Custom Groups** to set custom grouping values manually.

To se the grouping values manually, select **Use Static Custom Groups** and then click **Add**. Enter the grouping value in the dialog that opens. You can choose the **Group Name** from a drop-down list and enter a value for it.

#### **Configuring HP ThinPro and Debian clients**

- 1. Log on to the device as Administrator.
- 2. Open the **Control Panel**, select the **Management** tab, and double-click **HPDM Agent**. The Agent Configure Manager dialog opens.

🛞 o	Agent Conf	igure Manager	↑ _ □ ×
Agent Configure Manager			
General Gr	oups		
Agent Vers	sion: HP Device I	Management Agent 4.3.366	5.10576
Settings			
Curre	ent Gateway:	192.168.52.20	
Back	up Gateway:	.I.	
Pu	ll Interval:	1 day(recommended)	
Ŀ	og Level:	Error(recommended)	
De	lay Scope:	10 minutes(recommended	D 🔽
		ок	Cancel

There are two tabs in this dialog. The General tab contains all parameters for HPDM Agent settings. The Groups tab is used to set special grouping information for HPDM Console and HPDM Server use.

i o 🚯	Agent	Configure Manager	+ _ □ ×			
🛞 Agent Configure Manager						
General	General Groups					
🔴 Get Pr	e-Assign Grou	ps from DHCP Tag				
	atic Custom G					
Group	Name	Value				
P1 Manua	il Group	myP1 my Manual Group	Add			
			Edit			
			Delete			
		ок	Cancel			

There are two options in the Groups tab. Select **Get Pre-Assign Groups from DHCP Tag** to make the HPDM Agent report with grouping values to get from the DHCP server. Select **Use Static Custom Groups** to set custom grouping values manually.

To set the grouping values manually, select **Use Static Custom Groups** and then click **Add**. Enter the grouping value in the dialog that opens. You can choose the **Group Name** from a drop-down list and enter a value for it.

#### **HPDM Agent parameters**

Although the GUIs differ a little between Windows and Linux, their parameters are the same. The following are explanations for each parameter.

- Agent Version—Indicates the current version of HPDM Agent.
- **Current Gateway**—Indicates the IP address of the HPDM Gateway that is currently managing this HPDM Agent. You can change this value to make the HPDM Agent report to another HPDM Gateway with either an IP address or a hostname. The HPDM Agent refreshes this value into a valid IP address every time it receives a task from an active HPDM Gateway.
- **Backup Gateway**—Indicates the IP address of a backup HPDM Gateway. The HPDM Agent tries to find an HPDM Gateway to work with on startup. If the current HPDM Gateway is not available, the HPDM Agent attempts to connect to the backup HPDM Gateway.
- **Pull Interval**—Indicates the time interval that the HPDM Agent connects to the HPDM Gateway and asks for a task. Normally, tasks are pushed from the HPDM Gateway to the HPDM Agent when the HPDM Gateway gets a task. Sometimes the HPDM Agent is running on a device behind NAT, which means that the HPDM Gateway has no approach to connect to the HPDM Agent. Tasks for devices behind NAT can only be executed after the HPDM Agent establishes a connection to the HPDM Gateway and pulls tasks from the HDPM Gateway.
- **Log Level**—Indicates which log levels should be written into the log file. When set at a particular level, errors of that level and higher are logged. There are three levels for HPDM Agent: INFORMATION, WARNING, and ERROR (from low to high). See the *HP Device Manager 4.7 Administrator Guide* for more details about logging.
- Delay Scope—Indicates a time range during which the HPDM Agent sends a startup report to the HDPM Gateway after startup. The HPDM Agent randomly selects a time in that range and sends a startup report. This avoids net traffic peak. For example, suppose there are 100 devices. All of them have Delay Scope set to 10 minutes, and you send a reboot task to them all. The 100 devices all reboot, and then their HPDM Agents start. They do not report in at the 10th minute after that. Each of them uses a random time between 0–10 minutes. So, all 100 devices report within 10 minutes, avoiding net traffic peak.
- **Get Pre-Assign Groups from DHCP Tag**—Makes the Agent report with grouping values to get from the DHCP server. See <u>Configuring DHCP tags</u> for information on how to set grouping values on a DHCP server for HPDM.
- **Use Static Custom Groups**—Allows you to set custom grouping values for this device manually. The Agent ignores values from the DHCP server and reports the custom settings.
- Group Name—Indicates the group. There are seven fields to choose from. You can set some or all of them.
- Value—Indicates the grouping value for the specified file.

# Appendix A — Updating your HPDM version

This section describes how to update HPDM from the current version to the latest version.

## Updating HPDM to the latest major version

For example, the latest major version is HPDM 4.7. There are the following paths to update HPDM to 4.7.

To update HPDM from 4.6 or 4.6 S SPs to 4.7:

1. You can install HPDM 4.7 without installing the HPDM 4.6 SPs first. For example, you can update HPDM 4.6 SP1 to HPDM 4.7 without installing HPDM 4.6 SP2.

To update HPDM from 4.4 to 4.7:

1. Install HPDM 4.5, and then install HPDM 4.7.

## **Updating HPDM to the latest SP**

The following example uses HPDM 4.6 SP3

To update HPDM 4.6 to 4.6 SP3, use one of the following paths:

• Update HPDM 4.6 or 4.6 SP1 to 4.6 SP3.

A. Install HPDM 4.6 SP3 without installing lower service packs such as HPDM 4.6 SP2.

- Update HPDM 4.5 or 4.5 SPs to 4.6 SP3.
  - A. Install HPDM 4.6, and then install HPDM 4.6 SP3.
- Update HPDM 4.4 to 4.6 SP3.
  - A. Install HPDM 4.5.
  - B. Then, install HPDM 4.6.
  - C. Finally, install HPDM 4.6 SP3.

# For more information

To read more about HP Device Manager, go to hp.com/go/hpdm.

# Sign up for updates hp.com/go/getupdated

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