# HPDM Installation & Update Guide



HP Device Manager 4.7 SP3

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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 so on. 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 HPDM Server.
- Master Repository Controller—The content manager in the Master Repository, which synchronizes that content to
  other repositories as requested by HPDM Server.
- HPDM Agent—Software installed on the client to enable device management.

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 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 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 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 white paper FTP Server Configuration.

# **HTTPS server configuration**

For details about HTTPS server configuration, see the HP Device Manager 4.7 white paper HPDM Embedded HTTPS Server Deployment Guide.

#### **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 select **Start**, select **All Programs**, select **Accessories**, select **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. Select **Start**, select **All Programs**, select **Accessories**, and then select **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
```

 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 HPDM** 

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

To configure the necessary exceptions:

- 1. Select **Start**, select **All Programs**, select **Accessories**, and then select **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 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 to 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, 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 + P	PC COE (C:) + HPDMH.5			• 🙆 1	Search HPDM4.5		Ľ
Organize = 🔄 Open New F	iolder					) · · ·	
🚖 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		
bownloads Downloads							
E Recent Places							
🗃 Libraries							
Documents							
J Music	-						
E Pictures							
<b>Subversion</b>							
Videos							
Computer							
AL							
PC COE (C;)							

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	most disk space.)
C Cugtom Select which program features you want installed. P users.	ecommended for advanced
Destination Folder C\Program Files (x86)\HP\HP Device Manager\	Browse
InstallShield	Next > Cancel

6. Make sure all the HPDM components are selected. 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	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	Gack     Next     Cancel

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.

40	
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 incidenon moder 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.

<b>4</b> 2			
Configuration List	Ports Che	cking	
Language Setting	Port	Component	
Ports Checking	<b>1099</b>	HP Device Manager Server	
DHCP Setting for PXE	40002	HP Device Manager Server	
HPDM Gateway configuration	40005		
Result	40006		
Result	40009	HP Device Manager Server	
	40008	HPDM Gateway Controller	
	40003	HP Device Manager Gateway	
	40000	HP Device Manager Gateway	
	67	67 HP Device Manager Gateway	
	<b>6</b> 9		
	4011	HP Device Manager Gateway	
	40012	HP Device Manager Repository Controller	
	'		
		Check	
L			
		<back next=""> Finish Cancel</back>	

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

(1)		
Configuration List	HPDM Gateway configuration	
Language Setting	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 stoppe	d when HPDM Gateway is stopped)
	] -	
	<back< th=""><th>Next&gt; Finish Cancel</th></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     Device Manager Database Setup	_
Create New Database	
C Migrate HP Device Manager database to new lo	ocation
<back next=""> Finish</back>	Cancel

#### 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

Α.

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:

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 Authentication or SQL Server Authentication when configuring the HPDM database.

SQL Server 2008 Setup			🖸 HP Device Manager Database S	ctup 🧾 🗌
Database Engine Config Specify Database Engine authentica	uration tion securty mode, administrators and data directories.		Ostabase Type	MS SOL Server
Setup Support Nuine Product Service Losson Terms Produce Selection Instance Configuration Delis Spose Requestion Server Configuration Dense Request Configuration Dense Request Configuration Dense Registry Configuration Installation Theorems Complete		SQL Server administrators have unrestructed access to the Dotabase Engree.	Ordebese Setting: Dotabases Entrog: Dotabases: Padortification Server Address Padortification Statement Padorver Address Vendore Author Statement Padorver Address Vendore Author Statement Padorver Address Vendore Author Statement Vendore Author Vendore Author Vendore Author Statement Vendore Author Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vendore Vend	hertication
	Add Current User Add Brenove	Cancel Help	(Bick Biot)	Finish

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

If you choose PostgreSQL, you must set a password
🕼 HP Device Manager Database Setup
Database Type
C MS SQL Server
Database Settings
Database: hpdmdb
Server Address:
Username:
Password:
Confirm Password:
<back next=""> Finish Cancel</back>

8

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

Database Setting	5	
Database:	hpdmdb	
server Address:		
Authentication	SQL Server Authentication	
Username:		
Password:		

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

柳 HP Device Mana	ger Database	Setup	_ 🗆 🗙
User Settings			
Set the administrat Server	or's password fo	r Device Mana	gement
Username:	root		
Prosword:			
Confirm Password:			$ \rightarrow $
	1	1	1
<back< td=""><td>Next&gt;</td><td>Finish</td><td>Cancel</td></back<>	Next>	Finish	Cancel

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

HP Device Manager 4.5 - Inst	allShield 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 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 <u>Appendix A — Updating your HPDM version</u>.

### 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 C	OE (C:) + HPDM4.5			- 🖾	Search HPDM4.5	
Organize 👻 📑 Open 🛛 New folde	a.					💷 🔹 🛄 🔞
🔆 Favorites	Name -		Date modified	Туре	Size	
Desktop Downloads	HPDM_4.5	5.0.16176.exe	11/21/2012 2:59 PM	Application	124,297 KB	
Documents						
Music						
Pictures Subversion						
Fictures						
Pictures Subversion						

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**.

evice Manager 4.5 - InstallShield Wiza	ra			×
ense Agreement Please read the following license agreement of	arefully.			
END-USER LICENSE AGREEMENT			-	]
PLEASE READ CAREULLY BEFORE USING Agreement ("EULA") is a legal agreement bet entity) and (b) Hewlett-Packard Company ("H Product, installed on or made available by HF Hardware"), that is not otherwise subject to a	ween (a) you (e P'') that governs for use with you	ither an individu syouruse of an urHP computer	al or a single y Software product ("'HP	
HP or its suppliers. The term "Software Produ include associated media, printed materials a	ict" means comp nd "online" or el	outer software a ectronic docum	nd may	
HP or its suppliers. The term "Software Produ include associated media, printed materials a amendment or addendum to this EULA may a RIGHTS IN THE SOFTWARE PRODUCT AI accept the terms of the license agreeme	nct" means comp nd "online" or el Iccompany the P RE NFFERED C	outer software a ectronic docum Product.	nd may entation. An	1

- 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.	
Please select a setup type.	
Complete	uires the most disk space.)
C Custom Select which program features you want i advanced users.	nstalled. Recommended for
Destination Folder C:\Program Files\HP\HP Device Manager\ InstallShield	Browse
	ck Next > Cancel

#### Note

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

8. Make sure all HPDM components are selected. Click **Next**.

HP Device Manager 4.5 - InstallShield Wizard	×
Select Features Select the features setup will install.	
Select the features you want to install, and desele	ct the features you do not want to install.  Description  The graphical application used by administrators to access HP Device Manager management system.
253.47 MB of space required on the C drive 118035.71 MB of space available on the C drive InstallShield	
	< <u>B</u> ack <u>N</u> ext > Cancel

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



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.



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

<b>()</b>		
Configuration List	Ports Chee	cking
Language Setting	Port	Component
Ports Checking	<b>1099</b>	HP Device Manager Server
DHCP Setting for PXE	40002	HP Device Manager Server
HPDM Gateway configuration	40002	HP Device Manager Server
Result	40006	PostgreSQL
Result	40009	HP Device Manager Server
	40008	HPDM Gateway Controller
	40003	HP Device Manager Gateway
	40000	HP Device Manager Gateway
	67	HP Device Manager Gateway
	69	HP Device Manager Gateway
	4011	HP Device Manager Gateway
	40012	HP Device Manager Repository Controller
	1	
		Check
		<back next=""> Finish Cancel</back>

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



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

		>
Configuration List	HPDM Gateway configuration	
Language Setting	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< th=""><th>Next&gt; Finish Cancel</th></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**.

🐌 HP D	evice Mana	ger Databa	se Setup	_ 🗆 ×
Option	s			
C Cr	eate New Dat	abase		
-				
C Us	e HP Device	Manager data	ibase at existir	ng location
O Mi	grate HP Dev	ice <mark>Manager</mark> (	atabase to ne	w location
	<back< td=""><td>Next&gt;</td><td>Finish</td><td>Cancel</td></back<>	Next>	Finish	Cancel

#### 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 select Create New Database (see Creating a new database).

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

A processing dialog box 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 box 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**.

💯 HP Device Man	ager Databag	Sotun	
Configuration Mod		2 Secup	
	6		
<ul> <li>Import</li> </ul>			-
		Br	owse
C Setting Datab	ase		
C PostgreSC		MS SQL Serv	
e Postgrebu	L ()	IND OUL ORN	
Database Settings			
Database:	hpdmdb		-
Server Address;			
Usemame:			
Password			
Fassworu.			
Directory Settings			
Installation Path	of last installed H	P Device Man	ager:
		В	rowse
<back< th=""><th>Next&gt;</th><th>Finish</th><th>Cancel</th></back<>	Next>	Finish	Cancel

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

Look Conf		100	
🧽 💶 hbe	nate.properties		
Recent			
Roma			
Desktop			
My			
ocuments			
oconnisms.			
CONTRACTOR OF THE OWNER OF			
iomputer	hiterante essentine	r	0
2			Open

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

-		
柳 Set Password		×
security consideration	ected that you are using the default password. For ons, the password needs to be reset. Please enter a e database super user accessing PostgreSQL Serve	
Paseword:		
Confirm Password:		
	ОК Салс	el

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	<ul> <li>Import</li> </ul>
lava\Main\Server\hibernate.properties Browse	ager\Server\conf\hibernate.properties
C Setting Database	C Setting Database
C MS SQL Server	C PostgreSQL C MS SQL Server
Database Settings	Database Settings
Database. hpdmdb	Database: Index.tk
Server Address:	Server Address: 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:	Passworo.
Browse	Directory Settings
	Installation Path of last installed HP Device Manager:
	Browse
<back next=""> Finish Cancel</back>	<pre><back next=""> Finish Cancel</back></pre>

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	柳 HP Device Manager Database Setup 📃 🗖 🗙
Configuration Mode	Configuration Mode
O Import	O Import
lava\Main\Server\hibernate.properties Browse	lava\Main\Server\hibernate.properties Browse
Setting Database	Setting Database
PostgreSQL C MS SQL Server	C PostgreSQL C 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:	Usuname: 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.

🖗 HP Device Manager Database Setup 📃 🔲 🗙			
Configuration Mode			
C 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**.

🕼 HP Device Mana	ger Database	Setup	_ 🗆 X
User Settings			
Set the administrat Server	or's password fo	r Device Man	agement
Username:	root		
Possword:			
Confirm Password:			$ \rightarrow $
<back< td=""><td>Next&gt;</td><td>Finish</td><td>Cancel</td></back<>	Next>	Finish	Cancel

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

You have completed the HPDM update.

# Migrate an existing database to a new location

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

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

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

 Specify the source database. Select the last installed HPDM directory, and then select the database type. 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 Manager Database Setup 📃 🔲 🗙				
Specify the source database:				
Directory Settings	Directory Settings			
Installation Path	of last installed HP Device Manager:			
k\DeviceManage	er\trunk\Source\Java\Main Browse			
Database Type				
PostgreSQL	C MS SQL Server			
Database Settings	S			
Database:	hpdmdb			
Server Address:				
Username:	postgres			
Password:	*****			
<back< th=""><th>x Next&gt; Finish Cancel</th></back<>	x Next> Finish Cancel			

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

ທ HP Device Mar	ager Database Setup	_ 🗆 ×
Specify the destinat		
Database Type		
C PostgreSQL	• MS SQL Server	
Database Settings	]	
Database	hpdmdb	<b>_</b>
Server Address:	192.168.22.12	
Authentication	SQL Server Authentication	<b>_</b> )
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**.

柳 HP Device Mana	ger Database Setup
User Settings	
Set the administrat Server	or's password for Device Management
Username:	root
Prosword:	
Confirm Password:	
<back< td=""><td>Next&gt; Finish Cancel</td></back<>	Next> Finish Cancel

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

# **HPDM tools**

# **Configuring HPDM Server**

This section explains each parameter in HPDM Server configuration file.

#### Accessing the Server configuration file

1. Open File Explorer and find the installation folder for HPDM.

G 🕞 🗸 - Computer	· ▼ Local Disk (C:) ▼ Progra	m Eilen – UD – UD Deu			
		🚱 🕞 🖟 • Computer • Local Disk (C:) • Program Files • HP • HP Device Manager • Server • conf			
File Edit View Tools Help					
🕘 Organize 🔻 🏢 Views 👻 🧊 Open 👻 🕙 Burn					
Favorite Links	Name 🔺	■ Date modified     ■	Туре	▼ Size ▼ Tags	
_	aua 🖉	12/3/2010 6:57 AM	CONF File	1 KB	
Documents	ibernate 🖉	12/2/2010 9:33 PM	PROPERTIES File	1 KB	
Pictures	🛋 locale	12/2/2010 9:30 PM	CONF File	1 KB	
Nusic	📄 netmaskmap	12/3/2010 6:00 AM	CONF File	1 KB	
Recently Changed	server	12/2/2010 9:40 PM	CONF File	2 KB	
Searches	serverconf	12/9/2010 6:05 PM	XML Document	4 KB	
Duble	📄 wrapper	12/3/2010 6:01 AM	CONF File	7 KB	

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**

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 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 HPDM Gateway.

Parameter	Description

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

#### **Poll settings**

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 HPDM Server needs to poll 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 HPDM Server waits 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 HPDM Server waits 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 HPDM Server retries after it fails to connect to 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 HPDM Server waits before retrying polling HPDM Gateway when the last connection failed. This takes effect only if poll.enabled is set to true.

#### Task settings

Parameter	Description	
hpdm.task.SSL.enabled=true	This parameter indicates whether HPDM Server sends a task to HPDM Gateway with SSL- encrypted communication. Available values are true and false.	
hpdm.task.retry=true	This parameter indicates whether HPDM Server retries when failing to send a task to HPDM Gateway. If set to false, HPDM Server drops the task and marks it as a failure.	
hpdm.task.retryInterval=60	This parameter indicates how long in seconds 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** 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 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 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, 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 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 HPDM Server writes logs about communicating with HPDM Gateway.
hpdm.log.console=false	This parameter indicates whether HPDM Server writes logs about communicating with HPDM Console.
hpdm.log.task=false	This parameter indicates whether HPDM Server writes logs about tasks.
hpdm.log.taskQueueInterval	This parameter indicates how often (in seconds) HPDM Server writes a log about the tasks in the queue. Set to 0 to disable HPDM Servers from writing logs about tasks.
hpdm.log.db=false	This parameter indicates whether HPDM Server writes logs about database operations.
hpdm.log.masterController	This parameter indicates whether HPDM Server writes logs about communication with the Master Controller.
hpdm.log.audit	This parameter indicates whether HPDM Server writes logs about auditing HPDM Console. Set to true to write HPDM Console logon information to log, set to false to not write auditing information, and set to all 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 HPDM Server writes logs about advanced database query details.

#### **Cache settings**

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

# **Configuring HPDM Gateway**

1. After 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.

🜀 HPDM Gateway Config	juration ×			
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
  - 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 HPDM Gateway appears.
- 4. Click **OK** to exit HPDM Gateway Configuration window. Restart HPDM Gateway for changes to take effect.

#### **HPDM Gateway parameters**

- Server address—Indicates HPDM Server address.
- Local NIC—Indicates the network card for HPDM Gateway to send and receive tasks and reports.
- Log Level—Indicates the log level for 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 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 shown.

#### **Configuring DHCP tags**

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

# **Configuring 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 boxappears.

gent Version:	4.3.3660.10576	
Settings Surrent Gateway:	192.168.55.20	_
Backup Gateway:	1	-
Pull 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 P1 myP1 Edit	Get Pre-Assign Use Static Cus tatic Custom Gro		ſag
P1 myP1	Group Name	Value	1
			Add
L ditt.			E dit
Delete			Delete

There are two options in the Groups tab. Select **Get Pre-Assign Groups from DHCP Tag** to make 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.

#### **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 Confi	gure Manager	+ _ □ ×	
🛞 Agent Configure Manager				
General	Groups			
Agent V	ersion: HP Device M	1anagement Agent 4.3.366	5.10576	
Setting	s			
Cu	rrent Gateway:	192.168.52.20		
Ba	ckup Gateway:	I		
Î	Pull Interval:	1 day(recommended)		
	Log Level:	Error(recommended)	-	
C	Delay Scope:	10 minutes(recommended	0	
		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.

😔 o	Agent Configure Manager	↑ _ □ ×				
Rigent Configure Manager						
General Group	General Groups					
Get Pre-Assi	Get Pre-Assign Groups from DHCP Tag					
<ul> <li>Use Static Constant</li> <li>Static Custom</li> </ul>						
Group Name	Value					
P1	myP1	Add				
Manual Grou	p my Manual Group	Edit				
		Delete				
	ОК	Cancel				

There are two options in the Groups tab. Select **Get Pre-Assign Groups from DHCP Tag** to make 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 box 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 the explanations for each parameter.

- Agent Version—Indicates the current version of HPDM Agent.
- **Current Gateway**—Indicates the IP address of HPDM Gateway that is currently managing this HPDM Agent. You can change this value to make HPDM Agent report to another HPDM Gateway with either an IP address or a hostname. 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. HPDM Agent tries to find an HPDM Gateway to work with on startup. If the current HPDM Gateway is not available, HPDM Agent attempts to connect to the backup HPDM Gateway.
- **Pull Interval**—Indicates the time interval that HPDM Agent connects to HPDM Gateway and asks for a task. Normally, tasks are pushed from HPDM Gateway to HPDM Agent when HPDM Gateway gets a task. Sometimes HPDM Agent is running on a device behind NAT, which means that HPDM Gateway has no approach to connect to HPDM Agent. Tasks for devices behind NAT can only be executed after HPDM Agent establishes a connection to HPDM Gateway and pulls tasks from 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 HPDM Agent sends a startup report to HDPM Gateway after startup. HPDM Agent randomly selects a time in that range and sends a startup report. This avoids creating a 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 startup time. Each of them uses a random time between 0 and –10 minutes. So, all 100 devices report within 10 minutes, avoiding a net traffic peak.
- **Get Pre-Assign Groups from DHCP Tag**—Makes HPDM Agent report with grouping values to get from the DHCP server. For information on how to set grouping values on a DHCP server for HPDM, see <u>Configuring DHCP tags</u>.
- **Use Static Custom Groups**—Allows you to set custom grouping values for this device manually. HPDM 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. The following procedures can be used to update HPDM to 4.7, depending on your current version.

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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