# HPDM & Microsoft Azure Cloud Deployment Guide



HP Device Manager 4.7 SP3

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## **Overview**

HP Device Manager (HPDM) is a device management tool capable of working in many different complicated environments. If you configure your firewall, you can deploy HPDM in a cloud and use it to manage HP devices. This document covers deploying HPDM in Microsoft<sup>®</sup> Azure.

#### Note:

Make sure your Azure account has the necessary privileges, and that you have created your Azure workspace before deploying HPDM. For more information of creating an Azure account, contact Microsoft.

## **Deploying HPDM on Azure**

To deploy HPDM in Azure and manage HP devices:

- 1. Create virtual machines in your Azure workspace.
- 2. Install HPDM.
- 3. Configure the firewall.

#### Creating virtual machines in your Azure workspace

- 1. Go to <u>https://manage.windowsazure.com</u> and log on using your Azure account.
- 2. In the VIRTUAL MACHINES tab, select NEW.

	ALL ITEMS	virtual	machine	S		
$\bigotimes$	WEB APPS 0	INSTANCES	IMAGES DISK	S		
٢	VIRTUAL MACHINES	NAME	Ŷ	STATUS	SUBSCRIPTION	LOCATION
۲	MOBILE SERVICES	cloudHPDM	<b>→</b>	V Running	Visual Studio Enterpri	se with MS Central US
60-	CLOUD SERVICES					
DB	SQL DATABASES 0					
(A)	HDINSIGHT 0					
۲	MEDIA SERVICES					
₿2	SERVICE BUS					
M	VISUAL STUDIO ONLINE					
÷	NEW		CONNECT RES	5 U	ATTACH DETACH DISK	

3. Select **COMPUTE**, select **VIRTUAL MACHINE**, select **QUICK CREATE**, and then enter your information in the resulting boxes.

4. Select CREATE A VIRTUAL MACHINE.

сомрите	WEB APP	CONTEX CREATE	DNS NAME	
DATA SERVICES			IMAGE SZZ	.cloudapp.n
APP SERVICES			Windows Server 2012 💟 D1 (	l core, 3.5 GB mer 🔽
) NETWORK SERVICES			USER NAME	
MARKETPLACE PREMEW			NEW PASSWORD CONFI	RM
			REGION/AFFINITY GROUP	
			Central US	~

When the virtual machine status changes from Starting (Provisioning) to Running, you can install HPDM.

•	VIRTUAL MACHINES	NAME	ŕ	STATUS	SUBSCRIPTION
		cloudHPDM	→	V Running	Visual Studio Enterprise with MS
	0	testhpdm		* Starting (Provisioning)	Visual Studio Enterprise with MS
•	VIRTUAL MACHINES	NAME	Ŷ	STATUS	SUBSCRIPTION
	2	cloudHPDM	⇒	✓ Running	Visual Studio Enterprise with
2	MOBILE SERVICES	testhpdm		🗸 Running	Visual Studio Enterprise with

#### Installing HPDM and HPDM Embedded HTTPS server

1. Select the virtual machine you created in <u>Creating virtual machines in your Azure workspace</u>, and then select **CONNECT**.

٢	VIRTUAL MACHINES	NAME		Ť	STATUS
-	2	cloudH	PDM		V Running
Ŷ	MOBILE SERVICES	testhpd	im	→	🗸 Running
<u>.</u>	CLOUD SERVICES				
	BATCH SERVICES				
DB	SQL DATABASES 0				
	STORAGE 2				
(A)	HDINSIGHT 0				
۲	MEDIA SERVICES 0				
卽	SERVICE BUS				
×	VISUAL STUDIO ONLINE 0				
7	<b>CACHE</b> 0				
+	NEW		CONNECT	C REST/	ART SHUT DOWN

- 2. Save the RDP file your local system, and then use it to connect.
- 3. Upload the HPDM package to the virtual machine, and then install it. For instructions on installing HPDM, see the HP Device Manager 4.7 white paper *Installation and Update*.

4. Optionally, upload the installation package of HPDM Embedded HTTPS Server to the virtual machine, and then install it. For instructions on installing HTTPS server, see the HP Device Manager 4.7 white paper HPDM Embedded HTTPS Server Deployment Guide.

### Configuring the firewall rules

By default, a virtual machine created in Azure is protected by the endpoint firewall. You must map the ports corresponding to HPDM to manage your device over the Internet.

To add a port to your firewall:

- 1. Select a virtual machine with HPDM installed to open the virtual machine properties page.
- 2. In the ENDPOINTS tab, select **ADD**.

	DASHBOARD	MONITOR ENDPOINTS CO	INFIGURE
cloudHPDM	NAME	↑ PROTOCOL	PUBLIC PORT
testhpdm	PowerShell	тср	5986
	Remote Desktop	TCP	53883
NEW		ADD EDI	T MANAGE ACL DELETE

A. In the dialog that appears, select **ADD A STAND-ALONE ENDPOINT**, and then click the right arrow in the lower right-hand corner.

Add an endpoint to a virtual machine

ADD & STAND-ALONE ENDPOINT	
ADD AN ENDPOINT TO AN EXISTING LOAD-8	ALANCED SET 🗊

		ъ.	
	-	*	

B. Select the **NAME** of your HPDM component, select the **PROTOCOL** it uses, and then enter the **PUBLIC PORT** and the **PRIVATE PORT** that it uses.

Specify the details of the endpoint

NAME	
HPDM Gateway	*
PROTOCOL	
тср	*
PUBLIC PORT	
40000	
PRIVATE PORT	
40000	
CREATE A LOAD-BALANCED SET 🗐	
ENABLE DIRECT SERVER RETURN	

$\sim$	0
6	(1)
<u> </u>	C .
-	

C. Select the checkmark.

Repeat this procedure for every port that HPDM uses in your production environment. For more information about which ports HPDM uses, see the HP Device Manager 4.7 white paper *Deployment Guide*.

### Sample scenario

Production environments are complex, diversified, and flexible. Use the following example to better understand port configuration in the cloud. This is a typical model with detailed configurations for reference.

#### Note

There might be firewalls between Internet/Intranet and Azure. Make sure that you have completed the procedure in <u>Configuring the firewall rules</u> to allow communication between your devices and the cloud.



#### Figure 1. Typical topography

All ports in red in Figure 1 must be added to the endpoint firewall.

Table 1. Enpoints rule in Azure

Name	Protocol	Public Port	Private Port
HPDM Gateway B to HPDM Server	ТСР	40005	40005
HPDM Console to HPDM Server	ТСР	1099	1099
HPDM Console to HPDM Server	ТСР	40002	40002
HPDM Agent to Master Repository Controller	TCP/UDP	File Transfer Port	File Transfer Port
HPDM Console to Master Repository Controller	TCP/UDP	File Transfer Port	File Transfer Port
HPDM Agent to HPDM Gateway A	ТСР	40003	40003

# 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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