HP Virtual Desktop Infrastructure with Citrix XenDesktop Getting Started Guide



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Intended audience

It is assumed that the person reading this document and performing the installation of this software environment has a good understanding of Windows Server® installation, network management, and Microsoft® Active Directory.

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Introduction

Prerequisites

To complete your HP Virtual Desktop Infrastructure with Citrix XenDesktop installation you must have the following information:

- Case-sensitive server name for the license server
- HP integrated Citrix XenServer software available from this HP website (http://www.hp.com/go/XenDesktop-downloads).
- Choose from the following supported destination options for installing the HP integrated Citrix XenServer:
  - Hard drive
  - Secure Digital (SD) memory card
  - Flash media (USB flash drive)

  For more information on device support, see the *HP integrated Citrix XenServer Getting Started* (http://h20000.www2.hp.com/bizsupport/TechSupport/DocumentIndex.jsp?contentType=SupportManual&lang=en&cc=us&docIndexId=64179&taskId=101&prodTypeId=18964&prodSeriesId=3801993)
- HP integrated Citrix XenServer license file for Advanced Edition and HP integrated Citrix XenServer license file for Enterprise Edition (Redeemed using the entitlement certificate)
- Citrix XenDesktop license file (Redeemed using the entitlement certificate)
- At least one HP ProLiant server capable of supporting Intel® Virtualization Technology or AMD® Virtualization
- A management console running Microsoft® Windows® to run the XenCenter management GUI
- HP XenDesktop software purchased and downloaded from the HP website (http://www.hp.com/go/XenDesktop-downloads).

HP integrated Citrix XenServer ProLiant Virtual Console is a single-server management interface for XenServer.

Citrix XenCenter Management Console enables you to create resource pools, perform a XenMotion live migration, and optimize multi-server management if you have the proper license where HP ProLiant Virtual Console is optimized for single-server management only, which does not allow configuring of resource pools or performing live migrations. XenCenter can manage only one HP integrated Citrix XenServer Select Edition at a time.

Software download and license redemption for XenServer and XenDesktop

To successfully obtain all of your software and associated licenses, follow the process outlined in this document.

If you purchased HP Virtual Desktop Infrastructure (VDI) with XenDesktop Standard Edition only one license key is required because the integrated Citrix XenServer HP Select Edition that comes with the Standard Editions is licensed.

HP Virtual Desktop Infrastructure with XenDesktop Advanced and Enterprise Edition licenses requires two license files:

- A license file for the HP integrated Citrix XenServer Enterprise Edition. This license is available immediately upon registration of the entitlement certificate.
- A license file for the XenDesktop software components. Within one business day of receiving a request to redeem a license, you receive an email that the license is available for download.

Configuration

Part 1—Software download

HP VDI with Citrix XenDesktop:

- To download HP VDI with Citrix XenDesktop Standard, Advanced, or Enterprise, go to the HP Virtualization website (http://www.hp.com/go/XenDesktop-downloads), and then select the software bundle to download.
- To download feature packs that contain add-on features and provide additional enhancements, go to the following HP website (http://www.hp.com/go/XenDesktop-downloads).
- For existing HP VDI with Citrix XenDesktop customers, feature packs are available through Software Updates Manager (SUM) (http://www.itrc.hp.com).

HP integrated Citrix XenServer:

- To download HP integrated Citrix XenServer, go to the HP Virtualization website (http://www.hp.com/go/XenDesktop-downloads), and then select the software bundle to download.
- For information on how to install the software for HP integrated Citrix XenServer, see the *HP integrated Citrix XenServer Getting Started Guide* (http://h20000.www2.hp.com/bizsupport/TechSupport/DocumentIndex.jsp?contentType=SupportManual&lang=en&cc=us&docIndexId=64179&taskId=101&prodTypeId=18964&prodSeriesId=3801993).

Citrix support:

- For free downloads for hot fixes and patches, go to the Citrix website (http://support.citrix.com/).

Part 2—License redemption for HP integrated Citrix XenServer

The following information is required to redeem your license:

- Name and a valid email address for the license owner
- Server name (case sensitive) for the license server where the license keys are hosted
- The entitlement certificate included in this package

Host name requirement

To redeem the license file for the XenDesktop installation, provide the server name of your license server. The server name must be submitted with the proper case so that the license key and server match exactly. If they do not match exactly, the installation fails.

If you do not have a server installed to use as the license server, prior to starting the redemption process, you must define a server hostname to use when redeeming your license file at the HP License Key Delivery Service website (https://webware.hp.com/welcome.asp). Consult your network administrator to follow the particular server naming conventions as well as reserving the name to eliminate possible conflict with existing server names. The name of this server must follow standard Microsoft® server-naming conventions.

The most efficient way to obtain the proper server name from an already existing and running server is to log in to that server, open a CMD prompt, and then enter the `hostname` command, which returns the hostname in the proper case. Only the hostname is required to retrieve the key, not the fully qualified domain name.

To redeem the license keys for your software and to submit your case sensitive license server name, go to the HP License Key Delivery Service website (https://webware.hp.com/welcome.asp).

Part 3—License redemption for XenDesktop

After you receive an email that your license for XenDesktop is ready for download, redeem the license keys for your software. Go to the HP License Key Delivery Service website (https://webware.hp.com/welcome.asp).

For questions about redeeming your license, go to the HP License Key Delivery Service website (https://webware.hp.com/welcome.asp), and then click **Contact License delivery center**.

Installing the virtual machine infrastructure

1. Complete the steps in the *HP integrated Citrix XenServer Getting Started Guide* located at HP Virtual Desktop Infrastructure with Citrix XenDesktop website (http://www.hp.com/go/vdi/citrix), and then click **Support & Documents**.
2. Record the server password and management interface IP addresses. You need them to complete the installation process.
   - Password: _____
   - Management interface IP address: _____._____._____._____

Installing XenCenter to your remote management client

1. From the remote management client, open a web browser and enter the IP address of your HP integrated Citrix XenServer host.
2. To install the Citrix XenCenter management client software, follow the instructions on the page. You must remove any previous versions of Citrix XenCenter before installing this version on your remote management client.
3. To connect XenCenter on your remote management client to your previously installed HP integrated Citrix XenServer:
   a. Open XenCenter on your remote management client and select **Add New Server** from the toolbar. A dialog box appears.
   b. Enter the following information:
      - The management interface IP address for the hostname that you previously recorded
      - Root for the user name

— The server password that you previously recorded

If the management client successfully connects, HP integrated Citrix XenServer is listed in the management console as ready for configuration.

Installing the license file

- If you purchased HP Virtual Desktop Infrastructure with Citrix XenDesktop Advanced or Enterprise Editions:
  a. Obtain the license file for your HP integrated XenServer from the website referenced on your entitlement certificate.
  b. Place this file on removable media that can be inserted and read from the computer that you use as your Remote Management Console.
- If you purchased the HP Virtual Desktop Infrastructure with Citrix XenDesktop Standard Edition, the license file is not needed.

Installing your license using the Citrix Remote Management Console

1. Run the XenCenter management client software and select the HP integrated XenServer host.
2. Insert the removable storage where you saved the HP integrated XenServer license file to the remote management client running XenCenter.
3. From the menu bar, select **Server**, and then **Install License Key**. The Install License Key box appears.
4. Click **Browse.**
5. Select the file containing your HP integrated Citrix XenServer license for installation.
6. Follow the prompts to complete the installation.

Creating a resource pool when using multiple XenServers

If you are using multiple XenServers, create a resource pool as part of the XenDesktop environment where all of your desktop virtual machines reside.

1. From the XenCenter management client, select your **HP integrated XenServer host**, and then from the toolbar select **New Pool**. The New Pool dialog appears.
2. Give your new pool a name and description and then click **Next**. The master server dialog appears.
3. Select a master server for your pool. If you only have one server, that is the only server listed. You can include only servers with identical hardware configurations in any one pool.

Installation media

After you have downloaded and extracted the installation media for your version of HP Virtual Desktop Infrastructure with XenDesktop (Standard, Advanced, or Enterprise), make the installation media available for installation to your selected server. You can burn the .ISO images to a blank CD, or use XenCenter to present the .ISO directly to the virtual machines as virtual media to complete your installation.

- If you burn the .ISO images to blank CDs, use the CD imaging software that came with your writable CD drive.

- If you decide to use XenCenter to present the .ISO images to your virtual machines:
  a. Make the .ISO images available to the virtual machines by putting them in the .ISO directory specified in XenCenter.
  b. Make the .ISOs available to the server by creating an external NFS or SMB/CIFS share directory. For more information on using these external storage sources, see the XenCenter help.

Microsoft Windows infrastructure

If you do not have a Microsoft® Domain Controller, DNS Server, or DHCP Server available for this deployment, create them for this installation. These services run in a virtual machine on the HP integrated XenServer on Windows® 2003 Server. For more information, see the *Getting Started with Citrix XenDesktop User Guide*, located at the HP Virtual Desktop Infrastructure with Citrix XenDesktop website (http://www.hp.com/go/vdi/citrix)and then click **Support & Documents**.

Active Directory configuration

To make changes to the Active Directory root:

1. Ensure that you have Domain and Administrator permissions.
2. Define the name you use for your Organizational Unit in Active Directory. This is done in conjunction with your domain administrator. Citrix documentation recommends naming your organization unit as XenDesktop. You can name it whatever you like, but the name should work and follow the standards that the domain administrator has in place.
3. Work with your domain administrator to define the server names that are used in this installation. At a minimum, select the names for your Data Delivery Controller and your Provisioning Server. Both servers must be part of Active Directory.

To create your organization unit:

1. Log in as your domain administrator and run the **Microsoft® Active Directory Users and Computers** tool to manage your Active Directory. If you are using an existing Active Directory, you might need to enlist the help of the Active Directory Domain Administrator who runs your domain.
2. Using the Active Directory Users and Computers tool, create a new organizational unit for XenDesktop. This organization unit is used by the Desktop Delivery Controller to store farm configuration information and should exist before installation begins.
3. If the virtual machines that were created are not part of the Active Directory domain, join each to the domain now.
   a. Login to each virtual machine, right click **My Computer** and then select **Properties**. The System Properties box appears.
   b. Select the **Computer Name** tab and then click **Change**. The Computer Name/Domain Changes box appears.
   c. From the Member of section, select **Domain** and then enter the name of your domain.
   d. Click **OK.** The system prompts you for a user name and password.
   e. Enter a user name and password of a valid and existing domain user that has permissions to add computer accounts in the selected Active Directory domain. If successful, the system reboots on exit.

Installing the XenDesktop license

From the Upload license File page, click **browse** and navigate to the location of your XenDesktop license file that you downloaded from HP and that matches the name and case of your Desktop Delivery Controller server name.

Installing Desktop Delivery Controller

1. Ensure you are the Domain Administrator. Otherwise the installation fails.
2. On the specify Farm Edition page, select the XenDesktop edition that you are using, and then select **Next**.

For more information, see the *Getting Started with Citrix XenDesktop User Guide*, located at the HP Virtual Desktop Infrastructure with Citrix XenDesktop website (http://www.hp.com/go/vdi/citrix) and then click **Support & Documents.** Reference the "Setting up a Pilot Deployment" section.

Installing Microsoft®.NET Framework 3.5

Microsoft®.NET Framework 3.5 is required on the Provisioning Server and must be loaded from the installation source on the Desktop Delivery Controller installation CD. The version that is included in Windows Update does not work.

Technical support

HP contact information

For the name of the nearest HP authorized reseller:

- See the Contact HP worldwide (in English) webpage (http://welcome.hp.com/country/us/en/wwcontact.html).

For HP technical support:

- In the United States, for contact options see the Contact HP United States webpage (http://welcome.hp.com/country/us/en/contact_us.html). To contact HP by phone:
  - Call 1-800-HP-INVENT (1-800-474-6836). This service is available 24 hours a day, 7 days a week. For continuous quality improvement, calls may be recorded or monitored.
  - If you have purchased a Care Pack (service upgrade), call 1-800-633-3600. For more information about Care Packs, refer to the HP website (http://www.hp.com/hps).
- In other locations, see the Contact HP worldwide (in English) webpage (http://welcome.hp.com/country/us/en/wwcontact.html).

Before you contact HP

Be sure to have the following information available before you call HP:

- Technical support registration number (if applicable)
- Product serial number
- Product model name and number
- Product identification number
- Applicable error messages
- Add-on boards or hardware
- Third-party hardware or software
- Operating system type and revision level