

PHD Virtual Backup

for **CITRIX** XenServer™

version 5.0
Installation Guide

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Installing PHD Virtual Backup

This guide describes the steps required to install and configure PHD Virtual Backup in your Citrix XenServer® environment.

1. Review the "[System Requirements](#)" (on page 6) and "[Prerequisites](#)" (on page 8) to decide how you will implement PHD Virtual Backup.
2. Install PHD Virtual Backup, see "[Installing PHD Virtual Backup](#)" (on page 10)".
3. Deploy the PHD Virtual Backup Appliance, see "[Deploying the PHD Virtual Backup Appliance](#)" (on page 11)

System Requirements

The following requirements must be met to install and run PHD Virtual Backup for Citrix XenServer.

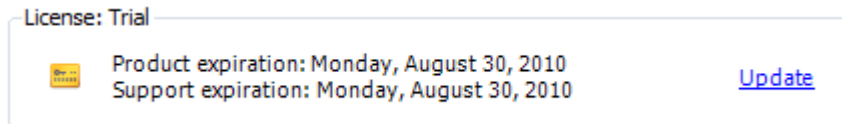
Table 1 - PHD Virtual Backup System Requirements

PHD Virtual Backup plug-in (for integrated XenCenter menus)	<p>XenCenter 5.5 or 5.6</p> <p>Note: PHD Virtual Backup is supported on XenCenter 5.5 when running on 32-bit Windows platforms, only. XenCenter 5.5 on 64-bit Windows platforms is not currently supported.</p> <p>PHD Virtual Backup is supported on XenCenter 5.6 when running on 32-bit and 64-bit Windows platforms.</p>
PHD Virtual Backup Appliance	<p>XenServer 5.5.x or 5.6.x</p> <p>1 GB free space on local or shared storage is required for the appliance virtual disk.</p> <p>Additional free space is required for the attached virtual disk that will be used to store backups. Due to data deduplication and compression, the storage disk should be, at a minimum, equal to the total size of the VM data you would like to back up. For example, if you have 500 GB of virtual machines, you should allocate at least 500 GB of storage. This should allow, on average, one month of stored backups.</p> <p>If needed, the size of the attached disk used for storage can be increased by shutting down the appliance and growing the disk within XenCenter.</p>
PHD Virtual Backup Console	<p>Windows XP, Windows Server 2003, Windows 7, Windows Server 2008 or Windows Vista, with .NET framework version 2.0 or above installed.</p>

Note: In addition to the integrated menu, the PHD Virtual Backup Console can be launched as a stand-alone application from the Windows Start Menu.

PHD Virtual Backup Licensing

PHD Virtual Backup is installed with a trial license. The currently installed license information is displayed on the General tab of the PHD Virtual Backup Console's Configuration area.



The **Product expiration** date displays when the PHD Virtual Backup trial license expires. This does not apply to purchased licenses. After the product expiration date, you must import a new license to use the product.

The **Support expiration** date displays when your support subscription expires. A current support subscription is required to receive support from PHD Virtual and to install product upgrades.

To upload a new license file

1. Open the PHD Virtual Backup Console to the **Configuration** page and select the **General** tab.
2. Use the drop-down menu at the top of the page to select the PHD Virtual Backup Appliance to update.
3. In the **License** section, click **Update**.
4. Select your license file and click **Open**.
5. The Appliance must be restarted after the license is applied. Click **Yes** to restart the Appliance.

The license information is updated to reflect when your new license will expire.

Note: Apply updated licenses to each PHD Virtual Backup Appliance you have deployed. Use the drop-down menu at the top of the Configuration page to select each appliance to update.

Prerequisites

- To initially configure the PHD Virtual Backup Appliance, it must receive an IP address either through DHCP (automatic) or by assigning it a static IP. To assign a static IP, see ["Deploying the PHD Virtual Backup Appliance" \(on page 11\)](#).

XenCenter 5.5 Prerequisites:

- Download and install PowerShell to the Windows machine where you are running XenCenter. For Windows XP, the filename is: WindowsXP-KB926139-v2-x86-ENU.exe.
- Download and install the XenServer PowerShell SnapIn (XenServerPSSnapIn-5.5.0-1.msi).

Backup Storage

Where will my backups go?

PHD Virtual Backup can backup VMs to either local storage or to attached shared storage locations in XenCenter. Where the backups are sent is determined by the PHD Virtual Backup Appliance used to perform the backup.

When each appliance is deployed and configured, a second virtual disk is added to the appliance VM. This is the storage location for all of the backups created by that appliance. When added, the appliance will automatically configure the disk and use it as the backup storage repository.

When using multiple PHD Virtual Backup Appliances, each appliance can be configured to use a different storage location.

Instructions for adding the backup storage disk are included as part of the PHD Virtual Backup Appliance deployment instructions.

How much storage do I need?

Due to data deduplication and compression, the storage disk should be, at a minimum, equal to the total size of the VM data you would like to back up. For example, if you have 500 GB of virtual machines, you should allocate at least 500 GB of storage. This should allow, on average, one month of stored backups.

If you need to increase the size of the storage disk after it's been added, you can shut down the PHD Virtual Backup Appliance and grow the disk within XenCenter.

Installing PHD Virtual Backup

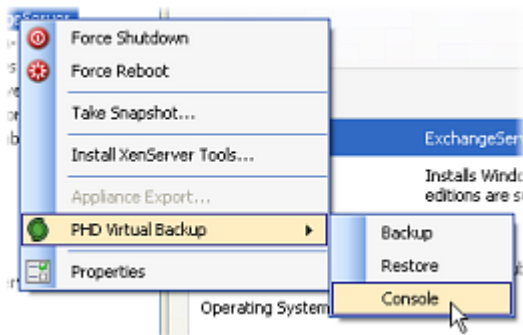
What you'll need

- The PHD Virtual Backup MSI file (phdvb.msi) extracted from the PHD Virtual Backup installation package.
- A Windows computer with XenCenter installed and access to your XenServer environment.

To install PHD Virtual Backup for Citrix XenCenter

1. Make sure XenCenter is closed.
2. From the PHD Virtual Backup installation package, double-click **phdvb.msi**.
The installation wizard opens.
3. Accept the license agreement and click **Install**. When the wizard completes, click **Finish**.

PHD Virtual Backup plug-in is installed and the PHD Virtual Backup menu options are available from within XenCenter.



Additionally, you can launch the PHD Virtual Backup Console from the Windows Start menu.

Before you can run any backups you will next need to deploy and configure the PHD Virtual Backup Appliance. See ["Deploying the PHD Virtual Backup Appliance"](#) (on page 11).

By default, the plug-in is installed to the Program Files\Citrix\XenCenter\Plugins\PHD Virtual directory.

Deploying the PHD Virtual Backup Appliance

The PHD Virtual Backup Appliance performs the backup and restore processing in each XenServer resource pool. Deploy at least one appliance per XenServer resource pool.

How many appliances do I need?

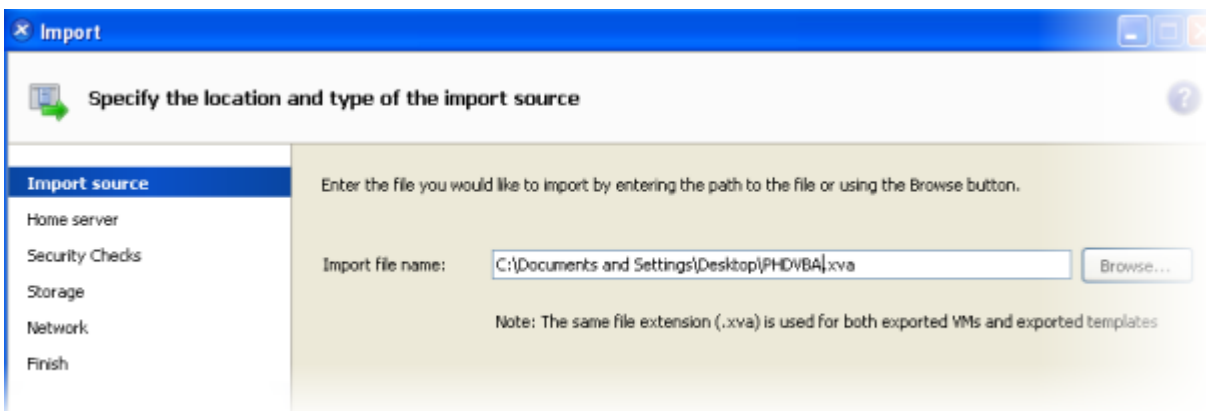
- You will need to deploy at least one PHD Virtual Backup Appliance per resource pool. Each appliance can perform backups and restores for VMs within the same resource pool. If you have more than one resource pool, you will need to deploy an additional appliance to each pool. Depending on your environment, you may choose to use multiple appliances within each pool, though only one per pool is required.

PHD Virtual Backup Appliance Notes

- If you have any VMs on local storage that you wish to back up, you will need to deploy an appliance to that XenServer host.
- The appliance is configured with 256 MB of memory, by default. If necessary, to improve backup and restore performance, this can be increased after deployment.
- To configure the appliance you will use the PHD Virtual Backup Console which is installed using the the PHD Virtual Backup MSI.

To deploy and configure the PHD Virtual Backup Appliance

- From the extracted zip file contents, double-click **PHDVBA.xva**.
XenCenter launches and the Import Wizard opens.



Note: If you are using XenCenter version 5.5, select **Exported VM** as the **Import type**.

Installing PHD Virtual Backup

Import type:

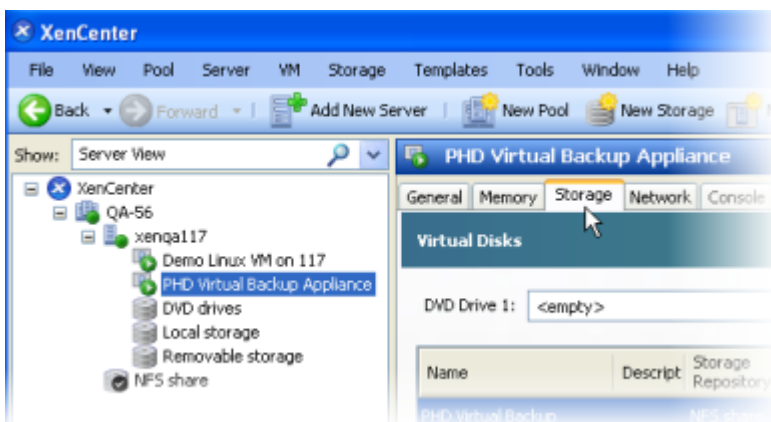
Exported VM

Exported template

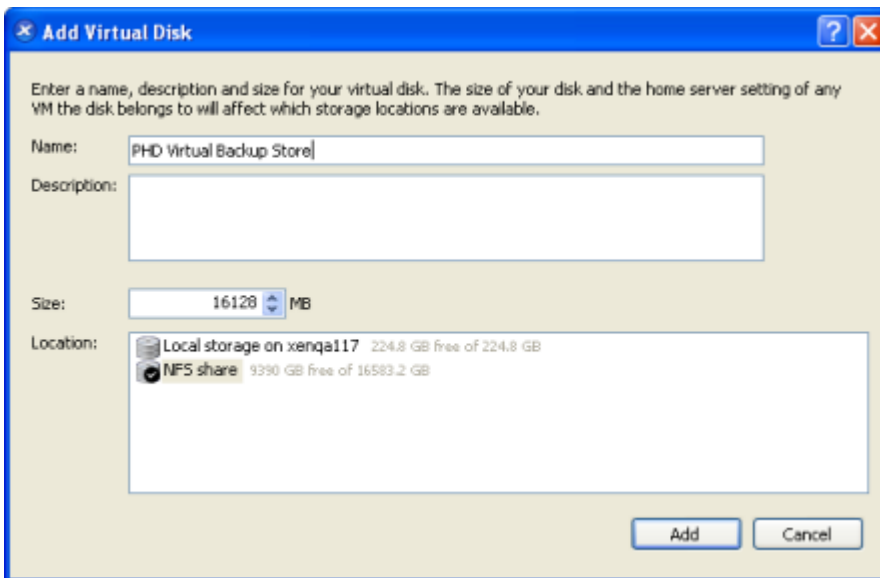
2. Click **Next**.
3. Use the wizard to select where you want to deploy the appliance and the network settings to use:
 - Home server
 - Storage location
 - Network

Remember that each appliance can back up the VMs within the XenServer pool it belongs to. If you need to backup VMs in multiple pools, deploy an appliance to a server within each pool.

4. Click **Finish**.
5. When the import completes, select the appliance within XenCenter and then select the **Storage** tab. Here you will add a virtual disk to use for storing backups.



6. Click **Add...**
- The Add Disk dialog opens.

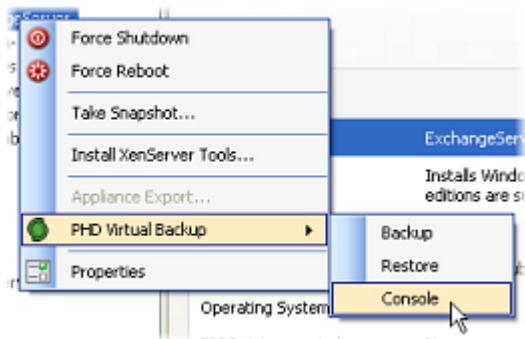


- You do not need to enter a name for the disk. The disk name is automatically configured when the appliance restarts (renamed to PHD Virtual Backup Store).
 - Enter a size for the disk. This is the amount of space you will allocate for storing backups. For more information, see "Backup Storage" (on page 9).
 - Enter a location. Location can be either local storage or an available storage repository (recommended).
7. When finished, click **Add**. The appliance formats the disk automatically.
 8. Next, ensure the appliance has an IP address assigned (within XenCenter, select the appliance VM and click the Network tab). If DHCP is enabled in your environment, the appliance will obtain an IP address automatically and you can continue with step 9, below.

If DHCP is not enabled, you must manually assign the appliance an IP address. To do this:

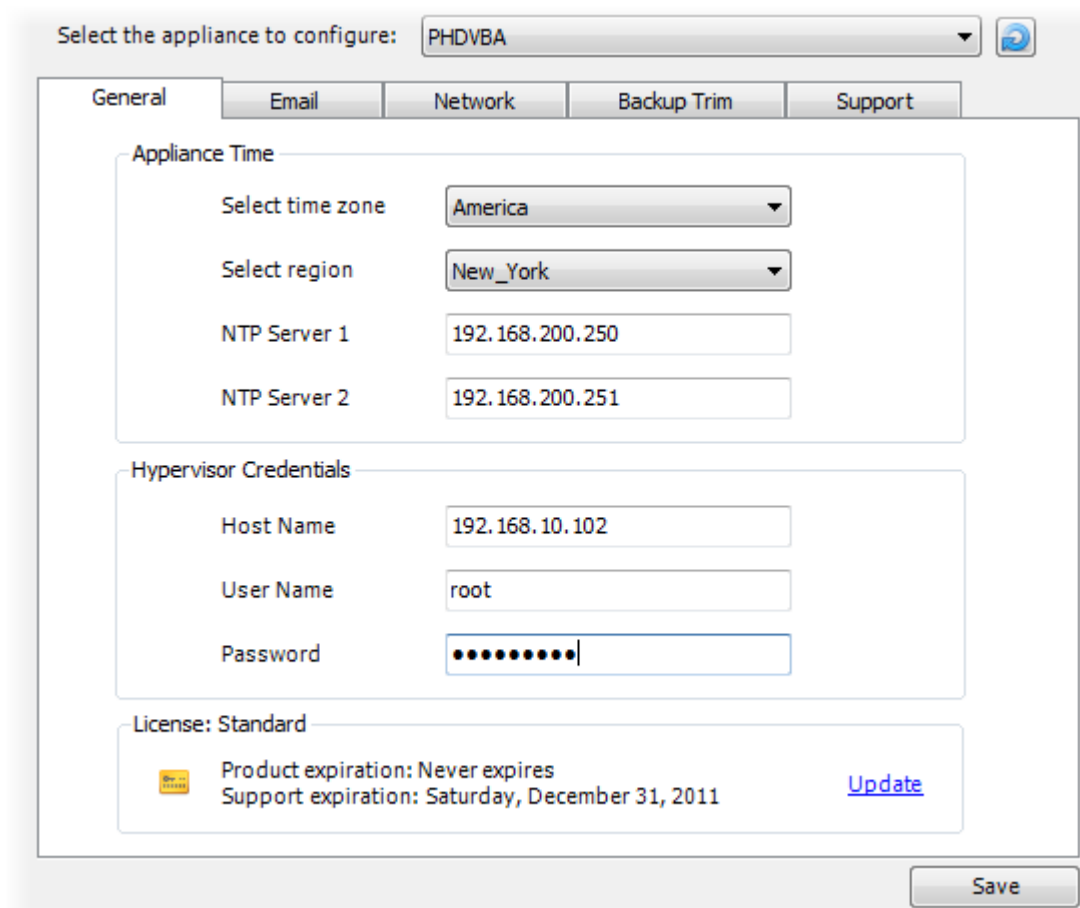
 - a. Within XenCenter, click the appliance VM and then click the **Console** tab.
 - b. Press **Ctrl-N** to enter the **Network Configuration** menu.
 - c. Select option **2. Static** and enter an IP address, Netmask, and Gateway address.
 - d. When complete, reboot the appliance (right-click the appliance VM and select **Reboot**) then continue with step, 9, below.
 9. When the appliance has finished booting and formatting the backup storage disk you defined, you can configure the appliance settings. Open the PHD Virtual Backup Console by right-clicking the appliance VM and selecting **PHD Virtual Backup > Console**.

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The PHD Virtual Backup Console opens.

- From the menu on the left, click **Configuration**. The Configuration page opens to the **General** tab.



- From the **Select the appliance to configure** drop-down menu, select the appliance you just deployed, if not selected already.
- Enter the **Appliance Time** information, including the time zone and NTP server addresses, if required.
- Enter your **Hypervisor Credentials**. In the **Host Name** box, enter the Management IP address of the Pool Master XenServer for the resource pool the appliance was deployed to.

The PHD Virtual Backup Appliance requires these credentials to perform the functions necessary to backup and restore virtual machines.

14. Click **Save**.
15. When prompted to restart the PHD Virtual Backup Appliance, click **Yes**.

The PHD Virtual Backup Appliance is now configured. Additional configuration options are available, but not required to begin running backups. Refer to the User Guide or online help for details.

What's Next?

Now that you've installed and configured PHD Virtual Backup, you can:

- Create scheduled backup jobs to protect some or all of your virtual machines.
- Backup VMs right now using the integrated menus in XenCenter.
- Deploy additional PHD Virtual Backup Appliances to protect VMs in other XenServer resource pools.
- Configure additional appliance options, including email alerts, networking, and time zone information.
- Restore backed up VMs.

You can create backup and restore jobs using the integrated PHD Virtual Backup menus in XenCenter or with the PHD Virtual Backup Console, which can be launched from XenCenter or from the Windows Start Menu.

For a description of the additional configuration options available and for step-by-step instructions about the various PHD Virtual Backup features, view the online help installed along with the product or refer to the Users Guide.

Updating PHD Virtual Backup

Updates to PHD Virtual Backup can be downloaded from the PHD Virtual Web site.

Console and Plug-in updates are available via MSI files and Appliance updates are available via update packages (.phd files). Appliance updates can be applied using the Configuration area of the PHD Virtual Backup Console. The Console and Plug-in are updated by uninstalling the existing version then installing a new MSI.

If you need to update your license, use the **General** tab of the Configuration page.

The current version of both the appliance and console are displayed on the Support tab.

To update the PHD Virtual Backup Appliance

1. Download the appliance update package from the PHD Virtual Web site.
2. Open the PHD Virtual Backup Console, and click **Configuration**.
3. Use the drop-down menu at the top of the page to select the appliance to update.
4. In the Updates area, click **Upload Appliance Patch**.
5. Select the downloaded the update package and click **Open**.
6. After the update is applied, the Appliance must be restarted. Click **Yes** to restart the Appliance.

The new PHD Virtual Backup Appliance version is displayed.

To update the PHD Virtual Backup Console and Plug-In

1. Download the latest PHD Virtual Backup MSI from the PHD Virtual Web site.
2. Make sure XenCenter is closed and use the Windows Control Panel, **Add Remove Programs**, to remove the current version of PHD Virtual Backup.
3. When removed, double-click the new MSI and follow the steps to install the updated Console and plug-in.

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