

PHD Virtual Backup

for **CITRIX** XenServer®

v5.1.4

Release Notes

March 2011

This document provides an overview of the changes made to PHD Virtual Backup for the version 5.1 release. It contains system requirements, new features, changes, and fixes for the latest version of the product as well as information about each product update.

The PHD Virtual Backup installation package contains:

- **phdvh.msi**: The PHD Virtual Backup MSI to install the plug-in and PHD Virtual Backup Console.
- **PHDVBA.xva**: The PHD Virtual Backup Appliance XVA.
- Documentation

To get the latest version:

- **New customers**: visit PHD Virtual's web site (www.phdvirtual.com) to register and download the latest version.
- **Existing customers**: Packages are available for download from the PHD Virtual Web site that contain the latest MSI and VBA update files. Use these packages to update an existing version 5.1.x installation to the latest version available.
- **Upgrading from previous versions (5.0)**: PHD Virtual Backup v5.1 is for new installations only. A utility is available to assist in the upgrade process from version 5.0.

For installation and configuration information, refer to the latest documentation included with the installation package or on the [PHD Virtual web site](#).

Updates

5.1.4 - March 25, 2011

Enhancements

- The delete trim process was improved.
- Additional improvements were made for backup performance, memory handling, CPU usage, and PHD VBA startup.

Fixes

- Appropriate information is now displayed when opening a PHD Console with no PHD VBAs available.

5.1.3 - March 4, 2011

Enhancements

- The PHD Console now uses TLS (SSL v3.1) for communication.
- Improved performance when using CIFS shares as backup storage.

5.1.2 - February 1, 2011

Enhancements

- Added support for Citrix XenServer 5.6 FP 1.
- Performance improvements including enhancements for faster job expansion and VBA memory handling.
- The Job History tab was updated to include icons in the result column.
- Changed the error "Could not link backup block" from a Critical error to a regular Error to allow backups to continue after temporarily losing connection with remote storage.

Fixes

- Fixed an issue where including previously excluded parent objects did not correctly include all VM disks.
- Fixed an issue where an upgraded Trial license did not correctly display the new license title.
- Fixed an issue where the backup report showed successful VM backups when in fact a Critical error caused the backup to stop and no backups were completed.

- Fixed an issue where the VBA could lose contact with the Console after increasing the size of the attached backup storage disk.

5.1.1 - December 27, 2010

- PHD Virtual Backup Console and Backup Wizard were updated to improve responsiveness.
- Improved error processing. Disk read errors will now be displayed for the individual backup, not the entire Job.
- Improved VBA startup performance. Cleanup jobs are now run in the background.
- Improvements in VBA memory handling for installations with large datastores.

5.1.0 - December 6, 2010

- File Level Recovery - recover individual files or individual application objects using third-party application recovery tools, by creating and mounting iSCSI targets from your backup files.
- Archive backups that you want to keep indefinitely.
- Expanded retention policies, including Keep All, Typical, and Custom options which allow you to configure the backups to store by recent, days, weeks, months, years.
- The new Backup Data Connector lets you create an export share to access backups in uncompressed formats.
- Restore thin provisioned backups with their original settings
- Data Streams - throttle the number of active streams during a job between 1 and 4.
- You now have the option to turn off compression for backups allowing for increased backup speeds or if you do not need or cannot use compression with your storage.
- Store backups on CIFS and NFS shares in addition to attached virtual disks.
- Exclude containers, VMs, or disks from your backup jobs.
- Export backups as VMDK as well as VHD and RAW virtual disk formats to restore to multiple hypervisors.
- Backup store monitoring and alerting.
- New, faster compression for backups.
- Improved snapshot model for more efficient use of space during backups.
- Improved virtual machine disk restore speeds.

5.0.0 - August 25, 2010

- Installed via an MSI, the PHD Virtual Backup plug-in enables integrated menus for backup and restore within XenCenter as well as the PHD Virtual Backup Console.
- The PHD Virtual Backup Console can be accessed from within XenCenter or as a stand-alone application using the Windows Start Menu.
- Use the PHD Virtual Backup Console to monitor job progress and storage space available including deduplication statistics and information about each PHD Virtual Backup Appliance running in your environment.
- Create scheduled jobs that run once, daily or weekly.
- Create backup and restore jobs right away with the Backup and Restore wizards.

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- The console and wizards each include comprehensive context-sensitive online help.
- Browse a catalog of all backups and quickly find VMs to restore using the available views.
- Download support logs for the console or appliances.
- Configure Trim settings to manage the number of backups stored for each VM.
- Deployed like any other VM from an XVA file, the PHD Virtual Backup Appliance (VBA) performs all of the backup and restore processing.
- Quick configuration - just add a virtual disk for storage and save your XenServer credentials and the appliance is ready to perform backups and restores.
- Backup and restore processing takes place within the VBA without needing to be loaded into or directly accessing Dom0.
- Backup or restore up to 4 virtual disks simultaneously with each PHD Virtual Backup Appliance you deploy.
- Each appliance can backup and restore VMs on any host within the XenServer resource pool. Deploy an appliance to each pool that contains VMs you want to protect.
- Store backups on local or shared storage using an attached virtual disk which can be increased to accommodate additional storage, as needed.
- Virtual Backup Appliances use compression and patent-pending source-side deduplication when storing backup data.

Known Issues

- Problem** PHD Virtual Backup Console does not detect iSCSI Initiator when using Windows 2003, 64-bit. (DCK-450)
- Workaround** Make sure the iSCSI Initiator is installed then use the Windows Start menu to run the program and manually mount any iSCSI targets that you've created using the iSCSI Initiator.
- Problem** Backing up and restoring VM and disk names that contain non-ASCII characters can cause the VBA to hang or crash. (DCK-508)
- Workaround** VM and disk names that contain non-ASCII characters are not supported for this release.
- Problem** iSCSI mounted backups may fail to delete in the PHD Virtual Backup Console even though they are not connected to an initiator. (DCK-557)
- Workaround** If a machine is connected to a PHD backup via its iSCSI initiator and that machine is restarted, you may not be able to delete the iSCSI mounts from the PHD Management Console File Recovery catalog. Restart the VBA and the mounts will be automatically deleted from the File Recovery catalog.
- Problem** When using EquaLogic storage with Storage Link, you may experience random disconnects during the backup. Additionally, the backup may fail and the VM that is being backed up may become unavailable.
- Workaround** This is a known issue from Citrix when using XenServer and Storage Link on EquaLogic storage. If you are using EquaLogic, you can turn off Storage Link (if possible) to allow backups to complete correctly. Turning off Storage Link may present additional issues within your environment - be sure to understand the impact this may have before proceeding.

System Requirements

The following requirements must be met to install and use PHD Virtual Backup.

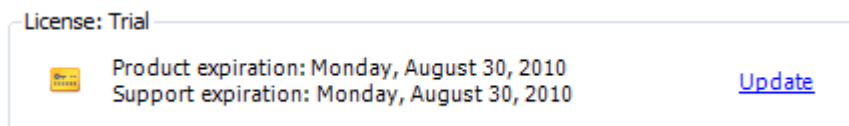
Table 1 - PHD Virtual Backup System Requirements

PHD Virtual Backup Appliance	Citrix XenServer 5.5 Update 2, 5.6, 5.6 FP 1 8 GB free space on local or shared storage is required for the appliance virtual disk. Additional free space is required if an attached virtual disk will be used to store backups.
PHD Virtual Backup Plug-in (for integrated menus)	XenCenter 5.5 or 5.6 Note: The PHD Virtual Backup plug-in is supported on XenCenter 5.5 when running on 32-bit Windows platforms, only. Running the plug-in on XenCenter 5.5 on 64-bit Windows platforms is not currently supported. XenCenter 5.5 requires Powershell installed on the Windows machine where PHD Virtual Backup will be installed. Additionally, the XenServer PowerShell Snap-In is required.
PHD Virtual Backup Console	Windows XP, Windows Server 2003, Windows 7, Windows Server 2008 or Windows Vista, with .NET framework version 2.0 installed.
Networking	To initially configure a 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, refer to the PHD Virtual Backup deployment instructions or the online help. HTTPS access is required for communication between the PHD Virtual Backup Appliance and Console as well as with each XenServer host.
File Level Recovery	To recover files from PHD Virtual backups when using a Windows machine, the Microsoft iSCSI Software Initiator must be installed. This will allow you to mount and view iSCSI targets created from your backup files. The Microsoft iSCSI Software Initiator is available, by default, with Windows Vista, Windows 7, and Windows 2008 Server. To mount targets on earlier versions of Windows, download and install the iSCSI Software Initiator from the Microsoft Web site. To mount iSCSI targets on Linux you must install an iSCSI Software Initiator for your Linux operating system. For example, on an Ubuntu machine, you can install the Linux Open-iSCSI Initiator. Refer to your operating system documentation for details on installing software initiators.

Note: VM and disk names with non-ASCII characters are not supported in version 5.1.

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.

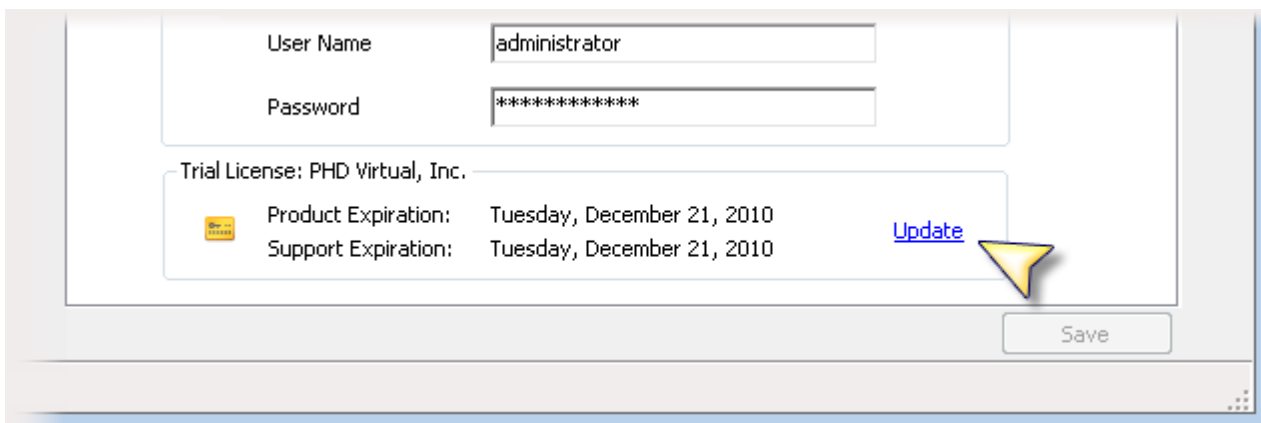


The **Product expiration** date displays when the PHD Virtual Backup trial license expires. This does not apply to purchased licenses. After the product expiration date, you must import a new license to use the product.

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** area, 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.

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