

PHD Virtual Backup

for VMware vSphere™

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.ovf**: The PHD Virtual Backup Appliance OVF.
- 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 (3.x, 4.x)**: PHD Virtual Backup v5.1 is for new installations only. Upgrading from previous versions of PHD Virtual Backup for VMware (esXpress) is not supported - refer to the Migration Guide for information and considerations for moving from earlier versions (3.x and 4.x).

For installation and configuration information, refer to the latest documentation included with the installation package or on the [PHD Virtual web site](http://www.phdvirtual.com).

Updates

5.1.4 - March 25, 2011

Enhancements

- Improved the refresh rate of the Backup Catalog when using vCenter Server.
- The delete trim process was improved and now runs once per hour.
- Added additional logging for connection errors.
- The PHD Console can now be set to show configuration settings and information for a single PHD VBA, only.
- Additional improvements were made for backup performance, memory handling, CPU usage, and PHD VBA startup.

Fixes

- Jobs that include a VM with bad metadata will now correctly report an error and fail gracefully.
- Connection issues should no longer cause a PHD VBA to reset.
- 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.
- Changing views in the PHD Console's Backup Catalog should be much faster.

Fixes

- Fixed an issue where the Current Jobs page could not be refreshed in some environments.
- Excluding independent disks should no longer result in an error.
- Fixed a problem where encountering duplicate disk UUIDs during a backup could cause the PHD VBA to crash.
- VMs that failed to quiesce during a backup will now be backed up without quiesce instead of failing.
- The snapshot cleanup process will no longer attempt to remove snapshots currently in use by another PHD VBA.
- After updating to 5.1.3, backups run using changed block tracking (CBT) will be forced to run an initial "full" CBT backup (with the following log message: "Expired metadata, forcing new full backup"). This will result in increased

backup times for the first backups run after updating to 5.1.3. However, backup speeds will return to normal with the next backup.

5.1.2 - February 1, 2011

Enhancements

- 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.
- Changed Block Tracking is now enabled by default when creating backup jobs with the Backup Wizard.
- Added support for non-standard ports.
- Added a workaround for a VMware CBT defect that could cause incremental backups to become inconsistent.
- Improved the process for removing leftover snapshots.
- Added support for backing up RDM disks (in virtual mode) and restoring RDM disks (as VMDK, only). Refer to the Known Issues section for additional information.

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 a problem where backups were not displayed in the Backup Catalog when the original VM was deleted.
- Fixed an issue where the VBA could lose contact with the Console after increasing the size of the attached backup storage disk.
- Fixed an issue where a restore could fail if the backup being restored was created while the VM was in the process of being moved via Storage vMotion.
- Fixed an issue where newly added or removed virtual disks were not recognized correctly during a backup. Newly added or removed disks are now recognized in the first backup after the change is made.
- Fixed a problem where quiesce was not properly initiated for Windows VMs.

5.1.1 - December 27, 2010

- PHD Virtual Backup Console and Backup Wizard were updated to improve responsiveness.
- VMware snapshot processing improvements. An existing PHDVB snapshot will now be deleted if found when a backup starts.
- Fixed an issue where Independent disks in a backup job caused the VBA to potentially become unresponsive.
- Virtual RDMs will now be skipped and a warning message will be displayed. Full support for virtual RDM backups will be included in a future release.

- 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.
- Fixed a problem where the VBA networking could not be configured if the MAC Address was changed either manually or by changing the network interface type.
- Improvements in VBA memory handling for installations with large datastores.

5.1.0 - December 6, 2010

- Expanded support for VMware vSphere - vCenter Server, ESX, and ESXi 4.x (vSphere). *Note the free version of ESXi, VMware vSphere Hypervisor™, is not supported.*
- 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.
- File Level Recovery - all file and folder permissions are maintained.
- PHD Virtual Backup menus integrated with vSphere Client 4.x.
- 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.
- Use Changed Block Tracking when backing up your VMs to backup only the data that changes between backups.
- 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.
- Job-based backup scheduling.
- New, faster compression for backups.
- Improved snapshot model for more efficient use of space during backups.
- Improved virtual machine disk restore speeds.

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** Datastore names that contain square brackets [] can prevent backups and restores from functioning correctly. (DCK-378)
- Workaround** To prevent backup or restore issues, make sure datastore names do not include square brackets.
- Problem** When backing up a container (Cluster, folder, etc.) the Backup Wizard summary step includes the VBA size in the calculated Data Size. (DCK-452)
- Workaround** Does not affect the backup - the VBA will not be included in the actual backup job.
- Problem** Backing up vApps and any VMs within a vApp is not currently supported. (DCK-529)
- Workaround** None. Will be supported in a future release.
- Problem** Read-Only storage repositories are displayed in the Restore Wizard as target locations. (DCK-413)
- Workaround** Do not select to restore a VM to a Read-Only storage location.

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- Problem** PHD Virtual Backup Console does not open from vSphere Client. (DCK-593)
- Workaround** Make sure you are logged in to vCenter with an account that has vCenter permissions. Accounts with permissions at a Datacenter level are not sufficient.
- Problem** Backups restore with only a single vCPU even if the VM had multiple vCPUs. (DCK-722)
- Workaround** None. Will be fixed in a future release.
- Problem** Jobs that use quiesce may fail due to a hypervisor limitation. This is related to the issue described in the following VMware Communities article: <http://communities.vmware.com/docs/DOC-11987>.
- Workaround** Create smaller, separate jobs for only those VMs that require quiesce. Do not use the quiesce function in larger jobs that include many VMs that do not need to be quiesced before backing up.
- Problem** The PHD VBA may hang when it loses heartbeat with vCenter Server. This can happen if the VBA is running and vCenter Server is powered off or restarted.
- Workaround** Use vSphere Client to restart the VBA. You may also need to close then open the PHD Virtual Backup Console.

System Requirements

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

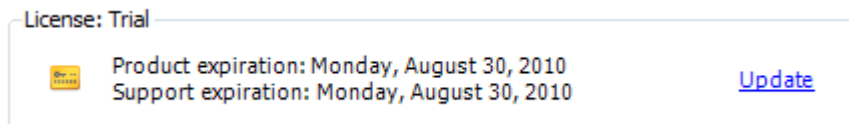
Table 1 - PHD Virtual Backup System Requirements

PHD Virtual Backup Appliance	<p>VMware vSphere 4</p> <ul style="list-style-type: none"> • ESX and ESXi 4.0 update 1 and above • vCenter Server 4.0 update 1 and above <p>Note: 64-bit machines must have VT (Virtualization Technology) enabled.</p> <p>VMware vSphere Hypervisor™ (the free version of ESXi) is not supported.</p> <p>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.</p>
PHD Virtual Backup Plug-in (for integrated menus)	vSphere Client 4.x
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	<p>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.</p> <p>HTTPS access is required for communication between the PHD Virtual Backup Appliance and Console as well as each vSphere host and vCenter Server.</p>
File Level Recovery	<p>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.</p> <p>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.</p>

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.

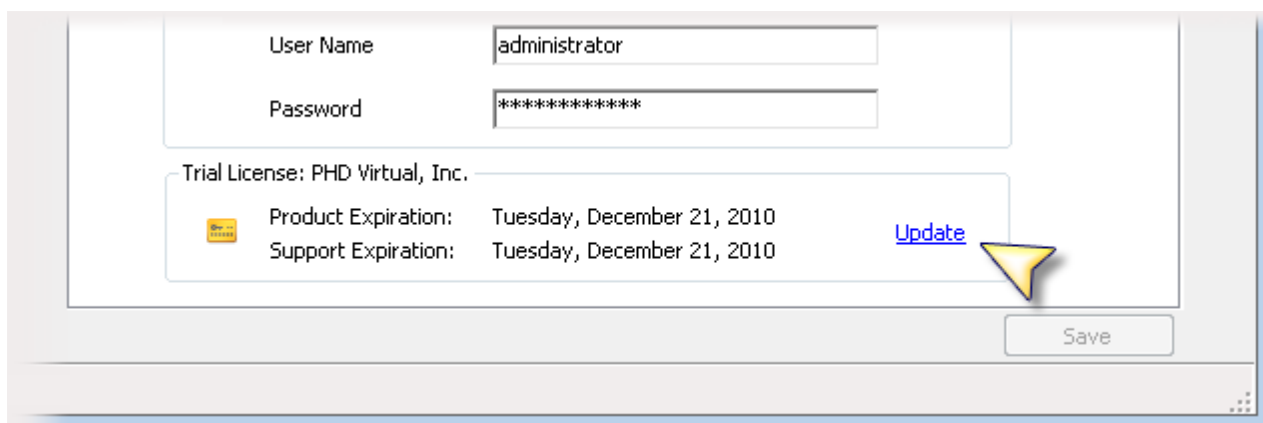


The **Product expiration** date displays when the PHD Virtual Backup trial license expires. This does not apply to purchased licenses. After the product expiration date, you must import a new license to use the product.

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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