PHD Virtual™

PHD Virtual™ Backup for VMware vSphere™

v5.3.1

Release Notes

January 6, 2012

This document provides an overview of the changes made to PHD Virtual Backup for the version 5.3.1 release, as well as system requirements, known issues, and licensing information. In addition, information about each product update is included in the Updates section.

This document contains the following sections:

To get the latest version of PHD Virtual Backup:

- **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 updates.
- **Upgrading from version 3.x or 4.x**: Upgrading from previous versions of PHD Virtual Backup for VMware (esXpress) is not supported. Refer to the Migration Guide for additional information about migrating from earlier versions.

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

Updates

v5.3.1 - January 6, 2012

Fixes

- The PHD Exporter was updated to allow for installation on unsupported operating systems. When installing to an unsupported system, a warning is now displayed.
- Fixed an issue where the PHD Exporter installation would fail when installed to a Windows machines configured as a Domain Controller.
- Fixed an issue where backed up, thin-formatted virtual disks were restored as thick.
- Fixed a problem where scheduled replication jobs could end with warning "Job has no VMs, job complete."

v5.3.0 - November 15, 2011

Enhancements

- VM Replication - replicate virtual machines from one location to another, sending only changed data to each replica VM after the initial replication takes place. For details on configuring and using VM Replication, refer to the User Guide and online help.
- The Restore Wizard was updated to include the ability to restore multiple VMs at one time (Mass Restore). In addition, restores can now be scheduled to run right away or later.
- Enterprise license users can now take advantage of an additional 4 data streams - for a total of 8 concurrent threads - doubling the number of virtual disks that can be backed up, restored, or replicated by each PHD VBA at the same time. *Note that using 8 data streams is recommended only if you have allocated at least 2 vCPUs to the PHD* VBA.
- PHD Virtual Backup Exporter - use this new Windows application to export backup files on a scheduled basis to a staging location to make them available for tape or other long term storage. Details about configuring and using the PHD Exporter are included in the User Guide and online help.
- The PHD VBA name is now included in the subject line of all email reports.
- Backup Storage Type can now be set to 'None' to accommodate PHD VBAs used for replication, only.
- To prevent skipping backups, Consolidate Helper snapshots are now removed when found on a VM during either the backup process or the snapshot clean up process.
- With both the addition of the PHD Exporter and the availability of the Backup Data Connector feature, the option to export individual backups is no longer required and was removed from the PHD Console.
- Continued improvements including enhancements made to the overall stability and speed of backup and restore processing and PHD Console performance.

Fixes

- The PHD VBA startup process was enhanced to include the networking configuration with the main startup process. Network startup process now waits for network interfaces before initializing and the manual network configuration (via Ctrl+N) is now available immediately.
- The scheduling model was updated and recurrence for jobs will now work as expected.
- All VMs and their status will now be included in email reports, regardless of the job completion status.
- CIFS shares that do not require credentials can now be used for backup storage.
- Fixed a problem that was causing inconsistencies with the stub files generated for BDC.
- Editing a scheduled backup job no longer requires you to change the day and time.
- When an error is encountered for a disk during backup, no other disks for that VM will be processed.
- Fixed a problem where non-CBT backups with verify All Blocks did not replace corrupted blocks
- Date and Time information was removed from BDC directory names to better enable scripting.
- Fixed the Data Stream slider in the General tab of the PHD Console's Configuration area to be more responsive.
- Fixed a networking issue 'Could not write network config(static): [Errno 2] No such file or directory...' when configuring the PHD VBA.
- The deduplication ratio displayed in the PHD Console will now correctly display as N/A (instead of inf:1) when the ratio is less than 1:1.
- Fixed a problem where templates were not backed up unless 'backup powered off machine' was also selected.
- Fixed an issue where spool files could be left behind after an error was encountered during the delete process, creating excess processing time on reboot.
- Fixed a problem where VMs backed up with 'VMXNET 3' network adapters were restored with 'VMXNET' network adapter.
- Removed redundant error messages that were logged when a disk could not be attached.
- DeDuplication charts are no longer displayed in the PHD Console's dashboard for network storage volumes .
- Fixed an issue where the SnapHunt process produced the error 'Could not determine if vmref VirtualMachine: [...] is an appliance'.
- The Restore Wizard will now warn when restored VM names exceeds 80 characters. Long VM names will no longer be truncated.
- SnapHunt, invalid host credentials, and Email error messages were updated to be more user friendly.
- The PHD Console will no longer display errors in the status bar for incompatible PHD VBAs.
- Read-Only storage repositories are no longer displayed in the Restore Wizard as target locations.

Known Issues

General

- When editing network settings using the PHD VBA's text-based network configuration interface (CTRL-N), both DNS options are required. If you do not have an alternate DNS, enter the primary DNS address again to save your settings. (DCK-934)
- VMs that include non-ASCII characters are not currently supported. Backing up and restoring VMs that include non-ASCII characters in the VM name, disk name, or text fields (Annotations , etc.) can cause the VBA to hang or crash. (DCK-508)
- Datastore names that contain square brackets [ ] can prevent backups and restores from functioning correctly. (DCK-378)
- 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. To work around this issue, 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.
- vNetwork Distributed Switches are not supported currently for backup, restore, or replication.VMs that use these switches can still be backed up, but network information will not be available for restore. Refer to the Restore section, below, for specific issues and workarounds.

PHD Console

- The PHD Console Dashboard may not display PHD VBA information when using XenServer 5.5. Though the information is not displayed, configuration and other functionality (backup, restore, etc.) is not affected. (DCK-1958)
- When selecting multiple backups in the Backup Catalog, the Restore button is not active. To restore multiple VM backups, you can select a single backup to open the wizard, then select any additional backups. (DCK-1578)
- Email addresses that use .local domain (for example, user@email.local) are not supported as Recipient addresses in the Email tab of the PHD Console. (DCK-1098)
- PHD Console does not refresh after a PHD VBA's IP address has changed. Close then open the PHD Console to reestablish the connection to the PHD VBA using the new IP address. (DCK-909)
- If the PHD Console does not open from vSphere Client, 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. (DCK-593)
- iSCSI mounted backups may fail to delete in the PHD Virtual Backup Console even though they are not connected to an initiator. 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. (DCK-557)
- PHD Virtual Backup Console does not detect iSCSI Initiator when using Windows 2003, 64-bit. 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. (DCK-450)

- The System Alert Viewer displays backup times based on the time zone of the machine on which the PHD Console is installed. If the PHD VBA uses a different time zone, the backup time shown in the Backup Catalog will not match what is displayed in the Alert Viewer. Verify the time zone of the PHD Console before looking for backups included in the alert reports. Any backups with an alert will have an alert icon displayed next to the backup name.

Backup

- Physical RDM disks are not actually excluded in the Backup wizard resulting in warnings in the backup report. These warnings will not affect performance. (DCK-1124)
- When backing up a container (Cluster, folder, etc.) the although the Backup Wizard includes the PHD VBA size in the calculated Data Size, the PHD VBA is not included in the actual backup job. (DCK-452))

Restore

- Some virtual machine attributes are not included with restored virtual machines. For a complete list, refer to the User Guide.
- The Default Network menu in the Restore wizard is empty when using only vNetwork Distributed Switches, preventing you from continuing. To workaround this issue you can create a dummy network to select in the Default Network menu, then manually configure the restored VMs after the restore has completed. (DCK-1959)
- If a selected network becomes unavailable before a restore job is run, VMs may be restored without a network interface card. Make sure any networks selected for use with each restored VM are valid. (DCK-1946)
- When the Restore wizard is opened, all VM backups are expanded - if you had selected a VM before opening the wizard, you may need to scroll to find the selected VM. (DCK-1916)
- Archived backups do not display an archive icon in the Restore wizard Select VMs list. This is a cosmetic issue that does not affect functionality. (DCK-1710)

Replication

- The Default Network menu in the Replication wizard is empty when using only vNetwork Distributed Switches, preventing you from continuing. To workaround this issue you can create a dummy network to select in the Default Network menu, then manually configure the replica VMs after the initial replication has completed. (DCK-1959)
- Replication thresholds do not account for pre-existing replicas when calculating free space remaining, which can result in skipped replication if thresholds are exceeded. To workaround this issue, replication jobs can be split into smaller jobs, the replica storage can be increased, or a new data store with additional free space can be used. (DCK-1952)
- If a selected network becomes unavailable before an initial replication job is run, replicas may be created without a network interface card. Make sure any networks selected for use with each replica are valid. (DCK-1946)
- If an error is encountered when adding a backup storage location for replication, an error is correctly displayed in the PHD Console, but the location is still added to the list of available data stores. Attempting to use this location for replication will not work correctly. To resolve the issue, you can remove it from the list and add it again. (DCK-1874)
- After refreshing the list of VMs available for replication, if a specific backup is not displayed, you can force an update by either 1) remove, then add the backup storage location as a replication store, or 2) change the contents of the backup catalog by running another backup or deleting a backup. After trying either workaround, refresh the list again and the missing backup should be displayed. (DCK-1871)
- When editing a Replication job, the replica VM suffix, network, and storage values may not be preserved. If this is the case, you can modify the values again using the wizard. (DCK-1832, DCK-1839)

- When a source virtual disk size has changed, the next replication job will report an error. To replicate the updated disk you will need to remove the replica then run the job again. (DCK-1544)

PHD Exporter

- If you cannot edit a previously added backup store (Save fails with an "inaccessible" error), remove the backup store then add a new store with the updated backup location information. (DCK-1940)

System Requirements

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

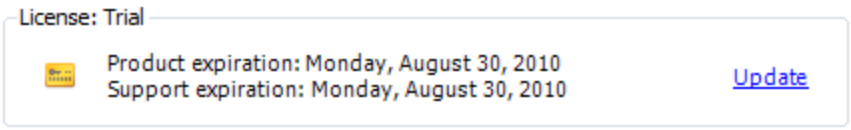
Table 1 - PHD Virtual Backup System Requirements

PHD Virtual Backup Appliance	VMware vSphere 4.x, 5.0 *VMware vSphere Hypervisor™ (the free version of ESXi) is not supported.* 8 GB free space is required for the VBA's virtual disk. Additional free space is required if an attached virtual disk is used to store backups. 64-bit machines must have VT (Virtualization Technology) enabled. If the PHD VBA is stored on a VMFS volume with default 1 MB block sizes format, backups are limited to VMDK files up to 256 GB. To backup larger VMDK files, store the VBA on a volume with a larger block size format (1 MB block size = 256 GB max file size, 2 MB block size = 512 GB max, 4 MB block size = 1024 GB max, 8 MB block size = 2048 GB max file size).
PHD Virtual Backup Plug-in (for integrated menus)	vSphere Client 4.x, 5.0
PHD Virtual Backup Console	Windows XP, Windows Server 2003, Windows 7, Windows Server 2008, Windows Server 2008 R2, or Windows Vista, with .NET Framework version 2.0 installed.
Backup Storage	Refer to the Backup Storage topic in the Installation Guide for details and best practices about backup storage.
Networking	To initially configure a PHD VBA, it must receive an IP address either through DHCP or by assigning it a static address. To assign a static address, refer to the product documentation. HTTPS access is required for communication between the PHD VBA and Console as well as each vSphere host and vCenter Server.
File Level Recovery	To recover files from backups when using Windows, the Microsoft iSCSI Software Initiator must be installed and running. If you are using Linux or Unix, install an Initiator for your operating system.
VM Replication	VM Replication may require an additional PHD VBA, one deployed at a primary site and another deployed at a secondary (disaster recovery) site, depending on your environment and replication requirements.
PHD Virtual Backup Exporter	Windows Server 2003 (32 bit) or Windows Server 2008 R2 with .NET Framework version 2.0 or later installed.

PHD Virtual Backup Licensing

Each PHD Virtual Backup Appliance is deployed with a trial license, by default. Although multiple appliances can be deployed within an environment, PHD Virtual Backup is licensed on a per-host basis.

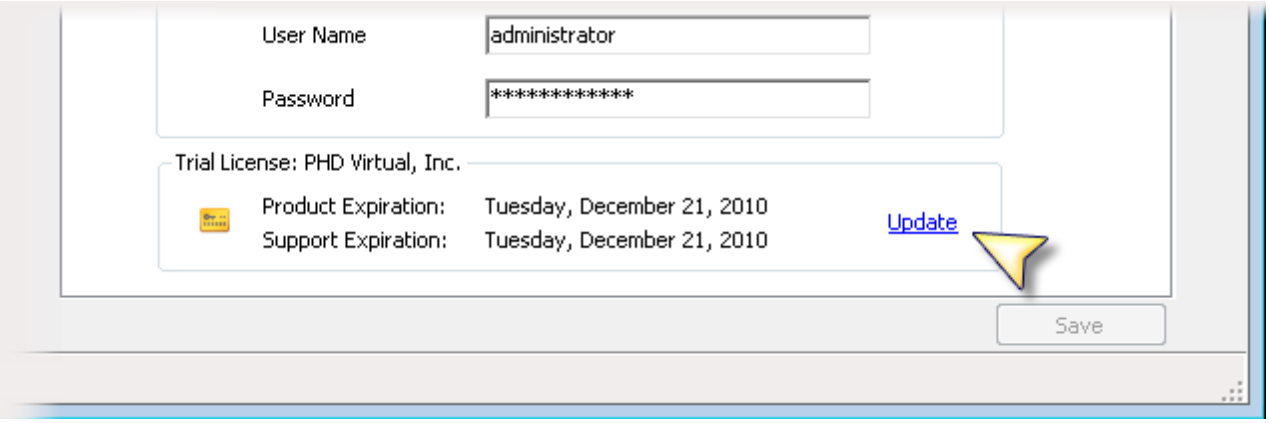
License information is displayed at the bottom of the **General** tab in the PHD Virtual Backup Console's **Configuration** area.



- **Product expiration** is the date when the PHD Virtual Backup trial license expires. This does not apply to purchased licenses. After the product expiration date, you must update the license to use the product.
- **Support expiration** is the date when your support subscription expires. A current support subscription is required to receive support from PHD Virtual and to install product upgrades.

To update a product license

1. Open the PHD Virtual Backup Console to the **Configuration** area and select the **General** tab.
2. Use the appliance selection menu at the top of the window to select the PHD Virtual Backup Appliance to update.
3. In the **License** area, click **Update**.



4. Select your license file (for example, *My_License.phd*) and click **Open**.

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

Note:	Apply updated licenses to each PHD VBA you have deployed.

Legal Notices

PHD Virtual Backup for VMware vSphere Release Notes

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