

esXpress version 4.0

Release Notes

April 2010

This document provides an overview of the changes made to esXpress for the version 4.0 release. It contains system requirements, new features, changes, and fixes for the latest version of the product.

esXpress consists of the following main components:

- esXpress Management Appliance - 4.0-2
- esXpress DeDupe Appliance - 4.0-2
- Host side install base (rpm) - 4.0-2

Note: The Management and DeDupe appliances are optional and are not required for running esXpress.

To download the latest versions:

- **Current customers:** use the Check for Updates appliance text menu options. If you are not using either appliance, you must install the latest RPM files manually.
- **New customers** should visit PHD Virtual's web site (www.phdvirtual.com) and register to download the latest version of esXpress.

For installation and configuration information, refer to the latest esXpress documentation on the [Knowledge Center web site](#).

What's New in 4.0

- **esXpress OVF Installer** – Deploy and configure the esXpress appliances using a Windows-based installer.
- **Central GUI Restores** – Restore backups directly from the esXpress Management Appliance.
- **Change Block tracking** – Take advantage of VMware's Change Tracking API to significantly reduce time and storage space required for backups.
- **Stats Updates** – DeDupe Appliance Stats page now includes a Trim Report and other tabs to organize the statistics display.
- **Add Hosts from vCenter** – Add hosts directly to the Management Appliance by importing a list of hosts from vCenter.
- **Quorum updates** – The Management Appliance Quorum now uses SSH by default for host communications. NFS is also still available.
- **System Pages** – The esXpress appliance web pages each now have a System page which displays useful information about the appliances including hostname, IP addresses, and available space.
- **Online Help** – Context-sensitive searchable help was added to both appliances and is available by clicking the help button on each page.
- **Enhanced product support** – esXpress now supports VMs with IDE disks and experimentally supports Distributed Switches with Ephemeral Ports (no binding).
- **Bug fixes and functionality improvements.**

esXpress Updates

4.0-2 - April 2010

Management Appliance

- Fixed a bug where Delta backups would use incorrect Full backup during restores.
- Added new re-verify option to Advanced tab.
- Updated help files and documentation.

DeDupe Appliance

- Fixed an issue with File Level Restores where Virtual Machines with underscore characters in their names were not available (VM would not expand in FLR tree).

Host Side Install Base (RPM)

- Fixed an issue with Windows 2008 Server when indexing SMB targets.
- Fixed a bug when handling multiple versions of JRE.
- Added new re-verify option to Backup Options menu.

PHD esXpress Installer

- Multiple usability enhancements including updated appliance IP address entry text box and improved tab ordering.

4.0-1 - March 2010 - GA Release

Management Appliance

(Previously known as the Configuration and Deployment GUI Appliance)

- Restore Now – you can now restore backup files directly from the Management Appliance using the new Restore Now page.
- Added the option to enable Changed Block Tracking to the Advanced Options. Take advantage of VMware's API to read only the blocks that have changed between backups.
- Fixed an issue in the daemon where the delete program was not called correctly.
- Added vCenter Import to add hosts directly from Virtual Center.
- The esXpress Quorum was updated to use a single, restricted SSH user account on each host device, by default.

- esXpress task updates:
 - The option, **Enable Dynamic Tasks**, which controlled the esXpress daemon, was removed from the Basic tab.
 - On the Hosts page, the **Enabled** button was renamed to **Scheduled Tasks** and now controls only the esXpress cron job (which in turn controls the daily backups). Disabling this button disables all daily backups as well as all scheduled backups ([x12], etc.) for the host. Special and one-time backups will continue to work, as they are controlled separately by the esXpress daemon. This allows you to disable all scheduled backups for maintenance, etc., but still run backups for mission-critical devices on an individual basis.
- When adding new licenses, you can now choose to import license information automatically from your license file.
- Added a new System page which displays relevant appliance information.
- All non-alphanumeric characters in VM Names and VMDK names will be changed to ‘_’ on import into the DB.
- Fixed stats for VMs.
- Added context-sensitive online help and updated all tooltip help.
- Added help icons for online help and tooltip help items.
- The modify host option now allows you to uninstall the product and the host page now reflects the esXpress installation state on each host.
- Fixed an issue with assigning a license to a host where the first license could not be selected.
- Fixed an issue where email addresses entered were not validated for proper formatting.
- Removed the ability to rename, disable, or delete built-in accounts
- Setup Wizard now contains inline help at the top of each page instead of pop-ups.
- Added a Quorum page to allow users to switch the quorum mode.
- Table layouts, borders, and paging styles are now consistent.
- Pre-compiled user interface for increased performance and reliability.
- Increased field length for **Globally SKIP VMDKs that match disk ID**.
- The Replication tab was renamed to Restoration to better reflect the available options. Also, some options were reorganized into more logical sections.

DeDupe Appliance

- The Stats page has been updated and now contains additional tabs and drill down capabilities.
- Updated the System page layout to display relevant appliance information in a more user-friendly format.
- Added context-sensitive online help.
- Removed the ability to rename, disable, or delete built-in accounts.
- Increased the timeout when enumerating files and folders for FLR information.
- Improved the auto delete performance.
- Validation marker files (.OK files) are now set to zero size.

Host Side Install Base (RPM)

- Change Block Tracking added - when enabled, esXpress will read only the blocks that have changed to determine what needs to be backed up, significantly improving backup performance.
- Added [t1] to [t24] notation for VM Name and Notes which designates the hour to backup VM. [t2] = 0200, [t17]=1700, etc.
- Added [target=x,y,z] command to set backup target within VM Name or VM Notes. Priority is Special, [target=], then local configuration.
- Added [s1] to [s24] commands. Similar to [t] commands, in addition to the nightly backup, you can use the [s] commands to run a Special backup at a specific time.
- Added experimental support for Distributed Virtual Switches with Ephemeral Ports (No Binding)

Known Issues

Problem	Upgrading to version 4.0 DeDupe Appliance from version 3.6-11 or 3.6-12 fails when using the Summary Page Check For Updates button. If you used the Check for Updates process to upgrade to a version 3.6-11 or later DeDupe Appliance, you will not be able to upgrade to version 4.0 using the Summary Page, Check For Updates button.
Workaround	Use the DeDupe Appliance text menu, Check for Updates option to upgrade to version 4.0.
Problem	Backups fail to run after upgrading esXpress version 3.6-10 or earlier when using an expired license.
Workaround	Contact PHD Virtual to upgrade your license.
Problem	If the esXpress VBAs are stored on a VMFS volume with the default formatting of 1 MB block sizes, you will be able to backup VMDK files up to 256 GB, only - you will not be able to backup files larger than 256 GB.
Workaround	If you need to backup VMDK files larger than 256 GB, you will need to store them on a VMFS volume formatted with larger block sizes. 1MB block size = 256GB max file size 2MB block size = 512GB max file size 4MB block size = 1024GB max file size 8MB block size = 2048GB max file size
Problem	Snapshot names appear as "esXpress v3 Backup" and should be "esXpress v4 Snapshot"
Workaround	None. This will not affect backups.
Problem	Selecting some items in the Management Appliance navigation tree (for example, License, Restore Now, Action Log, or System) causes expanded tree items to collapse.
Workaround	None.
Problem	The OVF installer (PHD esXpress installer.exe) fails to deploy the esXpress OVF.
Workaround	Make sure the esXpress OVF is located in the same directory as the installer executable.
Problem	When a backup is run for a VM that is already running a backup, it reports the duplicate backup as ALL GOOD.
Workaround	None.
Problem	Errors when using the esXpress OVF installer in a terminal server session.
Workaround	Move the contents of the \resources folder into the root folder.

Problem	When configuring Weekly Delta backups using the Management Appliance web interface, if FULL Backup Frequency is set to MONTHLY , the FULL backup takes place when the first Delta is scheduled. The option Day of Month for Fulls is ignored.
Workaround	Do not use the option Day of Month for Fulls as it is invalid. The Full backup will take place when the first Delta is scheduled each month.
Problem	CBT backups do not occur if the backup target is not the first target in the Target Team. Regular backups will still occur - they just will not take advantage of CBT.
Workaround	When running CBT backups, ensure you are using the first backup target in the target team. This will be resolved in a future update.
Problem	Restore fails (Argument list too long) when performing VBA restores on ESX 3.5.
Workaround	Perform a service console restore by disabling VBA restores.

System Requirements

View the following table for esXpress system requirements.

Table 1 - esXpress System Requirements

VMware version	ESX Server Version 3.5x, vSphere
esXpress Appliance VM Memory	1GB of memory allocated to each VM
Management Appliance VM Storage Requirements	A Minimum of 8GB of disk space is required on the VMFS partition of the ESX host to import the compressed Management Appliance VMDK file.
DeDupe VM Storage Requirements	A Minimum of 8GB of disk space is required on the VMFS partition of the ESX host for the DeDupe system data VMDK. Additional storage (NFS or VMDK) is required for your data disk.
VBA Memory Requirements	256 MB of memory allocated to each VBA
VBA Storage Requirements	3GB minimum of VMFS space for each running VBA during backups.
Minimum supported browsers for esXpress Appliance Web Interfaces	Internet Explorer 7, Firefox 3.0.7
Other Requirements	VMware Virtual Infrastructure Client 3 (VI3), or vSphere Client. ESXi is not supported at this time.
Quorum Requirements	Traffic must be routable between the esXpress Quorum and each host. If you've configured the esXpress Quorum to use an NFS share (instead of SSH), a VMKernel IP is required for each host. The appliance VM must also be on the same network as the VMKernel with the same VLAN ID or the network traffic must be routable between the VMKernel IP and the assigned Management Appliance IP for SSH and NFS connections.
PHD esXpress Installer	Virtual Center 2.5, vCenter Server (vSphere) VMware ESX 3.5 or 4.0 (vSphere) host

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