Release Notes

Product	Quantum esXpress^{tm} VM Based Backup and Recovery
Version	3.6-11
Date	February 2010

Purpose of Document

This document provides an overview of the changes made to esXpress for the version **3.6-11** release. It contains a list of additions, changes, known issues, and fixes for each component.

esXpress 3.6 zip file has two main components:

- o   esxpressVBA-3.1-1.esx.i386.rpm
- o   esxpress-3.6-x.esx.i386.rpm

esXpress Overview

Out of the box, esXpress provides automatic, daily backups of all running virtual machines. It can also perform individual backups that can be scheduled or initiated immediately. The easy installation ensures a simple but powerful backup solution for your virtual infrastructure.

Quantum esXpress software provides high-availability virtual appliances for protecting VMware virtual infrastructures and data to Quantum's DXi™-series deduplication systems. Quantum esXpress combined with Quantum DXi-series deduplication and replication appliances provides a comprehensive, scalable but simple and complete data protection solution for a VMware environment. The esXpress product has revolutionized data protection for virtual environments by using the virtual environment itself to back up more data in less time. esXpress uses "virtual backup appliances" (VBAs) – small virtual machines – to perform autonomous, fault-tolerant backup and restoration of your virtual environment directly to a DXi-series with no additional hardware or software required, and minimal impact to VMware servers, the service console or network performance. It scales easily across an enterprise's entire virtual infrastructure.

esXpress also provides in-depth reporting features including statuses, virtual machine name and size and the effective speed in both GB/hour and MB/second. esXpress can automatically compile and send these reports via email to systems administrators or managers.

Important:
esXpress is designed for the VMware administrator who has passed the VCP (VMware Certified Professional) exam or has equivalent experience. Installation and administration of the esXpress software requires that the administrator have a core understanding of ESX server configuration, virtual machines, basic networking and VMNET, and using VMware Virtual Center. This product is meant to be customer installable assuming the customer is a VMware administrator. The VMware administrator is for the purpose of this document the "user" and or "customer".

System Requirements

Operating Environment	ESX Server Version 3.5, vShphere 4.x esXpress Version 3.6.x **Note:** VMware Lab Manager and ESXi are not supported
Supported Browsers	IE 7.0 or greater Firefox 3.07 or greater *Other browsers such as Netscape, Safari, AOL or others are not supported

Hardware System Requirements

DXi Requirements

DXi6500 Series	Version 1.3-65 or greater
DXi7500, DXi7500 Express	Version 1.1.1 or greater
DXi3500, DXi5500	Version 1.7.1 or greater
DXi2500-D	Version 1.1.3_25 or greater

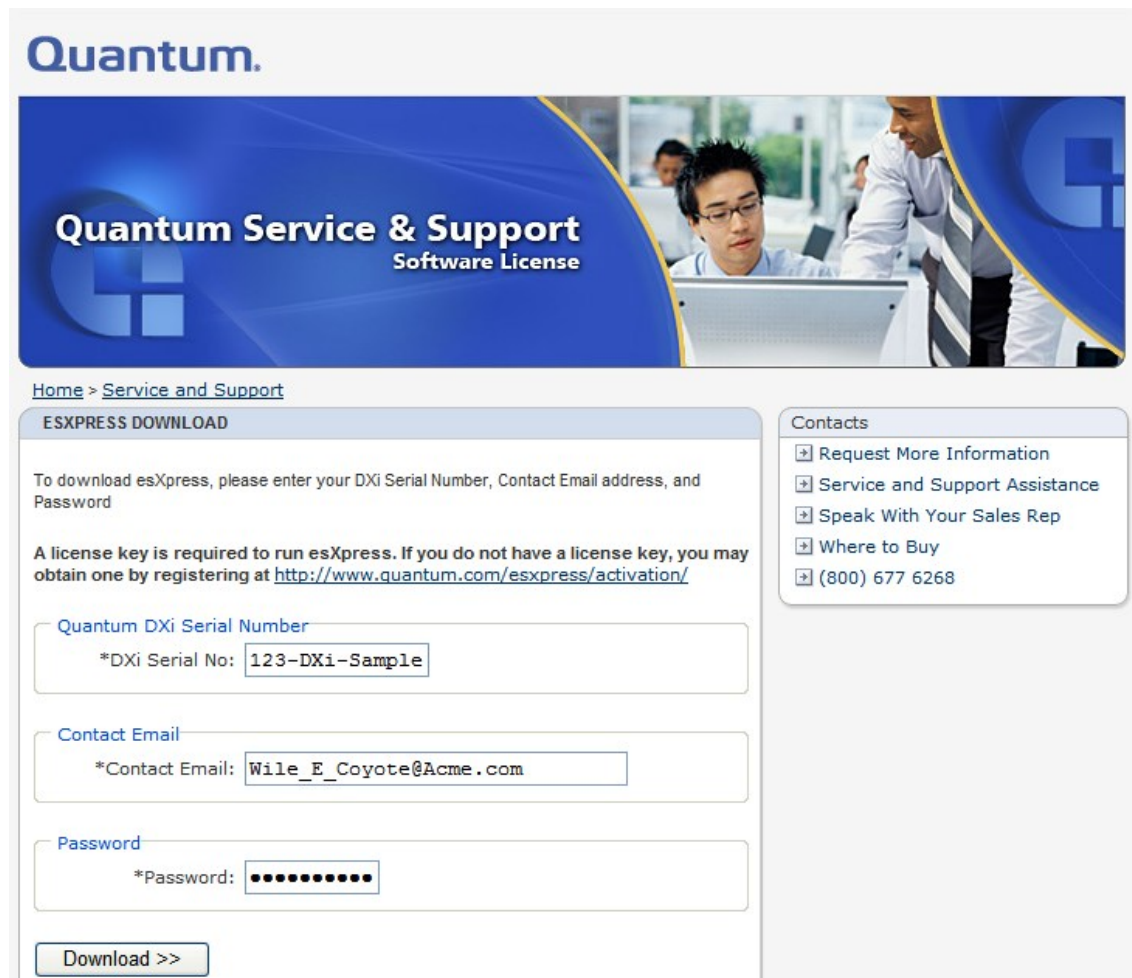## System / VMware Requirements

Memory	256 MB of memory allocated for each running VBA
Storage Requirements	A minimum of 8GB of disk space is required on a VMFS partition available to the ESX host to import the compressed GUI VMDK file.
VMware version	ESX Server version 3.5 (ESX 3.5i is not supported) *. ESX 3.5 or vSphere 4.x versions are supported.
VBA Storage Requirements	3 GB minimum of vmfs space for each running VBA during backups.
Supported Browsers for GUI Interface	Minimum Internet Explorer 7, Firefox 3.0.7
Other Requirements	VMware Virtual Infrastructure Client 3 (VI3) ore greater
*Refer to the VMware ESX Server 3 Installation Guide for VMware ESX system requirements	
ESX Service Console Memory Requirement	Minimum requirement is 800MB, The default was 227MB – Require ESX reboot

Downloading the Latest Version of Quantum esXpress

To download the latest version:

1 Navigate to the **www.Quantum.com/esXpress/download** Web site and fill out the download request forum.

Note: You will need your DXi serial number.

2 Download the esXpress 3.6-11 zip file to a location where the ESX server has access.

Note: This is a large file and will take time to download.

Updates for this Release

Configuration and Deployment GUI Appliance

Quantum customers have version 3.5-8 and should upgrade to the 3.6-11 version by simply selected the "Check for Updates" option from the esXpress text menu. Below is a list of changes and updates from version 3.5-8 up to and including the 3.6-11 release. All changes listed below are incorporated into the 3.6-11 build. There is no need to upgrade individual releases; 3.6-11 is a complete rollup of the individual releases.

3.6-10 and 3.6-11

- No changes in these releases.

3.6-8

- phd_support was updated to include CPU speed test and now will only take the last 25m of fsck.log and mysqld.log.

- Action ID was added to the Action Log.

- Fixed an issue on the Basic tab, Target Type and Location section where fields would not appear when Type was set to Net Only.

- Fixed an issue where Config page items were not properly centered.

- Fixed an issue where the Target Team host page would show an invalid subtitle.

- Fixed an error where two filter text boxes were displayed for quick config tab.

- Fixed an issue where titles would overlap with smaller browser windows.

- Fixed multiple minor issues with the license page of the setup wizard.

- Improved time syncing between appliances and hosts.

- Fixed an issue where hosts would inherit the incorrect number of VBAs.

- Fixed an error where the Net Delete and VMFS Delete fields would not allow all appropriate values.

- Fixed an issue with duplicate target team assignments and special backup targets.

- Fixed a problem where the host configuration page would not display the currently selected host.

- Fixed an error where VBA IP addresses were not removed when DHCP was selected.

- Subnet mask will no longer reset to 255.255.255.0 in the PHD text menu.

3.6-7

- Changed the following default settings to be enabled, by default:

  - BASIC - Backup Multi Disk VM in Parallel

  - REPLICATION - Use VBAs for restores

  - EMAIL - From Console (instead of VBA)

  - EMAIL - Email for One-Up Backups

  These settings are enabled by default for new installs only—they will not change an existing install when using Check for Updates.

- The Global GUI step was removed from the Setup Wizard.

- Fixed an issue where host could occasionally fail root login check on first attempt.

- Fixed the host version in GUI info tab.

3.6-4

- Fixed an issue where host SSH keys could be lost during installation.

- Existing Quorum mounts will not be remounted.

- Fixed an issue where Quorum NFS was sometimes left mounted after uninstall.

- Removed scheduled web restart.

- Restart Web services added to the PHD menu.

- Duplicate log messages will no longer appear during install.

- Installation time was decreased.

- Remote hostname no longer needs to be resolvable for install to work.

- Target Team updates:

    o A default Target Team now exists when you first install the GUI appliance.

    o Last remaining Target Team cannot be deleted.

    o Target Teams no longer inherit—they are set to host only.

    o During the initial setup, a Target Team must be selected.

    o Can no longer delete a Target Team that is in use.

    o Target Team page: updated the icon and message for removing targets from Target Teams.

- Filtered esXpress-quorum from Quick Config page.

3.6-3

- Added support for SUDO user access for install.

- Root now allowed as unprivileged user for install.

- Fixed error on bad host SSH key.

- Added nightly database backup for GUI.

- Added Apache daily restart to clean up tmp files for web services.

- Removed esXpress-quorum from host volume list.

- All numeric spinbox controls have been converted to either drop-down boxes or text boxes depending on the valid options.

- GUI wizard will now allow completed steps to be clicked directly.

- Fixed an issue where the vCenter icon caused an error when clicked.

Host Side Install Base (RPM)

3.6-11

- Fixed an issue where Delta backups would revert to Full backups after January 1, 2010.

- Fixed an issue with restoring backups made since January 1, 2010.

- Fixed an issue with backup restore logs that were incorrect after January 1, 2010.

- Fixed an issue where background restore jobs were not displayed in the PHD menu.

- Improved VBA restore speed when restoring large VMDK files with VBA.

3.6-10

- LE licenses will now show as "Supported" licenses.

- Duplicate disk backups are now always on for vSphere 4.

- Decreased retry time after a VBA failures.

- Fixed an issue with special characters in the username or password in the esxpress.cfg file.

- All snapshots will no longer be removed incorrectly.

3.6-8

- Fixed a problem where the Quorum was not updated when setting ABORT lock using the esXpress menu.

- Broke out the quorum daemon into a separate sub process from the phd_daemon.

- Changed all programs to allow the quorum daemon to do all processing.

- Fixed an error where SMB export folders were not shown during file level restores.

- Fixed an issue with long timeouts when indexing PHDD targets.

- Fixed an issue with PHDD backup throttling.

- Fixed an issue in the backup report, VBA Usage Chart, where unused VBA helpers were displayed.

- A warning is now logged if RUN_AFTER script used is not executable.

3.6-7

- Fixed setting VBA IP addresses from the text menu.

- Changed DeDup backup process: now making .ok files are now created for each block.

3.6-6

- Fixed a bug in FLRs for UTF-8 characters.

- Fixed an issue where the PHDD backup process resulted in a VBA timeout for large VMDK files on fast hardware.

  The following is an example error log message:

  2009-09-14 01:55:30.012a WRN: VBA 1 Helper.31185 is not responding, count 54 of 200 VM 'XXXX'

  2009-09-14 01:58:59.857a WRN: VBA 1 Helper.31185 is not responding, count 106 of 200 VM 'XXXX'

3.6-5

- Fixed an issue where false ERROR emails were sent after backups.

- Check for power on VBA even if command fails.

- Updated stubby and stubby.phh to both restore original VMDK STUB file if available.

- Fixed bad configure VBA messages, vmware-cmd.

- Fixed false error in daemon log for 'There seem to be multiple esxpress-quorum mounts.'

- Fixed calling Backup All with –force.

- Changed verification of blocks on PHDD target when making a backup.

- Improved the [xTEST] for PHDD Backups.

- Eliminated 'Incompatible device backing' errors.

- Enabled restores via SLES 10p1.

- Fixed API issues when using vSpehere4.

3.6-4

- Fixed an issue where backup folder was not created.

- Changes to mount commands in PHDD.

- Better block checking when backup is created.

- Better checking when block folders are made.

- Fixed issues for vSphere4, including load restore DB.

- Update daemon to do quorum updates to host.

- Fixed configuration options from PHD menu in vSphere 4.
- Fixed self restore of PHDD backups.

3.6-3

- Added new Restore options. In Place restores will now be attempted before a complete restore is run.
- Fixed an issue where incremental restores occasionally failed.
- Fixed a false WARN: Message about not mounting Dedup.

Known Issues

This release of esXpress software 3.6-11 has the following known issues.

Change Request Number	Description	Workaround
9473	NFS is not natively supported by esXpress as an option in the GUI or in User Doc	The user must NFS mount a DXi™ share using ESX Vmware and then instruct esXpress to backup to VMFS only specifying the DXi NFS mount.
9480	GUI: When performing a backup, there is no indication that a backup is occurring or the status of the backup.	The user must A) configure the SMTP server and instruct esXpress to send email to report backup status, or B) SSH into the Vmware ESX server and issue **esxpress** from the command line interface, or from the text GUI **Tail Backup Log,** to see the real time backup status.
9731	DXi5500: NFS VMFS backups report 0 bytes in the restore menu.	This is an erroneous reporting error. This will be fixed in next maintenance release firmware for DXi3500/5500.
9740	Warning: chown error in backup report when executing NFS/VMFS backup.	To avoid this error, change the **owner_for_VMFS_Backups_(chown)** variable from within the esXpress Text Menu system to the value of: **4294967294.** The user may also do the same from the esXpress GUI Menu when configuring the VMFS target type and location.

Change Request Number	Description	Workaround
9780	Need to document that in order to perform restores through SNMB the vmnic needs a service port enabled.	The user must enable a service port on all active vmnics performing backups or the re-index of backups will fail on the SNMB share.
9820	GUI: Quorom not updating properly, unable to modify esXpress settings via HTTP GUI.	This can occur when 2 esXpress GUI VM's are created in the same datacenter within Virtual Center. This is caused by esxpress-quorom (1) listed as an NFS share, when this occurs the esXpress host will perpetually lose the quorom enabled connection and as a result will fail to update. To recover, rename the esxpress-quorom (1) datastore to esxpress-quorom within VI client. Manually rejoin the quorom, ssh into ESX server and enter 'esxpress' to open esxpress text interface. Using 'quorom configuration' rejoin the quorom.
9998	GUI: unable to unassign SMTP server after setting.	The user must delete the SMTP server from the **Configuration** tab.
10224	GUI: the initial register attempt of VC plug-in results in a port 443 error, yet registration succeeds.	Try each change twice, to verify there are no errors on the second attempt.
10230	Schedule backups with [x#] commands do not run when VM is powered down, Auto_Backup_Powered_Off_VMs =Yes	This works as designed, [x#] commands will not backup powered off VM's, a backup full all will backup however.
10296	The user is able to set more than the maximum or less than the minimum allowed restore jobs than the software supports.	The user must stay within the confines listed on configuration page. If they set less than the minimum, background restores can fail.
10387	Cannot perform file level backups on Linux VMs that manage disks with a logical volume manager.	Contact Quantum for a list of supported configurations.

Change Request Number	Description	Workaround
10446	GUI: unable to set target for global settings, special one-up backups	For special one-up backups the user must be at host level configuration to specify the target.
10492	GUI: unable to change the host target team via global or host configuration settings.	The user must go to the host page and modify the host to indicate which target team to use.
10577	Backups fail if snapshot exists for VM.	Several changes need to be made to avoid this error. If a snapshot exists for a VM for whatever reason the following must be done in order to recover: Commit esXpress snapshots on backup should be ON Error if VM has snapshot should be OFF Snap on Snapshot must be enabled and configured
10791	Copy config and copy license from another host does not function as documented.	Do not use this feature (only available in Text menu), all config and license operations should be performed at HTTP GUI level.
10824	GUI: target location setup unable to detect recently added NFS/VMFS share despite **reload** attempts.	If persists, re-enable through the esXpress Text Menu.
10843	GUI: when taking a vmware snapshot of the GUI VM, a server exception occurred.	Ignore this error, when taking a snapshot of the GUI VM and capturing **with memory state** this can freeze/pause virtual machine and cause random errors.
10845	Host lost quorom overnight, no duplicate quorom names present.	Monitor host going forward, the host can recover communication to the quorum automatically. If the host cannot re-establish communication to the quorum, contact Quantum support.
10872	[xFULLSPECIAL] or [xFULLONE] should perform full back up, but instead performs delta backups, if one-up backup is set to delta.	The user must configure special one-up backups to perform full backup via esXpress GUI Menu.
10891	GUI: the user is able to create duplicate backup target names.	Avoid creating duplicate backup targets for ease of management.

Change Request Number	Description	Workaround
10892	Unable to restore delta special one up backup, full missing.	Do not do perform special one-up full or delta backups at this time.
10950	VBA fails to power when VBA location is FC disk or DXi NFS share.	VBA fails to power up. To correct the problem, use local disk. Program retries sometimes correct the issue.
11058	GUI: able to delete all users	Do not delete all users because you will not be able to log back in. SQL command available to create a user to get back into the esXpress GUI
11795	Host reboot during backup/restore of VM's does not return a failed state or restart of job.	VM will become HA upon host reboot and automatic backups will restart. Restores will leave an incomplete VMDK on the restore target. Only workaround is to delete the incomplete VMDK and run another restore job.
11841	Full restores will return a successful if the DXi is rebooted or there is Ethernet interruption.	This is a false message as the restore leaves an incomplete VMDK on the restore target. Workaround is to run delta restores. If a full restore is needed run a 0 block delta with the associated full backup. All full backups create a 0 block delta. Delta restores will fail as expected and will delete the incomplete VMDK from the restore target.
13219	VC plug-in on vSphere 4 does not show an esXpress icon.	Current workaround is to use the GUI.
13455	GUI: When opening the GUI after configuring the GUI VM network parameters, the home page shows PHD green.	Current workaround is to wait 30 seconds before opening the GUI after the GUI VM network parameters have been set.
13593	File level backups fail on Windows VM if disk is Basic GPT format.	GPT format is not supported at this time. Only MBR formatted disks are supported.

Change Request Number	Description	Workaround
N/A	Occasionally, checksum errors may occur during a restore. When verifying Delta blocks or performing a restoration (which also verifies the delta blocks), esXpress may detect that a checksum does not match.	This checksum does not affect the backup file. The problem esXpress detects is that a Delta Block does not match its checksum value. The value of the checksum is incorrect, but the data in the Delta block is correct.

Contacts

Quantum company contacts are listed below.

Documentation

To order documentation for esXpress or other products contact:

Quantum Corporation
P.O. Box 57100
Irvine, CA 92619-7100

(949) 856-7800
(800) 284-5101

Quantum Home Page

Visit the Quantum home page at:

http://www.Quantum.com

Quantum Support

To contact Quantum Global Services please visit:
http://www.Quantum.com/pdf/Quantum_Global_Services.pdf

We offer three convenient methods to get the support you need, anytime:

- **Knowledge Database** - An interactive database of the most frequently asked questions: **http://www.Quantum.com/faqs**

- **eSupport** - A Web-based, self-service application that allows registered users to create and track service requests: **http://www.quantum.com/eSupport**

- **Live Support:** To contact our world-class support representatives, please refer to the information below:

Americas:
1-800-284-5101 (toll-free) or
949-725-2100 (local)

Europe, Middle East and Africa:
United Kingdom: +44 (0) 1256-848748 (local)
France: +44 (0) 1256-848748 (local)
Germany: +44 (0) 1256-848748 (local)

Asia Pacific:
Australia: 1-800 285 435 (toll-free)
China: +86 (10) 8519 2099 (local)
India: +91 (98) 4400 6600 (local)
Asia, Pacific and Japan: +61 (7) 3839 0988 or +1 (949) 725 2100

Technical Publications

To comment on existing documentation send e-mail to:

doc-comments@Quantum.com

esXpress Product Information

You can register your esXpress software at:

http://esxpress.quantum.com/

Request More Information:

http://Quantum.mv.treehousei.com/Surveys/06/1BE8BC76ECC42185/RequestMoreInfo.aspx