

Protect your data faster and easier than ever.

Following are the significant new features in v4

Feature	Capability
Change Block Tracking	Version 4.0 now utilizes vSphere APIs to extract information as to which blocks have changed since the last backup, opposed to reading the entire VM to obtain this data. Version 4.0 will continue to support both methodologies for earlier VMware releases (i.e. non-CBT supported)
De-Dupe Optimization	Version 4.0 enhanced its capability to further optimize its De-duplication performance
OVF Install Wizard	The Version 4.0 Appliance OVF's can now be deployed using a Windows Installer-based wizard
Graphical Restore	Version 4.0 can now perform VM and VMDK restores directly from the Management GUI
No longer dependent on VM Kernel	Version 4.0 host management capabilities are no longer dependent on having the VMKernel port available. Management will now utilize SSH communication with the Service Console
Context Sensitive Help	Version 4.0 Management and DeDuplication Appliances now offer context sensitive help
Virtual Center Host Import	Version 4.0 can now discover new host information directly from VCenter
License Import	Licensing information can now be imported by Version 4.0 directly from a License File
IDE Backups	Version 4.0 added support for the new vSphere disk types backing up both IDE and SCSI based VMDKs
T Times (Link X Times)	Version 4.0 now simplifies the process of scheduling backups at set times
S Times (Scheduling Special Backups)	Version 4.0 has further enhanced the process of implementing special backups for unique cases
Target=Command	Specify the backup target to use for individual VMs during one-up and regular backups
FLR- Files larger	Restore individual files and folders larger than 4GB

PHD Virtual Backup for VMware ESX is the only solution for large virtualized environments.

The unique VBA™ architecture provides our customers with an enterprise-ready product that is custom designed for large virtualization environments. With PHD Virtual Backup for VMware ESX, we can provide our customers the ability to back up and restore their business-critical information quickly and in a setting that offers greater stability and more security than the competition.

Unique Competitive Differentiators

1. **Linear scalability - 16 concurrent backups (VBA)** Other backup vendors can't meet backup time objectives because their solutions are limited to only 1 or 2 backup streams per ESX host which is like trying to pull a fire hose worth of data through a straw. **esXpress** is the only solution that can scale up by running additional, concurrent backups (up to 16 per host) to meet critical backup windows

2. **No Additional Hardware or Software Required** Other backup vendors require the implementation of additional hardware and software to operate. These hidden costs are not evident in the purchase price of their software. **esXpress** is the only 100% virtual solution on the market. No additional hardware or software licensing is required to transport data to your backup targets.

Unique Competitive Differentiators

3. Verifiable and Measurable Deduplication Other vendors like to throw around the term deduplication - many try to pass off vanilla compression and incremental backups as a deduplication solution. These types of work-around result in high network utilization during backups, low compression ratios, and long restore times. **esXpress** source-side deduplication reduces network traffic, gives one-pass restores, and deduplicates data across an entire storage target. **esXpress'** detailed deduplication statistics and compression ratios provide quantitative results.

4. Native File Level Restores for Windows and Linux Other vendors claim to provide file level restores, but they only support Windows filesystems or may require additional software to implement restores for additional operating systems. Retrieving data from other filesystems can be a delayed, costly process. **esXpress** provides a simple, multi-user, web-based interface for Windows and Linux file level restores, out of the box.

5. Reliable Change Block Tracking (CBT) Other backup vendors blindly utilize and rely on the consistency of CBT (part of the vSphere vStorage APIs). Anomalies within CBT can cause your backup data to become corrupt and go undetected. **esXpress** is the only solution that validates the CBT data for each backup, ensuring data integrity and reliability.

6. Secure Virtual Backup Appliances Other backup vendors require a Windows-based application to manage and perform backups. Constant security patching, Windows viruses and zero day vulnerabilities leave your entire infrastructure at risk. **esXpress** VBAs have no open incoming network ports. VBAs are deployed from templates and destroyed after backup, rendering them immune to viruses and network hacking.

7. Distributed Architecture / Fault Tolerance Other backup solutions are littered with single points of failure which could cripple the backup/recovery environment. Backups need to run reliably night after night to assure the data is both recent and accurate. **esXpress** is a distributed architecture and does not rely on Virtual Center or any other single application to run backups, making it the only truly fault tolerant backup solution available.

8. Source-Side Incremental Replication for Disaster Recovery Most backup vendors do not include VM replication with their data protection solution. Their solution requires leaving multiple snapshots continuously on production VMs, lowering performance and increasing storage costs. **esXpress** replication sends only the compressed and deduplicated data, maximizing bandwidth. Disaster recover sites utilizing **esXpress** replication help you meet both RPO and RTO objectives.

9. Own Your Backup Data for Compliance Longevity Other vendors store backups in proprietary formats or require separate applications to perform restores. Restoration of data from previous versions may not be possible, violating compliance mandates. **esXpress** backups can be restored without the need for the **esXpress** software or license keys, providing long-term data protection.

10. One-Pass Restores from Tape Many backup vendors lack a proper method to backup to tape. Some require multiple steps to restore data written to tape which dramatically increases the recovery time and process complexity. **esXpress'** date smart dynamic export delivers backups to tape leveraging existing legacy backup products. Data is passed as VMware native files (VMDK and VMX) and the One-pass restores allow for quick, direct restoration from tape directly to the VMware environment.

11. Don't pass backup data through the Service Console Other vendors use the Service Console or hypervisor directly to transfer data during the backup and restore process. Moving data through this application layer jeopardizes host performance and stability. This causes the production Virtual Machines to respond unreliably resulting in a poor end user experience. **esXpress** data processing occurs within a VBA (a small virtual machine) outside of the Service Console. This ensures production VMs continue to perform and are unaffected during the backup/recovery process.

12. Conduct Backups from vCenter Other vendors control all backups through a single user application, requiring users to remotely connect to another system for backup operation and administration. Larger environments with multiple administrators are bottlenecked in the control of the backup environment. **esXpress** provides backup control from vCenter and **esXpress'** web-based platform providing simultaneous access for multiple administrators

13. Self-Healing Data Protection In an effort to increase backup speed, other vendors have a "send-it-and-forget-it" attitude regarding backup data. Once written to the target, the data is never verified or maintained. Network errors, bad disk sectors, bit flips, and other IT hiccups result in corrupt backup data and often times customers never know that critical data is corrupt after their restore. **esXpress** is the ONLY backup solution that continuously verifies and can repair existing backups using subsequent backup data.

