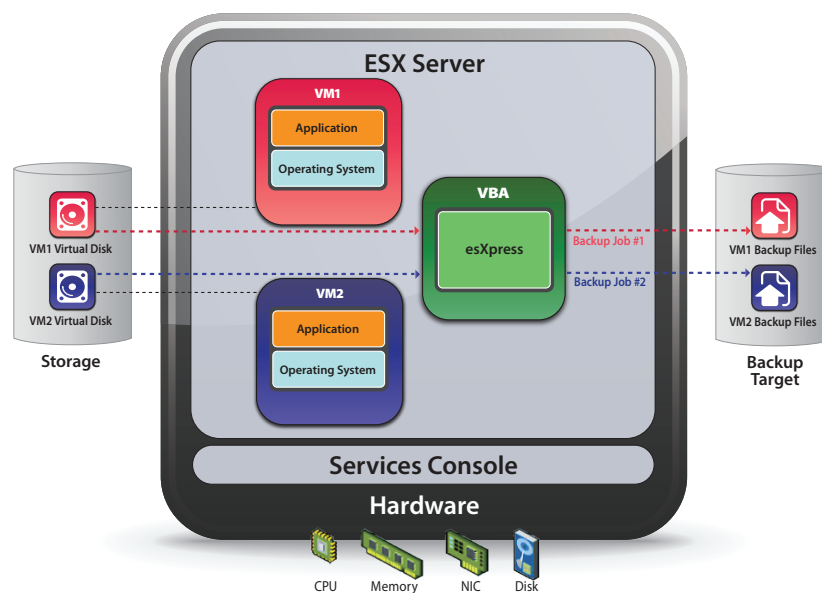


PHD Virtual Technologies Software is the world's first provider of high-availability virtual appliances for protecting VMware virtual infrastructures and data. Our esXpress product has revolutionized data protection for virtual environments by using the virtual environment itself to back up more data in less time at lower cost. esXpress has pioneered the use of "virtual backup appliances" (VBAs) – small virtual machines – to perform autonomous, fault-tolerant backup and restoration of virtual environments. esXpress scales across an enterprise's entire virtual infrastructure with no additional hardware or software required, and minimal impact on VM server, console or network performance. This unique approach, combined with an affordable, scalable per-host pricing plan, has earned esXpress over 1200 customers, 200 channel partners, and a recent VM World 2008 Gold Award for Data Protection.

Is Your VIRTUAL IT Infrastructure giving you REAL backup headaches?

The great promise of virtual infrastructures was to simplify IT by reducing hardware and removing costs. But as virtualization has gone mainstream, enterprise IT managers are quickly realizing that virtual IT can create some very real problems when it comes to backup and data storage. Traditional backup solutions are ill suited to virtual infrastructures, slowing down hosts and VMs with processor-intensive backup routines, clogging networks with huge backup files, and overwhelming storage devices with data. Even next-generation backup solutions – designed for virtual environments – have turned out to be complex and time-consuming, adding hardware and software that virtualization was supposed to reduce!



A Smarter Idea: Virtual Backup for Virtual IT Infrastructure

esXpress radically alters the notion of how to protect data in virtual infrastructures in one simple way: we use the virtual infrastructure to back itself up! esXpress uses virtual backup appliances (VBAs) – small virtual machines – that can be automatically deployed on an ESX server to autonomously conduct hot full or "virtual full" backups of all your Virtual Machines. esXpress VBAs operate outside of the ESX console, leveraging a virtual appliance architecture and our own innovative disk throttling so backups can be run during business hours with no impact

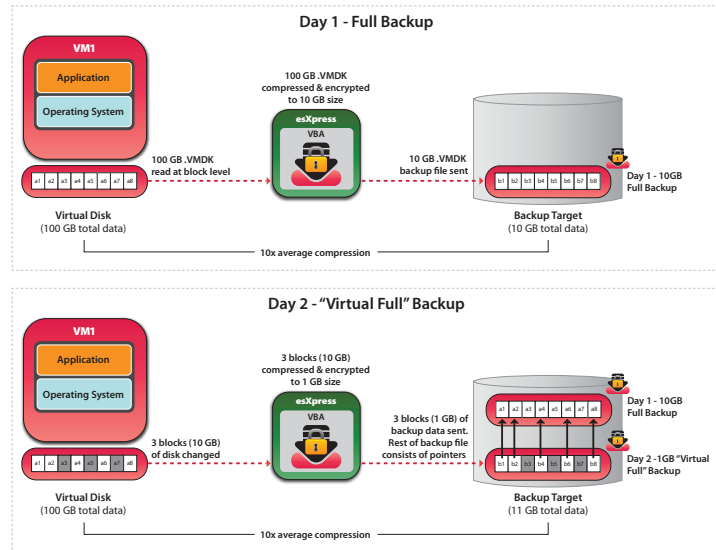
on VM performance on the ESX server. And esXpress backs up virtual disks at the "block level," delivering incremental backup that can be de-duplicated at the source before sending it to one or more local and/or remote storage targets simultaneously.

The result? Backups are smaller and faster, storage capacity lasts longer, and your entire infrastructure – VMs, hosts and networks – performs better. Overall IT costs are reduced significantly – and you have no more backup headaches.

One Simple Solution – Six Powerful Capabilities

esXpress software installs seamlessly into your existing VMware and storage infrastructure to provide six critical data protection processes:

- Backup** – esXpress uses a “block-level” rather than file-level process to perform autonomous, hot full and “virtual full” backups. Using VBAs that operate outside of the ESX console, esXpress backs up each of your VMs and sends the data to local, network-based or shared storage targets simultaneously. esXpress is storage platform independent, supporting iSCSI, Fibre Channel, CIFS, NFS, SSH and FTP, so it scales across your entire virtual infrastructure without any new hardware. esXpress is even fully fault-tolerant, automatically protecting VMs in the event of a host or storage target failure.



- De-Duplication** – esXpress performs “source-based” de-duplication of virtual disks by comparing blocks of data across all virtual disk files over their entire lifetimes – not just at single backup times. This dramatically reduces backup file sizes and network bandwidth needs, and enables incredible economies of scale in backup storage. On average, esXpress data de-duplication reduces storage requirements across a virtual infrastructure by 25:1.
- Replication** – esXpress utilizes built-in replication capabilities to perform several different types of replication depending on your disaster recovery or business continuity needs. These include simple replication of entire backup files and advanced replication of changed backup data only.
- Restoration** – esXpress allows you to quickly and easily restore either an entire virtual disk or individual files. Using an application-independent, executable backup file format, esXpress allows you to restore any virtual disk to any destination with a simple menu-driven process, regardless of whether you have access to the esXpress application. And because esXpress restores data at the block level, you can perform file-level restoration without having to go through time-consuming virtual disk mounting procedures.
- Management** – esXpress provides an intuitive management interface which integrates with your VMware management console or can be accessed directly from any web browser. The interface enables “set and forget” backup of your entire virtual infrastructure and centralized control of all hosts and deployed VBAs when you need it.
- Security** – esXpress uses the most powerful commercially available 256-bit encryption algorithms to encrypt your backups and store them locally, or safely transmit them to a remote disaster recovery site, providing a critical building block for compliance initiatives.

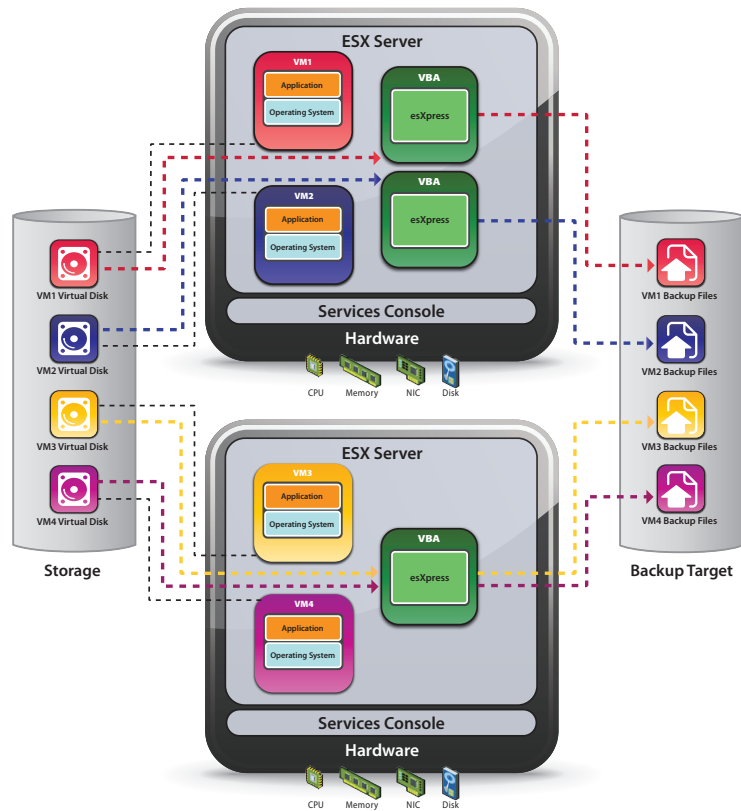
Virtual Data Protection that is Smarter, Faster, and Just Plain Better

esXpress is shifting the mindset and value proposition of backup solutions for VMware virtual infrastructures by removing the worry, complexity, and cost associated with traditional solutions, and giving you back something no other solution can – your time.

Protect Your Virtual Servers WITHOUT Adding Physical Servers

– esXpress is a software-based solution that requires no additional hardware. It uses VBAs – small virtual machines – that operate “outside the VM console,” saving time, reducing storage, and improving backup and restoration performance. And our cost-effective, per-host pricing means you can back up as many virtual servers as you want, regardless of how powerful the host server is, and you will not be penalized for upgrading hardware or increasing the number of processors on a host.

Restore Anywhere, Anytime – esXpress allows you to quickly and easily restore either an entire virtual disk or individual files. esXpress restores data at the block level, so you can perform file-level restoration without having to go through time-consuming virtual disk mounting procedures. And esXpress utilizes a unique executable backup file format which enables you to restore any backed up virtual disk to any destination whether or not your users have access to the esXpress application or an up-to-date license. It’s your data. It’s your backup. Restore when and where you need to. Period.



Slow the Growth of Backup Data - esXpress uses block-level backups and “source-based” data de-duplication to dramatically reduce the size of backup files and the time required to generate them and send them to a target storage device. This also vastly improves restoration time by enabling point-and-click restoration of individual files on a virtual disk or optimized restoration [no fragmentation] of a complete virtual disk.

“Worry-Free, High-Availability Data Protection”– esXpress is the only truly fault-tolerant virtual backup solution on the market today. esXpress VBAs can automatically detect and begin backing up virtual machines from another host that are “VMotioned” in the event of an entire ESX server failure. And esXpress VBAs will automatically roll to secondary or tertiary backup targets in the event a primary backup storage target fails. esXpress can even back up to local and offsite disaster recovery targets simultaneously!

“Get Your Nights and Weekends Back” – The unique esXpress VBA architecture, combined with innovative disk throttling and real-time reporting, allows you to run backups across your entire global virtual environment during normal working hours, with minimal impact on performance.

Why esXpress? Back Up More Data, In Less Time, at Lower Cost

Most backup and restore solutions operate with a “More Data = More Time and More Hardware” equation. Only esXpress reverses this trend, making data protection a “More Data = Less Time and Less Hardware” equation. By conducting backup and restoration of virtual infrastructures in a unique and smarter way, esXpress is able to achieve unprecedented economies of scale, simplicity of management and cost-effectiveness:

- Scalability** – VBAs can be added in just moments, and operate below the VM console, reducing single points of failure and scaling without affecting VM performance. esXpress’ block-level approach to data backup and replication reduces backup times and file sizes, speeds up restoration, extends the life of storage targets and minimizes network impact.
- Simplicity** – esXpress is a self-contained, autonomous and inherently fault-tolerant data protection solution that you can simply “set and forget.” Whether using the existing VMware Virtual Center Console or our simple web-based management interface, esXpress delivers centralized control of all hosts and provides simple one-click restoration of your entire virtual infrastructure, thereby reducing management time and hardware costs.
- Affordability** – An economical, per-host pricing model scales even in the face of growing data and server requirements and ensures you are not penalized when you need to upgrade host hardware.

