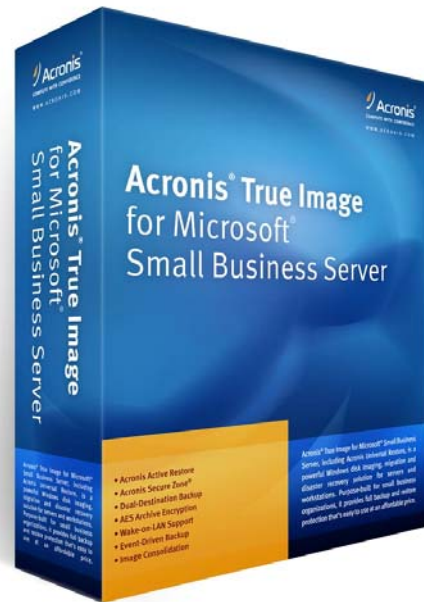


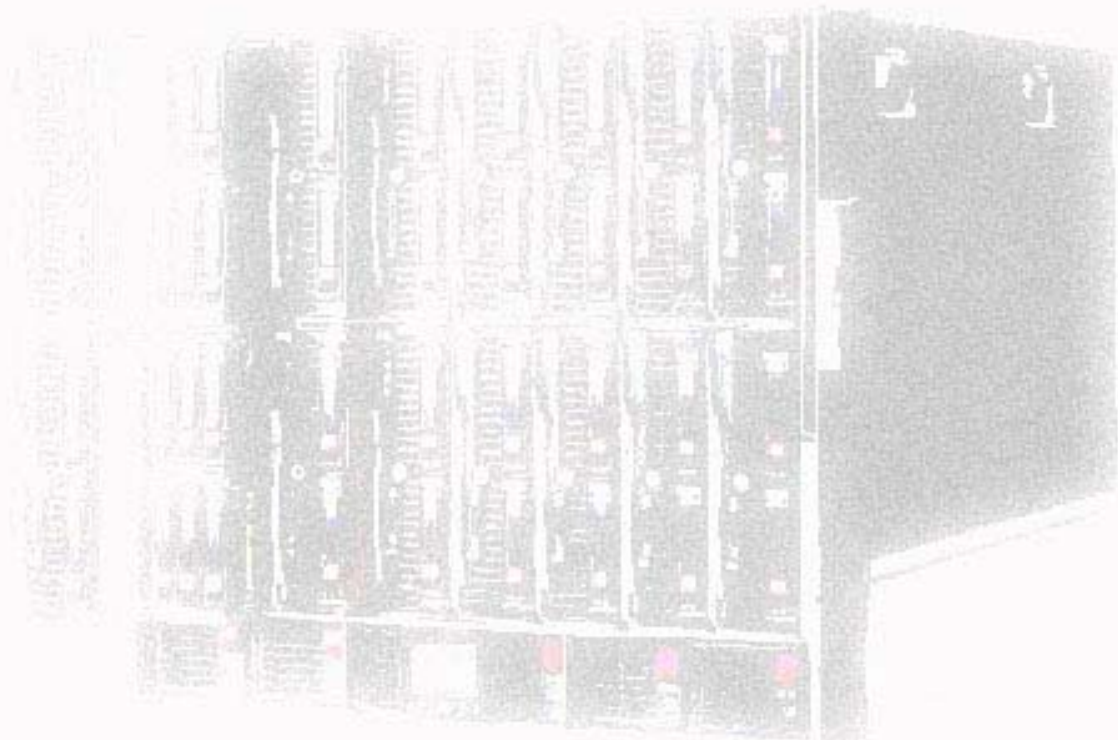
Acronis® True Image Echo™



IT Manager's Guide for Jan. 2009 Update Release

Table of Contents

Page 3	<i>Introduction</i>
Page 4	<i>What is Acronis True Image Echo?</i>
Page 4	<i>The Acronis family of products</i>
Page 6	<i>New with this release</i>
Page 8	<i>Features introduced in 2008 and other features</i>
Page 10	<i>Product family Master List of Functions</i>
Page 11	<i>Exercises for new features</i>
Page 12	<i>Conclusion</i>
Addendum	
Page 13	<i>What makes Acronis True Image Echo such a great choice for mission-critical server and workstation data protection?</i>



Introduction

This guide is designed for IT managers who will be evaluating the corporate family of Acronis® True Image Echo™ disk imaging, virtual and physical server migration, and backup and bare-metal recovery software. This guide will help you assess major features and benefits of the product. You also will learn what makes Acronis Recovery for Microsoft Exchange such a time-saving backup and restore product for protecting Exchange servers.

We will look at the family's features and benefits, some of the underlying technology supporting them, and debut new features that distinguish the January 2009 update release, including:

- **Support for all major server virtualization platforms**
- **Integration with the recently announced Acronis Recovery for Exchange**

To round out this document, we've suggested a number of exercises you can perform to familiarize yourself with some of the new features. And we've included Web links to product pages so you can quickly obtain additional information on each product.



What is Acronis True Image Echo?

Acronis True Image Echo falls generally into the categories of backup and disaster recovery software, as well as migration software for physical and virtual environments. Acronis True Image Echo creates an exact duplicate image of the live disk drives, including the operating system, all configuration files, programs, updates, databases, and such at the drive sector level. This image is independent of the original file format and the hardware from which it was imaged.

The image can be saved to internal or external disk drives (including USB 2.0 and FireWire), networked drives, to a writable CD or DVD, tape, or to virtually any other storage medium. The image also can be saved to the same disk being imaged in the Acronis Secure Zone or to a second destination drive. The image can be used for any number of purposes, including disaster recovery, data backup, system migration, and disk cloning.

The corporate family of Acronis True Image consists of the following products:

Acronis® True Image Echo Enterprise Server

Complete server backup and recovery solution for enterprise network servers

- Create an exact server disk image over network
- Back up and restore individual files and data bases
- Physical and virtual server disaster recovery
- Bare-metal restore in minutes
- Central administration and remote backup and restore
- Works with Windows and Linux servers
- *Virtual Edition version of this product* allows unlimited installations to virtual environments hosted on one hardware mode

More information: <http://www.acronis.com/enterprise/products/ATIES/>



Acronis® True Image Virtual Edition

Delivers flexibility and value in disaster recovery for large numbers of virtual machines

Take advantage of all the functional benefits of Acronis True Image Echo Enterprise Server, above, but in a product that is scaled for environments that back up, restore, or test five or more virtual servers on a single, physical server. Virtual Edition features one price per physical server, regardless of the number of virtual servers it supports. *Acronis Universal Restore*, an option on other Acronis products, is provided free with the Virtual Edition purchase.

More information: <http://www.acronis.com/enterprise/products/ATIVE/>



Acronis True Image Echo Workstation

Comprehensive data protection solution for networked desktop PCs and laptops

- Data and system backups
- Create an exact hard drive image
- Back up and restore individual files and folders
- Bare-metal restore in minutes
- Central administration and remote backup and restore

More information: <http://www.acronis.com/enterprise/products/ATICW/>



Acronis True Image Echo Server for Windows

Onsite data protection and recovery solution for Windows servers

- Create an exact Windows server disk image
- Back up and restore individual files and databases
- Server disaster recovery
- Bare-metal server restore

More information: <http://www.acronis.com/enterprise/products/ATICW/>

Acronis True Image for Microsoft® Windows Small Business Server

Onsite data protection and recovery solution for Microsoft Small Business System users

- Create an exact SBS server disk image
- Back up and restore individual files and databases
- Server disaster recovery
- Bare-metal server restore
- Most of the functionality of our Enterprise Server

More information: <http://www.acronis.com/smb/products/ATISBS/>



Acronis True Image Echo Server for Linux®

Onsite data protection and recovery solution for Linux servers

- Create an exact Linux server disk image
- Back up and restore individual files and databases
- Server disaster recovery
- Bare-metal server restore

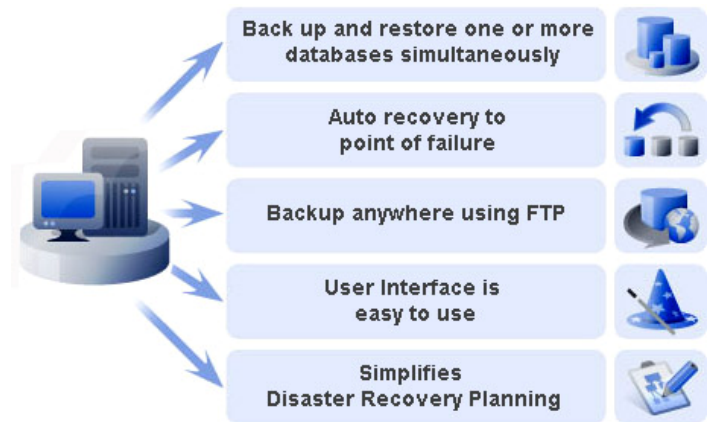
More information: <http://www.acronis.com/enterprise/products/ATISLin/>

Acronis application-specific recovery products for SQL and Microsoft Exchange servers

- **Acronis Recovery® for Microsoft SQL Server** (announced mid-year, 2008) is the industry's leading disaster recovery product for protecting SQL databases. Its rolling snapshots make near-instant recoveries possible, and it manages multiple database backups at the same time. Backup options are unparalleled: FTP support makes it possible to back up anywhere in the world.

More information:

<http://www.acronis.com/enterprise/products/ARSQL/>



Acronis Recovery for Microsoft Exchange (announced Sept., 2008) features the fastest high-granularity database backup on the market. It enables speedy recovery of individual messages, mailboxes and folders, all but eliminating the need for disk storage-intensive brick-level backups. No competing product is faster or more secure. Available for substantial Exchange environments, while an SBS edition serves Microsoft SBS users.

More information:

Acronis® Recovery™ for Microsoft Exchange

<http://www.acronis.com/enterprise/products/ARExchange/features.html>

Acronis Recovery for Microsoft Exchange SBS Server Edition

<http://www.acronis.com/smb/products/ARExchange/>

New with this release

Support for every major virtualization platform. We now support virtual machines and file formats from Citrix XenServer, joining existing support we introduced recently for VMware, Microsoft and Parallels platforms. Virtualization will continue to grow in importance in 2009. This Acronis update gives Acronis users the freedom to choose among virtualization platforms

without having to venture outside of the Acronis backup and recovery umbrella. *See exercise section to try out this feature.*

Enhanced Dual Destination backup. If enabled, the program will automatically place a copy of each backup in either the Acronis Secure Zone, a local drive or network share. With this feature, administrators can further protect their physical and virtual servers in the event that drives holding the original backups suffer physical damage. *See exercise section to try out this feature.*

Acronis Recovery for Exchange Integration – Users of Acronis Recovery for Exchange — backup and recovery software specifically designed for Microsoft Exchange Server — can now access Exchange-specific functions from within the Acronis True Image Echo Management Console. This update gives users access to Acronis Recovery for Exchange wizards and tools through the same console they use to manage the rest of their workstations and servers. New also: the ability to restore Exchange data automatically after an image restore. This feature speeds restorations or migrations of Exchange servers, even to bare metal machines, reducing the overall management workload in the Exchange environment. *See exercise section to try out this feature.*

Other new features simplify administration

The latest release of Acronis True Image includes many new features that not only simplify management of your Acronis-protected resources, but it also automates several functions. Here they are, briefly.

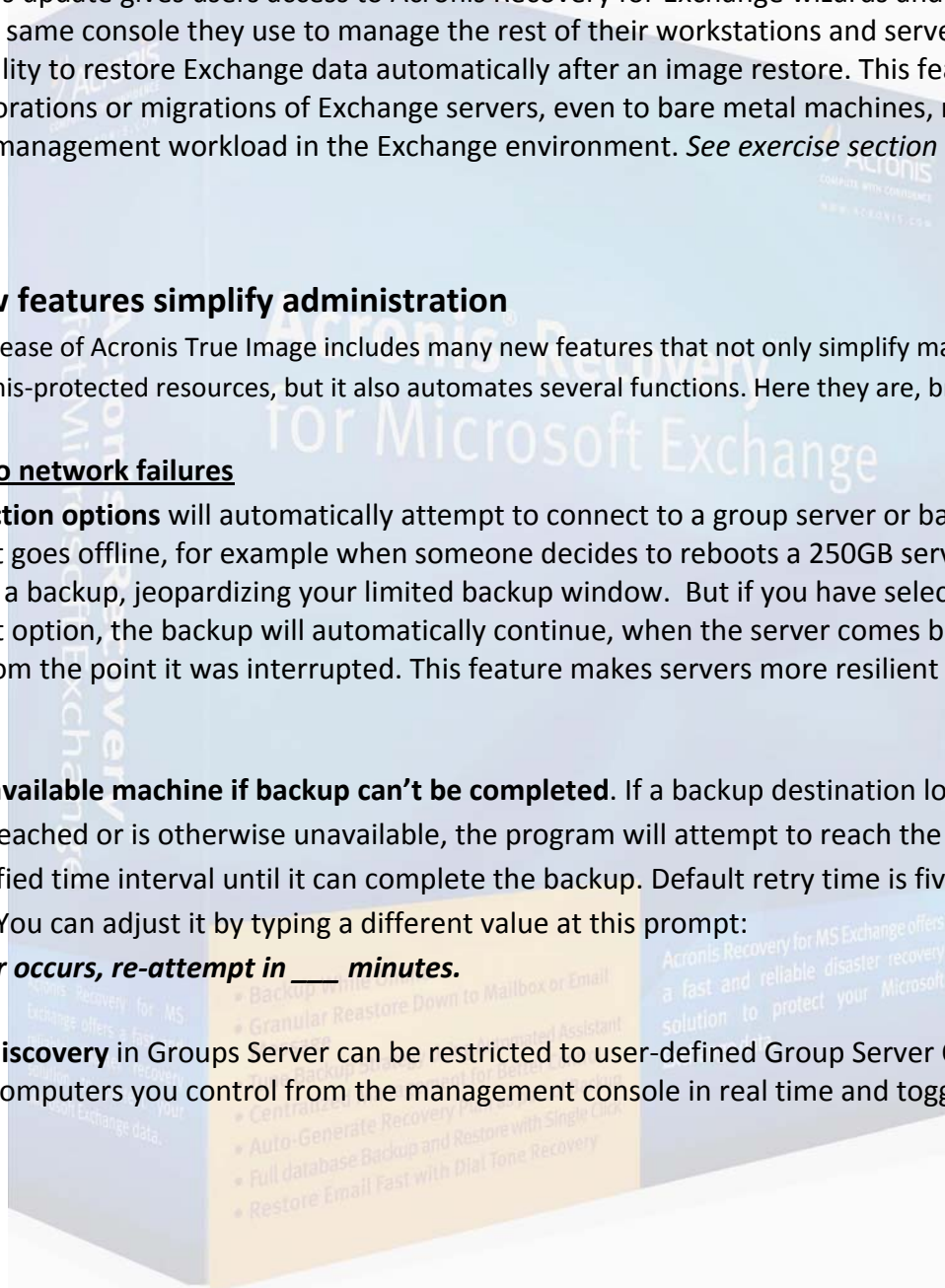
Resiliency to network failures

Reconnection options will automatically attempt to connect to a group server or backup server if it goes offline, for example when someone decides to reboot a 250GB server in the middle of a backup, jeopardizing your limited backup window. But if you have selected the reconnect option, the backup will automatically continue, when the server comes back online, from the point it was interrupted. This feature makes servers more resilient to failures.

Retry unavailable machine if backup can't be completed. If a backup destination location can't be reached or is otherwise unavailable, the program will attempt to reach the location at a specified time interval until it can complete the backup. Default retry time is five minutes. You can adjust it by typing a different value at this prompt:

If an error occurs, re-attempt in ____ minutes.

Computer discovery in Groups Server can be restricted to user-defined Group Server Options. See all the computers you control from the management console in real time and toggle off



those you don't wish to discover. Determine at a glance which computers are available for backup and Do not show messages and dialogs while processing ("silent" mode). *See exercise section to try out this feature.*

File Exclusion from image archives. If you have image files or temporary files you don't want to back up, you can exclude them. *See exercise section to try out this feature.*

Change Security ID (SID) after restoration is finished. When you add hardware, you can easily change the security ID over to the new machine as soon as the image has been restored.

Restore files without full path name. Speeds file recovery.

Domain users can be added to the AcronisBackupServerUsers group on the backup server. This feature addresses the needs of users who need to control administration tasks centrally, for efficiency and security reasons.

Group Server (Windows only) enhancements:

Do not search network for new computers_checkbox. This performance enhancement allows administrators to toggle on and off resources they'll be actively backing up and restoring.

Log the fact that Active Restore was used and finished. Allows a quick check of an event log to confirm that a remote restore was completed.

Command Line enhancements

Command line tool for Group Server. Allows administrator to refresh the list of computers in Group Server from a text file.

Command line tool for Backup Server. An easy way to export Backup Server information – backup file names, locations and computer – to an XML file. Administrator can easily check to see what backups are being performed.

Enhanced FTP Support. FTP can be used in Active Mode and its default port can be changed. This adds active mode support to existing Basic Mode support.

Acronis True Image Features Introduced during 2008

Consolidate your backup archives

Manage backup sets easily by consolidating archives. Take control of your images and keep archives from taking up valuable storage space. Consolidate daily, weekly or monthly incremental or differential images to new full images. Schedule consolidations to further automate archiving processes.

Automate your backup schedules

An event scheduling feature allows you to set a threshold on a particular disk: when a certain amount of data has been written, Acronis will automatically trigger that scheduled task to run and initiate the backup process. This works in addition to prescheduled backups to give users a greater measure of data protection in case a failure were to occur in between the time a lot of data was written and the time of the next scheduled backup. You may schedule more than one incremental/day. It requires writing a simple script to implement near-continuous data protection, allowing you to back up servers more frequently than once an hour.

Work with Dynamic Disks

Created as a direct result of end-user feedback and requests, Acronis True Image recognizes dynamic disks and includes a dynamic conversion tool which can create dynamic volumes.

Further Features:

- **(WOL) Wake on LAN** support to ensure all machines are backed up on schedule.
- Up to **256/AES encryption** for the highest level of data security. – particularly useful for protecting data that is being transmitted to a remote location
- **Initiate unattended restores from a remote location with the Acronis bootable agent** – Recover all systems in the network from one central location
- **Boot from an image, using Acronis Snap Restore™** (a patented technology) – Decrease downtime by allowing systems to be used during a recovery
- **Automatic image verification** – Gain peace of mind by ensuring that images can be used for restoration
- **Differential backups** – Decrease the volume of disk space required to protect data
- **File backups, in addition to our traditional image backups** – Flexible system protection
- **Exclude files from backups** - Capture only business data and save space in storage archives
- **Windows Event Log and SNMP support** – Facilitate administration by plugging into your existing network monitoring application
- **Custom scripts before/after backups** – Achieve compliance with company-wide backup policies
- **Throttling to control hard disk write speed and network bandwidth usage** – Minimize disruptions of business operations
- **Create CDs with bootable images, PXE packages, and bootable recovery media ISOs** - Eliminate the need to have separate recovery media for PXE and ISO and provide flexibility for application management

ACRONIS TRUE IMAGE CORPORATE FAMILY						
Master list of functions						
Feature	ENTERPRISE SERVER	SERVER FOR WINDOWS	SMALL BUSINESS SERVER ²	WORKSTATION FOR WINDOWS	SERVER FOR LINUX	VIRTUAL EDITION
System Protection						
Full disk imaging including differential and incremental backups	✓	✓	✓	✓	✓	✓
File-based backups	✓	✓	✓	✓		✓
VMware Consolidated Backup Support	✓	✓	✓			✓
Exclude file types from file-based backups	✓	✓	✓	✓	✓	✓
Compression	✓	✓	✓	✓	✓	✓
Password protection for Acronis Secure Zone®	✓	✓	✓	✓	✓	✓
Industry-standard AES archive encryption	✓	✓	✓	✓	✓	✓
Multi-volume snapshots	✓	✓	✓	✓		✓
Event-driven backup options	✓	✓	✓	✓		✓
Change System Identification (SID) when restoring an image	✓	✓	✓	✓		✓
Recovery						
Integration with Acronis Recovery for MS Exchange Server	✓	✓	✓	✓		✓
Create bootable media using WinPE and BartPE	✓	✓	✓	✓		✓
Bare-metal restore	✓	✓	✓	✓	✓	✓
Acronis Universal Restore ¹ (restore to different hardware)	✓	✓	✓	✓		✓
Mount images in read/write mode	✓	✓	✓	✓	✓	✓
Acronis Active Restore (priority application restore)	✓	✓	✓	✓		✓
Acronis Startup Manager (boot recovery environment with F11 key)	✓	✓	✓	✓	✓	✓
Support for all major virtual file formats	✓	✓	✓	✓		✓
Dynamic disks support	✓	✓	✓	✓	✓	✓
Automatic reboot after restore option	✓	✓	✓	✓	✓	✓
Administration						
Image consolidation	✓	✓	✓	✓	✓	✓
Backup scheduling	✓	✓	✓	✓	✓	✓
Notifications (email, pop-up, SNMP)	✓	✓	✓	✓	✓	✓
Logging (Acronis log, Windows Event Log)	✓	✓	✓	✓	✓	✓
Wake-On-LAN support	✓		✓	✓		✓
Back up multiple increments throughout a single day	✓	✓	✓	✓	✓	✓
Schedule periodic backup validation	✓	✓	✓	✓	✓	✓
Clone existing schedule	✓	✓	✓	✓	✓	✓
Remote Administration						
Central management console	✓		✓	✓		✓
Manage backup operations for groups of machines	✓		✓	✓		✓
Remote installation and configuration	✓		✓	✓		✓
Remote restore	✓		✓	✓		✓
PXE support	✓		✓	✓		✓
User Interface						
Both wizard-driven GUI and command-line interface	✓	✓	✓	✓	✓	✓
Active Protection						
Hot imaging/backups	✓	✓	✓	✓	✓	✓
Microsoft Volume Shadow Copy Service (VSS) Support	✓	✓	✓			✓
CPU/network bandwidth/disk write speed throttling	✓	✓	✓	✓	✓	✓

¹ Acronis Universal Restore is an optional license and is only available for Microsoft Windows XP and above

² Runs on Microsoft Windows Small Business Server 2003 only

Exercises for new features

Virtualization: To convert a disk image to a virtual disk file of a Citrix XenServer (or any other virtual platform type supported by Acronis – VMware, Microsoft and Parallels). You can also convert workloads from one virtual technology to another.

Create a full backup image first. Once you have the backup, initiate conversion tool,

- 1) Call up the image,
- 2) Chose a virtual platform and
- 3) Chose destination of converted file.

Exchange integration: auto start up of Exchange server after restore

In case of hardware failure you have to

- 1) Restore the lost partition using the Acronis True Image Echo Enterprise Server, and then
- 2) Start the Acronis Recovery for MS Exchange bare metal restore task. To start this task automatically, you need only
- 3) Select **Run Acronis Recovery for MS Exchange Bare Metal Restore after data recovery** option in the final step of the Acronis True Image Echo Enterprise Server Restore Data wizard.

Dual Destination Backup: Choose two backup destinations so if one fails you have another backup. One can be local and the other remote.

- 1) During setup, change the preset to **enabled**.
- 2) Chose a second backup location. Previously the second backup location could only be the Acronis Secure Zone. Now you can also choose to automatically place a copy of each backup on a local drive or network share.
- 3) The consistency of the copy is maintained automatically. After a backup is saved to the second location, the program compares the updated archive contents to the copy contents.
- 4) If some backups are missing from the copy, they will be copied to the external location along with the new backup.

File Exclusion from archive images: Prior to this version, you could only exclude files and folders from being backed up. Now you can also exclude files from disk or partition images.

- 1) In the middle of creating backup or setting up the backup task, you'll be brought to file exclusion screen,
- 2) At this point, you can apply custom filters to mask out file types like *.zip, *.exe, or *.mp3
- 3) During backup these files will not be backed up.

Conclusion

Competition improves the breed. Acronis has regularly taken this saying to heart from the time it introduced and patented its disk imaging technology in 2000 to right now in 2009 with the latest update for Acronis True Image products.

In an otherwise weak worldwide economy, Acronis continues to do a brisk business in backup and recovery sales, in part because Sarbanes-Oxley (SOX) in the US and other compliance requirements here and around the world don't go away when the economy slows. And, they continue to seek out products can improve the return on their IT investments and shorten recovery times. When an hour of lost server access can cost a company tens of thousands of dollars, and often much more, faster, more efficient products deliver an important competitive advantage.

New ways to maximize your investment. That's why Acronis continues to pursue new ways to help organizations maximize their IT investment and reduce the amount of work required to protect it. We think you will agree that the latest Acronis True Image update furthers the company's reputation for comprehensive and reliable products for protecting server and workstation data.

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To find out more about Acronis True Image products:

Call Corporate Sales
1 877 669-9749
1 650 745-2132 Fax
sales@acronis.com

Addendum

What makes Acronis True Image Echo such a great choice for mission-critical server and workstation data protection?

We've chosen to highlight our server and workstation offerings to illustrate what makes Acronis' imaging-based backup and restore capabilities so appealing to customers. There are plenty of products that can deliver a verifiable backup. But so many fall down when they are called upon to recover a server or workstation quickly and completely from a disaster. That's where Acronis' disk-based imaging technology, patented and aggressively enhanced over the years, gives organizations the guaranteed recoveries they need.

Two Acronis True Image Echo products have been chosen to illustrate the Acronis advantage.

Acronis True Image Echo Server for Windows[®]

Small and medium-size businesses place a greater reliance on fewer resources than their larger counterparts, but their data protection needs are no less important. How much business would an organization lose if even one of these servers went down? Acronis True Image Echo Server *for Windows* provides comprehensive system protection and recovery of Windows servers so businesses get *can get back* to business quickly.

Acronis True Image Echo Server allows you to create an exact disk image of a hard drive, including the operating system, applications, databases, and configurations or backup individual files and folders. Within minutes, a complete system recovery can be accomplished from an image, with no reinstallation of the operating system, applications or any reconfigurations or individual files and folders restored. Recovery can be performed to an existing system, to a new system with different hardware (using an optional Universal Restore module), or to a virtual server.

Wizard-driven interface. The Acronis True Image Echo Server's wizard-driven user interface walks users through backup and recovery tasks, enabling a comprehensive solution to be implemented that gives up nothing to the solution a much larger IT organization would be able to mount. Moreover an IT manager can implement this without the comprehensive IT knowledge required to set up a bulletproof data protection program using other products. Because Acronis can take a "hot" image from live servers, users are never impacted or forced to log off during creation of a server image. Using the Acronis Drive Snapshot technology, the product can back up critical operating system files, the master boot record, partition tables and

any partition-based boot records without a reboot. With support for Microsoft Volume Shadow Copy Service (VSS), even mission-critical database applications, such as Microsoft Exchange, SQL and Oracle, can be backed up during business hours because they are not taken offline.

When disaster strikes, recoveries are made simple through Guided Disaster Recovery, a feature unique to Acronis. Guided Disaster recovery allows even non-administrators to step up to a management console and decisively recover from a failure, providing an incalculable safety net if an IT manager is unavailable when disaster strikes.

Acronis True Image Workstation

Acronis Workstation products are similarly comprehensive and protect users against both their own errors (accidental deletions of a file, for instance) as well as virus-driven failures, or hard drive failures, or actual hardware loss, say if an office were flooded and equipment destroyed. Acronis True Image Workstation, for instance, is an ideal solution for backup and disaster recovery of an entire office network or a local computer.

Exact image of your workstation. Acronis True Image Echo Workstation creates an exact disk image of your office desktop and allows you to backup key data files and folders. You can run backup jobs on multiple machines simultaneously on both 64-bit and 32-bit Windows systems with the centralized remote management capabilities. When it's time to recover, users of competing products are routinely surprised at Acronis' ability to restore the entire desktop in minutes after an unforeseen event. Our patented Active Restore feature cuts downtime by allowing restored workstations to be used while user data is restored from the backup. And Acronis' optional Universal Restore module gives companies the flexibility to recover to different hardware, a lifesaver where all of a contents of a lost or stolen "road warrior" laptop – operating system, applications, settings and data – need to be restored quickly onto a new laptop out in the field.

Acronis imaging technology applies across our product line

We've highlighted just two of the Acronis True Image products, but the imaging technology that makes them leading products in the Windows and Linux product space runs through the entire Acronis True image line, providing the ideal backup and recovery answer to small, medium, and enterprise IT managers looking to protect their Windows and Linux environments. Read on and try some exercises that illustrate some of the update's new features.

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