

*Fast Backup and Live Recovery Solutions for Real  
Protection in a Virtual World*

# **ActiveImage**<sup>TM</sup> **3.5** **PROTECTOR**

**Server / Desktop Edition**

Innovative backup solutions optimised for physical environments featuring:

- **Active Inline Data Deduplication Compression (IDDC)**
- **Smart Sector technology for faster backup**
- **Disk image based secure restoration**
- **Windows Server 2012/2012 R2 and Windows 8.x support**
- **Integrated Offsite Replication**



Sector-based hot imaging backup and recovery solution with Inline Data Deduplication compression

# ActiveImage<sup>TM</sup> 3.5

## PROTECTOR

Server / Desktop Edition

## New Features in ActiveImage Protector v3.5

### Inline Deduplication Compression feature improves backup storage utilisation

ActiveImage Protector's new Inline Data Deduplication Compression (IDDC) feature efficiently eliminates duplicate data while compressing image files at a high rate resulting in a significant reduction in backup storage demands. With the proliferation of duplicate data in today's ever increasing use of Hyper-V virtual environments, ActiveImage Protector's inline data deduplication technology ensures high-speed backup coupled with minimal image file size and optimum system performance.

### Support for Windows Server 2012 and Windows 8

ActiveImage Protector supports the Storage Space feature in Windows Server 2012 and Windows 8, and saves backup images to a virtual volume in a storage space. ActiveImage Protector also supports backup of CSVFS volumes, part of Windows Server 2012's Cluster Shared Volume (CSV) feature. ActiveImage Protector is also VSS compliant which, when backing up live virtual machines together with VSS-aware server applications, ensures data consistency. Incremental backup of the ReFS (Resilient File System) is also supported.

### Support for the latest uEFI mother boards

Pre-Boot AIPBE (Linux boot environment) offers native support for uEFI.

### Updated virtualization utility

ActiveImage Protector supports conversion of image files to the VHDX file format.

### Support for Windows 8 client in Hyper-V

ActiveImage Protector's ReZoom and Seamless Hot Restore (SHR) features are now included in the Desktop Edition. Simultaneously recover and start up a virtual machine in a Windows 8 environment while the VM is restoring in the background.

The ReZoom feature can select individual Hyper-V virtual machines from the host's backup image and restore them to the original or a new Hyper-V host.

The SHR feature quickly starts a VM from the backup image while simultaneously restoring the same VM into the Hyper-V environment.

### Backup multiple disks to one single disk image

AIP's new Multiple Disks In One Image feature backs up multiple disks into the same disk image. Backup performance is enhanced when combined with Inline Data Deduplication Compression.

## ActiveImage Protector Main Features

### Backup

#### Hot-imaging of a running Windows machine

ActiveImage Protector's Hot-Imaging feature backs up an entire host, including the OS, applications and data files while the machine is active and running. AIP creates safe backups of VSS-aware applications using VSS (Volume Shadow Copy Service), a feature automatically incorporated as part of Windows Server 2012, 2008 and 2003, as well as Windows 8, 7, Vista and XP.

#### Cold-imaging of a static entire Windows machine

Create a backup image of a static system volume by cold-imaging with ActiveImage Protector. This is particularly useful to back-up new or clean system environments (directly after a Windows OS install) or for taking a snapshot of systems prior to a failure.

#### Command line execution support

The majority of AIP's features can be executed using either the command line or via a script file. AIP's command line interface allows system management tools to seamlessly administer backups via a prepared script file.

#### Fast Backup with Smart Sector Technology

AIP's Smart Sector Technology enables fast backup by backing up only the used sectors of a disk. This translates into smaller backup file sizes.

#### Fast Incremental Backup

Our proprietary filter driver tracks all data changes made since the previous backup. With each new incremental backup only the changes are saved, resulting in both reduced processing time and dramatically smaller backup file sizes.

#### Reconcile Feature in Continuous Incremental Backup

In the past, the failure, loss or corruption of an incremental backup file would mean a completely new backup would have to be created. AIP's Reconcile Feature allows you to continue the incremental chain even if an incremental file is lost, corrupt or has failed.

#### Smart Sector Technology - Backup Linux partitions from Windows

In a Windows/Linux multi-boot environment, AIP's Smart Sector Technology can backup both Linux (Ext2, Ext3 & Ext4) and Windows partitions from Windows.

#### Cold Backup of VMware ESXi 5 Server

Smart Sector feature provides faster backup by only backing up the used sectors on a disk.

#### Bad Sector Skip Function

In the event of a failing or corrupt disk, AIP's Bad Sector Skip function can continue a backup process even when unreadable or bad sectors are encountered, enabling the recovery of the remaining good sectors.

#### Encryption and Compression

ActiveImage Protector can create compressed and encrypted backup images and supports up to 256 bit encryption.

#### Flexible Backup Media

Backup image targets/storage can be pointed to any Windows accessible destination including NAS, SAN (fiber channel), USB, FireWire (IEEE 1394), eSATA or a shared network folder.

## Backup Features

### Integrated Off-Site Replication

ActiveImage Protector includes Automated Off-Site Replication. Backup files can be replicated to a shared folder or an FTP directory over a WAN. Up to three replication targets may be specified for a backup task. In the event of a natural or physical disaster, important backup data can be safeguarded by replicating the backup image file to a remote location for future recovery.

### Image Retention Policy

The Image Retention Policy feature can save space by automatically deleting backup images (an entire backup image set) that are older than the most current specified backup image set.

### Automatic Incremental Backup At Shutdown

In addition to normal scheduled backups, ActiveImage Protector can be set to automatically create a lightning fast incremental backup while a machine is shutting down.

### Throttling Feature

With ActiveImage Protector, system resource and network bandwidth usage priorities can be adjusted to ensure AIP's backup process does not affect the performance of other mission critical processes.

### Throttling Network Bandwidth Usage

With the network bandwidth throttling feature network bandwidth usage can be adjusted to lower the overall impact on bandwidth when a backup destination is located on a network share.

### Disk-to-Disk Copy

ActiveImage Protector's Disk-to-Disk Copy (D2D) feature can copy or clone the entire hard disk to a new or different disk. If the target drive is larger than the source, volumes can be kept the same size or enlarged proportionally to occupy the additional space on the target disk.

### Standard Snapshot Driver (Volsnap)

ActiveImage Protector was designed to use Volsnap, Microsoft's standard snapshot driver. No additional drivers are required.

### Point-In-Time Multi-Volume Snapshot

If a database is spread across multiple volumes, a simple backup image may not be restored correctly. The issue is caused not only by the difference in starting times between the backups and their respective volumes, but also by the inconsistency of the data created in the backup images themselves. Restoring inconsistent backup images results in an inconsistent database. ActiveImage Protect solves this problem by taking a point-in-time snapshot of all the volumes.

### Backup of VSS-aware Server Applications

ActiveImage Protector creates consistent backups of VSS-aware server applications such as SQL Server, Exchange Server and Oracle.

## Restore Features

### Restore Wizard

An easy-to-use wizard guides you step by step through the simple, fast and secure restoration process of your sector-based backup images.

### Fast Bare Metal Recovery

ActiveImage Protector's lightning-fast restore engine dramatically speeds up volume restoration to a new hard disk.

### Linux Based Recovery Environment

Perform faster disaster recoveries and static cold back-ups with ActiveImage Protector's Linux based boot environment (AIPBE).

### Shrink On The Fly

ActiveImage Protector provides Shrink on Restore for NTFS volumes. NTFS volumes can be restored to disk drives that are smaller than the original disk. The minimum requirement is that there is enough space on the smaller drive to restore the amount of actual data of the original volume.

### Pre-Boot AIPBE

ActiveImage Protector's Pre-Boot AIPBE feature enables the AIPBE to be booted directly from the hard disk without the use of an optical drive. A very useful feature on machines without optical media drives. (Not available for Hyper-V Server, Server Core)

### ActiveImage Protector Boot Environment (AIPBE) Builder

In conjunction with the Windows AIK or ADK, a Windows PE based boot environment builder is provided.

## Virtual Environment Support

### Enhanced Support for Virtual Environments (V2P, V2V, & P2V)

ActiveImage Protector provides the following virtualization tools for migration or restoration of virtual or physical machines. V2P (virtual to physical), V2V (virtual to virtual), and P2V (physical to virtual).

### Restore to virtual or physical machines on a different server and hardware

ActiveImage Protector's A.I.R\* (Architecture Intelligent Restore), developed using Windows Embedded technology, can restore backup images files to virtual or physical machine on a different servers and dissimilar hardware. A.I.R. supports the restore of disks and/or selected volumes.

\* A.I.R. technology enables easy migration across physical and virtual machines. i.e. a tablet PC which has no optical media drive.

## Other Features

### Support for latest hardware architecture

ActiveImage Protect supports the latest hardware architecture including uEFI mother boards and GPT (GUID partition table) volumes (boot, system, and logical).

### Granular File and Folder Restore

In the event of a system crash, ActiveImage Protector can mount an image file as a virtual drive to quickly and conveniently extract any files or folders contained in the image file.

### Incremental Consolidation

Multiple incremental backup files can be consolidated into a single incremental file, saving storage space and simplifying backup file management.

### Image File Unification Feature

ActiveImage Protector's Image File Unification feature unifies a full base image file and all associated incremental files into a single backup file.

### E-Mail Notification

Email notification can be sent (using SSL/TSL) to an email address of your choice. Notifications include successfully completed backups, backup failure, or in the event that AIP encounters an error, a restart or failure.

### Remote Backup Management

ActiveImageProtect offers centralised management of AIP installations on remote machines over a network. This feature can be used to push install AIP agents (either new installations or upgrades) to remote machines and manage AIP agents on remote machines, including backup schedule creation, task monitoring and more.



[www.netjapan.com](http://www.netjapan.com)