

ActiveImage™ 2022

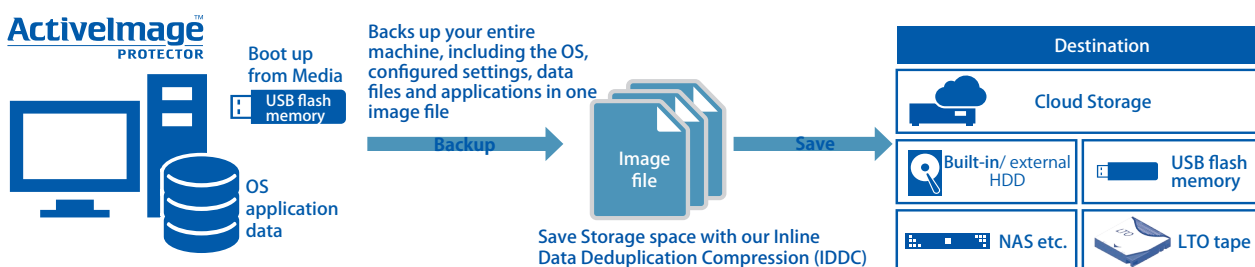
PROTECTOR

IT Pro

What is ActiveImage Protector™ IT Pro ?

Image based backup and recovery solution for IT professional

ActiveImage Protector™ IT Pro is an image based backup solution designed for IT professionals who need to back up and install OS/ applications on a fairly frequent basis at the clients workplace. ActiveImage Protector™ uses the latest sector-based technology to back up your entire hard disk, including the operating system along with all your applications and data. The backups are saved to any available storage location, including local hard disk, USB flash memory, cloud storage, network storage such as NAS and LTO tape.



No Installation Required

Without installation of the programs and drivers on server, ActiveImage Protector™ IT Pro enables to take a hot backup of the live operating system in clean state / all your applications / data entirely included in one image file. For example, when doing system maintenance, you can take a hot-imaging backup of a live server which has not been regularly backed up for long time, without shutting down the server, directly from the ActiveImage Protector™ IT Pro on DVD or USB media. You do not need to run a risk of installing uncertified programs or device drivers in production environment.

New Features of ActiveImage Protector 2022

Direct-To-Cloud Backup saves the created backups directly to cloud storage :

Backup systems directly to cloud storage. Supported public cloud storage services include S3 compatible object storage and Azure Storage. SFTP protocol is also supported.

LTO Tape support :

ActiveImage Protector™ now supports LTO tape devices as the destination storage suited for backing up large data volumes.

Incremental Backup

Fast and efficient incremental backup includes only sectors that have changed from the last backup.

IT Pro Creator wizard for creating boot media :

ActiveImage Protector™ IT Pro provides IT Pro Creator guiding through every steps to create a boot media. Now supports ADK for Windows 11/ Windows Server 2022 and Windows RE.

Disk-To-Disk Copy :

A new disk-to-disk copy option supports physical disks and volumes for a complete sector by sector copy.

Note: The functions with ※ in this data sheet are functions that can not be used in "Boot media" created by IT Pro Creator.

Backup Features

Image file based backup of the entire hard disk

ActiveImage Protector™ backs up your entire machine, including the OS, configured settings, data files and applications in one image file. When disaster strikes, select a backup image to quickly restore for a fast and complete recovery.

Hot-Imaging backup for live machines ※

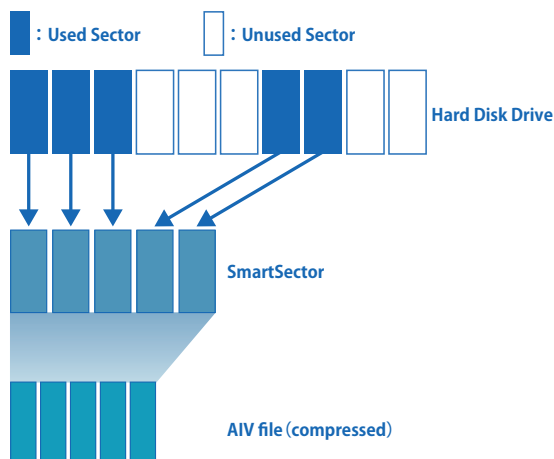
ActiveImage Protector™ backs up your entire machine, including the OS, applications and data files, while the machine is active and running without stopping the services including database or open files. The hot-imaging backup is useful especially when backing up the system and the data frequently updated throughout the day and night on non-stop server.

Cold-Imaging backup for static machines

ActiveImage Protector™ may be booted from the product media to create a backup image of a clean static system volume (immediately after installation of OS). Cold-imaging backup saving the point-in-time state of the failed system is convenient to examine the cause of the system failure.

Faster and smaller backup with Smart Sector technology

ActiveImage Protector™'s Smart Sector technology only backs up the used sectors on a disk, resulting in faster backup and smaller backup files.



Encryption of Backup Images

ActiveImage Protector™ can create password-protected and encrypted backup images and supports up to 256 bit encryption.

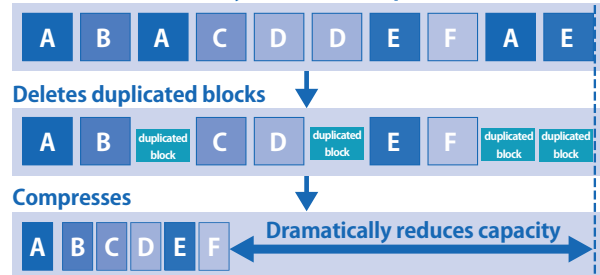
Bad Sector Skip

In the event of a corrupt or failing disk, ActiveImage Protector™'s Bad Sector Skip function will ignore bad or unreadable sectors, allowing you to back up and recover data in the remaining good sectors.

Save storage space with IDDC

Our Inline Data Deduplication Compression (IDDC) feature eliminates duplicate data while simultaneously compressing it, resulting in a significant reduction in backup storage requirements. Backup using IDDC does not increase the overall backup processing time (according to our test results: 27 hours to back up 11.7 TB data). You do not need to purchase an optional tool or an expensive storage offering de-duplication feature. No special configuration settings or operation are required.

Creates index for every block of backup stream



Fast Incremental Backup

Fast and efficient incremental backup includes only sectors that have changed from the last backup. The incremental backup saves both process time and storage space. ActiveImage Protector™ includes the proprietary change tracking filter driver for the fast incremental backup.

Base Backup			
1st incremental file			
2nd incremental file			
3rd incremental file			

Smart Sector backup of Linux Ext 2 / 3 / 4 from Windows

In a Windows / Linux multi-boot environment, ActiveImage Protector™'s Smart Sector Technology can back up both Linux (Ext 2, Ext 3 and Ext 4) and Windows partitions from Windows.

Command line execution support

Most of ActiveImage Protector™'s features can be used by specifying parameters for command line tool or with command file. ActiveImage Protector™'s CLI allows backups to be seamlessly administered by system management tools, if any, by using prepared script file.

A variety of Storage Media are supported

Save your backups to any available storage location, including NAS, SAN (fibre channel), USB, eSATA, network shared folders, cloud storages, etc., supporting a variety of system configuration and backup policies.

Backup Options

Support for Public Cloud Storage **New !**

Cloud storages including S3 compatible object storage and Azure Storage are supported as the backup destination / restore source storage enabling share management of backup images and ensuring availability of expanded backup storage capacity. ActiveImage Protector™ supports the SFTP protocol. The backup files can be saved directly to the private cloud server or rental server compatible with SFTP.

Scripting

Scripts can be implemented to run before and/or after snapshots are taken or after the backup image has been created. An example would be to execute a user-specified script to purge database cache before taking a snapshot and resume database after taking a snapshot (before starting a backup task), a script to copy / edit the created backup image file, etc. Scripts can be implemented respectively for a base backup and incremental backup tasks.

Offsite Replication in ImageCenter™ LE

The combined use of ImageCenter™ LE, ActiveImage Protector™ image management tool, provides Offsite Replication feature for replicating the backup image files to the replication target including a Network Shared folder, FTP, FTPS, SFTP, WebDAV, Amazon S3, Azure Storage, OneDrive, Google Drive and Dropbox.

LTO Tape Support **New !**

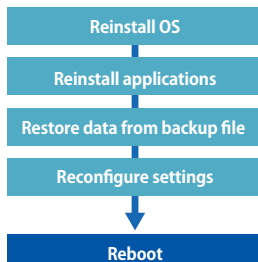
LTO Tape Support provides high speed backup of bulk data to higher capacity tape storage. The tapes saved at a different location can escape from physical damages, isolating backup data from a ransomware attack or when a disaster occurs. Tape pool configured with a group of multiple tapes is also supported.

Restore Features

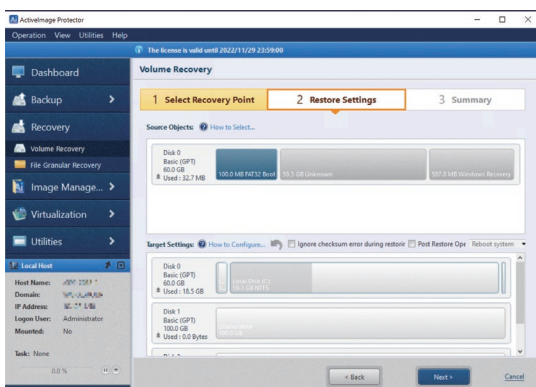
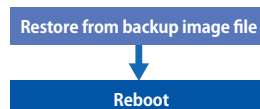
Fast and full-state recovery from disk image-based backup

In the event of a system failure due to hard disk failure, the traditional lengthy recovery process involved the reinstallation of OS and applications, data recovery, etc. ActiveImage Protector™ is a sector-based disk imaging backup / recovery solution and the built-in wizards guide you through every steps to perform required operations for recovery from the backup image file. Select the most up-to-date incremental backup file and your system is restored to the most updated state.

General backup software



ActiveImage Protector



Fast Bare Metal Recovery

ActiveImage Protector™'s lightning-fast restore engine dramatically speeds up recovery time. Bare Metal Recovery provides capabilities for initializing and creating partitions on the bare metal disk.

File Recovery feature ※

In the event of a system failure, as is often the case, you may only need specific files to restore in order to restart your duties. File Recovery feature allows you to restore a specific file or a folder from a backup image file on ActiveImage Protector™'s GUI. Then, the stream information and access rights assigned to files, which Copy File feature of Mount Image often fails to recover, are inclusively restored.

Architecture Intelligent Restore

A.I.R.* can restore virtual and physical machines from ActiveImage Protector™'s backup image files to different hardware. A.I.R. can also restore entire disks and/or selected volumes.

*A.I.R. (Architecture Intelligent Restore) can restore and migrate between physical machines.

Repair Boot Configuration

Recovery of BCD in MBR is supported on boot environment. In case that you failed to back up boot partition in the partition table, or that restored "C:" drive alone failed to boot up the system, the use of "Repair Boot Configuration" tool enables to restore BCD for the restored system to be bootable.

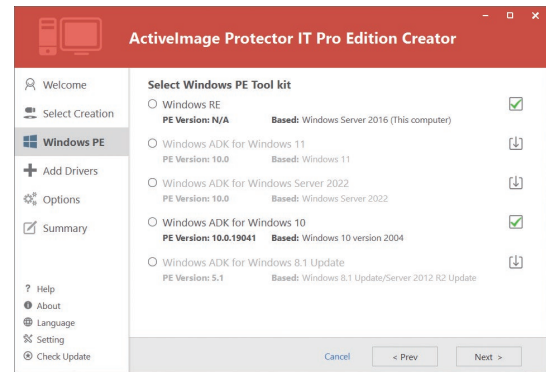
Shrink On the Fly

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.

IT Pro Creator wizard for creating IT Pro boot media

ActiveImage Protector™ IT Pro provides IT Pro Creator guiding through every steps to create a boot media. You can choose a media type, i.e., USB flash memory, USB hard disk, ISO image, optical media to create the boot environment. If a note PC does not come with an optical media drive, the use of bootable USB flash memory or USB hard disk drive offers bare metal recovery option. Bootable USB flash memory/ hard disk drive or SSD may provide you with a partition allocated for saving user data. Even in an emergency case, IT Pro Creator enables you to choose a media type most suitable for the system environment and proceed with the operation. In the event of a system failure on a server which the latest RAID driver is installed, if the dedicated device driver is not included in the boot media, the device cannot be recognized and restored. The use of IT

Pro Creator enables you to build the boot environment by adding the device driver and configured settings for full-state recovery. ADK for Windows 11/ Windows Server 2022 and Windows RE are supported now.



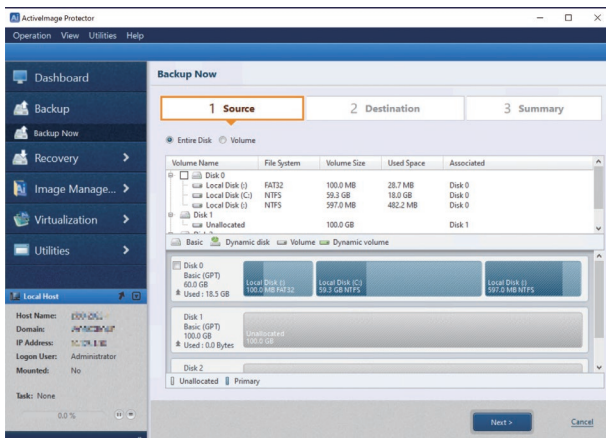
Enlarge or reduce target volumes or partitions during recovery

NTFS volume may be restored to a volume in specified size larger or smaller than the source volume (NTFS volume only).

Operation

ActiveImage Protector™'s GUI provides tools for efficient operations

ActiveImage Protector™'s GUI provides dashboard window enabling real time monitoring of the status of tasks, logs, schedules and disk information. Backup / Restore wizards windows make the software operation more intuitive.



Remote File Explorer

Built with File Explorer for selecting files / folders. Remote File Explorer allows you to browse files and folders from your image files in network shared folders on remote clients just in the same manner as on local computer.

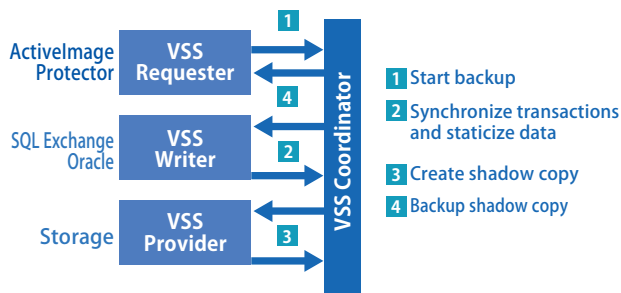
Snapshot Driver

Standard Snapshot Driver (Volsnap)

ActiveImage Protector™ uses Microsoft's standard Volsnap snapshot driver. No additional drivers need to be installed.

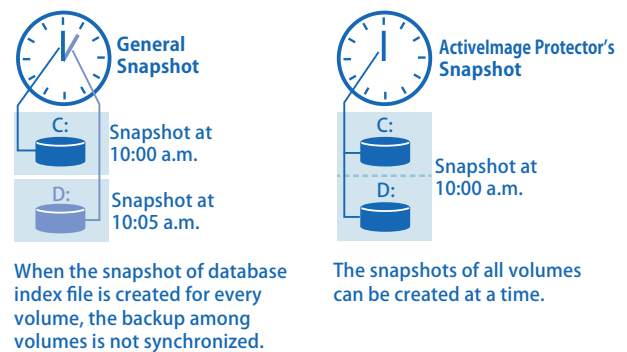
Backup of VSS-aware server applications

Create consistent backup of Microsoft VSS (Volume Shadow Copy Service)-aware server applications such as SQL Server, Exchange Server and Oracle.



Point-in-time multi-volume snapshots

ActiveImage Protector™ offers superior recoverability of databases spread across multiple volumes by taking a point-in-time snapshot of all volumes at the same time, thus ensuring consistency and recoverability. If database spanning across multiple volumes, backup by volume causes the inconsistency of the data in the backup images due to the difference in starting times between the backups. Restoring inconsistent backup images results in an inconsistent database. ActiveImage Protector™ solves this problem by taking a point-in-time snapshot of all the volumes.



Virtual Environment Support

Enhanced support for virtual environments (V2P, V2V & P2V)

ActiveImage Protector™ provides the virtualization from physical machines to virtual machines (Hyper-V, ESXi) or vice versa. The virtualization process includes the installation of the driver required for booting the virtual machine.

Virtual conversion utility

Virtual conversion utility is provided to convert a backup image file to virtual disk bootable as virtual machine. Conversion to the latest virtual disk format, VMware VMDK, Hyper-V VHD, VHDX is supported.

Virtualization Adapter ※

The driver for virtual machine can be injected into the current image file, which is saved as the differential file (.aix) of ActiveImage Protector™. The differential file may be restored to a virtual machine.

P2V (physical to virtual) conversion directly to virtual environments

P2V conversion supports Hyper-V or VMware ESXi as the target host to create the virtual machine attached with a converted virtual disk, enabling to immediately boot up the virtual machine.

P2V (physical to virtual) conversion directly from hard disk ※

P2V conversion feature supports direct conversion from a hard disk to a virtual disk bypassing P2V conversion from an image file which saves the process time.

Support for P2V (physical to virtual) disk on Windows PE

Conversion from physical to virtual disk (conversion to virtual disk only) is supported in Windows PE-based boot environment.

Image Management ※

Image Mount (Granular File and Folder Recovery) ※

ActiveImage Protector™ can quickly mount an image file as a drive, allowing you to extract any file or folder contained in the image file. When image file is mounted as a writable drive, the changes made on the drive will be saved as differential files.

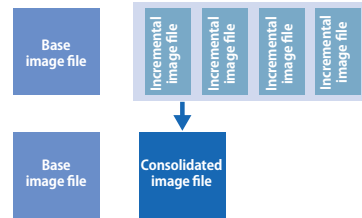
Archive Backup Files ※

Use the archive (unification) feature to unify a full base image file and all associated incremental files into a single backup file.



Consolidation of Backup Files ※

Consolidate incremental backups into a single incremental file to save storage space and for easier management.



License Management

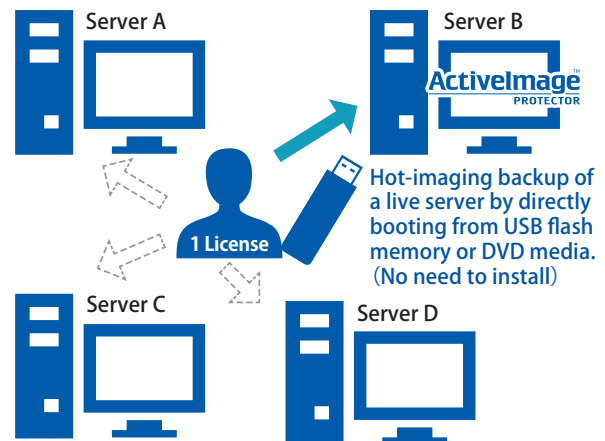
Create boot media including license information

ActiveImage Protector's IT Pro Creator creates boot media referring to the license information over the internet. The created IT Pro boot media can be used until the end of the specified validity period regardless whether online or offline.

IT Pro license conveniently designed for IT Professionals and offered at affordable price

IT Professionals of system integration businesses visit a variety of client companies to back up and build up server infrastructure. One of the problems is the cost of backup programs. In most cases you have to purchase one software license per a machine, therefore, it costs you a lot. In order to solve the problem, Actipty offers a newly designed license policy. ActiveImage Protector™ IT Pro is offered on a subscription basis, licensed per technician, allowing one technician to backup and restore an unlimited number of systems (server/ desktop)

on an unlimited number of machines for a period of one year. You can create IT Pro Boot Media to run the program from the media.



Others

Disk-To-Disk Copy **New !**

Disk-to-disk copy is used when migrating data from a hard disk to a large-capacity disk or to an SSD. The Disk-to-disk Copy feature can select the entire disk or a specific volume to copy, or copy to a higher capacity disk or volume. Data volumes from different disks can be combined using disk-to-disk copy for a new single disk.

Supports the latest version OS, uEFI compatible motherboard

The latest versions of Windows OS and Windows Server OS are supported. Backup and recovery features support GPT disk in uEFI boot system.

Supports the latest files systems

The latest file systems including ReFS (Resilient File System) , Storage Space and 4K sector disk are supported.

Support for hardware RAID

Backup / recovery of hardware RAID is supported.



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