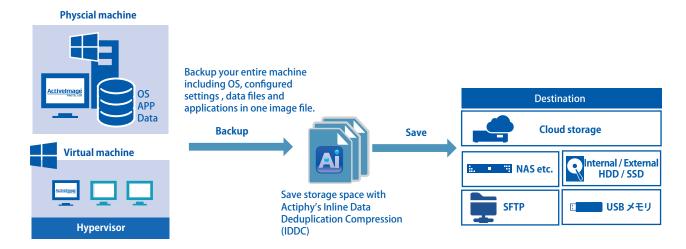
Activelmage 2022

Desktop

What is ActiveImage Protector™ Desktop?

Image based backup and recovery solution optimized for Windows client PC

ActiveImage Protector™ Desktop is an image based backup and recovery solution that supports physical and virtual environment on Windows client PC. ActiveImage Protector™ backs up the entire hard disk, including Windows client PC's operating system along with all your applications and data in a backup image file. When an emergency arises, wizard-driven interface guides you through the system recovery or file / folder recovery. Save your backups to any available storage location depending on the system configuration or intended use of the backup files, including USB HDD/SSD, cloud storage, as well as commonly-used NAS, etc.



Provides support for Disaster Countermeasures and Security Measures

ActiveImage Protector™, a disaster recovery solution, is designed to provide "a fast and successful recovery", and is useful for disaster recovery. Recently an increasing number of business institutions have introduced some sort of backup system offering a disaster recovery solution in the event of natural disaster or virus attack. On the other hand, many of them have experienced issues that "the system recovery never completed or took lengthy time" or "the restored system never boots up" in the event of a system failure which may lead to a business continuity crisis. ActiveImage Protector™ backs up your entire hard disk including the operating system in a single operation. In the event of a hardware failure of the backup source machine, the system can be restored to a different physical machine or a virtual machine. Immediate start-up of a virtual machine from a backup image file enables you to resume the server operation.

New Features of Active Image Protector™ 2022 (May 2022 Update)

VNC on RescueBoot:

ActiveImage Protector™ comes with RescueBoot feature enabling system recovery in the event of emergency without the use of external device. VNC viewer is now provided to remotely operate RescueBoot boot environment. System administrator can now restore the failed system in RescueBoot via VNC instead of local PC.

Extended File Backup feature:

This update additionally provides File Exclusion option and Network Shared Folder Backup feature.

Enhanced installer:

When installation fails, rollback operation is supported for cancelled installation. Update installation is now allowed while a backup task is being executed.

Backup Features

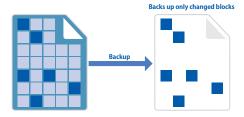
Image file based backup of the entire hard disk

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.



New features of File Backup New!

ActiveImage Protector™ provides File Backup enabling to back up granularly selected files and folders. Incremental Backup includes only changes made in a file saving storage space. You can specify Files, Extension and Pass which will be excluded from the backup files.



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-intime state of the failed system is convenient to examine the cause of the system failure.

Encryption of Backup Images

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

USB SmartDetect™

Automatically detects when your USB backup disk is not connected and will prompt you to resume your backups once the disk is reconnected. Even when multiple USB hard disks are specified as the destination to save backup images, USB SmartDetect feature can be enabled.

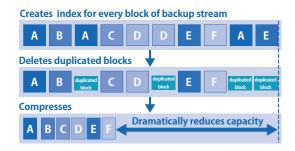
Fast Incremental Backup

Fast and efficient incremental backup includes only sectors that have changed from the last backup, saving both process time and storage space. ActiveImage Protector $^{\text{TM}}$ only runs backup tasks according to the predefined schedule, minimizing the consumption of the system resources on the machine.



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.



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 such as Azure storage, S3 compatible object storage, SFTP server, etc., supporting a variety of system configuration and backup policies.

Disk-To-Disk Copy

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.

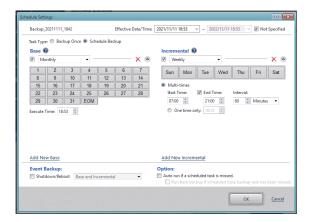
Command line execution support

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.

Backup Options

Schedule backup

Backup tasks can be automatically executed according to the onetime, weekly or monthly schedule, or a specific day of a week in a specific month. Also, you can schedule the first baseline backup and recurring incremental backup tasks to run subsequently. You are provided with the options including Retention Policy enabling to keep only predefined number of backup image generation sets for storage space saving, USB SmartDetect™ detecting disconnected USB backup disk and resume skipped backups once the disk is reconnected, etc.



Flexible Multi-Scheduling Feature

Multiple schedules can be defined for individual backup tasks. For example, you can create a new full backup each month for an ongoing Weekly Schedule backup task.

Image Retention Policy

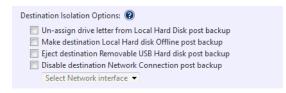
The use of Retention Policy feature allows you to automatically delete the obsolete backup image set when the number of backup image sets reaches the preset limitation and reduce the storage space requirements.

Automatic backup at shutdown

Due to time constraints you might have missed the timing of backing up your system though you recognized the need. ActiveImage Protector™ supports automatic backup when a machine is shutting down and you are leaving the office every day.

Upon completion of backup task, protect the destination (Destination Isolation Option)

Our ImageIsolate™ technology reduces potential malware or ransomware attacks by disconnecting access to a backup storage drives after backups complete.



Scripting

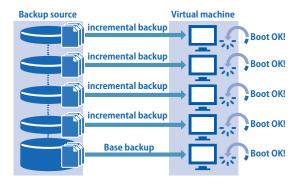
Scripts can be implemented to run before and/or after snapshots are taken or after the backup image has been created. An example would be to execute a user-specified script to purge database cache before taking a snapshot and resume database after taking a snapshot (before starting a backup task), a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

Post-backup Process

Runs BootCheck™, Replication and Consolidation tasks upon completion of a backup task or at a specified time.

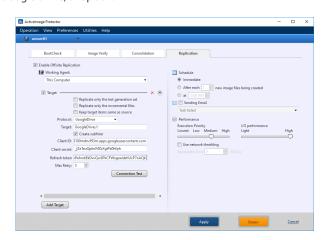
Automated backup "bootability" testing: BootCheck™

BootCheck™ provides confidence that your backup images are bootable on local or remote Hyper-V host. BootCheck™ boots up a virtual machine directly from a backup image file for quick bootability check, minimizing the resource consumption and start-up time. You can manually select Activelmage Protector™ backup image for bootability check from the console at any timing.



Offsite Replication supports cloud storages

Replication target supports a local storage, a Network Shared folder, FTP, FTPS, SFTP, WebDAV, Amazon S3, Azure Storage, OneDrive, Google Drive, Dropbox.



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.

Reinstall OS Reinstall applications Restore data from backup file Reconfigure settings Reboot Reboot

Fast Bare Metal Recovery

Activelmage Protector $^{\text{m}'}$'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 Activelmage 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 physical machines from Activelmage 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 different physical machines.

RescueBoot

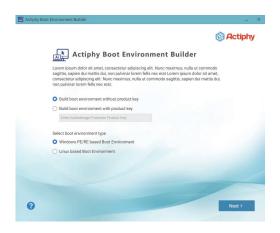
Adds an optional boot recovery environment to the system boot menu. ActiveImage Protector Boot Environment (boot environment) is directly launched from the internal disk drive without using external media, allowing you to restore the system on a tablet PC that does not come with an optical media drive or USB port.

VNC on RescueBoot New!

The new VNC on RescueBoot feature enables system recovery in the event of emergency without the use of external device. VNC viewer is now provided to remotely operate RescueBoot boot environment. System administrator can now restore the failed system in RescueBoot via VNC instead of local PC.

Actiphy BE Builder

ActiveImage Protector™ comes with boot environment builder for building Windows PE-based and Linux Debian-based boot environment and creating bootable media by selecting USB flash memory, USB hard disk, ISO image file or optical media as well as the product media. You can also create a standard Windows RE-based boot environment without installing Windows ADK. Boot Environment Builder allows you to add a specific device driver in the bootable media, if you use a hardware of which driver is not included in the product media. If your 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. When building boot environment on USB hard disk / SSD hard disk, the backup destination partition can be allocated. Backup in the boot environment media can be conveniently used to restore the failed system.



Enlarge or reduce target volumes or partitions during recovery

ActiveImage Protector $^{\text{m}}$ provides Shrink on Restore for NTFS volumes. NTFS volumes can be restored to disk drives that are smaller than the original disk.

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.

Image Management

Consolidation of Backup Files

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

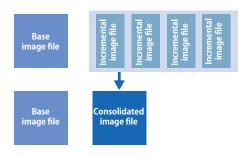


Image Explorer

Installed as a Windows Explorer extension, Image Explorer allows you to browse and copy files and folders from ActiveImage Protector™ image file without requiring a full image mount, saving your time and system resources. This will allow you to restore individual files or folder.

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.



Image Mount (Granular File and Folder Recovery)

ActiveImage Protector™ can quickly mount an image file as a drive, allowing you to extract any files or folders 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.

Instant recovery solution

Creates virtual standby replica (VSR) (integrated with vStandby™)

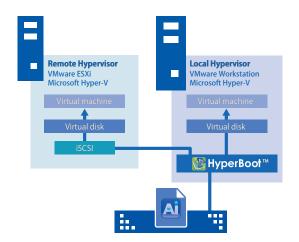
ActiveImage Protector™ integrates vStandby™, standby availability solution to replicate your physical / virtual machines (virtual standby replica) directly to an VMware ESX/ESXi or Hyper-V host, up-dating boot points with scheduled incremental snapshots. When a disaster strikes, the virtual standby replica (VSR) can be instantly started (in two minutes according to our test result).

ReZoom™ it! offered for granular virtual machine recovery

ActiveImage Protector™ offers ReZoom™ it! feature restoring a specific virtual machine included in a backup image of the entire Hyper-V host. ReZoom™ it! Migration tool enable to migrate a virtual machine to the same / different or a remote Hyper-V host. ReZoom™ it! can be installed as a stand-alone application and is useful for migrating a virtual machine to a different host.

HyperBoot™ add-on to immediately boot backups images as virtual machines

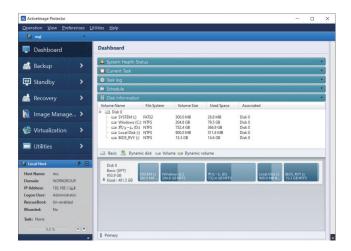
Use our free HyperBoot™ add-on to boot ActiveImage Protector™ backup image files as a fully functional virtual machine in only a few minutes in local and remote Microsoft Hyper-V, VMware ESXi, VMware Workstation Pro / Player, Oracle VirtualBox. HyperBoot™ serves as an interim replacement server to bridge the gap between disaster and recovery. Using VMware vMotion streamlines the recovery process by seamlessly migrating live virtual machines booted in vCenter to a hypervisor in a production environment..



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.



Client management console for easy administration of backup agents

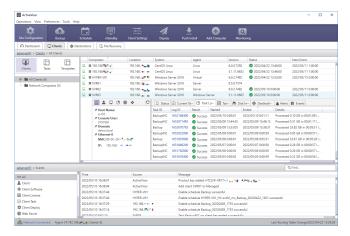
The use of Client management console enables to manage Activelmage Protector™ agents installed on remote computers.

- You can monitor the status of remote agents over the network, start execution of backup tasks from console and establish connection to remote console.
- One-click offers execution of scheduled backup tasks on remote network computers.
- Free evaluation version of Actiphy software installed on remote network computers can be upgraded to a full product version from console.

ActiveVisor, add-on Centralized Management Console for ActiveImage Protector™

ActiveVisor™ provides a centralized management tool for Activelmage Protector™ by monitoring networked client computers on which Activelmage Protector™ agents are installed. Centralized management operation includes auto-discovery of managed computers, push-installing Activelmage Protector™ agents, creating and deploying templates of backup tasks / configuration files, real-time monitoring of backup status list, obtaining information of Activelmage Protector™ agents on managed computers / OS / hardware inventory, remote operation of Activelmage Protector™ agents, etc.





Enhanced License Management Feature

Offline License File

The use of offline license file enables license activation on a standalone PC without internet connection. Actiphy Authentication Service (AAS) acts as a Standalone Licensing server for computers grouped over intranet without requiring a persistent internet connection.

Offers New Subscription License

Annual, three-year, five-year subscription and perpetual licenses are now available. Annual support contract fee will be deducted from the subscription fee.

*Annual support contract fee will be deducted from the three-year and fiveyear subscription fee.

Others

Supports the latest files systems

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

Supports the latest version OS, uEFI compatible motherboard

The latest version of Windows OS is supported. Backup and recovery features support GPT disk in uEFI boot system.

The Installer enables to create MSI file

The Installer enables to create an MSI file containing the product key dedicated to auto-distribution via Active Directory's Group Policy.

Faster and smaller backup with Smart Sector technology

ActiveImage Protector $^{\text{ms}}$'s Smart Sector technology only backs up the used sectors on a disk, resulting in faster backup and smaller backup files.

Monitor task log entries in Windows Event Log Viewer

Every task events are now recorded in the Windows event log to provide better integration into the Windows Management Interface for a more unified experience.

Email 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 ActiveImage Protector™ encounters an error, a restart or failure. Email notification may be set to inform you of the summary of task execution and license status (expiration of the license period).



Actiphy, Inc. NCO Kanda-kon'yacho Building, 8 Kanda-kon'yacho, Chiyoda-ku, Tokyo 101-0035, Japan Phone:+81-3-5256-0877 FAX:+81-3-5256-0878 https://www.actiphy.com global-sales@actiphy.com