

A decorative graphic on the left side of the slide features a blue and grey geometric design. It includes a laptop screen at the bottom, a network of white icons (gear, envelope, refresh, people, atom, document, keyboard) connected by lines, and a large blue arrow pointing right.

ActiveImageTM 2022

PROTECTOR

~ Product Summary ~

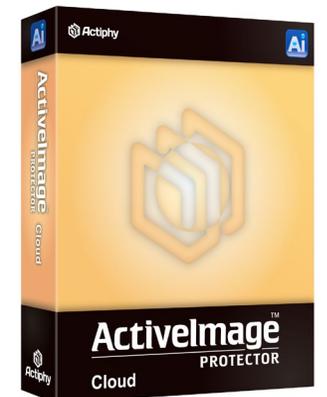
February 9, 2024
Actiphy Inc.

A Data and System Protection Solution supporting physical, virtual and cloud environments

ActiveImage Protector™ backs up the entire Windows / Linux server including the OS, applications, and data files to a disk image and protects the entire system. In the event of a disaster, ActiveImage Protector™ restores the entire system via an intuitive software operation. ActiveImage Protector™ provides a variety of features that meet and exceed a wide range of customers' needs, enabling to create standby virtual machines of your physical or virtual machines ready for an immediate startup or immediately boot backup images as virtual machines to resume system operation.

Main Features of ActiveImage Protector 2022

- Protect the entire system
- Flexible restore feature
- A variety of Storage Media are supported
- Safely protect backup files
- Support for virtual environment
- Support for Cloud environment
- Flexible Scheduled Backup
- Standby availability solution
- GUI provides tools for efficient operations

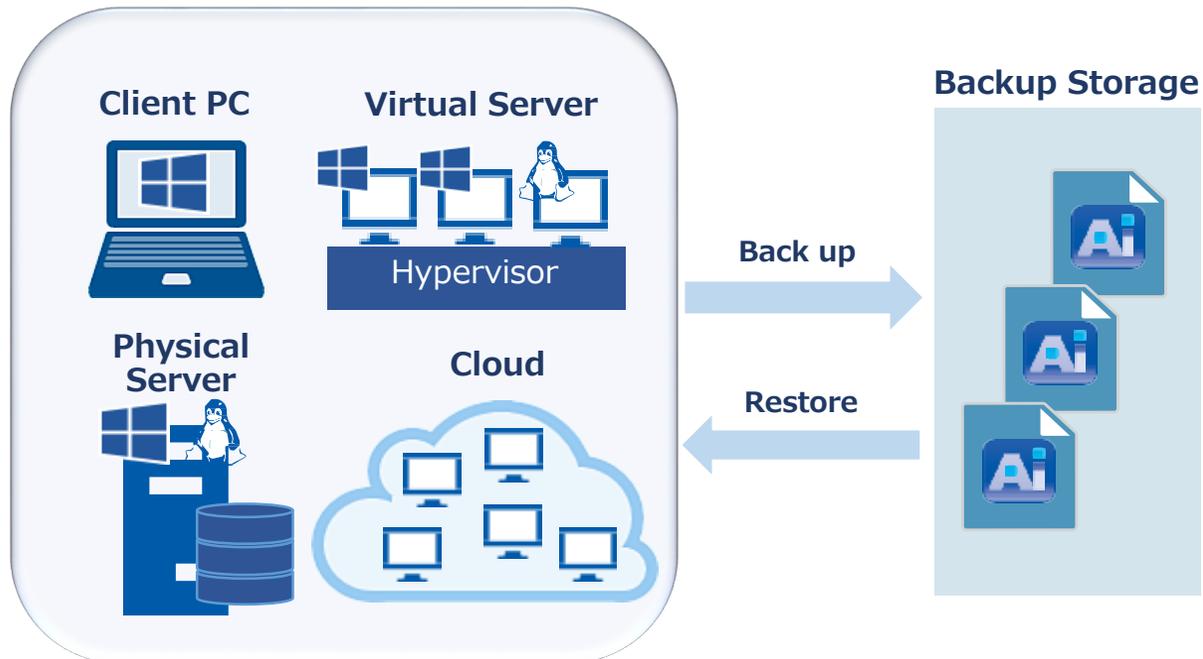


Protects the entire physical and virtual, Windows/Linux, On-Premise/Cloud environments including the OS, applications, and data.

Back up the entire system

ActiveImage Protector™ backs up the entire physical and virtual, Windows / Linux, On-Premise / Cloud environments including the OS, applications, and data to a disk image. ActiveImage Protector™ provides File / Folder Recovery feature restoring granularly selected files and folders from a backup image.

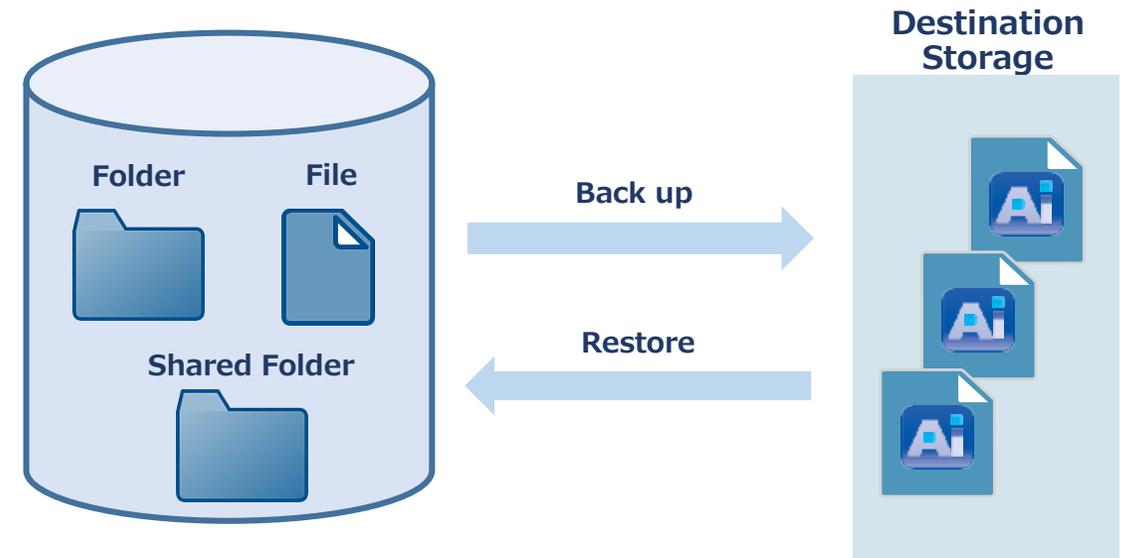
Back up the entire system



File / Folder Backup

File / Folder Backup is provided to back up granularly selected files and folders. Block based backup data are saved in a backup file. ActiveImage Protector™ also provides incremental backup feature and backup of a shared folder.

Backup of a network shared folder



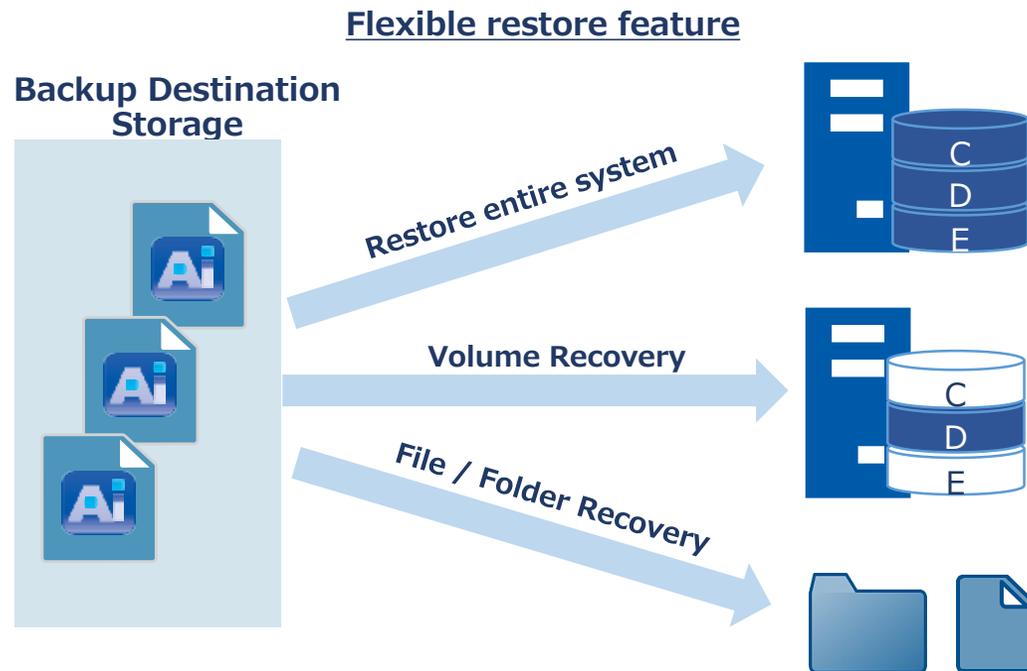
Flexible restore feature using a backup file

Flexible restore feature restores the entire system, specific volume or file / folder

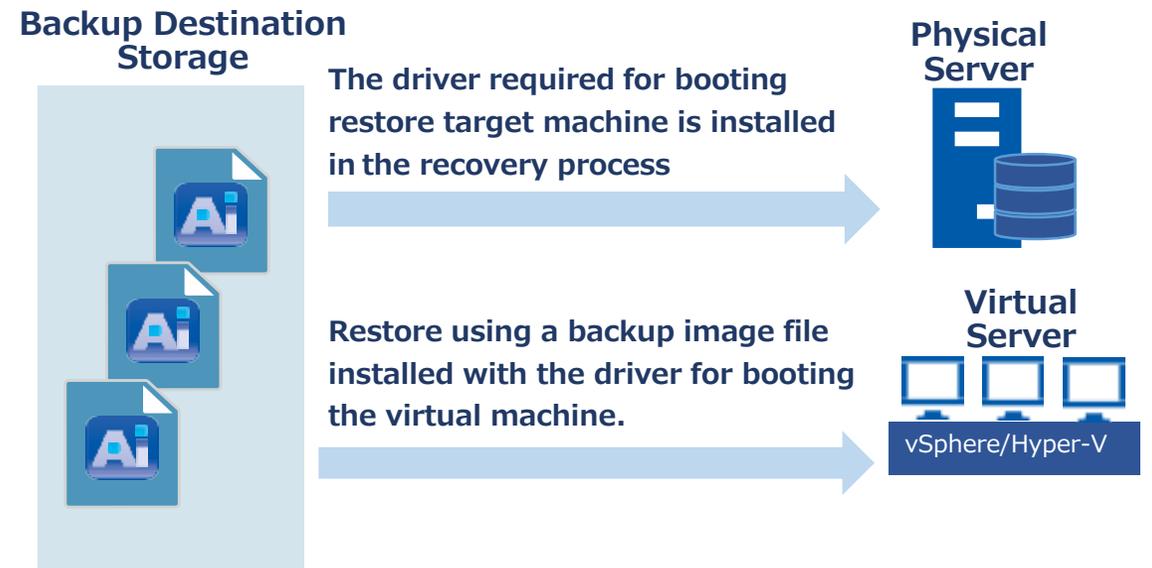
ActiveImage Protector provides flexible Recovery feature enabling to restore the entire system from a backup in the event of emergency. The built-in wizards guide you through every step to ensure recovery from the backup image file. You can also granularly select a specific volume or file / folder from a backup image and restore.

Restore to physical / virtual machines with different hardware configuration

In the event of a hardware failure, select a backup image to quickly restore to a physical machine with different hardware configuration or a VMware vSphere, Microsoft Hyper-V virtual machine.



Restore to a physical / virtual machine with different hardware configuration



New Recovery feature improves conveniences and reduces recovery process time

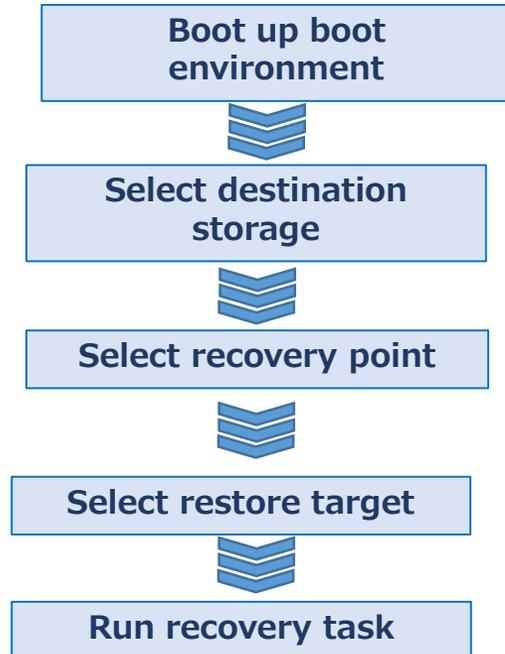
One-click offers system recovery **NEW**

QuickRecovery automatically starts recovery environment without the need for boot environment media. Boot up the recovery environment and select a specific recovery point. When restoring the system failed due to a software problem, recovery process complete on the restore target machine.

Remote console is provided to remotely perform restore operations

RescueBoot can be started from remote console to operate in boot environment. System administrators can now restore the failed system in RescueBoot via VNC instead of the local machine, in the event of a software failure.

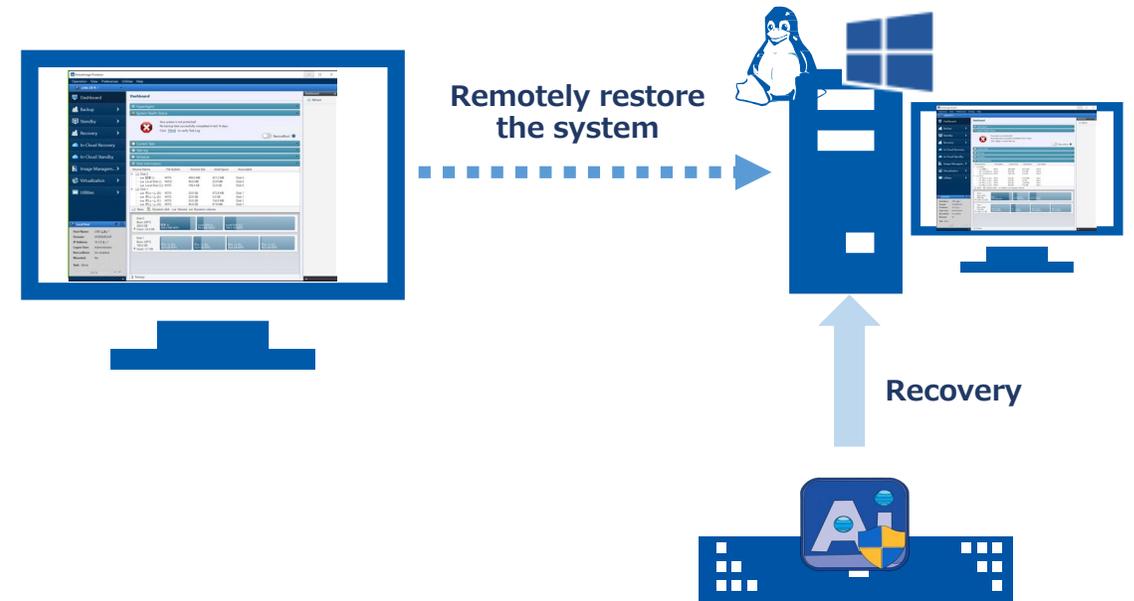
Traditional system recovery



QuickRecovery



VNC viewer provided for remote operation

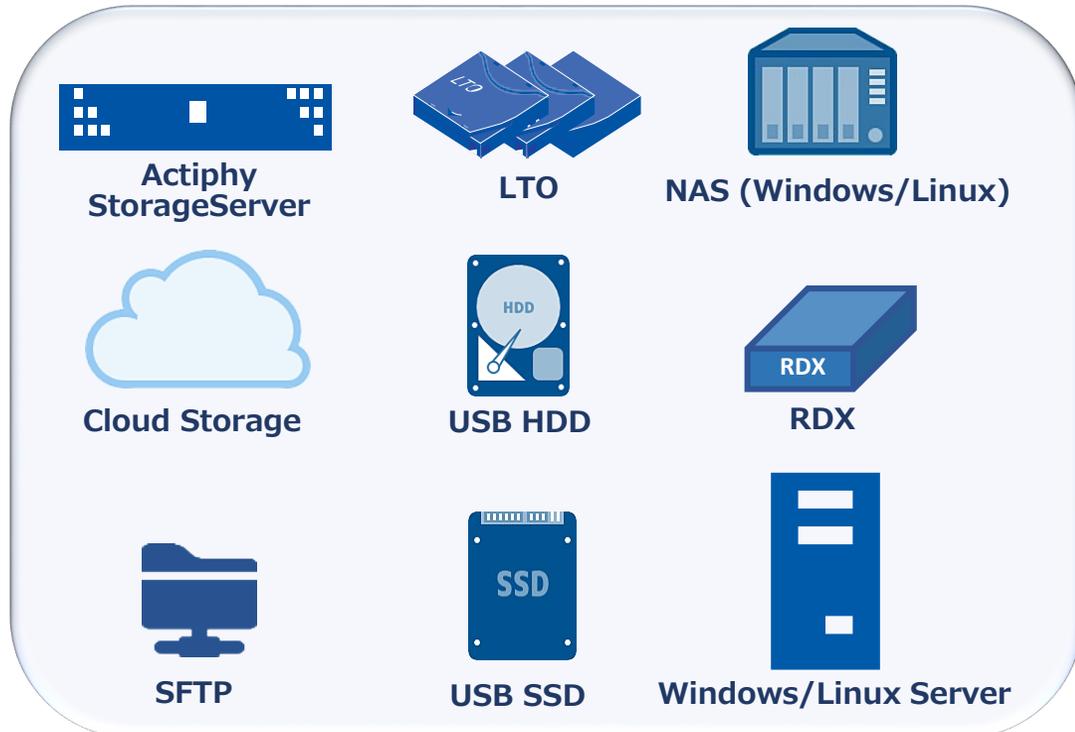


Save your backups to any available storage location depending on the system configuration and backup policies

A variety of Storage Media are supported to save backup files

A variety of Storage Media are supported ranging from USB HDD to cloud object storage depending on the system configuration and backup policies.

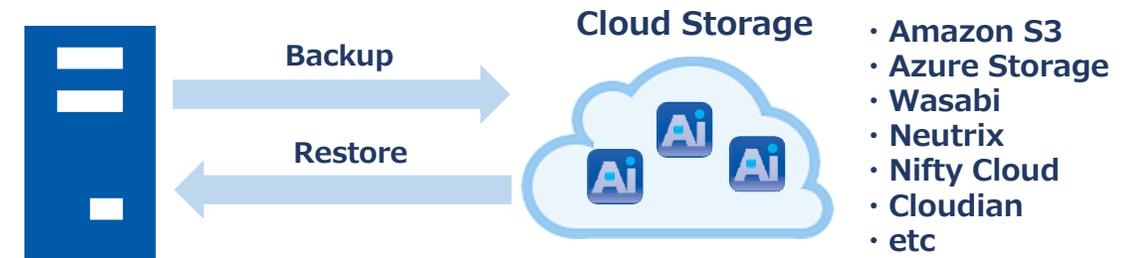
A variety of Storage Media



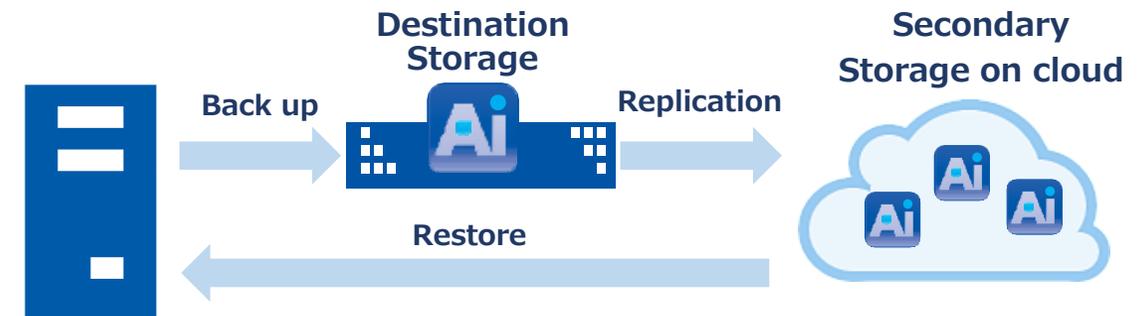
Backup files are directed to cloud storage

Backups can be directed to cloud storage. Offsite Replication tasks can be scheduled to replicate the created backup files to offsite replication target. The backups located in the secondary storage can be utilized as the most effective BCP countermeasure in the event of ransomware attack or when a disaster strikes.

Backups are directed to cloud storage



Secondary Storage on cloud

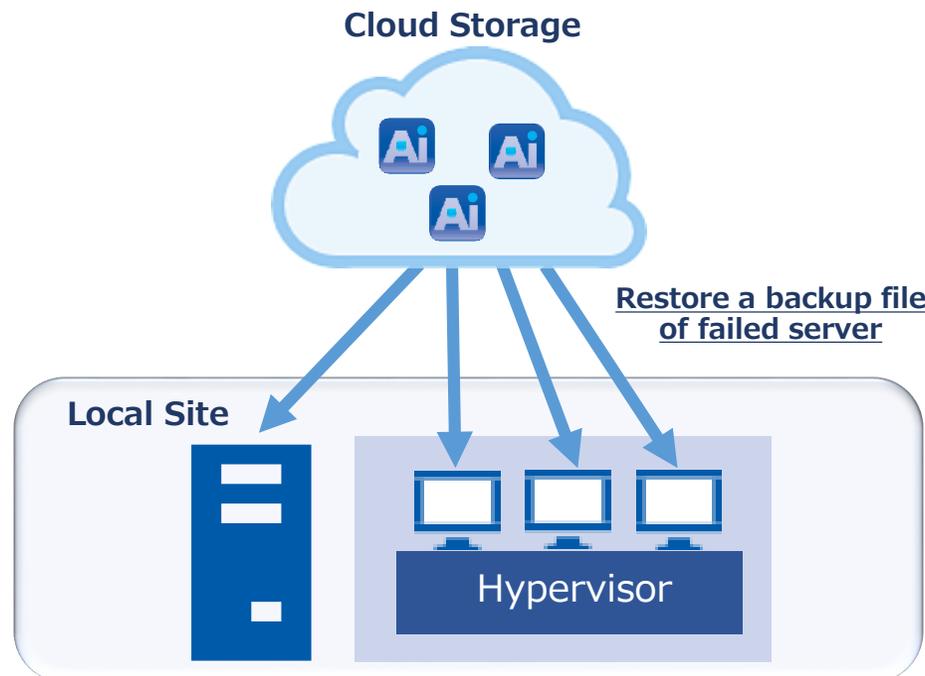


BCP countermeasure using cloud storage

Restore a backup file to local site

Restore a backup file of on-premise source machine saved in cloud storage directly to the original state. You do not need to deploy a storage device at the local site to download the backup file.

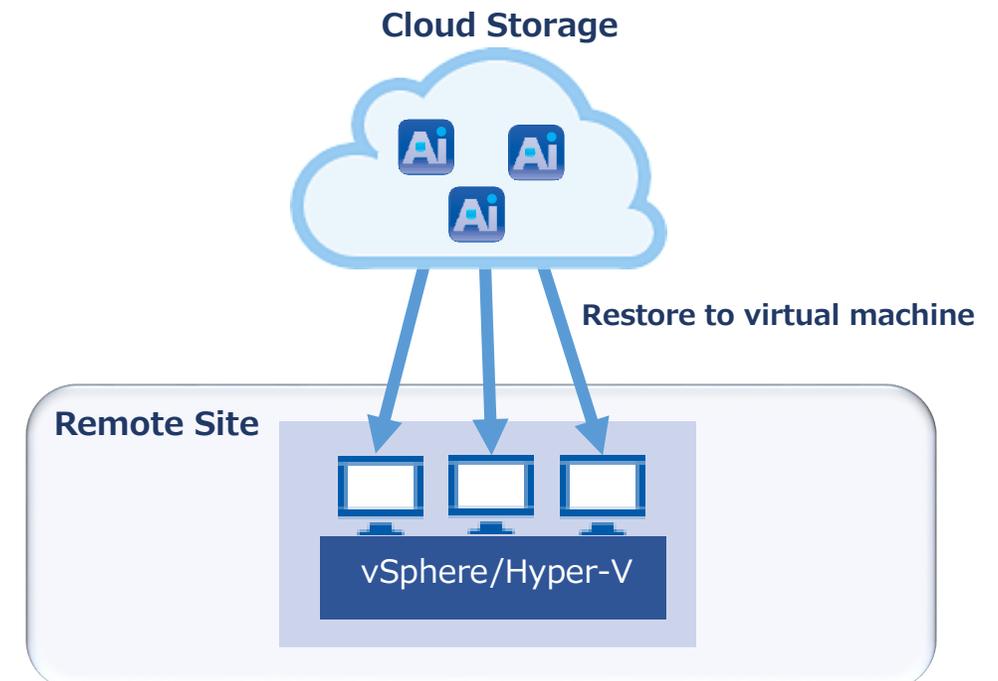
Restore a backup file of failed server



Restore a backup file to remote site

In the event of emergency, directly restore a backup file to a restore target virtual machine at on-premise remote site, which provides inexpensive BCP countermeasure.

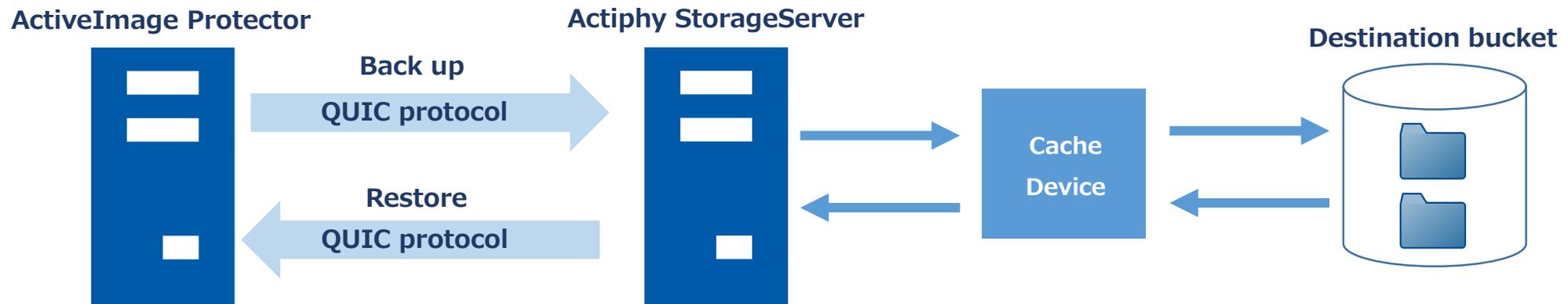
Restore a backup file to virtual machine at remote site



Secure storage dedicated to ActiveImage Protector backup operation NEW

Actiphy StorageServer Option provides the secure destination dedicated to ActiveImage Protector backup operation. Actiphy StorageServer integrated in ActiveImage Protector provides an independent storage for backup operation, protecting the backup image files from being compromised by a ransomware attack. Actiphy StorageServer uses QUIC protocol for data transmission, enabling to transfer backup data more safely and efficiently. Actiphy's StorageServer™ is engineered to take advantage of cache device in storage server such as USB SSD, delivering faster data transfer speed than the destination storage device, that secures stable backup process and speed. Actiphy StorageServer is available in Windows, Linux and Docker editions.

Provides secure destination dedicated to ActiveImage Protector backup operation



* QUIC protocol: Communication protocol enabling to transfer data more accurately than TCP and faster than UDP.

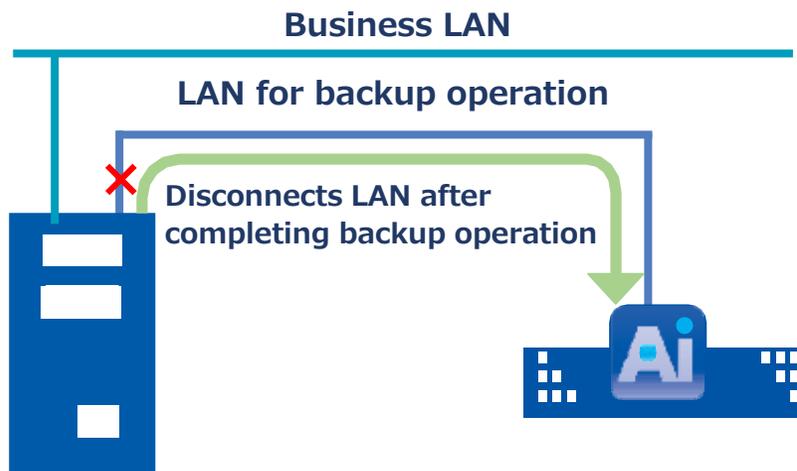
Secure countermeasures against cyber attack including ransomware to backup files

Destination Isolation Option

Enabling Destination Isolation Option off-lines the destination storage or disconnects network access to backup image storage drives after backups complete rendering the specified destination storage inaccessible from virus attack including ransomware. The following four options are provided to isolate the storage.

- Un-assign the drive letter from the local hard disk after completing the backup
- Take the destination local hard disk offline after completing the backup
- Eject the destination USB hard disk after completing the backup
- Disable the destination network connection after completing the backup

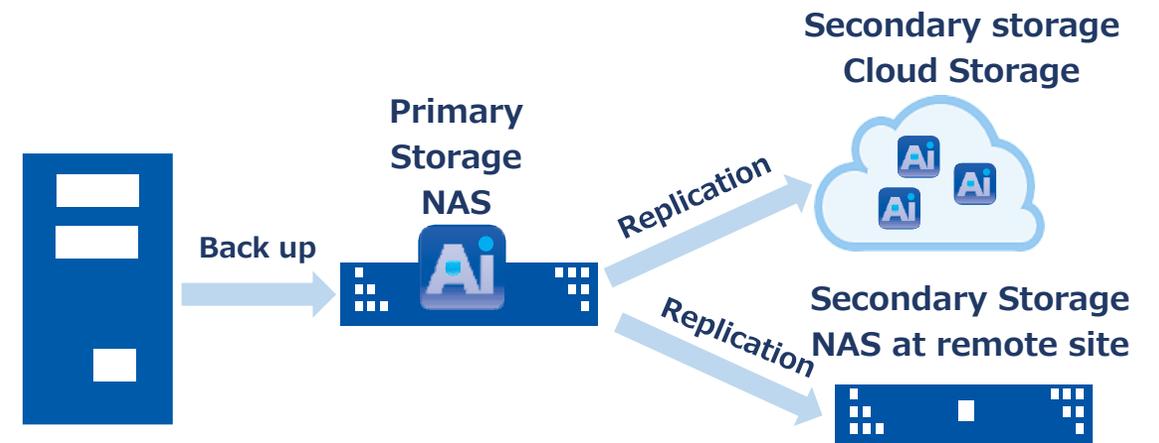
Disconnection of LAN for backup operation



Distributed storages for backup files

Offsite Replication tasks can be scheduled to replicate the created backup files to distributed offsite replication storages including local disk, network shared folder, FTP, SFTP, WebDAV, Amazon S3, Azure Storage, Wasabi, OneDrive, Google Drive, Dropbox. Distribution of backup files increase the security level.

Distributed storages for backup files

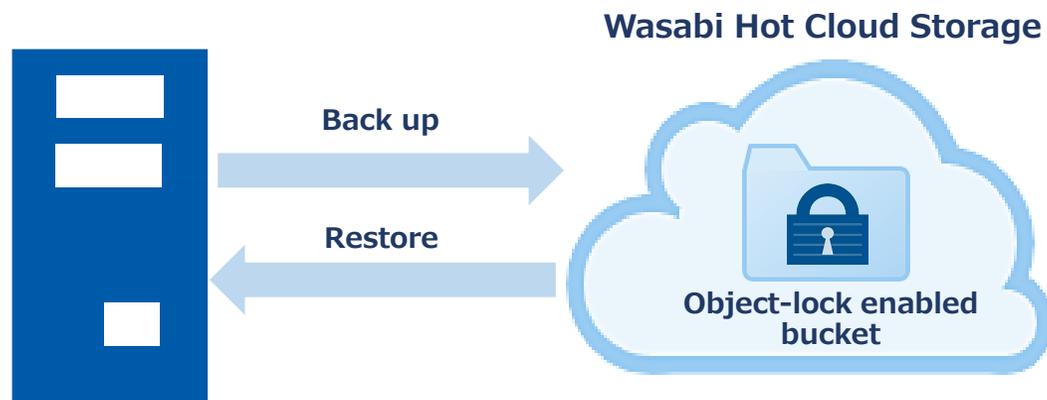


Protect the backup image files from being compromised by a ransomware attack

Object-lock enabled storage is supported

Object-lock enabled bucket on Wasabi Hot Cloud Storage is supported to use as the destination storage, which can reduce potential risk of cyber attacks including ransomware. The backups saved in the object-enabled storage is supported to restore.

Backups are directed to Wasabi Hot Cloud Storage



Backups are directed to LTO tapes suited for offline storage

Backups can be directed to LTO tape to provide offline storage. Distributed backup storages increases the security level and reduces potential ransomware attacks to backup files. In the event of emergency, backups in LTO tape can be used to restore the system.

Backups are directed to LTO tape



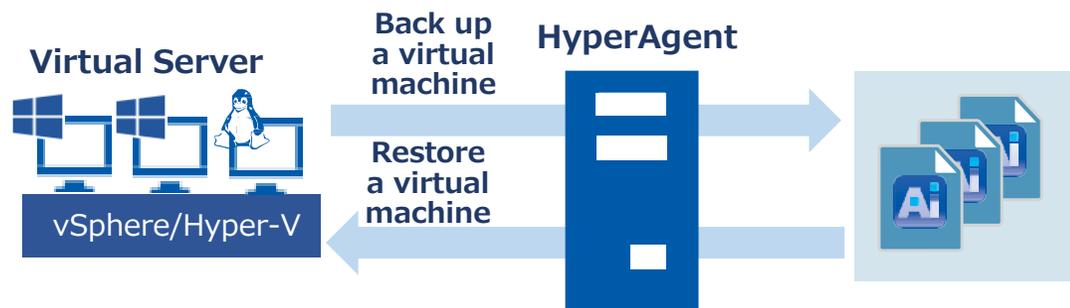
Agentless backup of virtual machines on VMware vSphere, Microsoft Hyper-V

Agentless backup of virtual machines

ActiveImage Protector™ Virtual now provides HyperAgent™, agentless backup feature, enabling to select and back up a virtual machine configured on VMware vSphere or Microsoft Hyper-V without the need for installation of agent. Flexible recovery feature enables to restore a selected file / folder from a backup file.

*Virtual machines configured on hypervisors other than VMware vSphere, Microsoft Hyper-V are supported to back up by using agent-based backup feature.

Agentless backup of virtual machines



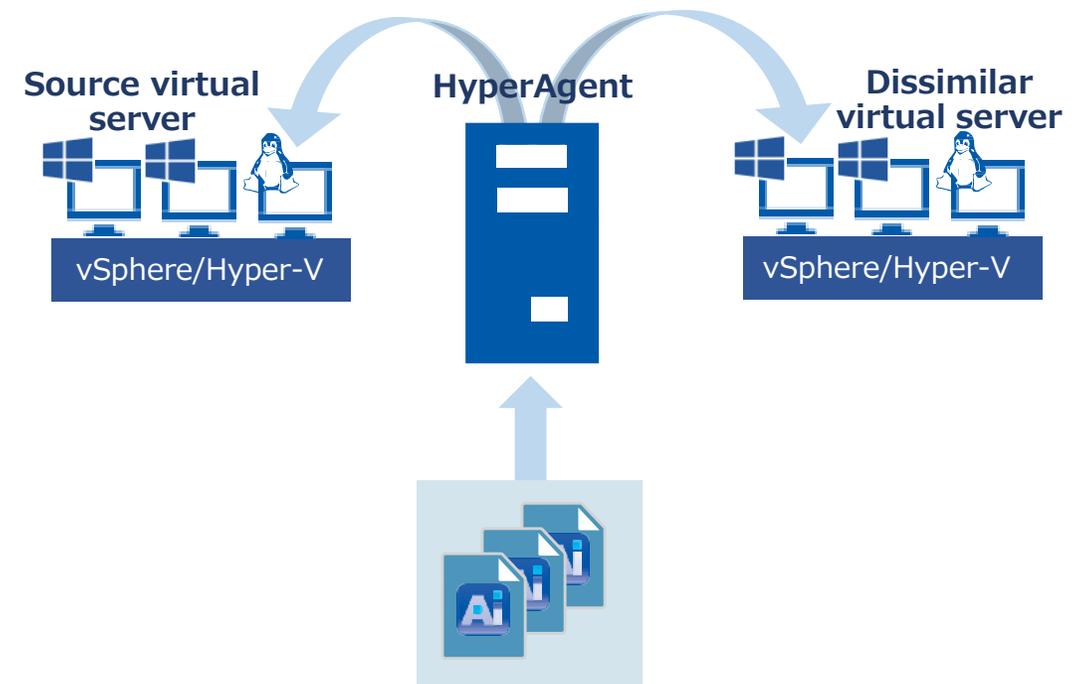
Benefits of agentless backup

- No need for installation of agent reduces man-hours required for the product deployment.
- Without the need for installation of agent on virtual machine, the consumption of CPU and memory resources are minimized.
- Flexibly support guest OS (Windows Server 2003 and later are supported.)

Flexible restore to the respective virtual machine

In the event of emergency, without the need for reconfiguring restore target virtual machine or virtual disk, HyperAgent enables to restore a virtual machine from backup file. A virtual machine can be restored to a virtual machine on a different hypervisor, which can reduce IT engineers' workload.

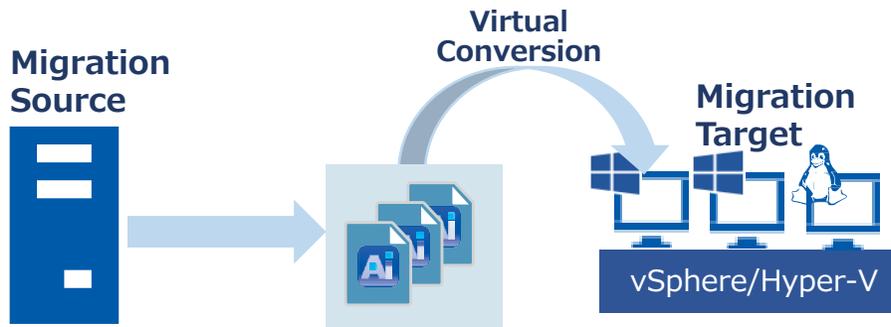
Restores virtual machine backups to dissimilar hypervisors



Virtual conversion utility enables migration to VMware vSphere, Microsoft Hyper-V environments

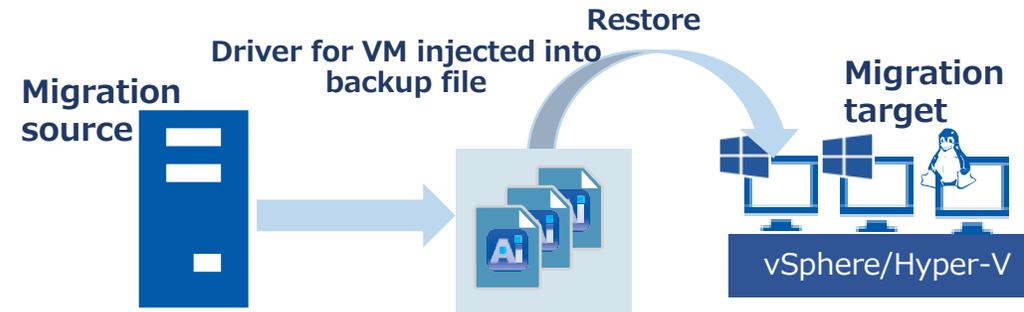
Migration from backup to virtual environment

Migration from a source backup image file to virtual machine or virtual disk is enabled without the need for reconfiguring virtual machine or virtual disk on target virtual host.



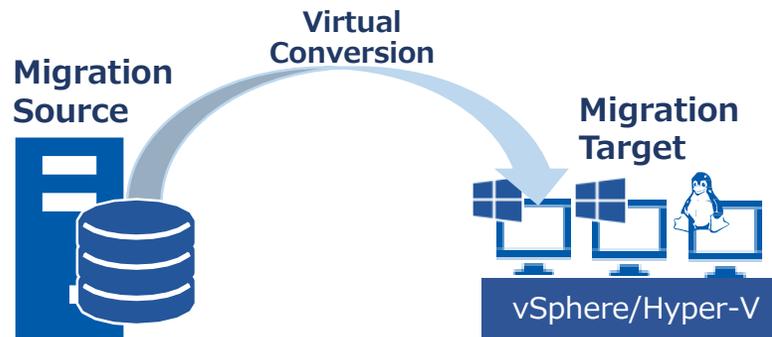
Restore source backup to virtual machine

Migration is enabled by restoring a backup of source machine to a virtual machine configured on migration target virtual host.



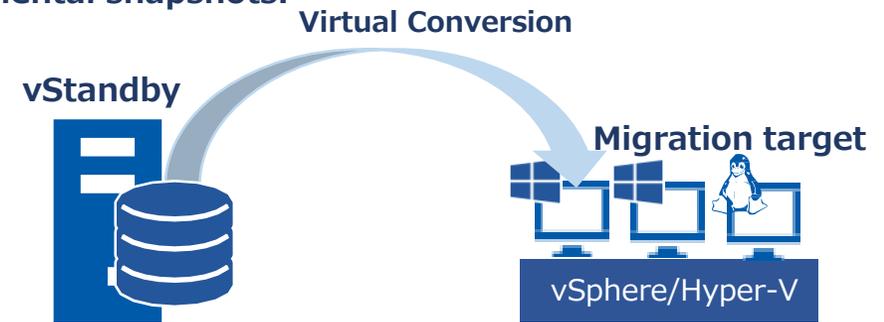
Migration from source disk to target virtual environment

Specify the migration source disk and directly configure virtual machine on migration target virtual host.



Seamless Migration

vStandby replicates your live physical or virtual machines directly to a VMware vSphere or Microsoft Hyper-V host as a virtual standby replica (VSR), keeping boot points updated with scheduled incremental snapshots.

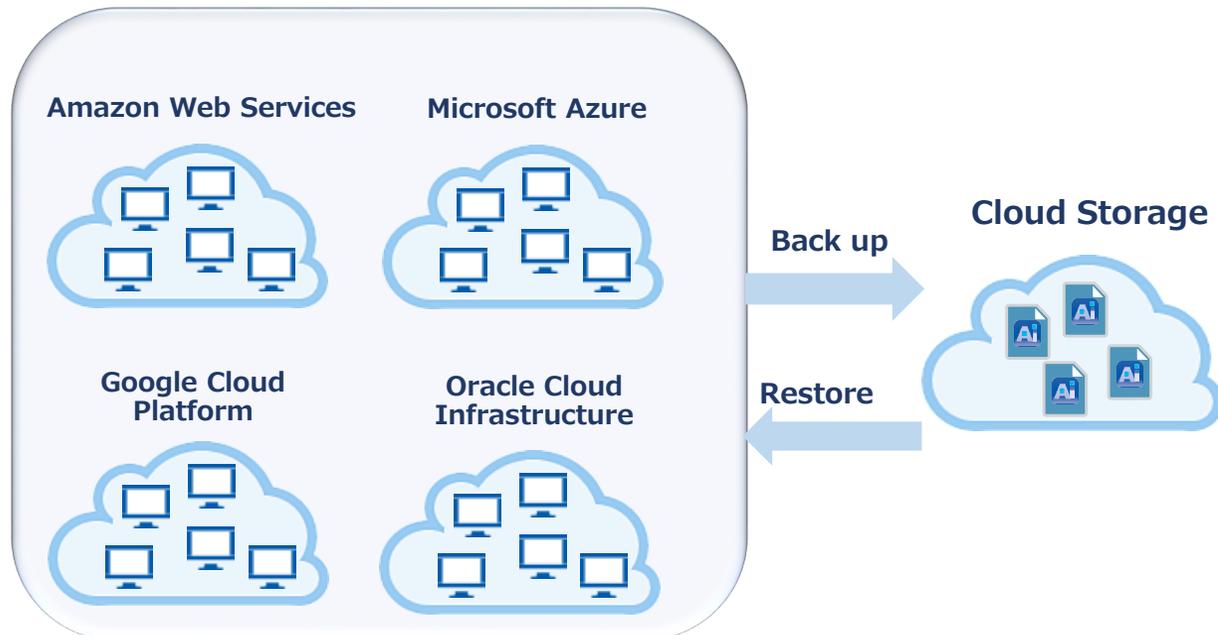


Back up / restore virtual machines in cloud environment

Multiple cloud storages are supported **NEW**

Built-in wizards guide you through every step to perform simple and unified backup operation for virtual machines on Google Cloud Platform(GCP), Oracle Cloud Infrastructure (OCI) as well as Amazon Web Services (AWS), Microsoft Azure (Azure).

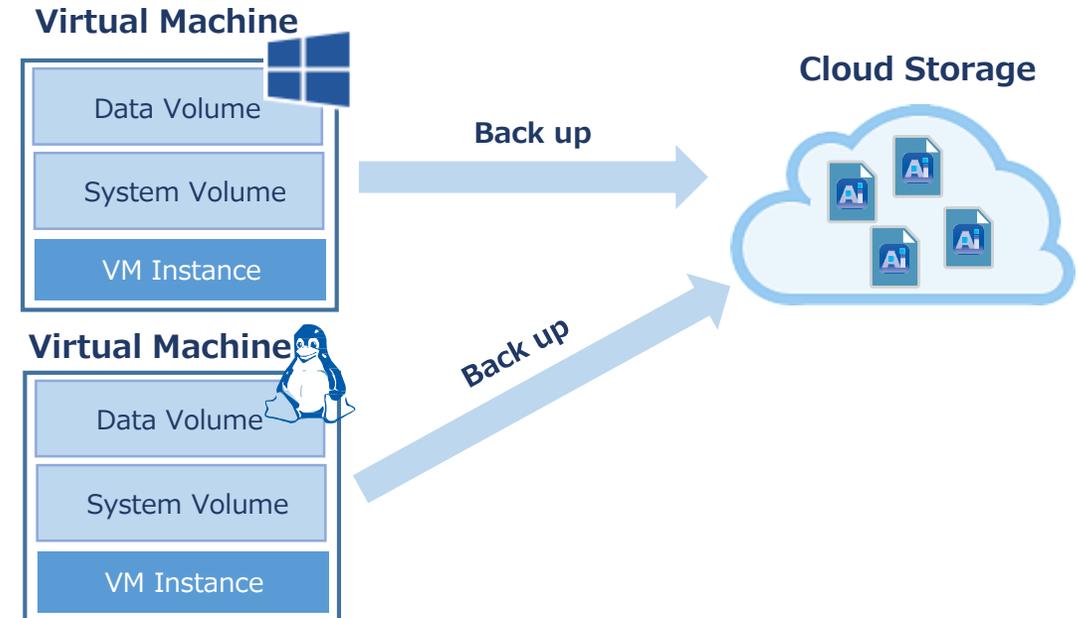
Back-up and restore virtual machines in multiple cloud environments



Back up the entire system of virtual machine in cloud environment.

Different from snapshot technology, ActiveImage Protector™ backs up the entire Windows/Linux virtual machines on cloud to a disk image. Save your backups to any available storage location, including cloud storage in VLAN on cloud, which does not incur additional costs. When disaster strikes, select a backup image to quickly restore to a virtual machine.

Back up virtual machines in disk image in Cloud

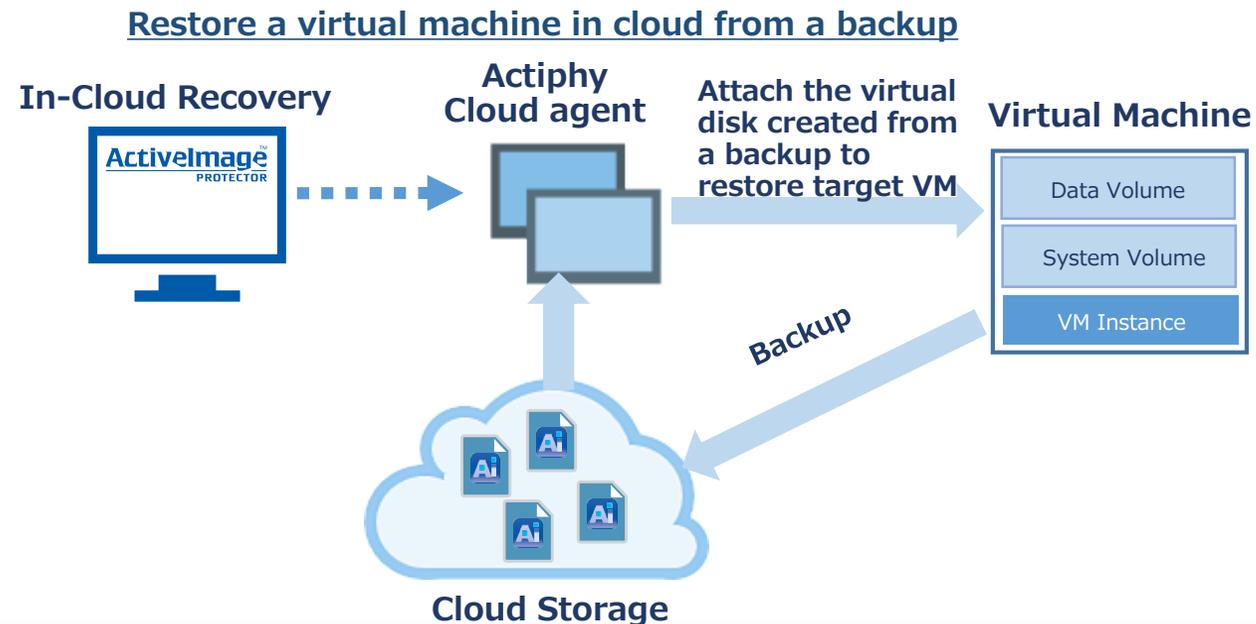


Back up / restore the entire system of virtual machines in cloud environment

Restore virtual machines in cloud environment

Boot up Actiphy Cloud agent installed in Actiphy's dedicated area in cloud by using In-Cloud Recovery, and restore the entire system, without the need for management console for cloud environment or command line operation. A volume or file / folder can be flexibly selected to restore from a backup image.

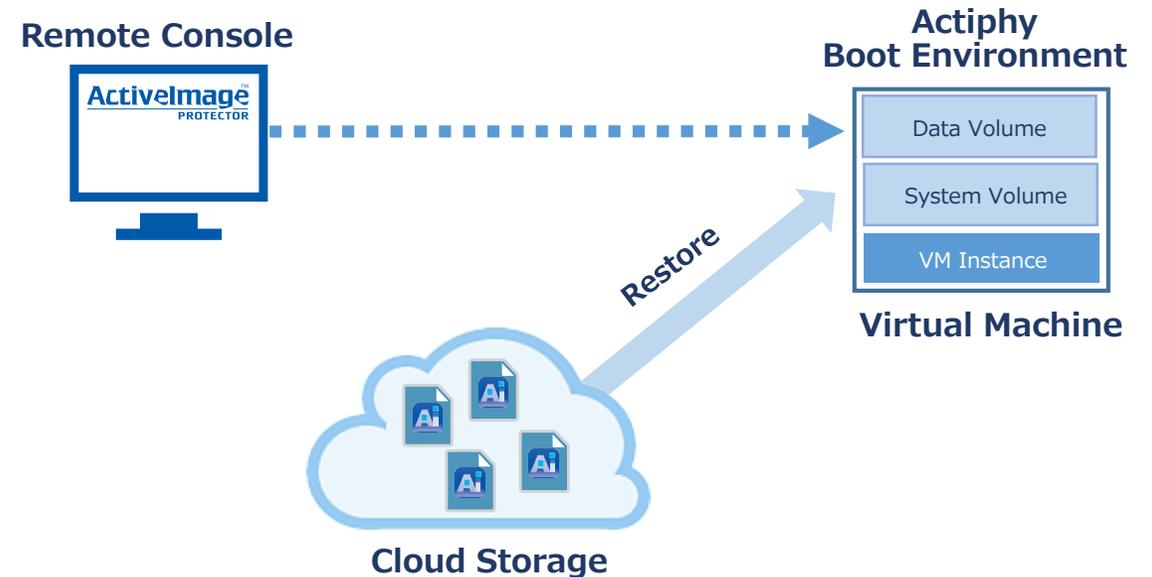
*In-Cloud Recovery™ does not support Google Cloud Platform(GCP), Oracle Cloud Infrastructure (OCI). When restoring a virtual machine, boot environment booted from RescueBoot is used.



Remotely operate the RescueBoot boot environment

Start up the ActiveImage Boot Environment created and booted directly from the internal disk, so that system administrator can remotely restore the failed system of virtual machine from a backup in cloud environment without the use of external device.

Remotely restore virtual machine in cloud

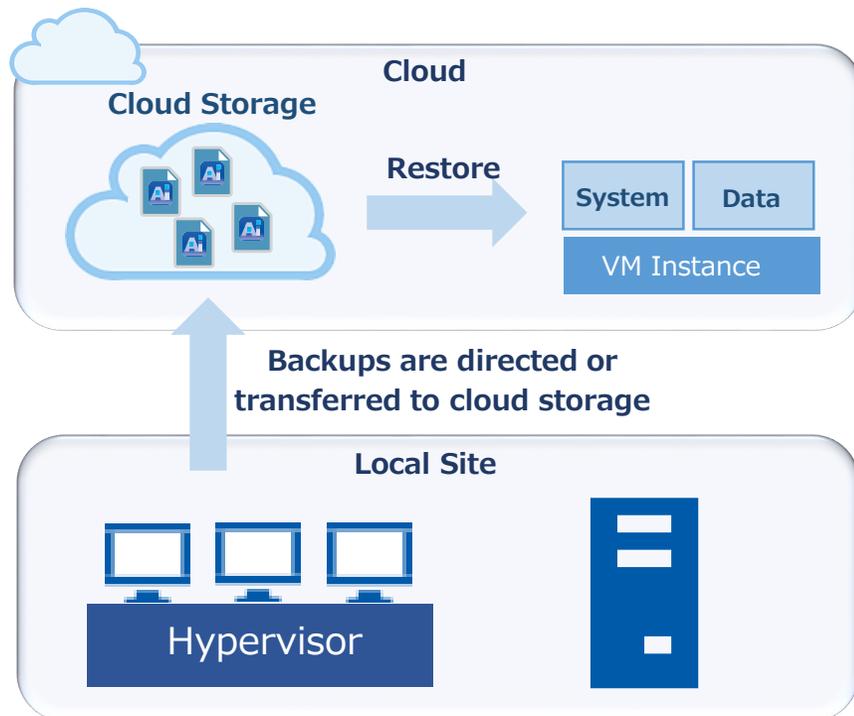


Utilize cloud environment as DR (disaster recovery) site

Restore a virtual machine on cloud environment from backup files

Back up physical / virtual machine at local site and save the backup files in cloud storage. Or replicate the backup files to cloud storage. In the event of emergency, temporarily restore the backup to a virtual machine on cloud.

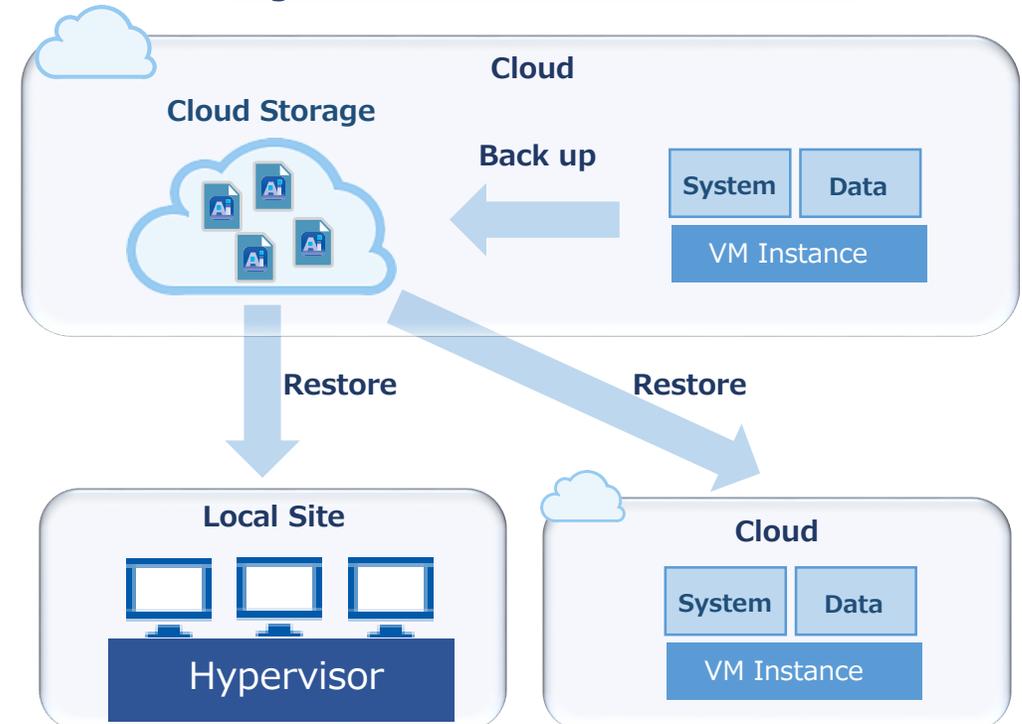
Restore to virtual machine on cloud



Migrate virtual machine on cloud to on-premise environment

Restore backup of virtual machine on cloud to virtual machine in on-premise environment or a virtual machine on a different cloud environment. Virtual machine on cloud serving as an interim replacement server can be migrated.

Migration of virtual machine on cloud

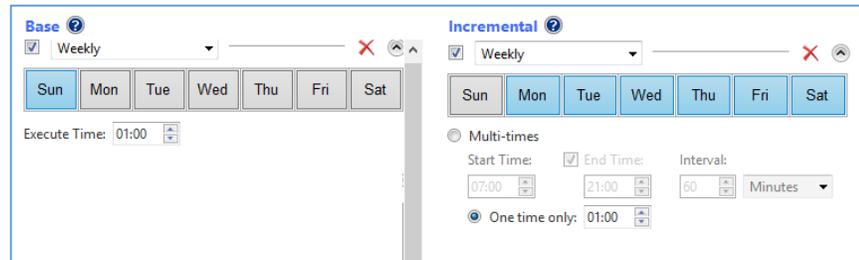


Backup tasks are executed according to predefined schedule

Backup tasks can be automatically executed according to the weekly, monthly or on a specific day of a week.

○ Weekly Schedule

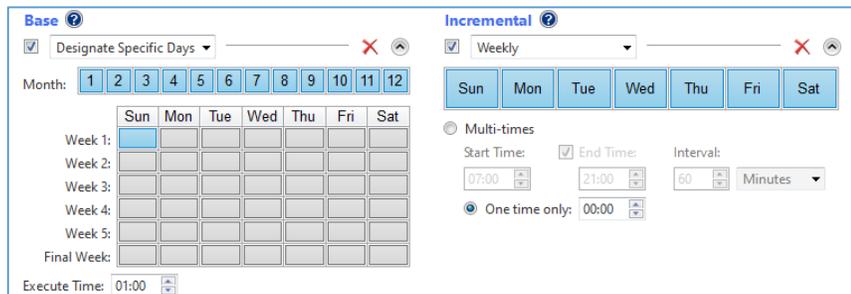
Full backup is scheduled to execute on the weekend while incremental backup tasks are scheduled from Monday to Friday. Incremental backup can be scheduled to run for multiple times a day.



The screenshot shows two configuration panels. The 'Base' panel is set to 'Weekly' with a calendar where Sunday and Saturday are selected. The 'Execute Time' is set to 01:00. The 'Incremental' panel is also set to 'Weekly' with a calendar where Monday through Friday are selected. It has 'Multi-times' selected with a 'Start Time' of 07:00, an 'End Time' of 21:00, and an 'Interval' of 60 minutes. The 'One time only' option is set to 01:00.

○ Designate Specific Days

Select by clicking a specific days of a week to perform a recurring full base backup while incremental backup tasks are scheduled from Monday to Friday.

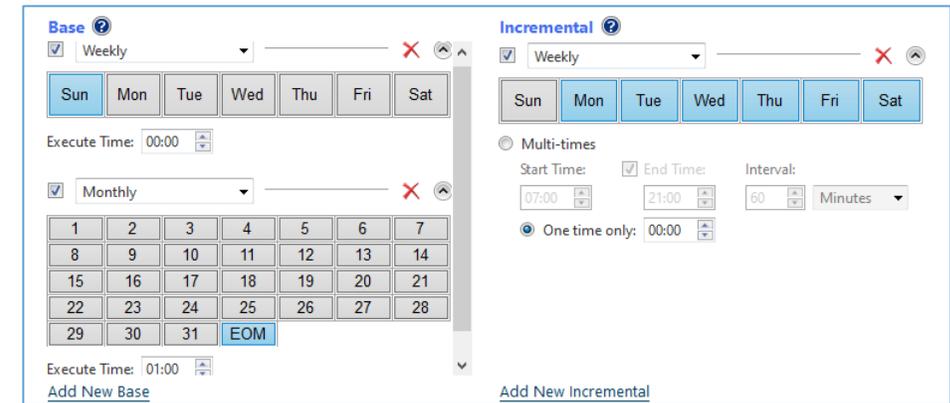


This screenshot shows the 'Base' panel with 'Designate Specific Days' selected. A calendar for the month shows days 1 through 12. Below the calendar, a grid allows selecting specific days for each of five weeks. The 'Incremental' panel remains the same as in the previous screenshot.

Customized Schedule Settings

○ Multi-scheduling

Incremental backup tasks are scheduled on weekly basis while full backup tasks are scheduled at the end of a month.

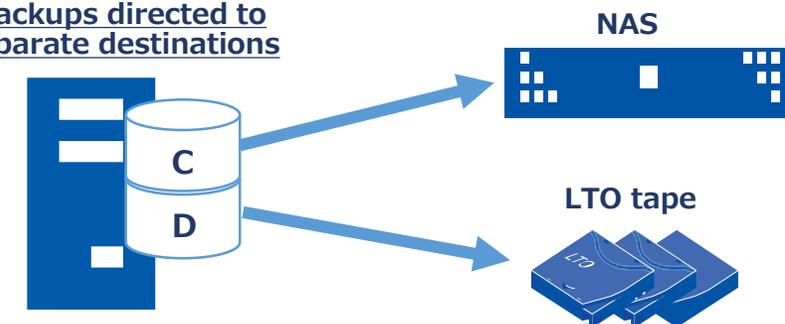


The screenshot shows two configuration panels. The 'Base' panel is set to 'Weekly' with a calendar where Sunday and Saturday are selected. The 'Execute Time' is set to 00:00. Below the calendar is a monthly grid with 'EOM' (End of Month) selected. The 'Incremental' panel is set to 'Weekly' with a calendar where Monday through Friday are selected. It has 'Multi-times' selected with a 'Start Time' of 07:00, an 'End Time' of 21:00, and an 'Interval' of 60 minutes. The 'One time only' option is set to 00:00.

○ Multiple Backup Destination Settings

Multiple backup task settings can be configured to direct backup files to multiple destinations. For example, backup files of C drive are directed to NAS while backup files of D drive are directed to LTO tape.

Backups directed to separate destinations

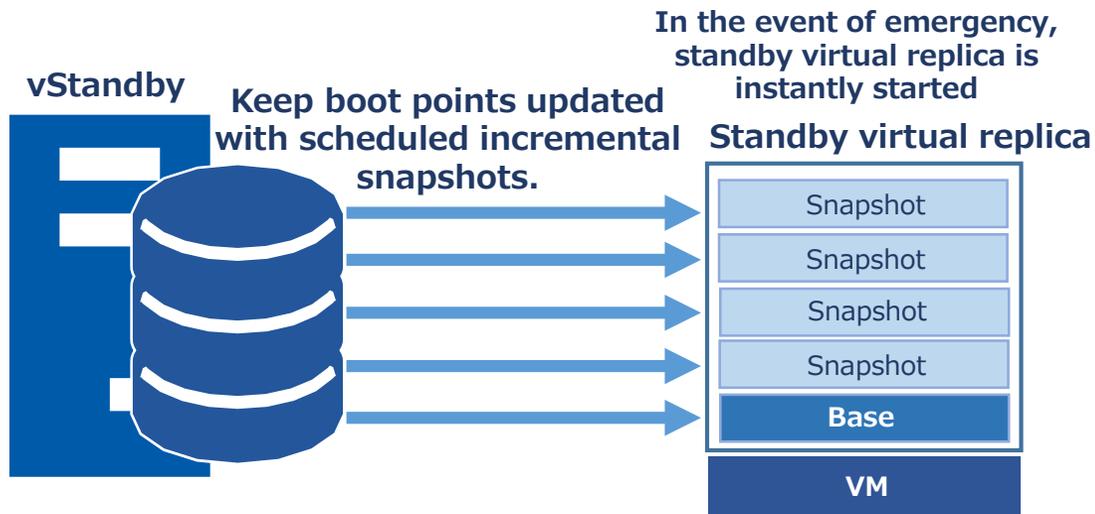


Featuring support for reduction of RTO

Create and maintain standby virtual replica

In an emergency, it may take lengthy time to restore a large volume of backup file. Use vStandby, add-on tool for ActiveImage Protector, to specify the source disk of your machine and automatically replicate your machine according to the pre-defined schedule on a target virtual host, VMware vSphere, Microsoft Hyper-V. When a disaster strikes, the virtual standby replica can be instantly started to continue the operation. ActiveImage Protector enables you to deploy affordable HA system.

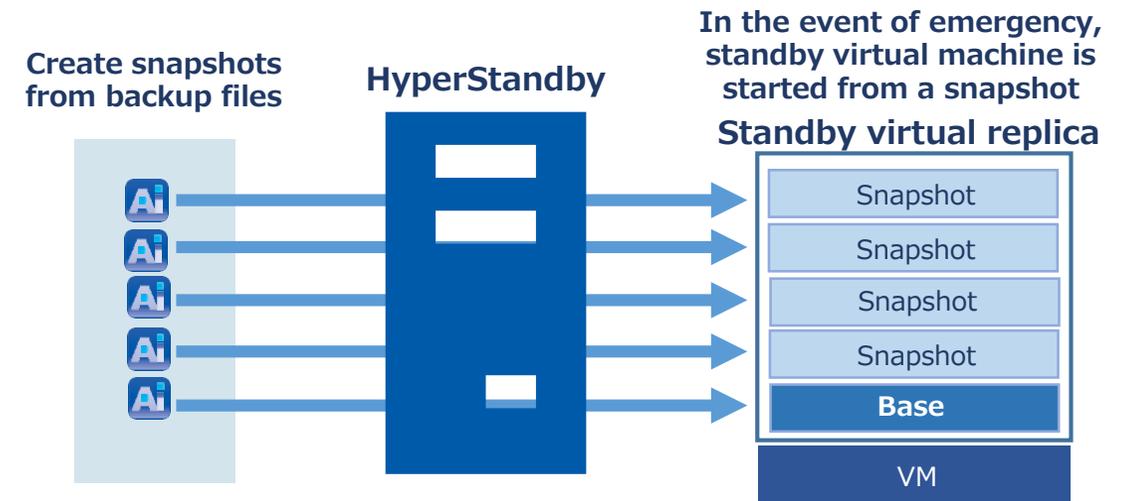
Create and maintain standby virtual replica from disk



Create standby virtual machine from a backup image

Uses HyperStandby™ to create and maintain a standby virtual machine from backup images on a target virtual host, up-dating boot points synchronized with scheduled incremental snapshots. For example, backups are replicated to remote site to create a standby virtual machine. When a disaster strikes, the standby virtual machine (SVM) can be immediately started. HyperStandby can provide an affordable disaster recovery solution.

Configure and maintain standby virtual replica at remote site

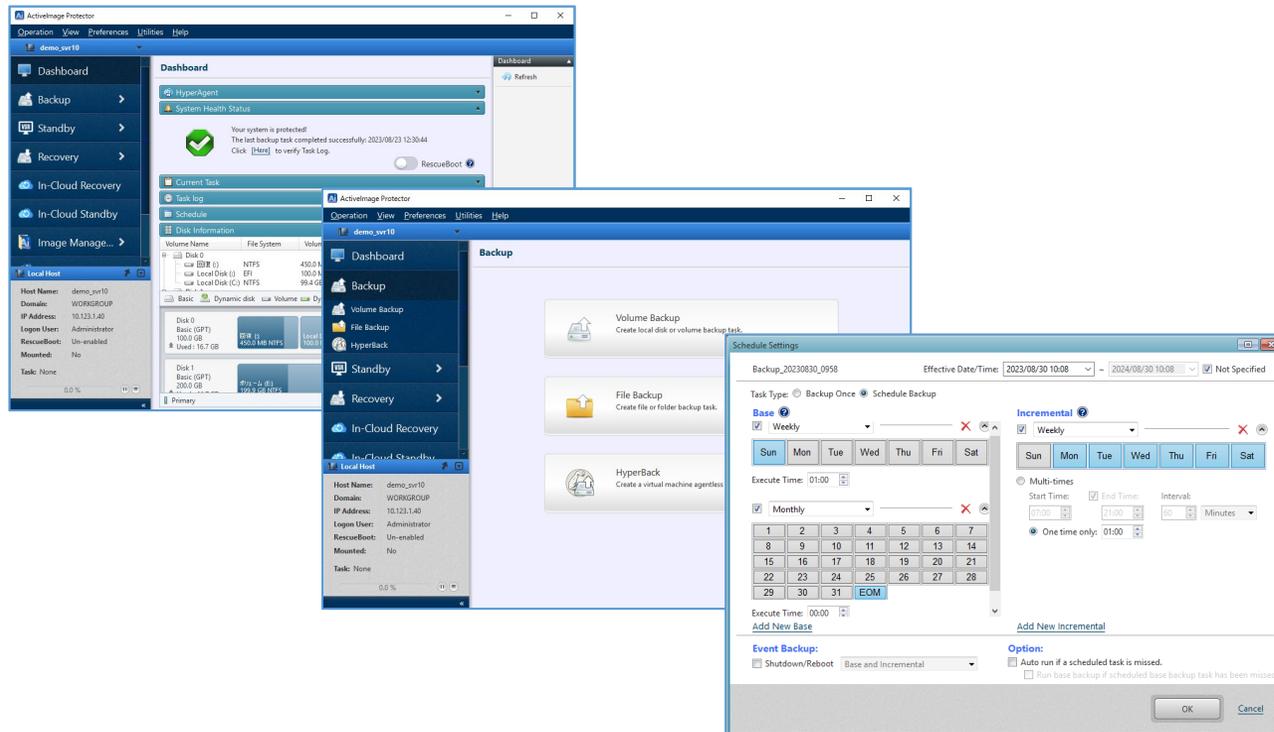


Easy to operate GUI

Built-in wizards guide you through every step to perform backup and restore operations

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

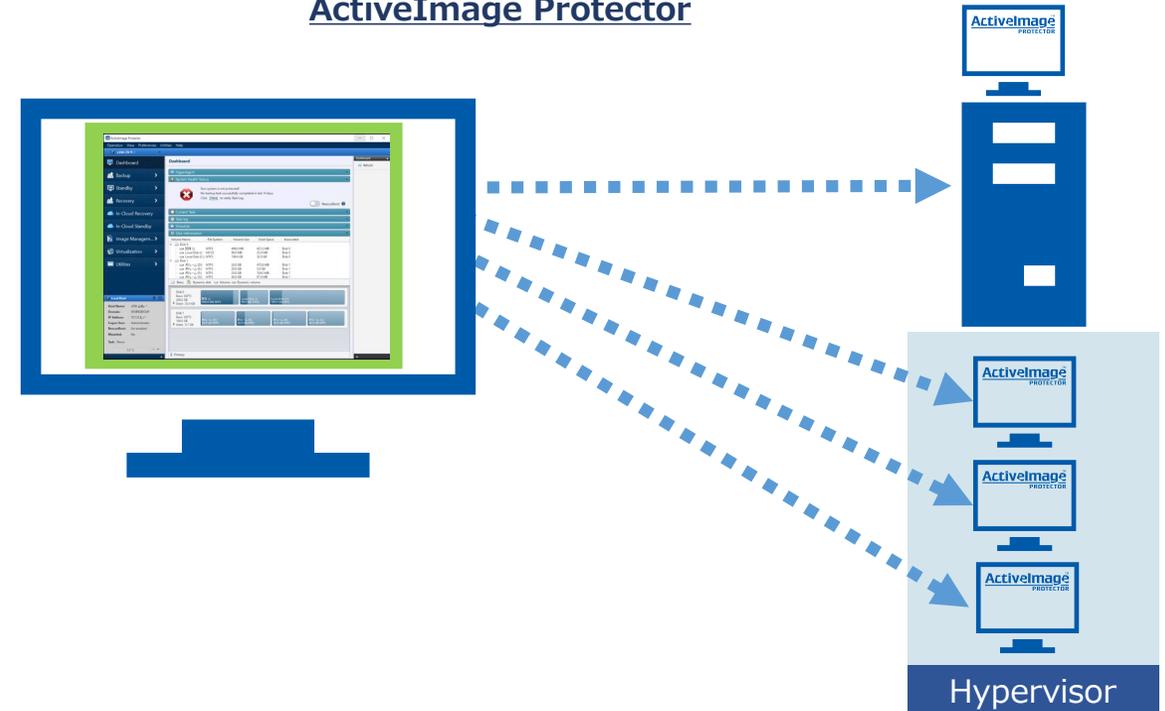
ActiveImage Protector's GUI



Remote console is provided

Remote console is provided to remotely operate ActiveImage Protector™ agents over network and monitor backup task execution status, backup task schedules, etc.

Remotely operate and manage ActiveImage Protector



Main Features		Server	Desktop	Linux	Virtual	Server vPack	Cloud	Cluster	IT Pro
		Windows Server	Windows PC	For Linux Server	On-premise Virtual Environment	VM in virtual / Cloud Environment	Public Cloud	WSFC	For IT professionals Annual subscription
Backup Feature									
	System Backup	○	○	○	○	○	○	○	○
	File Backup	○	○	—	○	○	○	○	—
	Shared folder Backup	○	—	—	○	○	○	○	—
	Agentless Backup of virtual machines	○※1	—	—	○※1	—	—	—	○
	Incremental Backup	○	○	○	○	○	○	○	○
	Deduplication Compression of backup files	○	○	○	○	○	○	○	○
	Scheduled Backup / Image Retention Policy	○	○	○	○	○	○	○	—
	Online Backup of SQL Server, Exchange, Oracle	○	○※2	—	○	○	○	○	○
	Destination Isolation Option	○	○	○	○	○	○	○	○
Restore Feature									
	System Recovery	○	○	○	○	○	○	○	○
	File / Folder Recovery	○	○	○	○	○	○	○	○
	Restore to enlarged / reduced volume size	○	○	—	○	○	○	○	○
	Restore to physical machines with different hardware configuration : A.I.R	○	○	—	○	○	○	○	○
	Restore to a virtual machine on different hypervisor (Hyper-V, VMware vSphere) : HyperRecovery™	○	—	—	○※3	—	—	—	—
	Restores the entire system to a virtual machine in cloud (AWS / Azure / Google / Oracle) environment : In-Cloud Recovery / RescueBoot*7).	○	—	—	○	○	○	—	—
	RescueBoot:Starts up the ActiveImage Protector™ boot environment	○	○	○	○	○	○	○	—
	RescueBoot / QuickRecovery:Boot up the recovery environment for immediately recovery	○	○	—	○※4	○※4	—	○	—

Main Features	Server	Desktop	Linux	Virtual	Server vPack	Cloud	Cluster	IT Pro
	Windows Server	Windows PC	Linux Server	On-premise Virtual Environment	VM in virtual / Cloud Environment	Public Cloud	WSFC	For IT professionals Annual subscription
Destination Storage								
Local Disk / Shared Folder	○	○	○	○	○	○	○	○
Actiphy StorageServer	○	○	○	○	○	○	○	○
Cloud Storage (Amazon S3 / Azure / Wasabi / S3-compatible)	○	○	○	○	○	○	○	○
LTO tape library	○	—	—	○※5	—	—	○	○
USB HDD/SSD/memory	○	○	○	○	○	—	○	○
RDX (USB/iSCSI connection)	○	○	○	○※6	○※6	—	○	○
SFTP Server	○	○	○	○	○	—	○	○
Others								
Creates virtual standby replica from a disk: vStandby	○	○	—	○※4	○※4	—	—	—
Create standby virtual machine from a backup image : HyperStandby	○	—	—	○※4	○※4	—	—	—
Backup file's bootability testing : BootCheck	○	○	—	○※4	○※4	—	—	—
Consolidation of incremental backup files	○	○	○	○	○	○	○	○
Replication of backup files	○	○	○	○	○	○	○	—
Virtual conversion (P2V, V2V)	○	○	—	○	○	—	○	○

※ 1 : Virtual machines configured on Hyper-V, VMware vSphere are supported.

※ 2 : Exchange is not supported.

※ 3 : Agent-based backup of LVM configured Linux machines is not supported to use.

※ 4 : Only Windows machine is supported.

※ 5 : Physical machine on which HyperAgent is installed is supported.

※ 6 : When "RDX data cartridge eject setting" option is enabled to back up virtual machine, please use iSCSI-connected RDX device.

※ 7 : Please use RescueBoot boot environment, when restoring a virtual machine in Google Cloud Platform (GCP), Oracle Cloud Infrastructure (OCI) environment.



**For your inquiry, please contact:
Actiphy Inc.
E-mail: global-sales@actiphy.com
Tel: +81-3-5256-0877**



www.actiphy.com