

# **ActiveImage<sup>TM</sup> 2022**

## **PROTECTOR**

### **ActiveImage Protector 2022 Cloud**

System Protection Solution for  
Public Cloud Environment

~ Product Summary ~

March 8, 2023  
Actiphy Inc.

## System Protection Solution for Public Cloud Environment

- 1 . What is ActiveImage Protector 2022 Cloud?
- 2 . Benefits of ActiveImage Protector 2022 Cloud
  - Back up virtual machines configured in cloud environment
  - Restore virtual machines configured in cloud environment
  - Backup File / Folder
  - DR solution using cloud environment
- 4 . Main Features
  - Backup / Recovery
  - Flexible backup schedule setting

## New System Protection Solution supporting virtual machines configured on public cloud services

ONew Recovery feature supporting virtual machines configured on public cloud services **NEW**

OCloud Object Storage is supported as backup destination **NEW**

OFile / Folder backup supports virtual machines configured on cloud environment **NEW**

### 1 license covers 5 virtual machines

1 Cloud license is required to back up a maximum of 5 virtual machines running on public cloud.

#### ActiveImage Protector Cloud License

1 license covers 5 virtual machines



### New Features of ActiveImage Protector 2022

S3-compatible object storage is supported as backup destination

Backup feature supports virtual machines on cloud environments including Amazon AWS, Microsoft Azure

File / Folder Backup feature is provided.

SFTP protocol is supported to provide secure communication.

Windows-based BE builder enables to build boot environment without the need for installation of Windows ADK.

Subscription and perpetual licenses are now available.

Windows Server 2022, Windows 11 are supported.

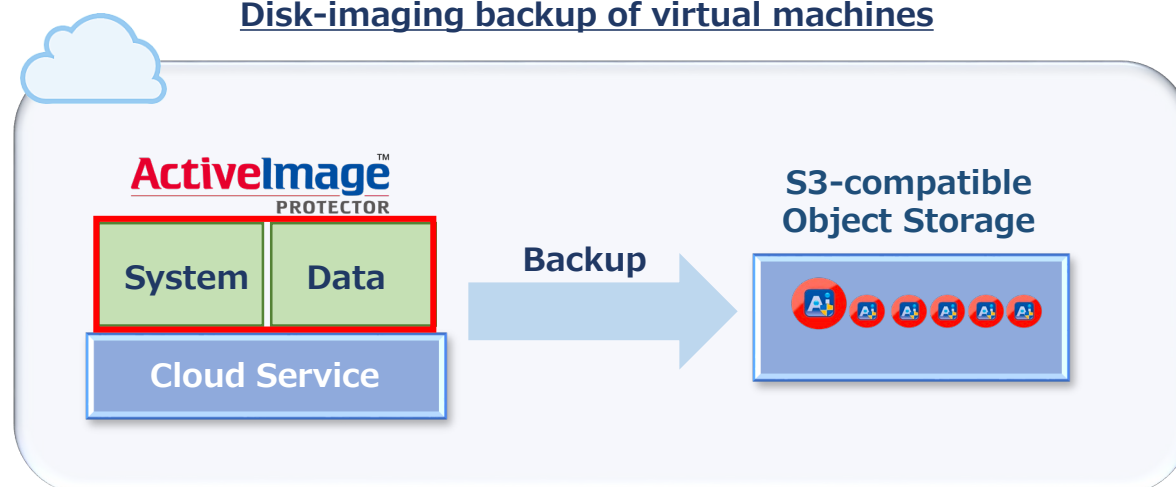
\* As for the summary of the new main features, please refer to "ActiveImage Protector 2022 Summary of New Features."

## Direct-To-Cloud Backup and In-Cloud Recovery

### Created backups are saved directly to cloud storage **NEW**

In contrast to traditional backup feature using snapshot technology, disk-imaging backup of virtual machines backs up the entire virtual machine including the entire system and data. Object storages are supported for backup destination, keeping data storage costs down.

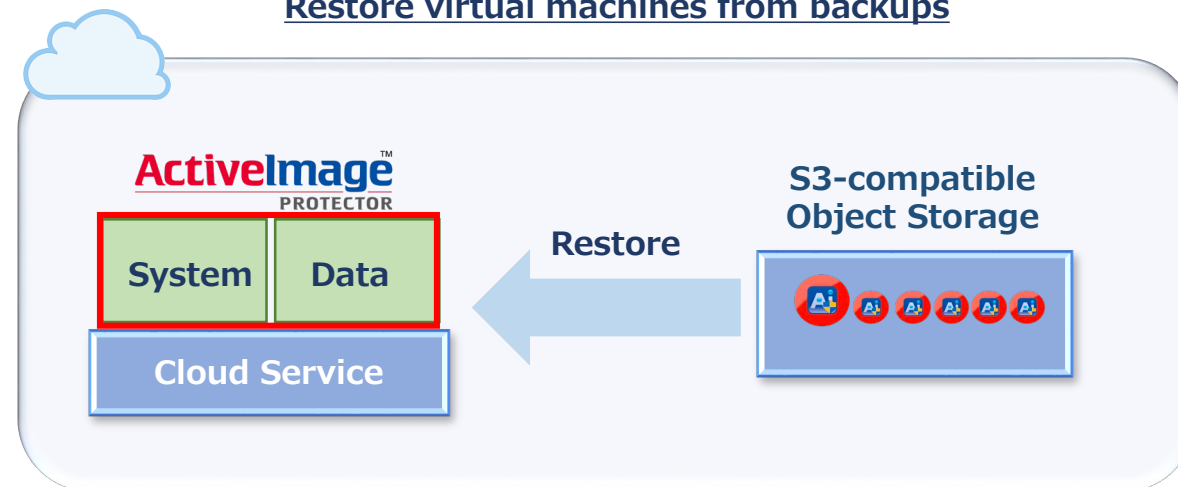
#### Disk-imaging backup of virtual machines



### In-Cloud Recovery offers an easy system recovery **NEW**

In-Cloud Recovery restores virtual machines from backup files without the need for management console for cloud environment or command line operation, which saves administrators labors in backup operation.

#### Restore virtual machines from backups



**Restore virtual machines in cloud environment using mostly the same operating procedures as On-premise**

**Virtual machines can be restored from backup by using wizard-driven three step operation.**

Restore virtual machines configured in cloud environment  
by using ActiveImage Protector

**Access object storage of  
backup destination**



**Select recovery point**



**Select restore target  
virtual machine**



**Automatically run  
recovery process**

**In-Cloud Recovery**

1 接続 2 復元ポイント 3 復元設定 4 確認

クラウドに保存されているバックアップをクラウド ベースの仮想マシンに復元します。  
ネットワークトラフィックを節約するために、復元エージェントは一時的にクラウド環境に配置されます。

クラウド サービス: Amazon AWS  
アクセス キー ID: AKIA6GQKERN6ANNURGNZ  
シークレット キー:   
リージョン: Asia Pacific (Tokyo) ap-northeast-1

**In-Cloud Recovery**

1 接続 2 復元ポイント 3 復元設定 4 確認

接続先: Amazon AWS, Asia Pacific (Tokyo) ap-northeast-1 region using Access Key: AKIA6GQKERN6ANNURGNZ  
バックアップ保存先: s3://aip-backup-s3/testEC2/e0d20890-2af8-4a9a-9718-51cc94091697

コンピューターの選択: windows2016-ec2

復元ポイントの選択:

2021/11/02 12:00:04	<input checked="" type="checkbox"/>
2021/11/02 11:00:06	<input type="checkbox"/>
2021/11/02 10:00:07	<input type="checkbox"/>
2021/11/01 18:07:42	<input type="checkbox"/>
2021/11/01 17:52:33	<input type="checkbox"/>

ディスクの選択: Disk 0 30.0 GB (30.0 GB 使用済み)

**In-Cloud Recovery**

1 接続 2 復元ポイント 3 復元設定 4 確認

復元対象のインスタンス: i-0e66ae52d2f7260a3(testEC2)

インスタンス ID: i-0e66ae52d2f7260a3  
インスタンスの状態: 実行中  
インスタンスタイプ: t2.micro  
プラットフォーム: windows

パブリック IP アドレス:   
プライベート IP アドレス: vpc-09d12dc39a8ef54c4  
VPC ID:   
サブネット ID: subnet-085b4e563093f2bac

ボリューム ID	デバイス名	ボリュームサイズ (GB)	アタッチメントのステータス
vol-01a060d6ab4202fd	vol-01a060d6ab4202fd	30	attached
vol-0fc5825c7994088ca	vol-0fc5825c7994088ca	100	attached

☐ 復元後にインスタンスを開始する ☐ 仮想化に失敗してもインスタンスを保持する

ディスク保存設定

☐ 接続中のディスクをデタッチする ☐ 接続中のディスクを削除する ☐ 接続中のディスクをそのまま保持する

☒ 以前に復元されたディスクを置換 (デタッチ) する ☐ 以前に復元されたディスクを置換 (削除) する

復元ディスクの設定

ディスク	マウントポイント	サイズ	ボリュームタイプ
ディスク 0	/dev/xvdd	30	General Purpose SSD(gp2)

**Only wait for the completion  
of restore process!**



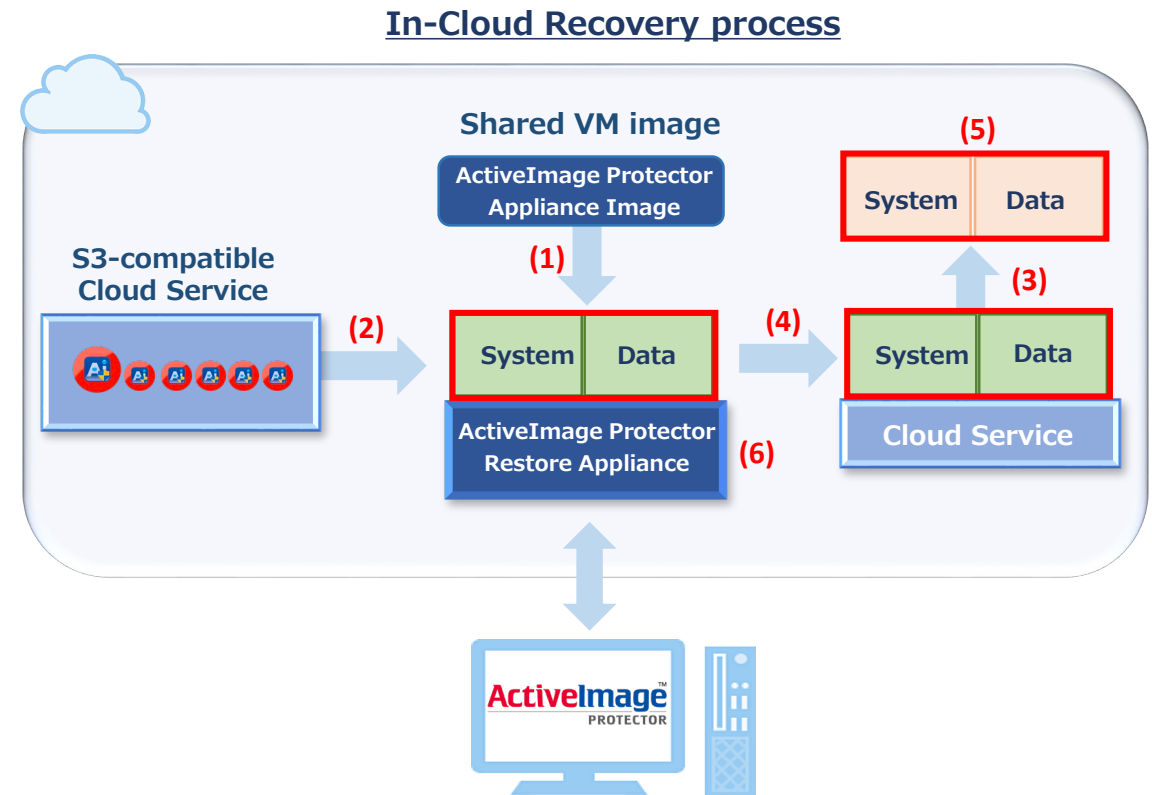
## Automatically execute VM restore process

In-Cloud Recovery restores virtual machines from backup files without the need for management console for cloud environment or command line operation, which saves administrators labors in backup operation.

- 1) "ActiveImage Protector Appliance Image", shared VM image, is located in the respective regions in cloud environment.
- 2) Internal process of In-Cloud Recovery automatically run as follows:

Automatically run the following processes:

- (1) Temporarily run **Restore Appliance** from **Appliance Image**
- (2) Restore Appliance creates virtual disk from backup
- (3) Disconnect virtual disk connected to restore source virtual machine.
- (4) Connect the created virtual disk to the restore target virtual machine.
- (5) The disconnected virtual disk can be deleted or retained.
- (6) End the temporarily running **Restore Appliance**.





## Uniform backup operation for on-premise / cloud environment

### Uniform backup operation for VMs in on-premise / cloud environment

Back up physical / virtual machines in on-premise / cloud environment using the same and simple operation.

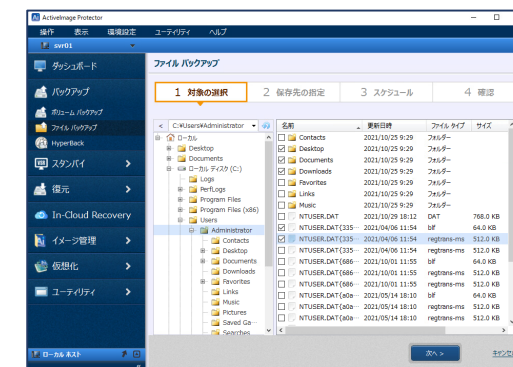
#### [Main backup operation]

- Backs up the entire hard disk of virtual machine on Cloud environment
- Incremental backup includes only changed sectors
- Backup using Deduplication Compression feature
- Backup using Retention Policy feature
- Scheduled backup
- Supports a variety of database running on cloud service
- Encryption of Backup Images (AES256, etc.)
- E-Mail notification of backup task execution results

#### Backup entire disk / by volume



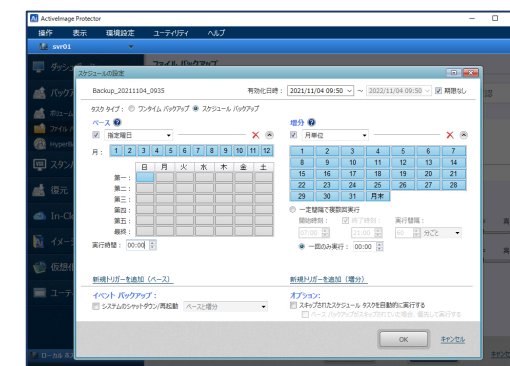
#### File / Folder Backup



#### Destination storage of backup files



#### Scheduled Backup

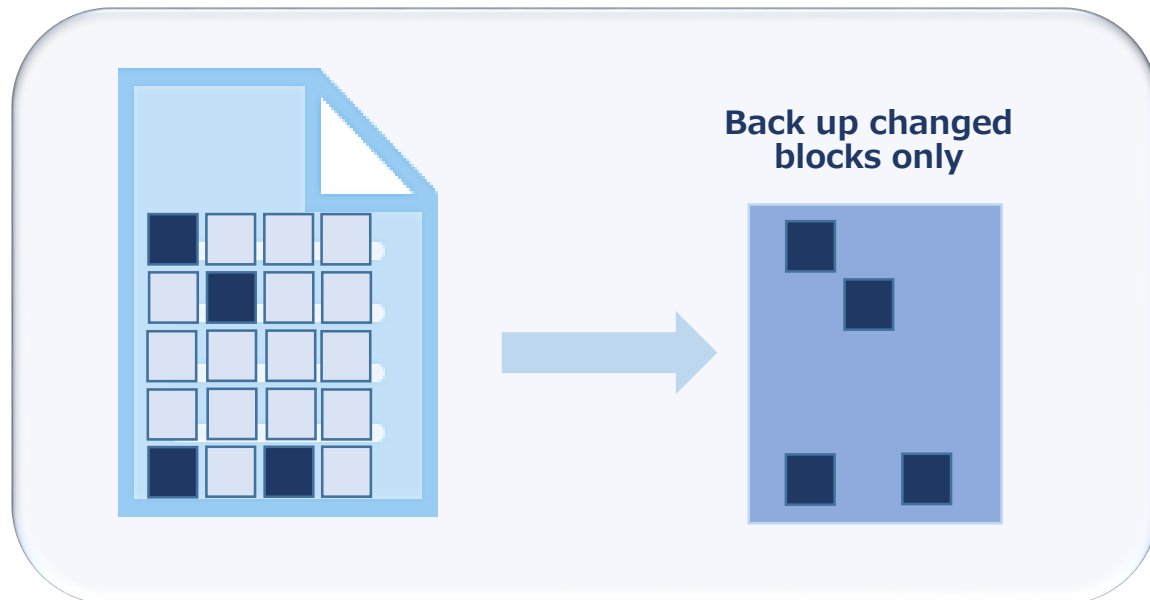


File / Folder backup feature is provided for virtual machines in cloud environment. **NEW**

### Block-based file backup

**Select a source file / folder and back up according to pre-defined schedule.** Configure daily incremental backup settings for backing up the blocks changed in the file / folder, enabling reduction of storage demand.

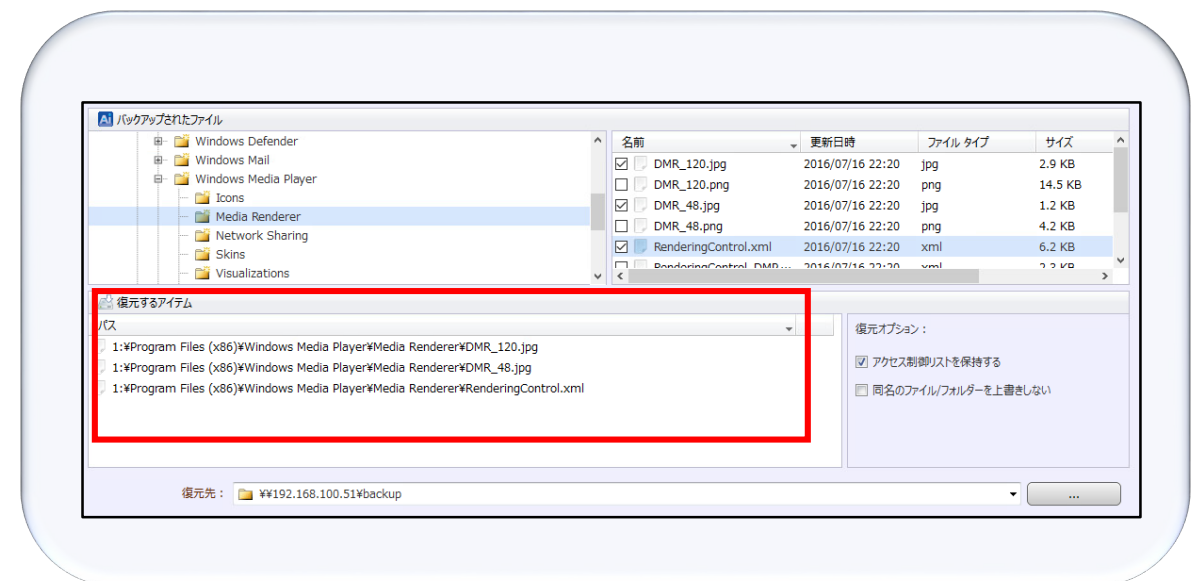
#### Incremental backup of changes in a file



### Restore file / folder

Select a file / folder in a backup file to restore. The stream information and access rights assigned to files are inclusively restored. **You can flexibly restore a point-in-time backup file.**

#### Select a point-in-time backup file and restore



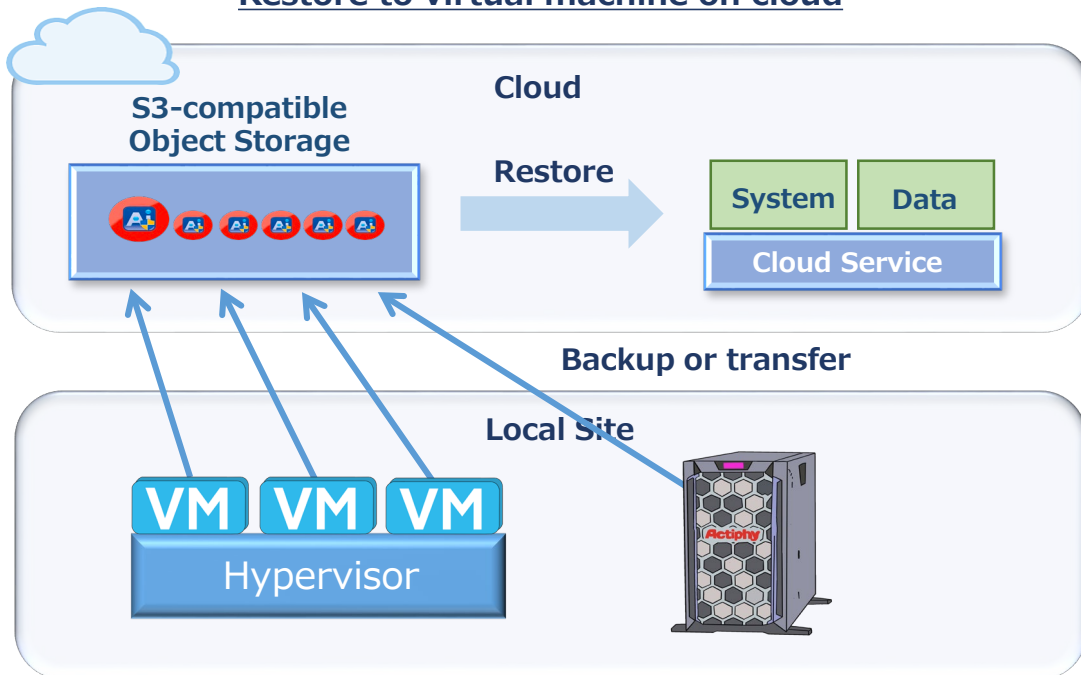


## Offers DR solution and cloud migration tool

### Deployment of DR site in cloud environment

Regularly back up on-premise physical / virtual machine and the backup files directly to cloud environments. When an emergency arises, **the failed system is restored from backup to virtual machine in cloud environment**. No additional drivers need to be installed and no extra operations are required.

#### Restore to virtual machine on cloud

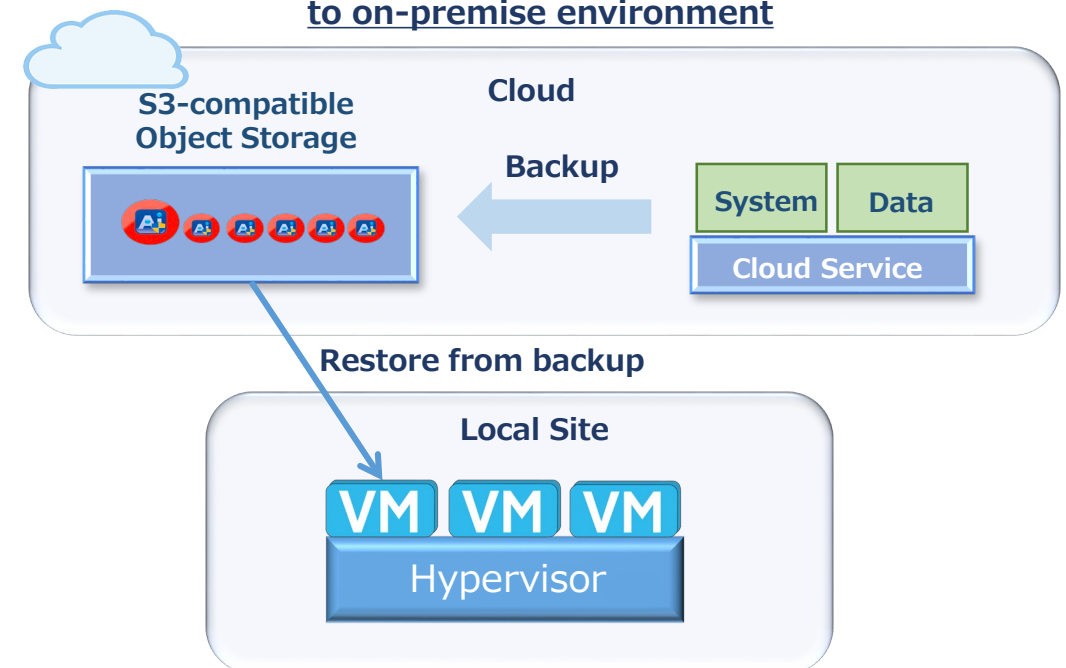


### Restore virtual machine on cloud to on-premise environment

In-Cloud Recovery offers an easy **system migration of virtual machine temporarily running in cloud environment from backup to on-premise virtual environment**.

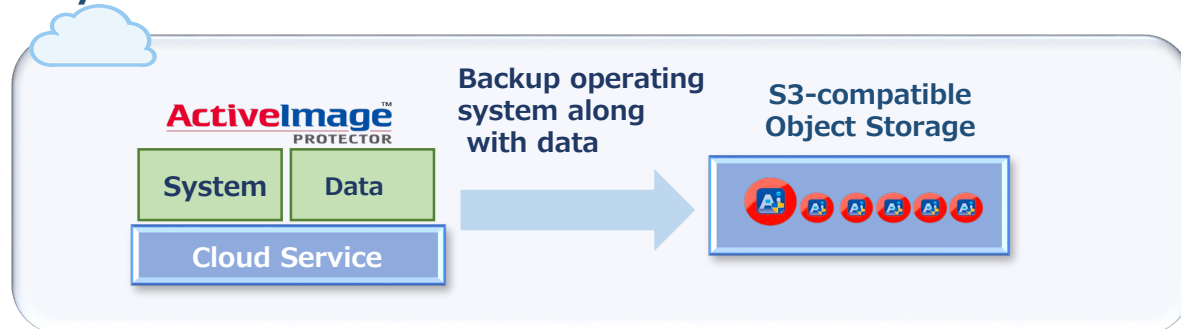
\* ActiveImage Protector is built with the capabilities for adding virtualization driver and configured settings while backing up.

#### Migration of a system from cloud to on-premise environment



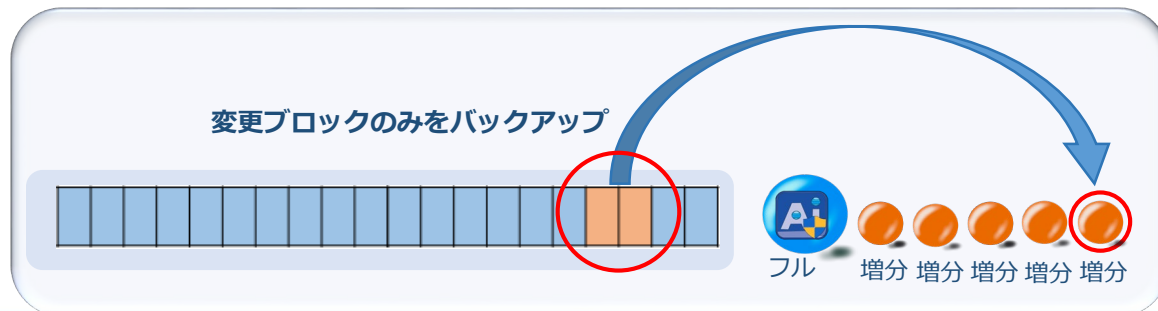
### Backup the operating system along with all your data

- ActiveImage Protector is a disk imaging backup of live Windows/Linux system (OS/application) along with all you data.



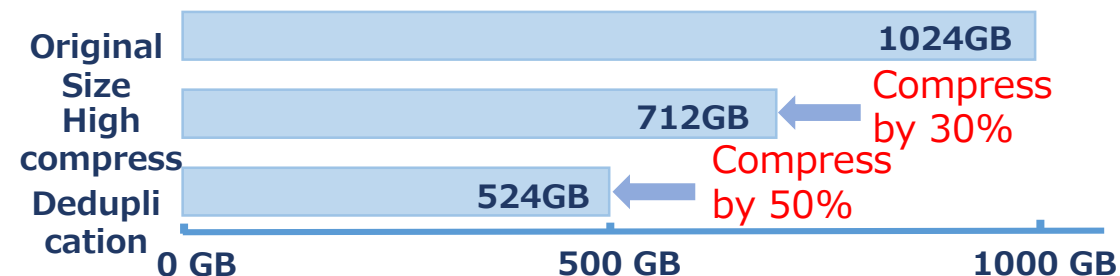
### Incremental backup includes only sectors that have changed from the last backup

Daily incremental backup **includes only the changes made since the last backup and is scheduled on regular basis according to the predefined schedule.** ActiveImage Protector only runs backup tasks according to the predefined schedule, minimizing the consumption of the system resources on the machine.



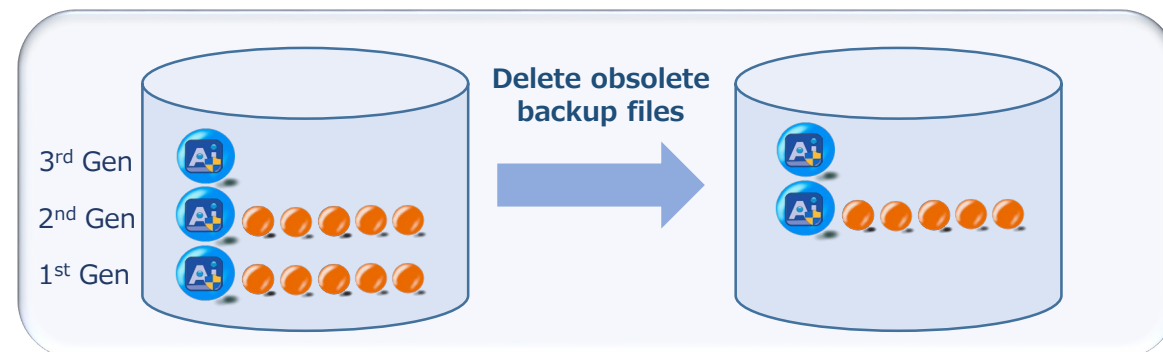
### Deduplication Compression reduces storage requirements

Our Inline Data Deduplication Compression (IDDC) feature eliminates duplicate data while simultaneously **compressing it**, resulting in a significant reduction in backup storage requirements and network load.



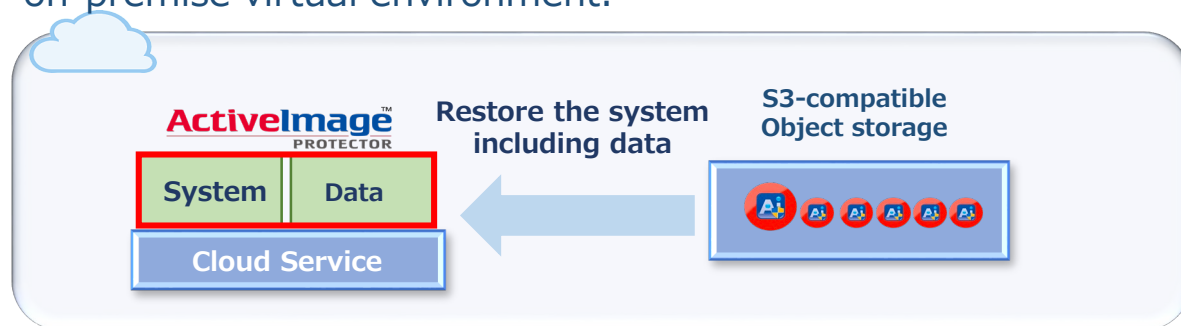
### Use Retention Policy to delete obsolete backup image files, resulting in reduction of the storage space.

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.



### Restore the entire disk

Select a backup file, specify the restore target VM and **your system is restored to the point-in-time backup**. The restore target may be the original VM, different VM as well as on-premise virtual environment.



### Restore by volume

Restore a backup image of a specific recovery point to a specified volume. For example, **only "D:" drive can be selected from the data volume to restore**.

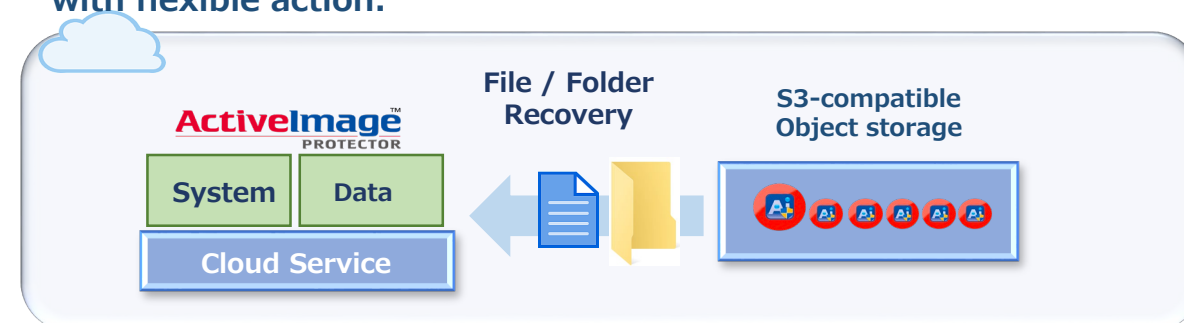


### File / Folder Recovery

#### File Recovery Feature

**Granular point-in-time recovery of files and folders is enabled.**

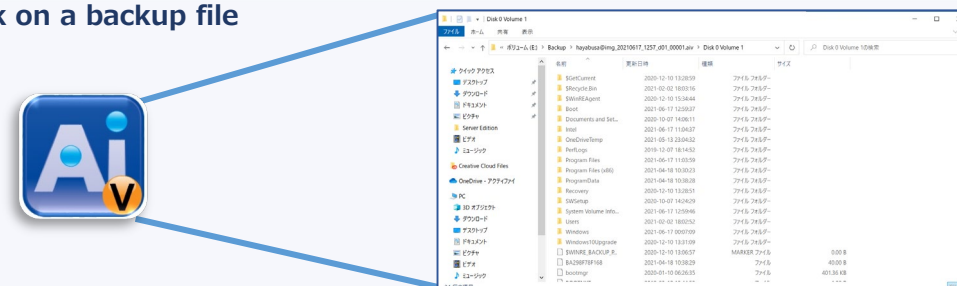
The stream information and access rights assigned to files are inclusively restored. When you only need specific files to restore in order to restart your duties, **File Recovery feature can provide you with flexible action.**



#### 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.

Click on a backup file



## Flexible Multi-scheduling

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.

### OWeekly

Full backup may be 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 the 'ベース' (Base) and '増分' (Incremental) scheduling settings. Both are set to '週単位' (Weekly). The 'ベース' schedule is set to run on '日曜日' (Sunday) at 00:00. The '増分' schedule is set to run from '月曜日' (Monday) to '金曜日' (Friday) at 07:00, with a 60-minute interval. The '一定間隔で複数回実行' (Execute multiple times at a fixed interval) option is selected.

### OMonthly

Select by clicking the date(s) of the month and the time of a day to perform a recurring full base backup tasks while incremental backup tasks are scheduled from Monday to Friday.

### ODesignate 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.

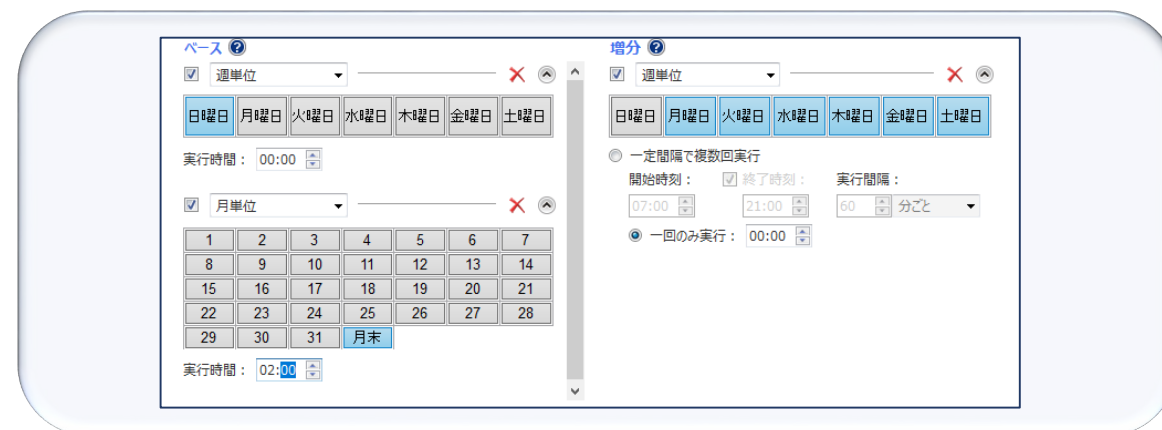
### OSpecified Date / Time

Select by clicking a date and time to schedule a full backup task on specific date while incremental backup tasks are scheduled for other days.

## Customized Schedule Settings

### OMulti-scheduling

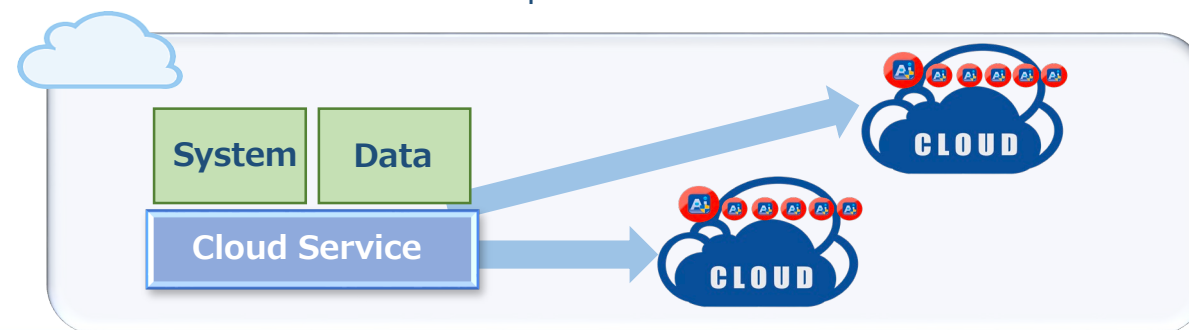
Incremental backup tasks are scheduled on weekly basis while full backup tasks are scheduled at the end of a month.



The screenshot shows the 'ベース' (Base) and '増分' (Incremental) scheduling settings. The 'ベース' schedule is set to '月単位' (Monthly) at the end of the month ('月末') at 02:00. The '増分' schedule is set to '週単位' (Weekly) from '月曜日' (Monday) to '金曜日' (Friday) at 07:00, with a 60-minute interval. The '一定間隔で複数回実行' (Execute multiple times at a fixed interval) option is selected.

### OMultiple Backup Destination Settings

Multiple backup task settings can be configured to direct backup files to multiple destinations. For example, configure the destination settings depending on the backup source, i.e., backup files of C drive are created in NAS A while backup files of D drive are created in NAS B.





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



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