

Advanced System Protection



Fast and secure drive imaging technology optimized for full system recovery and immediate business continuity for both Physical and Virtual environments.



Key Features



How it works

1	Full server image protection A system image of your operating system and data – preparing you for a full server recovery.	Complete disk image backup Select volumes you want to back up. Be sure to select the Critical Volumes if you want to do a full system recovery. A full image of each selected volume is backed up.
2	Your data is your data Your backups are kept in non-proprietary format – we do not hold your data for ransom.	Standard VHDX format A VHDX is created for each volume that is backed up. You can use a variety of MS or third-party tools to access the data. For System volumes, a separate VHDX is created for each hidden partition.
3	Fast, efficient, and reliable Multiple layers of technologies are applied to ensure backups are fast, use minimal disk space, and prioritize reliability of the newest data.	Reverse incremental forever Backups are performed at a block level and every backup after the first is incremental, only copying the changed data to the destination. With reverse incremental technology, the latest backup is always stored as a full VHDX with no dependencies. Thus both speed and space are prioritized, along with reliability of the newest data.
4	Predictable backup history You have control over how many backups you want to keep or what happens if the disk fills up.	Intelligent backup retention The oldest backups will be deleted automatically if disk space runs low, or to keep only the maximum number of backups configured. BackupAssist will never delete below the configured minimum number of backups, and instead will fail the backup, giving you full control over RPOs.
5	Restore files and applications Restore from individual files, entire MS applications, or individual email items.	Full support of BA Classic restore capabilities You can restore files and entire application databases using the Integrated Restore Console or granular restore tools (such as Exchange Granular Restore).
6	Encryption across all destinations Optionally select to protect your backups using military grade encryption.	Low level Encryption technology Data is encrypted using driver level technologies that ensures secure handling of data, and homogeneous support across all destination types. The VHDX cannot be mounted unless it is decrypted.
7	Immediate business continuity Boot straight into a backup when your production system fails.	VM instant boot Quickly create a bootable set of differencing disks that can be used to boot the backup as a VM while keeping the backup itself intact. This gives you time to carry out a full system recovery.
8	Full system recovery – anywhere You can recover into a physical, virtual, or even cloud environment: P2P, P2V, V2V, V2P.	Entire system and volumes recovery Use the RecoverAssist media to recover any system image backup to a physical, virtual, or cloud environment.
9	Flexible imaging recovery Recover to a dissimilar system even if it has smaller disks and you don't have access to the original system's OS.	Recover to dissimilar disks and from dissimilar environments You no longer need to have a RecoverAssist disk that matches the original system's OS. You can create it using any Windows OS. The target recovery disk can be smaller than the original systems – so long as it can hold the volume/s being recovered.



Backup Destination Support Matrix

	Backup Support	Backup Encryption Support	Bare Metal Recovery	VM Instant Boot	Test Restore
Local fixed media	Yes	Yes	Yes	Yes	Yes
External removable media	Yes	Yes	Yes	Yes	Yes
Network storage	Yes	Yes	Yes	Yes	Yes
iSCSI	No	No	No	No	No
Cloud	No	No	No	No	No



OS Support List

The following operating systems are supported by the Advanced System Protection engine:

- › Windows Server 2019 (x64)
- › Windows Server 2016 (x64)
- › Windows Server 2012r2 (x64)
- › Windows 10 (x64)
- › Windows 11 (x64)

32-bit and core versions of Windows operating systems are not supported.



FAQ

How often does a full backup occur?

- › Only the first backup for each destination is a full backup. Any subsequent backup will utilize the previous (latest) backup in the destination as the base image.

Does backup involve VSS?

- › Yes, VSS snapshots are created to ensure backups are application consistent.

Does Advanced System Protection support Test Restore?

- › Yes, Advanced System Protection supports Test Restore. It creates a hash for each block of data at a volume level. Each block of data may hold portions of one or more files. If a corruption is detected in a data block, all files associated with that block are reported as corrupted.

Can I use BackupAssist Classic Advanced System Protection and BackupAssist ER on the same machine?

- › No, BackupAssist ER and BackupAssist Classic can interfere with each other's operation.