
Imaging Best Practices

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Safeguarding Your Image Backups

The base files for Image backups are stored in the Local Storage folder as (.vhd) or (.vhdx) files. These files are not encrypted or compressed, which is what allows them to be restored more quickly than ones which are encrypted and compressed. While this advantage in recovery speed is helpful in a restore scenario, this may also leave the backup files open to modification.

There are circumstances in which the device containing the Local Storage folder was hit by malware (usually of the cryptolocker variety) and data on the base files was changed/corrupted. This prevented the software from restoring the image properly.

To prevent this from happening by exercising strict user access control over the Local Storage folder. Creating a user account which is used only by the Backup Agent service and is the sole account to have access to the Local Storage folder can prevent these sort of occurrences from happening.

Disk Defragmentation

Turn off scheduled disk defragmentation tasks

A defragmented disk will negatively impact backup performance; however, disk defragmenter processes will cause the Intronis agent to detect more changes to a disk than have actually occurred. This process increases the amount of time required to determine changed blocks, causing incremental backups to run longer than expected. To ensure incremental backups run quickly, disable any scheduled disk defrag jobs.

Run disk defragmentation prior to running your first backup

Running disk defragmentation prior to running an image backup can greatly improve the performance of your first and subsequent image backups. Run the disk defragmentation on any disk which houses volumes selected to be backed up once prior to running your first image backup. Do not schedule disk defragmentation jobs for these disks.

Backup Destination

Ensure your network has sufficient bandwidth if using network-attached storage

The first full backup will be larger than incremental file-based backups. Your local network needs enough bandwidth to support transferring image backups to a NAS device.

Do not back up to a disk on the machine you are protecting

It is ill-advised to back up to a disk local to the machine you are protecting. This does not provide adequate protection in the event of hardware failure. What's worse, if you're protecting a volume on the same disk to which you are backing up, performance is impacted substantially! This configuration is only advisable in test environments.

Prepare for Restores

Get acquainted with Intronis's restore options

Intronis has many restore options for image backups. Depending on the type of restore you need to perform, the environment to which you need to restore, and your customers' recovery time objectives, one recovery type may be preferable over another.

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