CLONING VS. IMAGING: WHAT'S THE DIFFERENCE?

Disk cloning is the process of making an exact, bit-by-bit copy of everything on a hard drive, including hidden system files, boot records, and all else. You should be able to swap a cloned drive for its original and never see any difference. Cloning is a straightforward backup strategy used by many home and business users.

Disk imaging stores the entire or selected contents of a disk in a compressed file that cannot be booted, as a cloned drive can, but is easier to maintain for incremental backups.

Both cloning and imaging create an exact record of your drive or partition, not just files, but the master boot record, allocation table, and everything else needed to run your operating system.

This isn't necessary for protecting your data--a simple file backup will handle that job just fine. But should your hard drive crash or Windows become hopelessly corrupt, a clone or image backup can quickly get you back to work.

As mentioned earlier, when you *clone* a drive, you copy everything on it onto another drive, so that the two are effectively identical. Normally, you would clone to an internal drive made external via a SATA/USB adapter or enclosure.

Imaging backup software copies everything on the drive into a single, compressed, but still very large file. You would probably save the image onto an external hard drive.

So what are the advantages of each?

Should your primary hard drive crash, a clone will get you up and running quickly. All you have to do is swap the drives.

On the other hand, if your drive crashes and you've backed it up to an image, you'd have to install a new internal hard drive, boot from your backup program's emergency boot USB flash drive, and restore the drive's contents from the backup.

So why image? An image backup provides greater versatility when backing up. You can save several images onto one sufficiently large external hard drive, making it easier and more economical to save multiple versions of the same disk or back up multiple computers.