

Skrevet af:

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GPT/MBR

MBR (Master Boot Record)

A special type of boot sector at the very beginning of a physical storage device. (supports up to 2 TB disks)

GPT (Guided Partiton Table)

A standard for the layout of the partition table on a physical storage device. (supports any size of disks)

RAID (Redundant Array of Independent Disks)

Raid 0 Min 2 drives - Not redundant - fast throughput.

Raid 1 Mirroring - min 2 drives.

Raid 0+1 Striping + Mirroring - min 4 drives.

Raid 1+0 Mirroring + Striping - min 4 drives.

Raid 2 Data is shared on bit-level on multiple disks - min 3 drives.

Raid 3-4 Striping with dedicated partition - min 3 drives.

Raid 5 Striping with distributed partition - min 3 drives.

Raid 6 Striping with double distributed partition - min 4 drives.

Raid 10 Similar to 0+1 data redundancy - min 2 drives.

Volume Types

Table 4-1 Volume types supported by disk type in Windows 7

Volume Type	Dynamic Disk	Basic Disk
Primary partition	No	Yes
Extended partition	No	Yes
Logical partition	No	Yes
Simple	Yes	No
Spanned	Yes	No
Striped	Yes	No
Mirrored	Yes	No
RAID-5	No (restricted to servers)	No

AT/SCHTASKS

An administrator can use the AT/SCHTASKS to schedule a command, a script, or a program to run at a specified date and time. He can create, delete, query, change, run, and end scheduled tasks on a local or remote computer.

Allocations Min/Max

Type:	Min. size:	Max.size
FAT16	2.042,5 KB	4 GB
FAT32	32.762,5 KB	4 GB
NTFS	1.048.576 KB	16 EB

Partition

A partition is the definiton of a section on a drive, a partiton enables the user to part a drive into multiple logcal sectors also known as Logical Volumes.

Volume

A Volume is treated like a separate drive from the physical drive, formatting a volume will only affect the volume.

VSS (Volume Shadow Copy)

A backup technology or service included in Windows XP or newer allows taking manual or automatic snapshots of files and volumes.

Backup types:

Full - Takes a full copy of the source and copies it to the desired destination.

Incremental - Takes a backup of anything that has been changed or creating since the last check. Looks for the "ready for archiving" bit to check if the file has been edited.

Differential - Similar to an incremental the first time it is performed. It copies all data changed from the previous backup. However, each time it is run afterwards, it will continue to copy all data changed since the previous full backup. It requires more storage and time to complete than a incremental backup.

Block - Block-level backup is a feature of incremental backup that allows uploading for only changed parts of files instead of whole files. In order to do that, it uses snapshot technology.

Disk Quota:

FSRM (File Server Resource Manager) - Is a management feature that can be installed on a Windows server. *It manages the following:*

User homefolder storage quota's - Folder quota's and which kind of file types can be stored. Can be used for generating usage reports.

Soft quota - Does not restrict the user from uploading more than allowed, but the IT department will be notified.

Hard Quota (Hard limit) - Does restrict the user from uploading more than allowed.

VHDx (Virtual Hard Disk)

VHD is a file format which represents a virtual hard disk drive (HDD) up to 2040 GB. VHDx is a newer version supporting up to 64 TB. It may contain what is found on a physical HDD, such as disk partitions and a file system, which in turn can contain files and folders. Both Disk Management Tool and Windows Server Backup allows you to create and mount VHD and VHDX files.

Basic/Dynamic Drives

BASIC DISK	VERSUS	DYNAMIC DISK
Basic Disk		Dynamic Disk
It's a traditional storage model that uses logical partitions labels to manage all partitions on the hard disk.		It's a relatively newer storage model that uses a hidden LDM database to manage all volumes on the hard disk.
It uses partitions to manage data.		It uses dynamic volumes instead of partitions.
It can hold up to four primary partitions or up to three primary partitions plus one extended partition, along with logical drives.		It contains single-volumes, spanned volumes, striped volumes, mirrored volumes, and RAID-5 volumes.
It supports multi-head configurations meaning you can easily switch between operating systems.		It does not support multi-head configurations meaning you cannot switch between OS.
Once created, the size of the partition cannot be changed or extended.		The dynamic disk is auto-shrinked for dynamic storage meaning the partition can be increased.

UEFI

(U)EFI stands for (Unified) Extensible Firmware Interface. It's a standard specification for the firmware interface on a computer, and it has been implemented by multiple vendors on various platforms. UEFI includes support for a newer partitioning format: the GUID Partition Table (GPT). It allows for using and booting from much larger disks, up to 8ZB, plus much better definitions of what each partition might be used for.

