

DataOptimizer Requirements

Hardware Requirements

Intel Pentium based system or a compatible processor with at least one quad core processor and at least 8 GByte RAM.

Operating System

Supported operating systems for DataOptimizer Server:

- Windows Server 2012 and 2012 R2 (Standard, Datacenter)
- Windows Server 2008 R2 SP1

The .NET Framework 3.5 is required. This framework is an optional feature of all supported operating systems and it will automatically be enabled during installation of DataOptimizer Server.

Hard Disk

The installation hard disk must be formatted with NTFS. Also, the hard disk used to store images and the database must not be encrypted or compressed.

Program Files

The program files require about 100 MByte of hard disk space on the system partition.

Archive Database

The database must be located on a NTFS formatted hard disk partition with sufficient space to store database entries for all files which have been copied to the Archive Tier.

The following formula is an estimation for the required space for the database:

$$\begin{aligned} \text{Database Size} &= 1024 \text{ Bytes} * \text{NumDirs} \\ &+ 256 \text{ Bytes} * (\text{NumDirs} + \text{NumFiles}) \\ &+ 36 \text{ Bytes} * \text{NumFiles} \end{aligned}$$

<NumDirs> and <NumFiles> are the total number of directories and files stored in the Archive Tier.

Examples:

- 1 million files and 10.000 directories will require about 315 MB hard disk space for the database.
- 10 million files and 100.000 directories will require about 3 GB of hard disk space for the database.

The database will automatically be increased in steps of 100 MByte, the initial size is 500 MByte.

Temporary Image Volumes and Volume Cache

Archived data are first stored in a temporary image volume on the hard disk before the volume is migrated to the Archive Devices. The temporary hard disk space will be released after successful migration of the volume. While a Storage Vault Job Cycle is running it requires space for at least two volumes per active Storage Vault.

Note: When archiving large files you must provide hard disk space for all volumes which are required to store the two largest files.

The volume cache is used to cache data which have been read from tape or object store devices. It is located in a sub-directory of the directory for the temporary image volumes. The size of this cache is configurable using the Advanced Settings dialog of PoINT Storage Manager. After installation the size is set to 20 GByte.

Capacity Tier Metadata Cache

Storage Vaults with a Capacity Tier using the object based file structure create a cache to map file IDs to the file entry in the Capacity Tier. This cache is located in the directory which is specified as **Configuration, Journal and Log Files** directory in the DataOptimizer setup dialog. It requires approximately 130 Byte per file in the Capacity Tier.

Required System Settings for CIFS/TAFS Server

After installation, the DataOptimizer TAFS Agent Configuration Tool will be started. This tool allows configuring how the communication between DataOptimizer Storage Manager and the TAFS Agent will be performed. If Storage Vaults have already been configured for this TAFS Client, it is necessary to deactivate all Storage Vaults and activate them again, after changing the communication settings.

SMB Pipes:

To allow communication between the TAFS Agent on the client computer and the DataOptimizer Storage Manager Service through SMB Pipes, it is necessary to adjust the following system settings on the computer running the DataOptimizer Storage Manager Service and on the computer where TAFS Client installation has been performed:

- "File and Printer Sharing" protocol must be enabled for local network connections
- "File and Printer Sharing" must not be blocked by a Firewall
- "Use Simple File Sharing" must be disabled
- To disable this option, open Windows Explorer and select Tools > Folder Options from the menu. Now select the property page "View" and uncheck this option.
- If many clients access the TAFS server using the SMB protocol, it is necessary to adjust the following registry setting. This setting is necessary because both, the client accesses and the communication between TAFS Agent and DataOptimizer Storage Agent use the same thread pool which may cause communication problems and hangs on high system usage.
- HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services\LanmanServer\Parameters
Value Name: MaxThreadsPerQueue
Value Type: DWORD
Content: 512 (Range: 1-65535, Default: 10)
- This value must be created if it does not exist. After changing the value, it is necessary to restart the computer.

TCP:

To allow TCP connections it is necessary to create firewall exceptions for the process PntFtrSvc.exe on the computer running the TAFS Agent and for jbxArch.exe on the computer where DataOptimizer Storage Manager has been installed. By default the TCP connection will be created using TCP port 8237, so that you may also unblock this port on both systems rather than creating exceptions for the processes.