GTS Network Storage – Quick Start Guide

Introduction

GTS Network Storage is file-level server data storage connected to a network, which provide data access to heterogeneous clients. Network Storage not only operates as a file server, but is specialized for this task by its hardware, software and configuration of those elements.

Benefits of Network Storage, compared to file servers, include faster data access, easier administration, availability over network and simple configuration.

Network Storage removes the responsibility of file serving from other servers on the network. They typically provide access to files using network file sharing protocols such as NFS or CIFS.

Key product benefits are:

- Managed storage service available on-demand, scalable from Gigabytes to several Terabytes.
- For Virtual/Dedicated Hosting, Colocation or remote servers.
- Central storage space for files sharing, backups or archives.
- Access provided with Data Services.
- Available for servers as CIFS/NFS network share

Network Attached Storage shall be considered as the storage space for servers. Things like advanced folders and user management shall be provided with the usage of customers' servers and Active Directory settings.

This Quick Start Guide is presenting the necessary steps to start using the service.

Confidentiality and Non-Disclosure

How to start

Managing the connection do Network Storage

Colocation / Dedicated Hosting

Servers, installed in GTS Datacenter shall be connected to the Network Storage with the physical interface on GTS Storage Area Network. By default the connection is redundant, which requires two Ethernet ports available in each server connected to the Network Storage (it is possible to connect also in non-redundant way). The configuration is prepared by GTS engineers.

Virtual Hosting

Virtual Machines can be connected to the Network Storage with the SAN infrastructure, or with Layer 3 network. Concrete design depends on particular requirements. Despite which type of connection is used, the configuration is done on the logical level, which means that no physical cabling shall be required. Typically Network Storage is connected with separate Network Interface created within Virtual Machine.

L2/L3 VPN

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Internet (over IPSec)

Access over the Internet is provided with secured IPSec tunnel. In order to configure the connection to the storage, first the connection to the VPN concentrator shall be managed. The tunnel may be configured on the router or directly on the servers connected to the storage (e.g. Cisco VPN client may be used).

Accessing Network Storage

The configured share is by default connected to the customer's servers as a *remote disk drive* with file system and is represented by the set of parameters:

- CIFS: IP\Share$\ + Admin user + password with Share full control rights
- NFS: IP/ + set of IPs with defined control rights (R/RW – „UNIX permissions")

Access to share created for the customer is restricted only to the services assigned to the customer. This allows only the specified users (CIFS) or IPs (NFS) to access specified share.

It is possible to use CIFS under Linux/Unix OS as well, however it requires additional mounting of the share in the OS.

CIFS

Set of data to configure the access:

- IP address of the Network Storage
- Share represented by: \\IP\Share$\
- User: admin
- Pass: (delivered in secure way agreed with particular customer)

Example:

- IP address of storage is 172.27.100.10
- Share: \\172.27.100.10\SS1100005$\
- login SS1100005-user1
- password MougBayfruj8

How to use:

```
NET USE
[devicename | *] [\\computername\sharename[\volume] [password | *]]
        [/USER:[domainname\]username]
        [/USER:[dotted domain name\]username]
        [/USER:[username@dotted domain name]
        [/SMARTCARD]
        [/SAVECRED]
        [[/DELETE] | [/PERSISTENT:{YES | NO}]]
NET USE {devicename | *} [password | *] /HOME
NET USE [/PERSISTENT:{YES | NO}]
cd \\172.27.100.10\
fill in user/passw


or mount the share directly under the Administration tools in GUI.
In case using CIFS from Microsoft OS no additional software is required. (part of OS)
In case using CIFS from Linux/Unix OS is SMB client required.
In case using CIFS from MacOS is SMB client no additional software is required. (part of OS)
```

NFS

Set of data to configure the access:

- IP address of the storage: IP
- Share name and exact patch: /vol/custvolname/share
- Set of IPs required for authentication purposes

Example:

- IP address of storage: 172.27.100.10
- path: /vol/custvolname/SS1100005
- 168.47.56.90: RW, 10.10.10.10: R

How to use

```
mount –t nfs 172.27.100.10:/path /[mountpoint]


In case using NFS from Linux/Unix OS no additional software is required.
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