Linking STORE (All Linux except STORE)

Introduction

Regardless of the function a server is to perform, except STORE (which makes the data area available to itself), the data area will be linked. The first VM to be set up should therefore be the role STORE.

Linking the data area

First a connection to the common data area is established. To do this, the path for the mount point is created with the following commands:

Connect Datastore - create directory

```
mkdir /home/jtel/shared
chown jtel:jtel /home/jtel/shared
```

IThe connection is then configured in the `/etc/fstab` file. The file can be edited with a text editor. The following entry must be inserted into the file as an example (replace password with the corresponding password):

Additional entry in / etc / fstab

```
cat <<EOFF >> /etc/fstab
//acd-store/shared    /home/jtel/shared    cifs    user=jtel,password=<password>,uid=jtel,gid=jtel,file_mode=0755,dir_mode=0755    0    0
EOFF
```

ATTENTION: to connect old file shares (SMB 1.0) under CentOS 7.x the following entry is necessary:

Additional entry in / etc / fstab

```
cat <<EOFF >> /etc/fstab
//acd-store/shared    /home/jtel/shared    cifs    user=jtel,password=<password>,uid=jtel,gid=jtel,file_mode=0755,dir_mode=0755,vers=1.0    0    0
EOFF
```

The first block of the line describes the UNC of the release. Here the name of the computer (here `acd-lb`) must be adapted if necessary. The third block contains among other things the credentials for sharing. If a domain name is also required here, it can be added with an additional parameter *domain=DOMAINNAME* separated by commas. If it is desired for security reasons not to store the credentials in the /etc/fstab file, which for system-immanent reasons has no special reading restrictions, they can be stored in a separate file. Such a file would then have the following format (replace password with the appropriate password):

File with separate access data

```
domain=MYDOMAIN
username=jtel
password=<password>
```

This file can be placed in any useful location (e.g. `root` home directory or directly in the `/etc` directory) and can be given read-only access to root. Assuming that such a file would be named `/etc/jtel-credentials`, the file's permissions are secured with the following commands:

Backup of the access data file

```
chown root:root /etc/jtel-credentials
chmod 400 /etc/jtel-credentials
```

In the file `/etc/fstab` the entry would then look like this

Secure entry in / etc / fstab

```
//acd-store/shared        /home/jtel/shared        cifs        credentials=/etc/jtel-credentials,uid=jtel,gid=jtel,file_mode=0755,dir_mode=0755        0        0
```

ATTENTION: to connect old file shares (SMB 1.0) under CentOS 7.x the following entry is necessary:

Secure entry in / etc / fstab

```
//acd-store/shared        /home/jtel/shared        cifs        credentials=/etc/jtel-credentials,uid=jtel,gid=jtel,file_mode=0755,dir_mode=0755,vers=1.0
0        0
```

After configuring the connection, the share can now be mounted. This is done with the command:

Connect the share

```
mount /home/jtel/shared
```

After connecting, a short test shows that the files can be accessed:

Access test

```
[root@acd-db2 ~]# ls -la /home/jtel/shared/
total 52
drwxr-xr-x.  9 jtel jtel 4096 Mar 30 10:35 .
drwx------.  6 jtel jtel 4096 Jun 12 17:03 ..
drwxr-xr-x.  5 jtel jtel 4096 Mar 22 12:13 Data
drwxr-xr-x.  4 root root 4096 Jun 14 08:37 Import
drwxr-xr-x.  7 jtel jtel 4096 Jun 13 15:37 JTEL
drwxr-xr-x. 16 jtel jtel 4096 Mar 23 15:55 JTELCarrierPortal
drwxr-xr-x.  3 jtel jtel 4096 Jun 13 15:40 LogFiles
drwxr-xr-x.  3 jtel jtel 4096 Feb 10 12:49 LogFilesCall
```

Securing the mount

Adjust the crontab so that the mount itself is restored, so that the boot order of the systems is not important:

Securing the mount

```
cat <<EOFF >> /etc/crontab
*/1  *  *  *  * root bash -c "if [ ! -d /home/jtel/shared/Data/system ]; then mount /home/jtel/shared ; fi"
EOFF
```

This can be tested as follows:

Testing ensuring the mount

```
ls /home/jtel/shared
(files are there and are listed)

umount /home/jtel/shared
ls /home/jtel/shared
(files are no longer there and are not listed)

... Wait up to one minute

ls /home/jtel/shared
(files are there and are listed)
```