

Mount SAMBA shares

Introduction

There are several ways of mounting SAMBA shares on a Linux machine. This manual gives an overview.

Prerequisite

It makes things easier if the Linux client is a member of an Active Directory domain. Hence I use Zorin OS, this can easily be achieved with the correct setting during the installation:

Use Active Directory checkbox

If you want to join a Linux computer to an Active directory, please refer to:

[AD Join](#)

Mount SAMBA shares

Manual mount

```
mount -t cifs -o username=<user>,password=<secret-password> //xigma-prime.simmy.ch/backup /mnt/backup
```

Permanent mount with fstab

In the fstab, I use the following command:

```
//xigma-prime.simmy.ch/images /mnt/images cifs  
credentials=/root/.smbcredentials,uid=1000,forceuid,gid=1000,forcegid 0 0
```

This will mount the share images to the mountpoint /mnt/images. The credentials are saved in the file .smbcredentials:

```
username=<username>
password=<password in cleartext>
domain=simmy.ch
```

The file itself is placed in the home directory of root. The access right are limited to read only for the root user. So there is minimal protection for the password in clear text. Only the root user can read it.

The share(s) will be mounted during the boot process. This works most of the times, but not always.

Permanent mount with pam_mount

It is more desirable to mount the SAMBA shares when the user logs in, rather during boot.

Installation of the necessary modules

```
apt install -y libpam-mount keyutils cifs-utils smbclient
```

Configuration entry in /etc/security/pam_mount.conf.xml

The following lines have to be added to the file after the line `<mkmountpoint enable="1" remove="true" />`:

```
<volume
fstype="cifs"
server="xigma-prime.simmy.ch"
path="images"
mountpoint="~/mnt/images"
options="sec=krb5,cuid=%(USERUID),workgroup=SIMMY,vers=3.0" />
```

`<mkmountpoint enable="1" remove="true" />` means that the mount point is created and removed automatically. Also there is no password saved on the computer. I also placed the mount point into the user home directory.

Permanent mount with GPO

It is possible to utilize GPOs to mount SAMBA shares on a Linux machine, that is joined to an Active Directory. However, I did not try this possibility.

Temporary mount

It is possible to mount a share with a file manager. This mount will be lost after log off or a reboot.

Useful resources

Revision #1

Created 22 January 2024 17:39:17 by Admin

Updated 22 January 2024 17:45:26 by Admin