

# Mounting user and IEU department shares on Debian

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These are instructions on how to mount the UZH IEU personal share on Debian version 9.9 Stretch. The procedure for mounting the personal, department and group share is the same, however you must change the server address. Refer to the instructions for Windows for info on the server address for each case. Although the details may differ for different linux distributions and versions, this is meant to serve as a guide.

## Preparation

Make sure you are connected to the University VPN.

Create a directory where you will mount the share.

```
mkdir /media/uzh/ieu
```

Install keyutils tool

```
sudo apt-get install keyutils
```

The IEU server authenticates users using kerberos. You need to install kerberos (krb5).

```
sudo apt-get install krb5-user
```

Kerberos comes with a default “realm”. You need to edit the kerberos configuration file (krb5.conf) to change the realm names and the server names.

Open the kerberos configuration file using the editor of your choice

```
nano /etc/krb5.conf
```

Follow the formatting of the other options already present.

Change the default realm to that of UZH. Modify under [libdefaults]

```
default_realm=D.UZH.CH
```

Add a realm for UZH, write this under [realms]

```
D.UZH.CH = {  
    kdc = d.uzh.ch  
    admin_server = d.uzh.ch  
    default_domain = uzh.ch  
}
```

At the list of [domain\_realm] add

```
d.uzh.ch = D.UZH.CH
```

Save changes and close.

## To mount drive

Get kerberos ticket. Replace “myshortname” for your UZH shortname. Note: do not run as superuser.

```
kinit myshortname@D.UZH.CH
```

Note: if you type

```
klist
```

you will see your ticket status. Tickets are valid for a defined period of time, usually 8 hours. Once they expire you need to request a new one by repeating the command above.

Mount the share. Use the correct server address for either your personal or department share. This example mounts the user personal share (ieu-fsusr.d.uzh.ch/letter).

```
sudo mount -t cifs -o sec=krb5,vers=1.0,cruid=1000,ieu-fsusr.d.uzh.ch/letter /media/uzh/ieu
```

Note: “cruid” should match the id of the user who ran kinit. If you have more than 1 user profile on your machine, this may change. By default, the first user in a fresh install is assigned “1000”. To see user information, type “id”.

Done. Now you should see your share folder.

Always unmount when you are finished.

```
sudo umount /media/uzh/*
```

## Bonus: script for easy fast mounting

This script will mount all shares you specify with a single command. This way all you have to do to mount your shares (personal, department and/or group) is type a single command into your terminal.

Make a new folder in your home directory for your environment variable.

```
mkdir ~/bin
```

Create the file where you will write the script. Replace “mountuzhshare” with whatever command you want to use to mount your share.

```
nano bin /mountuzhshare
```

Copy the following script into the file. Be sure to replace “myshortname” and “Professor” with your own info.

```
#!/bin/bash

USER=myshortname
IEUGROUP=Professor
UFIRST=$(echo ${USER:0:1} | tr '[a-z]' '[A-Z]')
ID=$(id -u)

if ! klist -s
then
  if ! kinit $USER
  then
    exit 1
  fi
fi

function mount_share () {
  SHARE=$1
  MNT=$2
  if mount | egrep -q ~"$SHARE "
  then
    echo "$SHARE already mounted."
  return

```

```
fi

[[ -d $MNT ]] || sudo mkdir -v $MNT
echo "Mounting share $SHARE into $MNT"
sudo mount -t cifs -o sec=krb5,vers=1.0,cuid=$ID,uid=$ID $SHARE $MNT
}

mount_share //ieu-fsusr.d.uzh.ch/$UFIRST/$USER /media/uzh/$USER
mount_share //ieu-fsgr.d.uzh.ch/IEU_All /media/uzh/ieu_all
mount_share //ieu-fsgr.d.uzh.ch/$IEUGROUP /media/uzh/$IEUGROUP
```

Make the script executable.

```
chmod +x bin/mountuzhshare
```

Append to \$PATH.

```
PATH=$PATH:~/bin
```

Modify the file bashrc in your home directory to export. Open file

```
nano .bashrc
```

Add this line to the file.

```
PATH="$PATH:~/bin"
```

Done.

Now to mount all shares, simply open a terminal and the command you chose.

```
mountuzhshare
```

Always unmount when finished.

```
sudo umount /media/uzh/*
```