

Mount Shared Folders

BSC - Workflows and Distributed Computing

March 31, 2017

1 Mount folders using NIS

1.1 VM Configuration

1. Install NIS and automount:

```
sudo su
apt-get update
apt-get install portmap nis
apt-get install autofs
```

- (a) be sure that nisdomainname is mmb.pcb.ub.es

```
dpkg-reconfigure nis
```

2. Configure NIS:

- (a) add the following lines to /etc/yp.conf

```
domain mmb.pcb.ub.es server 10.4.96.183
domain mmb.pcb.ub.es server 10.4.96.184
domain mmb.pcb.ub.es server 10.4.96.181
domain mmb.pcb.ub.es server 10.4.96.182
```

- (b) adapt /etc/nsswitch.conf

```
# /etc/nsswitch.conf
#
# Example configuration of GNU Name Service Switch functionality.
# If you have the 'glibc-doc-reference' and 'info' packages installed, try:
# 'info libc "Name Service Switch"' for information about this file.
passwd:      files nis
group:       files nis
shadow:      files nis
gshadow:     files

hosts:       files dns nis
networks:    files

protocols:   db files
services:    db files
ethers:      db files
```

```
rpc:          db files

netgroup:     nis

automount:    nis
```

3. Configure automount:

(a) create `/etc/auto.services` with the following line:

```
+auto.services
```

(b) create `/etc/auto.homes` with the following line:

```
+auto.homes
```

4. `systemctl add-wants multi-user.target rpcbind.service`

5. Restart services:

```
/etc/init.d/nis restart
/etc/init.d/autofs restart
```

1.2 Write on mounted folders

1.2.1 Home Directories

We can see where the home directories are using `ypcat passwd`. To have a home directory we need to create a link at `/usr/people/$username`

The MMB homes are at: `/orozco/homes/desktops/lcodo`

The BSC homes are at: `/orozco/homes/servers/bsc/$username`

1.2.2 Write

We can create a new user with the same UID and GID. Edit `/etc/passwd` and create the new user.

Or we can use the user to write `su $user`

2 Mount folders using CIFS

2.1 VM Configuration

1. Install CIFS:

```
sudo su
apt-get install cifs-utils
```

Configure cifs:

2. Create file `/etc/modprobe.d/cifs`

```
options cifs CIFSMaXBufSize=130048
options cifs cifs_min_rcv=64
```

3. Execute `modprobe -r cifs`

4. Mount directory

```
[ -d /transplant ] || mkdir -p /transplant
mount -t cifs //192.168.122.253/INBTransplant /transplant -o user=guest,
password=guestTransplant01,rsiz=130048,sec=ntlmssp
```

2.2 Write on mounted folder

2.2.1 Home Directories

The BSC homes are at: `/data2/INB/transplant/$username`

2.2.2 Write

Create a new user with the same UID and GID. Edit `/etc/passwd` and create the new user.

Add a soft link to the folder

```
sudo groupadd -g 306 transplant
sudo useradd -m -d /home/$USERNAME -s /bin/bash --uid 306 --gid 306 -G root $USERNAME
sudo mv /home/$USERNAME /tmp
sudo ln -s /transplant/testUser/test/ /home/test
```