

Accounts in the ECE Network Lab

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ACCOUNTS

As a common user, you would have several accounts in the ECE Network Lab.

DEVICE MANAGEMENT ACCOUNT

There are two kinds of the device management accounts in the Network lab:

- Workstation root/administrator accounts
- User and Executive Password/secret on Cisco devices

The lab instructors or TAs will have all these device management accounts. They can release these accounts to you if the experiment needs. Or you can find these accounts on your lab manual.

GROUP ACCOUNT

The group accounts are used to log on the lab workstations, which may run in WinXP and Linux.

The group account would be created by Lab Instructors or TAs based on the groups information.

USER ACCOUNT

The user account is setup on the Gateway for the lab user to access their ENCS /home. At the beginning of the semester, the lab user account is created based on the ENCS netgroups, e.g. the students, who register the related courses in the Network lab, their ENCS accounts will be ported on the Gateway. They can only use this account to access their ENCS /home.

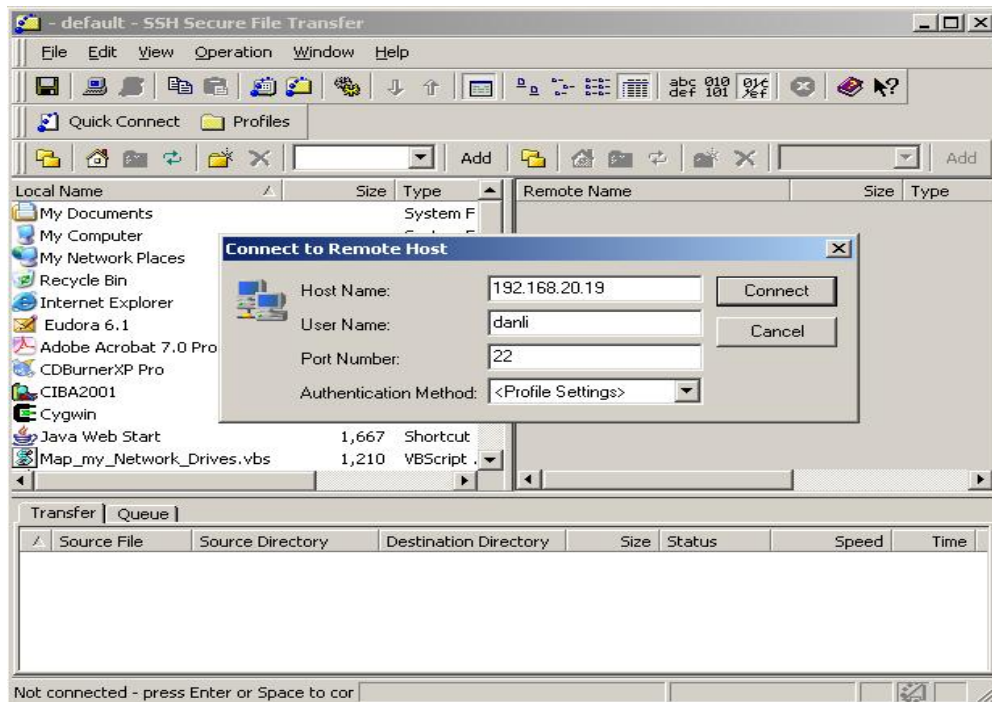
YOUR HOME ON GATEWAY

The gateway – Widget is setup for any user to access their Unix ENCS home directory. The Gateway IP is 192.168.20.19 in the Network Lab. So you can save any data or

configuration files to your home directory. Because of the security consideration, common user can't logon the Gateway. They can only use 'scp' and 'sftp' to access their home. Here introduce how to do this operation in WinXP and Linux.

FILE TRANSFER ON WINXP

The tool – 'Secure File Transfer Client' has been installed on any workstation. Run this tool, you would see the following window:



Click 'Quick Connect', then input the Gateway IP address and your ENCS ID, press "Connect", you need to input your password. You shall see your home directory on the right window.

FILE TRANSFER ON LINUX

In Fedora, you can use the SCP and sFTP to transfer your file between your ENCS home and the local. The basic SCP usage is as the following:

- a. To copy a single file to your home

```
scp mylocalfile.txt myuserid@192.168.20.19:netlab/newfilename
```

- b. To copy a single file from your home

```
scp myuserid@192.168.20.19:netlab/newfilename mylocalfile.txt
```

- c. To copy the whole directory to your home

```
scp -r mylocaldir myuserid@192.168.20.19:netlab/newdirname
```

- d. To copy the whole directory from your home

```
scp -r myuserid@192.168.20.19:netlab/newdirname mylocaldir
```

Note: here 'netlab' is a sub-directory under your ENCS home.

For more information, please refer to the SCP Command manual by 'man scp'.

sFTP is an interactive tool that works over an ssh connection, mirroring the ftp program's functionality and is in fact a nice front end to scp. You won't be using this client for anonymous downloads, but if you need to move data or other confidential information between machines, this is an excellent tool to choose. Once you've mastered the scp command you'll find sftp simple to use, or vice versa. They share many of the same flags and mostly the same syntax. The basic sFTP usage is as the following:

```
sftp myuserid@192.168.20.19
```

After being challenged for the password for user "myuserid," which is transmitted in a tunnel through the secure shell. For more information, please refer to the sFTP Command manual by 'man sftp'.

BACKUP THE ROUTER CONFIGURATION

Before you start an experiment, the routers should be in the default running configuration from the TFTP server - Gizmo.

Save a Router Config

After you do some configuration on the router, and you hope to save it for next experiment, you can use the following steps to save your configuration to a file:

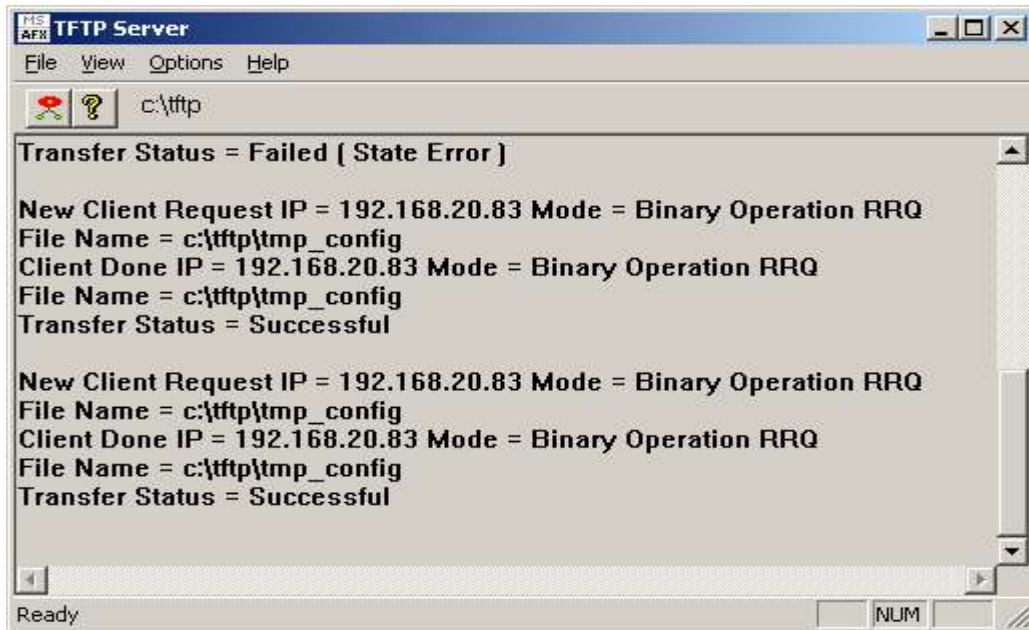
Step 1: Copy the router config to a Workstation.

- Start a TFTP server "TFTPSRV" on a workstation. The default directory of TFTP server is c:/TFTP. See bellosed figure.
- "**copy run tftp://192.168.20.67/r25-1-my-config**". Here 192.168.20.67 is the IP of the workstation, which is running the TFTP server. The file "**r25-1-my-config**" is the configuration file in the plain text, which you can use it for your report or for the next experiment. If the file exists already under your directory, above command will overwrite the old file.

OR

- Use HyperTerminal to copy and paste the config into a file

Step 2: Upload the config file to your home directory. Please refer to the above “File Transfer” section about how to do this.



Restore a Router Config

Sometime you may hope to continue your previous work and need to restore your configuration; you can use the following command to download your files:

Step 1: Download the config file from your home directory. Please refer to the above “File Transfer” section about how to do this.

Step 1: Copy the config file to the router

- Start a TFTP server on a workstation. The default directory of TFTP server is c:/TFTP.
- “***copy tftp://192.168.20.67/r25-1-my-config run***” . Here 192.168.20.67 is the IP of the workstation, which is running the TFTP server.

OR

- Use HyperTerminal to enter the router Global Configuration mode
- Copy and paste the content in config into a the terminal.