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# Part 1: What are Terminal Services / Remote Desktop?

Terminal Services allow multiple users to access a remote computer as if they were using the machine locally. Terminal Servers within NMHU allow students who cannot access lab resources or install applications on their home computers to have full access to the applications needed to complete course work.

## Part 2: Connecting to the HUSPSS Terminal Server

1) You will need your student username in order to log in to the HUSPSS Terminal Server. If you don't know what your username is, please go to <u>http://its.nmhu.edu/help</u> and follow the menus to obtain your username. The domain that student will be using is called STUDENTS.

2) The name of the Terminal Server for SPSS is huspss.nmhu.edu.

3) If you are at home, download and install the Remote Desktop Client from http://www.microsoft.com/windowsxp/pro/downloads/rdclientdl.asp. The Remote Desktop Client works for all Windows Operating Systems (95, 98, NT, ME, 2000, XP, and 2003). Window XP and Windows 2003 Server have the Remote Desktop Client already installed by default. Mac users can use the Remote Desktop Client if they have OS X. Download and install the Mac Remoter Desktop Client from http://www.microsoft.com/mac/downloads.aspx?pid=download&location=/mac/DOWNL OAD/MISC/RDC.xml&secid=80&ssid=9&flgnosysreq=True Note: Mac uses will not be able to use local drives.

4) Launch the Remote Desktop Client from Start, Programs, Accessories, Communications, Remote Desktop Connection.

| Semote Desktop Connection |                                     |                 |
|---------------------------|-------------------------------------|-----------------|
|                           | Remote Desktop<br>Connection        | 2               |
| Computer:                 | huspss.nmhu.edu<br>Connect Cancel H | lelp Options >> |

5) Type in the Server name into the Computer Name text box.

| 💐 Remote Desktop Connection 📃 🗖 🔀   |  |  |  |  |
|---|--|--|--|--|
|   | e Desktop<br>ection                              |  |  |  |
| General Display Local Resources Programs Experience Logon settings Type the name of the computer, or choose a computer from the drop-down list. |  |  |  |  |
| Computer:   | huspss.nmhu.edu                                  |  |  |  |
| User name:  | spssuser   |  |  |  |
| Password:   |  |  |  |  |
| Domain:   | HU_ADM   |  |  |  |
|   | Save my password                                 |  |  |  |
| Save current  | settings, or open saved connection. Save As Open |  |  |  |
| Connect   | t Cancel Help Options <<                         |  |  |  |

6) Select the options button and select "Local Resources". **Note:** In a lab environment, do not put in a User name and Password in the "General" since it will change with other people logging in to the computer.

| 📽 Remote Desktop Connection 📃 🗖 🔁 |   |    |
|-----------------------------------|---|----|
|                                   | Remote Desktop<br>Connection  |    |
|                                   | isplay Local Resources Programs Experience<br>computer sound<br>Bring to this computer  |    |
| Keyboard                          | Apply Windows key combinations<br>(for example ALT+TAB)<br>In full screen mode only   |    |
| -Local dev                        | ices<br>Connect automatically to these local devices when logged on<br>to the remote computer:<br>Image: Disk drives<br>Image: Disk dri Dimage: Disk drives<br>Image: Disk drives<br>Im |    |
|                                   | Connect Cancel Help Options   | << |

a. Select "Do not play" under "Remote Computer Sound"

b. If you want to be able to use your local hard drives and printer select "Disk drives" and "Printers" under the "Local Devices" section.

| 💐 Remot | e Desktop Connection   |
|---------|--|
| St.     | Remote Desktop<br>Connection   |
| General |  |
| 4       | Choose your connection speed to optimize performance. LAN (10 Mbps or higher) Modem (28.8 Kbps) Modem (56 Kbps) Broadband (128 Kbps - 1.5 Mbps) LAN (10 Mbps or higher) Custom |
|         | <ul> <li>Menu and window animation</li> <li>Themes</li> <li>Bitmap caching</li> </ul>  |
|         | Connect Cancel Help Options <<   |

7) Select the "Experience" Tab and select your connection speed to optimize performance. It is recommended that you do not allow the background to be shown regardless of your connection speed.

8) Select the connect button to connect to the Terminal Server.

| Log On to Windows  |   |  |
|--------------------|---|--|
|                    | Windows Server 2003<br>Standard Edition |  |
| Copyright © 1985-  | 2003 Microsoft Corporation              |  |
|                    |   |  |
| <u>U</u> ser name: | spssuser                                |  |
| Password:          |   |  |
| Log on to:         | HU_ADM                                  |  |
|                    | OK Cancel Shut Down Options <<          |  |

9) Login to the Terminal Server using the username and domain you got in Step 1 and 2 (again for students that will be their student username and the domain will be students).

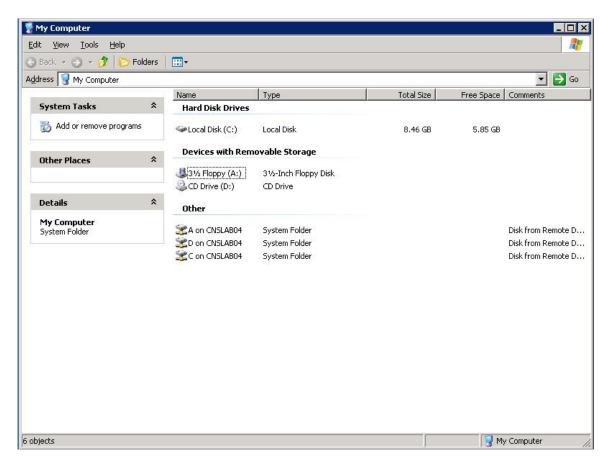
10) You are now ready to begin using the software on the remote Terminal Server.

#### Part 3: Accessing Local Drives and Printers from the Terminal Server

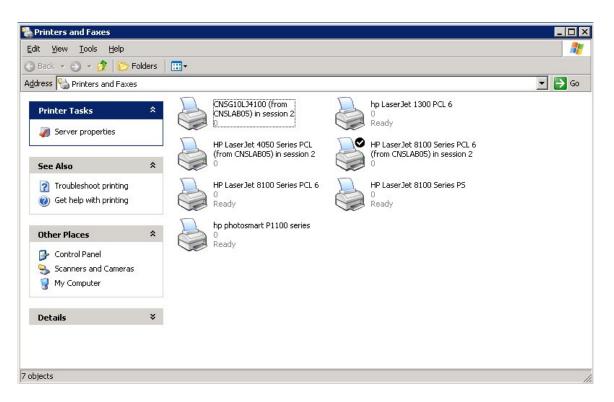
Note: In order to use the following features you must be using the Remote Desktop Client and be connected to a Windows .NET Server 2003 Server.

With the Remote Desktop Client, you can access your local machines floppy drive, hard drives and printers from the remote Terminal Server. In order for the remote server to access your local resources, you must enable the option as shown in Step 6 of Part 2 of this guide "Connecting to the HUSPSS Terminal Servers".

Once you are connected to the Terminal Server you will see all of your drives available in My Computer:



Moving files from one computer to another is as simple as copying and pasting! Note: Your connection speed will determine the file transfer speed. Transferring large files between the 2 computers can take a long time if you have a slow connection.



Local printers are just as easily accessible as your hard drives. Your local printers will be added to the list of available printers on the server. You can print documents you are viewing on the remote computer to your local printer assuming the server has the drivers for your printer.

**Note:** The Terminal Server will only be able to print to the printers on your local computer that it has drivers for. Administrators of the servers will not install new drivers if you printer is not compatible with the Terminal Server.

# Part 4: Accessing SPSS

You will now see the desktop of terminal server (see below). This looks very similar to your own desktop, except that it has a different background color and it has the SPSS 12 for Windows and a SPSS Document folder.



To run SPSS, simply double click the SPSS 12.0 for Windows icon. Remember to save your files to your local disk.

To access the SPSS 12.0 Documentation, double click on the folder to open it and then double click the document to open it. Note: All documentation is in Adobe Acrobat Reader format, but because it is running on the Terminal Server, you do not have to have it installed on the local machine.

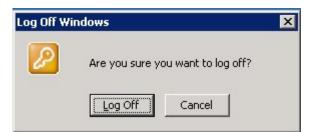
# Part 5: Ending terminal service

Before ending your terminal service connection, be sure that you have closed SPSS. At the bottom of the terminal screen is a start button that looks just like the START button

on your regular computer. Click on START **Start** and select Log Off from the menu(see below).

| SPSS User             |   |  |
|-----------------------|---|--|
| SPSS 12.0 for Windows | My Computer         Image: Security         Image: Security |  |
| All Programs          | <br>Log C   |  |

You will then prompted to either Log Off or Cancel. Log Off will terminate the Terminal Server session; Cancel will return you back to the Terminal Server session.



# Part 6: Restrictions and Usage Tips

## Restrictions

- Sessions disconnected for more than 30 minutes are force logged out.
- Sessions have a 3 hour limit. You must log back on after 3 hours.
- Sessions idle for more than an hour are force logged out.

#### **Usage Tips**

1) Make sure to log off the Terminal Server instead of just Disconnecting or closing the Remote Desktop Window. This frees up resources for other users.

2) Close programs and windows that you are not actively using. There are multiple users logged on to the Terminal Server at one time. Each application you are running takes away valuable resources from the server and other users which can adversely affect performance.

## **Part 5: Troubleshooting**

The Remote Desktop connection is very slow.

Cause: A low-bandwidth connection can slow Remote Desktop performance.

Solution: On the remote computer, set the background selection to None.

**Solution:** Do not run memory-intensive applications, for example, video games, over Remote Desktop

The remote connection has timed out. Please try connecting to the remote computer again.

**Cause:** The terminal server disconnected your session because you did not send a response within the time limit set for responses.

**Solution:** Try connecting to the terminal server again. If you receive this error message, try to reconnect at a later time. If you continue to receive this error message, contact the server administrator.

**Cause:** A slow network connection, caused by excessive network traffic, has delayed your response to the terminal server.

**Solution:** Try connecting to the terminal server again. If you receive this error message, try to reconnect at a later time. If you continue to receive this error message, contact the server administrator.

The specified computer name contains invalid characters. Please verify the name and try again.

Cause: The name of the remote computer is incorrect. This might be a typing error.

**Solution:** Try typing the name of the remote computer again. If you receive the same message, contact the server administrator to be sure you are using the correct name for the remote computer.

The local computer is low on memory. Close some programs, and then connect to the remote computer again.

**Cause:** Not enough RAM available on your computer. If your computer has too little RAM available, it cannot free enough processing capacity to start new functions, such as applications or connections.

Solution: Close all unnecessary programs, and try your connection again.

**Cause:** Not enough disk space available on your hard drive. If the hard drive on your computer is full, there might not be enough space available to allow the swap file to operate correctly. The swap file allows your computer to perform some RAM functions even when there is not enough RAM space available.

**Solution:** Free some space on your hard drive by:

- Emptying your recycle bin.
- Deleting temporary Internet files.
- Moving documents and other data files to a different drive.
- Removing programs that you rarely use.
- Deleting old temporary files from your hard disk. Temporary files have a .tmp file name extension, or names that begin with a tilde (~), and are usually found in the C:\Temp or C:\Windows\Temp folder.
- Emptying your recycle bin after you delete files.