

Connecting to UMBC Account and Software Remotely

1 Purpose

The purpose of this document is to instruct students how to connect to your UMBC Account and utilize accessible software. This document will discuss three programs that will need to be downloaded and setup.

Xming

PuTTY

WinSCP

(If all you are concerned with is accessing your files then read only the sections concerning WinSCP)

2 Xming

This program will allow you to run a local UNIX server on your Windows Based machine which will allow us to open displays and Graphical User Interfaces after connecting to UMBC.

2.1 Download

As of June 16, 2008 the following download page contains a link to download Xming:

http://sourceforge.net/project/showfiles.php?group_id=156984

All you need is the first file that appears, download and install (using its recommended settings).

3 PuTTY

PuTTY is a client that will be used to connect to UMBC's server.

3.1 Download

As of June 16, 2008 the following download page contains a link to download PuTTY:

<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

You just need to save the first link. The entire program is contained in a single file. You can put it wherever you wish, though I would prefer in a separate folder called "putty".

3.2 Setup

When you open the program, the configuration window will pop-up.

Let's focus on the *right pane* for now entitled "Basic Options for your PuTTY Session".

In the **Host Name (or IP address)** type `gl.umbc.edu`.

The default settings Port: 22 and Connection Type: SSH should already be selected.

Optional Step

Now go to the *left pane* and click on Window, then Appearance (you might need to *expand the branch* first by clicking the plus sign).

The right pane is now "Configure the appearance of PuTTY's Window".

Go to *Font Settings*.

Generally the font is pretty small to read in PuTTY, so if you click *change* you can change the default font. Normally I prefer **Terminal, 14-pt**.

End of Optional Step

The following step is very important.

On the left pane, go to Connection→SSH→X11.

The right pane should now say "Options controlling SSH X11 forwarding".

Click the box to *Enable X11 Forwarding* if there is no checkmark.

In the *X display location* type in `localhost:0`.

This will tell PuTTY to communicate with Xming whenever you open any windows while connected to UMBC.

(Side Note: Make sure the default setting for *Remote X11 authentication protocol MIT-Magic Cookie-1* is marked)

All that's left now is that we go back to the left pane and click on *Session* at the very top.

To save all the settings we put in, go to the right pane and where it says *Saved Sessions* type in **UMBC**.

Then click *Save*.

UMBC should now appear in the window.

Later on in this document when connecting to UMBC's server, you will click on **UMBC** and then click **Load** to load up all the settings we put in earlier.

4 WinSCP

WinSCP is a program that will allow you to manage your files and copy them to and from your local machine and your remote UMBC account.

4.1 Download

As of June 16, 2008 the following download page contains a link to download WinSCP:

<http://winscp.net/eng/index.php>

Choose the latest *non-beta* version of WinSCP to download, which as of the date of this document is 4.0.7.

Install using its recommended settings.

4.2 Setup

On the left pane, make sure *Session* is highlighted.

Just like with PuTTY. Put in the information in the right pane.

Host Name: `gl.umbc.edu`

Port Number: `22`

Your user name and password.

Leave the “Private key file” blank.

Protocol should already be marked as `SFTP(allow SCP fallback)`.

When you are done click *save* on the bottom.

Usually a name is already provided for you, so just click ok.

5 Connecting to your UMBC account

5.1 Starting Xming

First open XLaunch from Start→Programs→Xming menu

Make sure *Multiple Windows* (default) is marked then click next.

Make sure *Start no Client* (default) is marked then click next.

Click Next again.

Click Finish.

At this point, in your system tray (area where your clock is displayed), an X with a circle around it should be visible. This is to indicate to you that Xming is active, just right click the icon and choose exit to terminate the application at anytime.

5.2 Starting PuTTY

Open PuTTY from wherever you saved the file.

Click on the saved session “UMBC” that we created earlier and click load.

Then click open.

Click Yes or Ok to any pop-ups that may appear (usually this happens only for the first time)

6 Launching software

After connected, the following commands can be used:

`pwd` - “present working directory”, where you are in the system

`ls` - “lists” contents of your current directory (or folder)

`cd -folder name-` changes to a new folder (or directory)

`pico -file name-` opens up a basic text editor, you can use this to create m-files.

There are more basic commands, but it is easier to utilize them in the next section, **WinSCP**

In the SPCB program it is likely the only program you will need to launch remotely will be MATLAB.

Within anywhere in the system, you can launch MATLAB just by typing `matlab &` and pressing enter.

You can also type in `SAS &` to run SAS remotely, but it does not run properly remotely (or may not run at all).

To close your connection, just close the program or type `exit` at the command line and press enter.

7 File Maintenance

For this purpose we use the 3rd and final program, WinSCP.

Note: It is not necessary to be running Xming nor PuTTY in order to use WinSCP.

When you open WinSCP, go to the left pane and click Session→Stored Sessions.

Click on the session we saved earlier and then click load.

Go to the bottom of the page and click login.

Click Yes, ok, etc to any pop-ups that appear (usually happens only on the first time).

When login, the left pane represents your *local machine*. Where the right pane represents your *remote UMBC account*. From here you can manipulate files, copy, move, delete, etc just as you would in Windows Explorer.

8 Conclusion

That’s all you need to know about using UMBC software remotely in a nutshell. Remember running these programs locally in a computer lab (ENG or Library) is always most efficient. The contents of your account is accessible at any UMBC computer. If you ever need to access them remotely, make use of WinSCP.