Connecting to skew4 using X-Win32

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10/14/2008

There are two main modes in which an X-Window server can operate: namely single- and multiple-window. While exact details of each depend on both specific server and client used, the instructions below describe connecting to skew4.kellogg.northwestern.edu (running RHEL 5.0) using the X-Window server X-Win32 v9.1 running on MS Windows XP or Vista. This procedure also works for other servers such as WRDS [wrds.wharton.upenn.edu] and (in multiple window mode only) SSCC [seldon.it.northwestern.edu] and [hardin.it.northwestern.edu].

Single-window mode, as the name implies, creates a single window showing Linux desktop (KDE in case of skew4) within which a user can run terminal and GUI-based Linux software. The advantage of this mode is that the UNIX session remains contained within a window which can simplify desktop management; in addition standard KDE GUI environment is readily available.

The multiple-window mode creates a terminal window on user’s Windows desktop, from which other programs or terminal windows can be started via the command-line interface. GUI programs will then open in separate (sometimes multiple, e.g. in case of SAS or Mathematica) windows that can be individually repositioned on the Windows desktop. This mode is particularly convenient for users with multiple monitors.

This manual describes both connecting modes.

**Before connecting**

To connect to skew4, one needs to:

1. To be connected to the Northwestern network (off-campus users: please use VPN)
2. To have a recent version of X-Win32 (see [http://www.at.northwestern.edu/x-win32/](http://www.at.northwestern.edu/x-win32/))

**Multiple-Window Mode**

1. Start X-Win32. It will put an icon in the toolbar:

   ![Icon](image)

   Right click on the icon and choose “X-Config”:
2. Click on “Manual” in the “Sessions” tab:

3. Pick “ssh” & click “Next”
4. Fill the fields like follows; putting your netid in the “Login” field. Use your Northwestern password:
5. Click “Advanced” and set the fields as follows:

6. Click “Save”

7. Right click on the X-Win32 icon in toolbar again and pick “My Sessions” -> “skew4-mult”

A terminal window appears. Next time you connect you only need to do this last step.

From here you can start programs like Matlab, Mathematica, Stata (use xstata to start the GUI), Maple (use xmaple for GUI), etc. In order not to lock up the terminal window while the GUI program is running, you can put an “&” at the end of the command.

You can also open new terminal windows with “xterm -sb &”. You can also set the window background and foreground colors with “-bg” and “-fg”: for example “xterm -sb -bg gold” (you can find a list of UNIX named colors at http://www.uas.alaska.edu/sitka/idc/uasonline/unix_colors.html). There are also other options that you can use here or in the “Command” field in step 4 – see “man xterm” for full details.
Single-Window Mode

1. Step 1 as before: start X-Win32.
2. Step 2 as before: start X-Config & click on “Manual”.
3. Pick “XDMCP” and click “Next”.
4. Fill the settings as follows:

   ![X-Win32 - Edit Session (xdmcp) window](image)

   - **General**
     - **Session Name**: skew4-single
     - **XDMCP Mode**: Query
     - **Host**: skew4.kellogg.northwestern.edu
     - **Monitor**: 1

5. Right click on the X-Win32 icon in toolbar again and pick “My Sessions” -> “skew4-single”
6. Enter your netid and password
7. You now see the Linux KDE desktop. To start a terminal window you can right-click anywhere on the desktop and pick “Konsole”. From that window you can run software as described above.