

How to Install Xming For Windows

The Statistical Consulting Center

What is Xming?

Xming is a free, open source X-Windows terminal emulator (X Server) that runs on Microsoft Windows computers. If you need assistance installing or using Xming, call the Helpdesk at 974-9900, send email to stathelp@utk.edu, or stop by the SCC walk-in support area at 200 Stokely Management Center. We provide installation assistance to the UT community at all campuses. Also, at the Knoxville campus, most students, faculty, and staff researchers can receive up to 10 hours of free assistance each semester in the areas of statistics, computing, data file conversion, data mining, graphics, mathematics, scan form test scoring, text analysis, thematic mapping, visualization and web survey design. See oit.utk.edu/scc for details. We also offer training courses each semester. See web.utk.edu/~training for details.

How to get and install Xming X Server for Windows

1. You can obtain the **Xming X Server for Windows** program from the Web site <http://sourceforge.net/projects/xming>. Either save and download it to your Desktop or choose the run option to install it directly from the web site.
2. If you downloaded the Xming program to your desktop, double-click the **Xming** setup icon. The **Xming Setup Wizard** will start and the **Setup Xming** window will appear.
3. In the **Setup Xming** window, click **NEXT** to continue the installation.
4. When prompted for the installation location, choose the default C:\Program Files\Xming. Click **NEXT**.
5. When prompted for which components to install, accept the defaults. Click **NEXT**.
6. When prompted for the location for the shortcut, accept the default. Click **NEXT**.
7. When prompted for additional icons, select both the **Xming** and **Xlaunch** icons, if desired. Click **NEXT**.
8. Review the settings that you have selected. If no changes, click **Install**.
9. When the installation is complete, click **Finish**.
10. If the **Windows Security Alert** appears, your firewall is blocking all incoming traffic to your PC. To display on your screen, you need to select the **Unblock** option. This will add the necessary port to allow you to run X applications.
11. When Xming is running, you will see the Xming “X” symbol in your system tray on your Desktop.
12. To close Xming or to get more information about Xming, right-click on the Xming “X” symbol and choose from the drop down menu.

How to use Xming Server for Windows

Xlaunch is a wizard that can be configured to start Xming sessions. Or you can simply start the Xming Server and run X clients later by hand via **SSH** which is a Secure Shell client. If you have the SSH client installed, start **Xming** by double-clicking the icon on your Desktop or by using

Start > All Programs > Xming > Xming

Then use SSH to connect to the remote computer where you want to run an X application. If you have never used SSH or do not have an SSH client installed, see the sections below.

What is SSH?

SSH (Secure Shell) is security software that provides secure login sessions to UNIX and Linux computers. SSH simply provides a secure replacement for the telnet connection program. If you have never used SSH, server keys may be new to you. They are basically transparent. The keys provide two-way authentication. After exchanging keys, your entire login session is encrypted, including your password and everything that you sent to the remote machine and everything it sends to your PC.

Where to get SSH and how to install it

Save and download the SSH client from <http://sunsite.utk.edu/ftp/pub>. From the SSH folder, download to your Desktop the newest **SSHSecureShellClient** exe file. Double-click on that file and the **SSH Secure Shell** setup window will appear. When prompted for information, accept all the installation defaults. After a successful installation, the **SSH Secure Shell Client** icon will be placed on your Desktop.

How to configure SSH to connect to a remote UNIX computer

1. Double-click on the **SSH Secure Shell Client** icon on your Desktop.
2. In the **Default - SSH Secure Client** window, click on the **Profiles** button and select **Add Profiles** from the drop down list.
3. In the **Add Profile** window, type a name for your profile. For example, if connecting to the OIT UNIX computer moe.usg.utk.edu, type **moe** and then click on the **Add to Profiles** button.
4. Click on the **Profiles** button again and select **Edit Profiles** from the drop down list. Select **moe** from the Profiles list.
5. Select the **Connections** tab. Type in the host name, such as **moe.usg.utk.edu**. You can enter your username now or type it in each time you use the profile. Accept the other defaults.
6. Select the **Tunneling** tab. Check the box to the left of **Tunnel X11 connections**. Click on the **OK** button.
7. In the Moe – SSH Secure Shell window, select File > Save Settings.

8. Click on the **Profiles** button and select the **moe** profile. In the **Connect to Remote Host** window, type your user name and select the **Connect** button. In the **Enter Authentication Response** window, enter your password for moe. Click **OK**.
9. You should be logged on to moe. To test your X windows connection, enter **xclock&** in the **moe.usg.utk.edu – SSH Secure Shell** window. If a clock appears on your desktop, you are ready to use moe with the Xming X Server and SSH.

Performance

For some applications, the **Secure Shell** environment will slow the output display or response time more than you are willing to tolerate. If your session is satisfactory, you should continue your session as configured. If unsatisfactory, an option is to use the **Secure Shell** for login only and then switch to a non-secure session while running your application. The OIT UNIX machines require only secure logins. To switch your session to a non-secure one after login, see the instructions in the section “**How to switch to a non-secure session after login**” below.

How to switch to a non-secure session after login

On secure computers that require only secure logins, you can switch to a non-secure environment after a successful login. Thereafter, the transfer of information between the PC and UNIX computers will not be encrypted. Hence, the computer response time should improve.

Since Secure Shell tunneling will no longer be used, you must define where you want the information from UNIX to be sent; i.e., you must define the display that you are using for your output. This is done in a **Terminal** window on UNIX. For instructions on getting a **Terminal** window, see the section “**How to start a UNIX Terminal window**” above.

In a **Terminal** window on the UNIX machine, use one of the following commands depending on which UNIX shell you are using to define your display. Upper/lower case is important!

For the Korn/Bourne shell, in the **Terminal** window, type

```
DISPLAY=YourComputerName:0;export DISPLAY
```

For the C-shell, in the Terminal window, type

```
setenv DISPLAY YourComputerName:0
```

Note: The text “YourComputerName” is for illustration purposes; yours will be different.