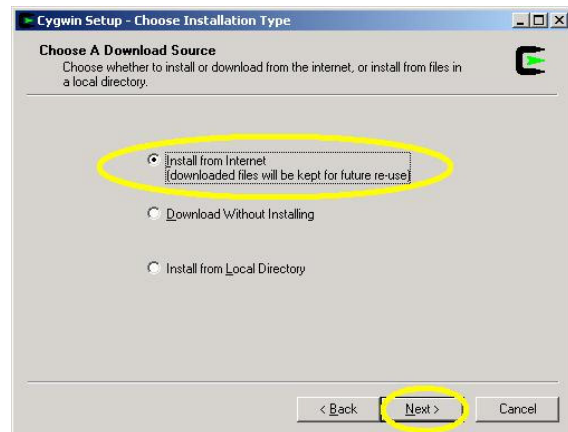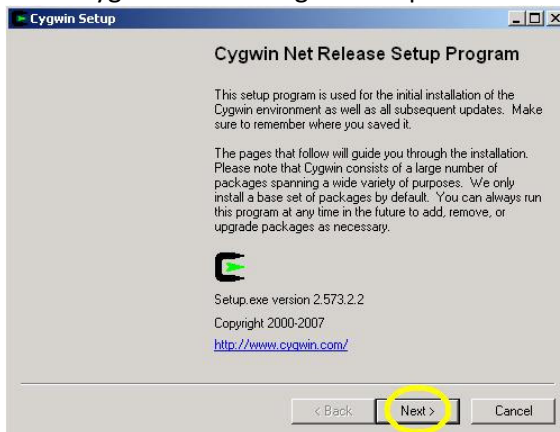# WinXINU Installation Guide

I. Installation Requirements

- Operating System: Windows XP or Windows Vista
- Microsoft .Net Framework v3.0 or higher
- HDD Space
  - 60 megabytes (WinXINU)
  - 1310 megabytes (Cygwin)
  - Total ~1.4 gigabytes
- Ability to connect to XINU server

II. Installing Cygwin

1) Go to Cygwin.com and download the setup file for Cygwin.
2) Run the downloaded setup.exe file
3) The first screen of the installer is a general description of what the setup program should be used for. Read it and click next.

Cygwin Install Image for Step #3

Cygwin Install Image for Step #4

4) Select how you wish to install Cygwin.

For installation on multiple computers it may be beneficial to host the needed installation files on a local server and then install from there. In this case the user should first download the files without installation to the local server or distribution computer. Then the user will run setup from each computer and select to install from local and navigate to the location of the saved installation files.

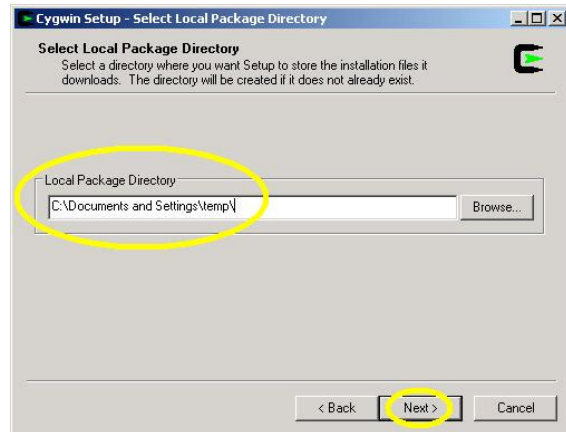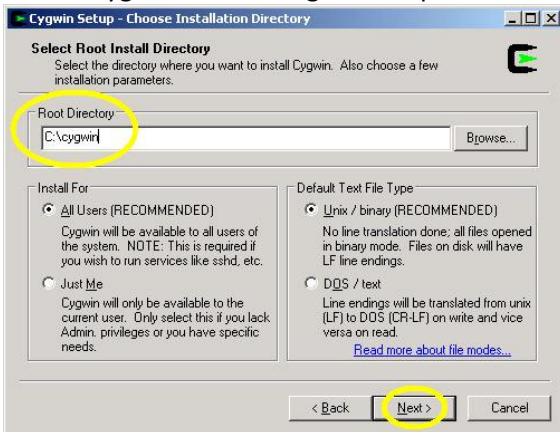In the general case one can just install from the internet.

After selecting how you wish to install Cygwin, select Next.

5) Choosing the installation directory.

   Choose the directory where you wish to install Cygwin.

   After choosing the directory, select Next.

   Cygwin Install Image for Step #5
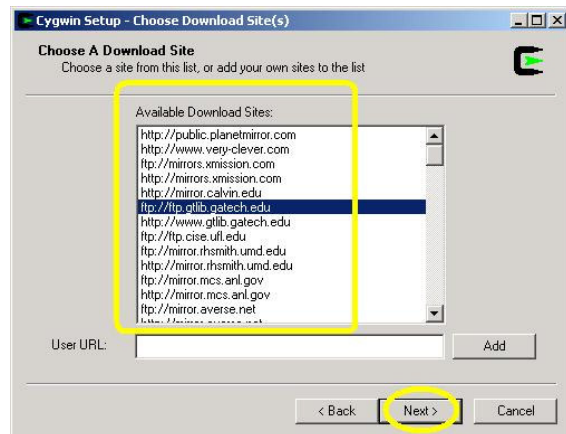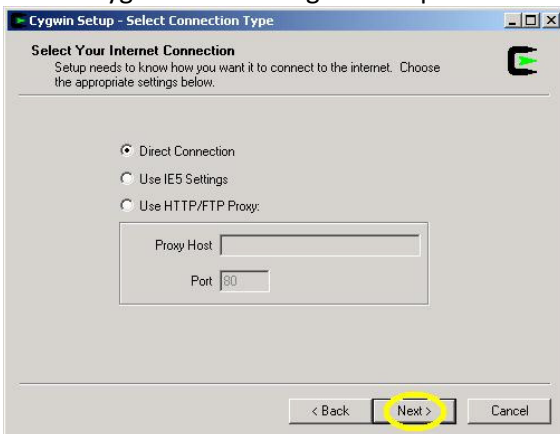

Cygwin Install Image for Step #6

6) Choosing the local install storage directory.

   Setup needs to download installation files and store them temporarily while it still needs them to install Cygwin. Please select a directory to store these files to.

   After selecting the directory, select Next.

7) Select how the computer connects to the internet. Then select Next.

   Cygwin Install Image for Step #7

Cygwin Install Image for Step #8

8) Select the online site to download installation files from. Then select Next.
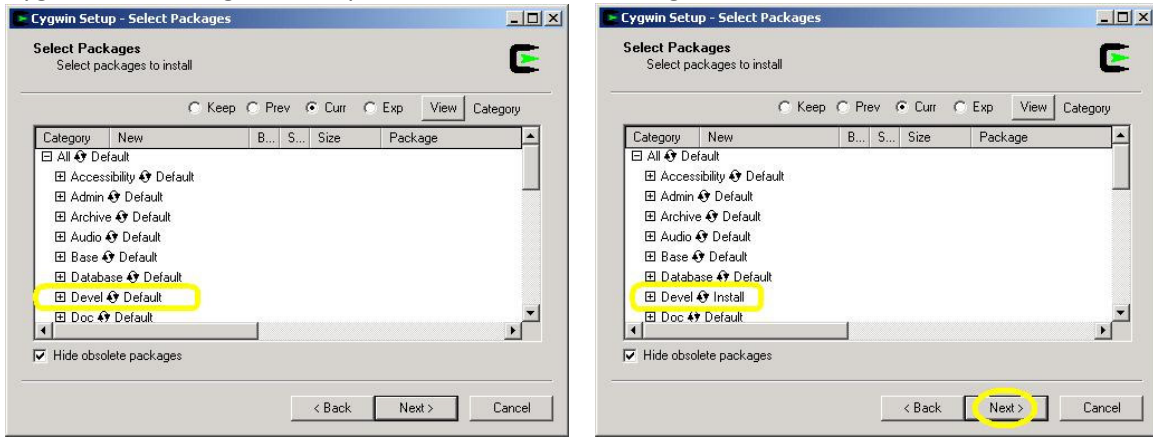
9) Select the Cygwin packages to install on the computer.

Only the Devel package (development) is needed to run WinXINU. Other packages are available for other uses, you may install them if you need or wish to have them.

Use the arrow circle next to the word "Devel" to cycle through the install settings, set it to "Install".
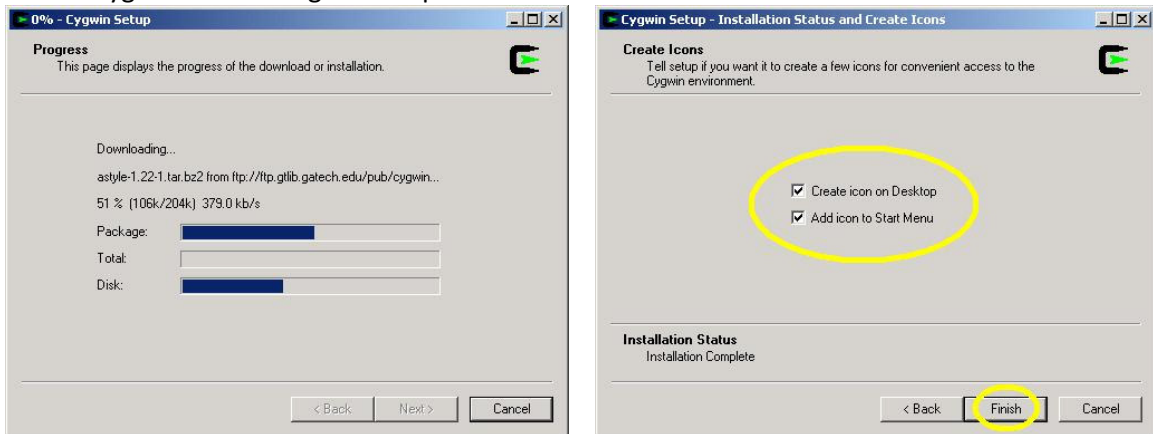
Select next once you have modified the installation settings for the packages you wish to have; as well as set the Devel package to "Install".

Cygwin Install Images for Step #9 – Before & After Changes

10) Cygwin setup will proceed to download and install files without any more prompts until installation has completed. This may take awhile depending on the internet connection speed and the speed of the computer.
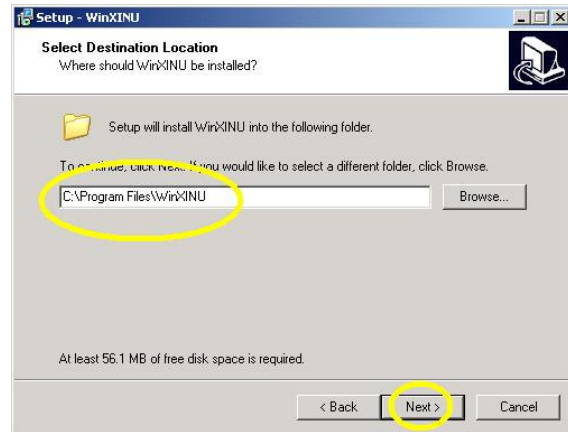
Cygwin Install Image for Step #10

Cygwin Install Image for Step #11

11) Once installation has finished a final screen will let you choose whether you wish to have an icon for Cygwin on your desktop and or one in your start menu. Neither is necessary for using WinXINU. After choosing the options you wish, select Finish.

III. Installing WinXINU

1) Download the setup file for WinXINU. It should be accessible through WinXINU installation page on the XINU wiki. (http://xinu.mscs.mu.edu/WinXINU/Installation)
2) Run the downloaded setup file.
3) The first screen of the installer lets you know what you are installing (WinXINU). Read and select Next.

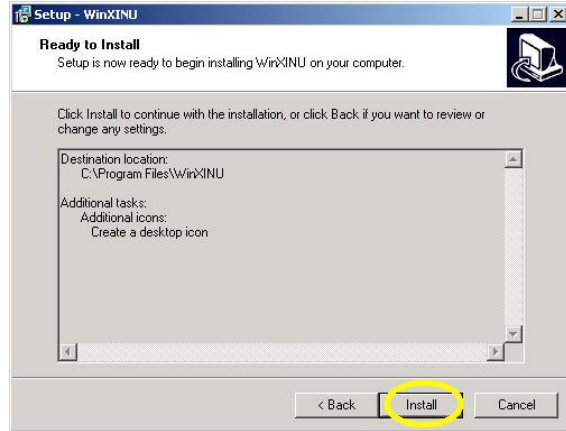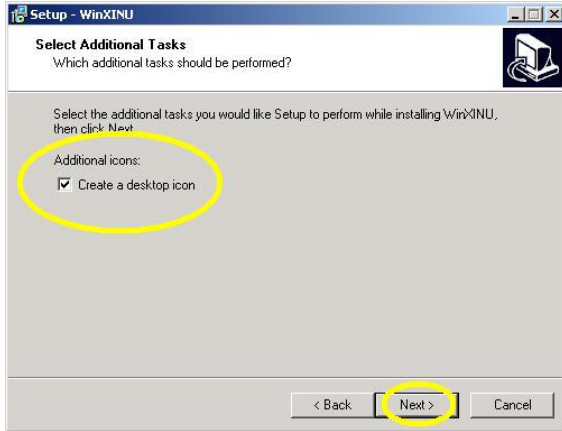WinXINU Install Image for Step #3

WinXINU Install Image for Step #4

4) Choosing the installation directory.

Choose the directory where you wish to install WinXINU. **It is recommended that this path does not contain spaces.**

After choosing the directory, select Next.

5) Choose whether a desktop icon should be added. Shortcuts for running the program as well as uninstalling the program will automatically be added to the Start menu. After making your choice, select Next.
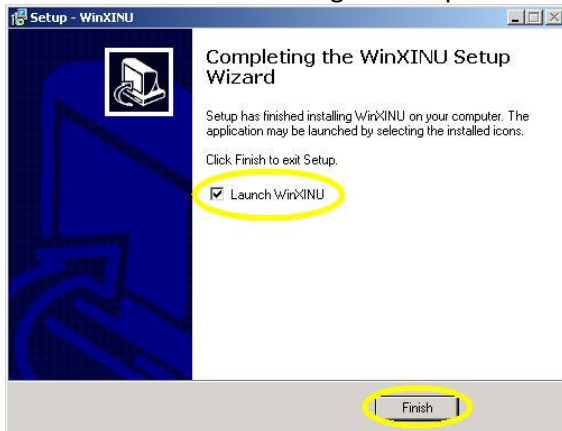
WinXINU Install Image for Step #5

WinXINU Install Image for Step #6

6) Verify your installation choices. Then select Install.

7) After installation of WinXINU has been completed the installer will give you the option to launch the program. Choose whether you wish to immediately launch the program and then select Finish.
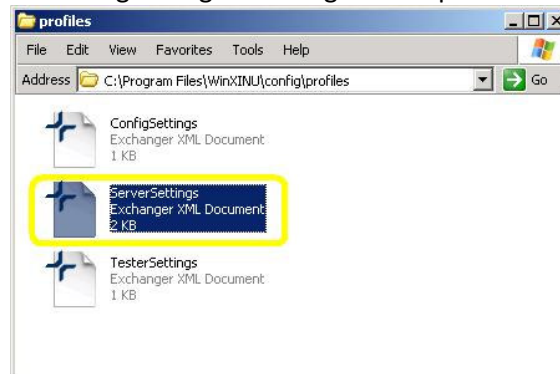
WinXINU Install Image for Step #7

IV. Altering Configuration Files

a)   Modifying Server Settings

1)   Navigate to the directory that you chose to install WinXINU into.
2)   Go into the config folder and then into the profiles folder.
3)   Open the ServerSettings.XML file in an editor, such as WordPad or Notepad.

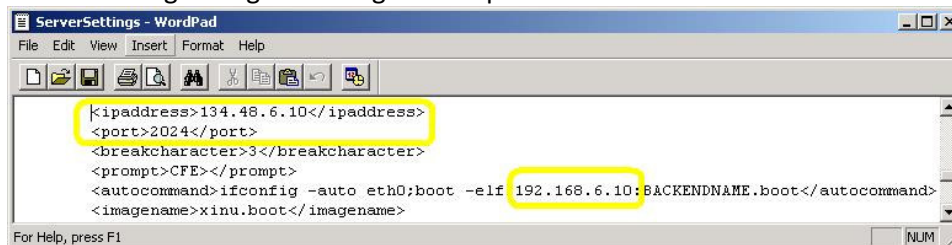Altering Config Files Image for Step #3

4)   Locate the IP Address tag <ipaddress>; modify the address to correspond to the internet protocol address of the XINU server.

Locate the port tag <port>; modify the port number to correspond to the port the XINU server will be listening on. Default for the current XINU server daemon is 2024.

Locate the automation command tag <autocommand>; modify the IP address of the command that is used for remote TFTP. This IP address may be the same as the as the IP address used for connection to the XINU server or it may be the internal network IP address for the XINU server.
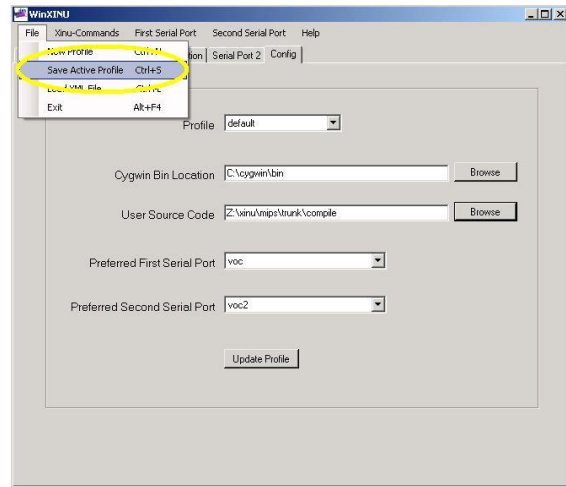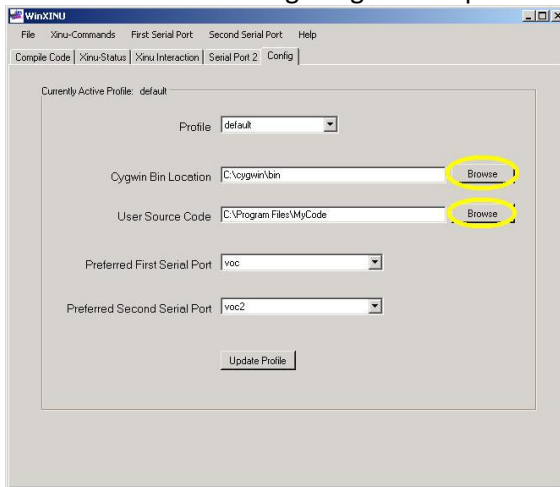
Altering Config Files Image for Step #4

b) Modifying User Configuration Settings

  1) Run WinXINU
  2) Navigate to the Config tab.
  3) Select browse next to the Cygwin Bin Location and select the location of the bin folder under where you chose to install Cygwin

     Select browse next to the User Source Code field. Navigate and choose where the user source code will be compiled and the boot image will be placed.

WinXINU User Config Image for Step #3

WinXINU User Config Image for Step #4

  4) Select the File drop down menu and choose to Save Active Profile.
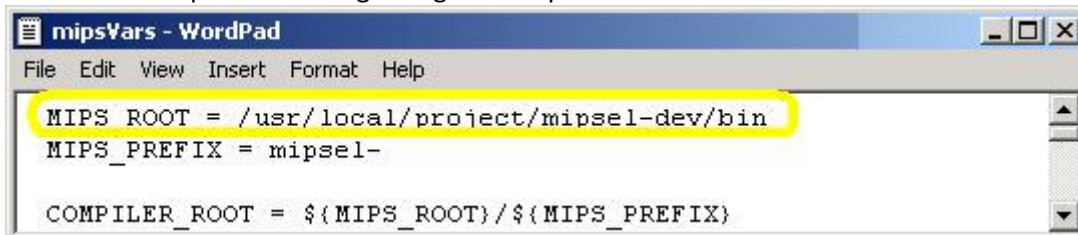
c) Modifying the Compilation Settings

   1) Navigate to the compilation directory of the user source code.
   2) Select and open the mipsVars file in an editor.
   3) Find the MIPS_ROOT line in the file; change it to contain the location of the cross compiler bin directory.

      This bin directory should be located where you installed WinXINU and then within the cross subdirectory of WinXINU.

      All slashes between directories in the path should be forward slashes ('/'), if you copy and paste the directory you must switch the back slashes ('\') between directories to be forward slashes ('/').

      WARNING: If the directory path has spaces in it they must have an escape character before the space ('\').

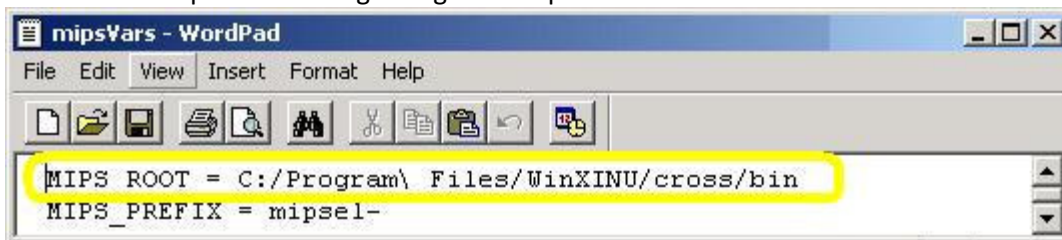WinXINU Compilation Settings Image for Step #3 – Before Modification

WinXINU Compilation Settings Image for Step #3 - After Modification