Using Ngspice on Eniac on a Windows Machine

Downloads and Setup

In order to use Ngspice on Eniac, you will need 3 pieces of software. A SSH terminal, a FTP client, and an X11 Display Server. You can use any software you like, but we will be using the following

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

FileZilla Client: https://filezilla-project.org/

Xming X Server for Windows: https://sourceforge.net/projects/xming/

To connect Putty to enaic servers, use the following settings.

Hostname: enaic.seas.upenn.edu

Port: 22

Connection type: SSH

Login info when connected: your pennkey and password

To enable Xming for Putty

In the left hand window of the Putty client, go to Connection -> SSH -> X11

Enable X11 forwarding

X display location: localhost:0.0

Save the Putty settings you have for future use

To connect Filezilla to eniac servers, use the following settings

Hostname: eniac-l.seas.upenn.edu

Username: your pennkey

Password: your password

Port: 22

Workflow

1. Use Electric on your local machine to create a SPICE Deck

2. Use Filezilla to move the SPICE Deck to the eniac servers. You may want to create a new homework folder for every assignment to hold your files

3. Navigate to the location of your SPICE Deck using Putty. The linux commands are
   View current folder contents: ls
   Move to folder: cd "folder name"
   Move to previous folder: cd ..

4. Run ngspice on your SPICE Deck