Using FileZilla to transfer and edit files

If you are logging into 2.11 BSD on the PiDP11 from a laptop, FileZilla on your laptop can be used to transfer files between 2.11 BSD an the laptop. Furthermore, you can use FileZilla to edit files on 2.11BSD using your favorite gui based editor on your laptop.

Setting up the 2.11 BSD system and FileZilla:

1. Networking has to be set up properly on 2.11 BSD. For details see the PiDP-11 user manual, under "A quick tour of 2.11 BSD", "setting up networking". Check your installation by using a ping from your laptop to 2.11 BSD. Note, that when you check the network connection from your laptop to 2.11 BSD, you have to enter the IP address of 2.11 BSD, and not of the underlying Raspbian. This is the ip address you entered in /etc/hosts in 2.11 BSD.

2. Download and install FileZilla. See https://filezilla-project.org/ for details. On Raspbian use sudo apt-get install filezilla to install it.

3. Start FileZilla and configure it as follows:

   In edit→Settings→Transfers, set as follows:

     Maximum simultaneous transfers: 1
     Enable speed limits
     Download limit 100 KiB/s
     Upload limit 20 KiB/s

   These limits worked without any problems on my setup

   In edit→Settings→File Editing, set use custom editor to the full path of your favorite editor (this step might depend on the OS of your laptop). On Raspbian, you can use the command whereis leafpad, for example, to get the full path of TextEditor.

   On line 3 of the standard FileZilla window, fill in as follows:

     Host: The ip address of your 2.11BSD
     Username: Your username on 2.11BSD
     Password: Your password on 2.11BSD
     Port: 21

   Then use the QuickConnect button on the same line. Once you have successfully logged in once to a server, you can use the down arrow next to the QuickConnect button.

   Note: You cannot connect as root. You first need to make a normal user on 2.11BSD. See the separate tutorial in this repository.

To transfer files, navigate to the proper directories in the local and remote directory trees. Then drag and drop a file from one to the other. For editing a file on the remote system using your favorite editor, navigate to it in the remote directory tree, then right click it and select View/Edit.

You can also use FileZilla on the Raspberry Pi running the PiDP-11 simulation, but you need to establish TCP/IP communication between this Raspberry Pi and 2.11 BSD, using Proxy ARP. See the corresponding documentation in the PiDP-11 user manual.