Logging into GFDL via SSH using PuTTY

Background

NOAA/GFDL allows registered users secure access to the site/resources via *SSH*. GFDL recommends and supports the *PuTTY* client-side tool for remote access through *daisy*, GFDL's *ssh* login host. Remember that *daisy* is only a gateway and provides no tools to do work on it. From *daisy*, the only thing users can do is connect to another host inside GFDL. Note that while *telnet* is still supported as a legacy service, SSH should be used to connect to another linux workstation.

NOAA/GFDL allows registered users access to the site/resources through SSH. PuTTY is a free implementation of SSH for the Windows platform, along with an xterm emulator. PuTTY is the supported tool at GFDL, but any SSHv2 client should work.

Once logged in to an internal linux workstation, a user can work from within the *SSH* terminal to obtain a full-function *XWindow* environment. The directions below provide information on starting up and configuring PuTTY.

To obtain authorization to log in remotely, please submit the Remote Access User Agreement Form which can be found at http://www.gfdl.noaa.gov/internal/index.html..

QuickStart

For experienced *SSH* users, the steps are:

- *ssh* to *daisy.gfdl.noaa.gov;* your login name is your internal GFDL username; your password requires a CRYPTOCard
- From there, follow the menu and log in to an internal linux workstation
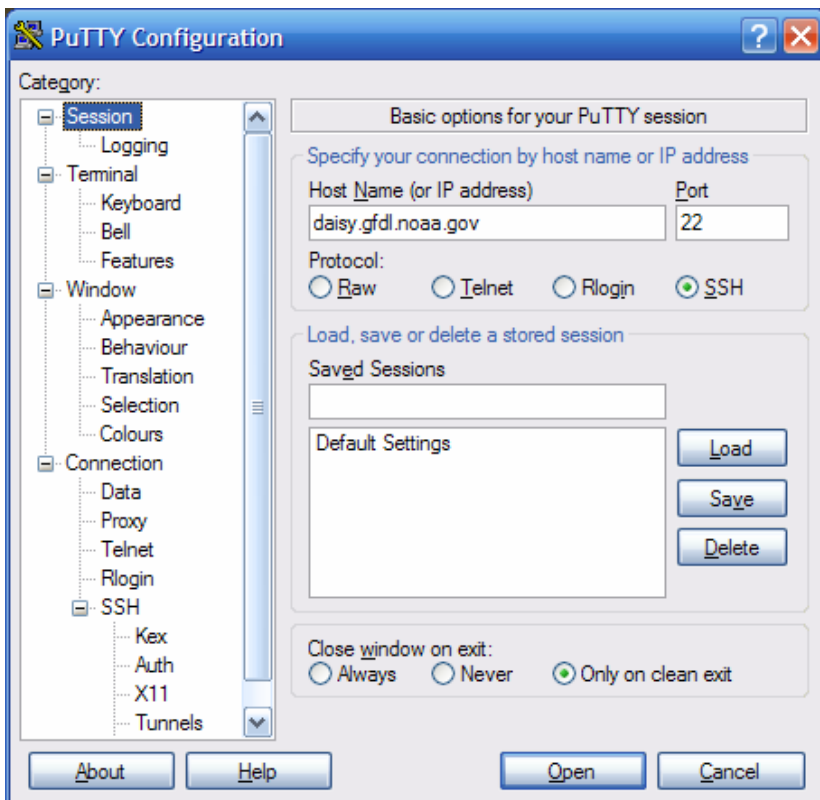
Downloads

PuTTY (Release 0.58) can be found at: http://www.putty.nl/download.html
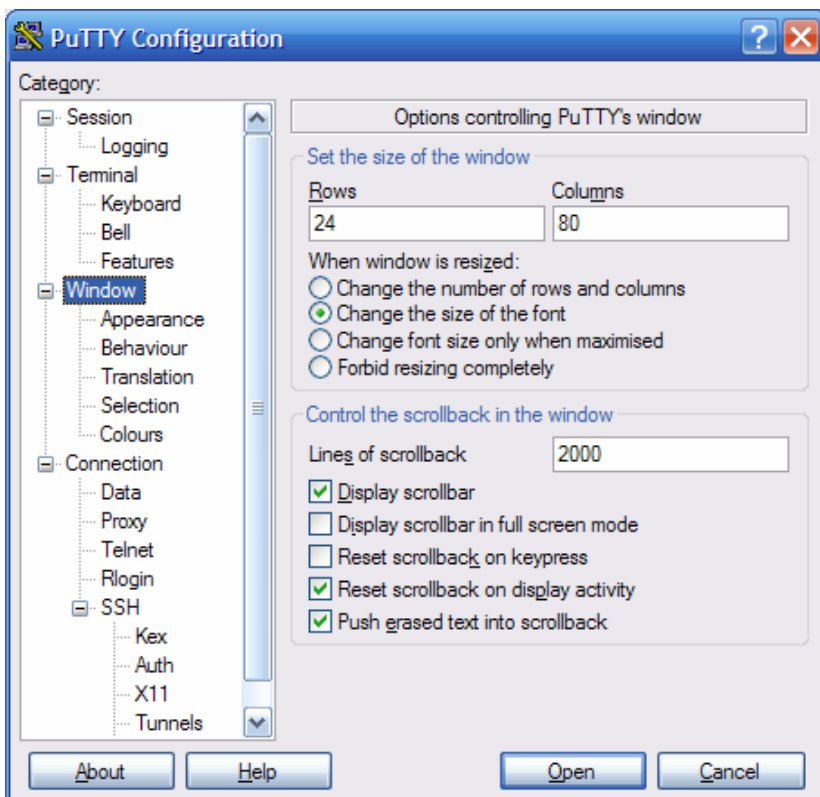
Detailed Instructions

**1. Logging into daisy.gfdl.noaa.gov using PuTTY:**
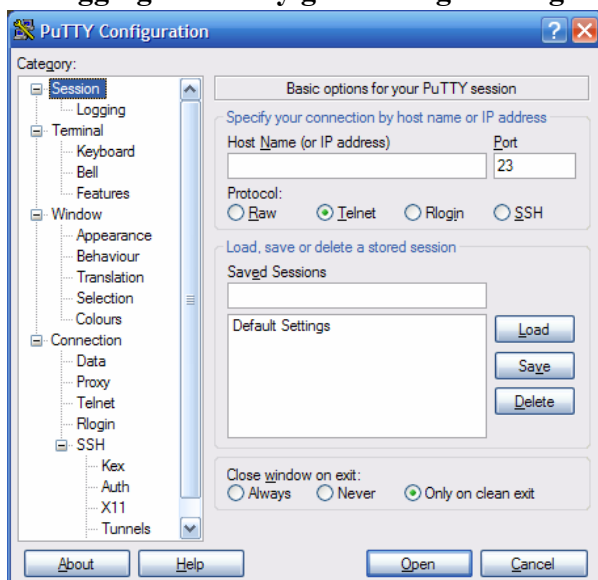
- This section assume that PuTTY has already been downloaded/installed
- Start PuTTY
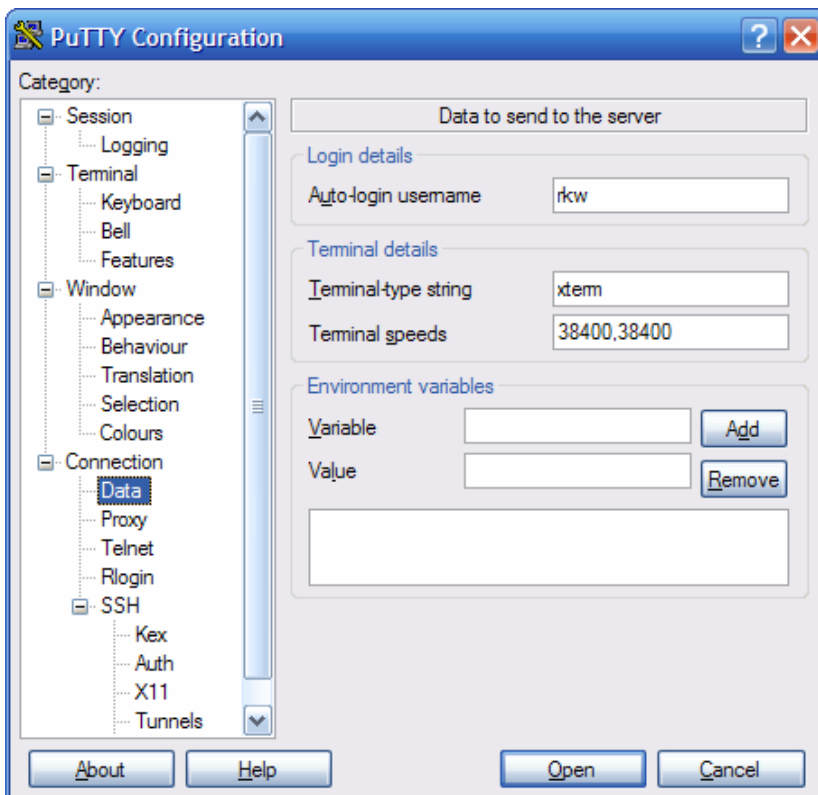- You can find PuTTY under "Start", "All Programs"

- For Host name, enter in "daisy.gfdl.noaa.gov"
- Click on the SSH button. The Port number will automatically change to 22.
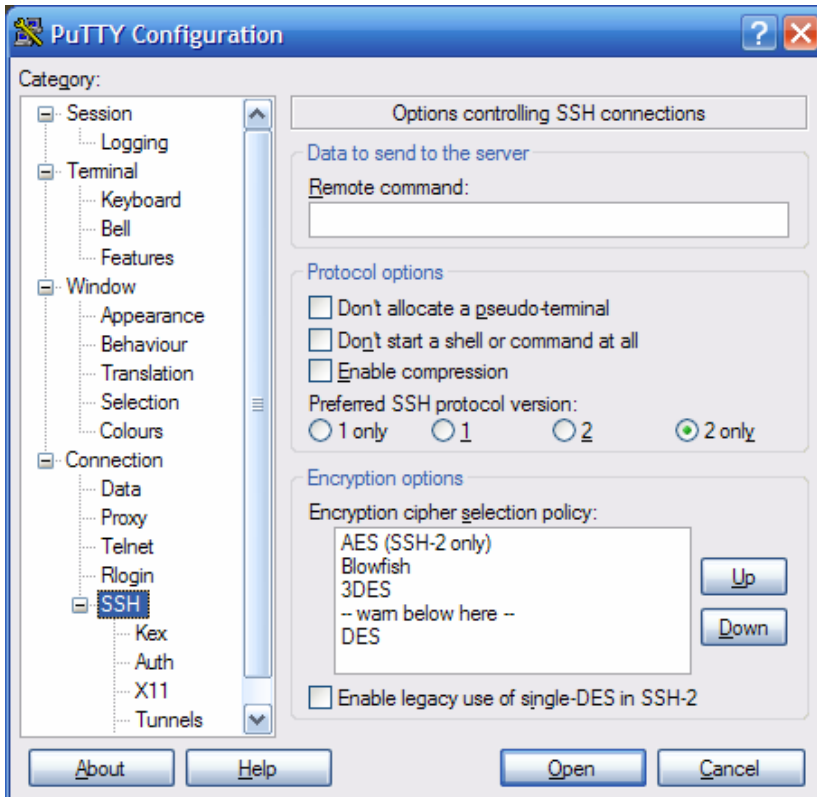

- Click on the "Window" Category on the left side.
- Change the "Lines of scrollback" to "2000"
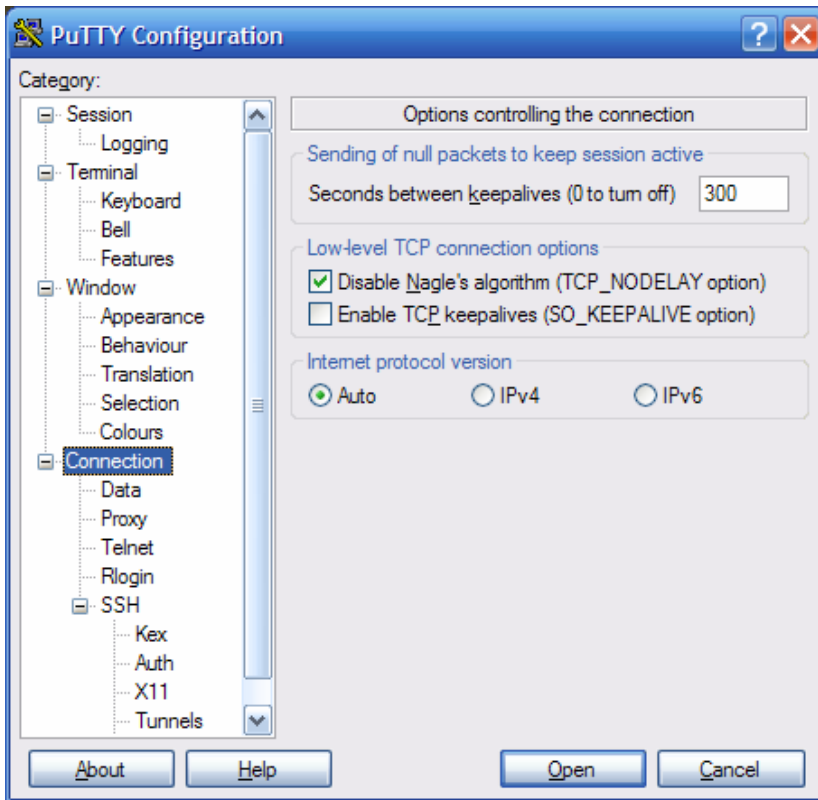
- Click on the "Connection" Category.
- In the "Sending of null packets to keep session alive" box, change the setting to "300".
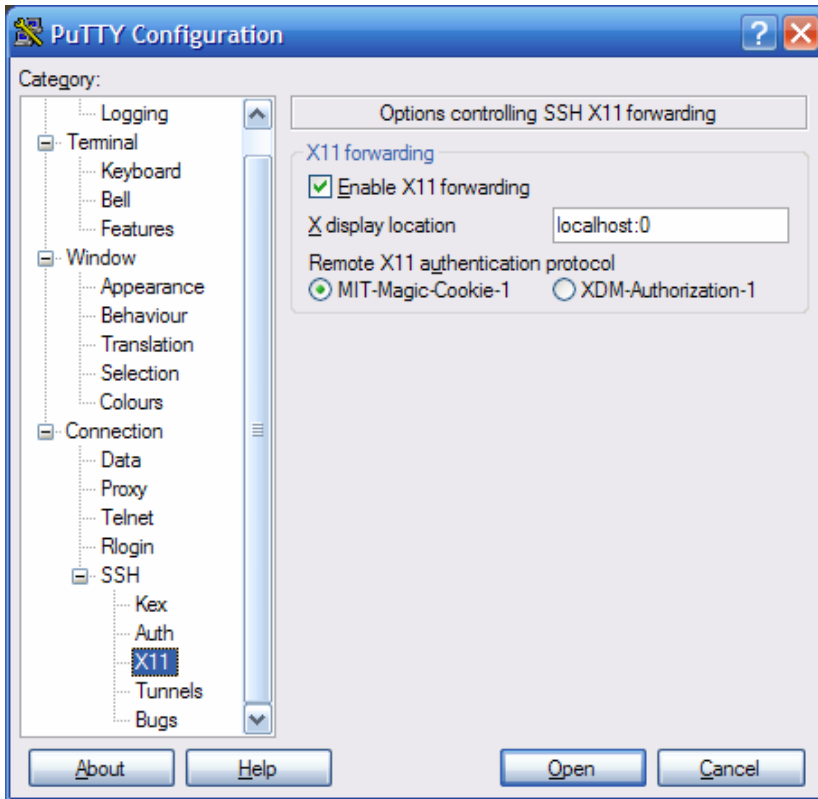

- Click on the "Data: Category.
- In the "Auto-login username" box enter your 2 or 3 letter user initials [example user "rkw" is shown]
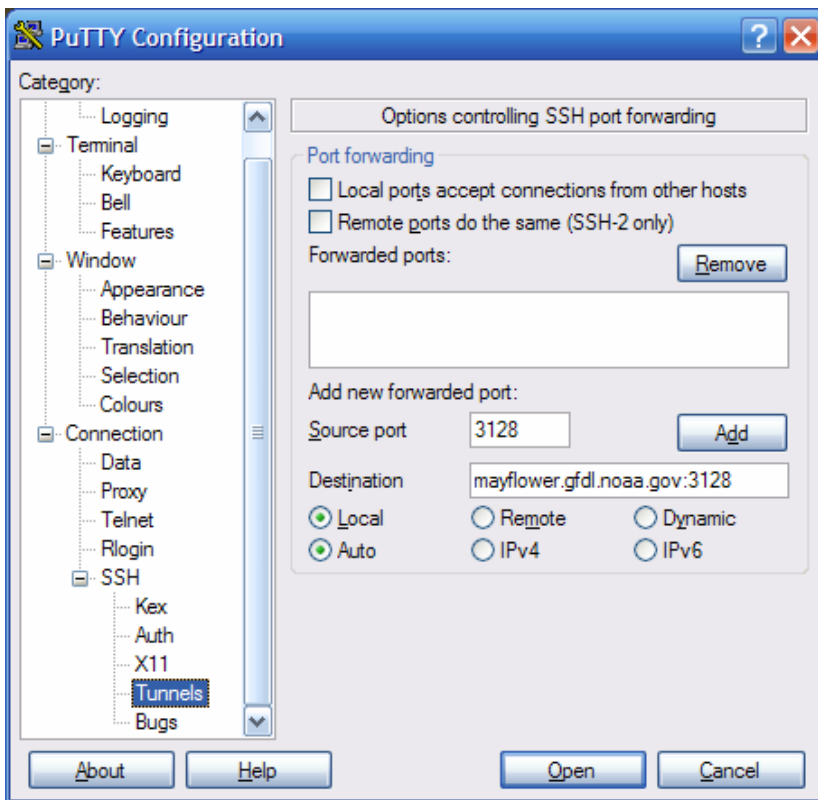
- Click on the "SSH" sub-Category.
- Change the "Preferred SSH protocol version:" to "2 only".

2. Set up Port Forwarding (necessary only if a user will X-display a window to an external host, want to setup their web browser to view GFDL internal-only web pages):

To be able to X-Display to an External host:

- Click on the "X11" sub-Category.
- Click on the checkbox to "Enable X11 forwarding".
- In the "X display location" enter "localhost:0".

To be able to use the GFDL proxy to view GFDL internal-only web pages:

- Click on the "Tunnels" sub-category.
- In the "Add new forwarded port:" enter 3128 as the "Source port" and "mayflower.gfdl.noaa.gov:3128" as the "Destination".
- **DO NOT** check "Local ports accept connections from other hosts".
- Click the "Add" button.
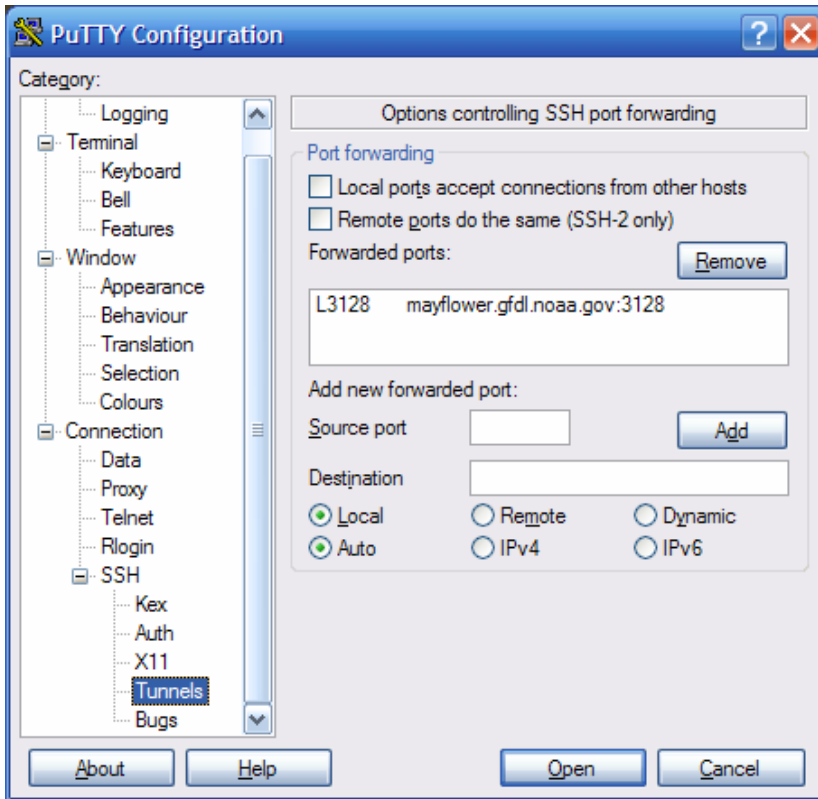
- The Tunnels screen should now look like the image to the left.

If your web proxy server is set correctly in your web browser, when you log into daisy, you will be able to view all internal GFDL web sites.

See the following site to see how to configure the auto-proxy for your web-browser: http://www.gfdl.noaa.gov/access/documentation

The internal GFDL home page is: http://cobweb.gfdl.noaa.gov

The internal GFDL helpdesk is: http://help.gfdl.noaa.gov
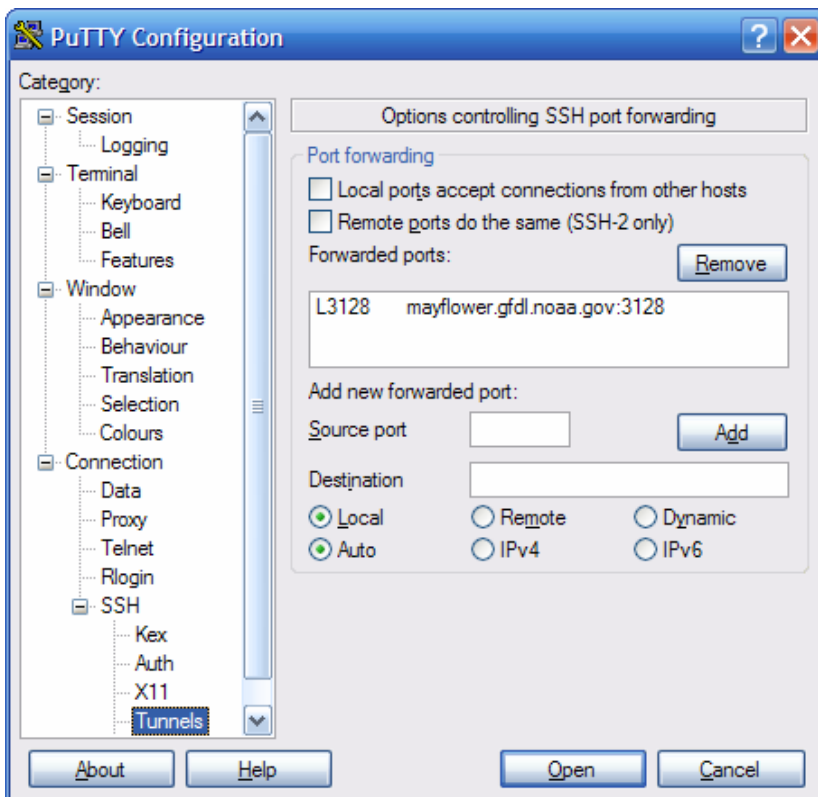
- The Tunnels screen should now look similar to the image to the left.
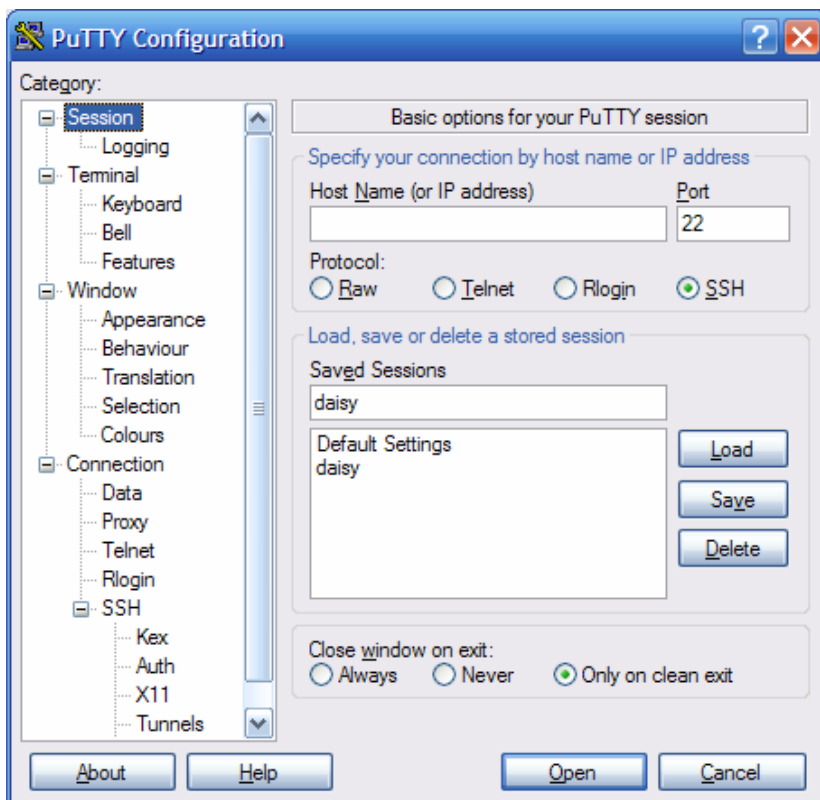
- Return to the "Sessions" Category.
- Enter "daisy", or a session name to identify this as the login to GFDL, into the "Saved Sessions" box.
- **Click the "Save" button on the right.**

- In the future click on "daisy" in the "Saved Sessions" list to open the connection.
- The connection to daisy will look like this:
- After a warning banner, you will be prompted for a password. Enter in your one time password using your CRYPTOCard password generator.
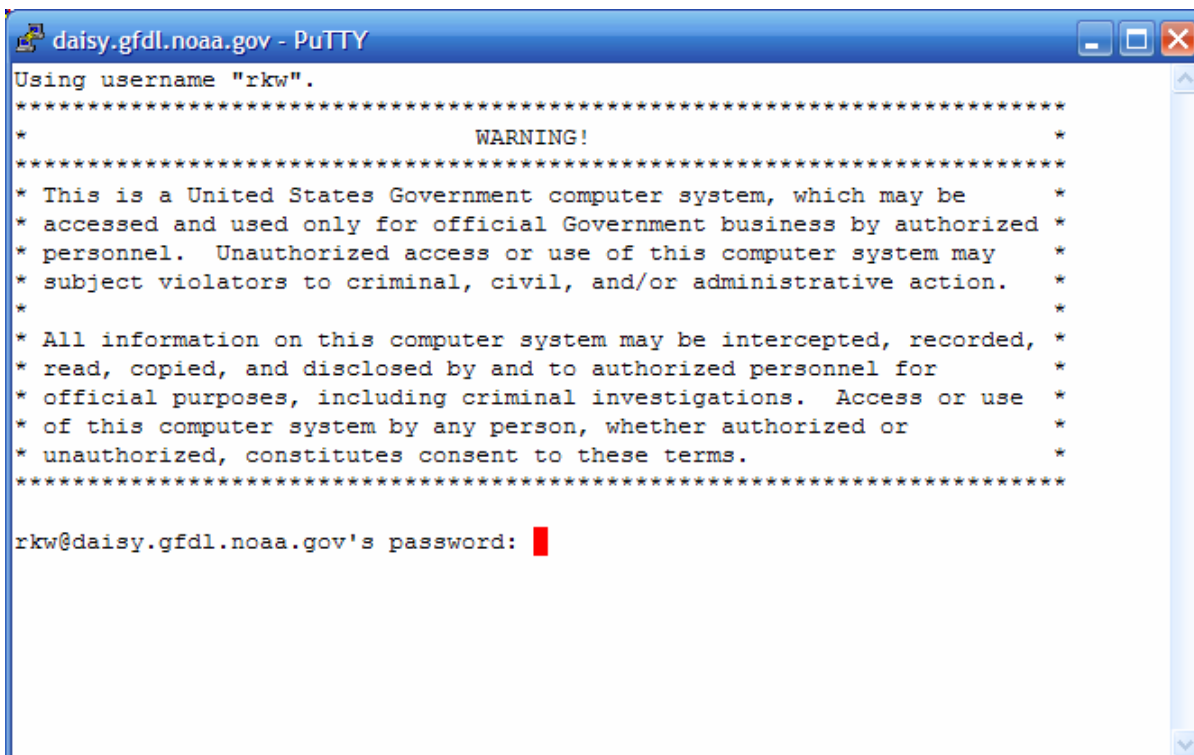
- Once you have successfully logged into daisy, your screen should look like this:

```
rkw@daisy:~                                                    _ □ ✕

rkw@daisy.gfdl.noaa.gov's password:


     d8b            d8,                Services Rendered:
     88P            `8P                ------------------
    d88                                + SSH Login
 d888888   d888b8b    88b .d888b,?88   d8P  ------------------
d8P' ?88  d8P' ?88    88P ?8b,   d88    88
88b  ,88b 88b  ,88b   d88     `?8b ?8(  d88
`?88P'`88b`?88P'`88bd88' `?888P' `?88P'?8b   , daisy, give me
                                      )88  your answer do
                                    ,d8P         --HAL
                                   `?888P'

-For Questions or before anything is done contact:-
  CONTACTS: Ron.Bewtra@noaa.gov      (GFDL x6555)
            Buz.Taylor@noaa.gov      (GFDL x5074)
            oar.gfdl.help@noaa.gov  <--Help Desk
            http://help/            <--Help Desk

20030215 rnb: remember that daisy DOES NOT mount
              your home file system.
20030523 rnb: Maximum login session set to 3 days!


********************************************************************
*                                                                *
* The host public1 is a new linux workstation that can be        *
* utilized by remote access users.  public is still              *
* available, however public1 has more memory and compute         *
* power.                                                         *
*                                                                *
* Please send comments/questions to oar.gfdl.help@noaa.gov       *
*                                                                *
********************************************************************
_____

       If you haven't read the warning, do so now.
_____


  Authorized users can ssh/telnet to their destination host.

 Special commands available:
   menu           -> prints this menu
   motd           -> prints Messages of the Day
   mystats        -> prints some general user statistics
   rmhost [host] -> removes old ssh host keys
   ssh [host]     -> secure shell session to a GFDL host
   telnet [host] -> telnet session to a GFDL host
   warning        -> prints the warning message

[rkw@daisy rkw]$ █
```

REMEMBER:
- Daisy is only a gateway. Daisy does not give you any tools to do work on it. From Daisy you can only SSH to another host inside GFDL.
- Port forwarding should be working. If your web proxy is set in your browser (see http://www.gfdl.noaa.gov/access/documentation to learn how to configure your proxy settings), you will now be able to view all internal GFDL web sites.
- From here you can ssh to an internal linux workstation (such as public1). You then can work within your PuTTY window or start a VNC session. See http://www.gfdl.noaa.gov/access/documentation for directions on using VNC at GFDL.