## <u>Configuring PuTTY for use with ssh.gfdl.noaa.gov</u>

- Session	Basic options for your Pul	TY session
Logging Terminal Keyboard Bell Features Window	⊂ Specify the destination you want to Host <u>N</u> ame (or IP address) ↓ Connection type: ○ Raw ○ Telnet ○ Rlogin ○	connect to Port 22 ● SSH ◯ Seria
Appearance Behaviour Translation Selection Colours	Load, save or delete a stored session Sav <u>e</u> d Sessions Default Settings	on Load
— Data — Proxy — Telnet — Rlogin ⊕ SSH — Serial	Close window on exit:	Sa <u>v</u> e Delete
	C Always C Never       On	ly on clean exit

1. Start PuTTY

(Once installed, you can find PuTTY under "Start", "ALL Programs")

Session	Basic options for your PuTTY session		
Logging ⊡ Terminal	Specify the destination you want to Host Name (or IP address)	connect to Port	
- Bell	ssh.gfdl.noaa.gov	22	
Features Window	Connection type: C Raw C Telnet C Rlogin I SSH C Serial		
Appearance Behaviour Translation Selection	Load, save or delete a stored sessi Saved Sessions	ion	
Colours	Default Settings	Load	
- Data		Save	
- Proxy - Telnet - Rlogin		Delete	
terial ∎	Close window on exit: C Always C Never I Di	nly on clean exit	

- Enter "ssh.gfdl.noaa.gov" in the Host Name text box.
- Click on the SSH button. The Port number should automatically change to 22.

aleguiy.	Ontions a	entrelling DuTTV's window
Logging	Set the size of the v	vindow Rows
Keyboard Bell Features	80 When window is re:	24 sized:
Window Appearance Behaviour Translation	<ul> <li>Change the nur</li> <li>Change the size</li> <li>Change font size</li> <li>Change font resizing of</li> </ul>	mber of rows and columns s of the font e only when maximised completely
- Selection Colours - Data - Proxy - Telnet - Rlogin ⊕ SSH - Serial	Control the scrollbad	ck in the window
	Lines of scrollback Display scrollba Display scrollba Reset scrollbac Reset scrollbac Push grased test	2000 r in full screen mode <u>k</u> on keypress k on display activity xt into scrollback

 Click on the "Window" Category on the left side. Change the scrollback to "2000"



 Click on the "Connection" Category. In the "Sending of null packets to keep the session active" box, change the setting to 300.

ategory:		
🖃 Session	Data to s	send to the server
Logging ⊡Terminal Keyboard	Login details Auto-login username	Firstname.Lastname
Bell Features ⊑ Window	Terminal details	xterm
- Appearance Rehaviour	Terminal <u>s</u> peeds	38400,38400
Gelection Colours Connection Data Proxy Telnet Rlogin €- SSH	Environment variables ─ Variable Value	Add <u>R</u> emove
About H		<u>Open</u>

6. Also under the "Connect" Category, click the "Data" subcategory, and enter your

Firstname Lastname as your Auto-login username.

∃- Session	Options controlling SSH connections
Logging ⊒Terminal Keyboard Bell	Data to send to the server <u>R</u> emote command:
<ul> <li>Features</li> <li>Window</li> <li>Appearance</li> <li>Behaviour</li> <li>Translation</li> <li>Selection</li> <li>Colours</li> <li>Connection</li> <li>Data</li> <li>Proxy</li> <li>Telnet</li> <li>Rlogin</li> <li>SSH</li> <li>Serial</li> </ul>	Protocol options Don't start a shell or command at all Enable compression Preferred SSH protocol version: O 1 only O 1 O 2 O 2 O 2 O 2 O 2 O 2 O 2 O 2 O 2 O 2
	Enable legacy use of single-DES in SSH-2

 7. Click on the "SSH" sub-Category. Change the "Preferred SSH protocol version" to "2 only" <u>Step 8 & 9 are only necessary if there is a need to view the GFDL internal web site from a remote</u> <u>location. If remote viewing is necessary, the "Proxy" would need to be set. If this is not necessary, go to</u> <u>Step 10.</u>

- Keyboard	Options controlling	g SSH X11 forwarding
Bell Features Window	X11 forwarding	1
Appearance	⊠ display location	localhost:0
Behaviour Translation	Remote X11 authenticatio	n protocol C XDM-Authorization-1
Connection Data Proxy Telnet Rlogin SSH Kex Auth TTY TTY Tunnels		

Keyboard	Option	is controlling SSH p	ort forwarding
Bell Features Appearance Behaviour Translation Franslation	Port forwarding     Local ports     Forwarded port	accept connection its do the same (SS s:	s from other hosts H-2 only) <u>R</u> emove
Colours Connection Data Proxy Telnet Rlogin SSH Kex Auth TTY X11 Tunnels	Add new forwa <u>S</u> ource port Destination I Local I Auto	rded port: 3128 mayflower.gfdl. C Remote C IPv <u>4</u>	Add noaa.gov:3128 C Dynamic C IPv <u>6</u>

- 8. Under SSH,
- Click on the "X11" category, and then click the checkbox to "Enable X11 forwarding".
- Enter "localhost:0" in the X display location "textbox".

- 9. Click on the "Tunnels" in the sub-Category.
- In the port forwarding box, Enter "3128" as the source port.
- Enter "mayflower.gfdl.noaa.gov:3128" as the destination port.
- The port will be "Local", not "Remote".
- DO NOT check "Local ports accept connections from other hosts".
- Click the "Add" button.

Rutty Configuration			?:
Category:			
Keyboard 🔺	] Option	ns controlling SSH p	port forwarding
Bell Features Window Appearance Behaviour	Port forwarding	) : accept connectior irts do the same (SS ts:	ns from other hosts (H-2 only) <u>R</u> emove
← Translation ← Selection ← Colours ← Connection ← Data ← Proxy ← Telnet ← Blogin	L3128 ma Add new forwa <u>S</u> ource port Destjnation	yflower.gfdl.noaa.gr arded port:	ov:3128
⊡-SSH Kex	<ul> <li>€ Local</li> <li>€ Auto</li> </ul>	C Re <u>m</u> ote C IPv <u>4</u>	⊂ Dynamic ⊂ IPv <u>6</u>
- TTY - X11 - <b>Tunnels</b> - Bugs - Serial	-		
<u>A</u> bout <u>H</u> e	lp 🔤	<u>O</u> pen	<u>C</u> ancel

• The Tunnels screen should now look like the image to the left.

Category:		
⊡- Session	Basic options for your Pul	TTY session
Logging     Terminal     Keyboard     Bell     Features     Window	Specify the destination you want to Host <u>N</u> ame (or IP address) [ssh.gfdLnoaa.gov Connection type: ○ <u>R</u> aw ○ <u>I</u> elnet ○ Rlogin (	connect to Port 22 ● SSH ○ Serial
Appearance Behaviour Translation	Load, save or delete a stored session Sav <u>e</u> d Sessions	on
Colours Colours Connection Data Proxy Telnet Riogin	Default Settings	Load Sa <u>v</u> e Delete
⊡ SSH Serial	Close <u>w</u> indow on exit: C Always C Never © Or	nly on clean exit
About He		Cancel

- 10. Return to the "Session" Category.
- Enter "rsa-ssh" into the "Saved Sessions" box.
- Click the "Save" button on the right.
- In the future double click (or load and Open) the "rsa-ssh" in the "Saved Sessions" list to open a connection.

The connection to ssh.gfdl.noaa.gov will look similar to this:



After a warning banner, you will be prompted for a PASSCODE. Enter in your "PIN" and your PASSCODE from your RSA FOB. Once you have successfully connected to ssh, your screen should look similar to this:

🚰 tt@ssh:~		
<pre>= read, copied, = official purp = of this compu = unauthorized, ====================================</pre>	and disclosed by and to authorized personnel for oses, including criminal investigations. Access or use ter system by any person, whether authorized or constitutes consent to these terms.	
Using keyboard- Access is via F Last login: Wed	interactive authentication. irst.Last username only. Enter RSA PASSCODE: .Dec 7 12:19:46 2011 from dhcp-034-214.gfdl.noaa.gov	
If you	haven't read the warning, do so now.	
Authorized us	ers can ssh to their destination host.	
Special comman	ds available:	
menu	-> prints this menu	
motd	-> prints Messages of the Day	
mystats	-> prints some general user statistics	
rmhost	-> removes old ssh host keys	
ssh [host]	-> secure shell session to a GFDL host	
warning	-> prints the warning message	
[tt@ssh ~]\$ 📘		-

## Remember:

"ssh.gfdl.noaa.gov" is only a gateway. ssh.gfdl.noaa.gov does not have tools to enable you to work on it. You can only SSH to another host inside of GFDL.

Port forwarding should be working. If your web proxy server is set correctly, you will now be able to view all internal GFDL web sites.