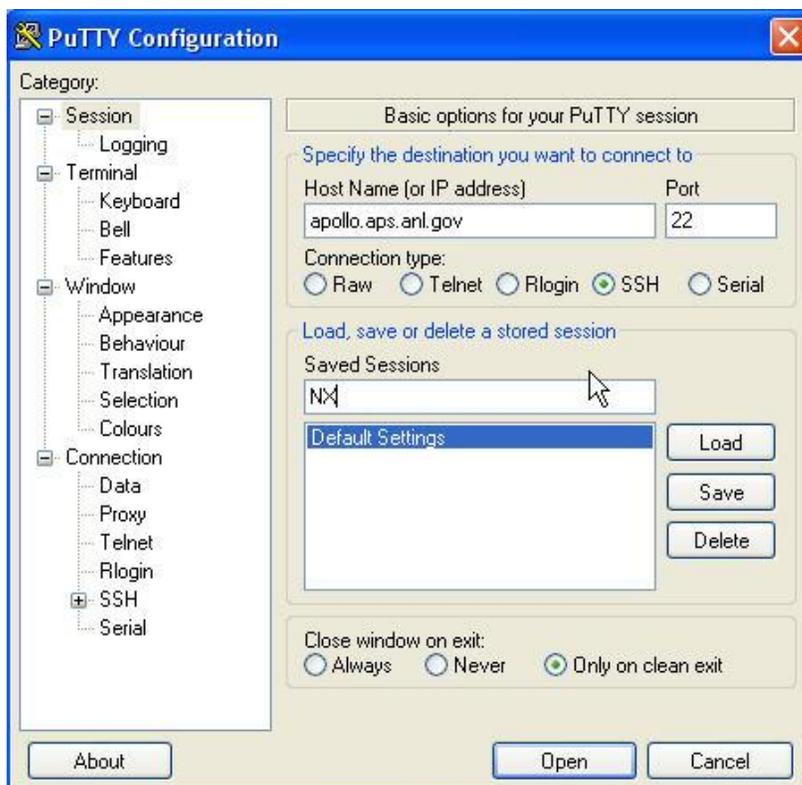


Tunnel X11 through PuTTY on Windows

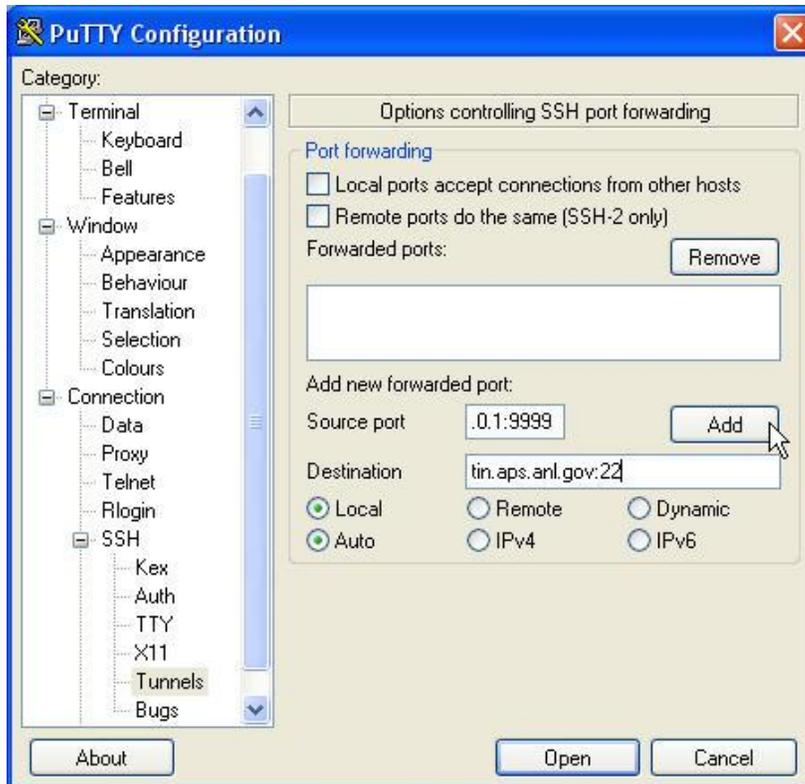
Scenario: You want to open a CDE session with APS Unix server tin.aps.anl.gov from home or while on travel. Using putty and FreeNX, you can tunnel X11 through the SSH session.

Step 1: Configure and launch putty ssh client

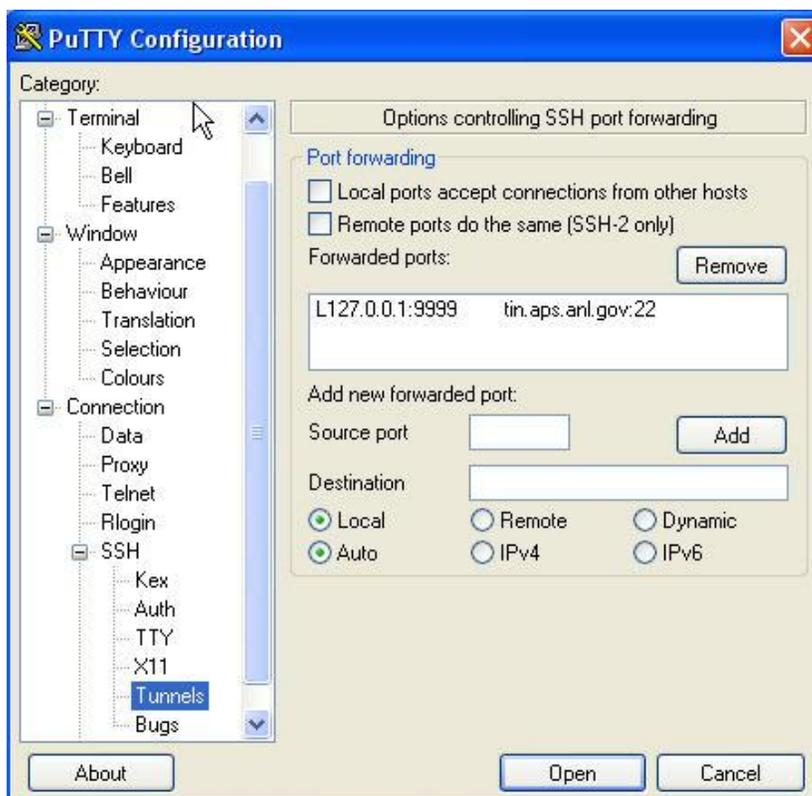
- 1) Configure session
Select "Session"
Enter hostname: apollo.aps.anl.gov, port 22
Enter session name: NX (your choice)



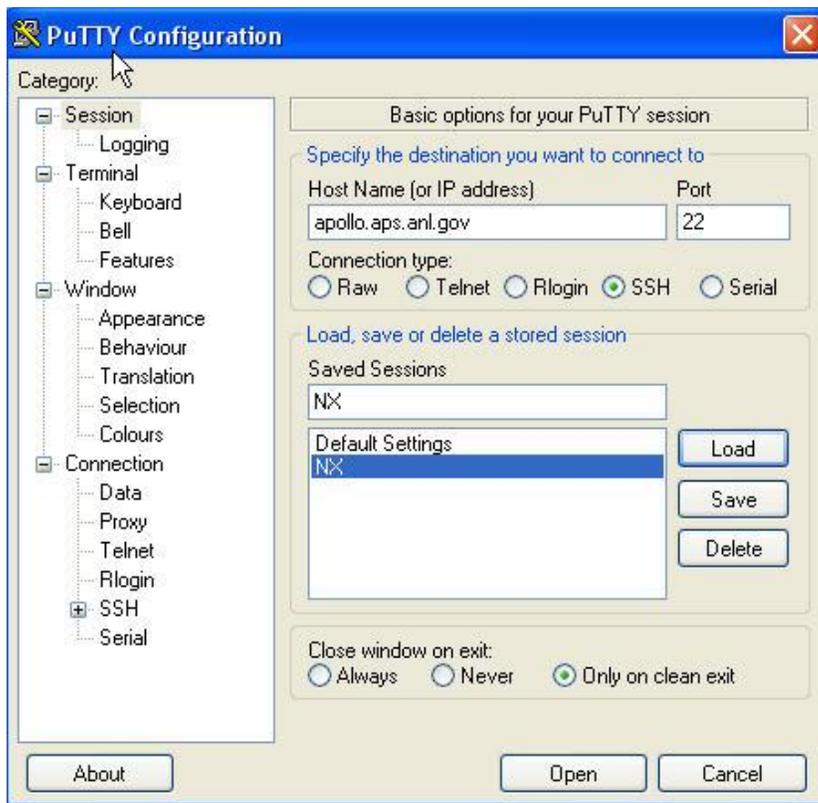
- 2) On SSH tab, select "Tunnels"
Under the heading "Add new forwarding port:", enter:
Source port: 127.0.0.1:9999
Destination: tin.aps.anl.gov:22 (or the IP hostname or address of whatever your destination host is, followed by ":22")



3) Click on "Add" to save these changes



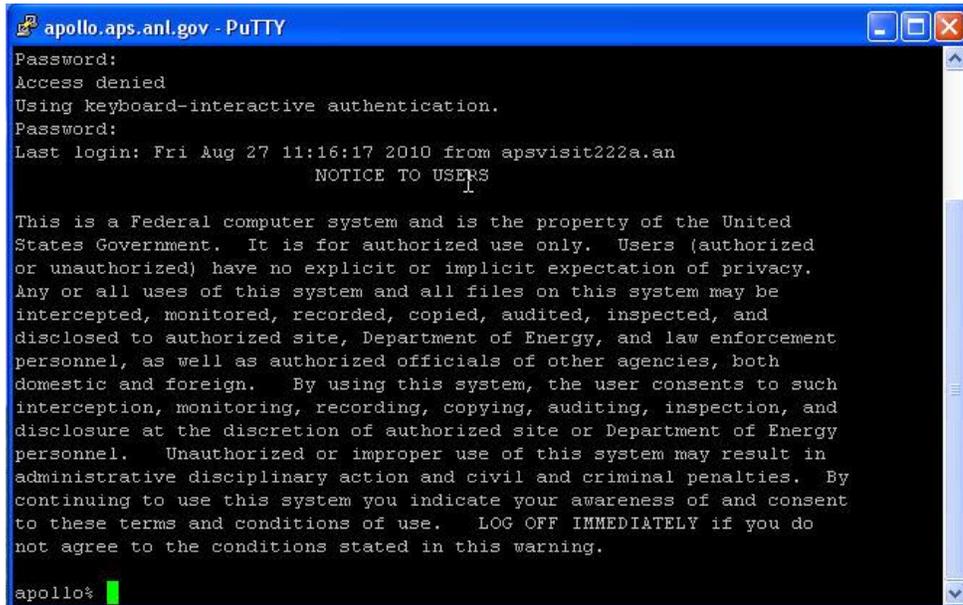
- 4) To launch, go back to the Session tab, under heading “Saved Sessions”, select “NX” and click on “Open”



- 5) In the putty session, login using your APS email/LDAP username and crypto card password:



6) Once logged in, you will be at the “Apollo” prompt:



```
apollo.aps.anl.gov - PuTTY
Password:
Access denied
Using keyboard-interactive authentication.
Password:
Last login: Fri Aug 27 11:16:17 2010 from apsvisit222a.an
      NOTICE TO USERS

This is a Federal computer system and is the property of the United
States Government.  It is for authorized use only.  Users (authorized
or unauthorized) have no explicit or implicit expectation of privacy.
Any or all uses of this system and all files on this system may be
intercepted, monitored, recorded, copied, audited, inspected, and
disclosed to authorized site, Department of Energy, and law enforcement
personnel, as well as authorized officials of other agencies, both
domestic and foreign.  By using this system, the user consents to such
interception, monitoring, recording, copying, auditing, inspection, and
disclosure at the discretion of authorized site or Department of Energy
personnel.  Unauthorized or improper use of this system may result in
administrative disciplinary action and civil and criminal penalties.  By
continuing to use this system you indicate your awareness of and consent
to these terms and conditions of use.  LOG OFF IMMEDIATELY if you do
not agree to the conditions stated in this warning.

apollo%
```

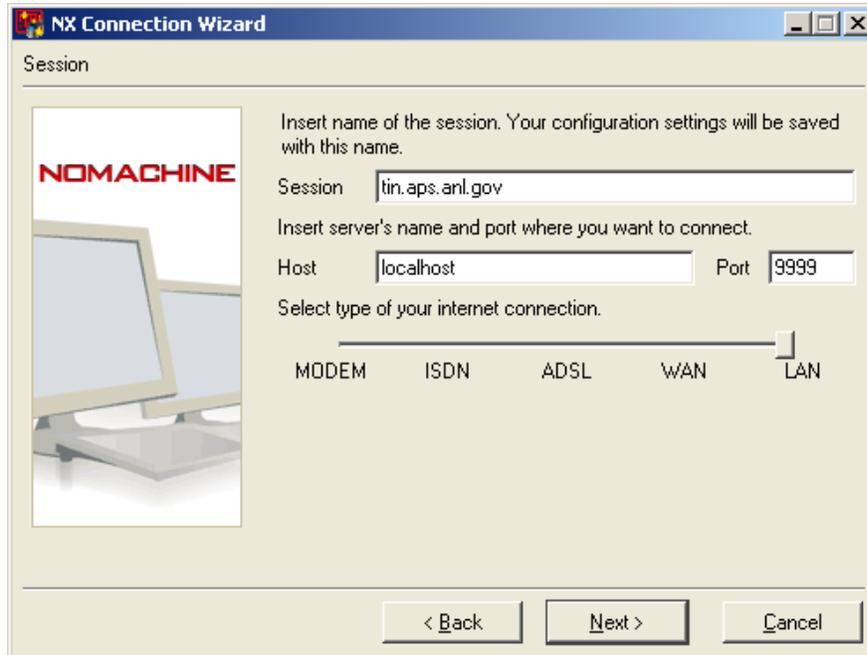
2) Configure and launch FreeNX

1) Once you have established the putty ssh session with apollo, launch the FreeNX client: Start->Programs->NX Client for Windows->NX Client for Windows and configure as follows:

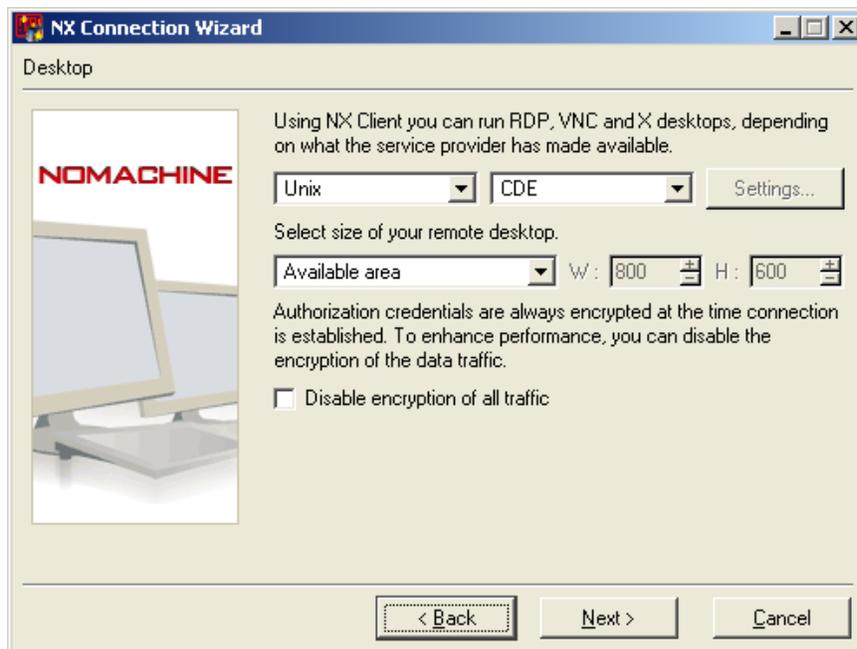
Select “Next”



- 2) Enter a descriptive "Session" name, in our example: "tin.aps.anl.gov":
Enter "Host" name as "localhost" and port "9999"
Select the internet connection type using the slider, in our example, "LAN"
Select "Next"



- 3) In the next screen, select the remote system's operating system, graphical desktop environment, and specify the graphics resolution. Select "Available Area" to use the entire screen. Select "Next"



4) Select “Create shortcut on desktop”, if you prefer.

Select “Finish”



6) Once the configuration is saved, you will be presented with the NX login screen:

Enter your username and password and select “Login”:



The NX session will go through various stages:

Setting up environment

Connecting to localhost

Connected to localhost

Waiting authentication

Downloading session information

The first time you connect to a specific remote host, you will be asked whether you want to continue connecting. Select "Yes" to continue:



7) If there are no errors, you will be logged into the full graphics environment of the remote host, tin.aps.anl.gov in our example.

