

# SSH Tunneling HOWTO for PDMWorks

SSH Tunneling creates an encrypted connection between your computer at home and a server located on campus in order to encrypt and secure information such as a username & password. SSH Tunneling works similarly to a VPN connection.

## Step 1

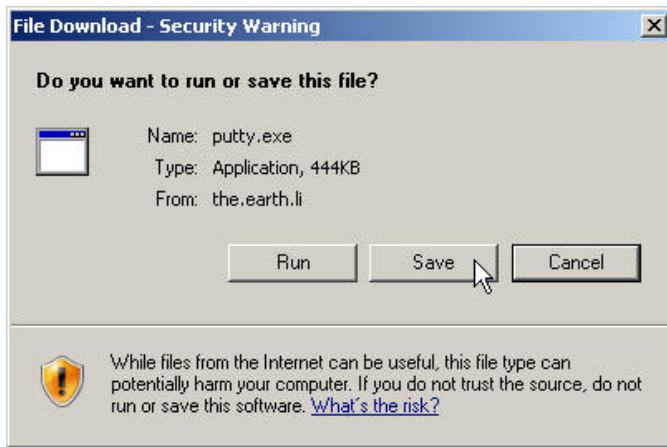
Download the free PuTTY SSH Secure Shell client from:  
<http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>

Click on putty.exe as shown below to download PuTTY



## Step 2

Click Save

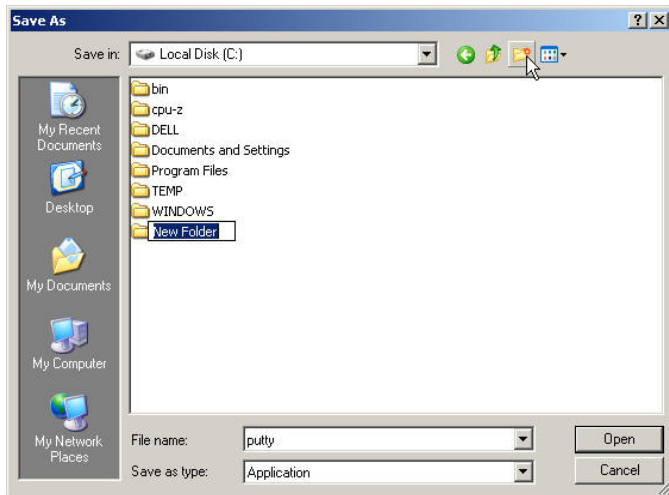


### Step 3

For “Save in” select C:

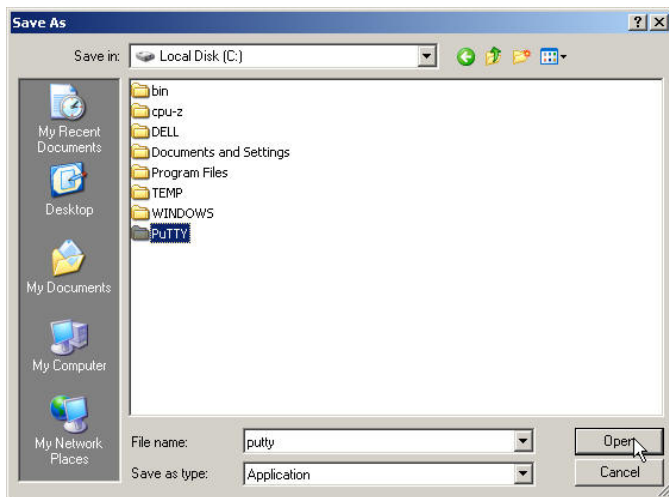
Click on the Create New Folder icon on top

This will create a new folder on your C: drive



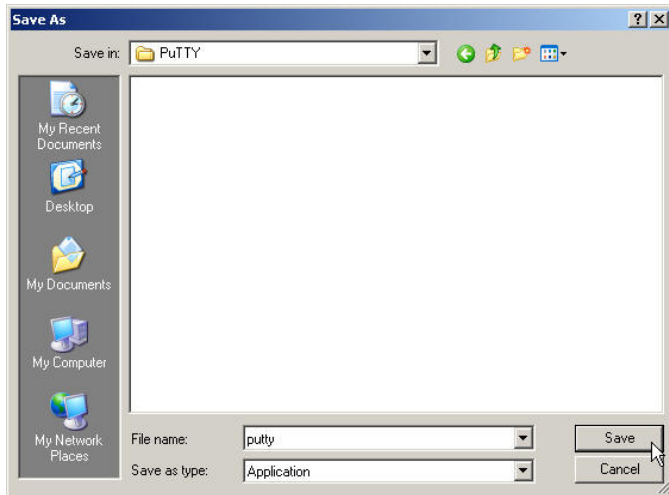
### Step 4

Name the new folder “PuTTY” and then click on the “Open” button



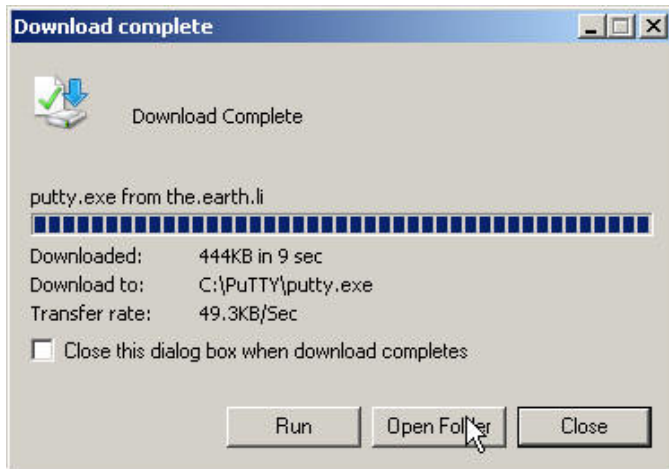
## Step 5

You should now see the folder “PuTTY” in the “Save in” section. Go ahead and click on the “Save” button



## Step 6

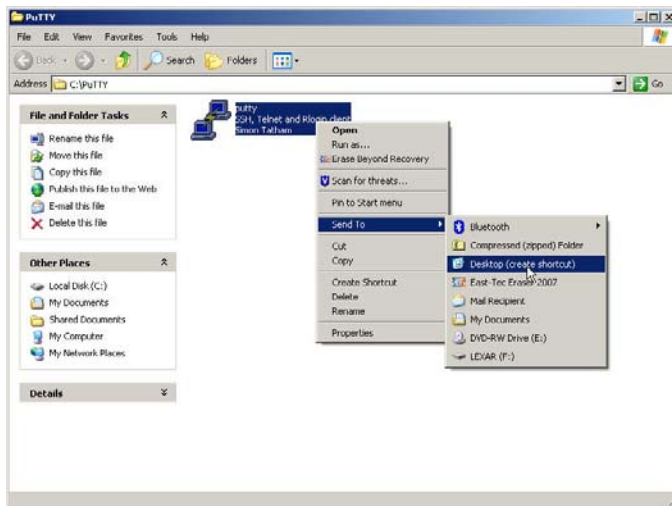
Click on the “Open Folder” button



## Step 7

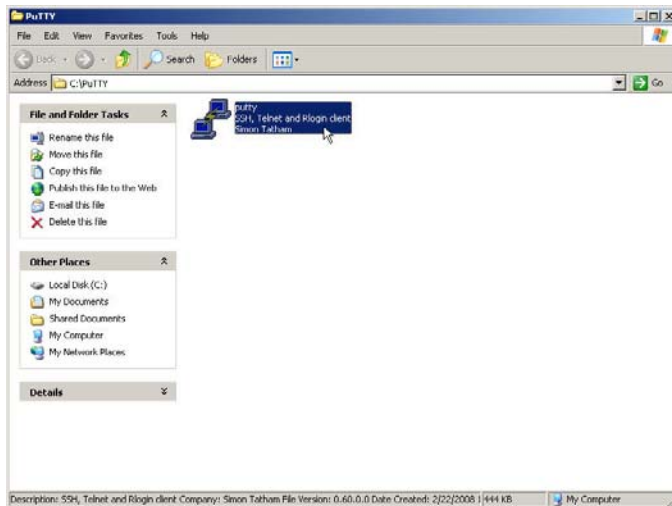
Now you will create a shortcut to PuTTY SSH client on your desktop for easy access to it in the future.

Right-click on the putty application and then select “Send To”->Desktop (create shortcut) in the drop down menu



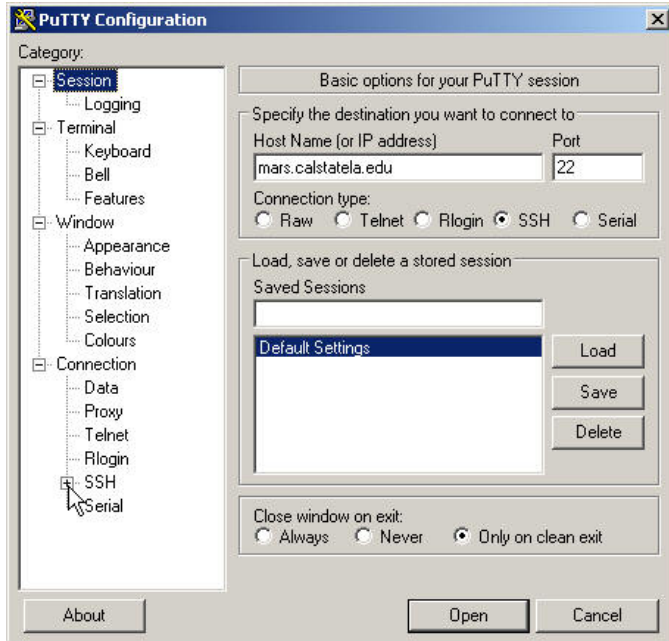
## Step 8

Go ahead and double click on the putty application to open it



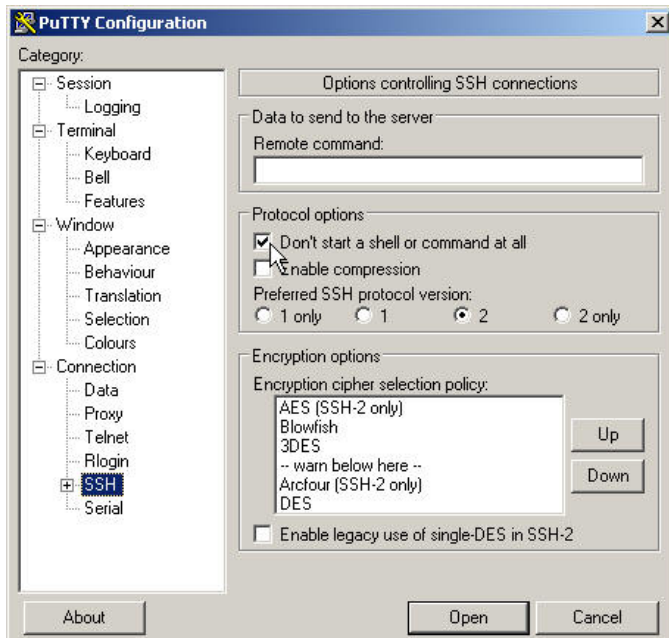
## Step 9

Once PuTTY loads you should see the screen below.  
Under Host Name enter: mars.calstatela.edu



## Step 10

Now you need to click on “SSH” under the “Connection” Category on the left side.  
Click the checkbox “Don’t start a shell or command at all” to enable it



## Step 11

Now you need to click on the + sign to the left of SSH to expand the sub-categories. Click on “Tunnels” and you should see the screen below.

For this example we are trying to connect to a server named “**et-cadsrv2.calstatela.edu**” and the port number we are trying to connect to is “**20000**”

To accomplish this to the following:

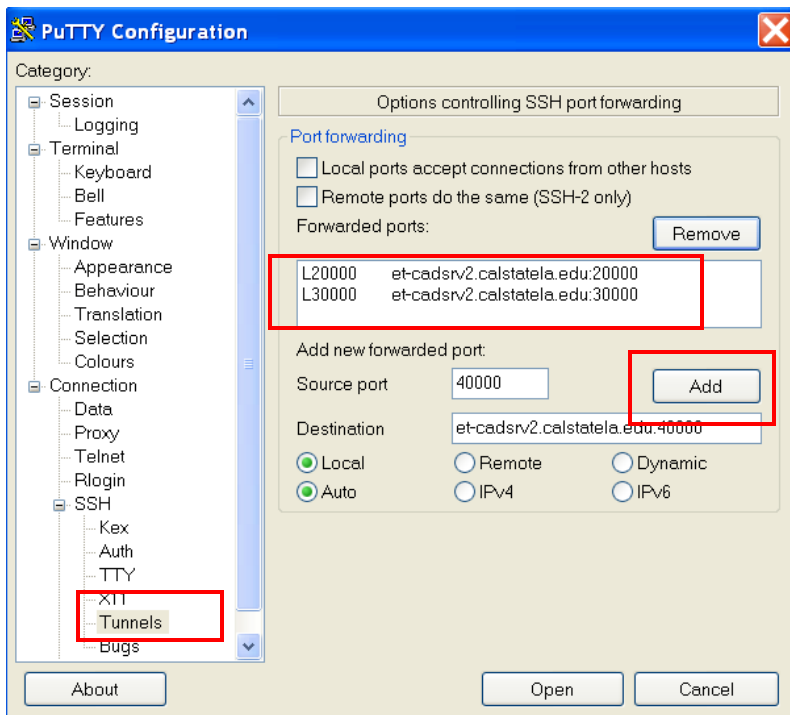
For “Source Port” enter: **20000**

For “Destination” enter: **et-cadsrv2.calstatela.edu:20000**

Then click on the “Add” button.

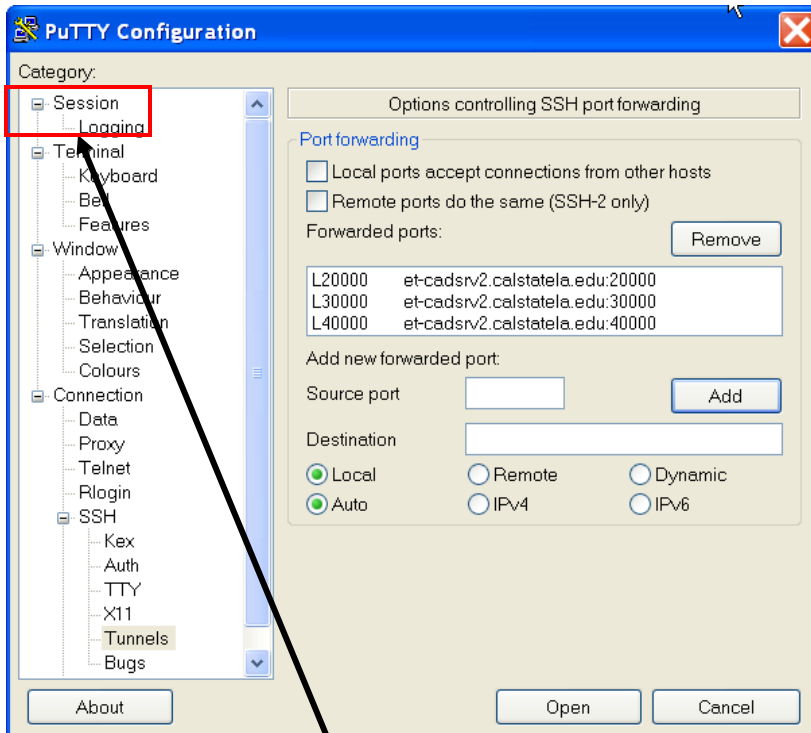
Add 2 more ports following the same steps as above. (**30000** and **40000**)

Note: You may need to add more than one port for your software to work properly



## Step 12

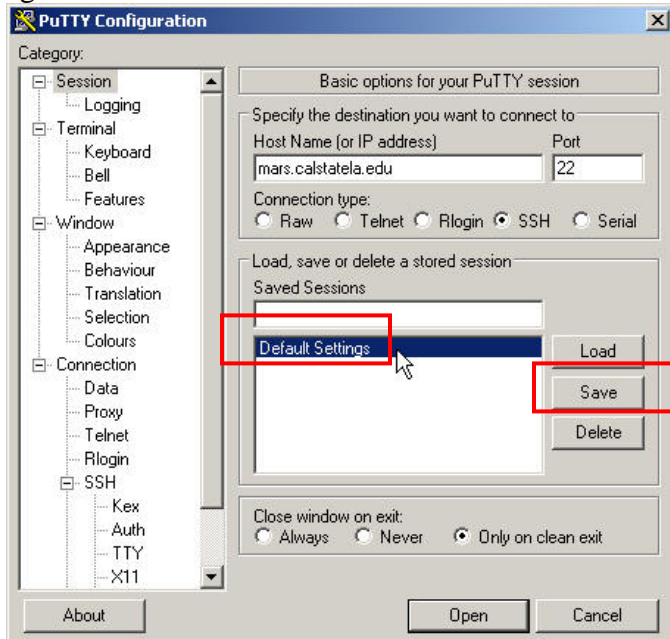
You should now see the forwarded ports that you have added listed.



### Step 13

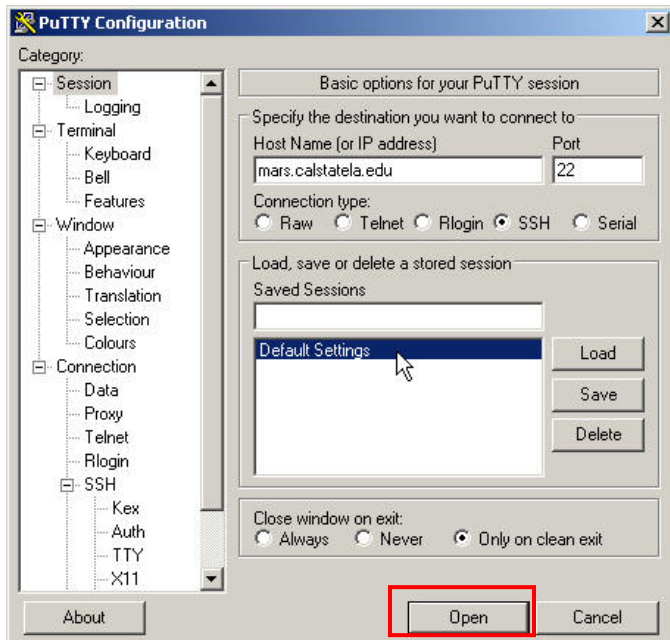
You now need to click on **“Session”** on the left side under Category to get back to the first screen you saw when you started PuTTY.

Click on “**Default Settings**” and then click on the “**Save**” button this will save all the settings so that next time you use PuTTY you will not have to re-enter everything all over again.

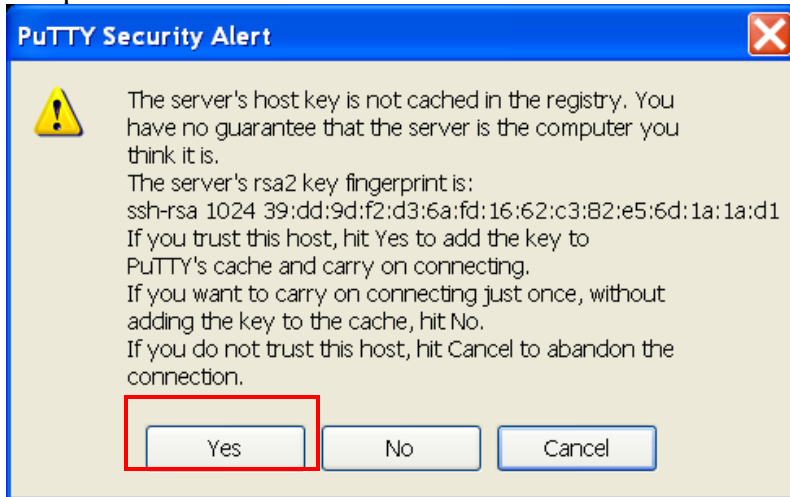


Step 14

Once you save your configuration in Step 13 you can go ahead and click the “**Open**” button”

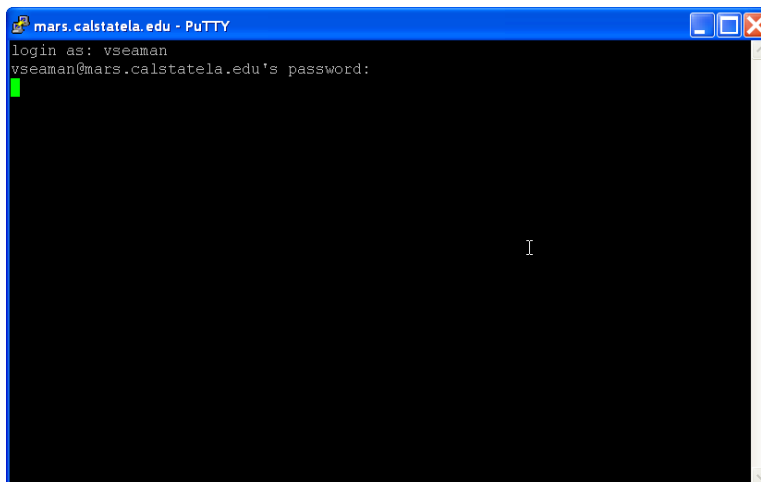


Note: you might see this PuTTY security alert, but just click on the **YES** button to accept!



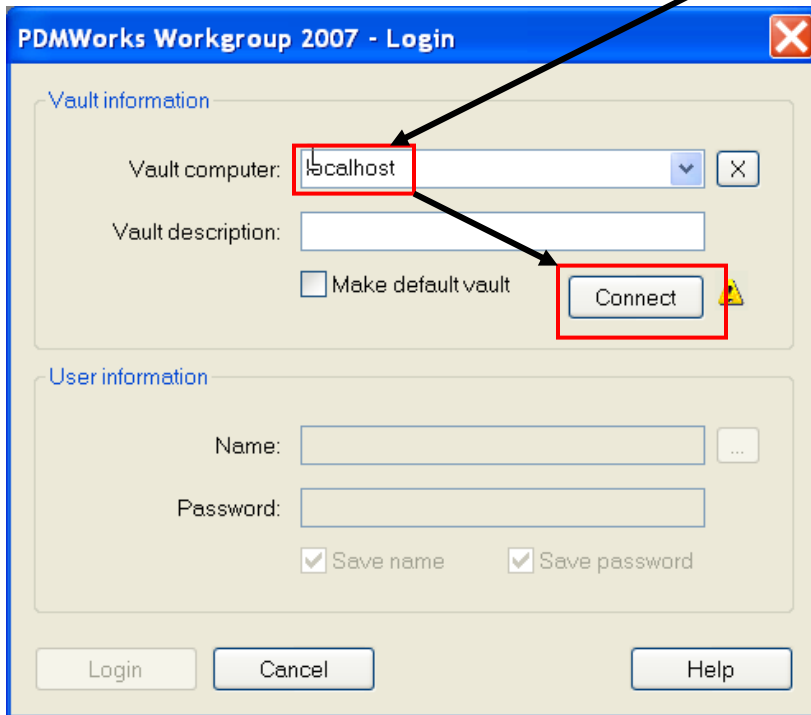
## Step 15

You should see the screen below popup. You will need to enter your **NIS username** where it says "login as: ". You will also need to enter your **NIS password**. If you enter the information correctly and you get no error messages the green cursor should go to the next line and you are now connected through an SSH tunnel to CSULA network. **You WILL NOT see anything else after you log in.** Simply minimize this mars.calstatela.edu log in window.



Step 16 (\*Important\* read carefully)

You can now go ahead and open up your SolidWorks software and launch (click on the Login area) the PDMWorks application. Instead of specifying the server you are connecting to in your software application you will be entering “**localhost**” for the server name instead of et-cadsrv2.calstatela.edu but the port should remain the same.



When you are trying to connect to a web server named “et-cadsrv2.calstatela.edu” that is running on port “8080” in your web browser you would use the following URL to connect to it: **http://localhost**

Step 17 (Log in with your team I.D. & Password)

PDMWorks Workgroup 2007 - Login

Vault information

Vault computer: localhost

Vault description:

Make default vault

Connect

User information

Name:

Password:

Save name  Save password

Login Cancel Help

Step 18 – try downloading a file OR uploading a file to the PDMWorks server

Step 19 – email Dr. Seaman at :vseaman@calstatela.edu

- a. everything works o.k. OR
- b. identify and problems