## Accessing ITP Virtual Lab

The following information is intended for students taking Information Technology Program (ITP) courses on how to log in and access software installed on the Viterbi School of Engineering's Remote Desktop Services Farm also known within ITP as the Virtual Lab.

- **Do I need to install any software to login?**

  You will need Remote Desktop Connection software. If you are a Windows User, the software is already installed. Go to the START or WINDOWS button, click on ALL PROGRAMS, click on ACCESSORIES, and select Remote Desktop Connection.
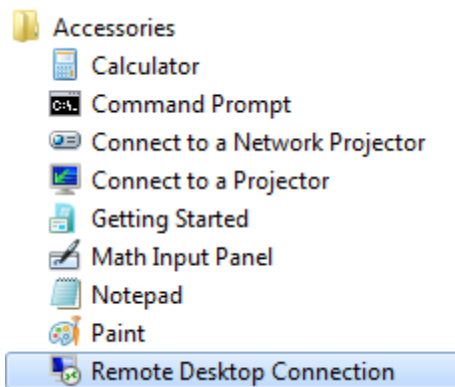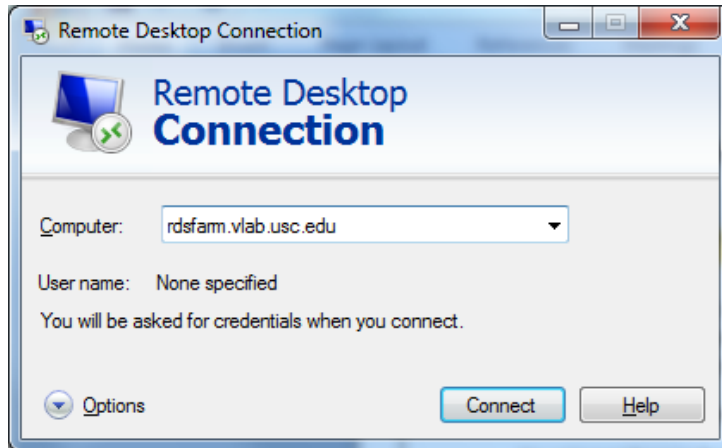

  If you are a Mac user, please go to the following link http://www.microsoft.com/mac/downloads and select the Remote Desktop Client for Mac 2.1.0. For additional help, please go to the following link: http://mac2.microsoft.com/help/office/14/en-us/rdc/
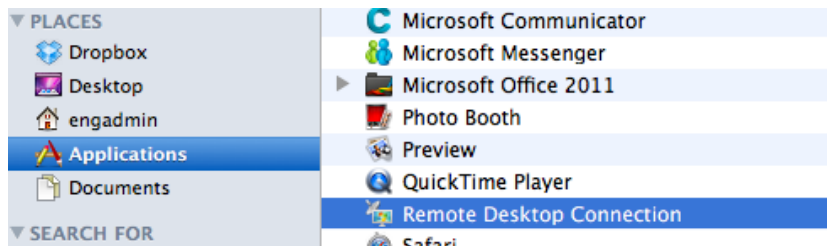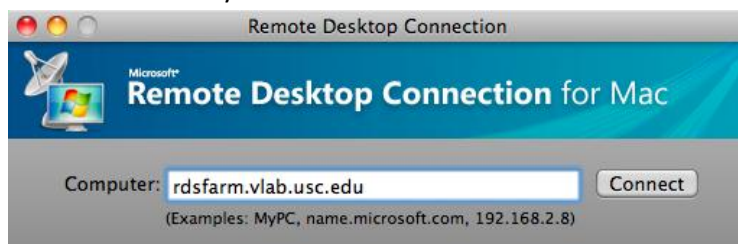
- **What is the name of the server that I should connect to?**

  rdsfarm.vlab.usc.edu


  or the window may also look like this:

- **How do I login to the Virtual Lab??**

  If prompted, select Other User. When entering the username/password, enter the domain prefix (case sensitive – must be all CAPS) and username in the format below. You must use your USCNetID credential to login. To change your password, go to http://www.usc.edu/its/password.

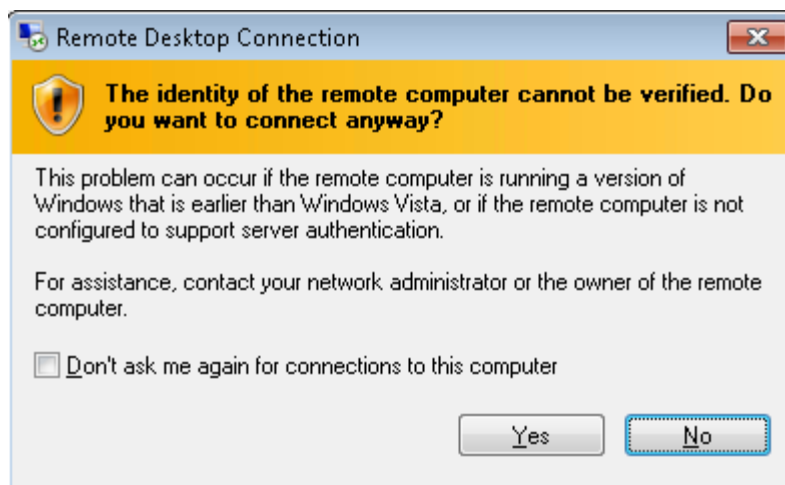 Username: USCNetID@ISD.USC.EDU
  Password: Your USCNetID password
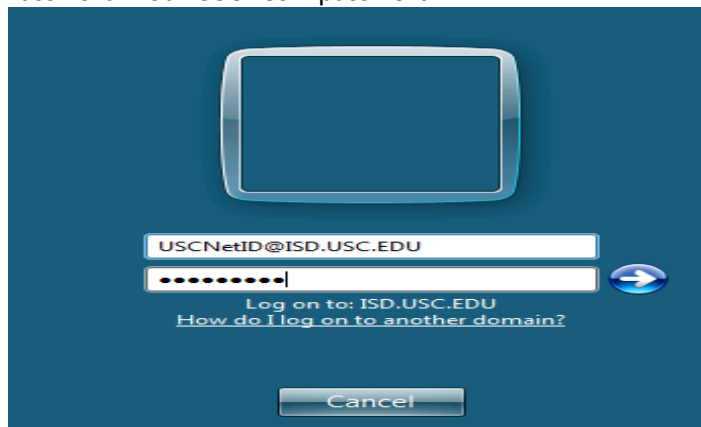
- **After I enter in the domain\username and password, I get a pop up saying that the server name on the certificate is incorrect. What do I do?**
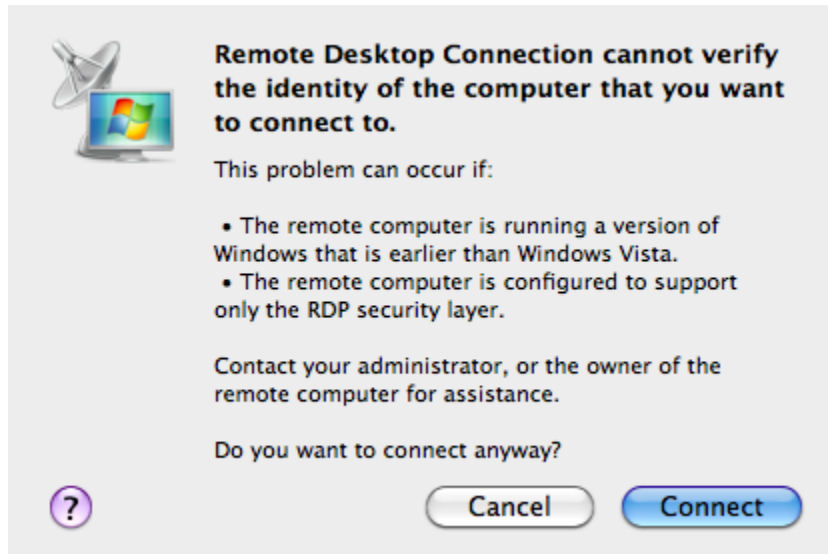

Click CONNECT. It is ok to connect to the server even though there is a certificate name mismatch.

On Windows computers, you might be prompted with the above. Check on "Don't ask me again for connections to this computer" so it will no longer prompt on the next logon. Click on **Yes** to continue.

- **When I am done, should I select LOGOFF from the server or just close out the Remote Desktop Connection client from my computer?**

  You should select LOGOFF on the server from the START or Windows button.
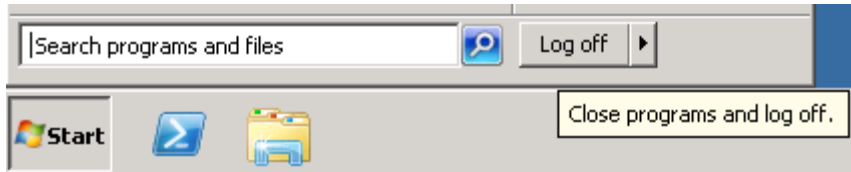
- **If an application does not run, what should I do?**

  Take a look at the desktop wallpaper to see which server you are logged into. There are 10 servers that you could be logged into with each one named SERVER1 through SERVER10. The server farm is load balanced so you will always be logged into the server with the lowest load or usage. Provide this information along with the application that is not working to your professor or the TA. Follow the same procedure if you experience any other problems while on the Virtual Lab.
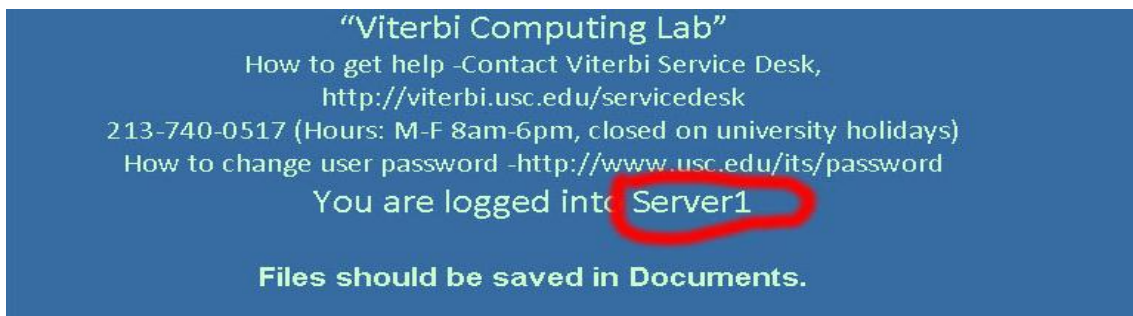

- **I followed all the steps and entered the domain/username and password correctly, changed my password but I still can't log in. What should I do?**

  Open a ticket at Viterbi Service Desk at http://viterbi.usc.edu/servicedesk or call 213-740-0517 for assistance. If it is determined to be a password issue, you may be redirected to USC Information Technology Services at 213-740-0555. To reset your password online, go to http://www.usc.edu/its/password.

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- **Where can I save my files?**

  You will be provided a U: drive. Go to the START or WINDOWS button and click on COMPUTER. You will see the U: drive under Network Location. This is your personal storage space on the network. Your classmates will not be able to access your personal storage space. Your personal storage is limited to 1GB.
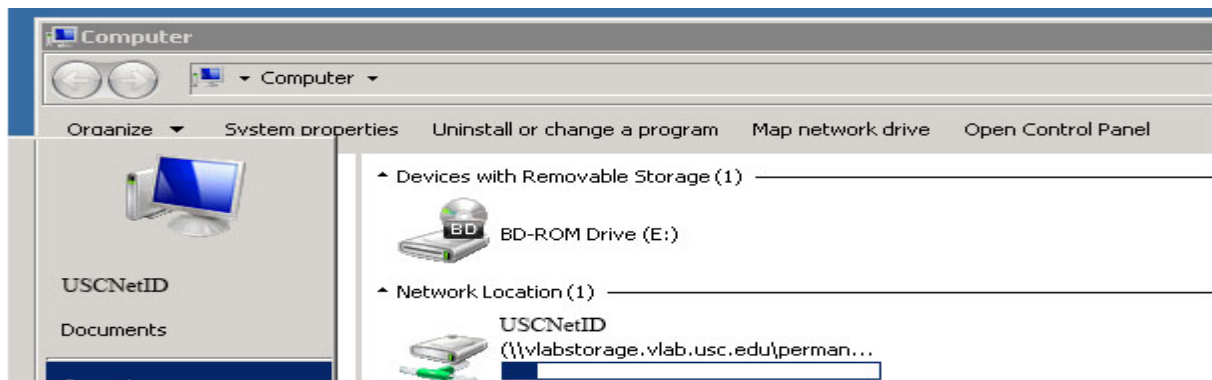
  See Appendix IV at the end of this document on how to copy/move files between your local computer and the U: drive for Windows and Macs.

- **When is the Virtual Lab available?**

  The Virtual Lab is available 24/7 during the semester. The only time the Virtual Lab may be down is for routine server maintenance. Advanced notice will be sent out to the professors or TAs whenever possible. You will also receive a prompt after logging in advising you of any scheduled server maintenance. Due to the clustered nature of the Virtual Lab server farm, you may not even notice when a server is taken offline for routine maintenance.

- **When will my user account expire?**

  In most cases, your user account is valid only for the semester you are taking an ITP course. It will expire when the course ends. Please copy your data files from the U: drive to another storage device before the end of the semester.

- **Are other platforms supported besides Windows and Mac OSX?**

  While Remote Desktop Connection Clients are available for other platforms and devices, troubleshooting connection issues is limited to Windows and Macs only.

Troubleshooting

- I entered my password and it doesn't seem to work. I know it is the right password because I could log in to the University's online email portal with it.

  If you never changed your password and you are still using your initially issued password, it may not work. Try changing your password. To change your password, go to http://www.usc.edu/its/password.

- "I get a message saying that the server is not found after launching the Remote Desktop application to connect to the rdsfarm.vlab.usc.edu. I am using my computer at home off campus and NOT using resnet."

  The possible cause of this error message is the rdsfarm.vlab.usc.edu entry is not found in the DNS that you are using. The DNS you are using is most likely provided by your internet service provider. To bypass your internet service provider's DNS, you could use the University's VPN or change your DNS.

  Here's how:

  - Log in to http://sslvpn.usc.edu to make a VPN connection with the University. You will then be using the University's DNS to resolve rdsfarm.vlab.usc.edu. After making the VPN connection, launch Remote Desktop. Additional information on connecting to the University's VPN could be found here: http://www.usc.edu/its/vpn/anyconnect.html
    (See Appendix I: USC VPN below for detailed steps)

  - Change your DNS to one offered by Google. Here are the step by step instructions from Google on how to modify the DNS setting for your computer platform.
    http://code.google.com/speed/public-dns/docs/using.html
    After changing your DNS, launch Remote Desktop and see if you are able to connect to the rdsfarm.vlab.usc.edu.
    (See Appendix II: Google DNS below for detailed steps)

  - Change your DNS to one offered by OpenDNS. Here are the step by step instructions from OpenDNS on how to modify the DNS setting for your computer platform.
    After changing your DNS, launch Remote Desktop and see if you are able to connect to the rdsfarm.vlab.usc.edu.
    (See Appendix III: Open DNS below for detailed steps)

  OpenDNS and Google DNS have been tested and will resolve rdsfarm.vlab.usc.edu allowing the Remote Desktop application to reach the rdsfarm.vlab.usc.edu. Please note that you should only pick one of the above to try at one time.

- Your remote session to rdsfarm.vlab.usc.edu intermittently locks up and turns black when using Remote Desktop Connection (RDC) for Mac. This is a known issue with RDC for Mac. Please note that your data and session are safe; you will be redirected to your existing session once logged back in successfully within 2 hours.
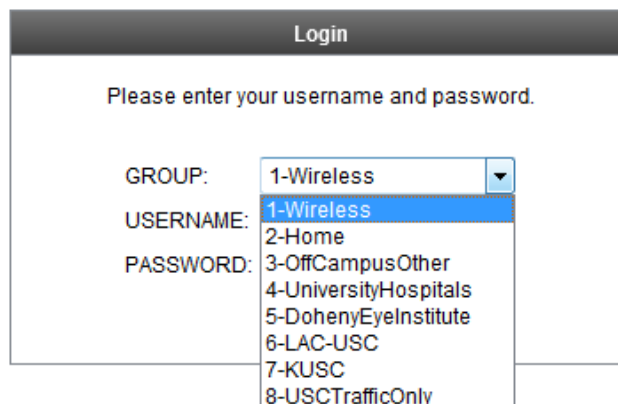
  Possible causes are network card, video and/or sound drivers on your local machine. If this issue occurs and you are unable to completely close down the session, you will need to issue a "Force Quit" on the RDC application: Click anywhere on the Desktop of your Mac, click on the apple in the top left of your screen, select Force Quit…, select Remote Desktop Connection and click on Force Quit.

  There are a few options to help resolve or workaround issue:

    o Ensure that you have the latest version of RDC for Mac
    o Try disabling sound redirection for RDC: With RDC open, click on RDC in the menu bar and go to Preferences…, click on the Sound icon, and select "Do not play sound"
    o Check apple.com for the latest drivers; install if available
    o After issuing a Force Quit, restart your Mac to flush RDC and memory – this typically resolves the issue for a longer period of time

Appendix I: USC VPN

- Point your browser to http://sslvpn.usc.edu
- Select either 2-Home or 3-OffCampusOther from the list below

- If this is your first time use, you may be prompted to install the VPN client Active Control. Proceed with the installation.
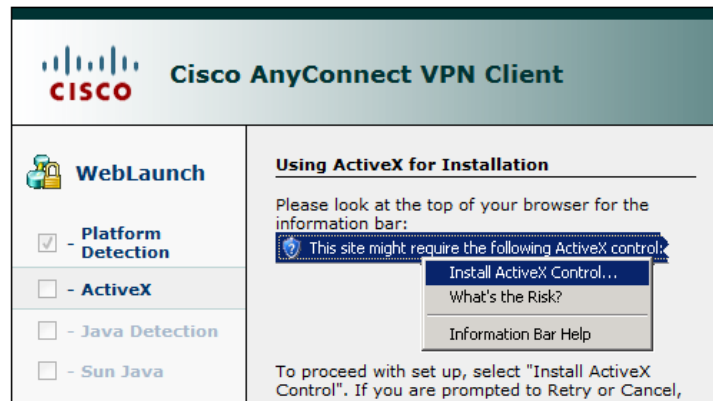
- You are successfully connected when the following dialog box has been displayed.

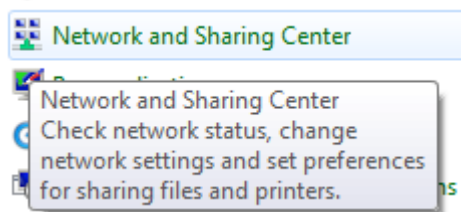- You can now launch your Remote Desktop Client to connect to the VLAB RDS Farm.

Appendix II: Changing your DNS Settings to use Google DNS
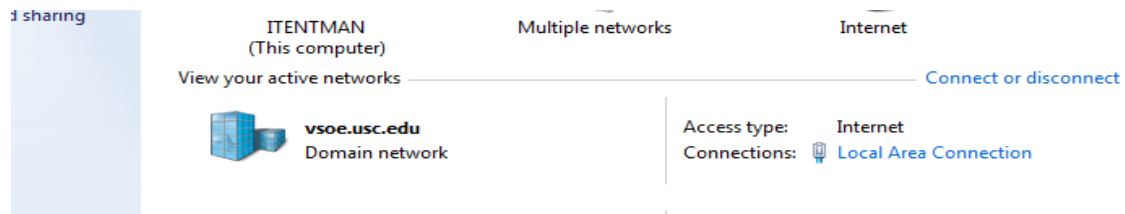
Windows Machines

1. Go the Control Panel.

2. Click Network and Internet, then Network and Sharing Center, and click Change adapter settings.

3. Select the connection for which you want to configure Google Public DNS. For example:

    - To change the settings for an Ethernet connection, right-click Local Area Connection, and click Properties.
    - To change the settings for a wireless connection, right-click Wireless Network Connection, and click Properties.

    If you are prompted for an administrator password or confirmation, type the password or provide confirmation.

4. Select the Networking tab. Under This connection uses the following items, select Internet Protocol Version 4 (TCP/IPv4) or Internet Protocol Version 6 (TCP/IPv6) and then click Properties.
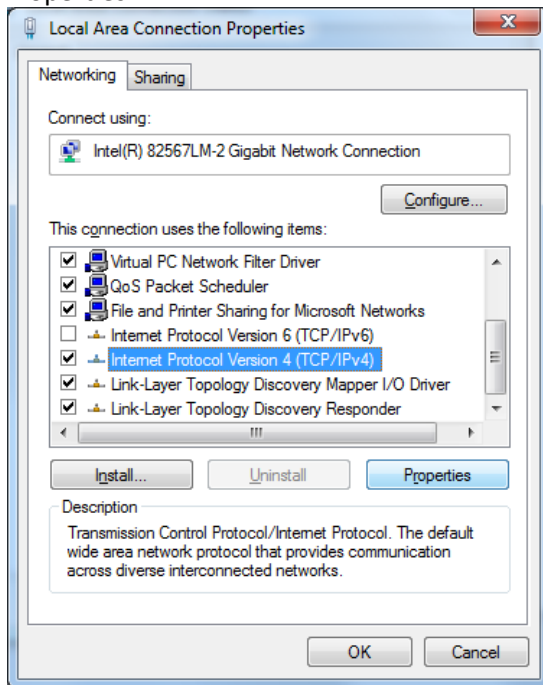
5. Click Advanced and select the DNS tab. If there are any DNS server IP addresses listed there, write them down for future reference, and remove them from this window.
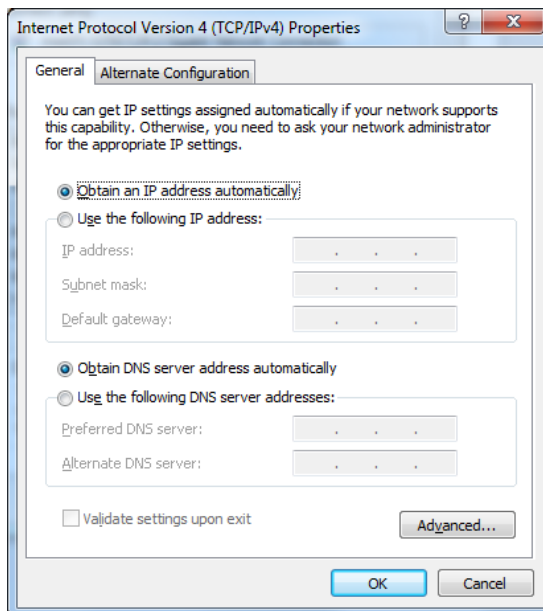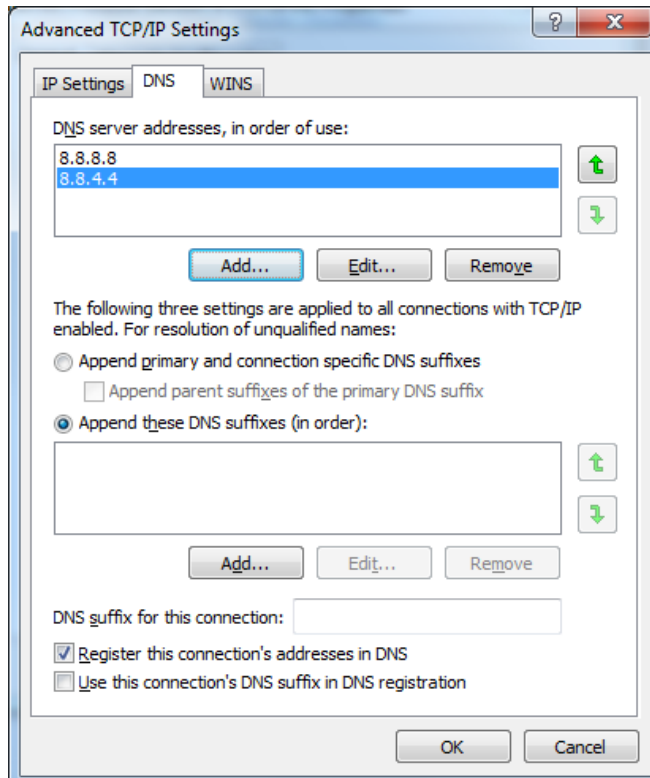
6. Select Use the following DNS server addresses. If there are any IP addresses listed in the Preferred DNS server or Alternate DNS server, write them down for future reference.
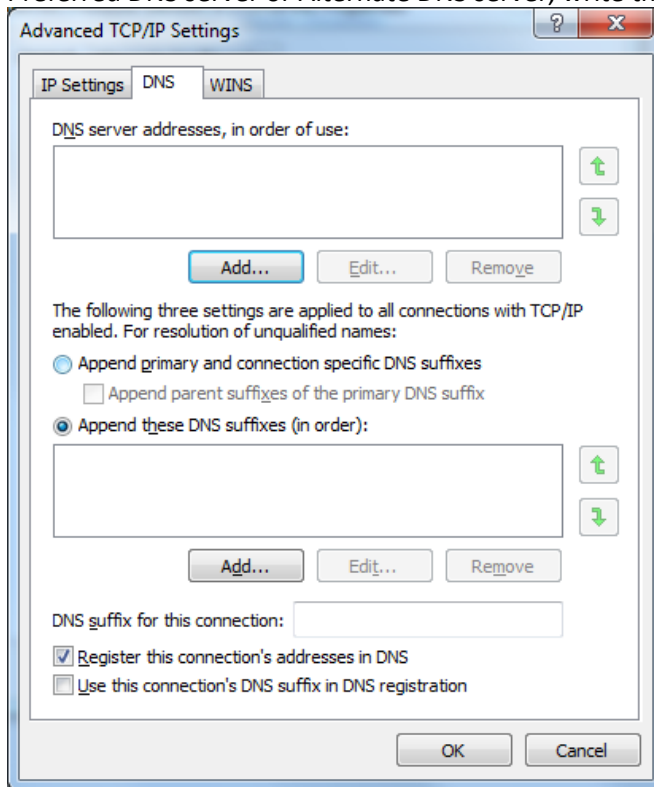
7. Replace those addresses with the IP addresses of the Google DNS servers:
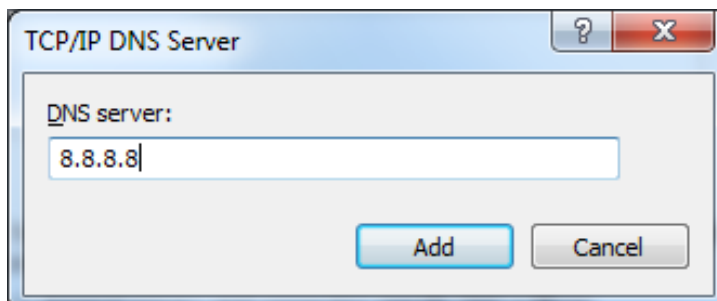
- For IPv4: 8.8.8.8 and/or 8.8.4.4.
- For IPv6: 2001:4860:4860::8888 and/or 2001:4860:4860::8844

8. Restart the connection you selected in step 3.
9. Repeat the procedure for additional network connections you want to change.

MAC Workstations:

1. Go to System Preferences.

2. Click on Network.

3. Select the first connection in your list and click Advanced.
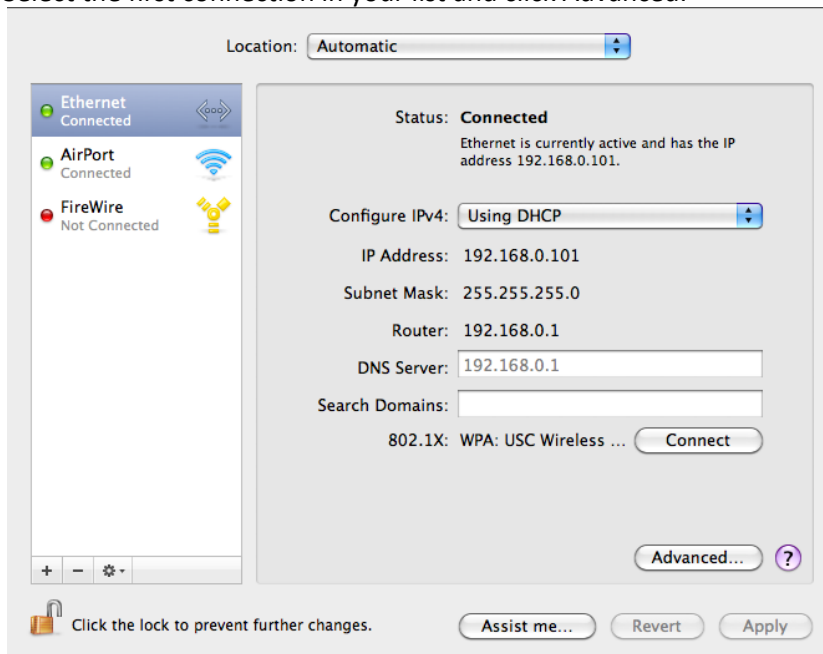
4. Select the DNS tab and add 8.8.8.8 and 8.8.4.4 to the list of DNS servers.
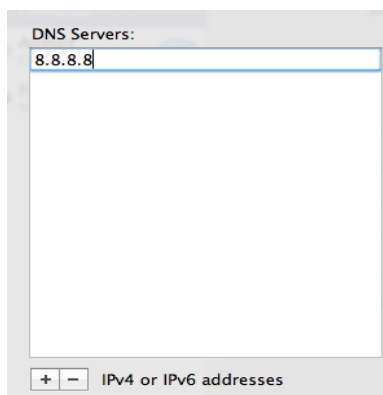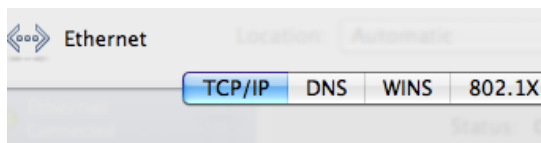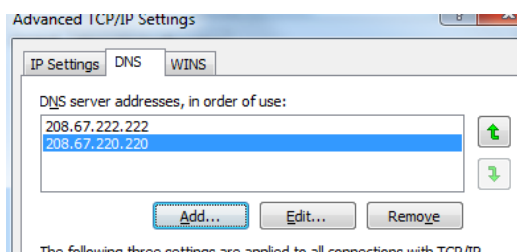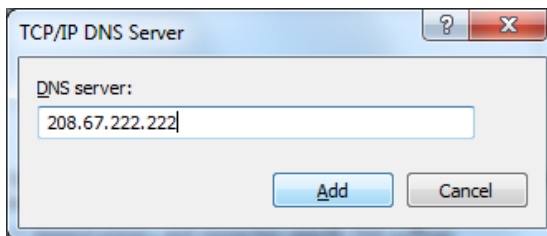
5. Click OK
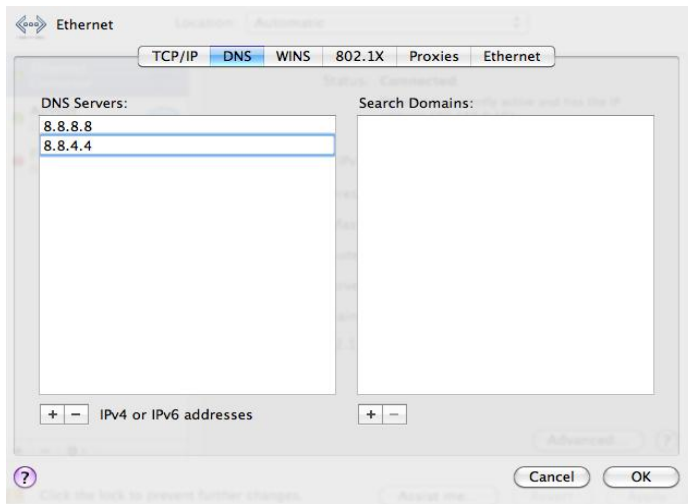
Appendix III: Changing your DNS Settings to use Open DNS

To use the Open DNS settings, follow the steps in Appendix II but use the following DNS entries instead.
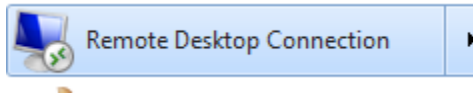
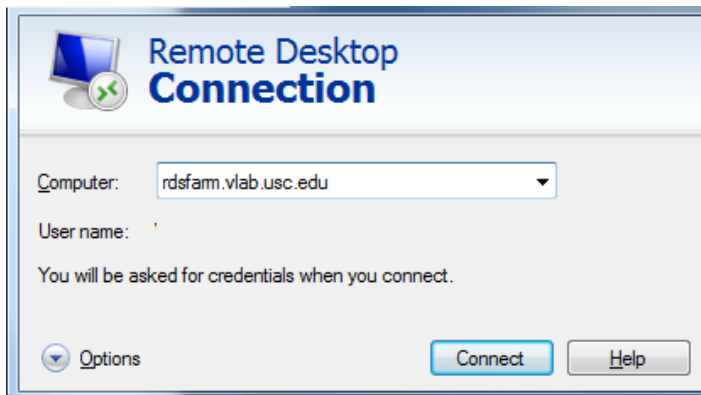**Appendix IV: How to Copy or Move files between your local computer and the RDSFarm U: drive.**

For Windows:

In order to copy or move files (such as Word documents) from your computer to the VLAB RDS FARM's U: drive, or vice versa, you must first set the preferences on the client.
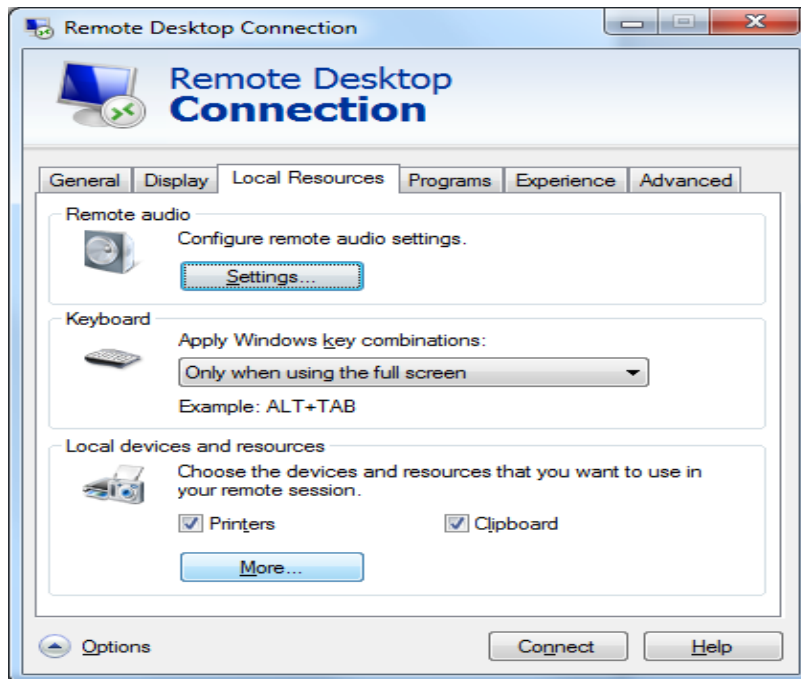
1) Launch the Remote Desktop Connection

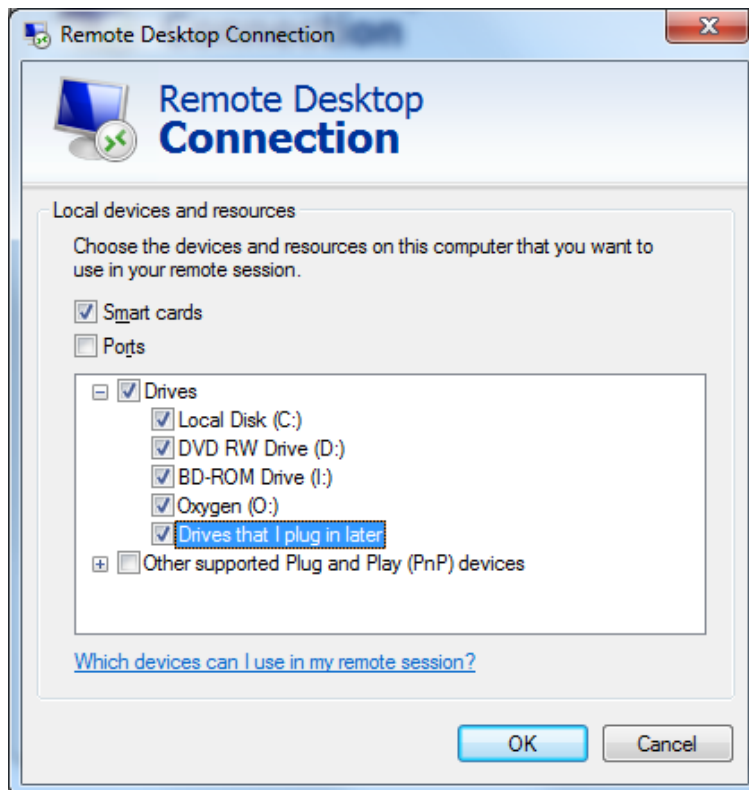2) Enter "**RDSFARM.VLAB.USC.EDU**" and Click on the **OPTIONS** button
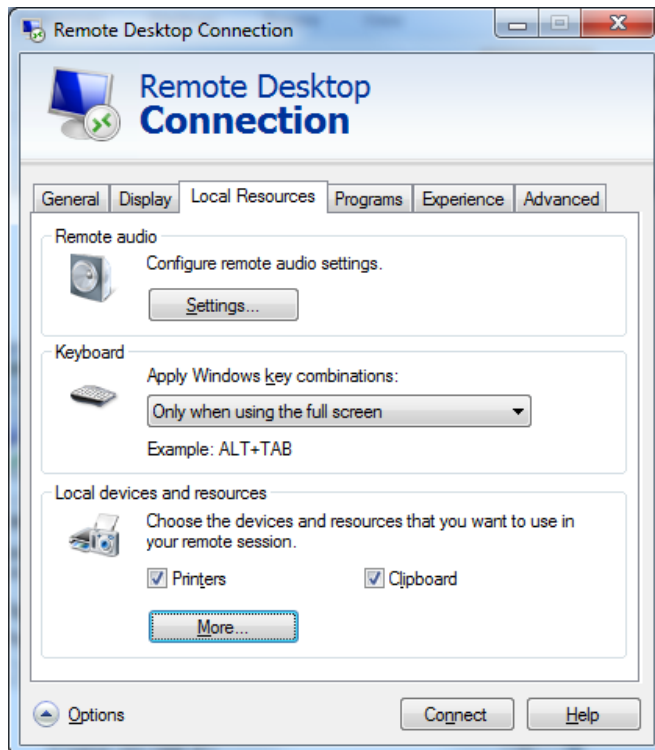

3) Select the **LOCAL RESOURCES** tab

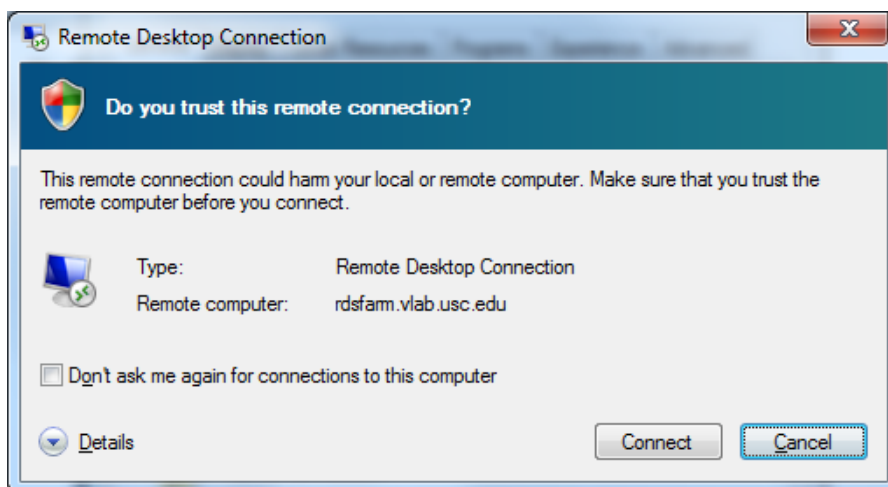4) Click on "**MORE…**" under Local devices and resources

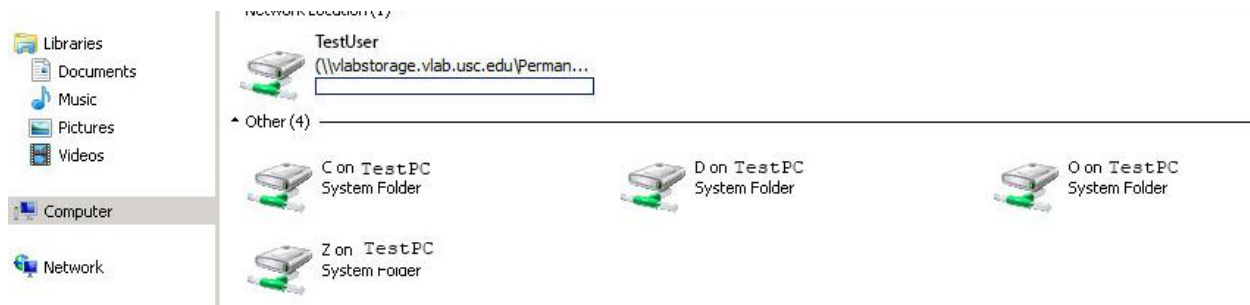5) Select the Drives you want to access and Click on **OK**

6) Click on **Connect**

7) You might be presented by the following screen, click (enable) "Don't ask me again for connections to this computer" to suppress future prompts on this computer and click on **CONNECT**.

Once you are logged on the VLAB RDS FARM, you will see your Local Drives under My Computer:
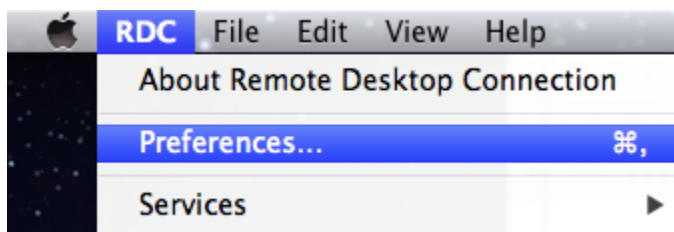

For Mac:

In order to copy or move files (such as Word documents) from your computer to the VLAB RDS FARM U: Drive or vice versa, you must first establish certain preferences on the client.

1) Launch the Remote Desktop Connection

2) From the toolbar, select **RDC** and then **Preferences…**

3) Select the **Drives** icon and select which local drive(s) you want to make available.

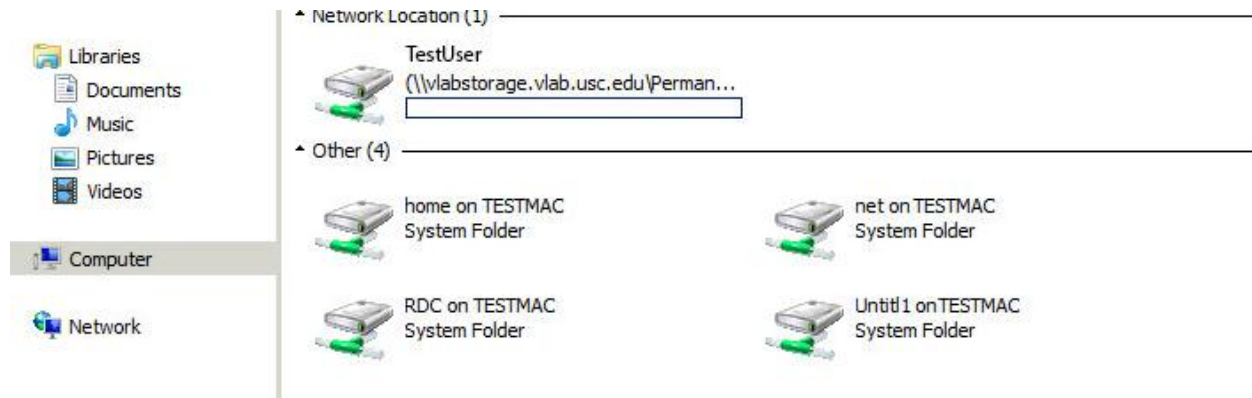4) Close the Preference Window and connect to the VLAB RDSFARM.

5) You may be presented with the following: Check (enable) the "**Don't show…** and click on **Connect**. The warning that appears states that someone with access to the Windows computer might be able to open your Mac files. However, only you have access to your Remote Desktop account and it is protected by your USC ID and password. The system is secure.

6) Click "**Connec**t" on the following Dialog Box.
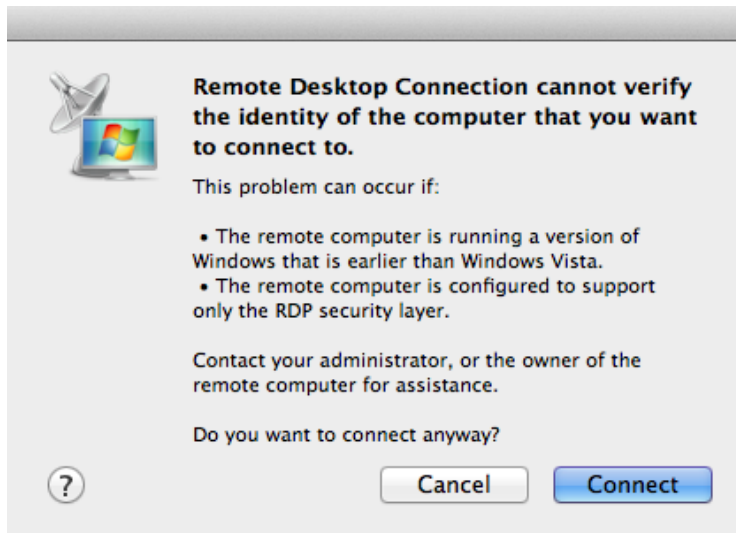
Once you are logged on the VLAB RDS FARM, you will see the Local Drives under my computer:

NOTE: After logging out of the VLAB RDSFARM, you will be prompted to save the changes.

The changes that you have made have not been saved to the connection file Default.rdp.

Do you want to save the changes to /Users/engadmn/Documents/RDC Connections/Default.rdp?

☐ Don't show this message again when connecting to rdsfarm.vlab.usc.edu

Don't Save   Save

You need to save this at least once, or your changes to the client will not be saved.