

## Lowell Observatory - VPN Setup Instructions

(Version 2020.12.02)

### Descriptions:

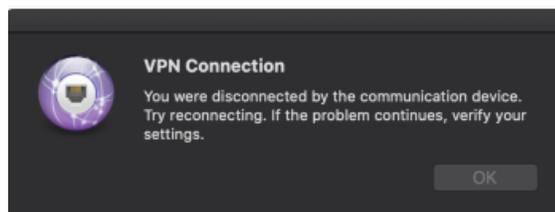
Lowell Observatory use the Dell SonicWall NSA 2600 for Firewall & VPN. All VPN traffics get routed to our gateway which allows users to access online subscribed Electronic Journals without having the need to administer two separate VPN accounts. **Please limit to work related activities and be sure to logoff when done using.** For stable VPN connection, use wired connection over wireless.

NOTE: Get in touch with Lowell IT for VPN access.

### VPN access according to the operating systems:

#### 1. Mac users:

- a. SonicWall Mobile Connect (SSL) (**recommended**): download from the Apple Store.
- b. L2TP over IPSec protocol (MacOS built-in)
  - i. Shared-Secret / Pre-Shared key: **lowellvpn**
  - ii. **NOTE: If you opt to use this protocol and encounter the error below, please use the Mobile Connect. IF both fail, please contact Lowell IT.**



#### 2. Windows users:

- a. SonicWall Global VPN Client (IPSec)
  - i. Passkey: **lowellvpn**

#### 3. Linux users:

- a. SonicWall NetExtender (SSL)

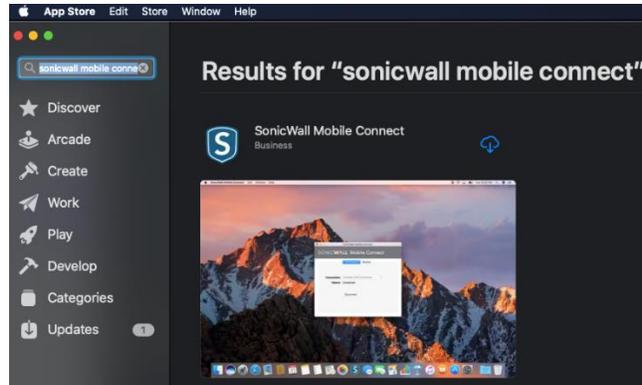
### Configuration info:

1. The VPN gateway: **207.192.243.66** (can also use **vpn1.lowell.edu**)
2. **SonicWall Mobile Connect & SonicWall NetExtender** doesn't require shared-secret/pre-shared key, but you need to specify the **4433** port.

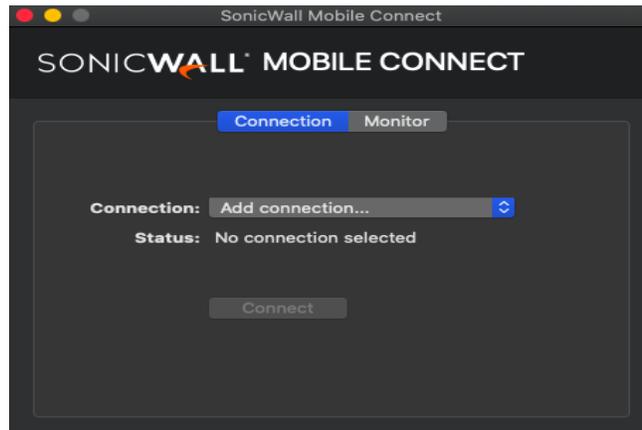
**IMPORTANT:** For Mac users using the built-in L2TP/IPsec protocol, please be aware that if two or more users are VPN in from the same network, then only one person can connect. The reason being is that L2TP protocol uses UDP connection, which get blocked by the SonicWall NAT firewalls when it sees two or more L2TP connection from the same outbound network going to the same Public IP address, which is 207.192.243.66. SSL doesn't have this problem since it uses TCP connection, making it indistinguishable from normal HTTPS traffic.

## Mac users using SonicWall Mobile Connect:

1. Visit your Apple Store in order to download and install the SWMC app.



2. Launch SWMC and click 'Add connection...'



3. Finally, fill out the info:

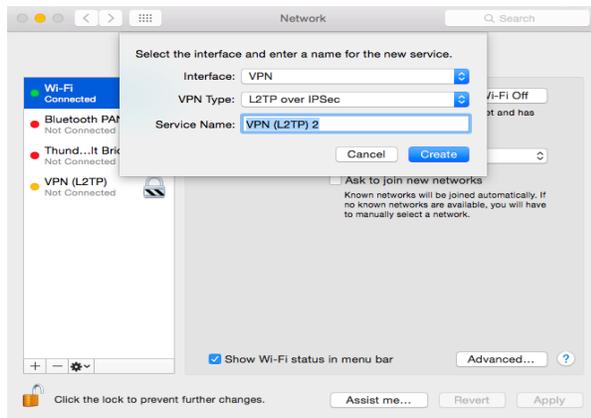


## Mac users using the native L2TP:

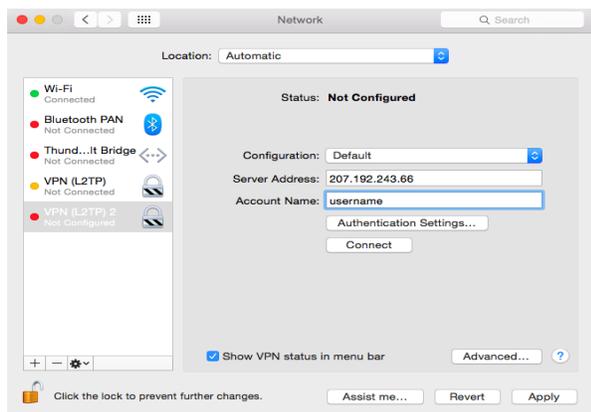
1. Open Network Preferences



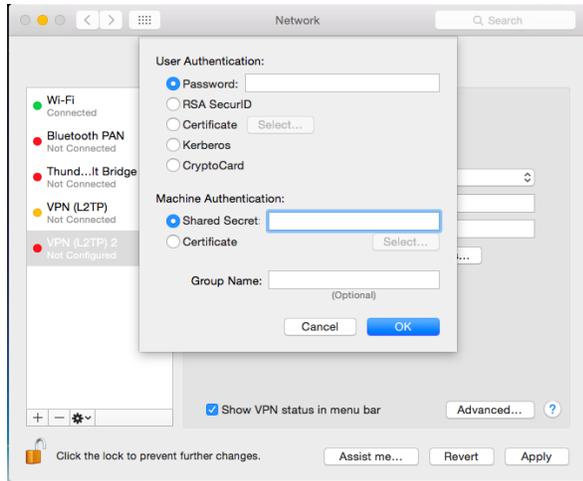
2. Click the + sign to add a connection and select L2TP over IPSec. Also enter a friendly name under "Service Name".



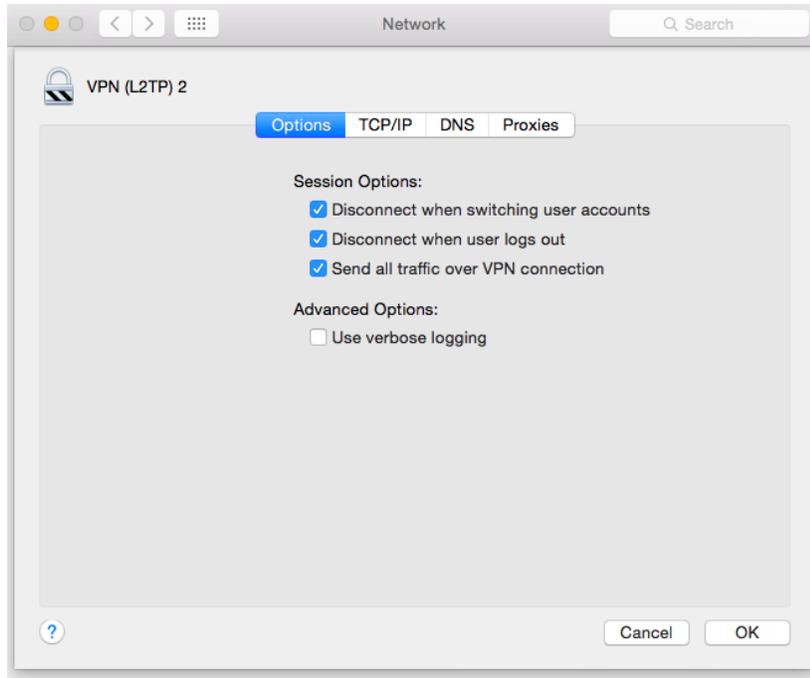
3. Enter server address and VPN username.



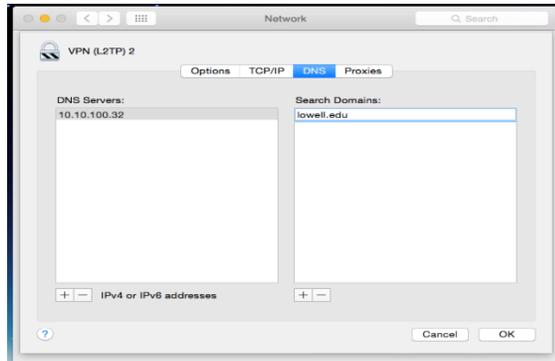
4. Click Authentication Settings and enter your VPN password and the shared secret (located at the Configuration info above).



5. Click Advanced and select “Send all traffic over VPN”.

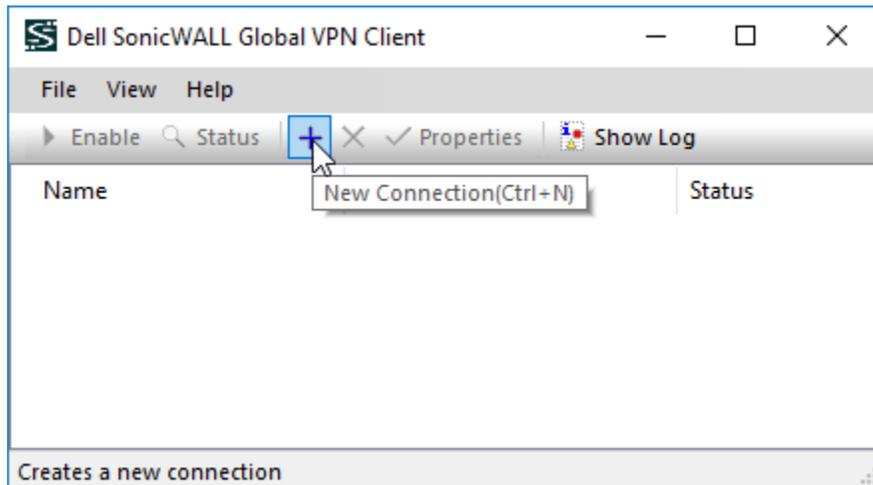


6. Click on the DNS tab and enter the following info.

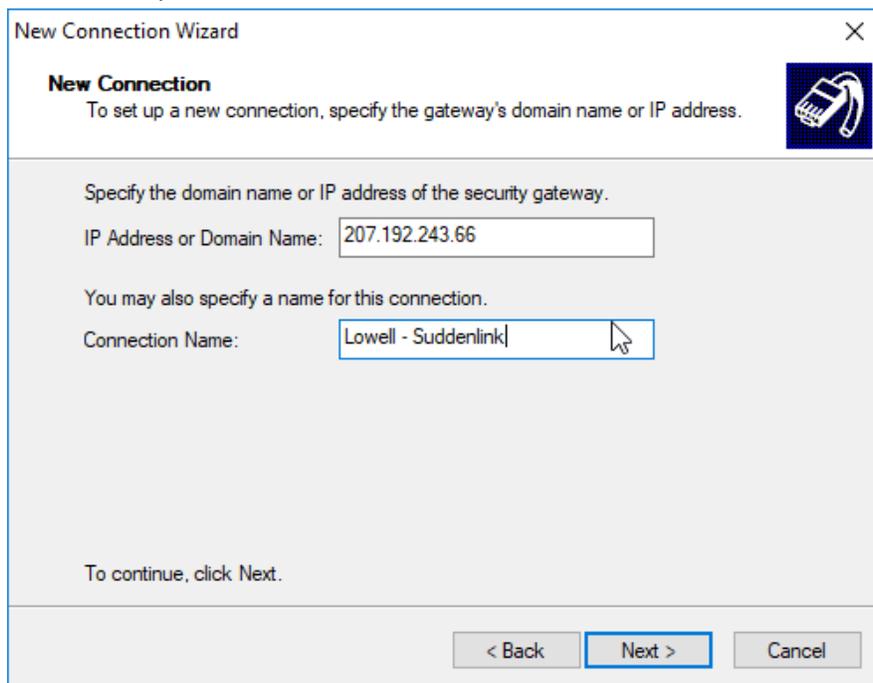


## Windows users using SonicWall Global VPN Client (GVC):

1. Download the Global VPN Client (GVC) from our FTP:  
<ftp://ftp.lowell.edu/incoming/temp/old/VPN/>
  - a. Make sure you get the 32- or 64- bit version appropriate to your operating system.
2. Once downloaded, go ahead and install the software. Run through the options, taking defaults.
3. Setup a new connection.



4. Enter Server Address/Connection name.



5. Enter username and password. You should see "Connection Established". To disconnect, click Disable.

### **Linux users using NetExtender:**

1. First, install the prerequisite package “default-jre” using the command “sudo apt-get install default-jre”
2. Next, download the NetExtender package from our FTP:  
<ftp://ftp.lowell.edu/incoming/temp/old/VPN/>
  - a. Grab the latest 8.5 version.
3. Un-tar the package archive using “tar -xvf NetExtender.Linux.8.5.793.x86\_64.tgz”
4. Run the installation script using “sudo ./install”
5. Run the application by running “netExtenderGui”
6. Enter server and credentials:
  - a. Server: 207.192.243.66:4433
  - b. Username
  - c. Password
  - d. Domain: Lowell.edu