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/preshared 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...'

	SonicWall Mobile Connect	
SONIC	LL ⁻ MOBILE CONNE	ст
	Connection Monitor	
Connection:	Add connection	
Status:	No connection selected	

3. Finally, fill out the info:

		SonicWall Mobile Connec	t	
	Enter a name and	l server address for a new \	/PN connection.	
	Name:	ie: Lowell VPN		
	Server:	vpn1.lowell.edu:4433		
		Cancel	Next	
-	Connection:	Add connection	\$	
	Status:	No connection selected		

Mac users using the native L2TP:

1. Open Network Preferences

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

0 • 0 < >		Network	
	Select the interface and	d enter a name for the new	v service.
146 E	Interface: VF	٩N	
Connected	VPN Type: L2	TP over IPSec	/i-Fi Off
Bluetooth PAN Not Connected	Service Name: VP	N (L2TP) 2	et and has
ThundIt Brk Not Connected		Cancel	Create
• VPN (L2TP) Not Connected	8	Ask to join Known new no known ne to manually s	new networks
+ - *	Show 1	Wi-Fi status in menu bar	Advanced ?
Click the lock	to prevent further changes	Assist me.	Revert Apply

3. Enter server address and VPN username.

$\bullet \bullet \circ < > \blacksquare$	Network	Q, Search
Loca	tion: Automatic	0
Wi-Fi Connected Connected Bluetooth PAN Not Connected	Status:	Not Configured
ThundIt Bridge	Configuration:	Default
VPN (L2TP)	Server Address:	207.192.243.66
VPN LCTP 2 Ven Cantigures	Account Name:	username Authentication Settings Connect
+ - *	✓ Show VPN status i	n menu bar Advanced ?
Click the lock to prevent fu	urther changes.	Assist me Revert Apply

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

	User Authentication:	
110.51	Password:	
Connected	RSA SecurID	
Bluetooth PAN	Certificate Select	
Not Connected	Kerberos	
ThundIt Bridge Not Connected	CryptoCard	•
VPN (L2TP)	Machine Authentication:	
Not Connected	 Shared Secret: 	
• VPN (L2TP) 2 Not Configured	Certificate	Select
	Group Name:	
	(Optional	1)
	Cancel	ОК
+ - *-	Show VPN status in menu ba	ar Advanced ?

5. Click Advanced and select "Send all traffic over VPN".

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

	Not	work	Q Search
VPN (L2TP) 2	Options TCP/IF	DNS Proxies	
DNS Servers:		Search Domains:	
10.10.100.32		lowell.edu	
+ - IPv4 or IPv6 ac	idresses	+ -	
?			Cancel OK

Windows users using SonicWall Global VPN Client (GVC):

- Download the Global VPN Client (GVC) from our FTP: <u>ftp://ftp.lowell.edu/incoming/temp/old/VPN/</u>
 - 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.

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4. Enter Server Address/Connection name.

New Connection Wizard	×		
New Connection To set up a new connection, specify the gateway's domain name or IP address.	S)		
Specify the domain name or IP address of the security gateway.			
IP Address or Domain Name: 207.192.243.66			
You may also specify a name for this connection.			
Connection Name: Lowell - Suddenlink			
To continue click Next			
< Back Next >	Cancel		

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"
- Next, download the NetExtender package from our FTP: <u>ftp://ftp.lowell.edu/incoming/temp/old/VPN/</u>
 - 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