Set up a VPN Connection on Linux (Ubuntu)

NOTICE: Beginning in July 2014, McGill has a new, more secure VPN server. Please follow the instructions below if you need to access secure resources, except for Library resources.

No VPN connection needed to access Library resources, with the exception of some <u>mobile</u> apps:

- McGill students, faculty and staff can simply click on any Library resource link and they will be prompted to sign into <u>EZproxy</u>, a service which provides access to the materials you are allowed to view based on your student, faculty or staff member status.
- McGill alumni can access Library resources through <u>Web VPN</u>. Find out more about <u>Library Resources for Alumni</u>.

Note: Due to <u>licensing restrictions</u>, only McGill students, faculty and staff are allowed to access restricted library resources through VPN or EZproxy.

System Requirements

To establish a VPN connection you will need to install the Cisco AnyConnect client on your computer. The Cisco AnyConnect client version 3.1x is supported on the following Linux operating systems:

- Red Hat Enterprise Linux 6.x (32-bit) and 6.4 (64-bit)
- Ubuntu 9.x, 10.x, and 11.x (32-bit) and Ubuntu 12.04 & 12.10 (64-bit)

Make sure you are connected to the Internet before starting a VPN session.

Step 1: Install the Cisco AnyConnect client

- 1. Point your Internet browser to <u>https://webfolders.mcgill.ca/install/cisco-anyconnect/Linux</u>
- 2. Download the appropriate version of the installer for your operating system (32-bit or 64bit)
- 3. Double-click and extract the package to a folder on your desktop.
- 4. Open a terminal window and type in the code next to each command line prompt (\$) below:

 $\$ cd <code>Desktop</code> (Go to the Cisco folder location where you downloaded the installer file.)

- \$ ls (This will give you the name of the folder where the files were extracted)
- \$ cd AnyConnect (Go to whatever you named the folder when you extracted it)
- \$ ls (This will give you the name of the AnyConnect file to extract.)

\$ tar -xvf anyconnect-predeploy-linux-3.1.04072-k9 (Extract the anyconnect file; the exact name and version number may be different)

ics@526-linux01: ~/Desktop/Anyconnect ics@526-linux01:-\$ cd Desktop ics@526-linux01:~/Desktop\$ ls Anyconnect anyconnect-predeploy-linux-3.1.04072-k9.gz Untitled Fold ics@526-linux01:~/Desktop\$ cd Anyconnect ics@526-linux01:~/Desktop/Anyconnect\$ ls anyconnect-predeploy-linux-3.1.04072-k9 ics@526-linux01:~/Desktop/Anyconnect\$ tar -xvf anyconnect-predeploy-l 072-k9 anyconnect-3.1.04072/ anyconnect-3.1.04072/vpn/ anyconnect-3.1.04072/vpn/manifesttool anyconnect-3.1.04072/vpn/libvpncommoncrypt.so anyconnect-3.1.04072/vpn/VeriSignClass3PublicPrimaryCertificationAuth η anyconnect-3.1.04072/vpn/update.txt anyconnect-3.1.04072/vpn/license.txt anyconnect-3.1.04072/vpn/libacciscossl.so anyconnect-3.1.04072/vpn/libacciscocrypto.so anyconnect-3.1.04072/vpn/libvpnagentutilities.so anyconnect-3.1.04072/vpn/vpndownloader-cli anyconnect-3.1.04072/vpn/anyconnect_uninstall.sh anyconnect-3.1.04072/vpn/libvpnipsec.so anyconnect-3.1.04072/vpn/vpn anyconnect-3.1.04072/vpn/libaccurl.so.4.2.0

\$ ls

\$ cd anyconnect-3.1.04072 (Go to the AnyConnect folder name shown in the output of the ls command) \$ cd vpn

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$ sudo ./vpn_install.sh
```

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🙁 🗩 🔲 🛛 ics@526-linux01: ~/Desktop/Anyconnect/anyconnect-3.1.04072/vpn
anyconnect-3.1.04072/posture/ACManifestPOS.xml
anyconnect-3.1.04072/posture/libaccurl.so.4.2.0
anyconnect-3.1.04072/posture/posture_install.sh
anyconnect-3.1.04072/posture/libinspector.so
anyconnect-3.1.04072/posture/posture_uninstall.sh
anyconnect-3.1.04072/posture/ciscod
anyconnect-3.1.04072/posture/libcsd.so
anyconnect-3.1.04072/posture/tables.dat
anyconnect-3.1.04072/posture/ciscod_init
anyconnect-3.1.04072/posture/cnotify
anyconnect-3.1.04072/posture/libhostscan.so
ics@526-linux01:~/Desktop/Anyconnect<mark>$</mark> ls
anyconnect-3.1.04072 anyconnect-predeploy-linux-3.1.04072-k9
ics@526-linux01:~/Desktop/Anyconnect$ cd anyconnect-3.1.04072
ics@526-linux01:~/Desktop/Anyconnect/anyconnect-3.1.04072$ ls
dart posture vpn
ics@526-linux01:~/Desktop/Anyconnect/anyconnect-3.1.04072$ cd vpn
ics@526-linux01:~/Desktop/Anyconnect/anyconnect-3.1.04072/vpn$ sudo./
```

Note: You will be prompted to enter the administrative password for your computer in order to proceed with the installation.

Once the Cisco AnyConnect installation starts, you will be prompted to accept the end user license agreement. Enter "y" to accept.



\$./vpnui (This command starts the Cisco AnyConnect client.)

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You should now see the Cisco AnyConnect pop-up window. Follow the instructions below to proceed.

NOTE: The **Cisco AnyConnect** icon will be placed in your Launcher. You can pin it to the Launcher and then can double-click the icon from there in the future.

Step 2: Connect to the McGill VPN using Cisco AnyConnect

If you just followed the instructions above to install Cisco AnyConnect, you should have the **Cisco AnyConnect Secure Mobility Client** window open at this point.

1. Click on the gear icon within the Cisco window to open the Preferences window.



2. Put a check in the box labeled "Allow local (LAN) access when using VPN (if configured) and close the Preferences window. This can speed up local network browsing.

AnyConnect Preferences				
Preferences				
Start VPN when AnyConnect is started				
Minimize AnyConnect on VPN connect				
Allow local (LAN) access when using VPN (if configured)				
Block connections to untrusted servers				
Close				

If you installed Cisco AnyConnect previously and you just want to establish a McGill VPN connection, go to the **Launcher** and double-click the **Cisco AnyConnect** icon (or find Cisco AnyConnect from the Applications folder).



1. In the **Connection** window, enter the McGill VPN address: **securevpn.mcgill.ca** and click **Connect**

Cisco AnyC	onnect Secur	e Mobility	Client	8			
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		du.					
CISCO							
Connect to:	ecurevpn.mcgill	.ca	▼	°			
	🕅 Coni	nect					
Ready to connect	t.						

2. Enter your <u>McGIll Username (first.last@mcgill.ca) and McGill password</u> in the fields provided and click **Connect**. Your McGill Password will not be saved so you need to enter it in each time you connect to VPN.

Cisco AnyCo	onnect Secur	e Mobility	Client	8
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	ciso	0		
Connect to:	ecurevpn.mcgill	.ca	•	0
Username:				
Password:				
	Conne	ect		
Please enter your	username and	password.		

3. Click Accept when prompted to agree to McGill's <u>Policy on the Responsible Use of</u> <u>Information Technology Resources</u>.



You should now be able to access secure locations on the McGill network as if you were on campus. Be sure to disconnect from the VPN when you no longer need it. Your VPN session

will time out automatically if you lose Internet connectivity, and after 48 hours of continuous activity.

Step 3: Disconnect from the McGill VPN using Cisco AnyConnect

When you no longer need the VPN connection, go to your **Applications** folder, double-click the Cisco AnyConnect icon and click **Disconnect**.