

# **VPN Configuration Guide for Unix/Linux**

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### **Pulse Secure Client for Ubuntu 14.x/16.x**

#### **Installation**

1. Download the Debian Pulse Secure install package from the IT VPN download page:  
<http://it.rockefeller.edu/vpn>
2. Open Terminal and cd to the location where you downloaded the installer from step 1 and run:
  - a. `sudo dpkg -i pulse-9.1R3.x86_64`
3. If you get a message about missing dependencies, run the script as suggested on screen:
  - a. `sudo /usr/local/pulse/PulseClient.sh install_dependency_packages`
  - b. There will be a lot of downloading and installing packages. Press 'Y' when asked to install additional packages

#### **Configuration of VPN Client**

1. To run the Pulse Secure client use the 'Search button' and search for pulse
  - a. The Pulse Secure program icon should show up. For easy access you can drag it to the Launch bar
2. Run the Pulse Secure GUI program
3. Click on the '+' button
  - a. Add a name and **vpn.rockefeller.edu** as the URL

#### **Establish a VPN Connection**

1. Open Pulse Secure
2. Click **Connect**
3. Enter your log-in information when prompted
4. Authenticate via Duo 2factor when prompted
  - a. Refer to Duo's FAQ page for assistance on how to use Duo - <http://itservices.rockefeller.edu/duo-faq>

#### **Disconnect the VPN Connection**

1. Open Pulse Secure
2. Click **Disconnect**

### OpenConnect Client for Fedora 23 and newer

#### Client Precheck

Check to see if OpenConnect is installed.

1. Open Terminal
2. Run following command: `sudo openconnect`
3. Run following command: `openconnect --version`

If the version is older than 7.08, run the following update command:

```
sudo dnf upgrade openconnect
```

Once the program has completed upgrading, check the version again by running the command in step 3 above. Version should be 7.08 or newer

#### Installation

If OpenConnect is not installed, follow these steps:

1. Open Terminal
2. Run following command: `sudo dnf install openconnect`
3. Once the program has been installed, check the version by running the following command as the version should be 7.08 or newer:

```
openconnect --version
```

Depending on your version of Fedora, if the installed version is older than 7.08, follow these steps:

1. Open Terminal
2. Run following commands:
  - a. `dnf remove openconnect`
  - b. `dnf install vpnc-script openssl-devel libxml2-devel`
3. Download the latest openconnect source code from here:  
<http://www.infradead.org/openconnect/download.html>
4. Unpack and compile the source code by entering the following commands as root:
  - a. `tar -xzvf openconnect-x.xx.tar.gz` (replace x.xx with the version)
  - b. `cd openconnect-x.xx`
  - c. `./configure --prefix= --without-gnutls`
  - d. `Make install`

#### Establish a VPN Connection

To establish a VPN connection, use sudo command to run the following command:

```
openconnect --juniper vpn.rockefeller.edu
```

1. Enter your RUNet username and passphrase when prompted
2. You will see a 'password#2' field. You have the following options to proceed:
  - a. Enter 'push' to send an authentication push to your registered DUO phone
  - b. Enter 'phone' to perform phone callback authentication to your registered DUO phone
  - c. Enter 'sms' to perform a SMS passcode authentication to your registered DUO phone
  - d. Enter any passcode from any registered DUO phone or hardware token
    - Refer to Duo's FAQ page for assistance on how to use Duo - <http://itservices.rockefeller.edu/duo-faq>

### **Disconnect the VPN Connection**

To disconnect terminate the VPN connection, close the root shell window or hold down ctrl+c on your keyboard in the root shell

### OpenConnect Client for Debian 8

#### Installation

1. If you run Debian please install pkg-config by entering the following command as root: **apt-get install pkg-config**
  - a. Install needed libraries, open Terminal and as root, enter:  
  
**apt-get install vpnc-scripts openssl libssl-dev libxml2-dev gcc gettext pkg-config make**
  - b. Download the latest version of the openconnect source code from here:  
<http://www.infradead.org/openconnect/download.html>
  - c. Unpack the source code by entering the following commands as root:
    - a. tar xzvf openconnect-x.xx.tar.gz (replace x.xx with the version)
    - b. cd openconnect
    - c. ./configure --prefix= --with-vpnc-script=/usr/share/vpnc-scripts/vpnc-script --without-gnutls --without-openssl-version-check
    - d. make install

#### Establish a VPN Connection

To establish a VPN connection, use sudo command to run the following command:

```
sudo openconnect --juniper --no-dtls vpn.rockefeller.edu
```

1. Enter your RUNet username and passphrase when prompted
2. You will see a 'password#2' field. You have the following options to proceed:
  - a. Enter 'push' to send an authentication push to your registered DUO phone
  - b. Enter 'phone' to perform phone callback authentication to your registered DUO phone
  - c. Enter 'sms' to perform a SMS passcode authentication to your registered DUO phone
  - d. Enter any passcode from any registered DUO phone or hardware token
    - o Refer to Duo's FAQ page for assistance on how to use Duo - <http://itservices.rockefeller.edu/duo-faq>

#### Disconnect the VPN Connection

To disconnect terminate the VPN connection, close the root shell window or hold down ctrl+c on your keyboard in the root shell

### **Pulse Secure Client for CentOS 7**

#### **Installation**

1. Download the RPM PulseSecure debian install package from the IT VPN download page:  
<http://it.rockefeller.edu/vpn>
2. Open Terminal and cd to the location where you downloaded the installer from step 1 and run:
  - a. `sudo rpm -i pulse-9.1R3.x86_64`
3. If you get a message about missing dependencies, run the script as suggested on screen:
  - a. `sudo /usr/local/pulse/PulseClient.sh install_dependency_packages`
  - b. There will be a lot of downloading and installing packages. Press 'Y' when asked to install additional packages

#### **Configuration of VPN Client**

1. To run the Pulse Secure client use the 'Search button' and search for pulse
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2. Run the Pulse Secure GUI program
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#### **Establish a VPN Connection**

1. Open Pulse Secure
2. Click **Connect**
3. Enter your RUNet username and passphrase when prompted
4. Authenticate via Duo 2factor when prompted
  - o Refer to Duo's FAQ page for assistance on how to use Duo - <http://itservices.rockefeller.edu/duo-faq>

#### **Disconnect the VPN Connection**

1. Open Pulse Secure
2. Click **Disconnect**

### ***VPN Client for RedHat***

RedHat users should contact the IT Help Desk at x8940 or [helpdesk@rockefeller.edu](mailto:helpdesk@rockefeller.edu) for a Linux technician to assist with the compiling and installation of the VPN client