

Omega Server Usage Instructions for Linux (Specifically for Ubuntu/Debian based distributions, but it's similar for other Linux distributions too)

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1 Instructions

1.1 Connecting to VPN

- Install Cisco AnyConnect. This will be used to connect to the UTA VPN.

```
sudo apt install network-manager-openconnect-gnome
```

- Add a new Cisco AnyConnect VPN connection from the settings menu (Settings → Network → '+' Button). A dialogues box as shown below will appear. Select the "Cisco AnyConnect Comaptible VPN" from the dialogue box.



- Fill in the VPN details VPN Protocol: Cisco AnyConnect Gateway: vpn.uta.edu
The final VPN settings should look something like this:

The screenshot shows a configuration page for a VPN named 'UTA'. The page has tabs for 'Details', 'Identity', 'IPv4', and 'IPv6', with 'Identity' selected. The configuration is organized into sections:

- Name:** UTA
- General:**
 - VPN Protocol: Cisco AnyConnect
 - Gateway: vpn.uta.edu
 - CA Certificate: (None) with an upload icon
 - Proxy: (empty field)
 - Allow Cisco Secure Desktop trojan
 - CSD Wrapper Script: (empty field)
- Certificate Authentication:**
 - User Certificate: (None) with an upload icon
 - Private Key: (None) with an upload icon
 - Use FSID for key passphrase
- Software Token Authentication:**
 - Token Mode: Disabled
 - Token Secret: (empty field)

- Setting up Duo

Follow this instruction page posted by Office of Information Technology (OIT) UTA on how to setup your duo account. This is a required step for authenticating to the UTA VPN [\[Link\]](#).

- Connect to the VPN

When connecting to the VPN, fill in the boxes with following details
GROUP: .Default-Students

Username: Your NetID (e.g. kck8298)

Password: Your NetID Password (e.g. SuperSecretPassword)

Password: Your Duo 6-digit OTP you get from your phone. Note that you should have setup the Duo by now as instructed in previous step. (e.g. 222333)

And then press connect. You should be connected to the UTA VPN now. Example screenshot below:

VPN host: vpn.uta.edu Connect

Type one of the following commands (push, phone or sms) into the NetIDplus field or a valid numeric code (Passcode).

Passcode : Log in using a passcode, either generated with Duo Mobile, sent via SMS, or provided by an administrator. Passcode examples: 123456 or 1456789

push - Push a login request to your phone (if you have Duo Mobile installed and activated on your iPhone, Android, Windows Phone, or BlackBerry device). Just tap "Approve" to authenticate. This method requires your phone to have data service or be on a WiFi network.

phone - Authenticate via phone callback. Answer the call and press "1" key on your phone's keypad to authenticate.

sms - Get a new SMS Passcode. Your first login attempt will fail - Log in again with your sms passcode using regular credentials and the sms passcode in the NetIDplus field.

 Login failed.

Please enter your username and password

GROUP: .Default-Students

Username: kck8298

Password:

Password:

Save passwords Cancel Login

1.2 Connecting to Omega Server

- Connect to Omega Server. This is an RHCE server at the time of writing this tutorial.

```
ssh NetID@omega.uta.edu (e.g. ssh astefan@omega.uta.edu)
```

Password is your NetID password. You can add your SSH keys if you want so that you don't have provide password everytime. You can find instructions to do so [here](#)

1.3 Syncing Code with Omega Server

There are many options to do so. Some are discussed below:

1.3.1 Using Rsync

Refer to this [Link](#) Section 2: Copy a Directory from Local Server to a Remote Server for details. Basically you can use rsync to sync your local machine folder with remote machine (Omega in our case).

1.3.2 Using Nautilus

Create a new SFTP connection in nautilus. More detailed explanation [here](#). Basically you are using nautilus, your file manager to copy your files over to Omega.

1.3.3 Using Github

Make a private repo in github (It should be private, else your code is considered plagiarized and will be reported to honor council) and commit all your code changes there. Next in the Omega server use git pull to get all the latest changes you made. This will help you learn Git as well as provide platform to store your work for future references.

1.3.4 Using CLion

CLion is a great IDE which you can use to develop your code. CLion offers remote development and debugging options for professional users. You can get professional membership by signing up with your UTA account as a student. CLion automatically syncs your code with remote server (Omega in our case) and then builds it and then subsequently runs it too. More detailed tutorial on how to set that up is provided [here](#).