

## Using IDE's for development

Mac Users can use **Xcode**, Linux users can use **Eclipse**, windows users can use **Visual Studio** for socket programming. Please refer this document for further details:

<https://web.eecs.umich.edu/~sugih/courses/eecs489/common/notes/ide/> (Step by step pictures included on how to use the IDE's)

### Using Oracle VirtualBox for Linux on Windows:

Download virtual box here to use Linux on windows: <https://www.virtualbox.org/>

**Socket Programming:** [http://www.linuxhowtos.org/C\\_C++/socket.htm](http://www.linuxhowtos.org/C_C++/socket.htm)

## How to connect to Design Center (Linux host) for windows users

### Pre-requisites for remote access

#### 1. Duo

You will need to have Duo set up. If you already have Duo set up, skip to step 2. If you do not have Duo set up yet, follow the instructions in the .

#### 2. VPN

Connect to the VPN before you remotely access the ECC. If you do not have the VPN set up yet, refer to the VPN installation document.

### Install NoMachine Enterprise Client software

1. Download the NoMachine Enterprise Client software on the computer you're connecting from  
"<https://downloads.nomachine.com/>"
2. Navigate to the folder where the application is downloaded in. Right click on the executable file and click on Run as administrator.
3. On the welcome screen, click "Next."
4. Review the terms and conditions, accept the license agreement, and click "Next."
5. Choose the preferred installation location for the application. Installation might take a moment to complete.
6. Restart your machine to complete the installation.

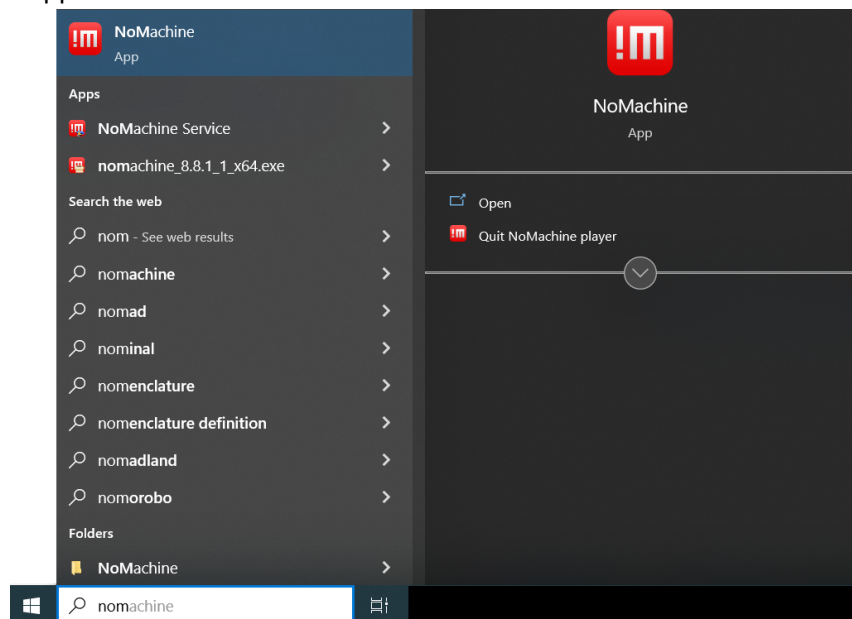
## Download Linux NX for NoMachine

1. To download the connection file open "<https://quota.engr.scu.edu/nx/ECC-NX-Linux.nxs>" in browser.
2. Sign in with your SCU username (SCU Gmail without the @scu.edu), then enter your SCU password to access and download this file
3. Save the file somewhere easy to remember (like your Desktop or Documents folder)
4. Navigate to the folder where the application is downloaded in. Double-click on the ECC-NX-Linux.nxs file you saved
5. On your first connection, you will be prompted to trust the key of the NX server

This opens **NoMachine Enterprise Client**, follow the "[Connecting to NoMachine](#)" steps to access the Linux client.

## Connecting to NoMachine

1. Open NoMachine application

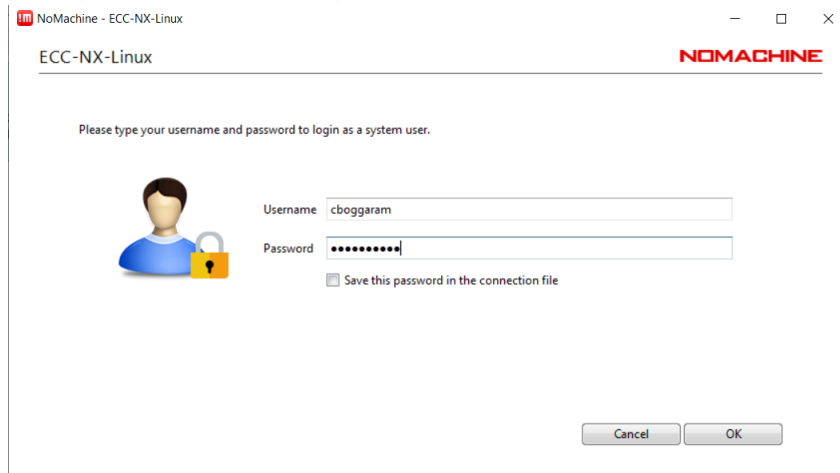


2. Click on "ECC-NX-Linux, Linux NX" as shown below and click on Connect



The first time you connect, you might receive an alert. Click "Ok" to proceed.

3. Enter your credentials (SCU ID and Password), and then click "Ok."



4. Click on "Create new virtual desktop" and configure all the required settings.
5. On your first connection, NX will display up to three help screens overlaid on top of the Linux desktop, click OK on each to move on
6. When the desktop is displayed, it may be smaller or larger than desired, simply resize the NX window to the size you want and wait for the Linux desktop to resize itself to match.

#### In case the display remains too small or is cut off:

- i. Move your mouse to the upper-right corner of the NX window (where the Linux date/time display is located by default).
  - ii. An animation resembling a page folding down will appear. Click on it.
  - iii. Choose "Display.", Click "Resize remote screen" to frame it (the "Fit to window" option will become inactive).
  - iv. Click "Done" twice.
7. The Linux desktop should now auto-size itself to fit in your NX window.

**NOTE:** Before finalizing the process, it's a good idea to create a test folder. Close the connection, and then repeat the steps to reconnect. This will help verify if the test folder is visible upon reconnection. If the folder isn't visible, it's recommended to keep a backup copy of your data in the SCU cloud, either on Google Drive or OneDrive. It's always a best practice to have duplicate copies of your data stored in these drives.