## **Pre-learning: Unix/Linux Tutorial**

• If you are not familiar working with Unix/Linux system, please go to the Unix/Linux tutorial website or read the full tutorial

To work on projects from your system follow the below given steps:

### **Step 1: Connect to UTD VPN**

 Follow instructions in the link to download and connect to UTD VPN <u>click</u> here

### **Step 2: Download and Setup NoMachine**

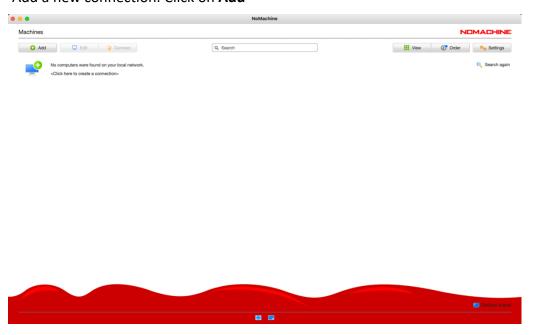
- Based on the operating system of your system, use the link to download
  NoMachine click here
- Complete the NoMachine setup: Follow the instructions shown below

#### How to Use NoMachine

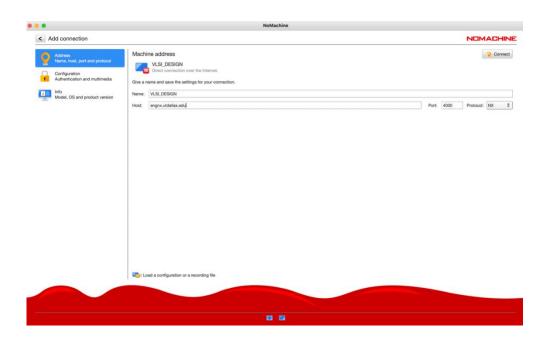
What is NoMachine and how can I use it? NoMachine is a software that runs on multiple platforms (ie: Windows, Mac, and Linux). It is an end user client that connects to a remote desktop session running on the engineering NoMachine Cluster. Each time you connect to a NoMachine session the user will be given a full CentOS 6.6 Redhat Linux desktop to use. The NoMachine Cluster is a multi-node cluster, and is load balanced between all nodes. Which means when you connect or start a new NX connection the user will be placed on the server (node of cluster) with the most available resources. To give some examples of what can be done from the NoMachine Linux desktop. A user can start Cadence, MATLAB, Mathematica, or even compile written programs then save output to their home directory. Users can connect USB Drives to their workstations and manage files in their home directory. Workstations include client PC's or Mac's as well as Zero-Clients located in various open access labs. The NoMachine cluster is a shared resource between all of the engineering students of UTD. Please keep this in mind when writing large files out to /tmp or processor intensive programs as an example. The NoMachine Cluster is not a research tool to be used on large research projects.

This document covers how to use the NoMachine client to connect to the Department of Engineering NX cluster.

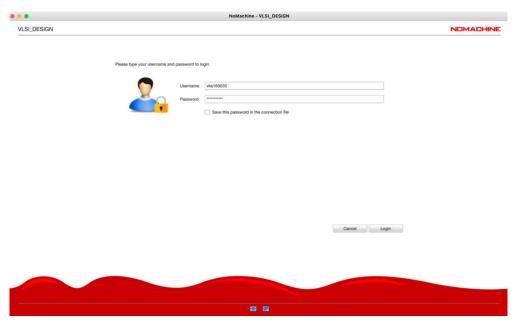
- 1. Open the NoMachine client application.
- 2. Add a new connection. Click on Add



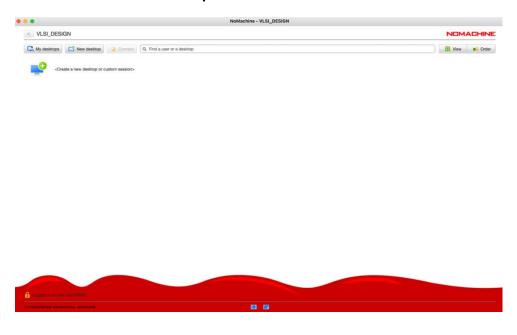
 In Address: Enter a name of your choice (example: VLSI Design) and enter the host as "engnx.utdallas.edu". Make sure the port is 4000 and protocol is NX. Click Connect (top right corner)



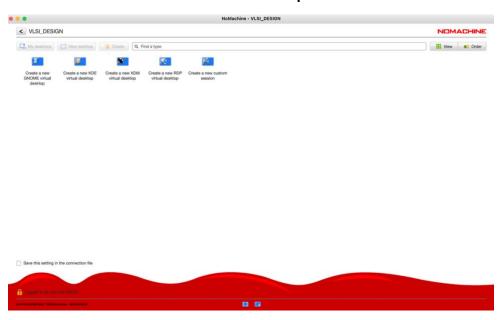
4. Your NetID and Password are your Username and Password respectively. You can check "Save this password in the connection file" if you are using your personal system



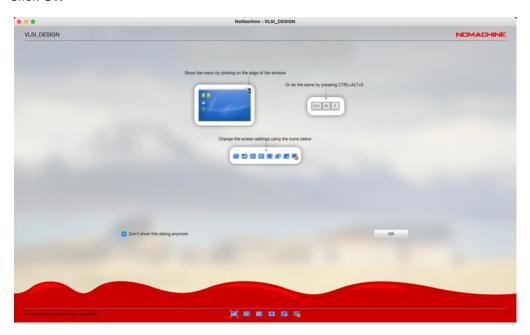
### 5. Click on Create a new desktop or custom session



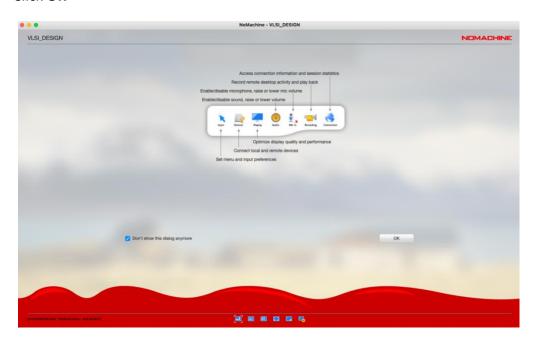
#### 6. Click on Create a new GNOME virtual desktop



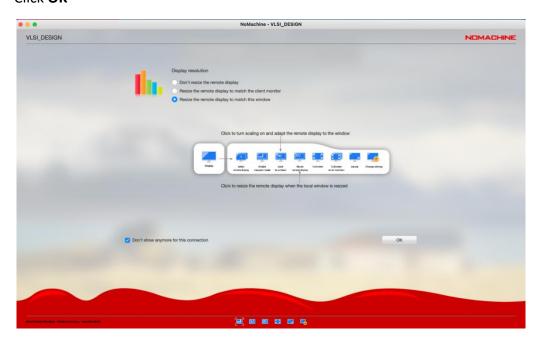
## 7. Click **OK**



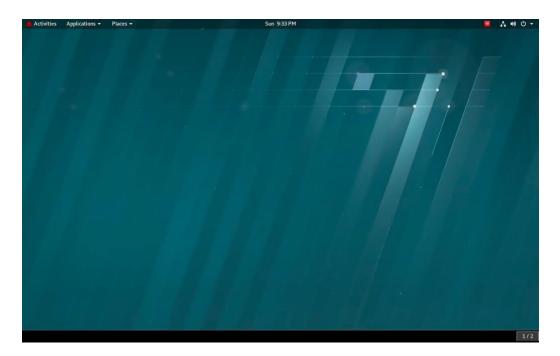
## 8. Click **OK**



You can change the display resolution here.
 Click on the icons at the bottom center to change the display.
 Click **OK**



10. You should be able to see the screen as shown below.



# **Reconnecting to a running NX Session**

If you feel like taking a break and return to your work later, you can easily resume/ reconnect to a running NX session. Please do not use this as an alternative to save your work. Your work will not be saved, it will only be left running the background.

Just close the window where the NX Client is running. The NX client will automatically send your session to the background and prep the connection to be resumed later.