

SECS Linux Servers

Your SECS account enables you to connect to our Linux servers. The intended use of the General Purpose Linux Servers are to:

1. Provide educational access to the installed software
2. Give students the opportunity to work in a Linux environment
3. Run long running or computationally intensive jobs.

Available Servers

To connect to any available server use **beatles.secs.oakland.edu**.

Or you can connect directly with:


- **ringo.secs.oakland.edu**
- **harrison.secs.oakland.edu**
- **paul.secs.oakland.edu**
- **lennon.secs.oakland.edu**
- **yoko.secs.oakland.edu**

Note: The server Gaga (GPU) has been retired as of 6/7/2016. It has been replaced by Yoko.

Accessing the Servers

Connection Methods

There are several methods for accessing these servers.

 **Note:** You will need to Connect to the SECS [VPN](#) before SSHing onto a SECS Linux server from off campus.

Windows

- [MobaXterm](#)
- [Nomachine](#)

Mac

- [XQuartz](#)
- [Nomachine](#)

Linux

- [ssh with X forwarding](#)
- [Nomachine](#)

Transferring files to and from the servers

Our Linux environment mounts the [SECS Network drive](#) as your home directory. View the “How To Connect to the SECS Network Drive” section on the [SECS Network Drives](#) page for more information about transferring files.

Hardware

Ringo CPU threads: 24 @ 3.47GHz Memory: 32G Cuda cores: None

Paul CPU threads: 48 @ 2.40GHz Memory: 99G Cuda cores: None

Harrison CPU threads: 8 @ 2.33GHz Memory: 10G Cuda cores: None

Lennon CPU threads: 48 @ 2.0GHz Memory: 96G Cuda cores: 1536

Yoko CPU threads: 56 @ 2.0GHz Memory: 96G Cuda cores: 2688

Software

- Matlab
- Comsol
- Eclipse
- Ansys
- Fluent

Environments

- Java
- Python
- gcc
- Latex

- Android: The Android SDK is stored on all of the servers at */APPS/android-sdk*. When installing and configuring the Eclipse ADT plugin, ensure that the plugin can find this directory (More information on how to do so can be found [here](#)).
- Cuda GPU computation

Using Cuda The GPU servers have Nvidia GPUs running the CUDA® software. It is our intent that all new Linux Servers will be Cuda capable.

Current Servers with Cuda enabled GPU's:

- yoko.secs.oakland.edu
- paul.secs.oakland.edu

Using CUDA® All CUDA® related software is located in */APPS/cuda*

To use the CUDA® SDK you have two options:

- Run */APPS/cuda/SDK.run*
 - At “*Enter install path (default ~/NVIDIA_GPU_Computing_SDK):“* Press Enter
 - At “*Enter CUDA install path (default /APPS/cuda):“ * Press Enter
- Download newest SDK
 - from [here](#) to
 - your home directory and run it as above.

Nvidia® Documentation

- [Cuda Developer Resources](#)
- http://www.nvidia.com/object/tesla_software.html