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 It has been replaced by Yoko.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