

Lab 1: Getting started with DETER

Step 1: Creating the experiment

1. Go to www.deterlab.net.
2. Log in (link is on the left menu).
3. Click on the “My DETERlab” link on the left hand menu.
4. Click on the “projects” tab.
5. Click on the CSCI493 link, in the PID column.
6. Click on the “Experimentation” tab at the top of the page and select “Begin an Experiment”.
7. Fill out the form, including the .ns file to be uploaded for the experiment. For this lab, upload from “Server”:

```
/share/education/LinuxDETERIntro_UCLA/intro.ns
```

8. An email will be sent to you indicating that experiment creation has been finalized.

Step 2: Swapping experiments in and out

1. Once the experiment has been created, select the experiment from the “Experiments” tab in “My DETERlab” at www.deterlab.net.
2. Click on the EID for the experiment to obtain experiment information as well as topology visualization of the virtual network.
3. From the left bar menu, select “Swap Experiment In”. This takes some time. Be patient. You will receive an email when this is complete.

Step 3: Logging into an experiment node

Once the experiment is swapped in, you can login to the nodes in your experiment. This is a two-step process:

1. Use ssh to log in to `username@users.deterlab.net`. Your username is listed in your profile under “My DETERlab”, and it’s the same as your login for the DETER website.
2. From `users.deterlab.net`, you can ssh into the experiment nodes using the “Qualified Nodes” given the email you received after creating the experiment. You have a special ssh key on all nodes allowing you to log in without authentication.

Step 4: Don’t forget to swap out!!

Swap out - don’t terminate! When you want to take a break from your work, make sure you save your work to an appropriate location (usually using scp) and then swap out your experiment. To swap out, use the “Swap Experiment Out” link in the “Experiment Options” panel. Note that this is the same place that previously had the “Swap Experiment In” Link. This allows resources to be reallocated so that someone else can use them.

Do NOT use the (poorly-named) “Terminate Experiment” link, since it will permanently erase the experiment and you won’t be able to work on it again.