

Working with Virtual Machines

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Local virtual machines allow you to test configuration changes, code, and add test content without affecting your live Arca repository. There are several ways you might install and run a local virtual machine on your computer. This guide offers the two simplest options.

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Getting started

You will need:

- A computer with minimum 4 GB of RAM
- VirtualBox or other virtualizing software
 - Download VirtualBox here: <https://www.virtualbox.org/wiki/Downloads>
- A virtual machine image. Either:
 - The Arca Virtual Machine (4 GB):
<https://vault.sfu.ca/index.php/s/Swy7ULjSj1XjI9P>
 - The old link at http://bceln.saas.dgicloud.com/vm/BCELN_TRAINING.ova appears to be no longer available. If it resumes, user and password to download are same as the virtual machine credentials below.
 - The official Islandora Virtual Machine: Get the latest release at <http://islandora.ca/downloads>

Which machine to download?

There are benefits and drawbacks to each VM.

Arca Virtual Machine:

- Pro: Uses the official Arca theme and many modules by default; will look and feel more or less like a real Arca site
- Con: May not work on all sites; depends on your IT configuration and individual computers. Extremely out of date, as it was captured when Arca was first implemented and is missing a number of updates.

Islandora Virtual Machine:

- Pro: Fewer issues getting it working; more highly customizable because it's stock Islandora.
- Con: Comes only with basic theming and stock modules installed. Requires more configuration if you want it to look like your site.

Credentials

For the Islandora VM, see the credentials at the Downloads page:

<http://islandora.ca/downloads>

For the Arca VM:

Virtual machine credentials:

user: bceln

pass: fUC9q5ou

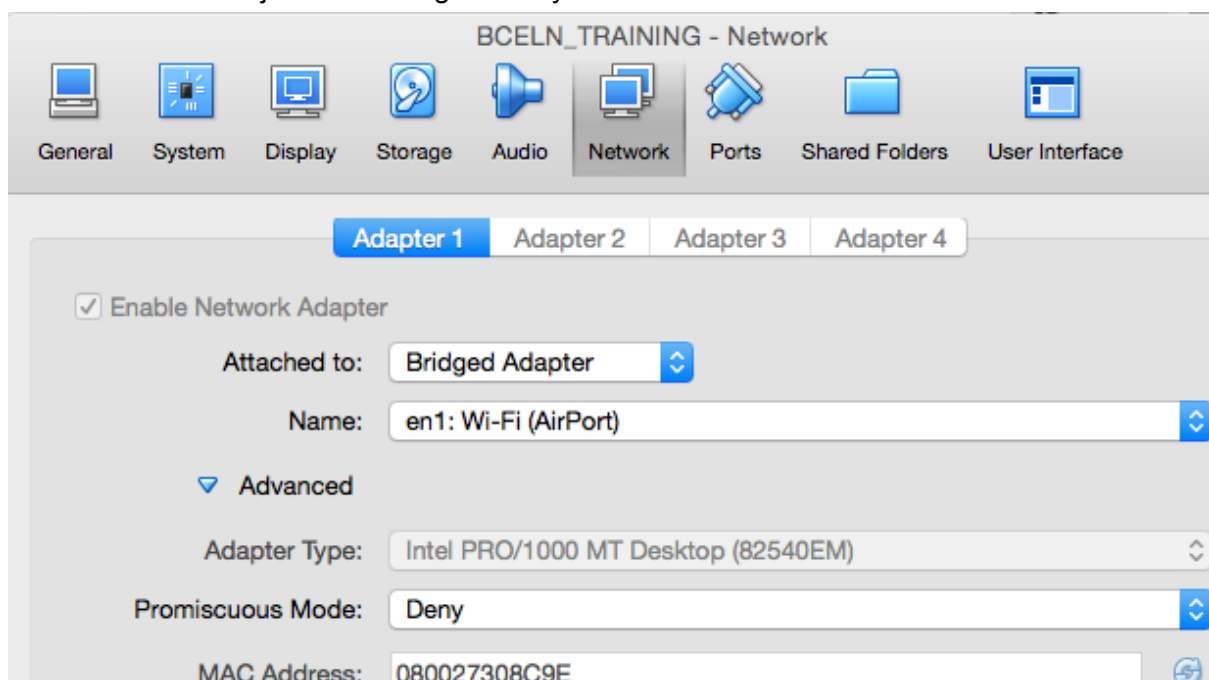
Drupal credentials:

user: islandora

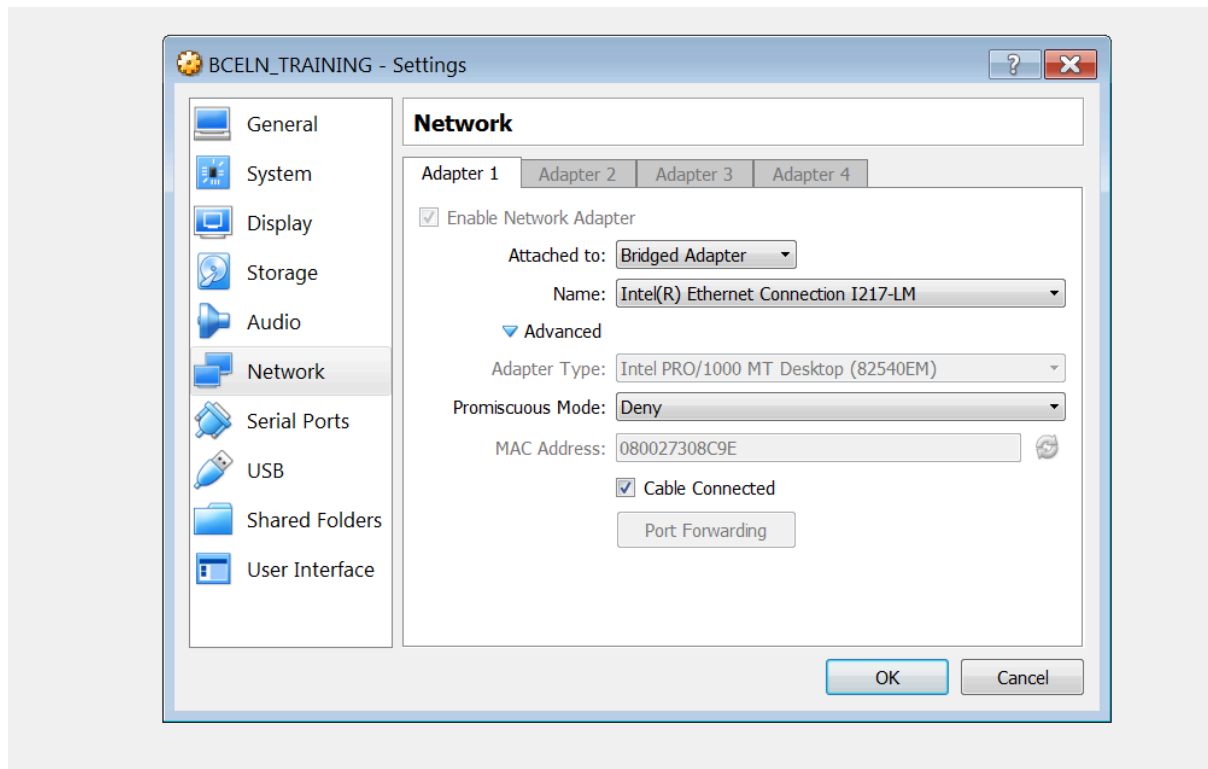
pass: fUC9q5ou

Setup

1. Download and install VirtualBox.
2. Download the virtual machine (VM).
3. Open up VirtualBox. Then open up the virtual machine. VirtualBox should open up the VM and import it automatically.
 - If that doesn't work: From VirtualBox, go to File, and select Import Appliance.
4. In VirtualBox, select your machine, click on settings, go to Network, and ensure that the correct type of connection is selected (ethernet or wi-fi) depending on how your computer is connected to the internet.
 - If you work on a laptop and switch between wired and wireless, you will need to adjust the settings when you switch.



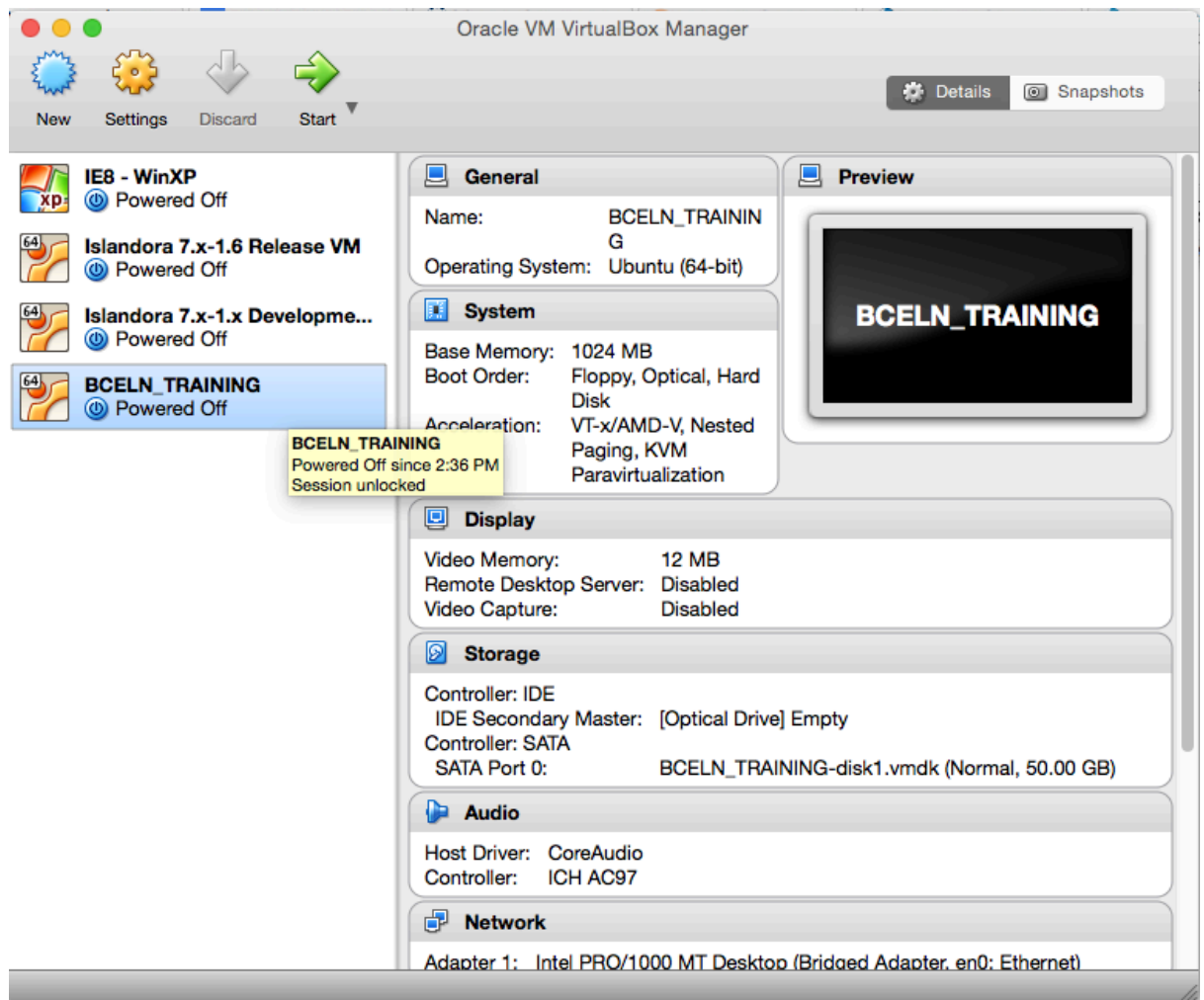
If using a wired connection, make sure that the “Cable Connected” box is checked.



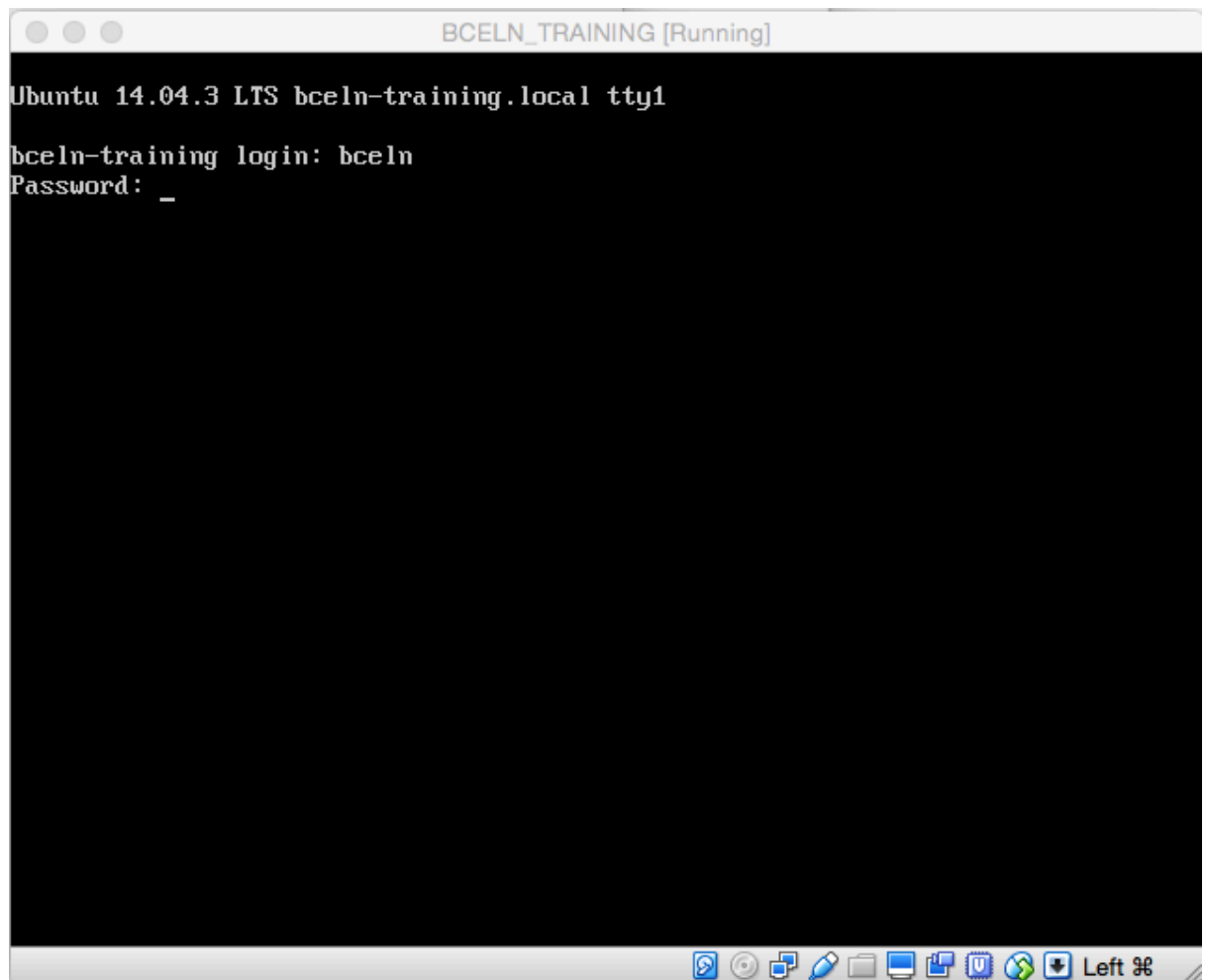
Using your virtual machine

1. In VirtualBox, click on the virtual machine you wish to use: either “BCELN_TRAINING” for the Arca machine, or “Islandora 7.x-1.[x] Release VM” for

the Islandora machine. Click the green Start arrow to power it up.




2. Enter the virtual machine credentials (see Credentials section above). Note the password is invisible; it won't look like you're typing, but it will accept your input:



3. Once logged in, leave the VM open and go to your web browser.
4. In your web browser, navigate to the VM's site.
 - For the Islandora machine, the address is <http://localhost:8000>
 - For the Arca machine, URL is <http://bceln-training.local/user>
 - i. Note that including http:// is necessary
 - ii. If you're an early adopter site, you can navigate to your own child site page
 1. e.g. For Trinity Western University:
<http://twu.bceln-training.local/user>
 2. Otherwise, just use the base URL

← → ↻ twu.bceln-training.local/user



BRITISH COLUMBIA

[Home](#) > User account

User account

Username *

Enter your BRITISH COLUMBIA username.

Password *

Enter the password that accompanies your username.

5. Log in with the Drupal credentials

Once logged into your training site, you can upload test content, make configuration changes, etc. Any changes you make will not affect other users' installations.

Basic VM Set-up: Arca machine

Before you start playing in your VM, you'll want to make sure you can log in and log out. Do the following:

1. In the Structure menu, go to Menus → BC ELN Main.
2. Click +Add Link.
3. Give your link the title Login, and the path user/login. Click Save.

4. Add another link called Logout, and the path user/logout. Click Save.

[+ Add link](#)

[Show row weights](#)

MENU LINK	ENABLED	OPERATIONS	
Home	<input checked="" type="checkbox"/>	edit	delete
Partner institutions	<input checked="" type="checkbox"/>	edit	delete
Browse all collections	<input checked="" type="checkbox"/>	edit	delete
About	<input checked="" type="checkbox"/>	edit	delete
FAQs	<input checked="" type="checkbox"/>	edit	delete
Contact	<input checked="" type="checkbox"/>	edit	delete
Login	<input checked="" type="checkbox"/>	edit	delete
Logout	<input checked="" type="checkbox"/>	edit	delete

[Save configuration](#)

5. Move your links to the end of the menu by click and dragging their cross icon.
6. Click Save Configuration and close the window.
7. A Logout link should now appear in the top menu.



To get the BC ELN Forms:

- Download the bcelndora module: <https://github.com/bondjimbond/bcelndora/>
- Under Modules, click Install, and upload the module.
- Enable the module, and your forms should be available.

Installing Modules via the Command Line

If installing modules via the browser isn't working (possible in the baseline Islandora VM), you can instead do so using the command line - the same window where you typed your password to start up the VM.

In that window, use the following commands:

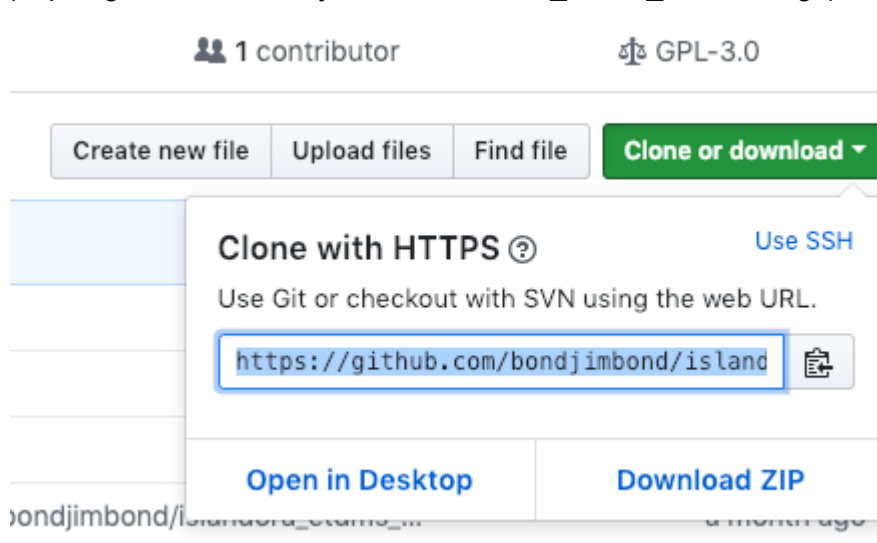
To navigate to the Modules directory: `cd /var/www/drupal/sites/all/modules`

To download a Drupal (non-Islandora) module: *drush dl <modulename>*

- For example, to install the module “Context”, type *drush dl context*
- You’ll find the module’s machine name on its webpage, in the URL:
<https://www.drupal.org/project/context>

To download an Islandora module:

- In your browser, find the module’s Github repository (e.g.
https://github.com/bondjimbond/islandora_etdms_download)
- Click the “Clone or download” button, and copy the URL that appears
(https://github.com/bondjimbond/islandora_etdms_download.git)



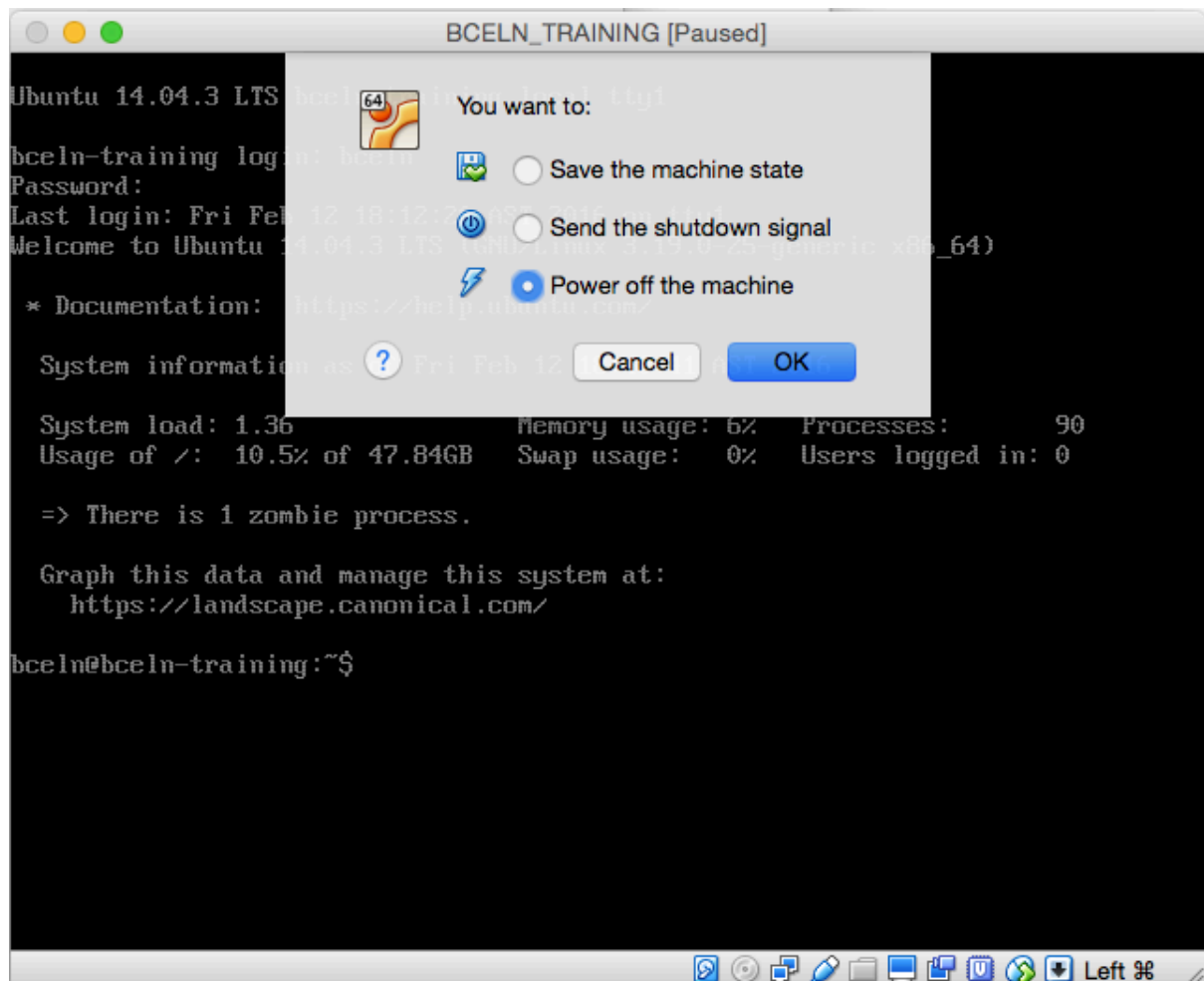
- Back in the terminal, go to the modules directory: *cd /var/www/drupal/sites/all/modules*
- Use “git clone” and paste the URL you copied:
git clone https://github.com/bondjimbond/islandora_etdms_download.git

To enable your new modules: *drush en <modulename>*

- E.g. *drush en islandora_etdms_download*
- You can also enable your new modules in the browser as normal.

Quitting

When finished using your virtual machine, simply power it down by clicking the close (X) button on the VM console (black screen with white text window).



Select one of the three shutdown options:

1. Save the machine state
 - Equivalent to putting the computer to sleep. When you power on again, it will come back as if you never shut it off.
2. Send the shutdown signal
 - Takes longer to exit.
 - Probably the safest option for keeping your test data safe - akin to selecting the "shut down" option on your computer.
3. Power off the machine
 - Equivalent to pulling the plug. May have adverse effects, though none observed so far.
 - The lazy and fast way to exit.