



(../..)

In this lab we will setup VirtualBox, Vagrant, and BOSH-lite on your machine. This will be your environment for the remaining labs.

Clone the labs repository

Clone the labs repository.

Use the `--recursive` flag when cloning to get the course submodules (<https://git-scm.com/book/en/v2/Git-Tools-Submodules>).

```
git clone https://github.com/platform-acceleration-lab/apps-platform-acceleration-bosh-code.git --recursive
```

`cd` into the labs directory.

```
cd apps-platform-acceleration-bosh-code
```

Install Ruby

For this lab, you will need to use Ruby version 2.3.1.

If you do not have it, install it with `rbenv`.

First install `rbenv` (<https://github.com/rbenv/rbenv#installation>) and install `ruby-build` (<https://github.com/rbenv/ruby-build#installation>).

Then use `rbenv install` to install ruby.

```
rbenv install 2.3.1
```

If `rbenv` can't find Ruby 2.3.1, follow the instructions to get the latest list of Rubies for `ruby-build`.

Bosh Command Line Client

Once Ruby is installed, install the gems specified in your `Gemfile`.

From the root of your `apps-platform-bosh-code` repository, run:

```
gem install bundler
rbenv rehash
bundle install
```

This will install the `bosh` command line client.

Verify your installation by running `bosh --version`. If at first your shell cannot find the `bosh` executable, you may need to run `rbenv rehash`.

VirtualBox

Download (<https://www.virtualbox.org/wiki/Downloads>) VirtualBox for your OS and run the installer.

Once it's installed, you don't need to do anything else.

You will interact with VirtualBox using Vagrant.

Vagrant

Download (<https://www.vagrantup.com/downloads.html>) Vagrant for your OS and run the installer.

Once installed, verify your installation by running the following command in a terminal:

```
vagrant --version
```

A Note on Versions

This lab was tested against version `1.8.7` of Vagrant, and version `5.1.10` of VirtualBox. It should work on other versions, but if you have trouble, try using those specific versions. You can find older versions of Vagrant here (<https://releases.hashicorp.com/vagrant/>), and of VirtualBox here (https://www.virtualbox.org/wiki/Download_Old_Builds).

Setting up the VM

Initialize the VM using Vagrant:

```
vagrant up --provider virtualbox
```

While that is running, take a look at the `Vagrantfile` in the root of the `platform-acceleration-bosh-code` repository. Notice the declaration of the base image:

```
config.vm.box = 'cloudfoundry/bosh-lite'
```

This configuration setting tells Vagrant to provision a new VM using the `cloud-foundry/bosh-lite` image as a starting point. The image comes with a BOSH director pre-installed.

Once Vagrant has finished bringing the VM up, verify you have a working BOSH-lite director by targeting it (username: admin/password: admin) and getting information about your director:

```
bosh target 192.168.50.4  
bosh target
```

Running `bosh target` without an argument will print information about the bosh director you have targeted, which should look like:

```
Current target is https://192.168.50.4:25555 (Bosh Lite Director)
```

To avoid problems in future labs, make sure you're running the correct version of BOSH-lite that you are connected to the correct BOSH director. The director exposes an `/info` endpoint. Curl that endpoint to get director info, including version number.

```
curl -k https://192.168.50.4:25555/info
```

The command should return something like the following:

```
{
  "name": "Bosh Lite Director",
  "uuid": "fb70f16a-4d6f-41f8-bc2e-0181a03dffa18",
  "version": "1.3262.3.0 (00000000)",
  "user": null,
  "cpi": "warden_cpi",
  "user_authentication": {
    "type": "basic",
    "options": {}
  },
  "features": {
    "dns": {
      "status": false,
      "extras": {
        "domain_name": null
      }
    },
    "compiled_package_cache": {
      "status": true,
      "extras": {
        "provider": "local"
      }
    },
    "snapshots": {
      "status": false
    }
  }
}
```

NOTE: You can get nicely formatted JSON by piping the response to a JSON formatting tool, like jq (<https://stedolan.github.io/jq/>).

Check the returned JSON and make sure your Director is at version `1.3262`.

Next check the version of your `bosh` cli, it should match the version of your director, at least up to `1.3262`.

```
bosh --version
```

