

AtoM and Vagrant

INSTALLING AND CONFIGURING THE ATOM VAGRANT BOX
FOR LOCAL TESTING AND DEVELOPMENT



What is Vagrant?

Vagrant is a tool for building complete development environments. With an easy-to-use workflow and focus on automation, Vagrant lowers development environment setup time, increases development / production parity, and makes the "works on my machine" excuse a relic of the past.

Vagrant was started in January 2010 by Mitchell Hashimoto.

Vagrant remains and always will be a liberally licensed open source project. Each release of Vagrant is the work of hundreds of individuals' contributions to the open source project.



What is VirtualBox?

VirtualBox is an open source, cross-platform virtualization application.

When we describe VirtualBox as a "virtualization" product, we refer to "full virtualization", that is, the particular kind of virtualization that allows an *unmodified* operating system with all of its installed software to run in a special environment, on top of your existing operating system. This environment, called a "virtual machine", is created by the virtualization software by intercepting access to certain hardware components and certain features. The physical computer is then usually called the "host", while the virtual machine is often called a "guest". Most of the guest code runs unmodified, directly on the host computer, and the guest operating system "thinks" it's running on a real machine.



The AtoM Vagrant Box



Installing the Atom Vagrant Box

Step 1: Download and Install VirtualBox

- <https://www.virtualbox.org/>



Step 2: Download and Install Vagrant

- <https://www.vagrantup.com/>



Installing the Atom Vagrant Box

Step 3: open your command line interface



Search for "cmd" and hit enter



Applications/Utilities/Terminal



CTRL + ALT + T

Installing the Atom Vagrant Box

Step 4: make a new directory on your desktop and then change directories into it



```
> cd Desktop
```

```
> mkdir vagrant-2.4
```

```
> cd vagrant-2.4
```



```
> cd Desktop
```

```
> mkdir vagrant-2.4
```

```
> cd vagrant-2.4
```



```
> cd ~/Desktop
```

```
> mkdir vagrant-2.4
```

```
> cd vagrant-2.4
```


Installing the Atom Vagrant Box

Step 5: Initialize the directory to be a Vagrant environment

```
> vagrant init artefactual/atom
```

Step 6: Run Vagrant!

```
> vagrant up
```


And Now an Intermission for our Windows Users...

(Mac and Linux users, feel free to skip ahead a couple slides)



SSH, Vagrant, and Windows

What is SSH?

SSH stands for Secure Shell. It is a secure way of connecting to a remote computer or server using encryption to protect the connection.

To connect to the guest O/S (the Vagrant box – the virtual machine you are running) from the Host (your computer), we use SSH.

Linux and Mac support an SSH client natively, but Windows does not – so we need to install an SSH client to access the AtoM Vagrant box's command-line interface.

Our preferred Windows SSH client is PuTTY.

Step A: Download and Install PuTTY

- <http://www.putty.org/>
- Follow the link to the Downloads page

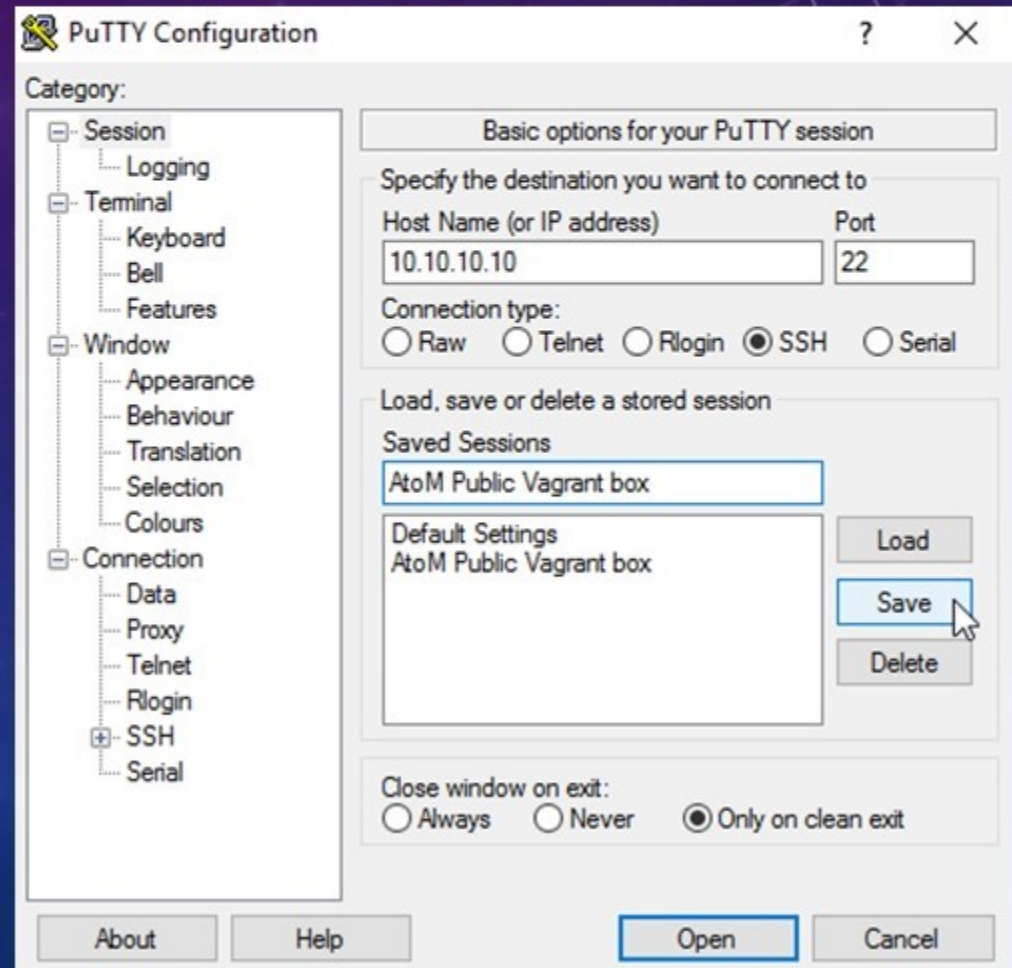


SSH, Vagrant, and Windows

Step B: Launch PuTTY and Configure it for Vagrant access

- Host Name: 10.10.10.10
- Port: 22

In the "Saved Sessions" field, give this configuration a name so you can reuse it (e.g. AtoM Vagrant Box), then click "Save."



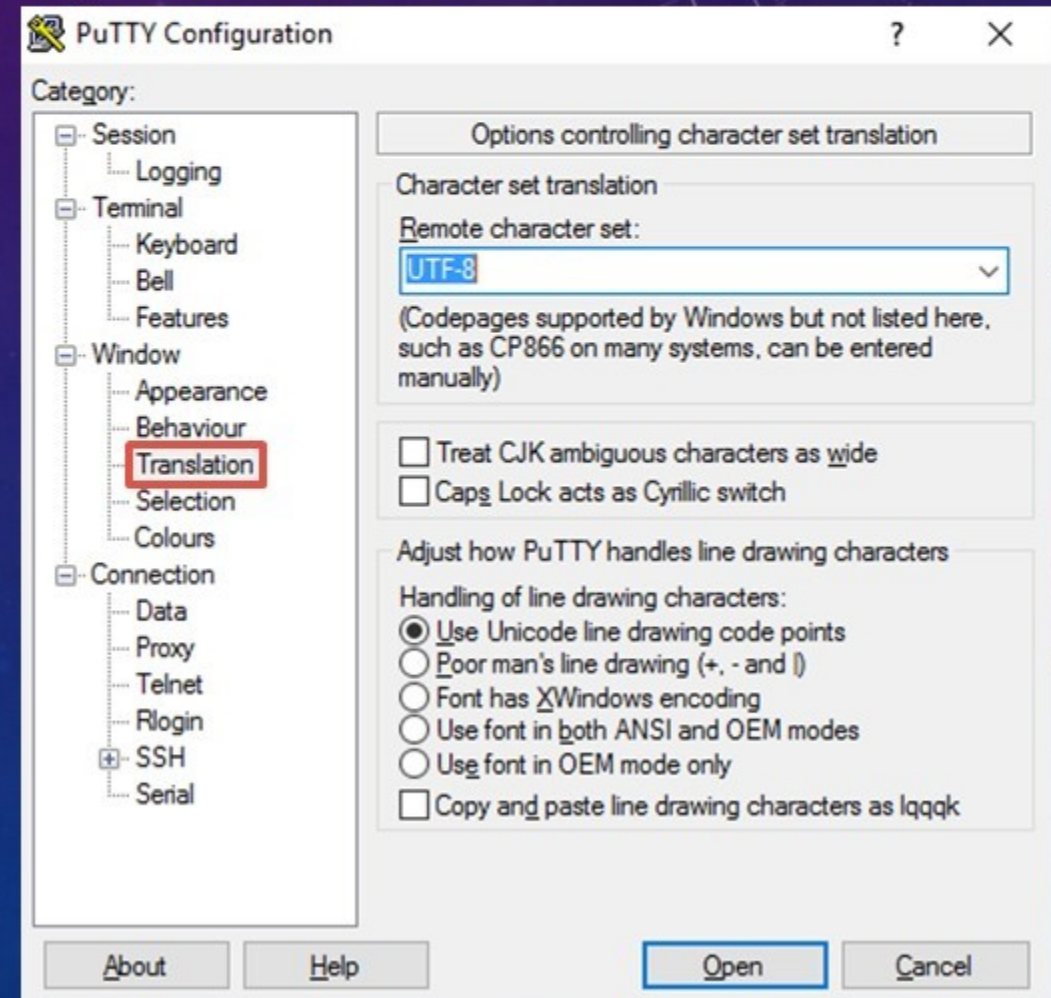
SSH, Vagrant, and Windows

Step B: Launch PuTTY and Configure it for Vagrant access

In the options on the side, click “Translation” under the Window heading.

Select UTF-8 as the Remote character set.

In the menu, click the top link, “Session”, to return to the main page. Remember to click “Save” to preserve these settings.



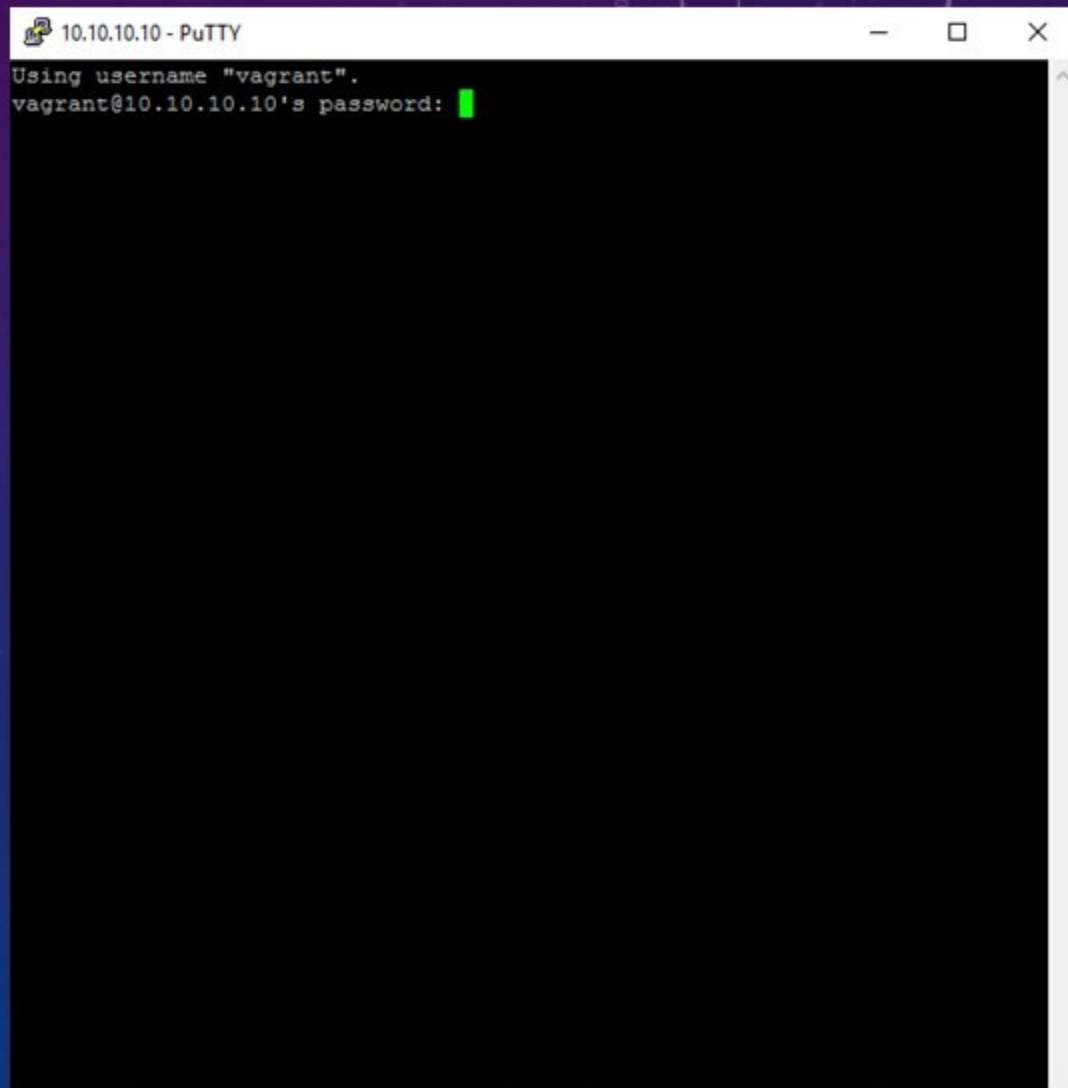
SSH, Vagrant, and Windows

Step C: Launch the PuTTY SSH terminal!

On the main PuTTY page, click on your saved Vagrant settings and then click the "Open" button

PuTTY will open a terminal so you can connect to the Vagrant box

REMEMBER: you must already have run "vagrant up" via the Windows command-line interface for the connection to work.



SSH, Vagrant, and Mac/Linux

To access the Vagrant box, enter the following command:

```
> vagrant ssh
```

REMEMBER: you must already have run
"vagrant up" for the connection to work.

If You Are Prompted for a Password

Both the username and the password for the AtoM vagrant box are: `vagrant`

- Username: vagrant
- Password: vagrant

Now you're almost ready to start using AtoM!

[illegible]

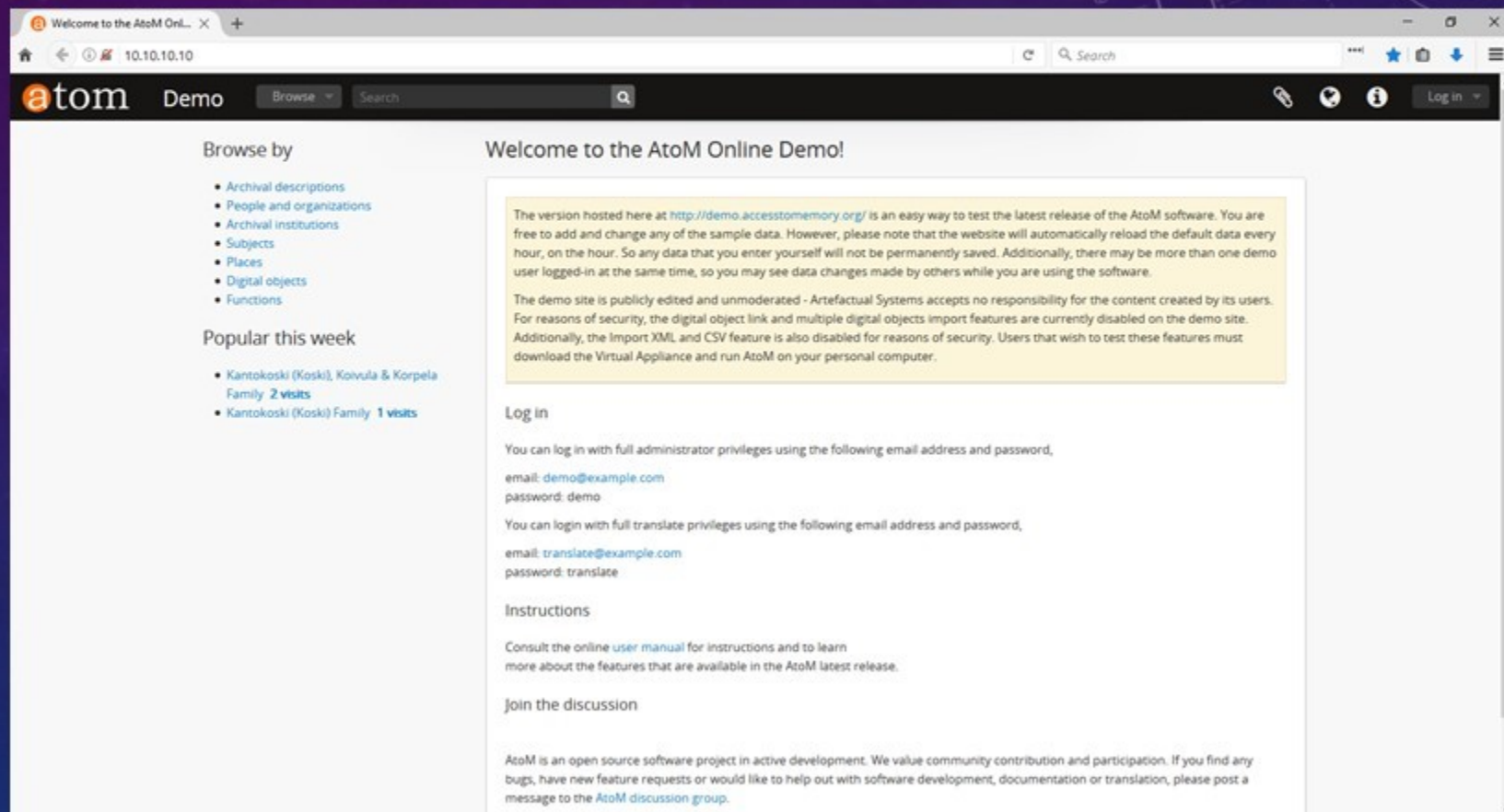
Open Your Web Browser

Enter the following address to access your local AtoM site:

10.10.10.10

Log in credentials:

- User: demo@example.com
- Pass: demo



Part 2: Updating the Vagrant Box with the Latest Atom Code

Because the AtoM Vagrant box is targeted in part to developers, it follows our latest development branch. Currently (March 2017), that is the qa/2.4.x development branch in our GitHub code repository.

The AtoM Vagrant box will not automatically keep up to date with the latest AtoM development – meaning all the newest features and bug fixes are not currently included! We **strongly recommend** you update your Vagrant box before using it.

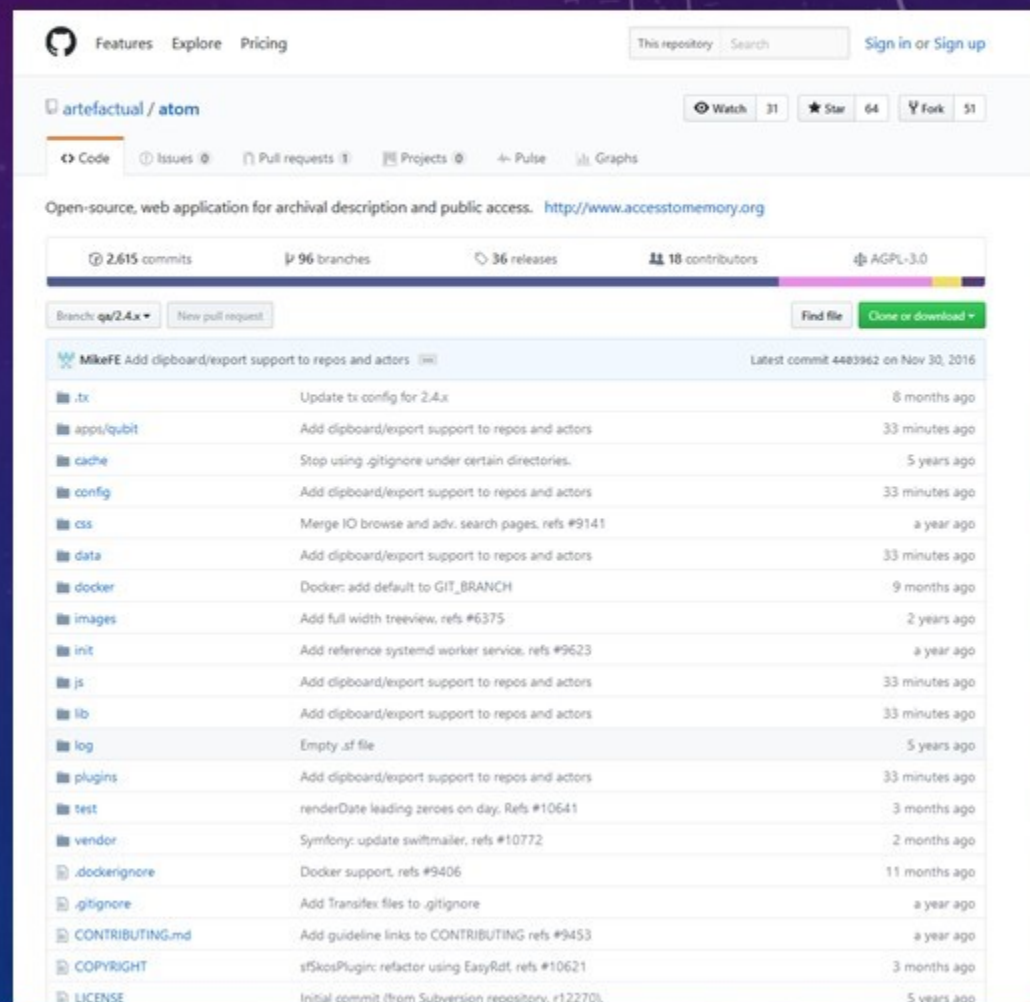
We'll do this by running some commands in our Vagrant terminal.

Read more about the AtoM code repository on our wiki:

- https://wiki.accesstomemory.org/Resources/Code_repository

See our public code repository on GitHub:

- <https://github.com/artefactual/atom/>



The AtoM public code repository on GitHub

Updating the Vagrant Box with the Latest Atom Code

Step 1: Navigate to the atom directory from the root vagrant directory

```
> cd atom
```

Step 2: Pull in the latest AtOM code

```
> git pull --rebase
```


Updating the Vagrant Box with the Latest Atom Code

Step 3: Purge the current database and run the SQL upgrade task

```
> php symfony tools:purge --demo
```

```
> php symfony tools:upgrade-sql
```

WHY?

There have been changes to the database since the 2.3 release. The first task will purge the current database and then re-add the demo user (so you can log into the user interface), and the second task will run a task to upgrade the MySQL database to the latest schema version.

Updating the Vagrant Box with the Latest Atom Code

Step 3: Clear the application cache and restart all services

Clear the application cache:	> php symfony cc
Restart the webserver (NGINX):	> sudo systemctl reload nginx
Restart PHP-FPM:	> sudo systemctl restart php7.0-fpm
Restart the memory caching engine (memcached):	> sudo systemctl memcached restart

Updating the Vagrant Box with the Latest Atom Code

Step 4: Rebuild the theme and repopulate the search index

Rebuild the base (Dominion) theme CSS:	> make -C plugins/arDominionPlugin
Repopulate the search index:	> php symfony search:populate

Congratulations! Your AtoM Vagrant box should now be up to date!



"Don't make me laugh...!!!" by DigiTaL~NomAd
<https://www.flickr.com/photos/urban-spaceman/3682523624>

Shutting Down Vagrant



close the PuTTY terminal

In your Windows terminal, enter:

```
> vagrant halt
```



Exit the SSH session: `> exit`

Shut down Vagrant: `> vagrant halt`

Wait until the command prompt returns, indicating that the box has successfully shut down. You're done! Now you can close the terminal.

Using Vagrant Next Time

Now that all the dependencies are installed and the box has been updated:



```
> cd Desktop/vagrant-2.4
```

```
> vagrant up
```

Open PuTTY and launch your saved AtOM Vagrant box settings



```
> cd Desktop/vagrant-2.4
```

```
> vagrant up
```

```
> vagrant ssh
```



```
> cd ~/Desktop/vagrant-2.4
```

```
> vagrant up
```

```
> vagrant ssh
```

Vagrant box Credentials:

- Username: `vagrant`
- Password: `vagrant`

Open AtOM in your Browser – URL: <http://10.10.10.10>

- Username: `demo@example.com`
- Password: `demo`

Further Resources

AtoM Vagrant documentation:

- <https://www.accesstomemory.org/docs/latest/dev-manual/env/vagrant/>

AtoM Command-Line Tutorial Videos

- <https://www.youtube.com/playlist?list=PLZiwlG5eSMeyeETe15EsEBSu5htPLK-wm>

