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.

https://www.vagrantup.com/about.html

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.



https://www.virtualbox.org/wiki/Virtualization

The AtoM Vagrant Box



WintualBox

AtoM and all of its dependencies....

Are packaged as a Vagrant box... Which is run by VirtualBox as a virtual machine...

And accessed via SSH and/or a web browser.

Installing the Atom Vagrant Box

Step 1: Download and Install VirtualBox

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



Step 2: Download and Install Vagrant

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



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)



What is SSH?

SSH stands for <u>Secure SH</u>ell. 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

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



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."

- Session	Basic options for your PuT	TY session
Logging	Specify the destination you want to o	connect to
Keyboard Bell	10.10.10.10	22
Features Window	Connection type:	SSH OSerial
Appearance Behaviour Translation	Load, save or delete a stored session Saved Sessions	n
Selection	AtoM Public Vagrant box	
Colours	Default Settings AtoM Public Vagrant box	Load
Data Proxy		Save
Rlogin ⊛SSH		Delete
Serial	Close window on exit: Always Never Onh	y on clean exit

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.

? >
Options controlling character set translation Character set translation Remote character set: UTF:3 (Codepages supported by Windows but not listed here, such as CP866 on many systems, can be entered manually) Treat CJK ambiguous characters as wide Cape Lock acts as Outilic switch
Adjust how PuTTY handles line drawing characters Handling of line drawing characters: Use Unicode line drawing code points Poor man's line drawing (+, - and I) Font has XWindows encoding Use font in both ANSI and OEM modes Use font in OEM mode only Copy and paste line drawing characters as lqqqk

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.

Putty 10.10.10.10 - Putty

Using username "vagrant". vagrant@10.10.10.10's password:

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!

Using username "vagrant". vagrant@10.10.10.10's password: Welcome to Ubuntu 14.04.4 LTS (GNU/Linux 4.2.0-42-generic x86_64)

* Documentation: https://help.ubuntu.com/ New release '16.04.2 LTS' available. Run 'do-release-upgrade' to upgrade to it.

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AtoM 2.x

- Web: https://www.accesstomemory.org
- Docs: https://www.accesstomemory.org/docs
- AtoM: http://10.10.10.10

Last login: Wed Mar 8 16:29:23 2017 from 10.10.10.1 [~] vagrant\$

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

10.10.10.10		
n Demo Browse v Search	٩	
Browse by	Welcome to the AtoM Online Demo!	
Archival descriptions People and organizations Archival institutions Subjects Places Digital objects Functions Popular this week Kentekerki (Kocki) Kenerik & Kenerik	The version hosted here at http://demo.accesstomemory.org/ is an easy way to test the latest release of the AtoM software. You are free to add and change any of the sample data. However, please note that the website will automatically reload the default data every hour, on the hour. So any data that you enter yourself will not be permanently saved. Additionally, there may be more than one demo user logged-in at the test same time, so you may see data changes made by others while you are using the software. The demo site is publicly edited and unmoderated - Artefactual Systems accepts no responsibility for the content created by its users. For reasons of security, the digital object link and multiple digital objects import features are currently disabled on the demo site. Additionally, the Import XML and CSV feature is also disabled for reasons of security. Users that wish to test these features must download the Virtual Appliance and run AtoM on your personal computer.	
Family 2 visits • Kantokoski (Koski) Family 1 visits	Log in You can log in with full administrator privileges using the following email address and password, email: demo@example.com password: demo You can login with full translate privileges using the following email address and password, email: translate@example.com password: translate Instructions Consult the online user manual for instructions and to learn	
	more about the features that are available in the AtoM latest release. Join the discussion AtoM is an open source software project in active development. We value community contribution and participation. If you find any bugs, have new feature requests or would like to help out with software development, documentation or translation, please post a	

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:

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

Features Explore	Pricing		This repository Search		Sign	in or Sig	an u
artefactual / atom			Watch 31	★ Star	64	¥ Fork	51
O Code ① Issues @	🖺 Pull requests 👔 🛛 📃 Proj	ects (Ø) - + Pulse - Jill G	iraphs				
een-source, web applicatio	n for archival description ar	nd public access. http://w	ww.accesstomemory.org				
@ 2.615 commits	1/2 96 branches	♦ 36 releases	11 18 contributors		∯ AG	°L+3.0	
kench: qa/2.4.x • New pull req	piett			Find file	Oon	e or downlo	ed •
👷 MikeFE Add dipboard/expor	rt support to repos and actors		Lates	t commit 448	3962 of	n Nov 30, 2	2016
in .tx	Update tx config for	2.4.x				8 months	990
appt/qubit	Add dipboard/export support to repos and actors				3	3 minutes	ago
cache	Stop using .gitignore under certain directories.					5 years	ago
config	Add dipboard/export support to repos and actors			33 minutes ag			ago
CSS	Merge IO browse and adv. search pages, refs #9141					a year	ago
data	Add clipboard/export	support to repos and actors			3	3 minutes	ago
docker	Docker: add default t	o GIT_BRANCH				9 months	ago
images .	Add full width treevie	rw. refs #6375				2 years	ago
init init	Add reference system	nd worker service, refs #9623				a year	ago
in ja	Add clipboard/export	support to repos and actors			3	3 minutes	ago
in lib	Add clipboard/export	support to repos and actors			3	3 minutes	əgo
in log	Empty .sf file					5 years	ago
plugins	Add dipboard/export support to repos and actors				3	3 minutes	ago
in test	renderDate leading 2	renderDate leading zeroes on day. Refs #10641				3 months	ago
vendor	Symfony: update swi	Symfony: update swiftmailer, refs #10772				2 months	ago
dockerignore	Docker support, refs	Docker support, refs #9406			1	1 months	ago
julignore	Add Transitex files to .gitignore					a year	990
CONTRIBUTING.md	Add guideline links to	o CONTRIBUTING refs #9453				a year	ago
COPYRIGHT	stSkosPlugin: relactor using EasyRdL refs #10621				3 months	900	

The AtoM public code repository on GitHub

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

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.

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

Step 4: Rebuild the theme and repopulate the search index

Rebuild the base (Dominion) theme CSS: > make -C plugins/arDominionPlugin

Repopulate the search index: > pl

> 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:



> vagrant up

Open PuTTY and launch your saved AtoM Vagrant box settings

Vagrant box Credentials:

- Username: vagrant
- Password: vagrant

> cd Desktop/vagrant-2.4

> vagrant up

> vagrant ssh

> cd ~/Desktop/vagrant-2.4

> vagrant up

> vagrant ssh

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

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

Further Resources

AtoM Vagrant documentation:

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

AtoM Command-Line Tutorial Videos

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

