Assuming <u>VirtualBox</u> is already installed on your machine, we will create a new drupal instance named master. (**Note:** steps below are based on a MAC, see <a href="https://www.drupal.org/node/2008792">https://www.drupal.org/node/2008792</a> for alternatives).

# Step 1: Download Vagrant Drupal Development

- 1. **ONLY works with the latest Development release** (8.x-1.x-dev at the time of this writing): https://www.drupal.org/project/vdd
- 2. Unzip and move VDD folder to the directory of your choice.

## Step 2: Declare new site(s) in config.json

- 1. Open vdd/config.json
- 2. Update config.json to include info for a new site named **master** add a comma after the drupal7 host info and add the master info:

\*To add info for additional sites, copy the example above and place a comma after the final closing bracket then replace master with the name of the new site.

The config.json file should look similar to the image below - **notice the added comma**:

```
"alias": ["www.drupal7.dev"]
37
38
             }
39
           },
           "master": {
40
41
             "account_name": "root",
             "account_pass": "root",
42
43
             "account_mail": "box@example.com",
             "site_name": "Master VDD",
             "site_mail": "box@example.com",
             "vhost": {
46
               "document_root": "master",
               "url": "master.dev",
48
49
               "alias": ["www.master.dev"]
50
52
54
55
```

#### Step 3: Change Drush to Version 6.x

- 1. Drush 6.0.2 is installed on our servers and doesn't speak well with the VDD default so we have to change it.
- 2. Navigate to vdd ► chef ► cookbooks ► core ► vdd ► recipes and open drush.rb
- 3. Change line 8: reference "master" to reference "6.x"

```
5  # Install drush-master, required for drush with D8 sites.
6  git "/usr/local/bin/drush-master" do
7  repository "https://github.com/drush-ops/drush.git"
8  reference "6.x"
9  action :sync
10 end
```

4. Save the file!

### Step 4: Press the Red Button

- 1. Turn on the Vagrant machine by navigating to the vdd folder in terminal
  - a. \$ vagrant up
- 2. This step takes some time depending on host machine/connection etc... (and even more time if this is the first time using vagrant!)
- 3. Eventually you will see a line that looks something like this: Install finished! Visit http://192.168.44.44 in your browser.
  - a. Note: Skip to Step 5 while you wait...

# Step 5: Update hosts file

- 1. We have to add the new domains to our hosts file to view them in the browser.
- 2. Open Finder and Go to Folder... (Shift + CMD + G) type in: /private/etc/hosts
- 3. Open the hosts file with your program of choice and add the following lines:

192.168.44.44 master.dev

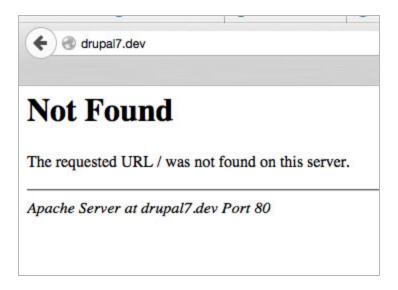
192.168.44.44 www.master.dev

```
# Sites declared in VDD's config.json
12 192.168.44.44 drupal8.dev
13 192.168.44.44 www.drupal8.dev
14 192.168.44.44 drupal7.dev
15 192.168.44.44 www.drupal7.dev
16 192.168.44.44 www.master.dev
17 192.168.44.44 www.master.dev
18 # End of sites declared with VDD
```

- 4. If you are adding more than one site per the **Declare new site(s) in config.json** instructions, add them at this time using the format above.
- 5. Save the file!

## Step 6: Welcome to VDD!

- 1. Assuming the vagrant box provision from Step 4 has completed, we can view it in our browser
- 2. Open the browser of your choice and navigate to http://192.168.44.44/
- 3. You will see the list of Configured Sites with the host info you just added per Step 5
- 4. Clicking on one of the dev links will bring you to a Not Found page



5. This is working as it should, there is no information in the folder for the browser to pull up.

## Step 7: Update the File System to NFS

- 1. The default file system can be very slow for running drupal, so we change this to NFS
- 2. Locate config.json in the vdd folder and open it.
- 3. On line 9 change "type": "default" to "type": "nfs"

```
1 {
2    "vm": {
3     "ip": "192.168.44.44",
4    "memory": "1024",
5     "synced_folders": [
6     {
7          "host_path": "data/",
8          "guest_path": "/var/www",
9          "type": "nfs"
10     }
11     },
```

- 4. Save the File!
- 5. Open Terminal and navigate to the vdd directory and reload vagrant
  - a. \$ vagrant reload
- 6. You will be prompted to enter your password (requirement of the new nfs file structure). This is the same password that you would normally use to log in to your machine.

#### Step 8: Provision the new Drupal site

- 1. Open Terminal and navigate to the vdd directory
- 2. SSH into the virtual machine:
  - a. \$ vagrant ssh
- 3. Navigate to the sites directory
  - a. \$ cd ~/sites
- 4. Use drush to download and install the latest version of drupal to master
  - a. \$ drush dl drupal-7 --drupal-project-rename="master" -y
    - i. If there is already a folder named master this will overwrite it with a fresh install
  - b. \$ drush @master si standard -y
- 5. Visit the newly provisioned site in your favorite browser: <a href="http://master.dev/">http://master.dev/</a>

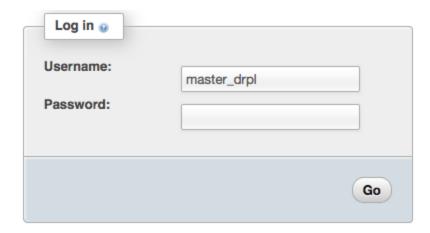
#### Step 10: Copying A Site into Vagrant

There are a few ways to copy a site into vagrant including:

- Manually Transfer Database and Files
- Using Drush to Transfer the Database and Files
- Using Git Clone to Pull Down a Folder From a Git Repository

#### Manual Database and File Transfer

- a. Visit <a href="https://umwebdev.oit.umass.edu/phpmyadmin/">https://umwebdev.oit.umass.edu/phpmyadmin/</a> and login via shibboleth
- b. Once you reach the welcome screen phpMyAdmin login appears
  - The login info can be found by opening settings.php via ftp on umwebdev at: sitename ► sites ► default
  - ii. Use the database username and password to login



- c. Click on the database name from list on the left (ignore information\_schema)
- d. Click the Export tab and click Go
- e. Download the file (master\_drpl.sql) to your computer and logout of phpMyAdmin

  \*if you don't log out you might think you are in vagrants phpMyAdmin and drop all the tables on the wrong site...

f. Open the file and change the Database name to master (it was initially master drupal).

```
19 --
20 -- Database: `master`
21 --
```

#### g. Save the file!

- h. Navigate back to the vagrant phpMyAdmin at <a href="http://192.168.44.44/phpmyadmin">http://192.168.44.44/phpmyadmin</a> and login using **root** as the username and password
- i. Click the database name **master** from the list on the left and scroll down to the bottom of the structure (default) tab.
- j. Click Check All and choose drop from the dropdown menu. Double check that the URL begins with 192.168.44.44 - this will DELETE the entire database and you don't want to do this on the wrong server! Click Yes to confirm
- k. Click the **Import** tab and choose the file you downloaded from the steps above (master\_drpl.sql).
- I. Click Go and with a little luck you will see: Import has been successfully finished
- m. Open up the FTP program of your choice and copy the entire **sites** folder from /cwis/http/remote/htdocs/master/sites to your desktop.
- n. Visit the vdd folder on your machine and navigate to **settings.php** at vdd/data/masters/sites/default/settings.php
- o. Open the file and copy the database info

```
215
      $databases = array (
216
        'default' =>
217
        array (
          'default' =>
218
219
          array (
220
             'database' => 'master',
221
            'username' => 'root',
                        => 'root'
222
             'password'
            'host' => 'localhost',
223
224
225
            'driver' => 'mysql',
             'prefix' => '',
226
227
          ),
228
        ),
229
      );
```

- p. Delete the entire **sites** folder at vdd/data/master/sites and move the **sites** folder from your desktop to replace it.
- q. Navigate to **settings.php** and open it
  - i. Replace the database info with the info we copied above.
  - ii. Scroll down to the bottom of the file and delete all the memcache info.

```
include DRUPAL_ROOT . '/../memcache/config.php';

sconf['memcache_servers'] = get_oit_memcache_servers();

sconf['cache_backends'][] = 'sites/all/modules/contrib/memcache/memcache.:

sconf['cache_default_class'] = 'MemCacheDrupal';

sconf['cache_class_cache_form'] = 'DrupalDatabaseCache';

sconf['memcache_bins'] = array('cache' => 'default',);

sconf['memcache_key_prefix'] = 'master_drpl';

sconf['memcache_key_prefix'] = 'master_drpl';
```

- r. Save the file!
- s. Open terminal and navigate to vdd and SSH into the box
  - i. \$ vagrant ssh
- t. Navigate to the master site, remove authentication modules and clear the cache
  - i. \$ cd ~/sites/master
  - ii. \$ drush dis memcache memcache admin shib auth shib provision -y
  - iii. \$ drush cc all
- u. Create a one time login via drush
  - i. \$ drush uli
- v. After logging in navigate to master/admin/people and add a new password to your profile.
- w. Jump up and down you've manually moved the site into vagrant!

#### 2. Transfer the Database and Files with Drush

- a. We need to set up a drush alias file with the information for our local site and the remote site we are pulling from as well as accessing it through a password prompt.
  - i. Open the vdd folder on your machine and navigate to vdd ► data ► master ► sites ► all
  - ii. Inside the all folder create a new folder named drush
  - iii. Create a new file named master.aliases.drushrc.php and save it inside the drush folder.
  - iv. Open the file and add **alias and authentication info** required to remotely access umwebdev.oit.umass.edu:

v. The file should look similar to the screenshot below:

```
<?php
     $aliases['dev'] = array(
       'uri' => 'master.dev',
'root' => '/var/www/master',
 6
    $aliases['remote'] = array(
       'uri' => 'umwebdev.oit.umass.edu/master',
 9
10
       'remote-host' => 'umwebdev.oit.umass.edu',
       'remote-user' => 'backd',
11
      'root' => '/cwis/http/remote/htdocs/master',
12
13
14
     $options['ssh-options'] = '-o PasswordAuthentication=yes';
```

#### vi. Save the file!

- b. Test that the file is working by opening terminal and ssh'ing into the vagrant box
  - i. Enter the master directory: \$ cd ~/sites/master and check the status of the remote server
  - ii. \$ drush @remote status
  - iii. You should be prompted for a password and will see the see the status of umwebdev.oit.umass.edu/master upon authentication.
- c. Now we copy the files and database! (Reused from Hal's Clone UDP instructions)
  - i. Run the following commands in terminal to clone the filetree:
  - drush rsync @remote @dev to sync the file tree from umwebdev/master to /var/www/master.
     The system will respond with:

You will destroy data from /var/www/master/ and replace with data from backd@umwebdev.oit.umass.edu:/cwis/http/remote/htdocs/master//

Do you really want to continue? (y/n):

• Doublecheck the directories and answer "y"

You will get no indication of progress, and the transfer may take some time. It is finished when the prompt reappears.

- ii. Run the following command in terminal to clone the database:
- drush sql-sync @remote @dev

The system will respond with:

You will destroy data in master and replace with data from master\_drpl

You might want to make a backup first, using the sql-dump command.

Do you really want to continue? (y/n):

Doublecheck the database names and answer "y"

\*For some reason this step asks to enter in the password up to 5 times (drush7 only asked once) - go ahead and enter the password as many times as required.

Again, you will get no indication of progress, and the transfer may take some time. It is finished when the prompt reappears.

d. Clear the cache with drush \$ drush cc all

**Note:** If you view the site before completing the below steps to remove memcache and shib, you may get a number of error messages. Once you've removed them and cleared the cache everything should work.

- e. Use drush to remove authentication modules:
  - \$ drush dis memcache memcache\_admin shib\_auth shib\_provision -y
- f. Clear the cache:
  - \$ drush cc all
- g. Create a one time login via drush:
  - \$ drush uli
- h. After logging in navigate to master/admin/people and add a new password to your profile.
- i. View your site at <a href="http://master.dev/">http://master.dev/</a>