

drush from the command line on MULTI-SITE
install

CORNELL DRUPAL CAMP 2013

PRESENTATION

By

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Who Am I?

- Ken Walling
- Mystical Philosopher, Bodhisattva Warrior, Husband, Father, Leader of Men, Sharer of Knowledge, Cryptocurrency Evangelist, Entrepreneur, Consultant, CISSP, GREM, Information Technologist, doer of things, keeper of stuff.
- I develop and maintain multiple Drupal installs using drush as a primary tool
- I enjoy helping folks realize visions

What are we going to talk about?

- Using drush to ease our lives as Drupal Admins and/or developers
- Installing drush
- Installing drupal using drush
- Modifying the drupal install with drush
- Using drush to back up and restore our entire drupal installation (including the MySQL database)

What are we NOT going to talk about?

- This presentation is a rehash of a couple of presentations given at the Syracuse Innovators Guild.
- They came AFTER talks about setting up a Linux Server (**LAMP**) securely
- They came AFTER presentations on setting up IPTables as a host-based Firewall
- Those topics are beyond today's scope

Just in case you got here late...

- Drupal is a database backed content management system (CMS) written in PHP
- Drupal is modular and themable and extremely customizable
- The multi-site install I'm talking about is one in which one installation of drupal runs several virtual hosts on an Apache Web server, each with their own MySQL database for user accounts, content, etc.

What else should be said?

- I am a perfect human – and by that, I mean I make mistakes. Mistakes are baked into our makeup, to keep us humble (and enable genius).
- I use notes to do these installs. My notes have become presentations and are on their way to becoming scripts.
- I am presenting what I have done. That which has worked for me – there may be better ways.
- Now... on to drush

What is drush ?

- The “drupal shell” (DRUsh)
- Command line tool for manipulating all facets of a drupal installation
- Information can be found at **drush.org**
- See also:
 - <http://drupal.org/project/drush>
 - [**https://drupal.org/security**](https://drupal.org/security)

Why drush?

- Speed, Accuracy, Repeatability, Ease.
- It takes significantly less time to do the same task with drush that you might otherwise do via the Drupal web interface.
- It is a skill you can build on over time.
- The basics are easy to pick up.

One Way To Get drush installed

- On Ubuntu Server (a Debian based Linux distribution) you can use:
- `$ sudo apt-get install drush`
- The version of drush you get may be out of date, but – you can use drush to update drush
- You will need to ensure proper permissions in order for drush to be able to update itself (next slide)

On Ubuntu you will need write privs to /usr/share/drush

- Some helpful commands:
- `$ which drush`
- `$ drush --version`
- `$ drush dl drush --destination='/usr/share/'`
- The last command above will download (dl) drush and put it into the destination.
- You will be prompted that the location already exists, and asked if you would like to overwrite it.
- You do.

Other ways to install drush

- I like using apt-get when I can.
- If you like pear, you can use PEAR
- `$ pear channel-discover pear.drush.org`
- `$ pear install drush/drush`
- Check out the **README** on the drush Github site for instructions for manual installation, if you need to - or want to – do it that way.

Once We Have drush installed

- `$ drush [options] <command> [argument1] [argument2]`
- `$ drush help`
- `$ drush topic`

Lets install Drupal using drush

- Make sure you can write to `/var/www`
- Change your working directory to be `/var/www/`
- `$ drush dl drupal`
- Recursively change the group ownership on the drupal directory to be the `www-data` group (Apache User)
- `$ sudo chgrp www-data -R ./drupal`
- You should remove permissions to “other” which are not needed. Everything should be accessed by the Apache user (`www-data` on an Ubuntu system).

What do we have so far?

- Drush has been installed and potentially upgraded.
- Apache is operating out of /var/www, in this example, and drupal is now installed there.
- Your Apache VirtualHosts should point to /var/www/drupal as their root directory
- We need a database for each of our sites, let's set one up
- We will create a db named “demo” that will be administered by a user named “demogod” that has a password of “wordofgod”

Create a MySQL database

- `$ mysql -u root -p`
- `mysql> create database demo;`
- `mysql> grant all on demo.* to 'demogod' identified by 'wordofgod';`
- `mysql> flush privileges;`
- `mysql> quit`
- `$`

drush site-install

- With this basic command we could create a new drupal site. (But there is a more complete command up next.)
- `$ drush site-install --db-url=mysql://demogod:wordofgod@localhost/demo`
- That would get us a site – but we would still have a bunch of mundane things to configure; so, we will opt for a longer string to supply those additional configurations
- See: <http://www.drush.org/#site-install>

Create a Drupal site with drush!

- `$ cd /var/www/drupal`
- `$ drush site-install --db-url=mysql://demogod:wordofgod@localhost/demo --site-name="Temple of the DemoGod" --site-mail="webmaster@temple.flashserv.net" --account-name="demogod" --account-pass="wordofgod" --account-mail="demogod@temple.flashserv.net" --sites-subdir="temple.flashserv.net"`

Lets add “all the things” - with drush

- `$ drush dl token pathauto devel imce backup_migrate exclude_node_title libraries ckeditor views webform colorbox views_slideshow media smtp`
- *notice the next command we omit token
- `$ drush pm-enable pathauto devel(...and the rest)`
- *drush adds it as a dependency
- `$ drush pm-info pathauto`
- Using the above command we see it is enabled

Lets change the theme with drush

- `$ drush dl marinelli`
- `$ drush pm-enable marinelli`
- `$ drush variable-set theme_default marinelli`

Lets check the status and upgrade Drupal

- Look especially for errors and warnings after running:
- `$ drush core-requirements`
- `$ drush core-status`

- The following command will update the core drupal install
- `$ drush up drupal`

A bit about archive-dump and archive-restore

- The archive is of both the file system and the database(s)
- Archive-dump will backup your code, files, and database into a single file.
- Archive-restore will restore the same. For a multi-site backup, we can choose to only restore one or more of the sites from the archive.
- The archive of the file structure starts at `/var/www/drupal` (or the root of your drupal install)

Lets back up the whole install with archive-dump (aka ard)

- Based on what we have talked about so far, our Multi-Site Drupal Install may only be running its first site, plus the default site. We will back this up as if there were already multiple sites being hosted.
- `$ drush ard @sites`
- The above command puts, as an example:
 - `20131202033037/multiple_sites.20131202_033040.tar.gz` file in our `drush-backups/archive-dump` directory, which is in our home directory.

Using archive-restore (aka arr)

- And then to restore it, we specify the archive tar.gz file we previously created, and the site name.
- This command should be run from /var/www as it will replace the entire drupal file system. You may need or want to delete the entire drupal directory before running the restore.
- I suggest you look up ard and arr on drupal.org and play with all of the options on a dev site prior to relying on it.
- `$ drush arr ~/drush-backups/archive-dump/20131202033037/multiple_sites.20131202_033040.tar.gz`

Omega theme and Omega-Tools module

- Just a quick aside...
- Omega is a responsive base theme (and mostly beyond our scope).
- The Omega-tools module works with drush to create sub-themes (which are a requirement of using Omega)
- `drush omega-subtheme "Temple of the DemoGod" --destination=temple.flashserv.net`
- The above will place the newly created subtheme in the `sites/temple.flashserv.net/themes` directory.

Thank You!

- I hope this short presentation provided enough information to illustrate the benefits of using drush.
- This is really just the tip of the iceberg.
- Learn more at <http://drush.org>