Self Hosting Beyond the Website

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Slides: https://link-to.xyz/shslides

Who Am I?

- WordPress Full Stack Developer for STAT
- Formerly DevOps & WordPress dev for Oomph
- Linux enthusiast
- Lots of experience with web servers

What will I talk about?

- Hosting your website vs hosting your entire server
- Where to look for hosting
- Demo of server setup
- Questions

Why not shared hosting?

Shared hosting means one server to host them all.

Reverse IP Domain Check

	Control of the Color		
CD .			

Found **216** domains hosted on the same web server as bostonwp.org (192.185.36.125).

It appears that the web server located at 192.185.36.125 may be hosting one or more web sites with explicit content. The web sites in question are highlighted in red below. There is a possibility that all of the web sites on this web server may be blocked by web filtering software. Search engine rankings for these web sites may be affected as well.

Check

acousticturnpike.com adikacommunication.com aipaerospace.com allwalksproductions.com ararelife.com askthesingleman.com beijing.hmconline.com blastus.net bobyoungphoto.com bostonwpdemo.com cambridgecapital.org careerleadershipforum.com coachiohnevans.com coyoteday.org creativeemailsignatures.com customhomephotos.com divorceandremarriagebook.com erinandtodd.haarphotography.com foster-adopt-odyssey.com gethisloveback.com glamourweave.com

haarassociates.com

Remote Address bostonwo.org

adikatourandtravel.com alarmsystemsinatlanta.com andicom.co ascotvalebeautyclinic.com auntys-fuking.fanz.in bingotramp.com blue-film.fanz.in bostonwp.org bostonwpdemo2.com canasimaging.com cintel.org.co codybiblechurch.com craftymofos.com croatianradioprogram.com dietryingracingteam.com eng.s-vent.com exst.us footballbettingcentre.com gasprovider.org gizmophiliacs.com gocomala.com hair-back-forever.com

activedevelopment.com

Reverse IP lookup from You Get Signal

So what?

- Shared resources
 - Web
 - Email
 - Database
- The actions of another site could have repercussions on your site.
- You only have control over your files and what little resources you have.

What about WordPress hosting?

- Some of the same reasons as above
- More restrictions.
- More expensive
- Prices based on combination of visits, space, or bandwidth.

Ok, but there are benefits, right?

- Hands-free on the server side
- "99% uptime" (or something like that)
- You only need to worry about your site & code

Why complete self hosting?

You have the power

- Ensure all updates are timely
- Tune your server to optimize your site performance
- One IP address for your server
- Tie in other technologies (node, python, ruby)
- Run comand line scripts (wp-cli)
- Set up multiple servers (split database and web)



What are the downsides?

- You have the keys to the castle
- Keep is secure
- Responsible for performance
- Sleep could be lost

What are my options?



- Really cheap plans
- 1-click Applications
- Several different distros
- Automatic backups
- Tons of tutorials
- Limited support



- Choose a plan, based on memory/disk size
- Multiple servers
- Lots of tutorials
- Been around for a while





- Free micro instances
- Lots of options
- Can be daunting
- Pennies per hour, based on instance



- Cadillac of VPS hosting
- Managed support
- You pay for the support

Calculator

How do I get started?

Pick a Linux distro



- Most popular
- New LTS every 2 years / support for 5
- Large amount of tutorials

debian

- Grandfather of distros
- Extremely stable
- Most Ubuntu tutorials can be used for debian

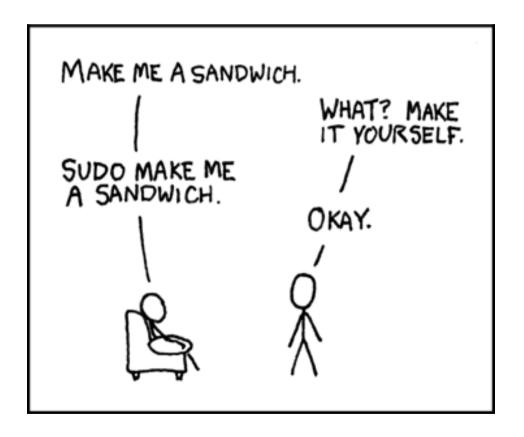


- Open Source version of Red Hat
- Extremely stable
- Supported for 10 years

Practice with Vagrant

```
1 # -*- mode: rubv -*-
 2 # vi: set ft=ruby:
 4 # All Vagrant configuration is done below. The "2" in Vagrant.configure
 5 # configures the configuration version (we support older styles for
 6 # backwards compatibility). Please don't change it unless you know what
 7 # you're doing.
 8 Vagrant.configure(2) do |config|
    # The most common configuration options are documented and commented below.
     # For a complete reference, please see the online documentation at
     # https://docs.vagrantup.com.
12
      # Every Vagrant development environment requires a box. You can search for
     # boxes at https://atlas.hashicorp.com/search.
     config.vm.box = "ub"
16
      # Disable automatic box update checking. If you disable this, then
     # boxes will only be checked for updates when the user runs
     # `vagrant box outdated`. This is not recommended.
20
     # config.vm.box_check_update = false
21
22
     # Create a forwarded port mapping which allows access to a specific port
     # within the machine from a port on the host machine. In the example below,
     # accessing "localhost:8080" will access port 80 on the guest machine.
     # config.vm.network "forwarded_port", guest: 80, host: 8080
26
                                                                                        utf-8[unix]
                                                                                                       21%
                                                                                                               15: 22
1:Vagrantfile
```

With great *sudo* comes great responsibility



- Sudo is a powerful tool.
- It has the same rights as the root user
- When following a tutorial, make sure you know what a step is asking before running a command as sudo.

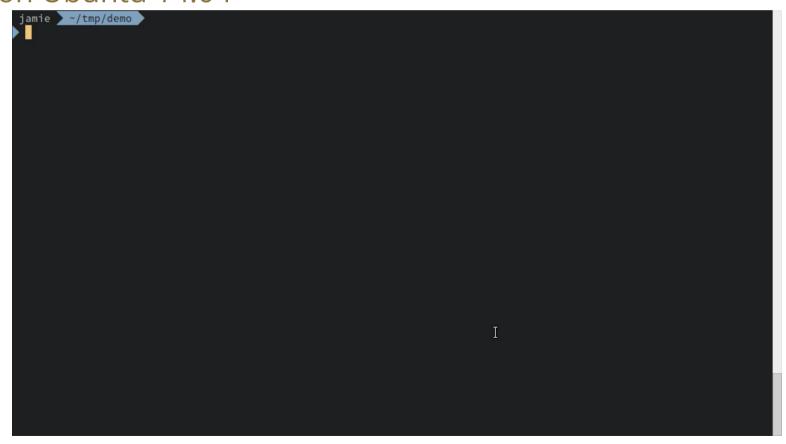
Explanation of sudo

Credit: XKCD

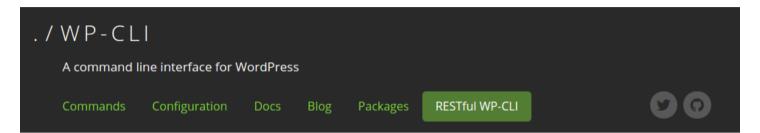
LAMP Install Demo

Taken from:

How To Install Linux, Apache, MySQL, PHP (LAMP) stack on Ubuntu 14.04



WP-CLI



WP-CLI is a set of command-line tools for managing <u>WordPress</u> installations. You can update plugins, set up multisite installs and much more, without using a web browser.

A more RESTful WP-CLI aims to unlocking the potential of the WP REST API at the command line. Project backed by Pressed, Chris Lema, Human Made, Pagely, Pantheon and many others. <u>Learn more</u> →

Requirements

- >> UNIX-like environment (OS X, Linux, FreeBSD, Cygwin); limited support in Windows environment
- >> PHP 5.3.29 or later
- >> WordPress 3.7 or later

Installing (And Upgrading)

First, download wp-cli.phar using wget or curl. For example:

curl -O https://raw.githubusercontent.com/wp-cli/builds/gh-pages/phar/wp-cli.phar

Parting Words

- Backups!
- Perform regular updates
- Monitor logs
 - NewRelic
 - Amon
 - Prometheus

Questions?

Resources:

https://link-to.xyz/shdocs