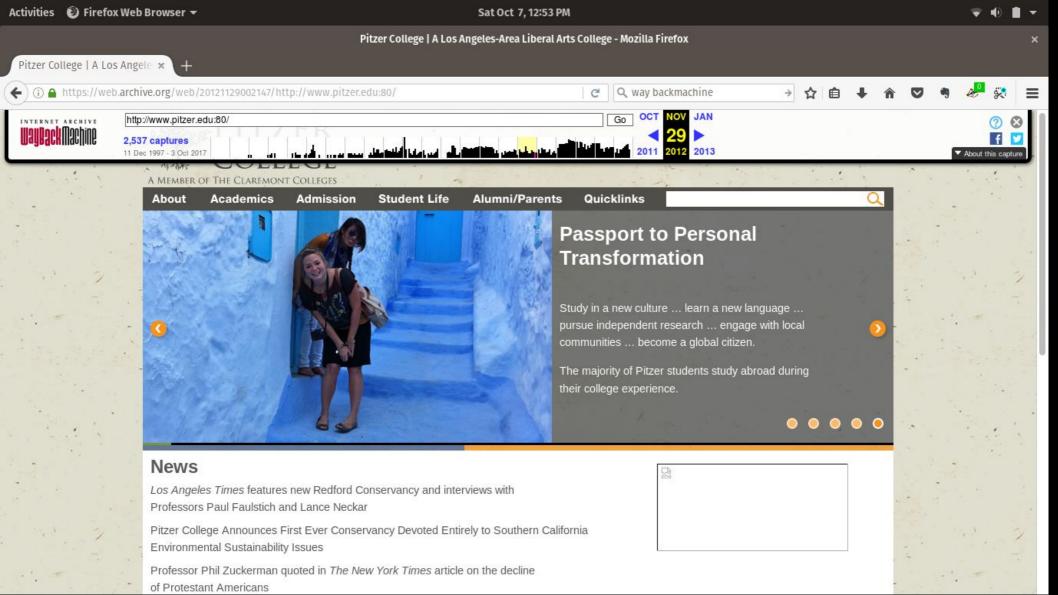# When is Multisite right for you?
Secrets and shortcuts you need to know...

Joseph Dickson
www.LinuxBookPro.com

Slides Available at http://www.linuxbookpro.com/is-multisite-right-for-you/
or http://wp.me/p6Iyaa-6m

Follow me on
Twitter & Instagram **@joe4ska**
Google Plus **+JosephDickson**

Pitzer College | A Los Angeles-Area Liberal Arts College - Mozilla Firefox

Pitzer College | A Los Angele ✕   +

https://web.archive.org/web/20121129002147/http://www.pitzer.edu:80/   way backmachine

INTERNET ARCHIVE
WayBack Machine

http://www.pitzer.edu:80/   Go

OCT **NOV** JAN
◀ **29** ▶
2011 **2012** 2013

2,537 captures
11 Dec 1997 - 3 Oct 2017

▼ About this capture

PITZER COLLEGE
A MEMBER OF THE CLAREMONT COLLEGES

About   **Academics**   **Admission**   **Student Life**   **Alumni/Parents**   **Quicklinks**

Passport to Personal Transformation

Study in a new culture ... learn a new language ... pursue independent research ... engage with local communities ... become a global citizen.

The majority of Pitzer students study abroad during their college experience.

News

Los Angeles Times features new Redford Conservancy and interviews with Professors Paul Faulstich and Lance Neckar

Pitzer College Announces First Ever Conservancy Devoted Entirely to Southern California Environmental Sustainability Issues

Professor Phil Zuckerman quoted in *The New York Times* article on the decline of Protestant Americans

What is WordPress Multisite

A multisite network is a collection of sites that all share the same WordPress installation

What is WordPress Multisite

- Sites share Plugins
- Sites share Themes
- Sites share Users

A Skyscraper Analogy
The Corporation

Single large website

Specialized resources

Each floor serves as a section of the site

Each room a post, page or feature

A Skyscraper Analogy
The Office Building

Multiple websites

Generalized resources

Each floor serves a unique website

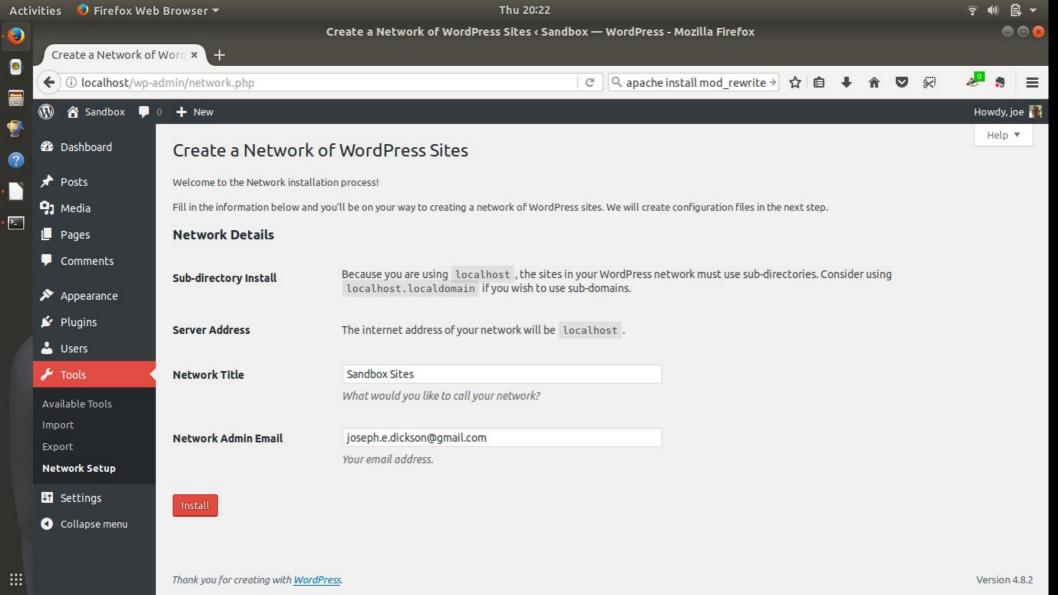Each room a post, page or feature
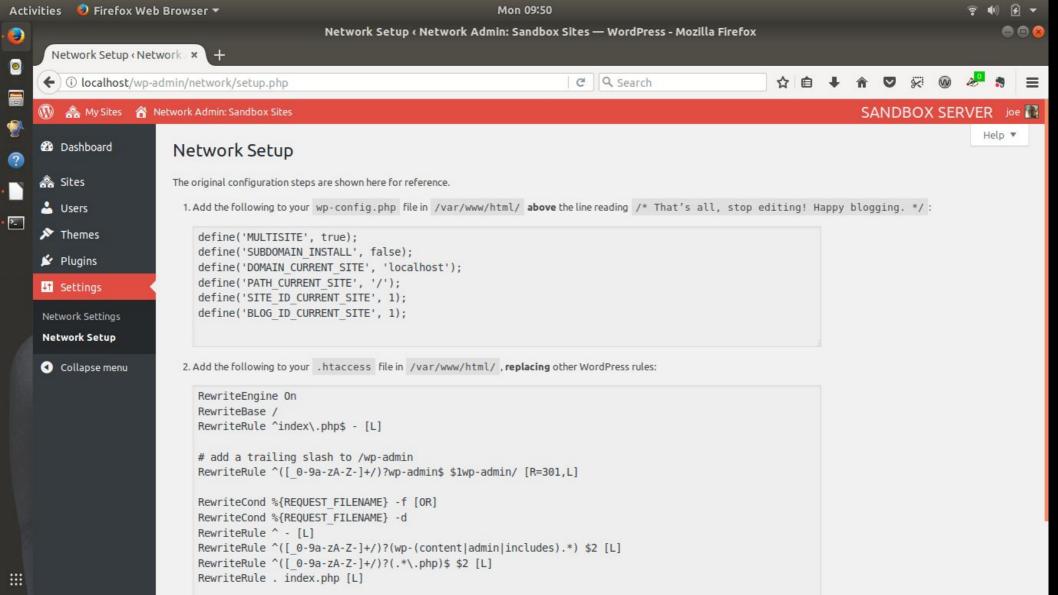
How to get started

- https://codex.wordpress.org/Create_A_Network
- Setup a new WordPress installation
- Enable Pretty Permalinks
- Enable Multisite in wp-config.php
  - define('WP_ALLOW_MULTISITE', true);
- Create A Network
- Network Setup

How to get started

```php
 * Activate WP_DEBUG for development set to true  */
define('WP_DEBUG', false);

/* Enable Multisite */
define( 'WP_ALLOW_MULTISITE', true );
/* Multisite Settings */
define('MULTISITE', true);
define('SUBDOMAIN_INSTALL', false);
define('DOMAIN_CURRENT_SITE', 'localhost');
define('PATH_CURRENT_SITE', '/');
define('SITE_ID_CURRENT_SITE', 1);
define('BLOG_ID_CURRENT_SITE', 1);

// set server environment to 'LOCAL'
define('WPLT_SERVER', 'SANDBOX');

// set admin bar color to #800080
define('WPLT_COLOR', '#E14D43');
```

```
^G Get Help    ^O Write Out  ^W Where Is   ^K Cut Text   ^J Justify    ^C Cur Pos
^X Exit        ^R Read File  ^\ Replace    ^U Uncut Text ^T To Spell   ^_ Go To Line
```

Create a Network of WordPress Sites ‹ Sandbox — WordPress - Mozilla Firefox

Create a Network of Word ✕ +

← ⓘ localhost/wp-admin/network.php C 🔍 apache install mod_rewrite →

Ⓦ 🏠 Sandbox 💬 0 + New

Howdy, joe 🖼

Help ▾

Create a Network of WordPress Sites

Welcome to the Network installation process!

Fill in the information below and you'll be on your way to creating a network of WordPress sites. We will create configuration files in the next step.

Network Details

Sub-directory Install

Because you are using `localhost`, the sites in your WordPress network must use sub-directories. Consider using `localhost.localdomain` if you wish to use sub-domains.

Server Address

The internet address of your network will be `localhost`.

Network Title

Sandbox Sites

What would you like to call your network?

Network Admin Email

joseph.e.dickson@gmail.com

Your email address.

Install

Sidebar menu:
- Dashboard
- Posts
- Media
- Pages
- Comments
- Appearance
- Plugins
- Users
- Tools
  - Available Tools
  - Import
  - Export
  - **Network Setup**
- Settings
- Collapse menu

Thank you for creating with WordPress.

Version 4.8.2

Network Setup ‹ Network ×　　＋

← ⓘ localhost/wp-admin/network/setup.php　　　　　ℂ　Ｑ Search

🅦　🏠 My Sites　🏠 Network Admin: Sandbox Sites　　　　　　　SANDBOX SERVER　joe

📋 Dashboard

Network Setup

Help ▾

The original configuration steps are shown here for reference.

🏠 Sites

👤 Users

1. Add the following to your `wp-config.php` file in `/var/www/html/` **above** the line reading `/* That's all, stop editing! Happy blogging. */` :

🖈 Themes

✎ Plugins

```
define('MULTISITE', true);
define('SUBDOMAIN_INSTALL', false);
define('DOMAIN_CURRENT_SITE', 'localhost');
define('PATH_CURRENT_SITE', '/');
define('SITE_ID_CURRENT_SITE', 1);
define('BLOG_ID_CURRENT_SITE', 1);
```

🔧 Settings

Network Settings

Network Setup

2. Add the following to your `.htaccess` file in `/var/www/html/` , **replacing** other WordPress rules:

◀ Collapse menu

```
RewriteEngine On
RewriteBase /
RewriteRule ^index\.php$ - [L]

# add a trailing slash to /wp-admin
RewriteRule ^([_0-9a-zA-Z-]+/)?wp-admin$ $1wp-admin/ [R=301,L]

RewriteCond %{REQUEST_FILENAME} -f [OR]
RewriteCond %{REQUEST_FILENAME} -d
RewriteRule ^ - [L]
RewriteRule ^([_0-9a-zA-Z-]+/)?(wp-(content|admin|includes).*) $2 [L]
RewriteRule ^([_0-9a-zA-Z-]+/)?(.*\.php)$ $2 [L]
RewriteRule . index.php [L]
```

What does Multisite look like?


```
joe@Lemur: ~

File  Edit  View  Search  Terminal  Help

mysql> SHOW tables;
+----------------------+
| Tables_in_wp_myblog  |
+----------------------+
| wp_blog_versions     |
| wp_blogs             |
| wp_commentmeta       |
| wp_comments          |
| wp_links             |
| wp_options           |
| wp_postmeta          |
| wp_posts             |
| wp_registration_log  |
| wp_signups           |
| wp_site              |
| wp_sitemeta          |
| wp_term_relationships |
| wp_term_taxonomy     |
| wp_termmeta          |
| wp_terms             |
| wp_usermeta          |
| wp_users             |
+----------------------+
18 rows in set (0.00 sec)
```

What does Multisite look like?

- **wp_blogs** Each site created is stored here
- **wp_blogs_versions** database version information
- **wp_registration_log** records the admin user created when each new site is created.
- **wp_signups** This table holds the users that have registered for a site via the login registration process

What does Multisite look like?

- **wp_site** table contains the main site address
- **wp_sitemeta** various option information, including the site admin is kept here
- **wp_users**. All users – Multisite adds two fields not in the stand-alone version
- **wp_usermeta** meta data of users for each site

What does Multisite look like?

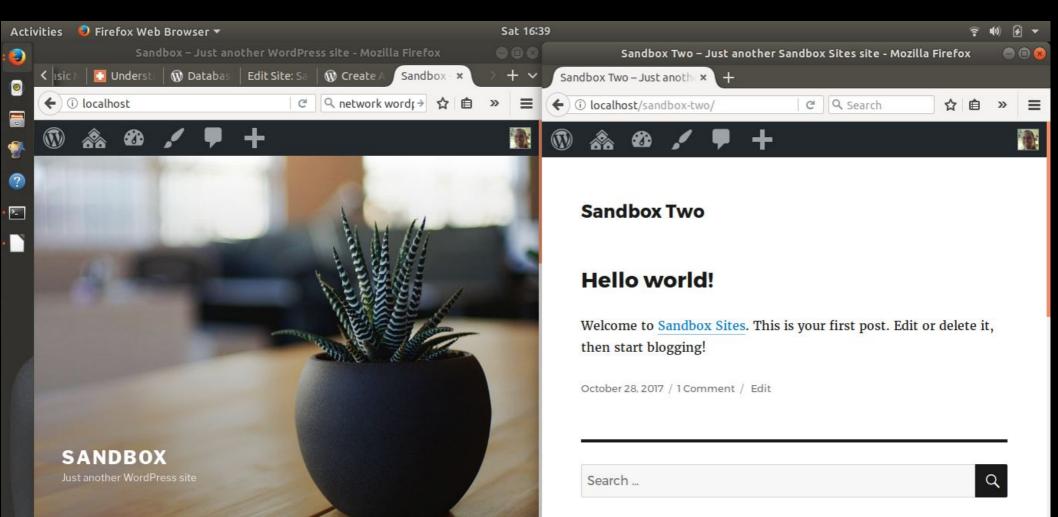- The data of the main site are stored in existing unnumbered tables. The data of additional sites are stored in new **numbered tables**

What does Multisite look like?


```
| wp_users                |
+-------------------------+
28 rows in set (0.00 sec)

mysql> mysql> SHOW tables;
+-------------------------+
| Tables_in_wp_myblog     |
+-------------------------+
| wp_2_commentmeta        |
| wp_2_comments           |
| wp_2_links              |
| wp_2_options            |
| wp_2_postmeta           |
| wp_2_posts              |
| wp_2_term_relationships |
| wp_2_term_taxonomy      |
| wp_2_termmeta           |
| wp_2_terms              |
```
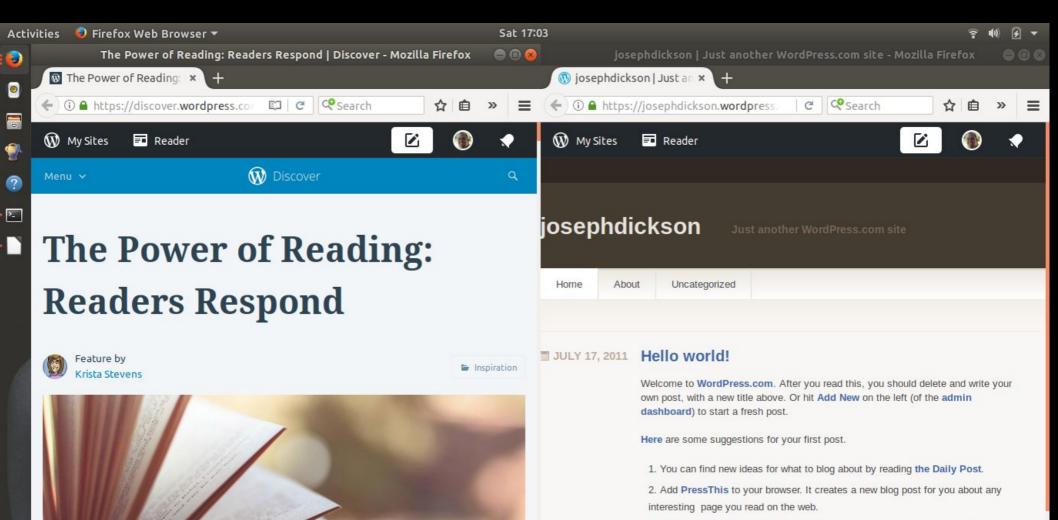
Domain Setup

- **Sub Folders**
  - www.your-site.com/**sub-folder**
- **Sub Domains**
  - **sub-domain**.your-site.com
- **Unique Domains**
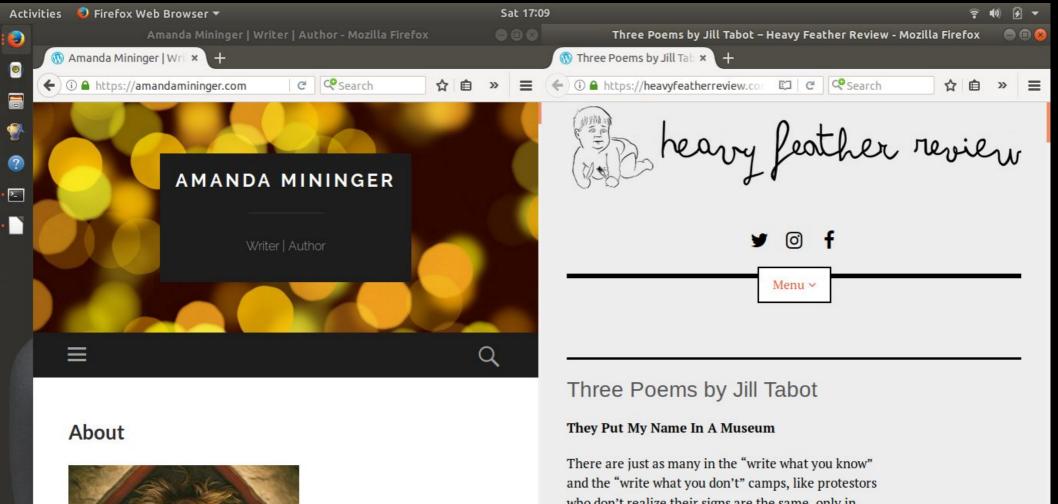 - www.**your-site.com**
  - www.**another-site.com**

Subfolder

Subdomain

Unique Domains

Amanda Mininger | Writer | Author - Mozilla Firefox   Three Poems by Jill Tabot – Heavy Feather Review - Mozilla Firefox

Ⓦ Amanda Mininger | Wri ✕   +   Ⓦ Three Poems by Jill Tab ✕   +

← ⓘ 🔒 https://amandamininger.com | C   Search   ← ⓘ 🔒 https://heavyfeatherreview.co   C   Search

AMANDA MININGER

Writer | Author

heavy feather review

Menu ⌄

About

Three Poems by Jill Tabot

They Put My Name In A Museum

There are just as many in the "write what you know"
and the "write what you don't" camps, like protestors
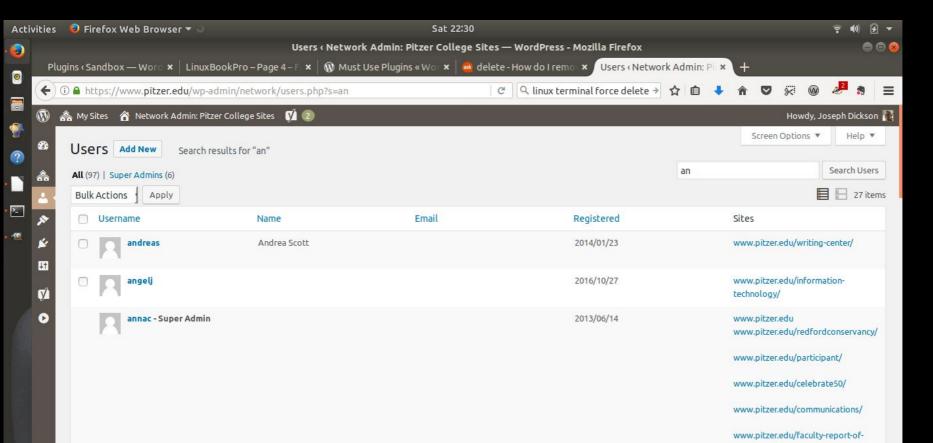who don't realize their signs are the same, only in

A Multisite Shares Stuff

- Themes and Plugins are sharable
- Every user is at least a registered guest on all sites
- Multisite shares the server uploads folder

Network Users

Users

- Users are at least a registered guest user for all sites
- Access can be elevated for any number of sites
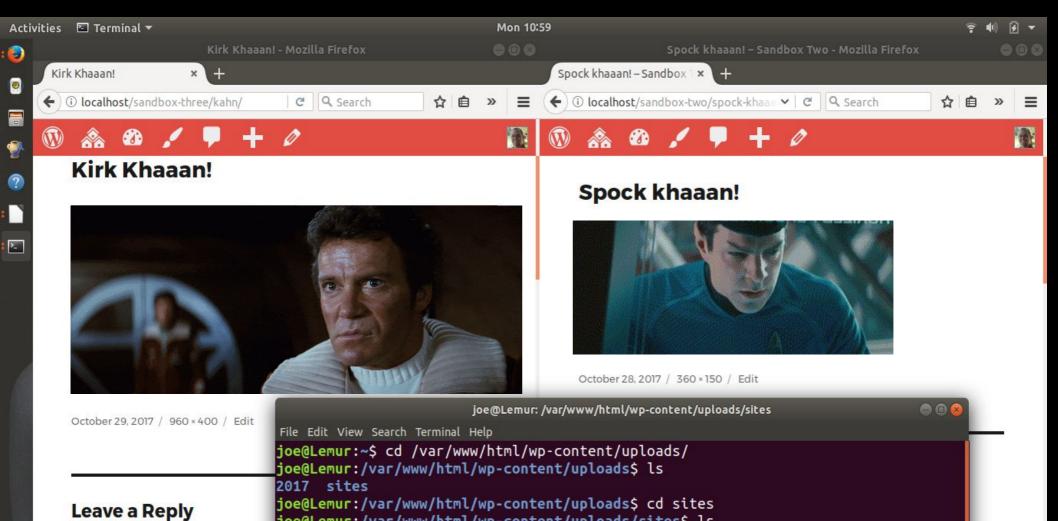- Admin bar will appear if the user is logged in

Admin

- Abilities reduced to individual sites sites
- Can't add or edit Plugins
- Can't add or edit Themes
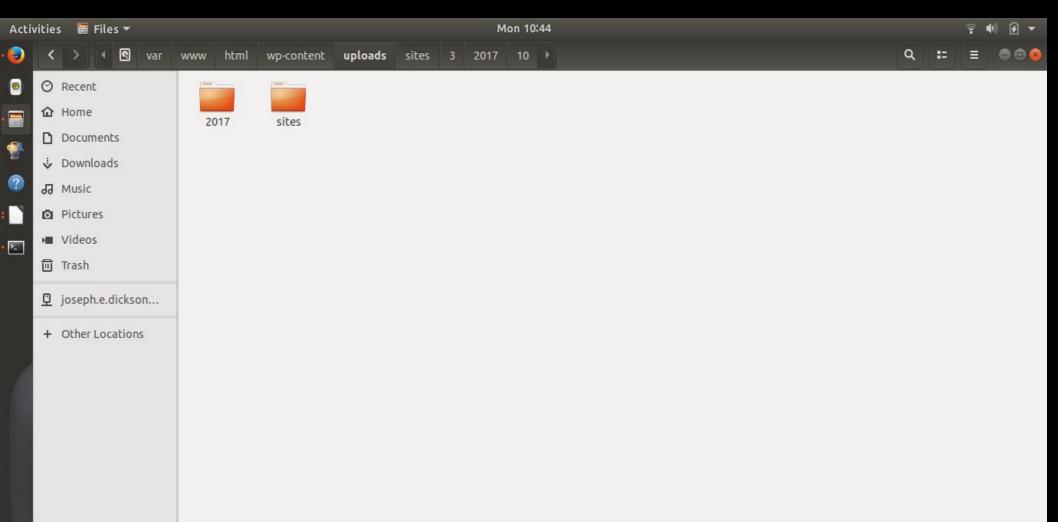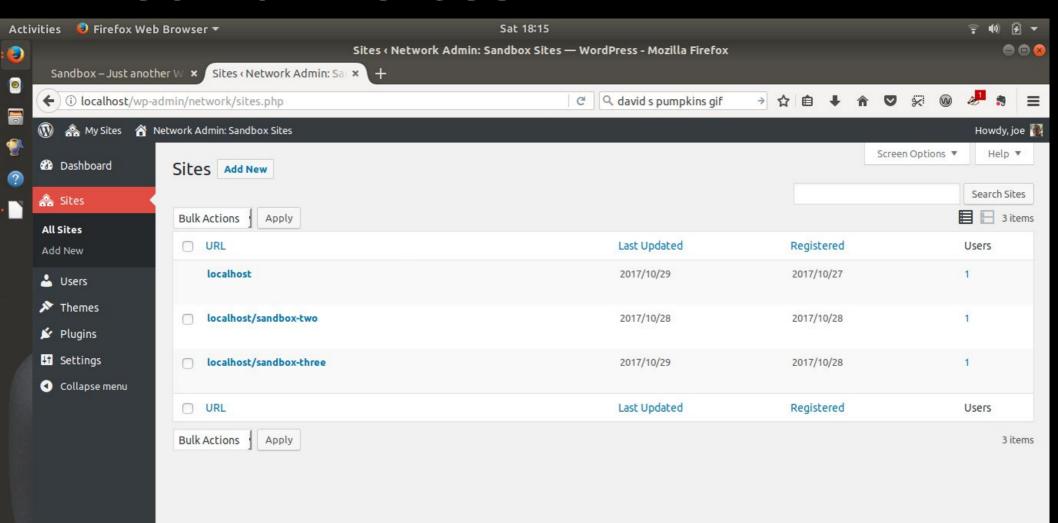- Can't access Network Admin features

Super Admin

- Replaces and demotes the traditional Admin
- Can add Themes
- Can add Plugins
- Is a Super Admin for the entire network
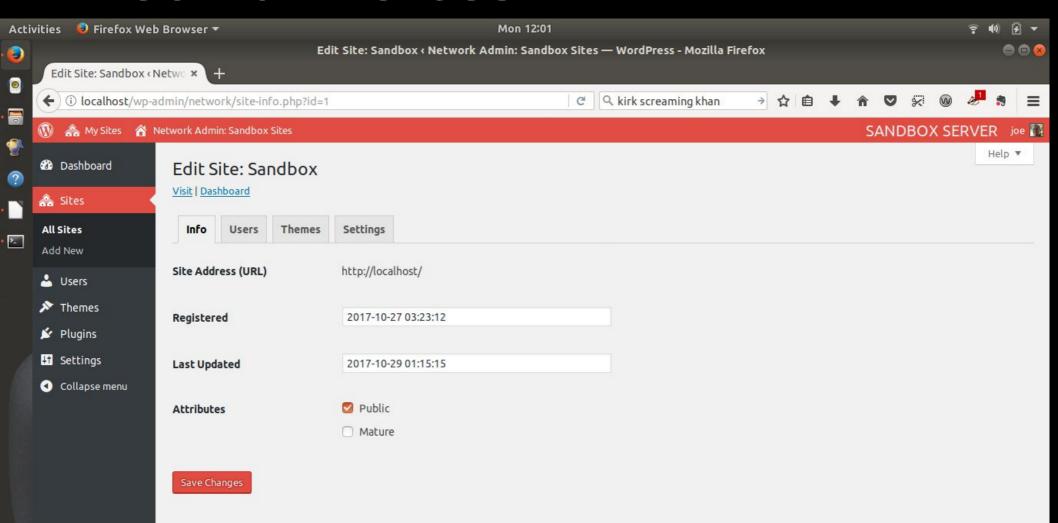- Can Access Network Admin Menu
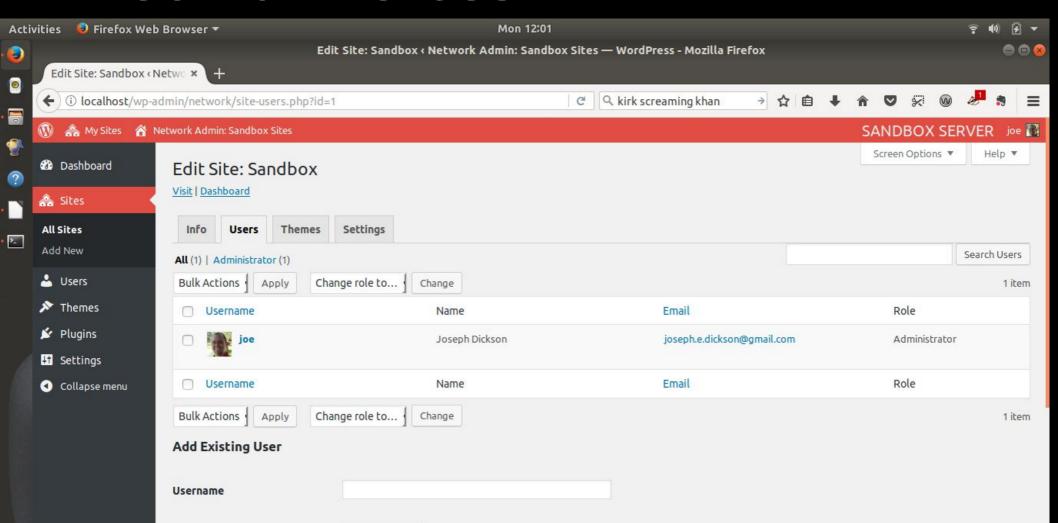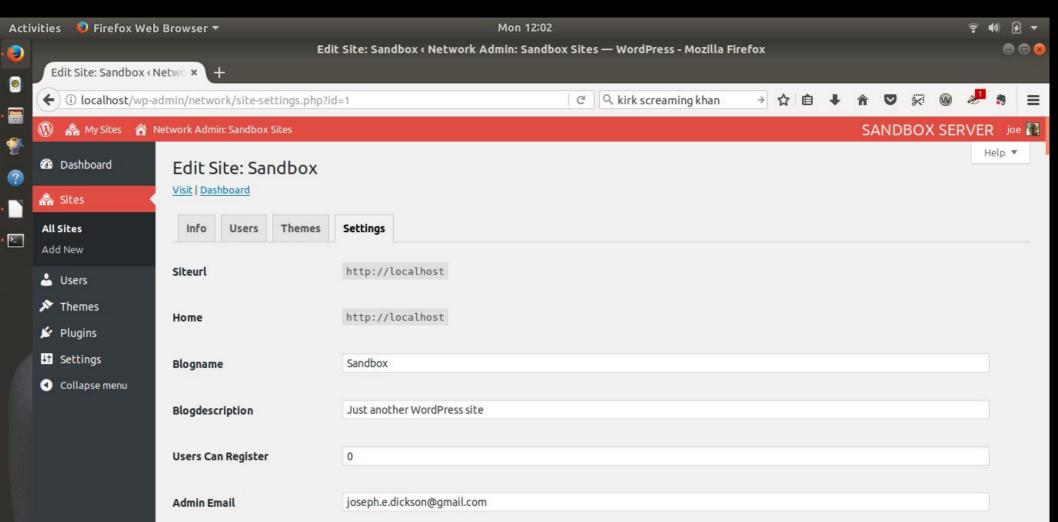
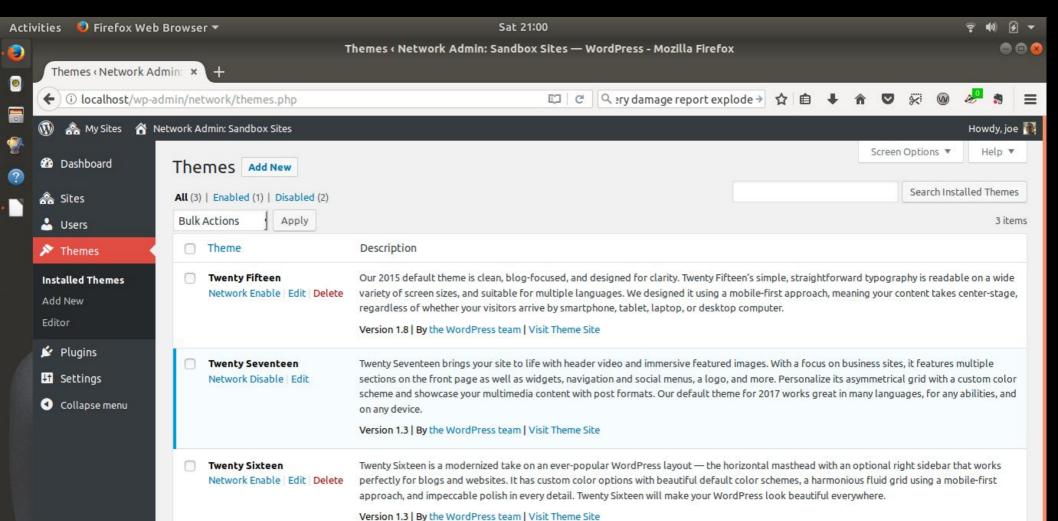# Shared Server Folders

Shared Server Folders

Network Sites

Network Sites

Network Sites

Network Sites

Network Enable Themes

Themes ‹ Network Admin: Sandbox Sites — WordPress - Mozilla Firefox

Themes ‹ Network Admin: ✕   +

← → ⓘ localhost/wp-admin/network/themes.php   ✉ | C   🔍 ery damage report explode →   ☆ 📋 ⬇ 🏠 ▼ 🎞 Ⓦ   ≡

Ⓦ 🏠 My Sites 🏠 Network Admin: Sandbox Sites   Howdy, joe 🖼

🎨 Dashboard   **Themes** Add New   Screen Options ▾   Help ▾

🏠 Sites   All (3) | Enabled (1) | Disabled (2)   [   ]   Search Installed Themes

👤 Users   Bulk Actions   Apply   3 items

🖌 **Themes**   ☐   Theme   Description

Installed Themes ☐   **Twenty Fifteen**   Our 2015 default theme is clean, blog-focused, and designed for clarity. Twenty Fifteen's simple, straightforward typography is readable on a wide
Add New   Network Enable | Edit | Delete   variety of screen sizes, and suitable for multiple languages. We designed it using a mobile-first approach, meaning your content takes center-stage,
Editor   regardless of whether your visitors arrive by smartphone, tablet, laptop, or desktop computer.

                                                    Version 1.8 | By the WordPress team | Visit Theme Site
🔌 Plugins

🎛 Settings   ☐   **Twenty Seventeen** Twenty Seventeen brings your site to life with header video and immersive featured images. With a focus on business sites, it features multiple
                         Network Disable | Edit   sections on the front page as well as widgets, navigation and social menus, a logo, and more. Personalize its asymmetrical grid with a custom color
◉ Collapse menu   scheme and showcase your multimedia content with post formats. Our default theme for 2017 works great in many languages, for any abilities, and
                                                    on any device.

                                                    Version 1.3 | By the WordPress team | Visit Theme Site

                     ☐   **Twenty Sixteen**   Twenty Sixteen is a modernized take on an ever-popular WordPress layout — the horizontal masthead with an optional right sidebar that works
                         Network Enable | Edit | Delete   perfectly for blogs and websites. It has custom color options with beautiful default color schemes, a harmonious fluid grid using a mobile-first
                                                    approach, and impeccable polish in every detail. Twenty Sixteen will make your WordPress look beautiful everywhere.

                                                    Version 1.3 | By the WordPress team | Visit Theme Site

Single Enable Themes

Edit Site: ‹ Network Admin: Sandbox Sites — WordPress - Mozilla Firefox   ⊖ ⊡ ⊗

Edit Site: ‹ Network Admin ✕   ╋

← ⓘ localhost/wp-admin/network/site-themes.php?id=3   ▦ C   🔍 ery damage report explode → ☆ ▤ ⬇ 🏠 ⛊ ✗ Ⓦ 🔖 ⁰ 🔲   ☰

Ⓦ 🏠 My Sites   🏠 Network Admin: Sandbox Sites   Howdy, joe 🖼

🎛 Dashboard   Screen Options ▼   Help ▼

🏠 Sites   Edit Site:
                          Visit | Dashboard
All Sites
Add New   ┌──────┬───────┬────────┬──────────┐
                          │ Info │ Users │ Themes │ Settings │
👤 Users   └──────┴───────┴────────┴──────────┘

📌 Themes   Network enabled themes are not shown on this screen.

🖌 Plugins   **All** (2) | Enabled (1) | Disabled (1)   [   ] Search Installed Themes

🔧 Settings   Bulk Actions ▾   Apply   2 items

◀ Collapse menu   ☐ Theme   Description

                          ☐ **Twenty Fifteen**   Our 2015 default theme is clean, blog-focused, and designed for clarity. Twenty Fifteen's simple, straightforward typography is readable on a wide variety of
                             Enable | Edit   screen sizes, and suitable for multiple languages. We designed it using a mobile-first approach, meaning your content takes center-stage, regardless of whether
                                               your visitors arrive by smartphone, tablet, laptop, or desktop computer.

                                               Version 1.8 | By the WordPress team | Visit Theme Site

                          ☐ **Twenty Sixteen**   Twenty Sixteen is a modernized take on an ever-popular WordPress layout — the horizontal masthead with an optional right sidebar that works perfectly for
                             Disable | Edit   blogs and websites. It has custom color options with beautiful default color schemes, a harmonious fluid grid using a mobile-first approach, and impeccable
                                               polish in every detail. Twenty Sixteen will make your WordPress look beautiful everywhere.

                                               Version 1.3 | By the WordPress team | Visit Theme Site

Single Site Themes

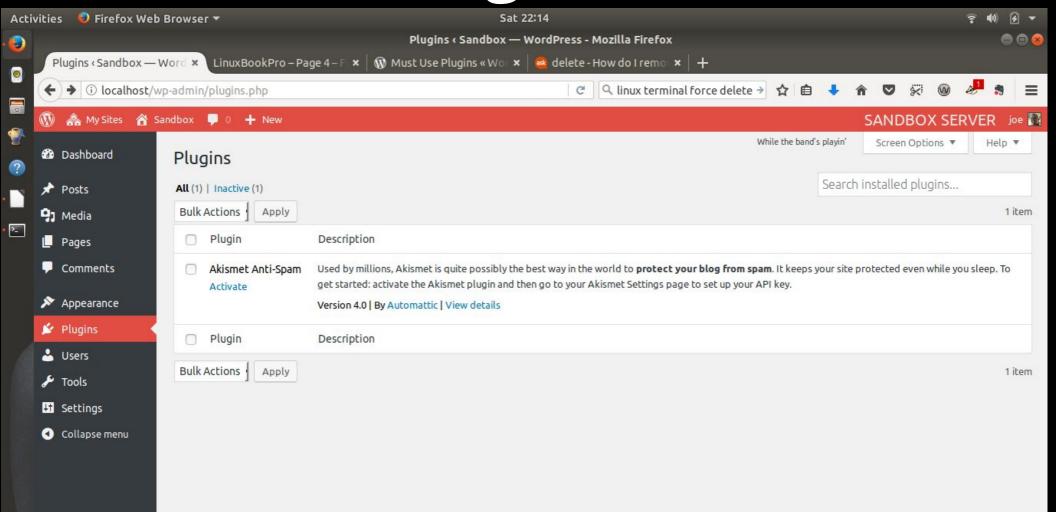# Network Activate Plugins

Manual Activate Plugins

Must Use Plugins

```
joe@Lemur: /var/www/html/wp-content/mu-plugins
File  Edit  View  Search  Terminal  Help

joe@Lemur:/var/www/html/wp-content/mu-plugins$ ls
hello.php   toolbox   wplt-loader.php
joe@Lemur:/var/www/html/wp-content/mu-plugins$ █
```

Must Use Plugins

Plugins ‹ Sandbox — WordPress - Mozilla Firefox

Plugins ‹ Sandbox — Word ✕ | LinuxBookPro – Page 4 – F ✕ | Ⓦ Must Use Plugins « Wor ✕ | ask delete - How do I remo ✕ | +

← → ⓘ localhost/wp-admin/plugins.php   C   🔍 linux terminal force delete →   ☆ 📄 ⬇ 🏠 ▼ ✂ Ⓦ   ≡

Ⓦ 🏠 My Sites 🏠 Sandbox 💬 0 + New   **SANDBOX SERVER** joe 🖼

Plugins   While the band's playin'   Screen Options ▼   Help ▼

All (1) | Inactive (1)   Search installed plugins...

Bulk Actions Apply   1 item

	Plugin	Description
☐	Plugin	Description
☐	**Akismet Anti-Spam** Activate	Used by millions, Akismet is quite possibly the best way in the world to **protect your blog from spam**. It keeps your site protected even while you sleep. To get started: activate the Akismet plugin and then go to your Akismet Settings page to set up your API key. Version 4.0 | By Automattic | View details
☐	Plugin	Description

Bulk Actions Apply   1 item

Dashboard
Posts
Media
Pages
Comments
Appearance
Plugins
Users
Tools
Settings
Collapse menu

Must Use Plugins

- Caveats include
    - Plugins don't appear in the dashboard
    - Plugins need to be manually updated
    - Activation hooks are not executed
    - Only reads php files in the **mu-plugins** ignores folders and subfolders

Advantages of Multisite

- Quickly deploy new sites
- Update all Plugins and Themes in a single dashboard
- Manage user access to edit specific sites
- Backup all sites in a single batch

Site Management

- Archive Sites
- Spam Sites
- Deactivate Sites

localhost/archived-site — Archived	2017/10/29	2017/10/28	1
localhost/spam — Spam	2017/10/29	2017/10/28	1
localhost/deactivate — Deleted	2017/10/29	2017/10/28	1

Shared Hosting

- Everything in one place
- Shared server directories
- Shared resources and bandwidth

Downsides

- It depends on your usage...
- No global menu
- Shared Users
- Shared Themes
- Shared Plugins

No Global Menus

- 5 Menus + 76 sites = a lot of menus to manage
- https://wpmututorials.com/plugins/networkwide-menu/

User Conflicts

- Users from one website on the network are also registered users on all other sites within the installation.
- This could be a concern if hosting multiple clients on one Multisite.

Portability Issues

- Tables are not interchangeable without editing
- Requires some planning to pull a site out of Multisite

wp-content is shared

- Providing access to a server's folders gives access to the entire network's uploaded content
- Media Uploads
- Themes
- Plugins

Specific website needs

- Some sites may require a unique Plugin or Theme
- This could conflict with other sites or introduce instability within your network

Resolving Theme Conflicts

- Always test a Themes before introducing it to your site
- If something breaks, deactivate the theme and try a default theme. If the problem persists it may be a plugin related issue

Resolving Plugin Conflicts

- Always test the Plugin before introducing it to to your site
- Audit Plugins regularly for errors and check if it's still actively maintained.
- Remove Plugins that don't add value to your website
- Keep a backup of older versions of a Plugin before upgrading

Tips to Avoid Catastrophe

- Backup your Multisite daily
- Update Themes and Plugins and take precautions
- Use backups to create testing servers for coding
- Never code in the live production website
- Use your browser's inspection tools and log files to hunt down possible errors

Keep it simple

Take only what you need to survive

When to use Multisite

- Single large projects
- A single client with multiple projects
- Local testing environment on your computer
- Host sites for friends and family

Maybe use Multisite?

- Short term or timely projects
- Similar websites for multiple clients
- Host projects in progress for remote reviewing

Avoid Multisite

- Private Data
- Clients who need directory access
- Using Plugins and Themes that you know are unstable
- Heavy bandwidth sites (alongside other sites with unique domains)

Avoid Multisite

- Tiny budget hosted websites
- Until you've tested it for yourself
- Sites you know will be moved to another host

Best Practices

- Install only trusted Themes and Plugins
- Audit Themes and Plugins often
- Perform daily backups
- Practice single site migrations
- Practice restoring from backups

Any Questions?

When is Multisite right for you?
Secrets and shortcuts you need to know...

Joseph Dickson
www.LinuxBookPro.com

Slides Available at http://www.linuxbookpro.com/is-multisite-right-for-you/
or http://wp.me/p6Iyaa-6m

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Google Plus **+JosephDickson**