



TEXAS A&M
TECHNOLOGY
SUMMIT

Streamline Building, Deploying, and Maintaining Your (Higher-Ed) Websites with WordPress

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AgriLife Communications

- We build modern, accessible websites which meet the needs of our users and the organization.
- We have approximately 3,764 unique users across 20 installations with 1,060 sites.

AgriLife Communications

- Building, deploying, and maintaining WordPress at this scale benefits from automation wherever possible.
- CLI tools and development frameworks can help separate concerns and improve developer sanity.

AgriLife Communications

- Our plugins and themes are open source and on Github, so anyone can view and repurpose it as needed.

Building Websites

Plugin and theme development using tools, frameworks, and services.

Tools

- Local dev environment
- Composer
- GruntJS
- SASS
- Node Package Manager (NPM)

Frameworks

- WordPress
- Advanced Custom Fields Plugin
- Genesis Theme Framework
- Foundation 6 by Zurb

Services

- Github
- WP Engine
- Codeship
- Slack
- Basecamp

Process

- Start my local dev environment.
- grunt watch rebuilds css when sass files are saved.
- Develop with Sublime Text.
- PHP changes just need a browser refresh.

Process

- Before committing a PHP change to Github I `npm run checkwp` to make sure it adheres to WordPress coding standards.
- Update the version in `package.json`.
- Commit changes to Github, which notifies our team via Slack – and deploys to our servers!

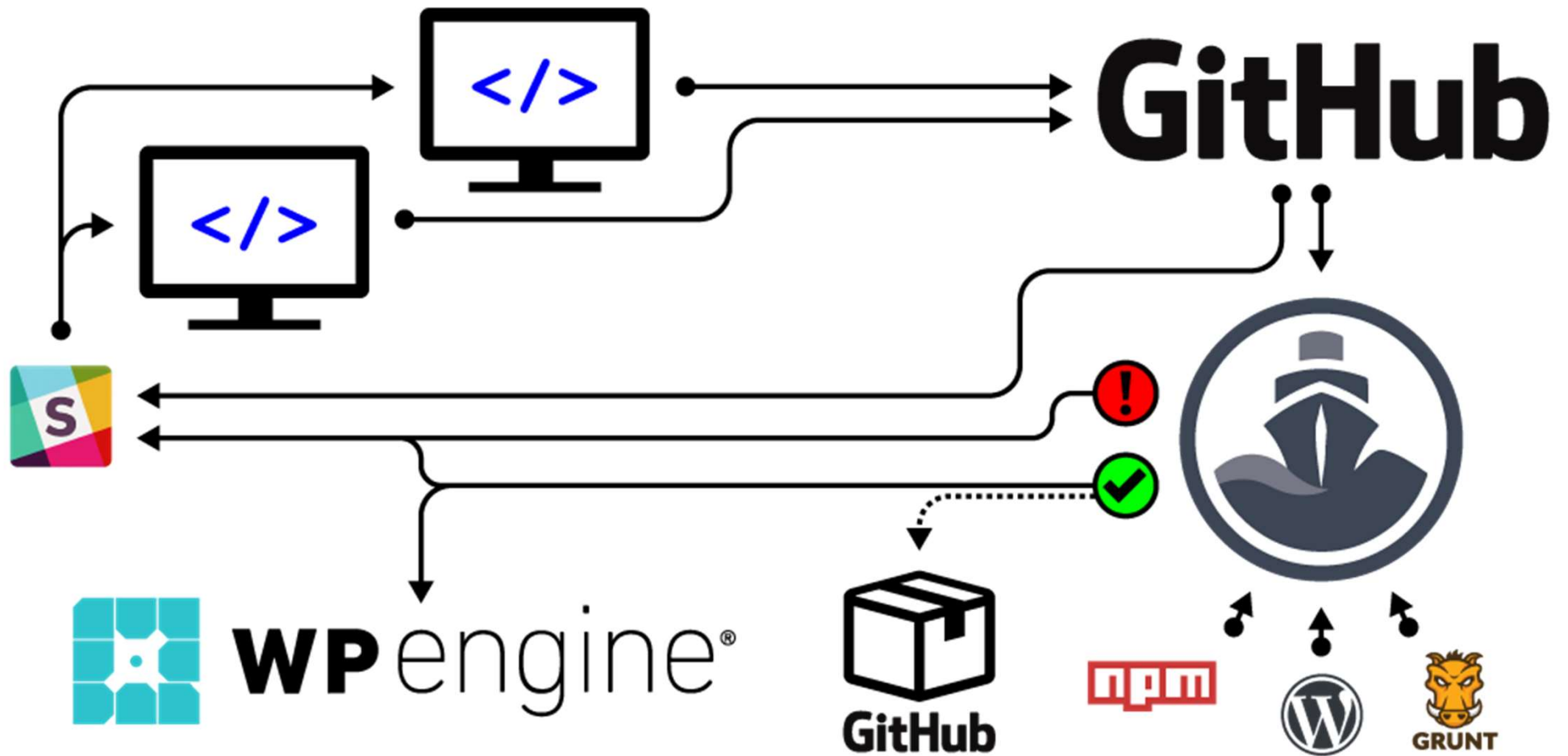
Deploying and Releasing

Using Codeship and Github to distribute our plugins and themes

Overview

- Automating deployment frees my time and expedites pushing fixes and features.
- It typically takes 2.5 – 7min based on how many servers we're deploying to.

Workflow



Releasing to Github

- The release *.zip file can be downloaded by anyone and then uploaded through the WordPress dashboard to install it on a site.
- The release notes include commit messages for each commit that has happened since the last Github release.

Codeship

- Requires about an hour of setup.
- Uses a set of cli commands to configure the virtual machine, build files, release, and deploy.
- Video tutorial on YouTube.

WP Engine

- Their Git Push feature allows us to automate deployments.
- Staging and Production environments help test code if local testing isn't enough.

Slack

- Notifies us when Codeship starts, and when it fails or succeeds.
- Notifies us when Github repositories are pushed to or get a new release.

Maintaining Websites

Updating third party code and supporting users

Common tasks

- Update core, third party plugins and themes.
- User training.
- Install commonly used plugins on new sites.
- Manage user access.

Updates

- Back up servers.
- `wp core update --ssh=sshlogin`
- `wp plugin update --all --ssh=sshlogin`
- `wp theme update --all --ssh=sshlogin`

Training

- WP101 videos embedded in the dashboard.
- <https://firstcallhelp.tamu.edu/>

Common plugins

- Advanced Custom Fields Pro (premium or free)
- Gravity Forms (premium)
- CAS Maestro
- Soliloquy Slider
- Google Analytics for WordPress
- Really Simple SSL
- The Events Calendar
- WP101 (premium)
- Yoast SEO

User access

- User roles define access.
- `wp role create role_slug Name`
- `wp cap add "role_slug"
"capability_slug"`
- Optional: `wp user set-role username
role_slug`

Our approach

- Allows us to support a large number of sites and users with a relatively small team.
- Helps provide our users with secure and accessible plugins, themes, and websites which are easy for all of us to modify.

Our approach

- Reduces the amount of time and effort it takes to make and upload a change to our code.
- Our plugins and themes are open source and on Github, so you can view and repurpose it for your own needs.

Resources

- Our latest Genesis child theme:

<https://github.com/agrilife/agriflex4>

- Our latest plugin:

<https://github.com/agrilife/af4-agrilife-org>

- Codeship custom script to initialize a project:

<https://gist.github.com/ZachWatkins/1c30f2b58>

[47fcbfee1c72cc5f3fc57cf](https://gist.github.com/ZachWatkins/1c30f2b5847fcbfee1c72cc5f3fc57cf)

Resources

- <https://wp-cli.org/>
- Foundation 6 documentation:
<https://foundation.zurb.com/sites/docs/>
- My Codeship video tutorial:
<https://youtu.be/iNOaUyDPHDQ>



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Questions?