

# MODERN TOOLING WITH WORDPRESS

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# WORDPRESS IS TURNING 16 THIS YEAR

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# THE GOOD OL' DAYS

SHARED HOSTING

FTP DEPLOYMENTS

CLUNKY CUSTOM FIELD SUPPORT

DIFFICULT TO MONITOR

SMALL/MEDIUM BLOGS

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# NEW WORDPRESS

TIME

VARIETY

The New York Times



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# HOW?

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# CASE STUDIES

ENTERPRISE LEVEL WORDPRESS (KOPPENHAVER)

CLOUD-SCALE WORDPRESS (AWS)

THIS TALK (YOU'RE IN THE RIGHT PLACE)

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# OVERARCHING THEME: CONFIGURATION AS CODE

ENVIRONMENTS SPECIFIED IN CODE (VAGRANTFILE, DOCKERFILE,  
ETC...)

PLUGIN CONFIGURATION IN CODE (FIELDMANAGER, COMPOSER, ETC...)

AUTOMATED DEPLOYMENT BASED ON SCRIPTED CONFIGURATIONS

ALLOWS YOU TO VERSION CONTROL AND MORE CONSISTENTLY  
MANAGE THINGS

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**THOSE ARE HIGH-LEVEL OVERVIEWS  
LET'S GET INTO SPECIFIC TOOLS**

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# LOCAL ENVIRONMENT

(UNHEARD OF IN GOOD OL' WORDPRESS)

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# NATIVE PHP/MYSQL

(POSSIBLE, BUT NOT ENCOURAGED)

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# VAGRANT & VIRTUALBOX

(VIRTUAL MACHINE)

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# WHAT IS VAGRANT?

**VIRTUAL MACHINE WITH CONFIG SPECIFIED BY A VAGRANTFILE**

**SELF-CONTAINED ENVIRONMENT FOR EACH SITE OR GROUP OF SITES**

**CAN BE TURNED ON/OFF, UPGRADED INDEPENDENTLY**


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Oracle VM VirtualBox Manager

**Tools** 

**VM List:**

- homestead-7  Running
- hsvg-web\_default\_1526936798354\_92264  Powered Off
- MSEdge - Win10  Powered Off
- local-by-flywheel  Powered Off
- IE11 - Win7  Powered Off
- vip\_9ac3068cc19**  Running

**General**

Name: vip\_9ac3068cc19  
 Operating System: Ubuntu (64-bit)  
 Settings File Location: /Users/keanan/VirtualBox VMs/vip\_9ac3068cc19

**System**

Base Memory: 2048 MB  
 Processors: 2  
 Boot Order: Hard Disk  
 Acceleration: VT-x/AMD-V, Nested Paging, KVM Paravirtualization

**Display**

Video Memory: 12 MB  
 Graphics Controller: VBoxVGA  
 Remote Desktop Server: Disabled  
 Recording: Disabled

**Storage**

Controller: SATAController  
 SATA Port 0: box-disk1.vmdk (Normal, 40.00 GB)

**Audio**

Disabled

**Network**

Adapter 1: Intel PRO/1000 MT Desktop (NAT)  
 Adapter 2: Intel PRO/1000 MT Desktop (Host-only Adapter, 'vboxnet7')

**USB**

Disabled


**Shared folders**

Shared Folders: 5

**Description**

None

**Preview**






# VARYING VAGRANT VAGRANTS (VVV)

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**DAYTON:**

**REPO: [HTTPS://GITHUB.COM/VVV/CUSTOM-SITE-TEMPLATE.GIT](https://github.com/vvv/custom-site-template.git)**

**HOSTS:**

**- DAYTON.TEST**



# HOMESTEAD

(BUILT FOR LARAVEL, ALSO BASED ON VAGRANT)

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## **FOLDERS:**

**- MAP: ~/CODE**

**TO: /HOME/VAGRANT/CODE**

## **SITES:**

**- MAP: DAYTON.TEST**

**TO: /HOME/VAGRANT/CODE/DAYTON**

**DOCKER?**

**([HTTPS://GITHUB.COM/IOUP/WP-LOCAL-DOCKER](https://github.com/IOUP/wp-local-docker))**

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# DEVELOPMENT WORKFLOW

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# BETTER PLUGIN MANAGEMENT

## WPACKAGIST

REPOSITORY FOR WP PLUGINS THAT CAN BE  
PULLED IN THROUGH COMPOSER

```
"require": {  
  
    "wpackagist-plugin/akismet": "dev-trunk",  
  
}
```

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# PLUGINS AREN'T JUST FOR END USERS

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# OBJECTS TO OBJECTS

(ONE OF THOSE TIMES NOT TO USE WORDPRESS)

BUT IF YOU MUST...

LETS YOU RELATE “OBJECTS” TO “OBJECTS” AND  
PROVIDES QUERY INTERFACE FOR THESE  
RELATIONS

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```
ADD_ACTION('INIT', 'REGISTER_O2O_CONNECTION');

/* ASSIGN RELATED GALLERIES TO A SINGLE POST */

FUNCTION REGISTER_O2O_CONNECTION() {

    O2O::REGISTER_CONNECTION('POST_GALLERIES', 'POST', 'GALLERY', ARRAY(

        'RECIPROCAL' => TRUE,

        'TO' => ARRAY(

            'SORTABLE' => TRUE,

            'LABELS' => ARRAY(

                'NAME' => 'GALLERIES',

                'SINGULAR_NAME' => 'GALLERY'

            )

        ),

        'FROM' => ARRAY(

            'LABELS' => ARRAY(

                'NAME' => 'POSTS',

                'SINGULAR_NAME' => 'POST'

            )

        )

    ));

}
```



# FIELDMANAGER

**CUSTOM FIELDS...DEFINED IN CODE**

**HELPS DEPLOY FIELDS THROUGH VCS  
INSTEAD OF RELYING ON THE DB**

**HONORABLE MENTION: ACF**

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```
ADD_ACTION( 'FM_POST_POST', FUNCTION() {  
  
    $FM = NEW FIELDMANAGER_GROUP( ARRAY(  
  
        'NAME' => 'CONTACT_INFORMATION',  
  
        'CHILDREN' => ARRAY(  
  
            'NAME' => NEW FIELDMANAGER_TEXTFIELD( 'NAME' ),  
  
            'PHONE' => NEW FIELDMANAGER_TEXTFIELD( 'PHONE NUMBER' ),  
  
            'WEBSITE' => NEW FIELDMANAGER_LINK( 'WEBSITE' ),  
  
        ),  
  
    ));  
  
    $FM->ADD_META_BOX( 'CONTACT INFORMATION', 'POST' );  
  
});
```

# QUERY MONITOR

HELPS YOU SEE WHAT'S ACTUALLY GOING ON

DEBUGS SLOW QUERIES, LOAD TIME,  
TEMPLATE LOADING, HOOKS, TRANSIENTS,  
AND MORE

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# REWRITE RULES INSPECTOR

NECESSARY WHEN DOING CUSTOM URL  
REWRITES

LETS YOU PUT IN A URL AND SEE THE  
REWRITES THAT MATCHED

CAN FLUSH PERMALINK FROM INSIDE PLUGIN

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# TEMPLATING

TIMBER LETS YOU USE TWIG TEMPLATE

ELIMINATES A LOT OF WP UGLINESS

```
<?PHP
```

```
$THUMB_ID = GET_POST_THUMBNAIL_ID($POST->ID);
```

```
$URL = WP_GET_ATTACHMENT_URL($THUMB_ID); ?>
```

```
<IMG SRC="<?PHP ECHO $URL; ?>"
```

```
ALT="THUMBNAIL FOR <?PHP ECHO $POST->POST_TITLE; ?>" />
```

```
<IMG SRC="{{POST.THUMBNAIL.SRC}}"  
ALT="THUMBNAIL FOR TIMBER" />
```

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# WP-CLI

**COMMAND LINE INTERFACE TO INTERACT WITH WORDPRESS**

**MOST ACTIONS THAT CAN BE UNDERTAKEN WITH WORDPRESS  
CAN BE DONE THROUGH THE COMMAND LINE**

***WP CORE UPDATE***

***WP PLUGIN INSTALL***

**CUSTOM CLI COMMANDS (MIGRATION, SCRIPTING, ETC)**

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# FUNCTIONS.PHP

**SPLIT FUNCTIONS.PHP INTO MULTIPLE PARTS**

**TEMPLATE-TAGS.PHP, MEDIA.PHP, ETC**

**BETTER YET, IF FUNCTIONALITY CAN BE ENCAPSULATED,  
SPLIT IT OUT INTO A PLUGIN**

**USE NAMESPACES TO ENSURE YOUR FUNCTIONS DON'T  
CONFLICT, BECAUSE EVERYTHING IS GLOBAL**



# FRONT END

**YOU CAN USE SASS, JUST ENQUEUE YOUR COMPILED CSS**

**YOU CAN USE WEBPACK OR GULP OR NPM OR WHATEVER**

**BASICALLY, FIND A WAY TO OUTPUT A COMPILED JS/CSS FILE AND YOU CAN USE IT**

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# FRONT END (PT 2)

**YOU CAN HAVE AN ENTIRELY DECOUPLED FRONT-END  
OR A SPA TYPE OF SITE**

**WP REST API (IN CORE SINCE 4.7)**

**CAVEAT: AUTH IS HARD (BUT GETTING BETTER)**

**CAVEAT 2: PLUGINS**



# CODING STANDARDS

USEFUL WHEN WORKING ACROSS A TEAM

PHPCS AND WPCS

WPCS ACTUALLY INCLUDES: WORDPRESS-CORE,  
WORDPRESS-DOCS, WORDPRESS-EXTRA (WPCORE++)

CAN BE HOOKED UP TO YOUR EDITOR TO RUN ON SAVE

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**AND FINALLY...**

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**PLEASE USE VERSION CONTROL**

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# VERSION CONTROL

**SOME OF THE BEST PRACTICES WE HAVE COVERED  
HELP WITH THIS**

**AVOID CONSTANT FUNCTIONS.PHP MERGE  
CONFLICTS**

**DON'T VERSION CONTROL UPLOADS...OR PLUGINS  
(IF YOU'RE USING COMPOSER)**

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# DEPLOYMENT

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**THE FIRST RULE OF DEPLOYMENT IS...**

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# NO FTP (MOSTLY)

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# DEPLOYMENT

**CAN USE ANYTHING THAT HOOKS INTO VCS**

**SHELL SCRIPT, ANSIBLE, DEPLOYER, ETC...**

**GITFTP**

**DEPLOYS SHOULD BE THE LEAST PAINFUL PART  
OF YOUR WORKFLOW**

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# OTHER CONSIDERATIONS

PHP7

GUTENBERG/REACT

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**QUESTIONS?**

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