

## Development Workflow and Resources (Out of date)

This is the gateway documentation to get all your development-related questions answered.

### **Before you begin development...**

As a best practice (and so that you have the most up-to-date code on your local machine), make sure to update your local repos first thing everyday. To accomplish that, in your terminal, type:

```
cd ~/Documents/new-projects/postmedia-infrastructure/
```

and then, once you have postmedia-infrastructure in your path, type:

```
scripts/git-pull
```

**TL; DR.** \*

Follow the link : ^

### **Beginning development**

The entire development process - from entering a ticket into the sprint to starting work on it and getting it through production - has been detailed at the following link: [Deployment Pipeline](#).

Below are links to resources which will aid in the process.

### **Resources needed for your local environment**

- [LDAP](#)
- [Setting up local Virtual Machines \(VMs\)](#)
- [Tools available within VMs](#)
- [Connecting to local Redis/MySQL database](#)
- [Git branching strategy](#)
- [PHP Coding Standards/Unit tests](#)
- [Debugging PHP code](#)
- [Common gotchas when running VMs](#)
- [Accessing VMs locally](#)

### **Resources for Remote Dev environment**

- [How do I create snapshots?](#)
- [Where do I see my recently built snapshot?](#)

### **Getting stuff through Staging(QA/UAT) to Production**

- [How do I build an artifact \(for Stage servers\)?](#)
- [Accessing Websites on Dev/Stage](#)
- [Grafana/Kibana Metrics and Tutorial](#)

### **If the above sections did not answer your questions...**

It is very likely that your question has already been addressed before. Please check out the link below:

- [How-tos / Frequently Asked Questions \(FAQs\) about Virtual Machines](#)
- [Frequently asked Questions \(FAQs\) about the deployment pipeline](#)

### **If all else fails...**

Please feel free to post a message in the #operations channel on Slack.

**Note:** Try and give complete detail about the issue you are facing. For e.g.: Add a snapshot of the error you are seeing on the terminal, add info about the VM you are trying to run etc.)

\*

## **Local**

### **Git**

Fix merge conflicts locally (assuming merging YOUR\_BRANCH\_NAME into qa branch):

```
git fetch origin
```

```
git checkout qa
```

```
git merge --no-ff YOUR_BRANCH_NAME
```

...

(Fix the merge conflicts)

...

```
git commit -a
```

...

(Press Esc, then enter :wq, then press Enter)

...

```
git push
```

Revert and remove the last commit from the commit history in the current branch:

```
git reset HEAD^ --hard
```

```
git push -f
```

Undo a merge if you haven't committed the changes yet:

```
git reset --merge
```

### **Dev environment (deprecated)**

Restart NGINX:

```
sudo brew services restart nginx
```

Restart PHP locally:

```
brew services restart php71
```

Restart PHP in VM, after vagrant ssh:

```
systemctl restart php7.2-fpm
```

Restart PHP-FPM:

```
kill php-fpm; php-fpm -y /usr/local/etc/php/7.1/php-fpm.d/www.conf
```

Restart MySQL:

```
brew services restart mysql
```

Clear WordPress cache and transients:

```
wp transient delete --all; wp cache flush
```

### **Etc**

Show hidden files:

```
defaults write com.apple.finder AppleShowAllFiles YES
```

## VM

Note: These commands can only be run after running:

```
cd ~/Documents/new-projects/postmedia-infrastructure/vagrant/  
communities.local  
vagrant ssh
```

## Cache

Clear Redis cache:

```
redis-cli flushall
```

Clear nginx caches:

```
sudo rm -rf /var/cache/nginx/nexus_microcache  
sudo rm -rf /var/cache/nginx/thewhig_microcache  
sudo rm -rf /var/cache/nginx/thesudburystar_microcache  
sudo rm -rf /var/cache/nginx/edmontonexaminer_microcache  
sudo rm -rf /var/cache/nginx/kingstonthisweek_microcache
```

Clear WordPress transients/object caches:

```
REDIS_DB=0 wp transient delete --all --url=http://nexus.local --path=/opt/  
wordpress --debug=false
```

```
REDIS_DB=0 wp cache flush --url=http://nexus.local --path=/opt/wordpress --  
debug=false
```

```
REDIS_DB=0 wp transient delete --all --url=http://thewhig.local --path=/opt/  
wordpress --debug=false
```

```
REDIS_DB=0 wp cache flush --url=http://thewhig.local --path=/opt/wordpress --  
debug=false
```

```
REDIS_DB=0 wp transient delete --all --url=http://thesudburystar.local --path=/  
opt/wordpress --debug=false
```

```
REDIS_DB=0 wp cache flush --url=http://thesudburystar.local --path=/opt/  
wordpress --debug=false
```

```
REDIS_DB=0 wp transient delete --all --url=http://edmontonexaminer.local --  
path=/opt/wordpress --debug=false
```

```
REDIS_DB=0 wp cache flush --url=http://edmontonexaminer.local --path=/opt/  
wordpress --debug=false
```

```
REDIS_DB=0 wp transient delete --all --url=http://kingstonthisweek.local --path=/  
opt/wordpress --debug=false
```

```
REDIS_DB=0 wp cache flush --url=http://kingstonthisweek.local --path=/opt/  
wordpress --debug=false
```

## Etc

Check error log:

```
tail -100 /var/log/php/php-fpm-error.log
```

Clear error log:

```
echo '' > /var/log/php/php-fpm-error.log
```

Making terminal functions to make life easier

## VM

To enter vagrant up on ~/Documents/new-projects/postmedia-infrastructure/

vagrant/communities.local/ could be annoying. I wrote shell functions for this. However, if you used [Vagrant Manager](#), you wouldn't need these functions.

```
vvv() {  
    dir=$(pwd)  
    cd ~/Documents/new-projects/postmedia-infrastructure/vagrant/  
communities.local  
    vagrant up  
    cd ${dir}  
}  
  
xxx() {  
    dir=$(pwd)  
    cd ~/Documents/new-projects/postmedia-infrastructure/vagrant/  
communities.local  
    vagrant halt  
    cd ${dir}  
}
```

Put this on your ~/.bash\_profile or ~/.zshrc (depends on which shell you are using. See [Oh-My-Zsh](#)). Now you can turn VM on and off by typing vvv and xxx on terminal, on any directory.

### Unit test

It's similar with PHPCS.

```
unittest() {  
  
    dir=$(pwd)  
  
    if [ -z "$1" ]; then  
        set -- ${postmediaLibraryDir}  
    fi  
  
    cd $1  
  
    phpunit5 -c tests/phpunit.xml --report-useless-tests --disallow-test-  
output --verbose  
  
    cd ${dir}  
  
}
```

### Syntax for VI

For vi editor to show the syntax highlight, put this on your ~/.vimrc, and run vim on

your terminal.

colo desert

syntax on