

# Local Dev Environments FOR DUMMIES

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Acquia  
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# Who are these people?

Jeff Geerling

Sr. Technical Architect,  
Acquia

St. Louis Drupal Users  
Group

Drupal VM maintainer



Chris Urban

Manager, Acquia  
Drupaldelphia

JIRA nerd



# Why are you here?

- Need something to do before lunch
- Heard about Composer but you're tone deaf
- Your Outrigger is stuck in the Lagoon
- You're a Drupal developer and you know you shouldn't be deploying untested code to production but you don't have a local environment you feel confident in and there's oh so many choices out there and you don't know where to start and Docker and Vagrant and oh my



Who are we?

# So, really, what will we learn?

- who you are
- development scenarios that might be best for you



Chris Urban

@\_urban\_

Hey #Drupal friends! I'd like to learn what you use for your local development environment. Here's a short survey: [bit.ly/drupal-dev-survey-2018](http://bit.ly/drupal-dev-survey-2018) I'll share results at [@midwestcamp](#) and [@DrupalConNA](#) Please RT for broad coverage!



#### Drupal Local Development Survey

This is a short survey to collect information about local development setups and to answer this question: what are Drupal developers using when working on their l...

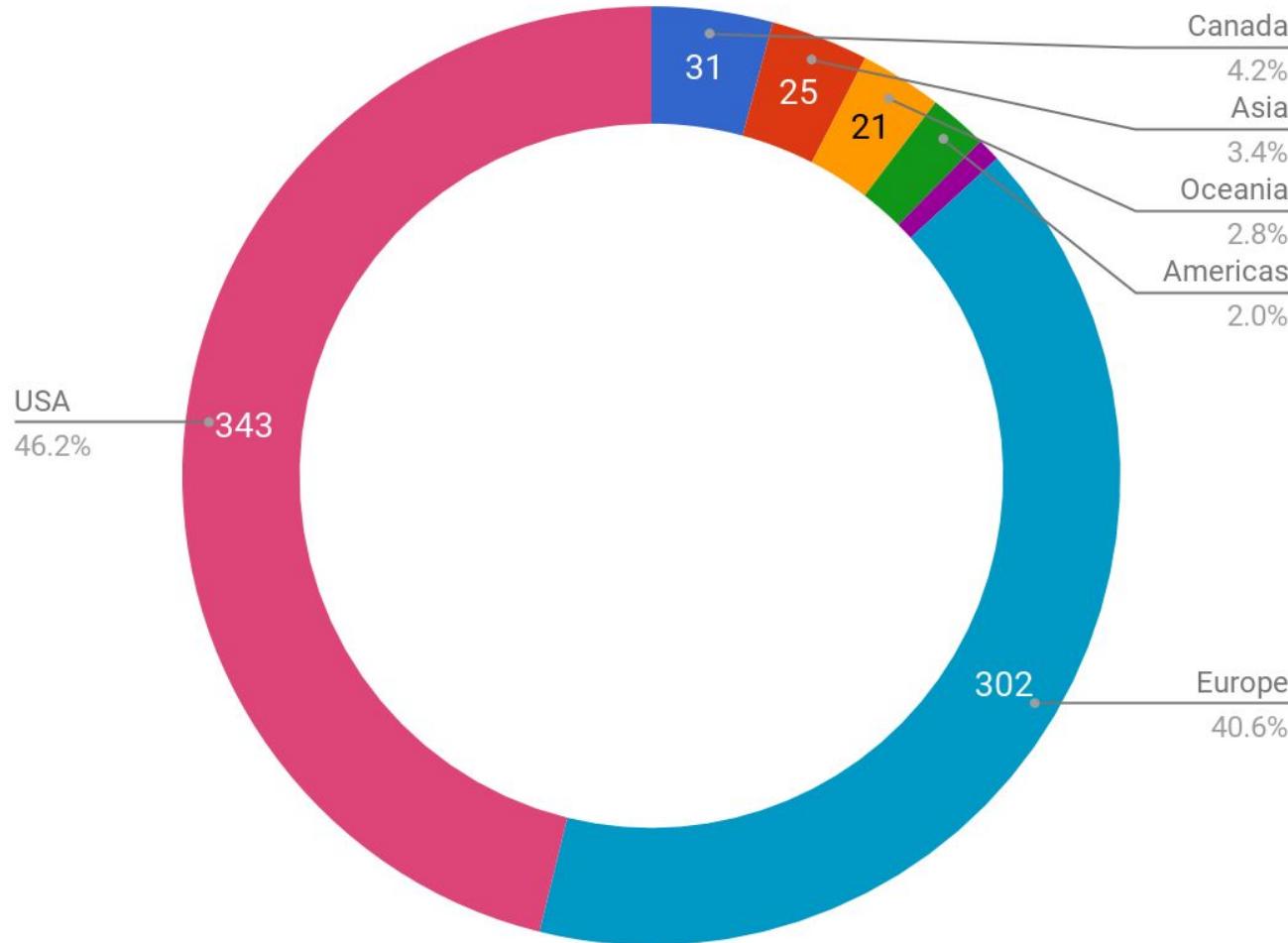
[docs.google.com](http://docs.google.com)

**<http://bit.ly/drupal-dev-survey-2018>**

# 2018 Drupal Development Survey

**<http://bit.ly/drupal-dev-survey-2018>**

## Location

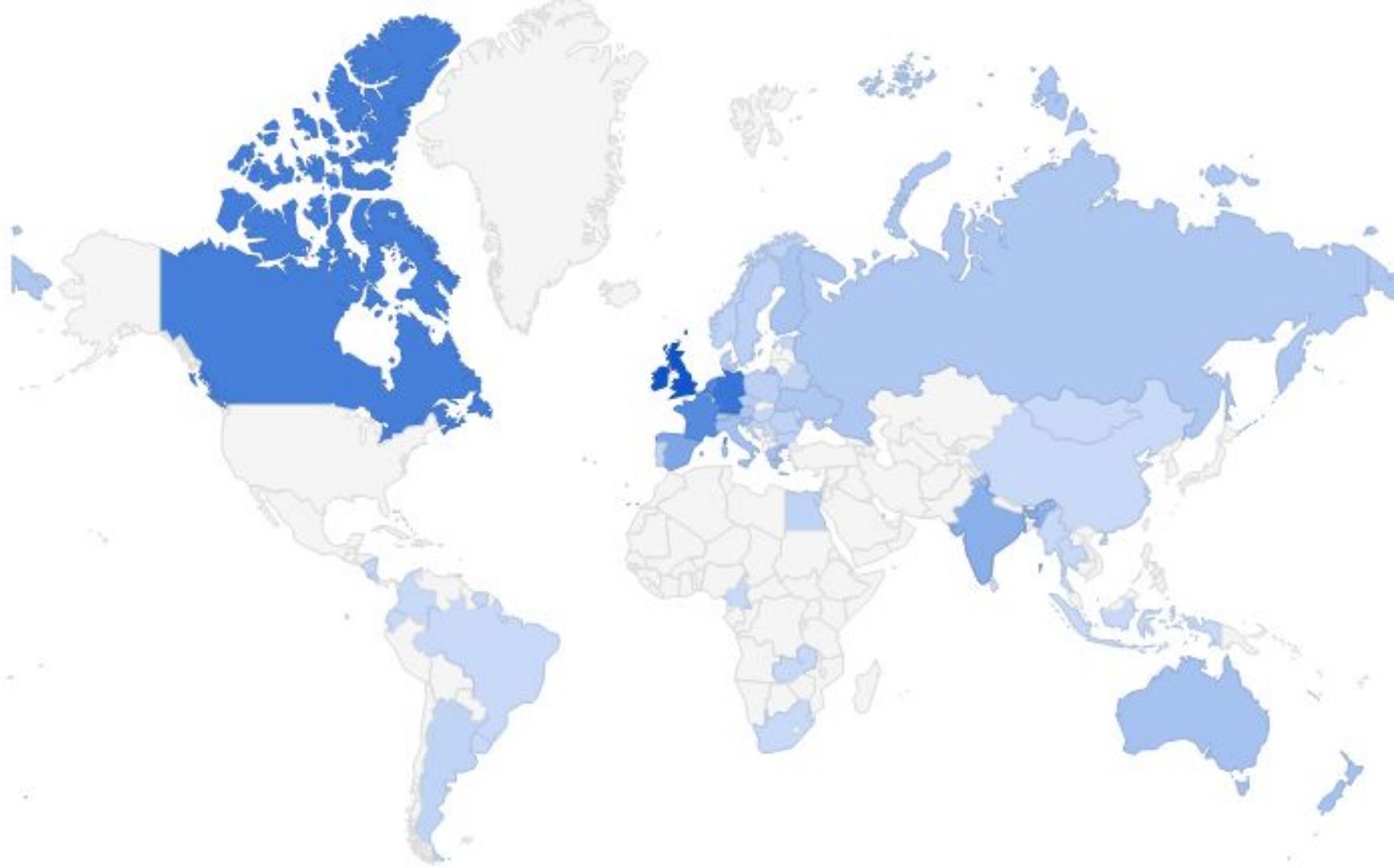


Total submissions

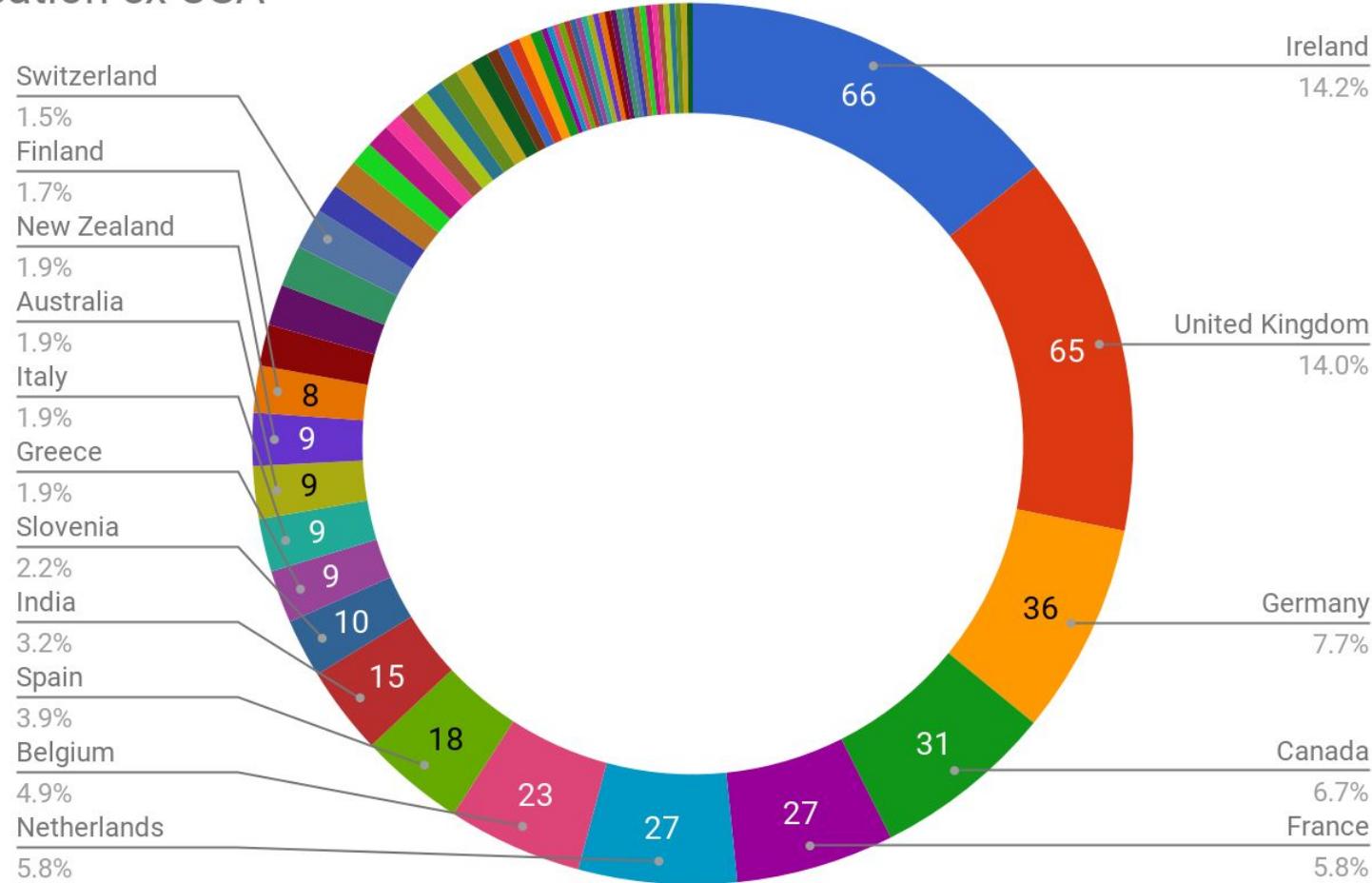
**742**

Total countries

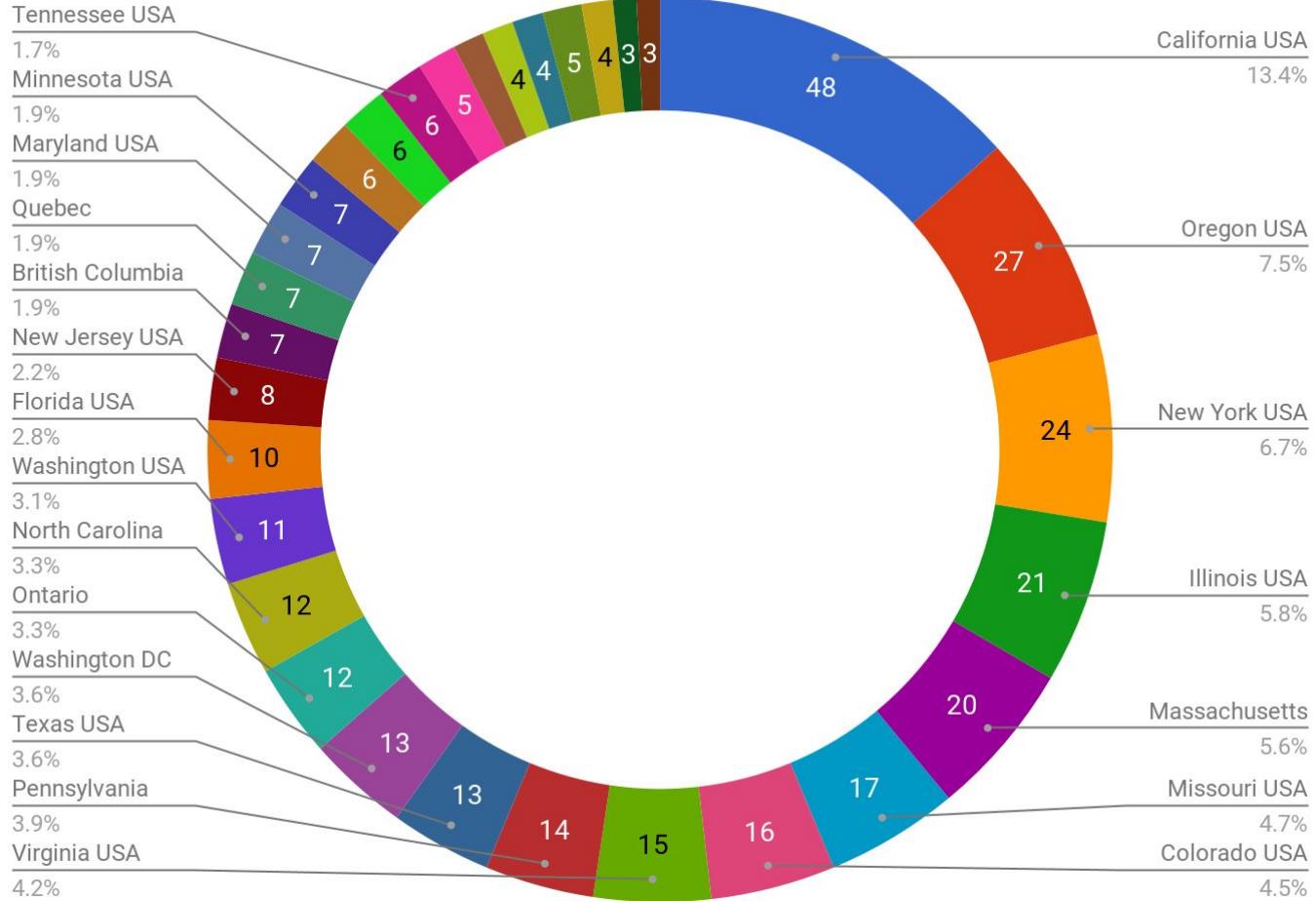
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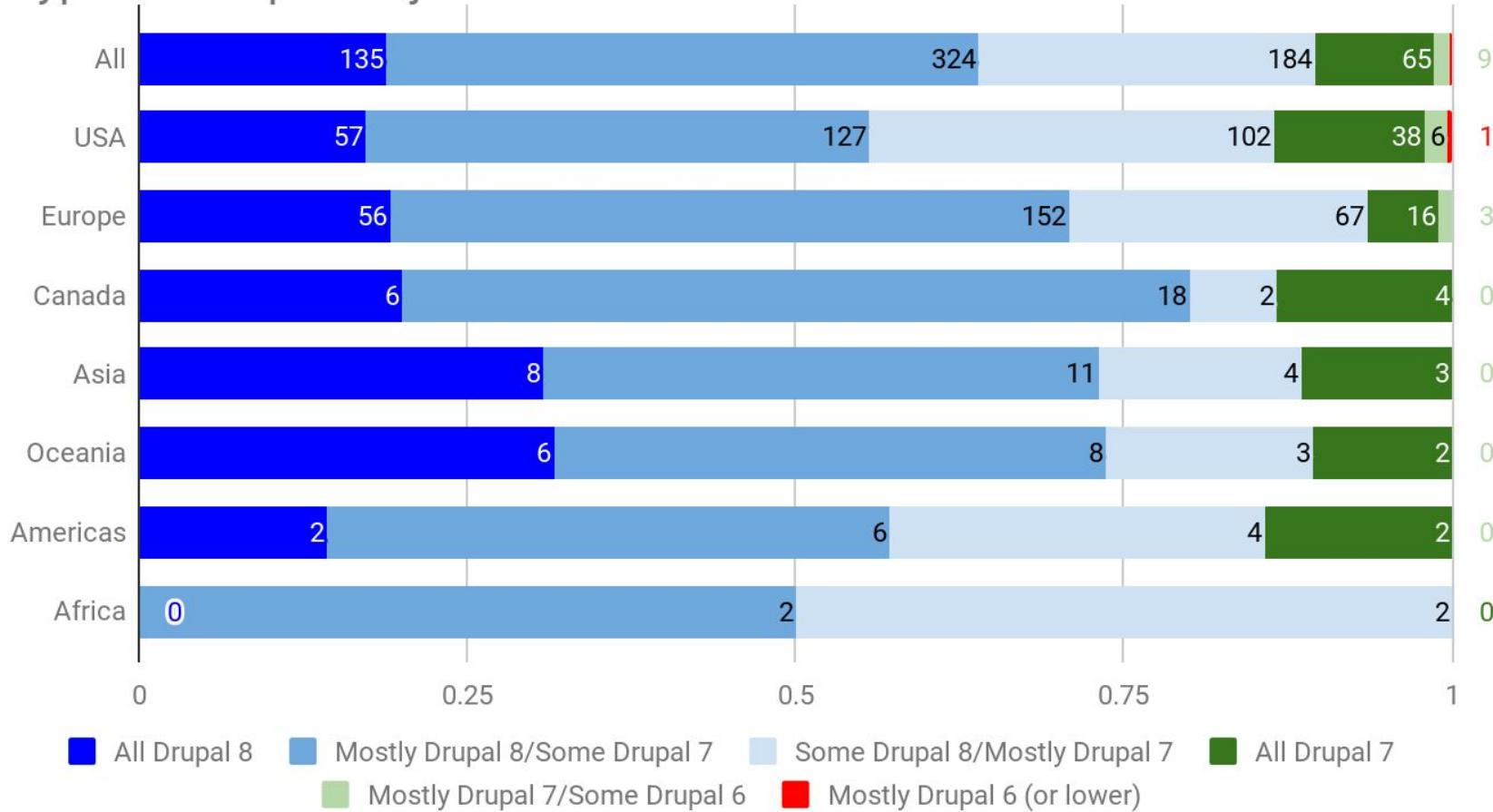
Location ex USA



# Location USA only



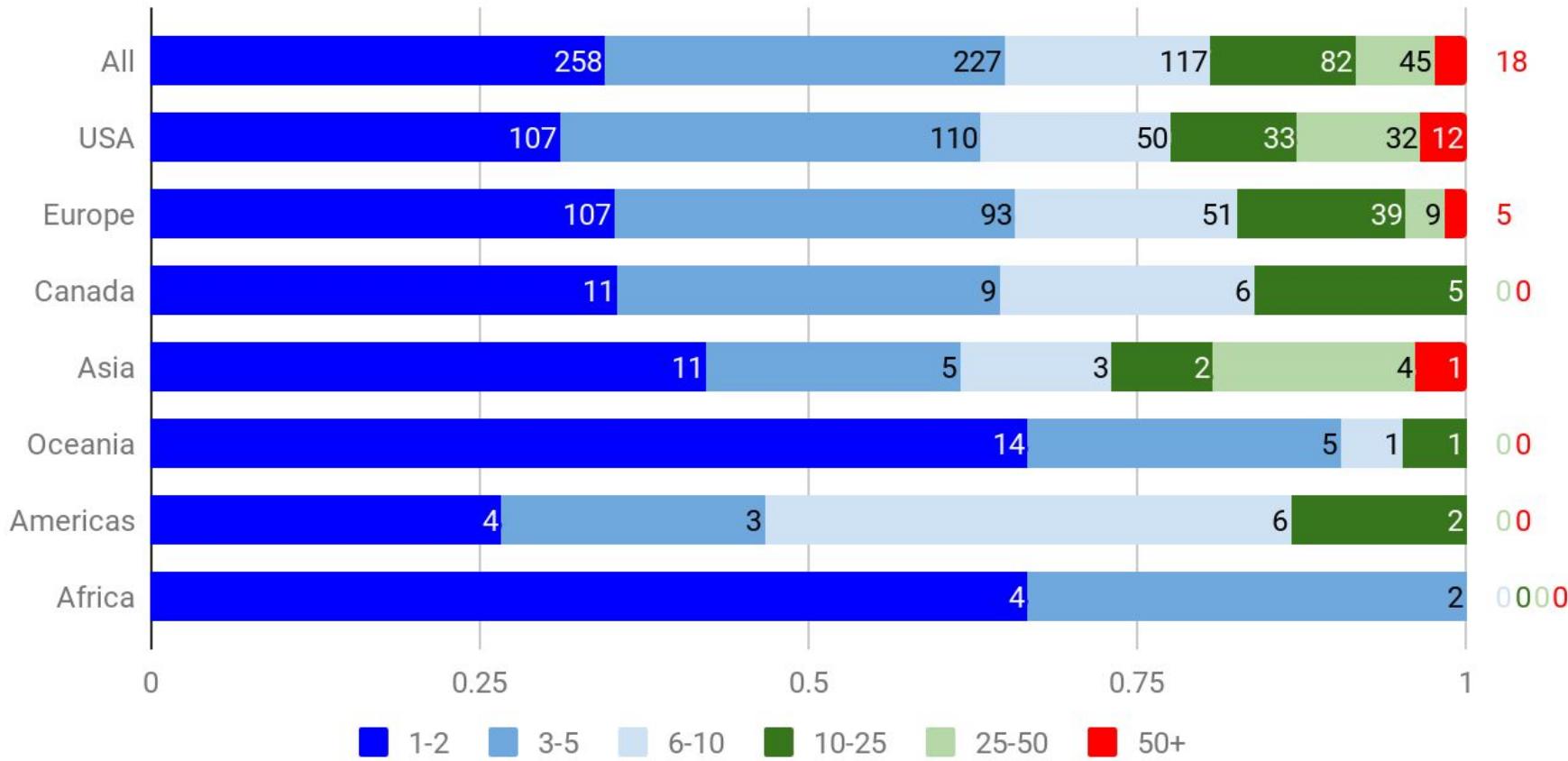
# Types of Drupal Projects



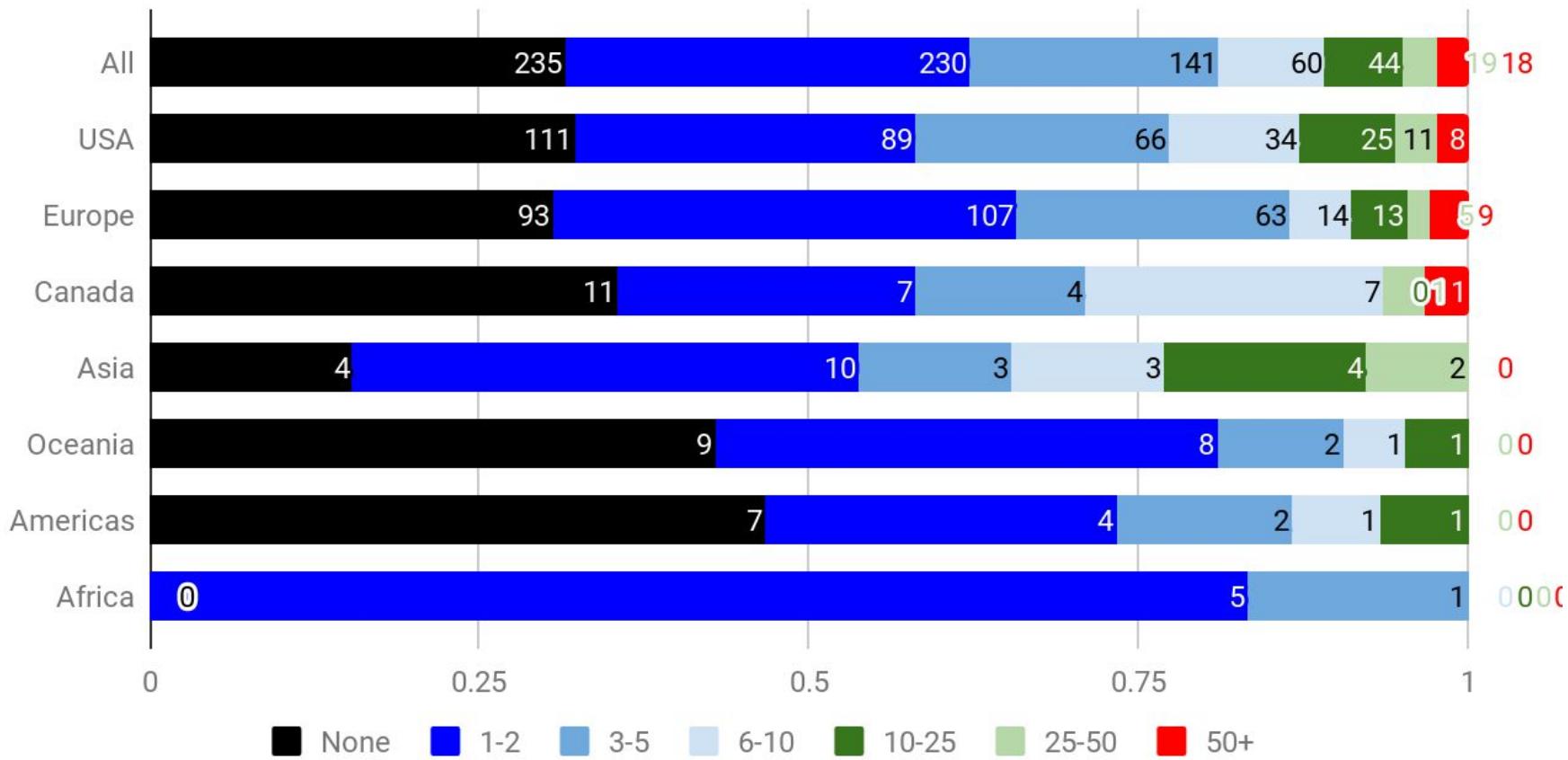
## What types of Drupal projects you are working on?

- 90% of respondents are working on Drupal 8
- Canada has the highest percentage (80%) of Mostly or All D8 projects
- Asia & Oceania have the highest percentages (29%) of All D8 projects
- Only US & Europe still have active Drupal 6 projects (2%)

## Drupal dev team size



## Other dev team size

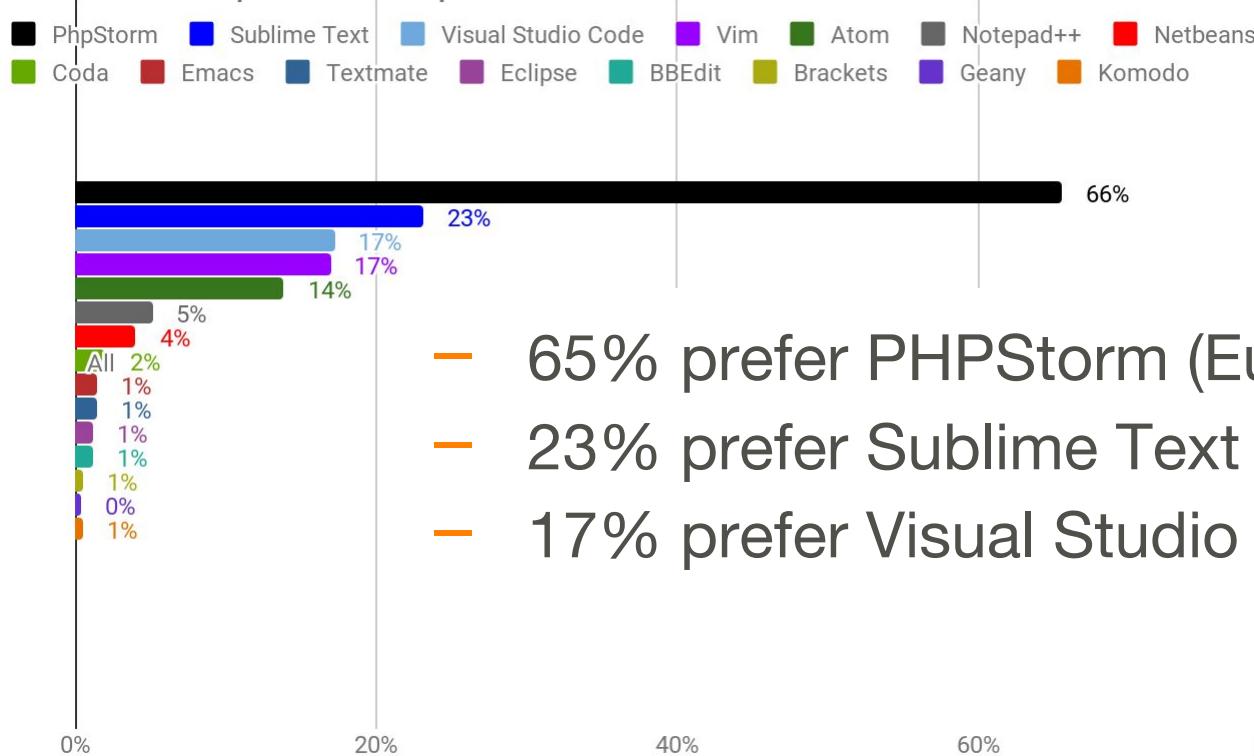


## How many developers are on your team?

- 66% work in teams of 5 or less Drupal developers
- Only US, Europe and Asia reported teams of 25 or more Drupal developers
- 32% reported no other developers
- 50% reported working with up to 5 other developers

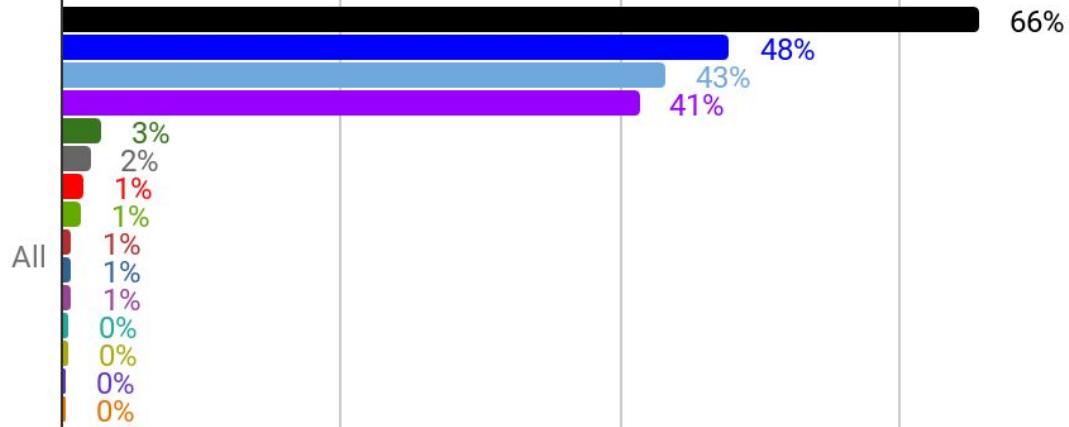
# What do you use for code development?

Code Development tool preferences



- 65% prefer PHPStorm (Europe: 73%)
- 23% prefer Sublime Text (Asia: 46%)
- 17% prefer Visual Studio Code or vim

# QA methodology



Developer does own tests

Peer review

Architect does code review

QA team

Automated testing

linting

CI tools

PHP Code Sniffer

client reviews

Behat tests

phpunit tests

code standards

SonarQube

CircleCI

PHP Mess Detector

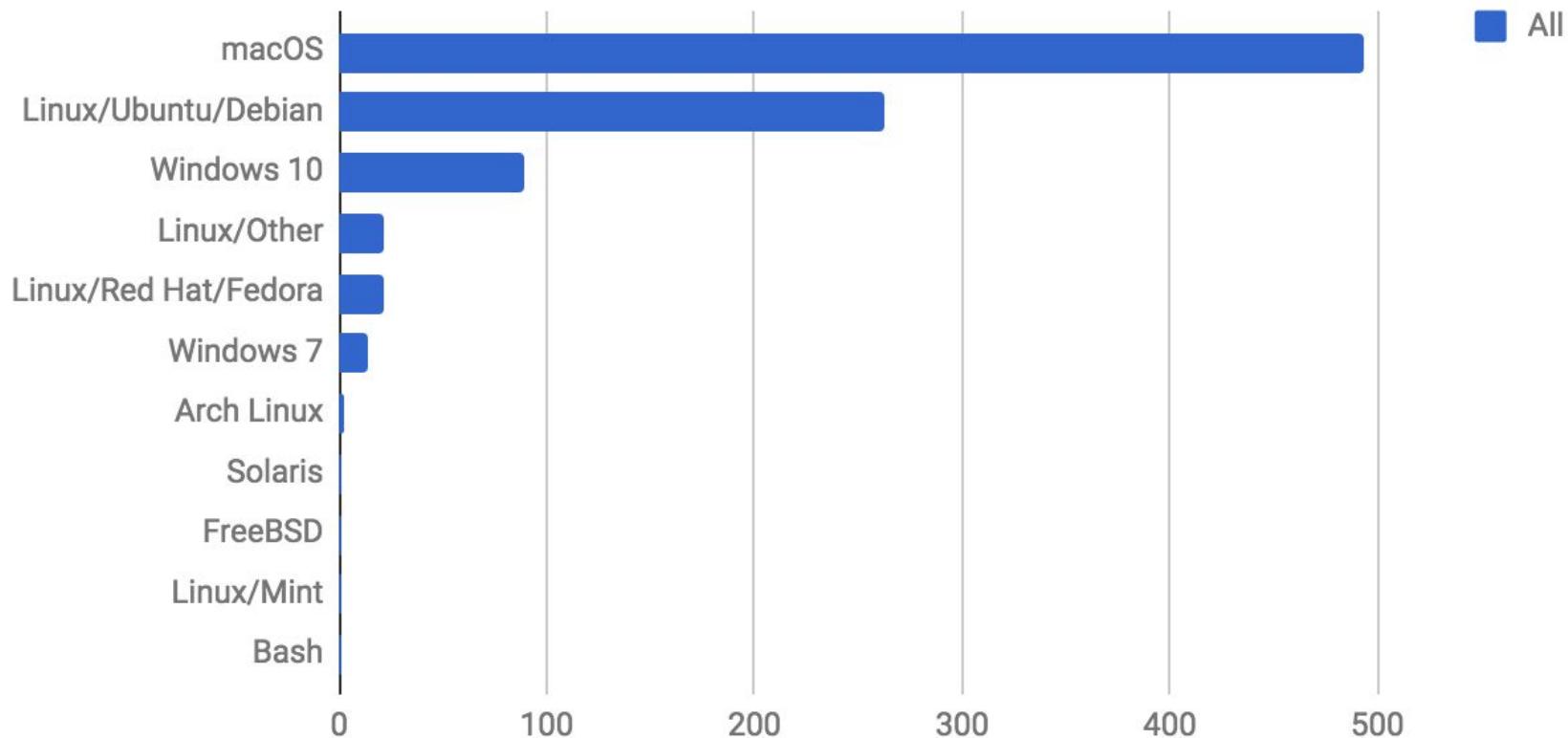
Acquia BLT

2 more

# QA methodology used

- My favorite responses here:
  - Dumb luck
  - Just wing it
  - Let's do it live
  - Ship it if it works
- Asia relies most on peer review and QA teams than other regions.
  - Developer does own tests
  - Peer review
  - Architect does code review
  - QA team
  - Automated testing
  - linting
  - CI tools
  - PHP Code Sniffer
  - client reviews
  - Behat tests
  - phpunit tests
  - code standards
  - SonarQube
  - CircleCI
  - PHP Mess Detector
  - Acquia BLT
  - Wraith tests
  - Luck/Wing/Prayer

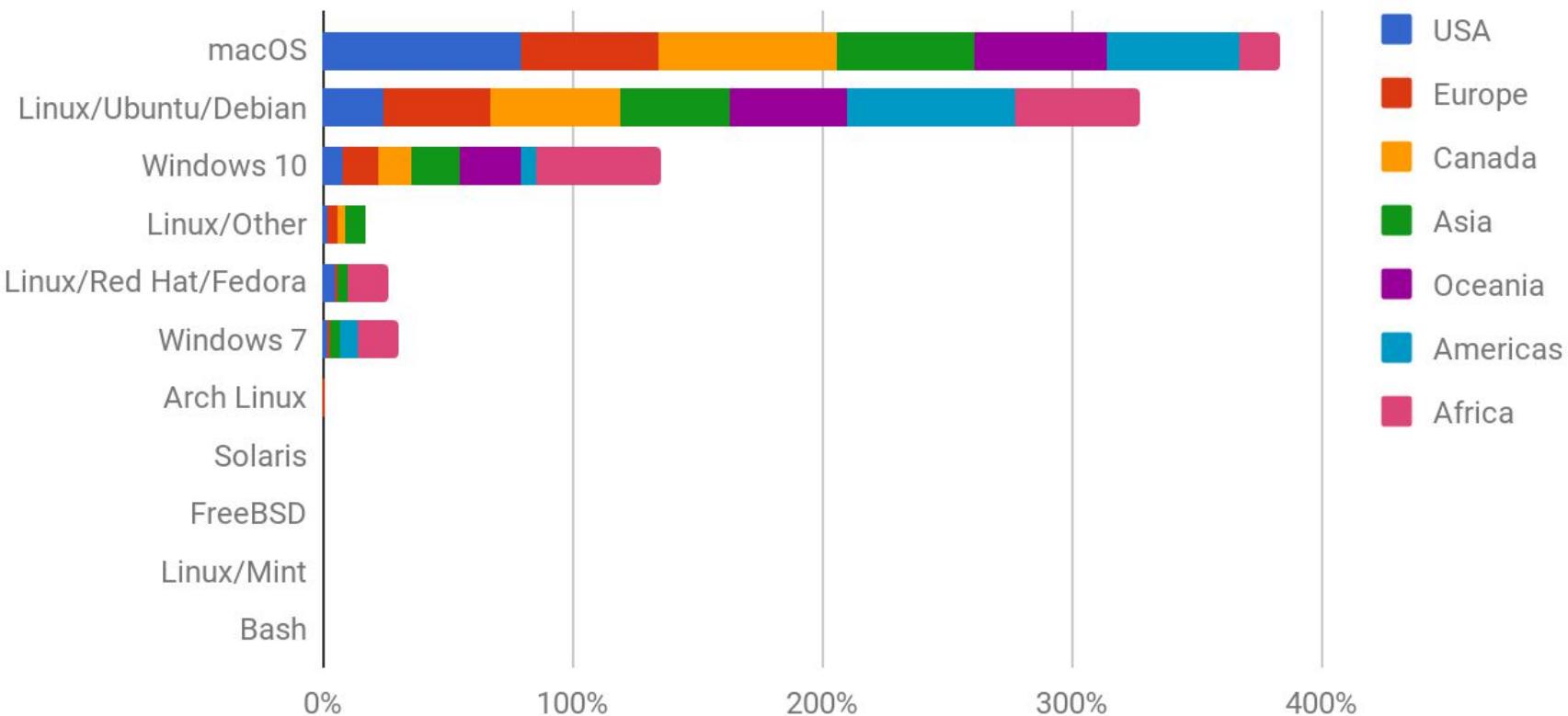
# Local OS Preferences



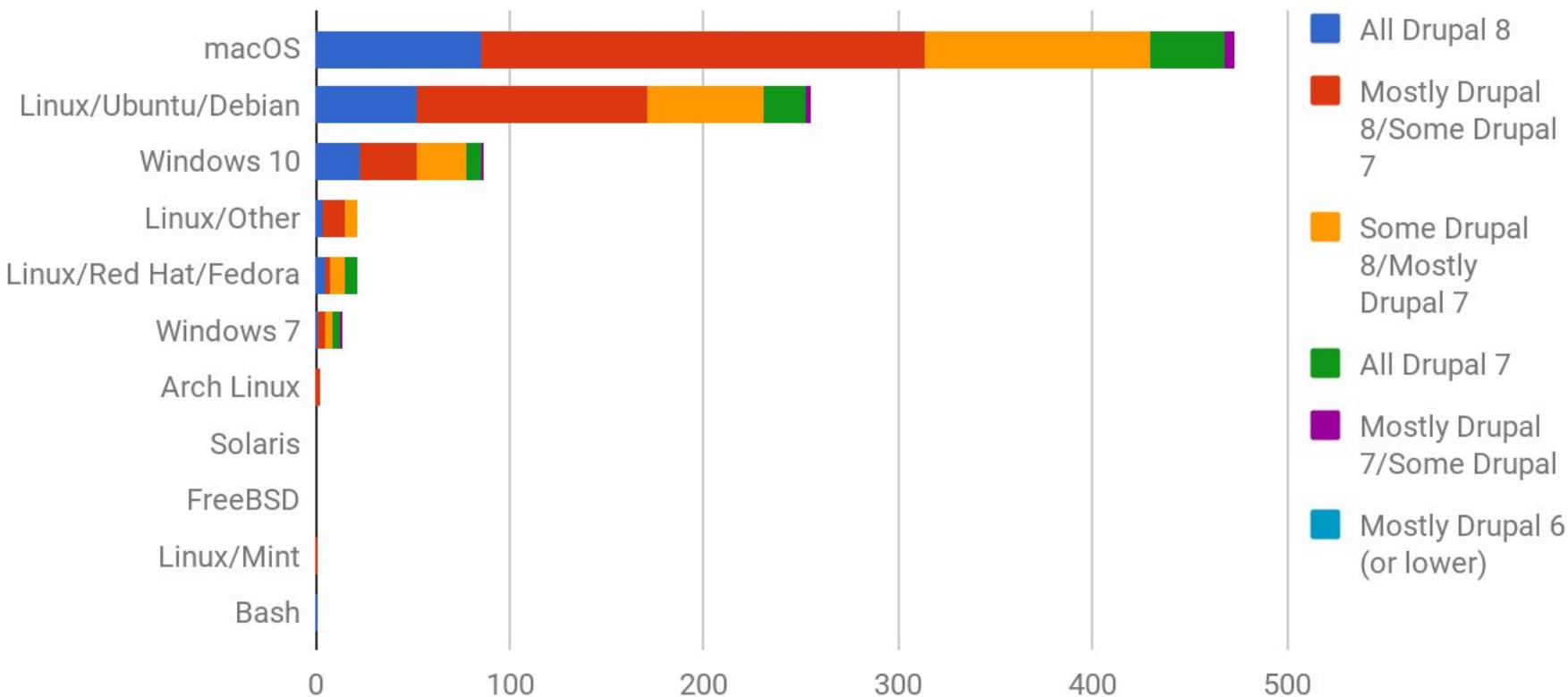
# Local

- Details on which local OS works best for your scenario touched up on in:
  - [Developing with VirtualBox and Vagrant on Windows](#) (relevant blog post by Jeff Geerling)

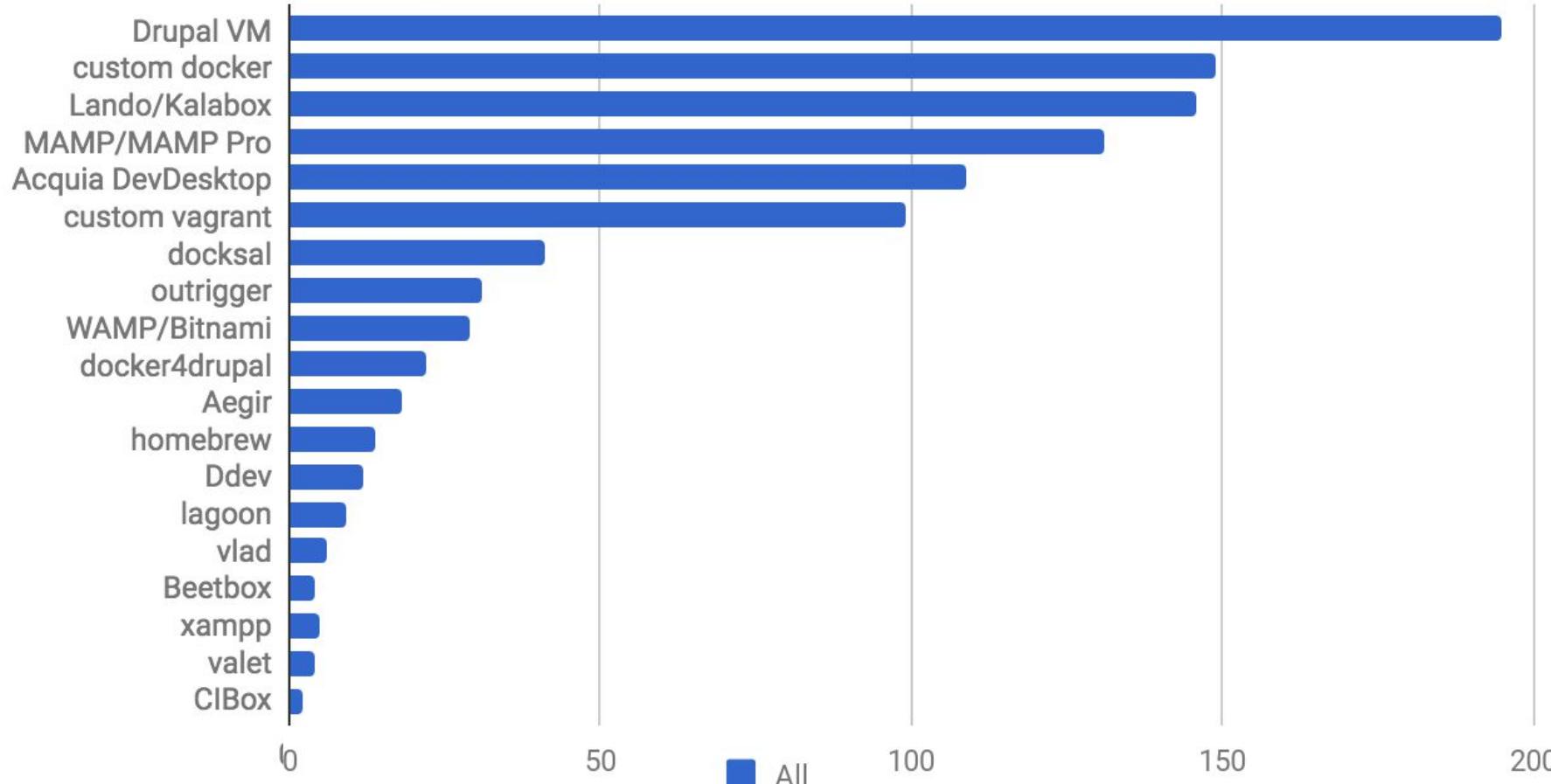
# Local OS Preferences by Region



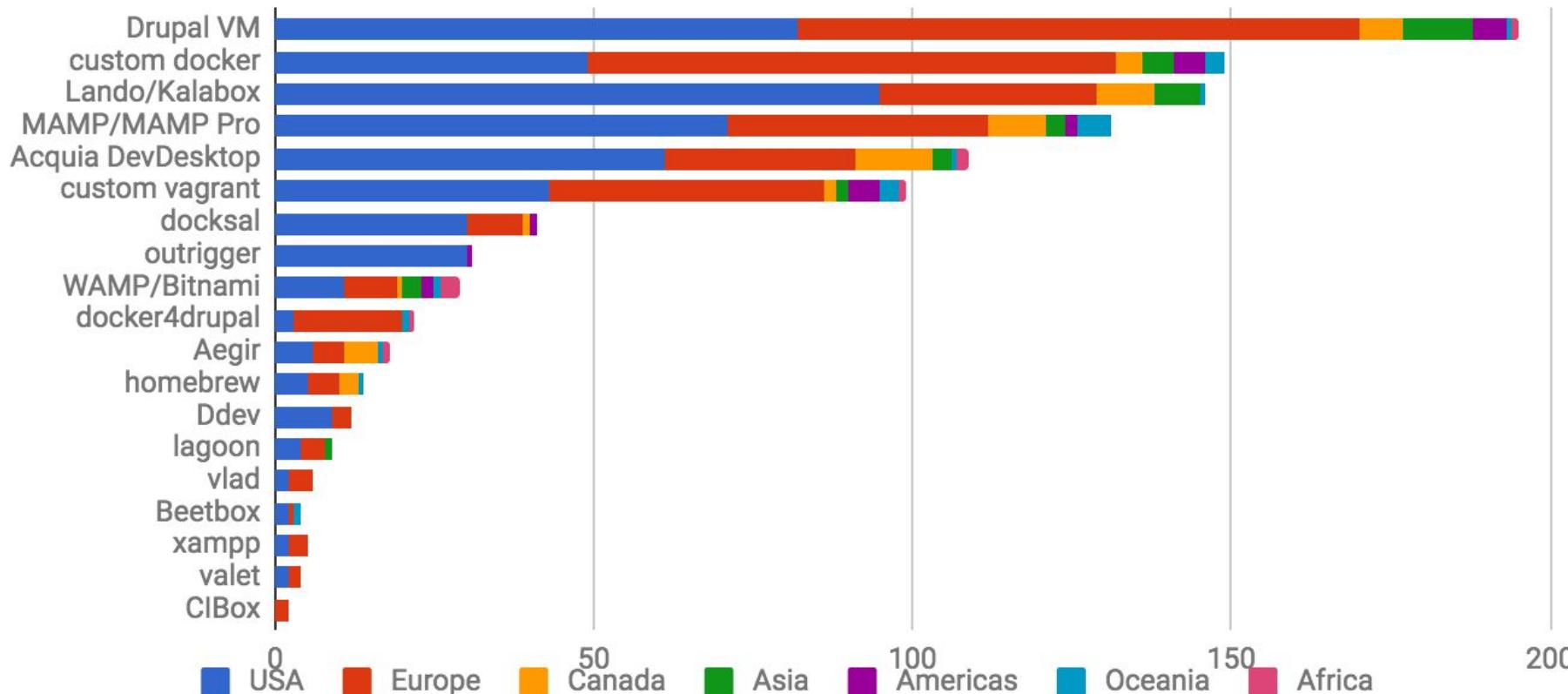
# Local OS Preferences by Project



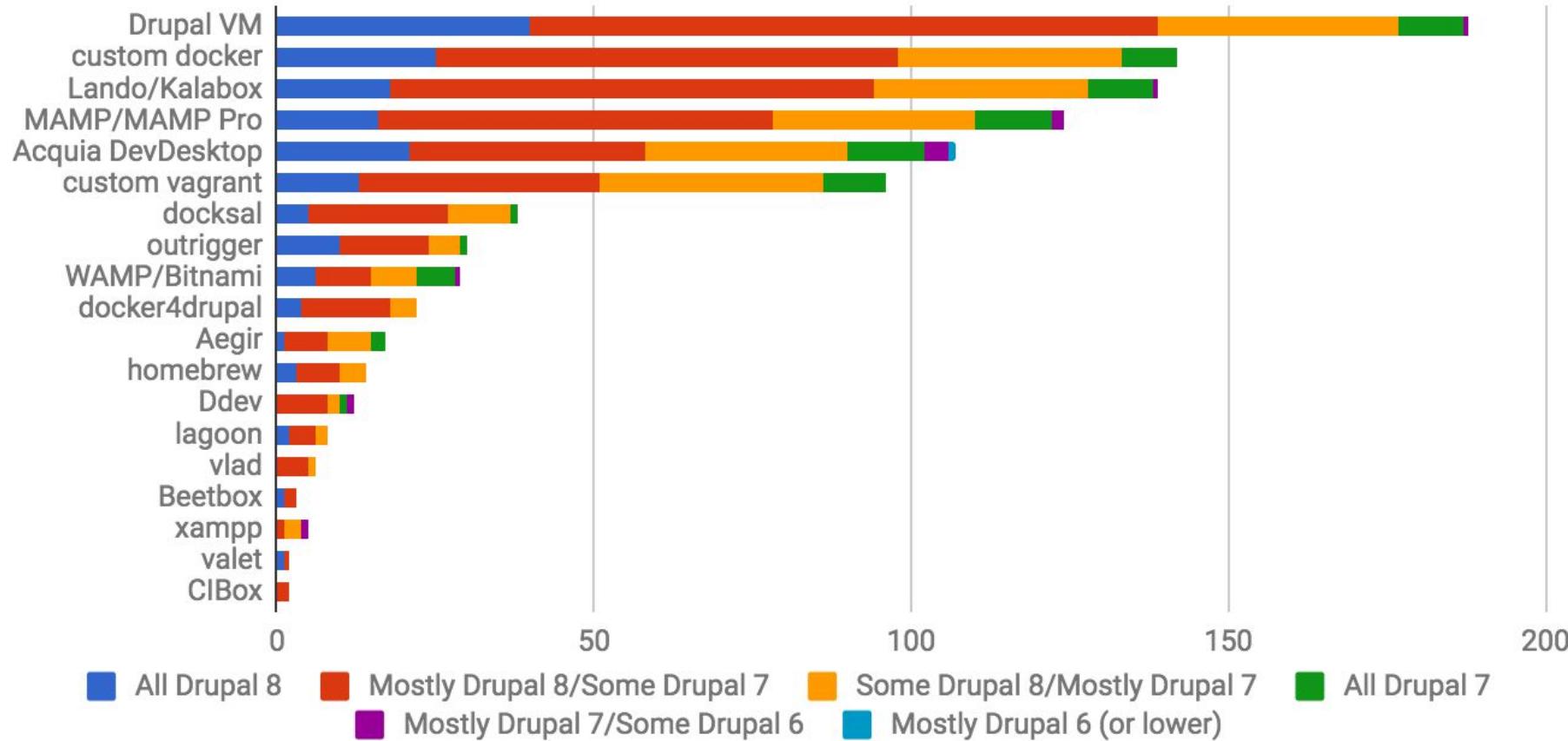
# Local Dev Technologies



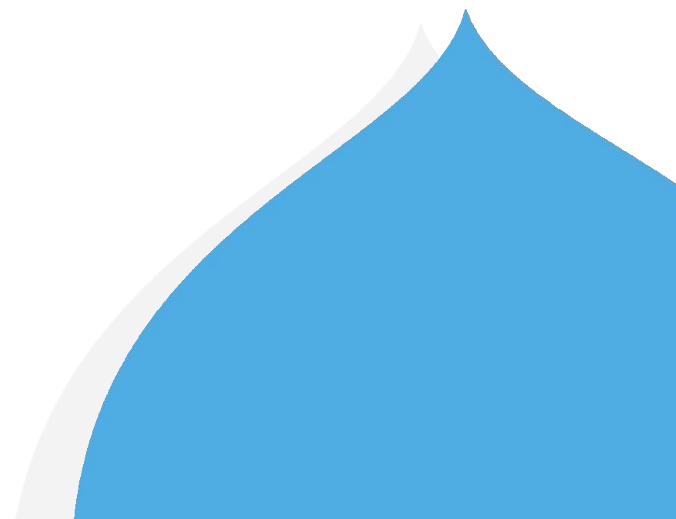
# Local Dev Technologies by Region



# Local Dev Technologies by Project



# Local development scenarios



# Personas

Site builder, Drupal 8 and 7, MacOS

Single developer, Mostly Drupal 8, MacOS

Drupal developer team, Drupal 8, Windows 10

Drupal developer team, All Drupal 8, MacOS

# Judging criteria

What are the best options for each type of scenario

Prevent blowing up your computer

Prevent confusion and time wasting

# Site builder, Drupal 8 and 7, MacOS

Recommendation:

- Acquia Dev Desktop
  - fulfills need to easily set up a site for testing or evaluation
  - gets you a local environment with a few clicks
- try Docksal or Lando if adventurous
  - follow guide for install, with minimal CLI experience
  - allows more customization

# Single developer, Mostly Drupal 8, MacOS

Recommendation:

- Custom Docker (can modify Lando, Docksal, other)
  - easy to get started
  - easy to make lightweight through removing things not needed
  - runs on Windows, Linux and Mac

Avoid:

- Any tools that slow development, like Vagrant
  - More overhead and resource usage
  - Ruby

# Drupal developer team, Drupal 8, Windows 10

Recommendation:

- Drupal VM or one of Docker tools
  - if important to replicate prod, use Drupal VM

Avoid:

- Any tools that do not support Windows 10

# Drupal developer team, All Drupal 8, MacOS

Recommendation:

- Docker (Lando, etc.)
- If mirroring production important, Drupal VM

Avoid:

- Any tools that slow development, like Vagrant

# What should a local dev environment accomplish?

- Relatively easy to start new projects
- Easy to continue working on existing projects
- Set up global configurations to share with team
- Mimic production environment



# How important is mirroring your production environment?

# Mirroring your production environment locally

- Cross your fingers? Living on a prayer? Dumb luck?
- Please don't develop on production.
- Don't want to accidentally overwrite production
- Matching PHP probably most important, MySQL, Apache versions can be critical



**Vagrant 101**

# Vagrant 101

- Allows us to more easily set up machines locally via VirtualBox
- Builds an entire copy of a machine virtually. Everything. Inside your computer.
- Works well on Windows, Mac and Linux
- Has a mature networking model: dns, ip handling

# Docker 101



# Docker 101

- Same kind of thing as Vagrant, but instead of full environment, eliminates excessive stuff (network card, USB, sound card, etc.)
- Bundles everything together in a more streamlined way
- Allows for layering on top of machine images, to change codebases easily
- Way way faster to build environments as most things are prebuilt

# Who is this Composer and why should I care?



# Why do I need to know Composer?

- It's been a long journey for composer and Drupal 8 to be friendly, they are much better working together
- In the next year we'll see including the local environment as a dependency
  - instead of downloading the tool, composer will string together local dev environment requirements
  - further streamlining of build process
- Already have inclusion of Node.js for FE work, custom modules, patches

## Mac vs Windows



# Mac or Windows?

- We've seen lots of customers that want to keep Windows development in place
- Run the numbers: the cost of switching to Macs might be cheaper than the project debugging time & overhead
- Savvy developers can manage on Windows 10
- DrupalVM has had tremendous support for Windows 10 :)

# How important is automated deployment?



<https://giphy.com/gifs/best-wtf-japan-qDzjV6cMctT2M>

# Automated deployment is cool.

- Some of the tools we've talked about include ability for pushing to production environments
- Lando has recipes for Pantheon, platform.sh, Acquia
- If hosting providers recommend utilizing one tool over another we'd suggest following it or at least trying it

# Thank You!

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