

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

Drupaladelphia

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

A high-angle, black and white photograph of a massive crowd of people at what appears to be a concert or festival. The crowd is dense, filling the entire frame from the foreground to the background. Many individuals have their arms raised in the air, some holding up phones or cameras. In the far background, the silhouettes of buildings and a large, arched structure, possibly a bridge or a stage backdrop, are visible against a lighter sky. The overall atmosphere is one of a large-scale public gathering.

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-sur... 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

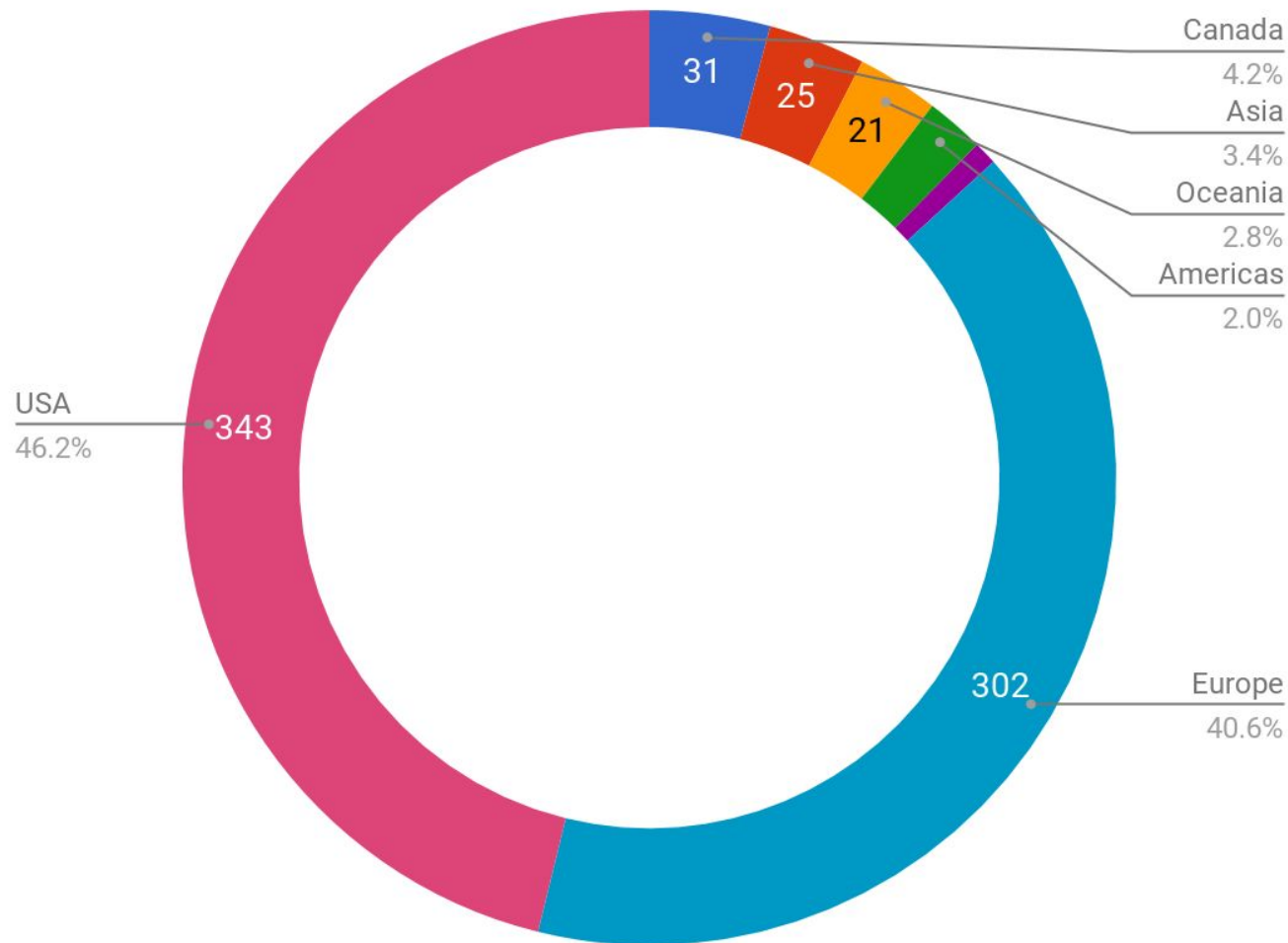
<http://bit.ly/drupal-dev-survey-2018>

2018 Drupal Development Survey

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



Location

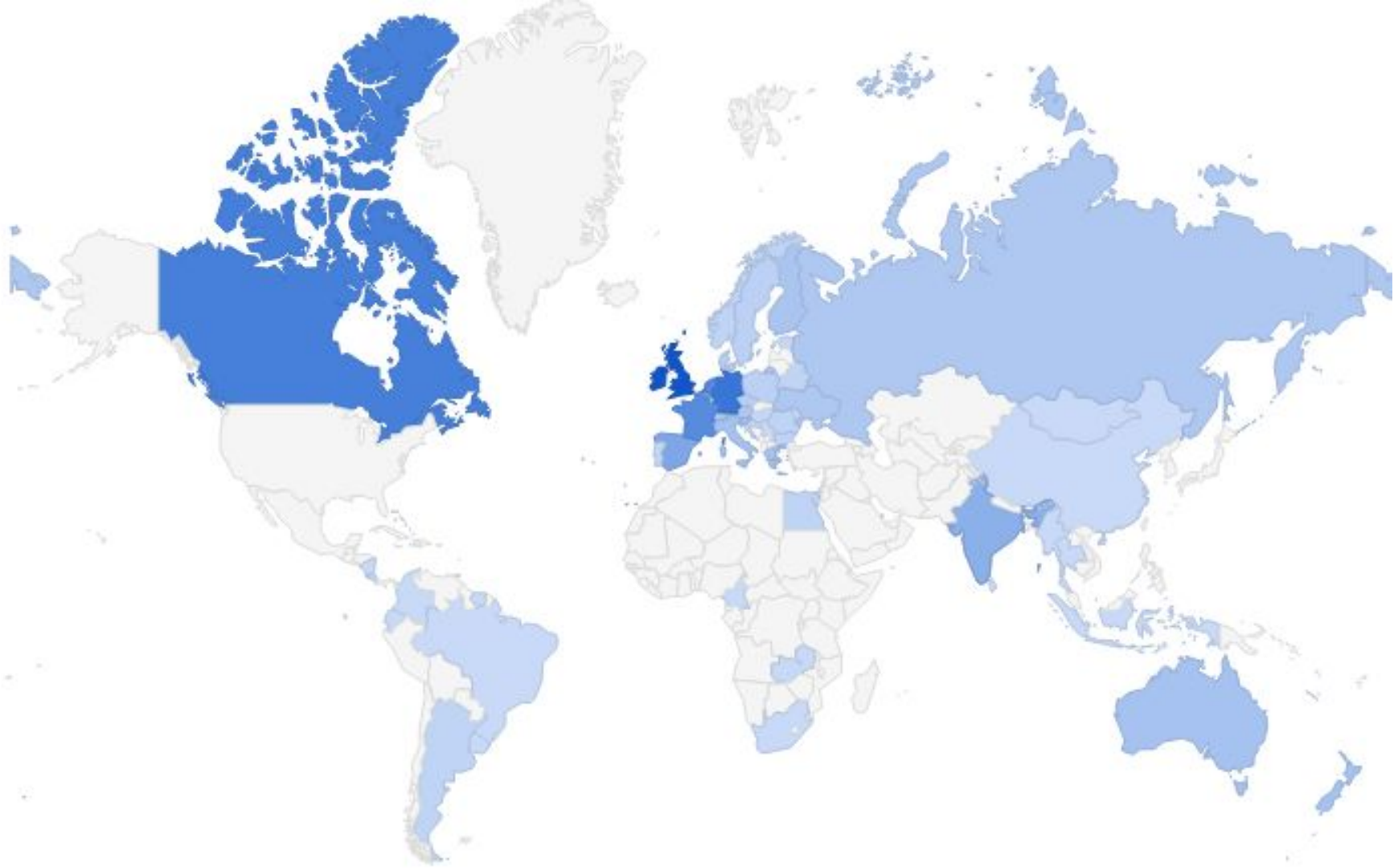


Total submissions

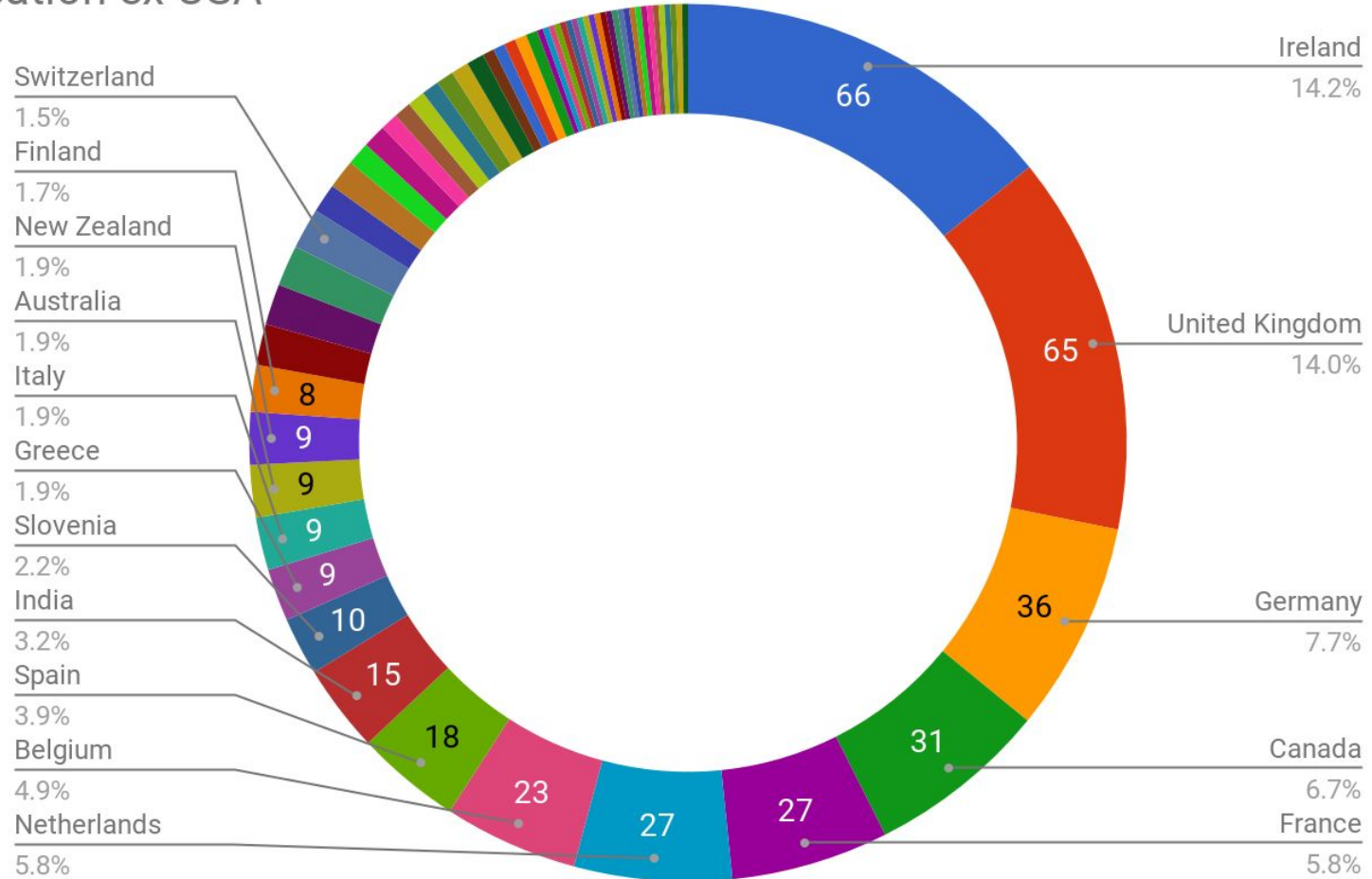
742

Total countries

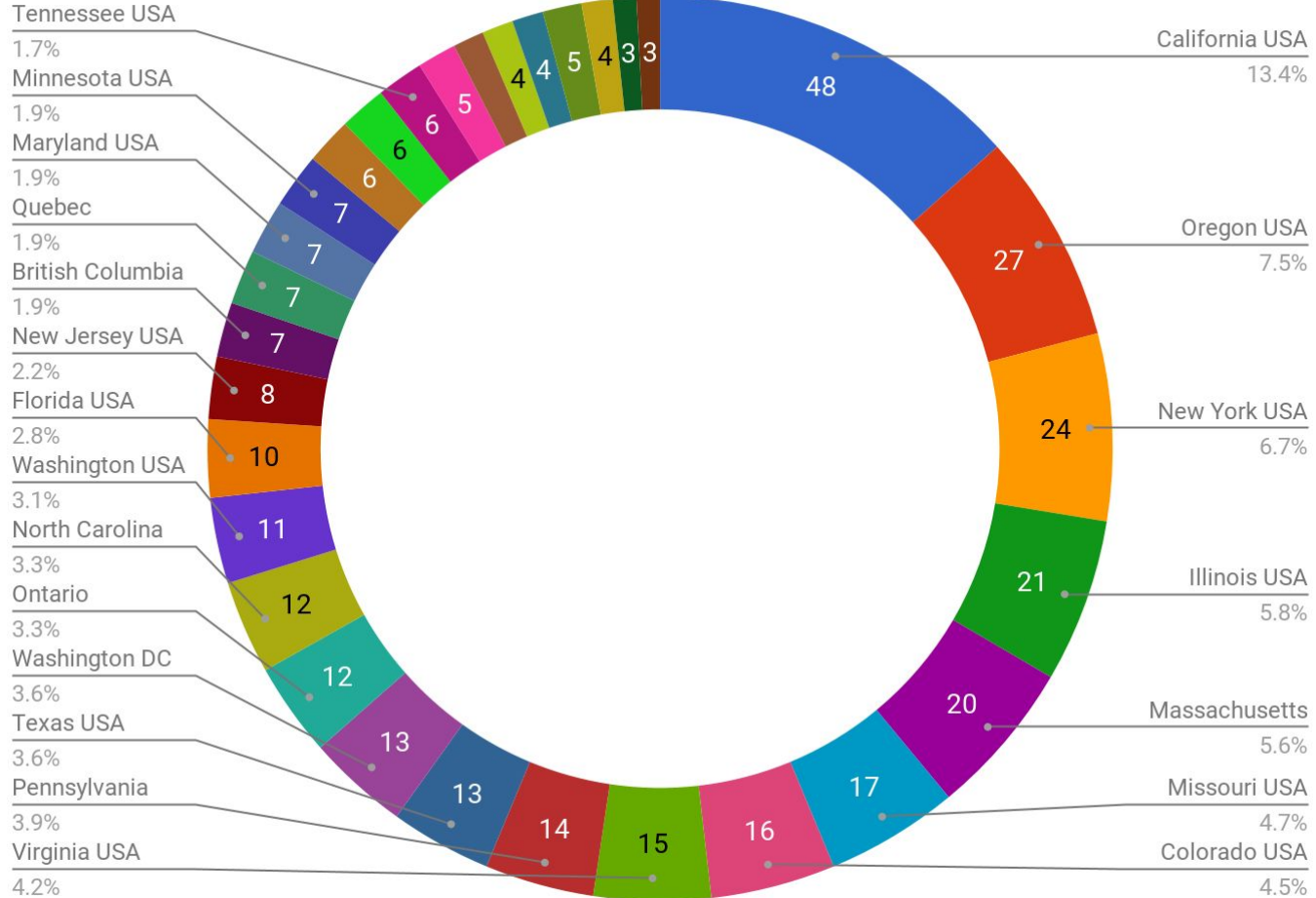
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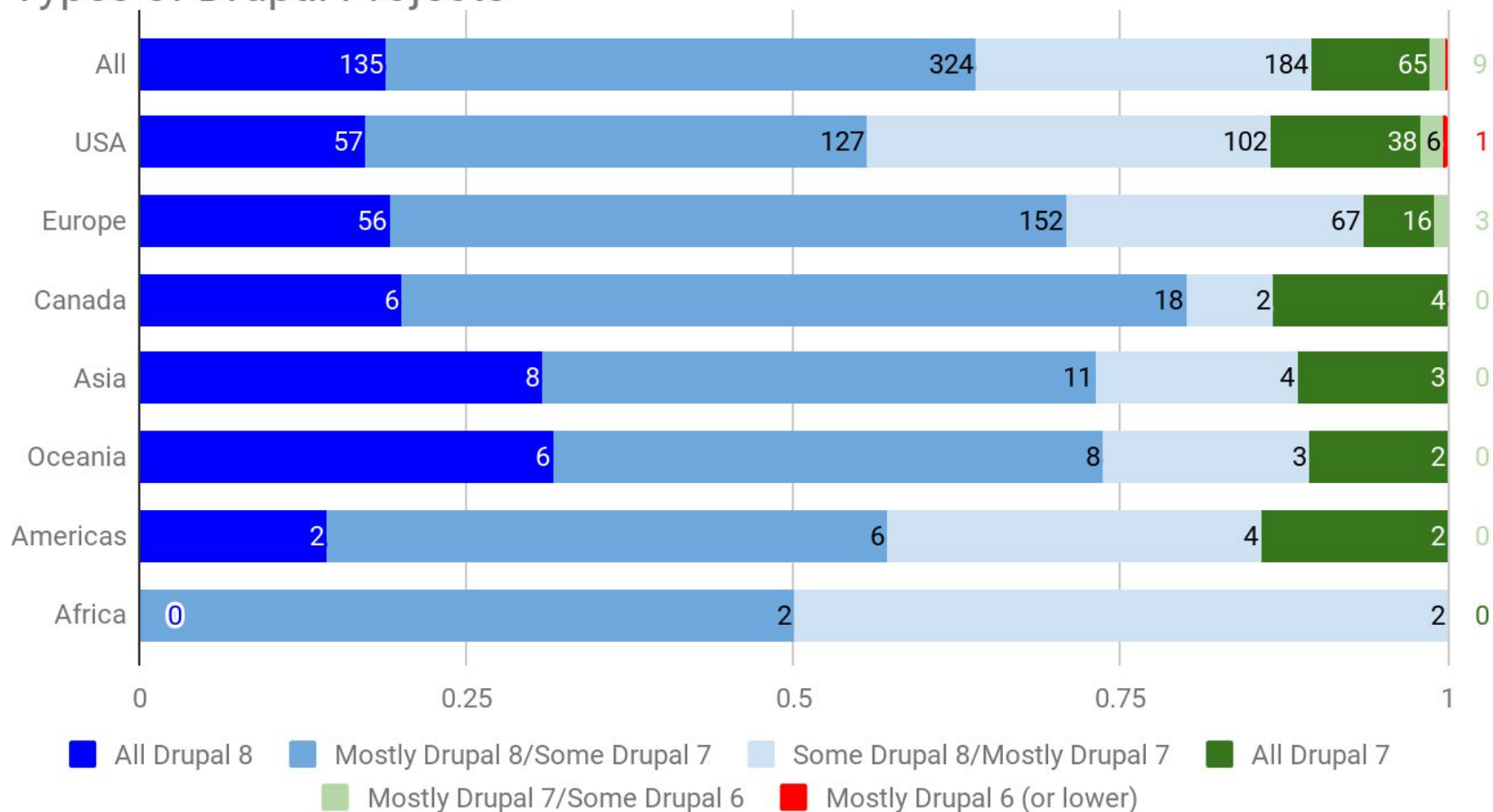
Location ex USA



Location USA only



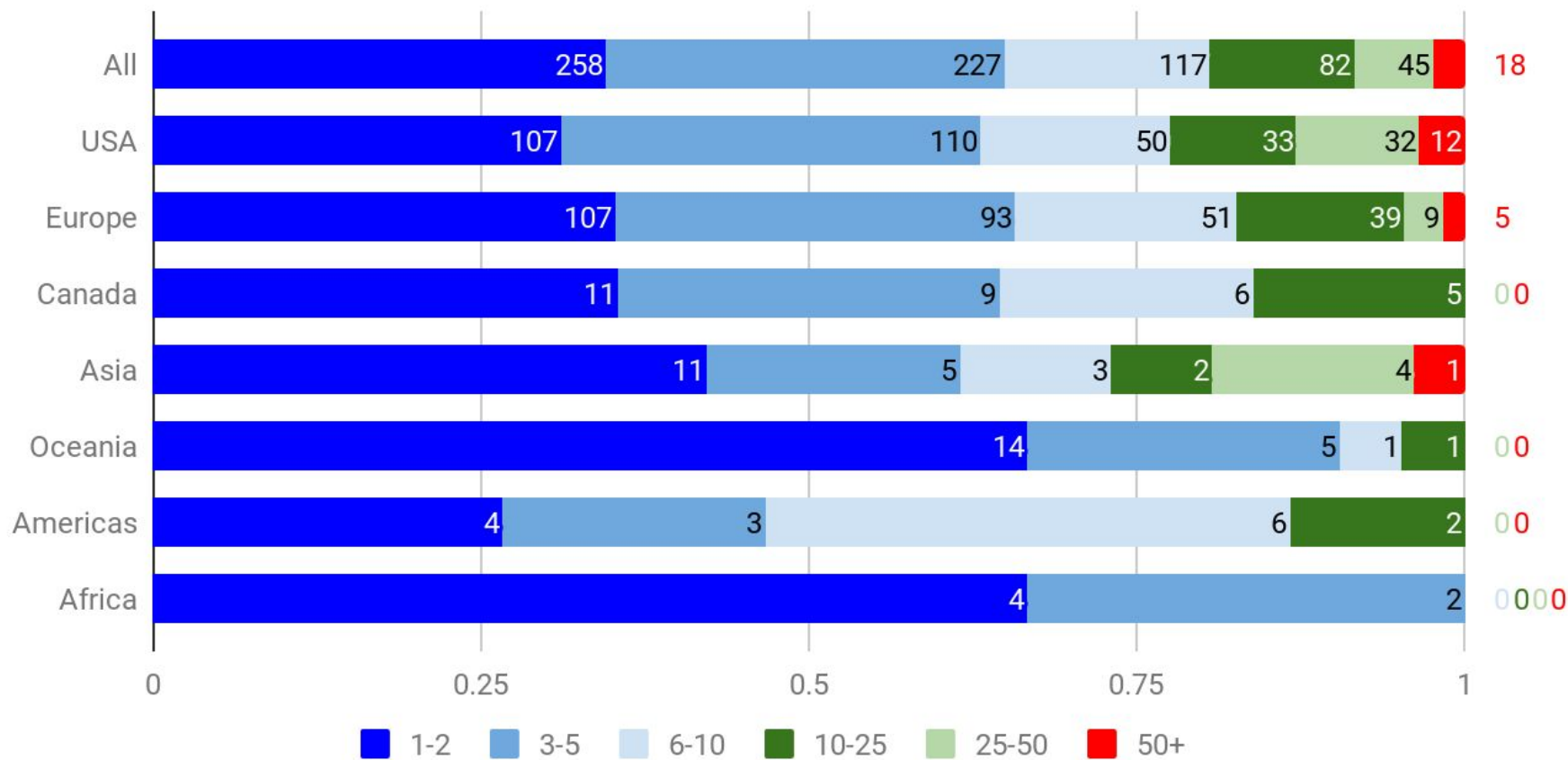
Types of Drupal Projects



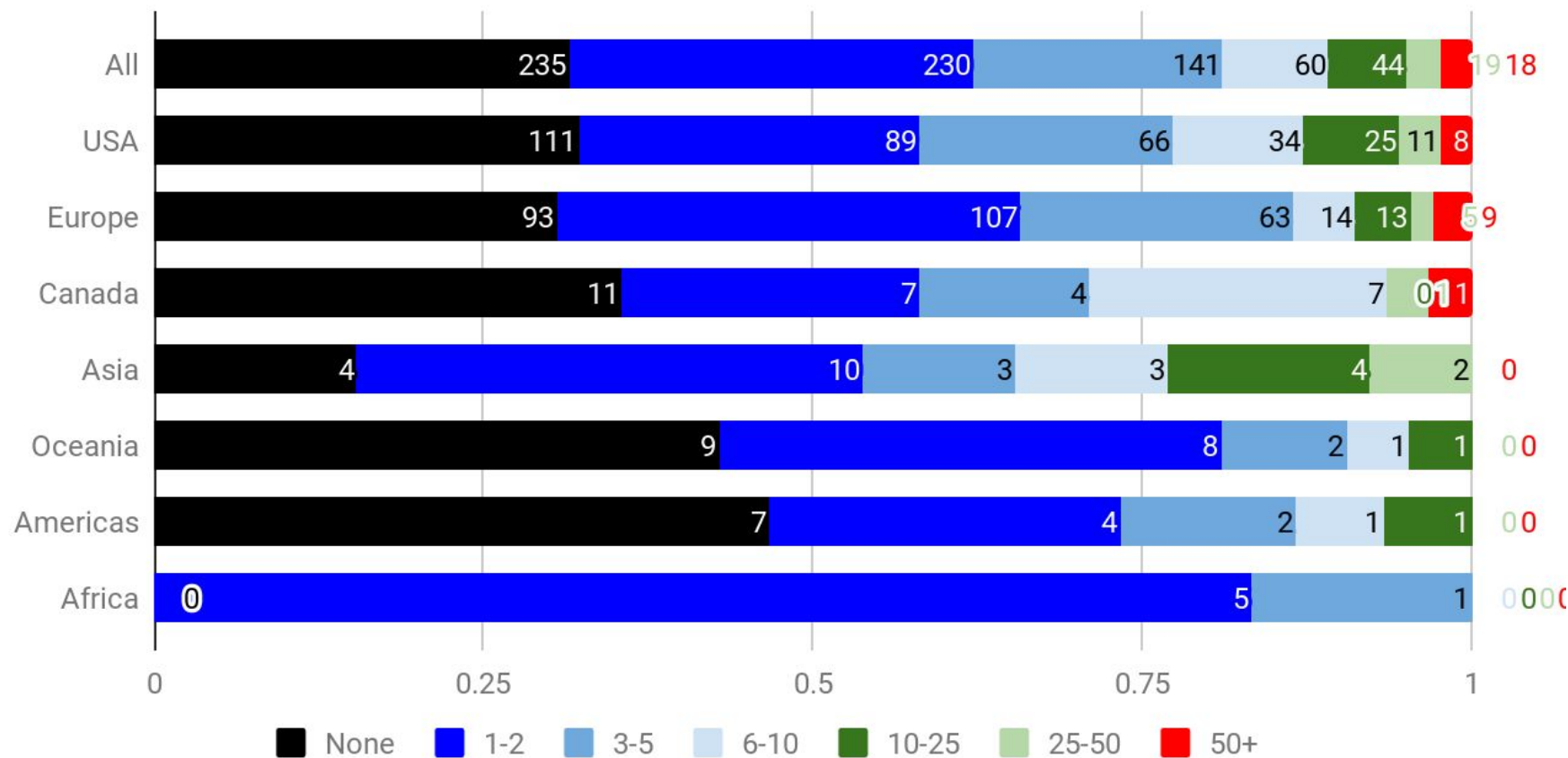
What types of Drupal projects you are working on?

- 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



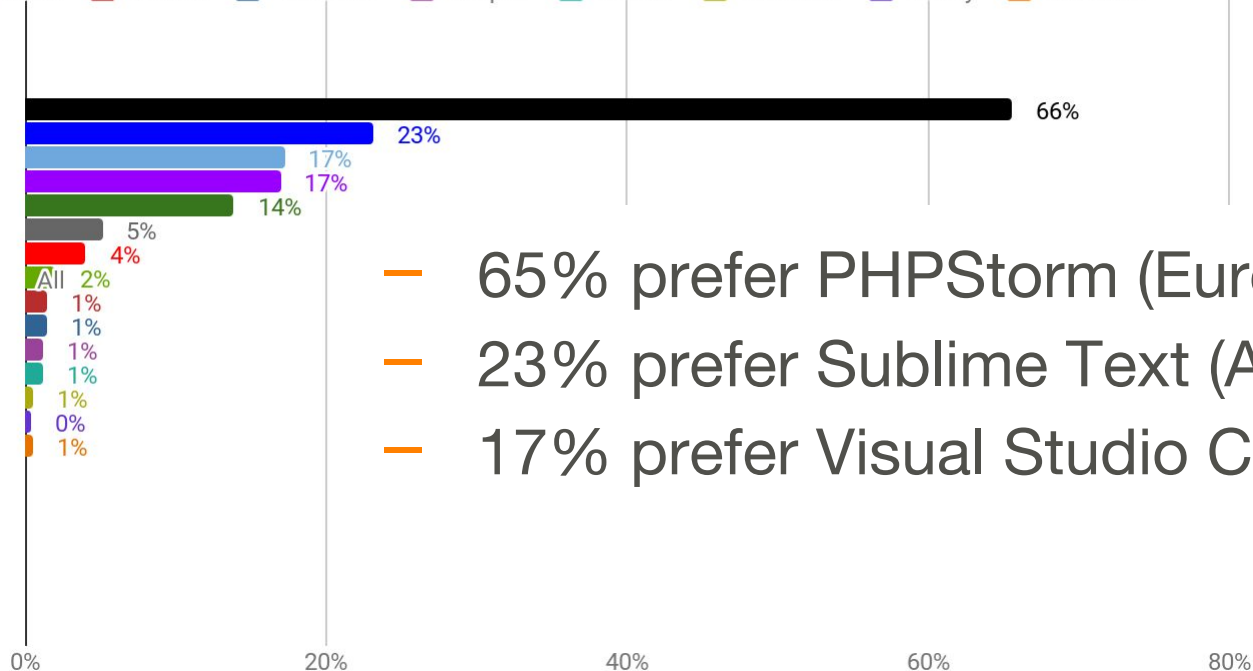
How many developers are on your team?

- 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?

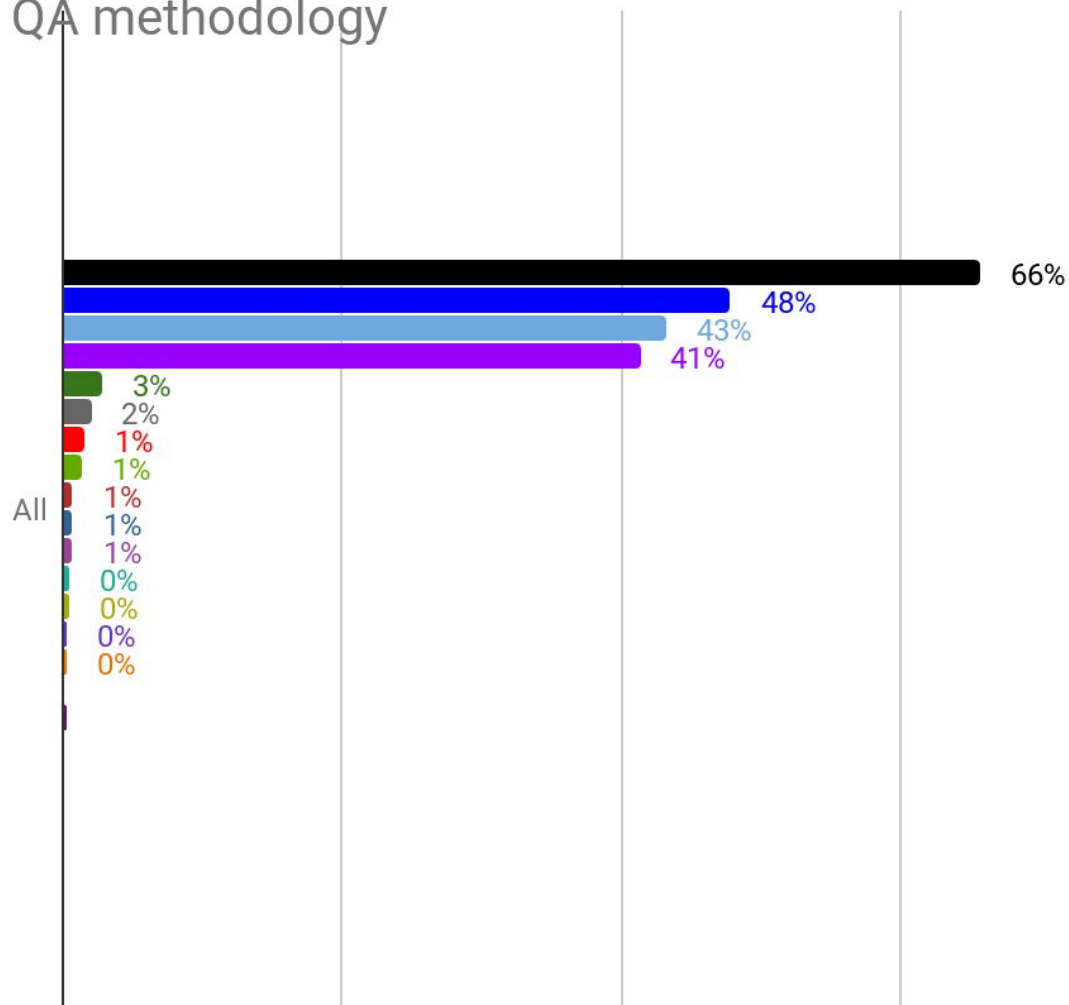
Code Development tool preferences

Legend: PhpStorm (black), Sublime Text (blue), Visual Studio Code (light blue), Vim (purple), Atom (green), Notepad++ (grey), Netbeans (red), Coda (light green), Emacs (dark red), Textmate (dark blue), Eclipse (dark purple), BBEdit (teal), Brackets (yellow-green), Geany (dark blue), Komodo (orange).



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

QA methodology



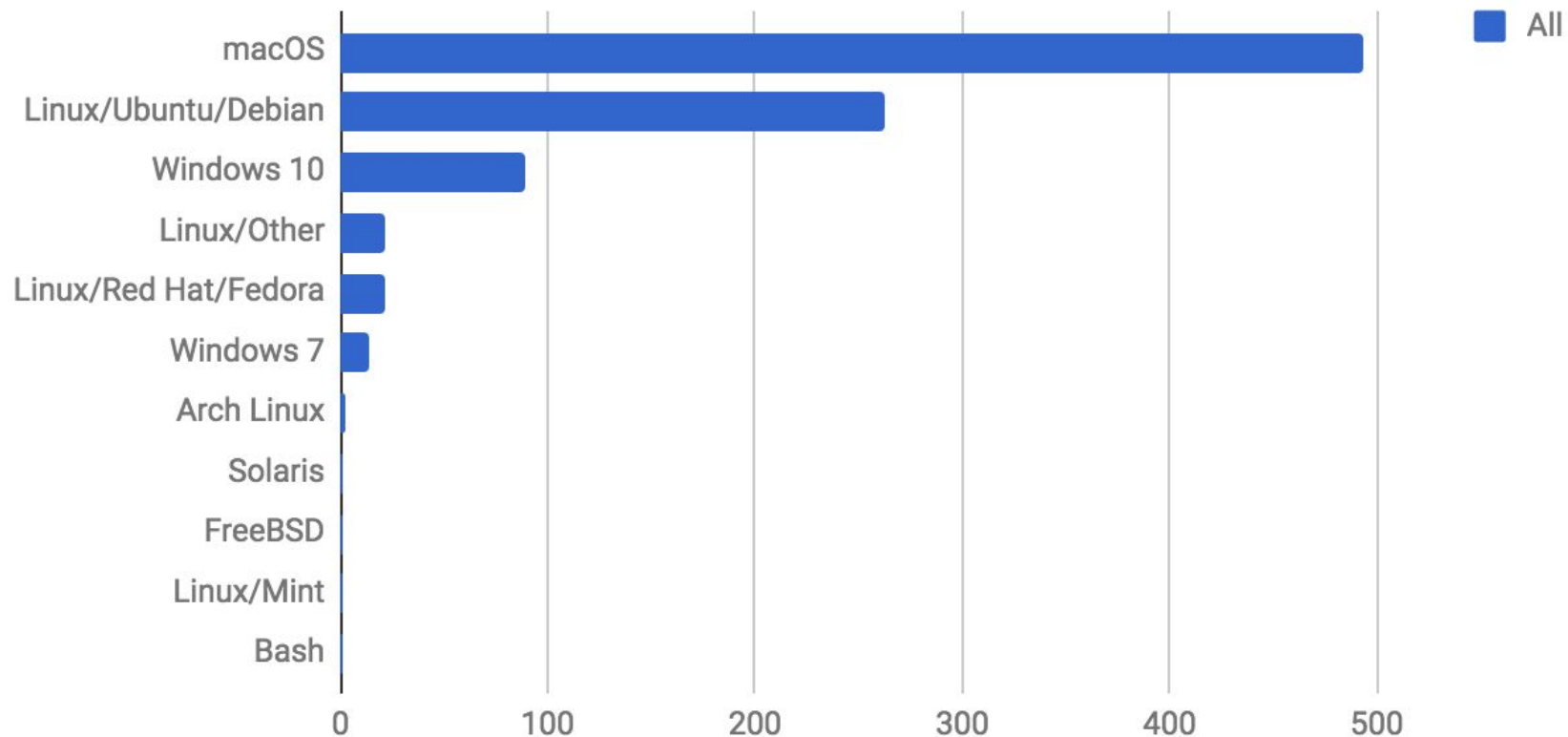
- Developer does own tests
- Peer review
- Architect does code review
- QA team
- Automated testing
- linting
- CI tools
- PHP Code Sniffer
- client reviews
- Behat tests
- phpunit tests
- code standards
- SonarQube
- CircleCI
- PHP Mess Detector
- Acquia BLT
- 2 more

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

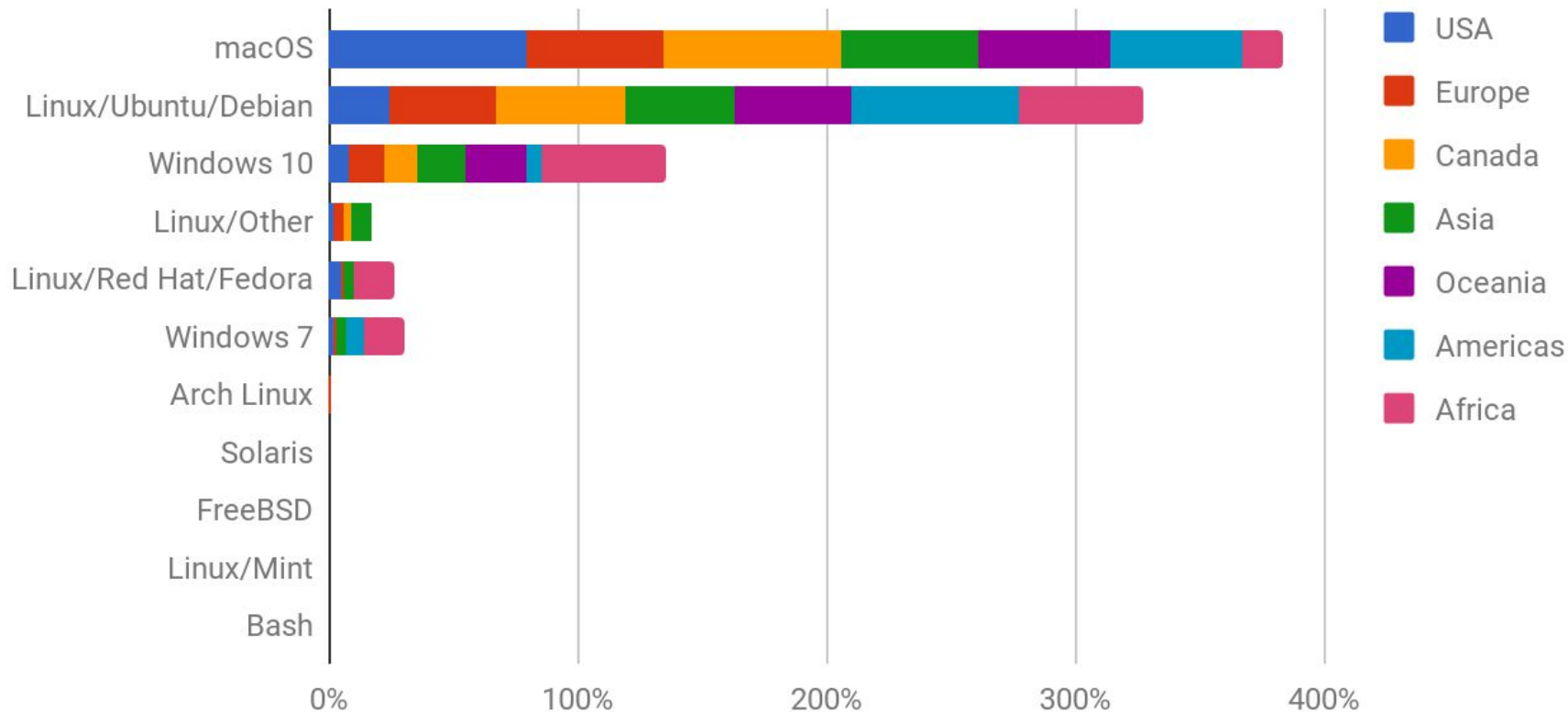
Local OS Preferences



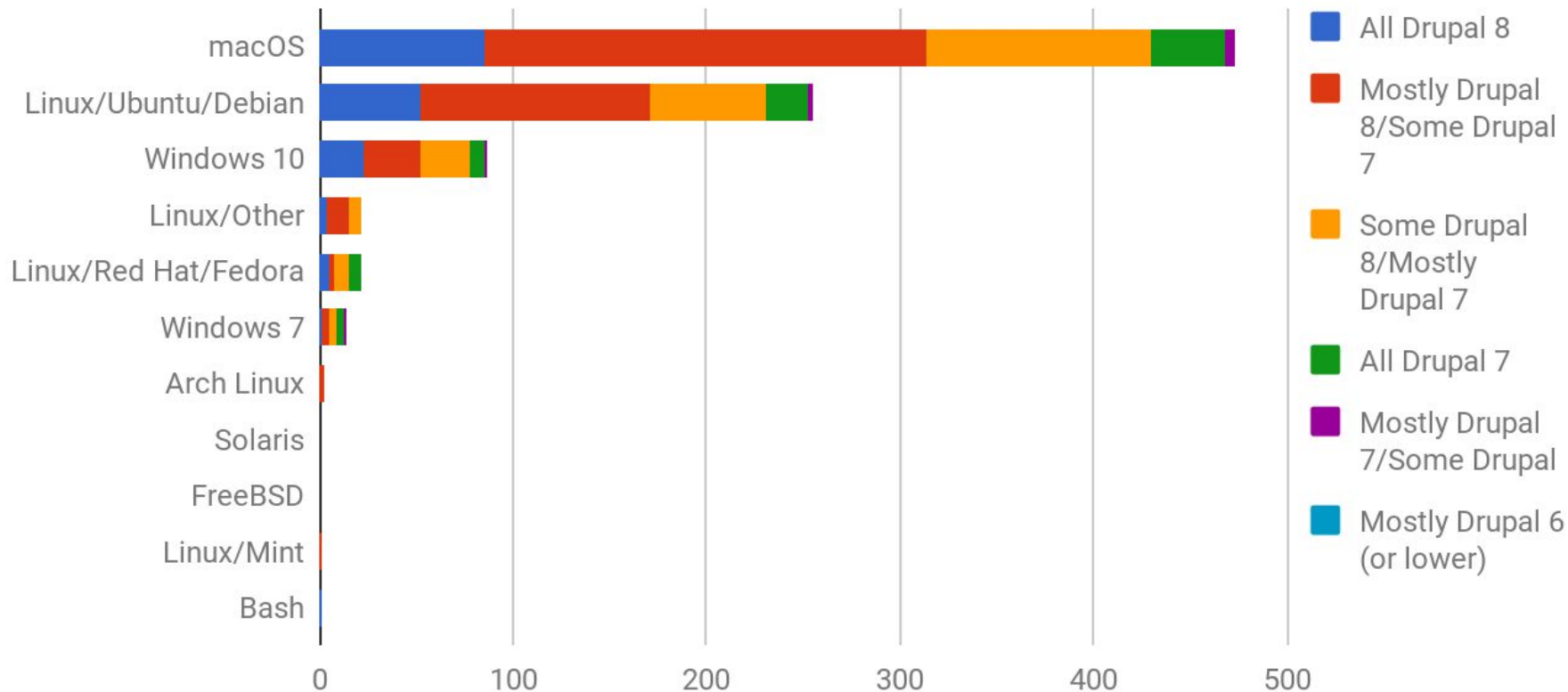
Local

- 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)

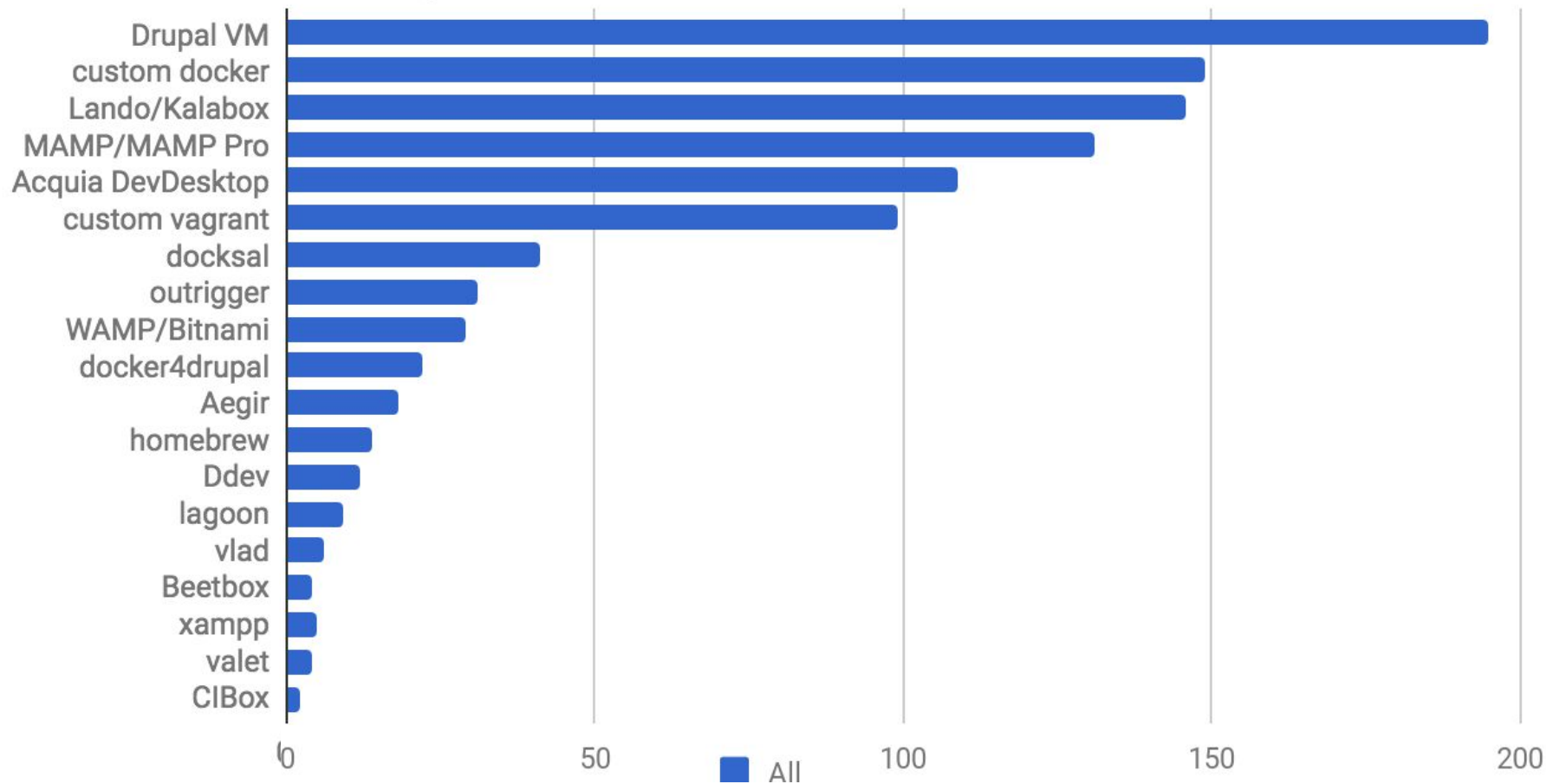
Local OS Preferences by Region



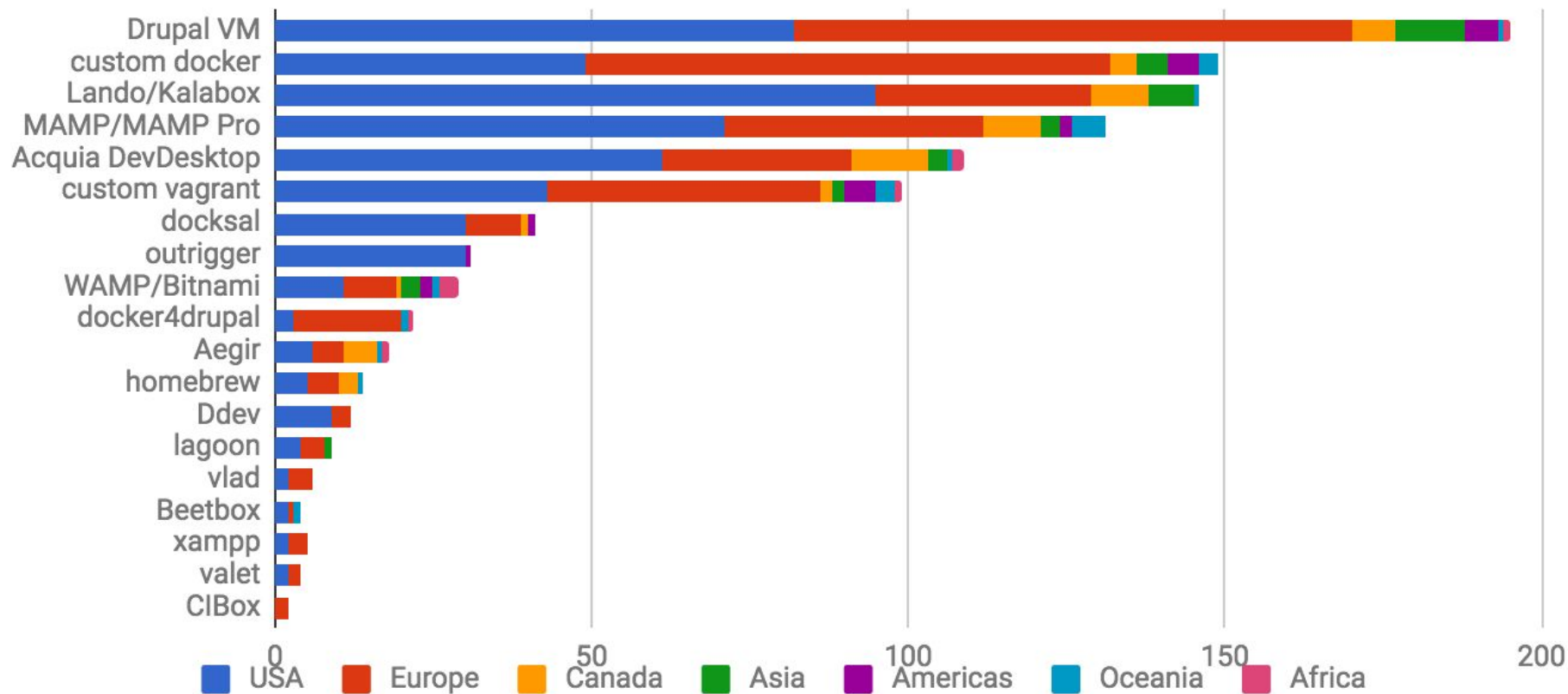
Local OS Preferences by Project



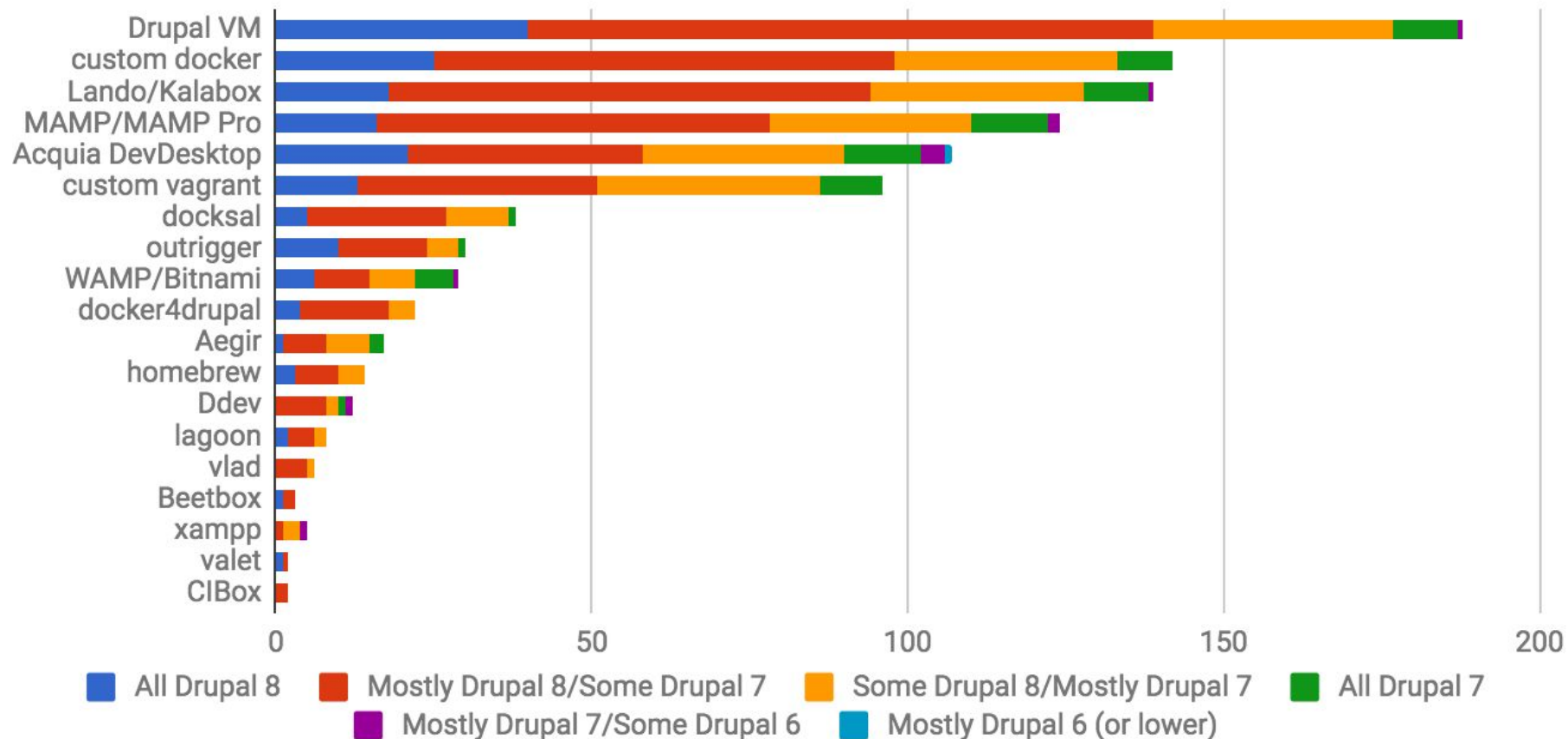
Local Dev Technologies



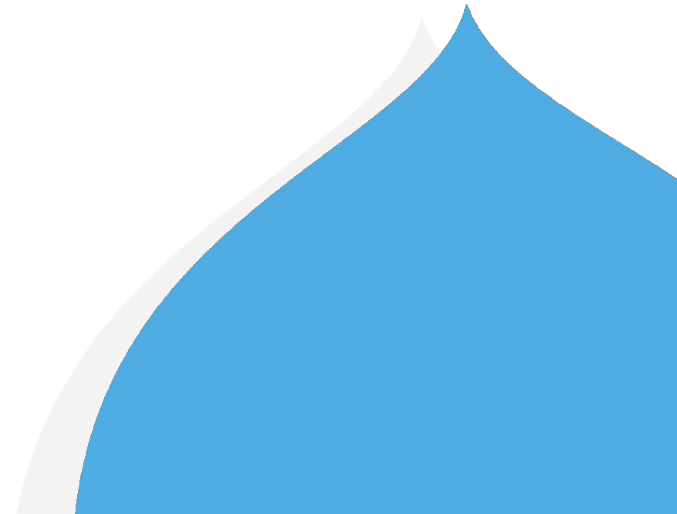
Local Dev Technologies by Region



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

A high-contrast, black and white close-up portrait of a man with a weathered face, long hair, and a full beard. He is wearing a dark baseball cap with a small, indistinct logo on the front. The lighting is dramatic, casting deep shadows on the right side of his face and highlighting the texture of his skin and hair. The background is a soft, out-of-focus grey.

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?



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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