



Magento**Live**

UK | 2016



Migrate from Magento 1 to Magento 2 Like a Pro

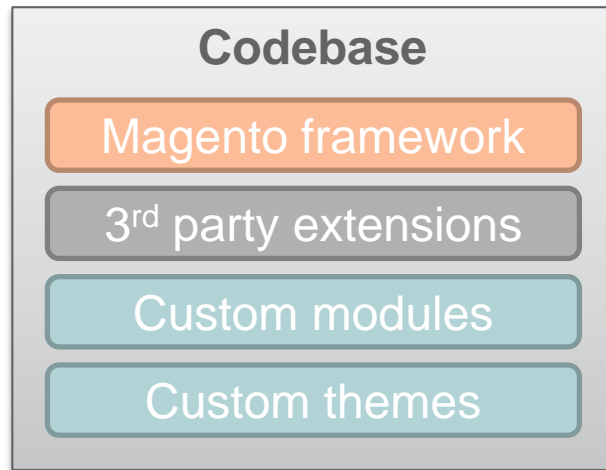
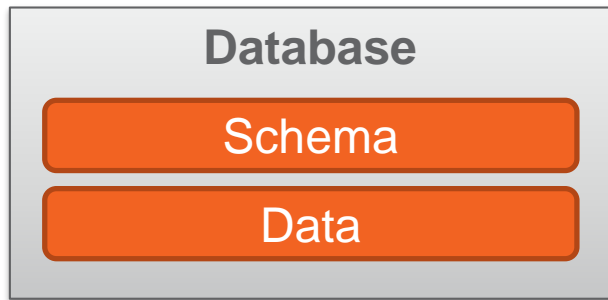


Gordon Knoppe

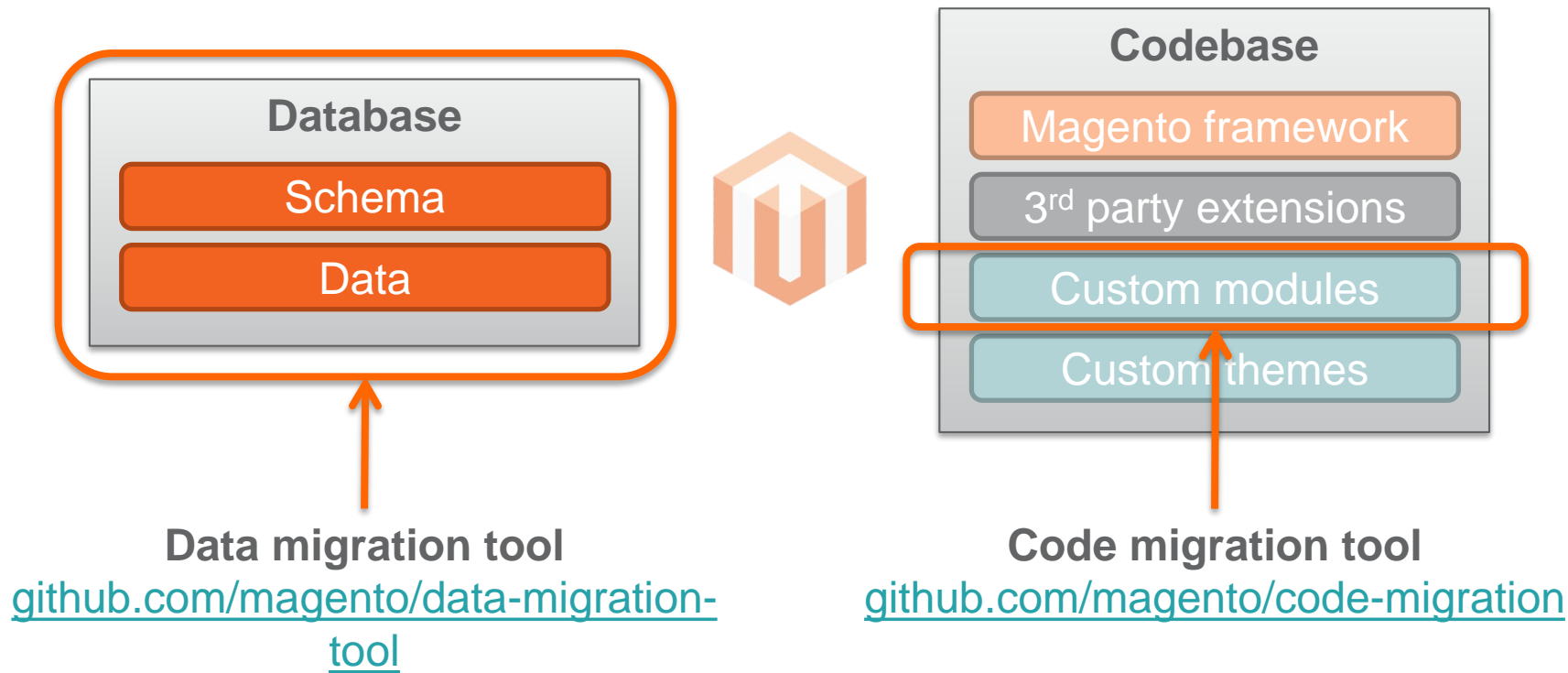
*Business Solutions Architect
Magento, Expert Consulting Group*

@gordonknoppe

Magento 2 Upgrade Scope



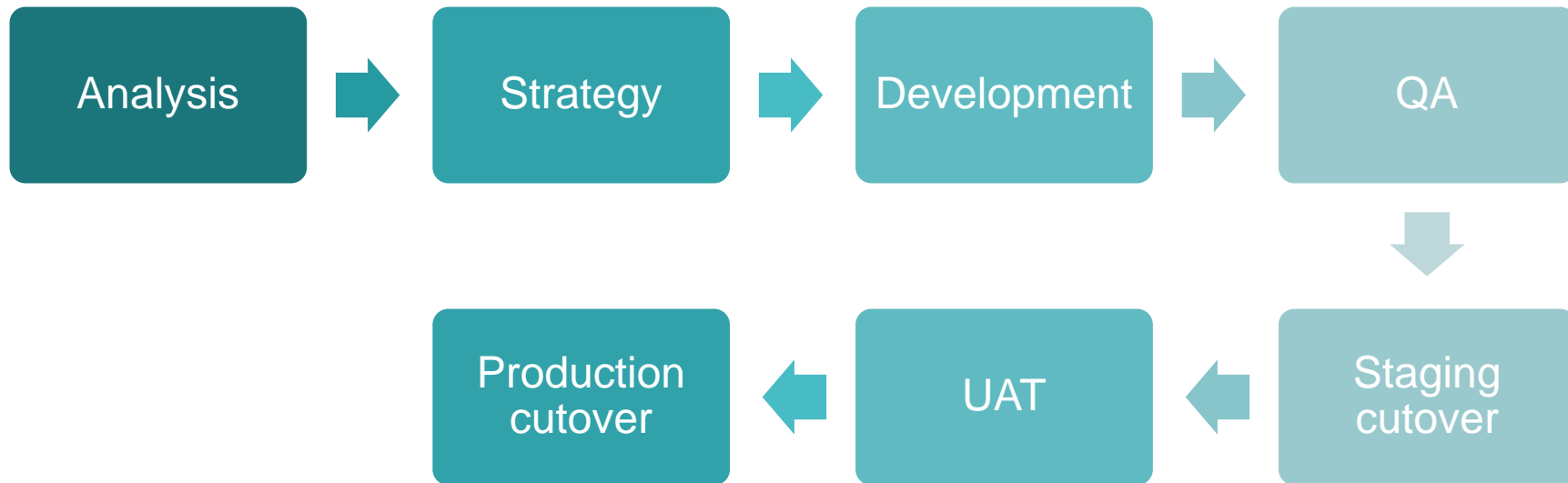
Magento 2 Upgrade Tooling



Preparation is Key

Code is only one part of this

Phases of the Migration

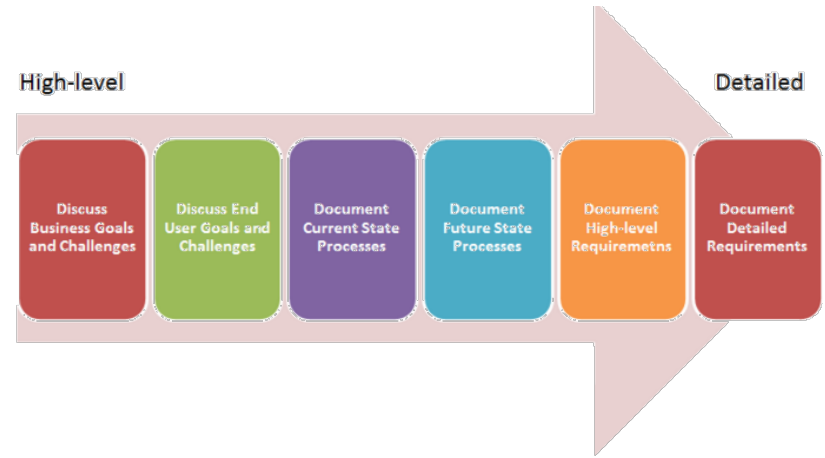


Analysis & Strategy



Requirements

- Do you have any written down?
- Obsolete customizations
- Map out M1 and M2 Features in Use
- Desktop vs mobile
- How will it be tested?
- Deployment tools



New Features Strategy

- New in Magento 2
- Or maybe just new to you?
- Return to native
- Demo, demo, demo for your business users!



Code Analysis / Audit

- Custom modules
- Third-party extensions
- Dependencies between modules and extensions
- Unused modules
- JavaScript functionality
- Business logic in templates

Third-party Extensions Strategy

- Full inventory of installed extensions
- Remove, return to native, upgrade
- Magento 2 compatible extension ready
- Does it do everything it did in the Magento 1 version?



Custom Module Strategy

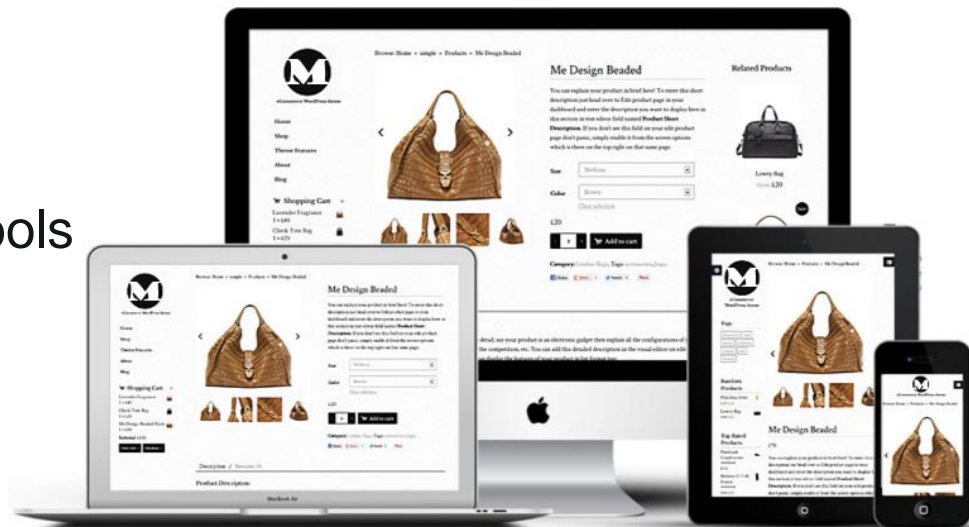
- Native + 3rd party ext. + ??? = Your site
- Remove or migrate
- Re-architect
 - Divide, merge, or completely refactor?





Theme Analysis

- Identify theme requirements
- Create theme approach
- Theme is not migrated with tools



Theming and Personal Devices Strategy

- HTML, CSS and JavaScript
- Build on a responsive foundation
- Single theme or global multi-store with unified branding?
- Supported devices and responsive break points



Beyond The Code



Integrations

Information migration

Business processes

Infrastructure

Environments

Testing

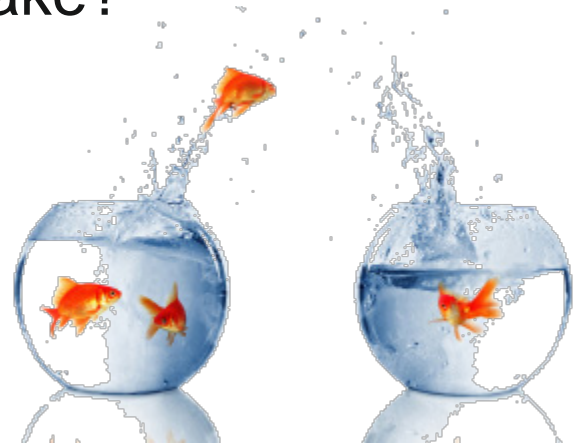
Integrations Strategy

- High-level view of integrations with third-party systems
- Landscape diagram
- Integration technology approach
- Remove, migrate, re-architect



Information Migration Strategy

- Database, media, legacy design / content elements?
- How much data? How long will it take?
- Clear plan for launch day
- Practice, practice, practice
- Open source data migration tool



Data Migration Tool

- github.com/magento/data-migration-tool
- Supported versions
 - Community Edition (CE) version 1.6.x, 1.7.x, 1.8.x, 1.9.x
 - Enterprise Edition (EE) version 1.11.x, 1.12.x, 1.13.x, 1.14.x
 - Older version? Professional Edition?
 - Upgrade schema first to a supported version
- Full and differential migrations



Infrastructure Strategy

- Updates to the technology stack
- Your hosting and service choices
- Deployment process
- ECG whitepaper coming soon on this topic
- Magento Enterprise Cloud Edition



Environments Strategy

- Development
- Staging / QA
- UAT
- Production
- Code promotion process
- What about the running
Magento 1 environment?

Testing

1. Test plan

- a) Developers
- b) QA team
- c) UAT plans
- d) Tools
- e) Communication
- f) Workflow



3. Test cases

Inputs:

Requirements &
Client's UAT Test Cases

Outputs:

Test Cases &
Requirements-to-Test-Case Matrix

2. Test environment

Automated Testing and Development

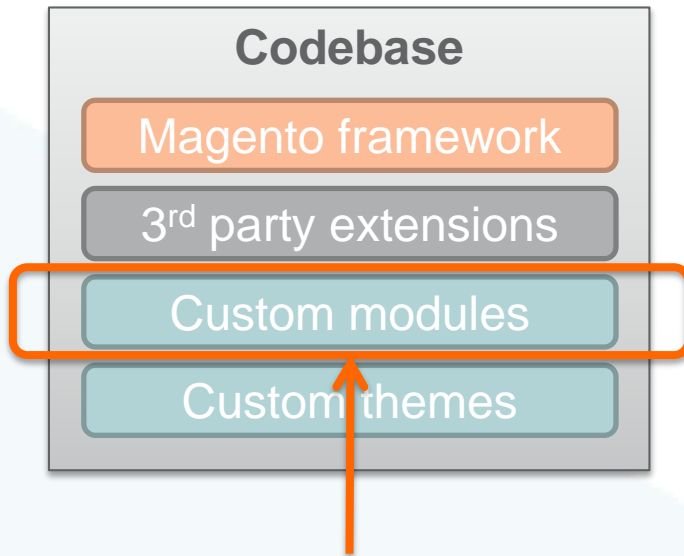
- Magento 2 ships ready for testing
- Continuous Integration?
- Testing requirements and definition of done for developers

Business Process Change Strategy

- Processes subject to change
- Looking for something? Things may have moved...
- Admin users by role and their tasks

Finally, time to work on the code!

Code Transformation / Migration



Code migration tool

github.com/magento/code-migration

Code Migration Tool Scope

Magento
module



Layout



Directory
structure



Configuration



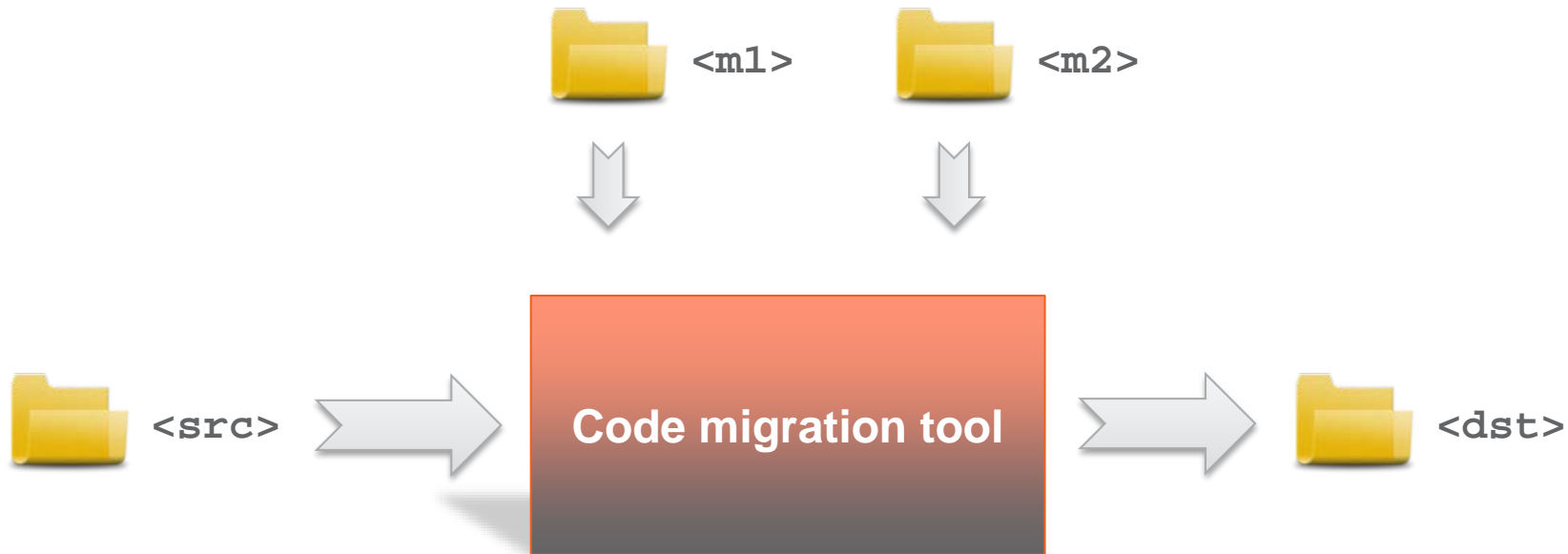
`<?php // code ;)`

Code Migration Tool Overview

- **Audience:** Magento developers
- **Interface:** Command line interface (CLI)
- **Goal:** Automate routine code changes
- **Methodology:** Static code analysis
- **Remaining work:** Manual testing, troubleshooting, fixing



Directory Utilization



Code Upgrade Project Breakdown

1. Magento 1.x tasks

- a. Remove unused modules
- b. Revert modifications of core files]:->
- c. Remove fixes of bugs irrelevant in Magento 2

2. Code migration tool tasks

- a. Tailor the tool for patterns unique to the project
- b. Run the tool against Magento 1.x codebase

3. Magento 2 tasks

- a. Commit disabled Magento 2 modules
- b. Test, fix, and enable module by module

Code Migration Tool - Resources

- Available on GitHub
 - <https://github.com/magento/code-migration>
- Sergii Shymko's Magento Imagine 2016 presentation
 - Slides:
 - <http://imagine.magento.com/sites/default/files/Mon.Margaux1.1630.SS7,8.Technical.pdf>
 - Video:
 - <https://youtu.be/IXJ6rMdQvkk>

Quality Assurance

UAT Testing

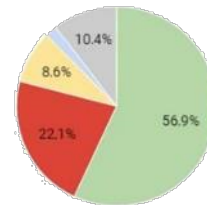
Test Plan Input: Client's UAT Test Cases

Output: Client's testing issues and test result

- Integrations & end-to-end systems testing
- Regression testing
- User Acceptance Testing (UAT) of all site and admin features
- Deployment testing
- Recovery

UAT STATUS

	Catalog	Customer	Sales	Returns	Mobile	780
						Total
PASS	157	76	208	52	17	562
FAIL	117	24	36	12	10	218
CAN'T TEST	38	4	11	12	6	85
RETEST avail.	7	1	11	0	0	19
Remaining	8	11	36	21	1	103
Total	327	116	302	97	34	987



Cutover and Release

Staging and production cutover

- Ordered list of steps to be taken during staging and production cutover
 - Order of operation
 - Dependency
 - Task description
 - Responsible party
 - Status (to do, done)
- The cutover should be practiced and tested to catch issues and establish realistic timeframes



And you're live!



Thank you - Questions?

Twitter: @gordonknoppe



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Magento Enterprise Cloud Edition: Technical Overview



Magento Enterprise Cloud Edition

A robust solution
enabling rapid deployment and on-going
innovation combining industry-leading
cloud technologies with the
full flexibility of Magento

Why Magento Enterprise Cloud Edition?

Differentiated

Unrivalled flexibility

Best Practices

Integrated learnings

Modern & Robust

Mature industry leading technologies

Efficient & Repeatable

Differentiation, not deployment and DevOps

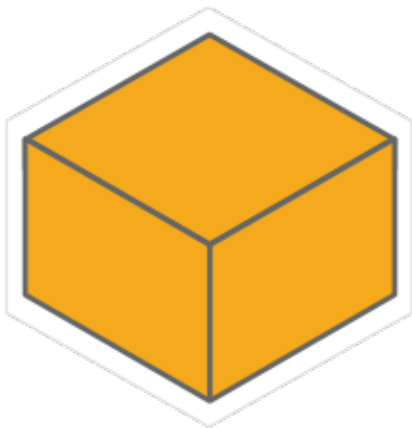
Peace of Mind

Availability, Scalability,
Redundancy,
Monitoring, Support,

Magento Enterprise Cloud Edition



Cloud Infrastructure



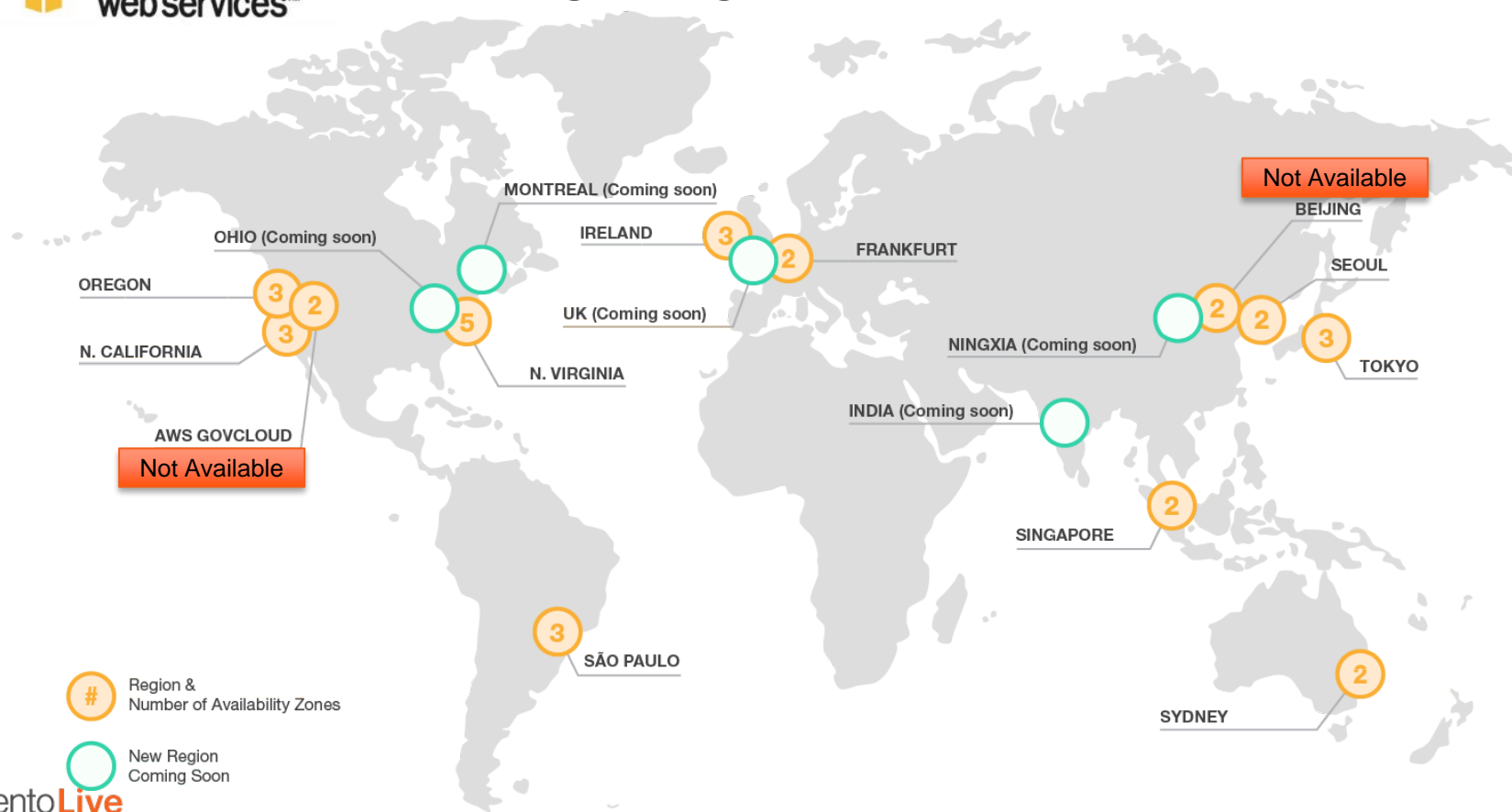
Why

- Industry Leading Cloud Technology
- Elastic and Flexible
- Virtually Limitless Scalability
- Global presence

What

- Dynamic Scaling
- Cost Efficient
- PCI-Certified Environment

Hosting Regions



Region &
Number of Availability Zones

○ New Region
Coming Soon

Platform-as-a-Service (PaaS)

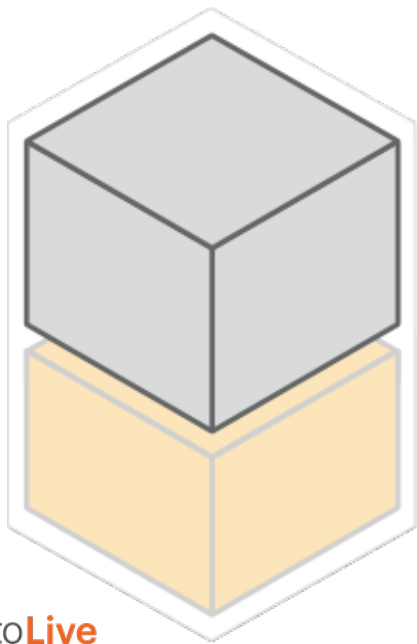


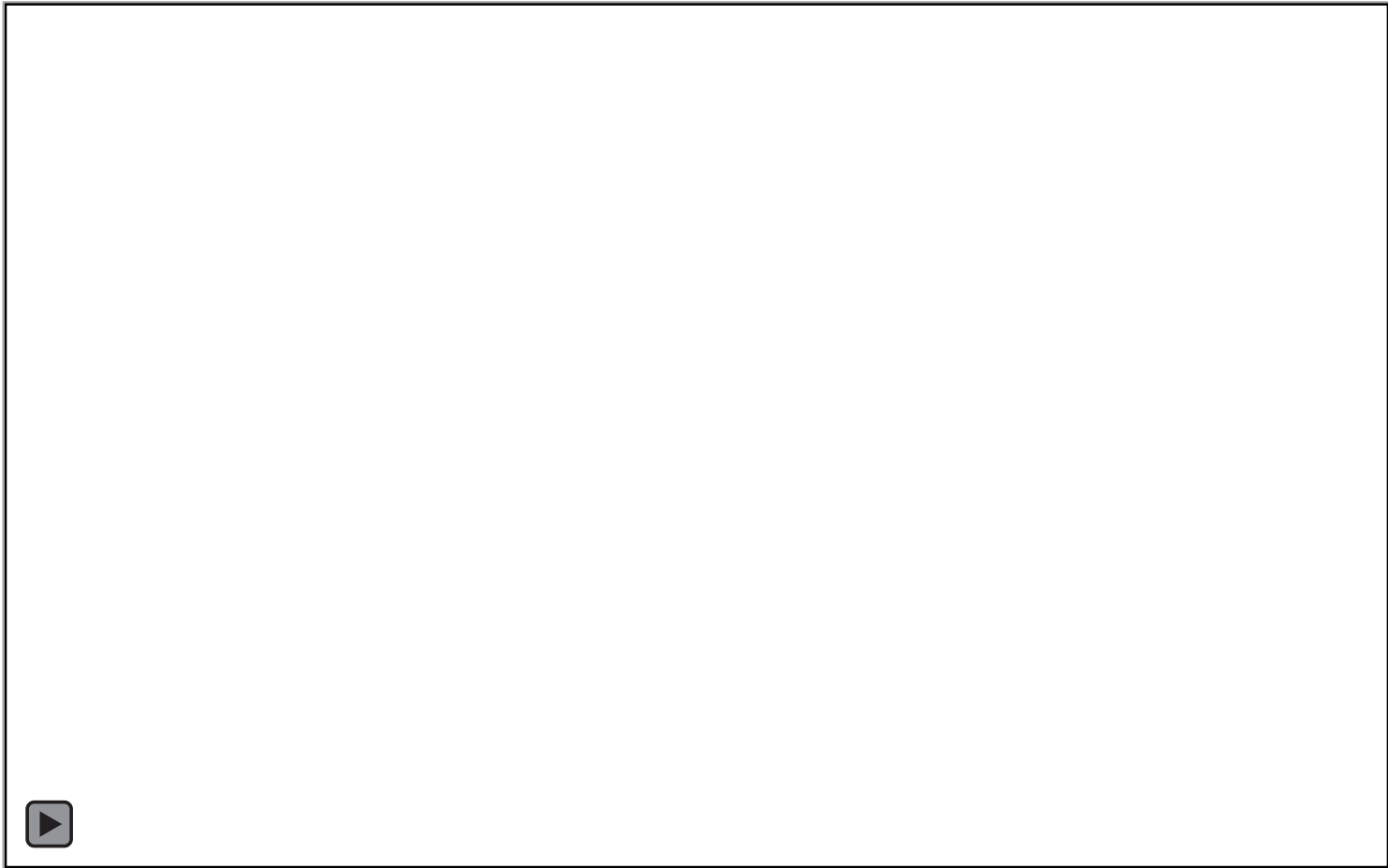
Why

- Be truly agile and ship faster
- Robust deployment process
- Developer efficiency

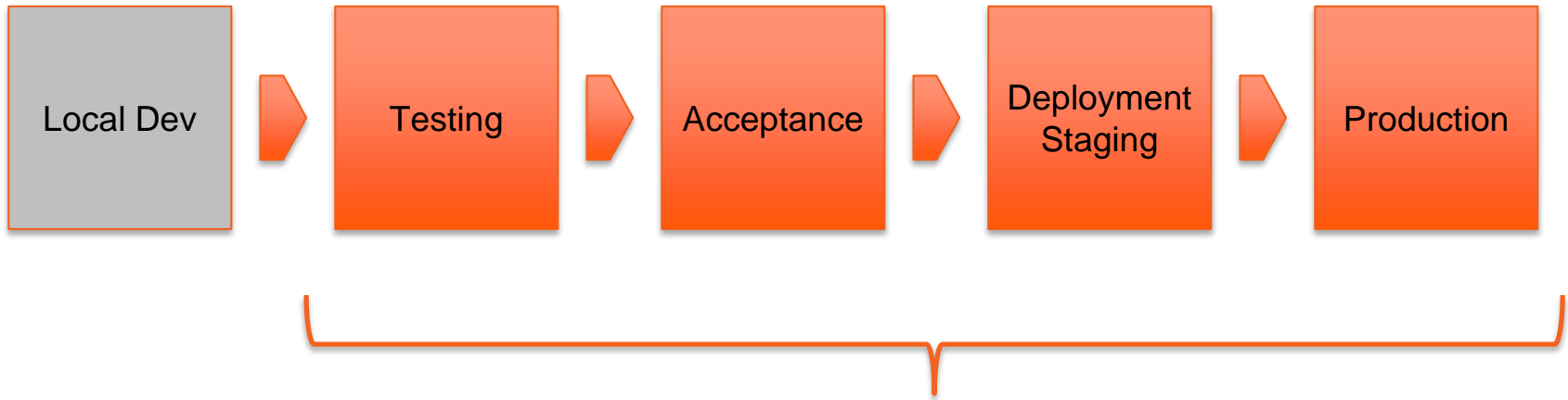
What

- Consistent, repeatable development-to-production deployment flow
- Rapid environment creation and cloning
- Test and acceptance
- Automation of DevOps activities



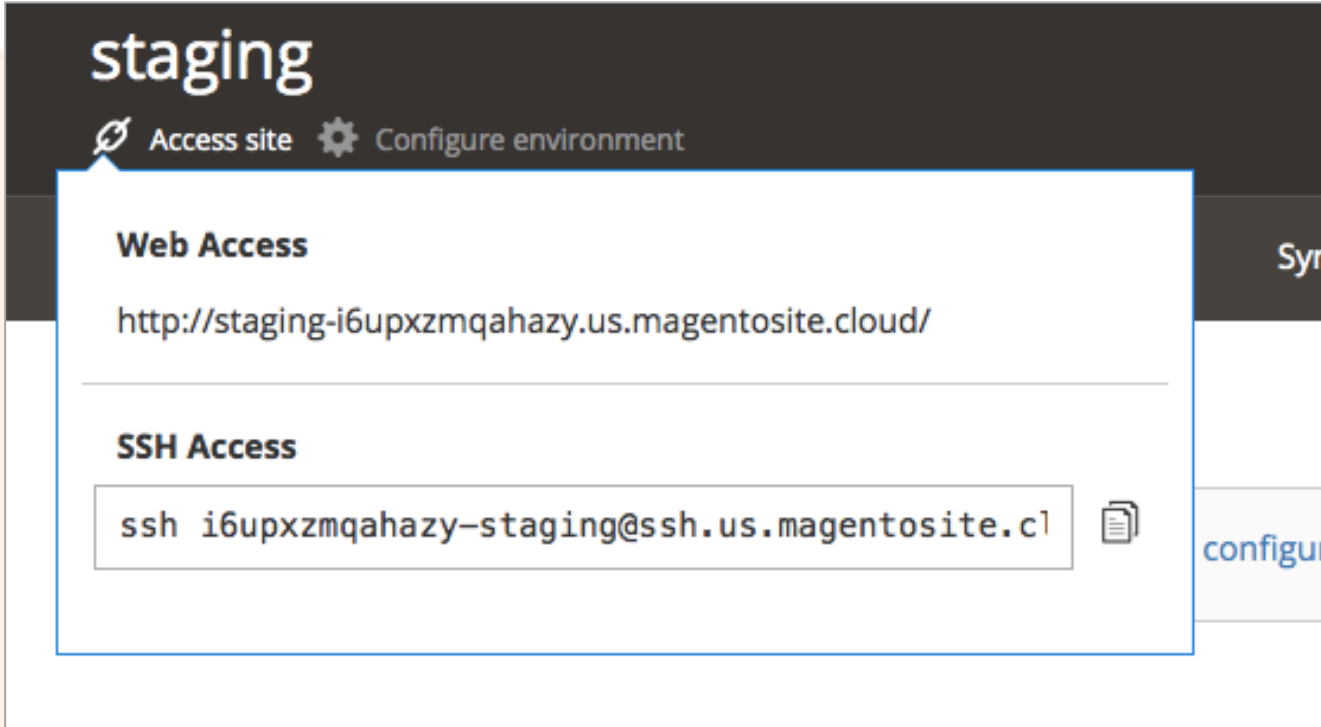


Testing, Acceptance, and Staging





Magento Enterprise Cloud Edition

Environment Access



The screenshot shows a web interface for managing a staging environment. At the top, the word "staging" is displayed in a large, white, sans-serif font on a dark background. Below it, there are two navigation links: "Access site" with a magnifying glass icon and "Configure environment" with a gear icon. A white modal box is open in the center, containing two sections: "Web Access" and "SSH Access". The "Web Access" section displays the URL "http://staging-i6upxzmqahazy.us.magentosite.cloud/". The "SSH Access" section displays the command "ssh i6upxzmqahazy-staging@ssh.us.magentosite.c1" inside a text box, with a copy icon to its right. On the right side of the interface, partially visible, are the words "Syr" and "configur".


staging

 Access site  Configure environment

Web Access

`http://staging-i6upxzmqahazy.us.magentosite.cloud/`

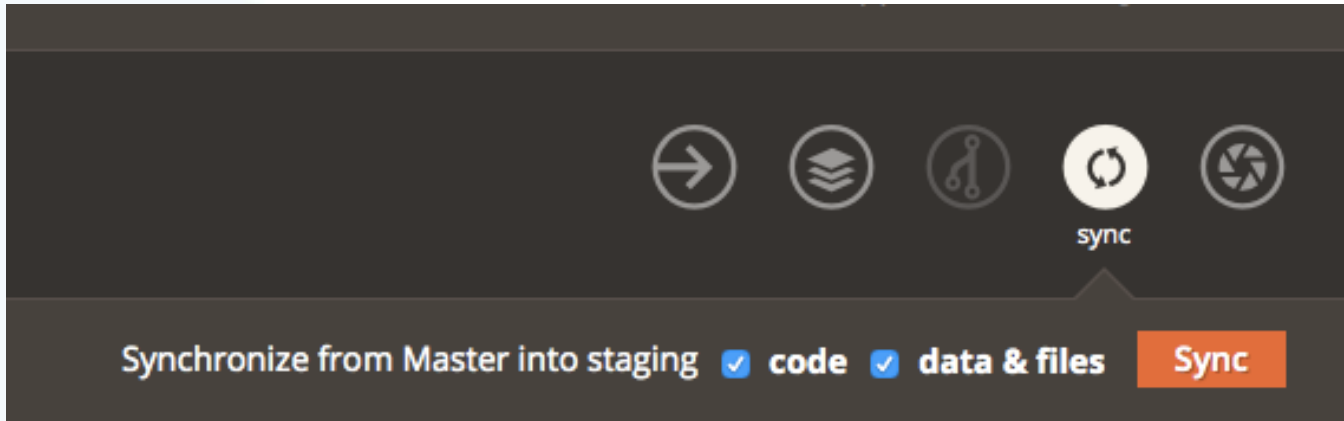
SSH Access

`ssh i6upxzmqahazy-staging@ssh.us.magentosite.c1` 

Syr

configur

Synchronize Files and Database



Service Definition and configuration

```
8 # The toolstack used to build the application.
9 type: php:7.0
10 build:
11     flavor: composer
12
13 # Enable extensions required by Magento 2
14 runtime:
15     extensions:
16         - mcrypt
17         - redis
18         - xsl
19         - json
20
21 # The relationships of the application with services or other applications.
22 # The left-hand side is the name of the relationship as it will be exposed
23 # to the application in the environment variable. The right-hand
24 # side is in the form `
```

Technology Stack

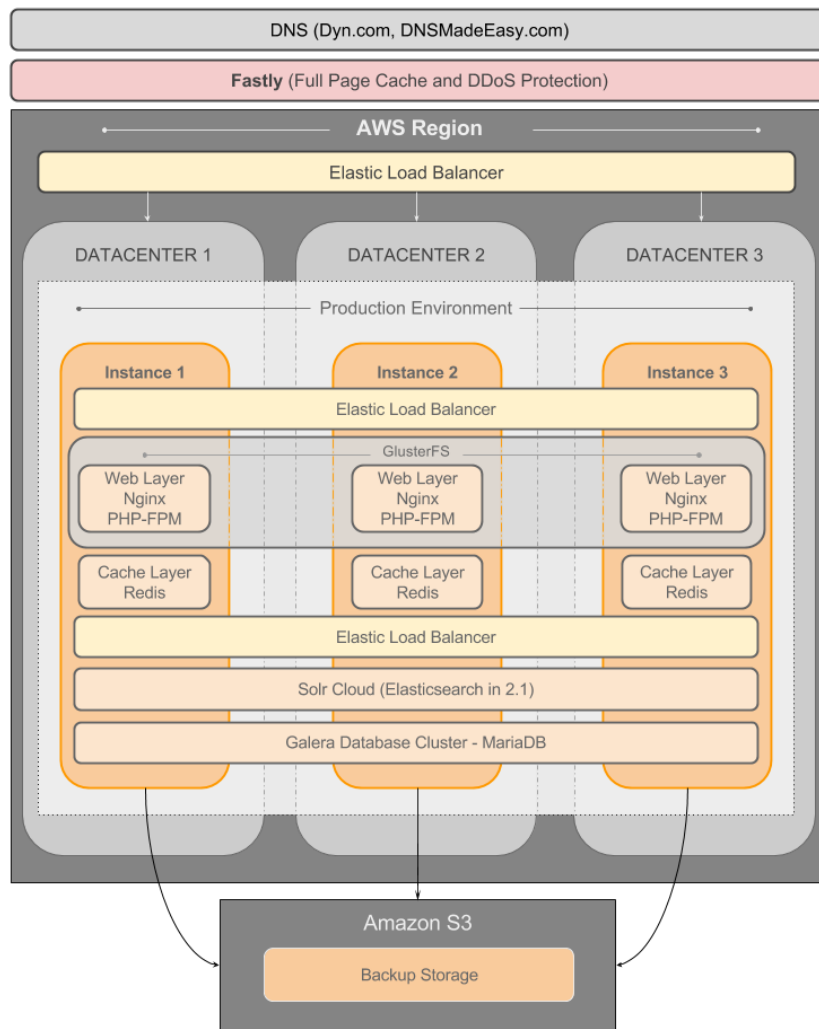
- Debian GNU/Linux 8 (jessie)
- Nginx 1.8
- PhP 7
 - Strongly recommended
 - PhP 5.5, 5.6 also available
 - Available PhP Extensions can be found [here](#)
- MySQL 10.0 (Maria DB in a Galera Cluster (in production))
- Redis 2.8 & 3.0
- Solr 4.0
- Elastic Search 1.7
- RabbitMQ 3.5



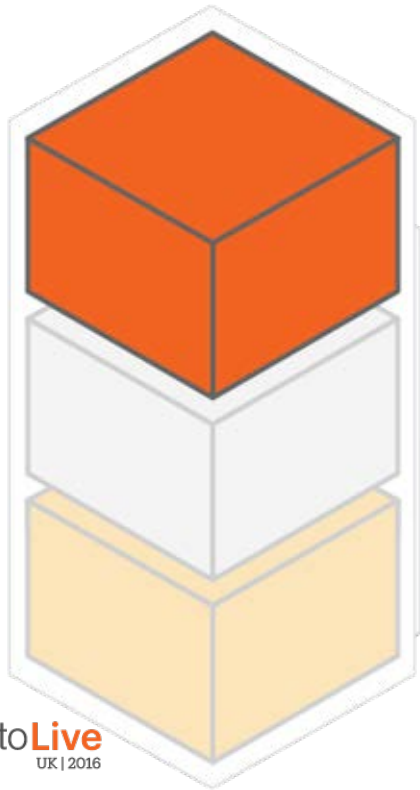
Integration with Product Environment

- Push from PaaS environment to production environment
- 99.99 Availability SLA for the full hosting stack
- Triple redundancy
- Zero down time scalability for the full stack
- 24 x 7 monitoring

Architecture



Magento Enterprise Edition



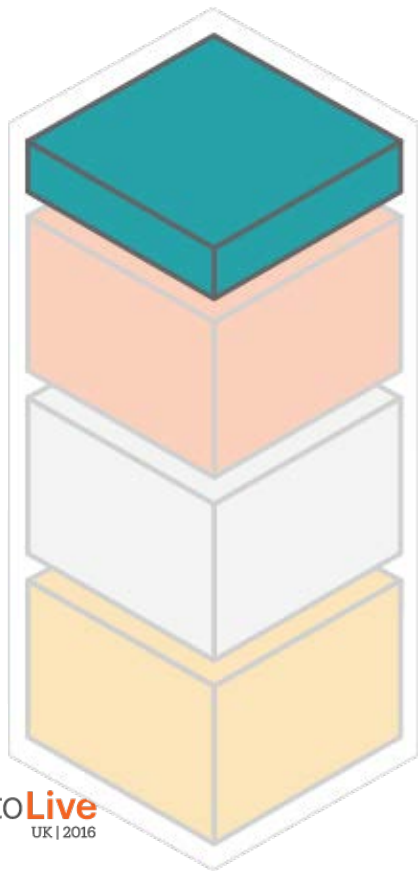
Why

- Unequaled flexibility
- Large developer and technology ecosystem

What

- Magento EE 2 codebase
- Works with all M2 Marketplace extensions
- Access to source code
- No limitations on customizability
- Regular release schedule

Performance Management Tools



- Enable Developers & Partners
- Ensure Great Customer Experiences
- Enable the Potential of Magento



New Relic®

- Application and Performance monitoring

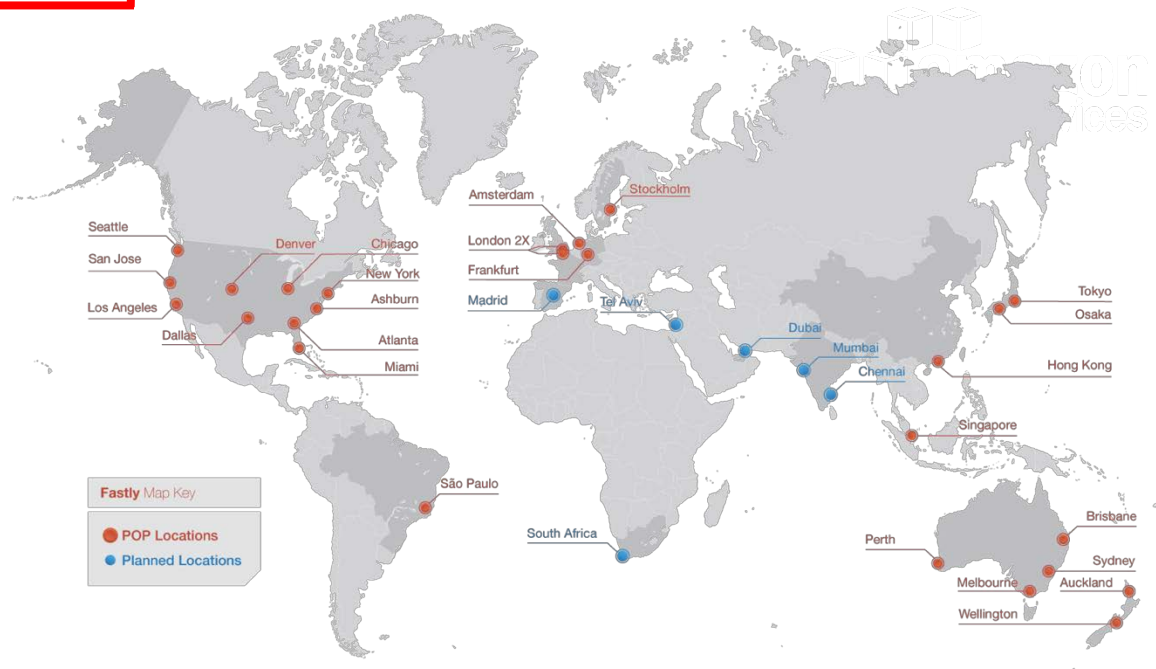
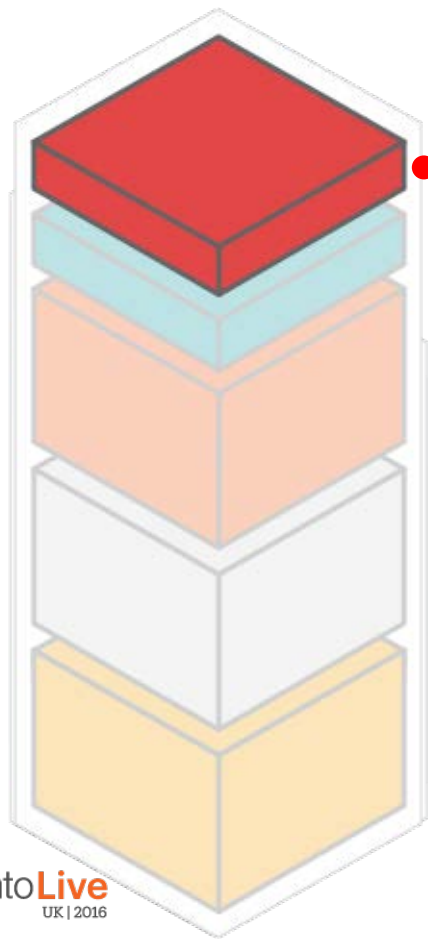


blackfire

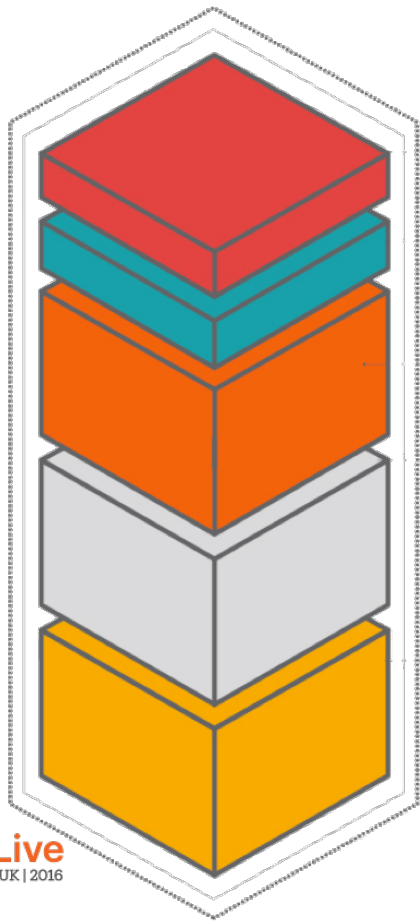
- Performance profiling

CDN & DDoS Protection

fastly



Magento Enterprise Cloud Edition



- Delivered by Magento
- Unequaled Flexibility for Customization
- Robust, Proven Technologies
- Elastic Resources
- Global Reach
- 99.99% Full Stack SLA
- 24x7 Monitoring & Support

Questions



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