

# Introduction to Cloud Manager

## Objectives:

- Describe Cloud Manager and the basic Cloud Manager terminologies
- Set up programs
- Describe Cloud Manager Git
- Get started with Cloud Manager
- Push a release candidate to Cloud Manager



# Cloud manager for Adobe Experience Manager (AEM)



## Self Service Portal

Easily access & manage the cloud environment and CI/CD pipeline



## CI/CD Pipeline

Code inspection, performance testing, and security validation



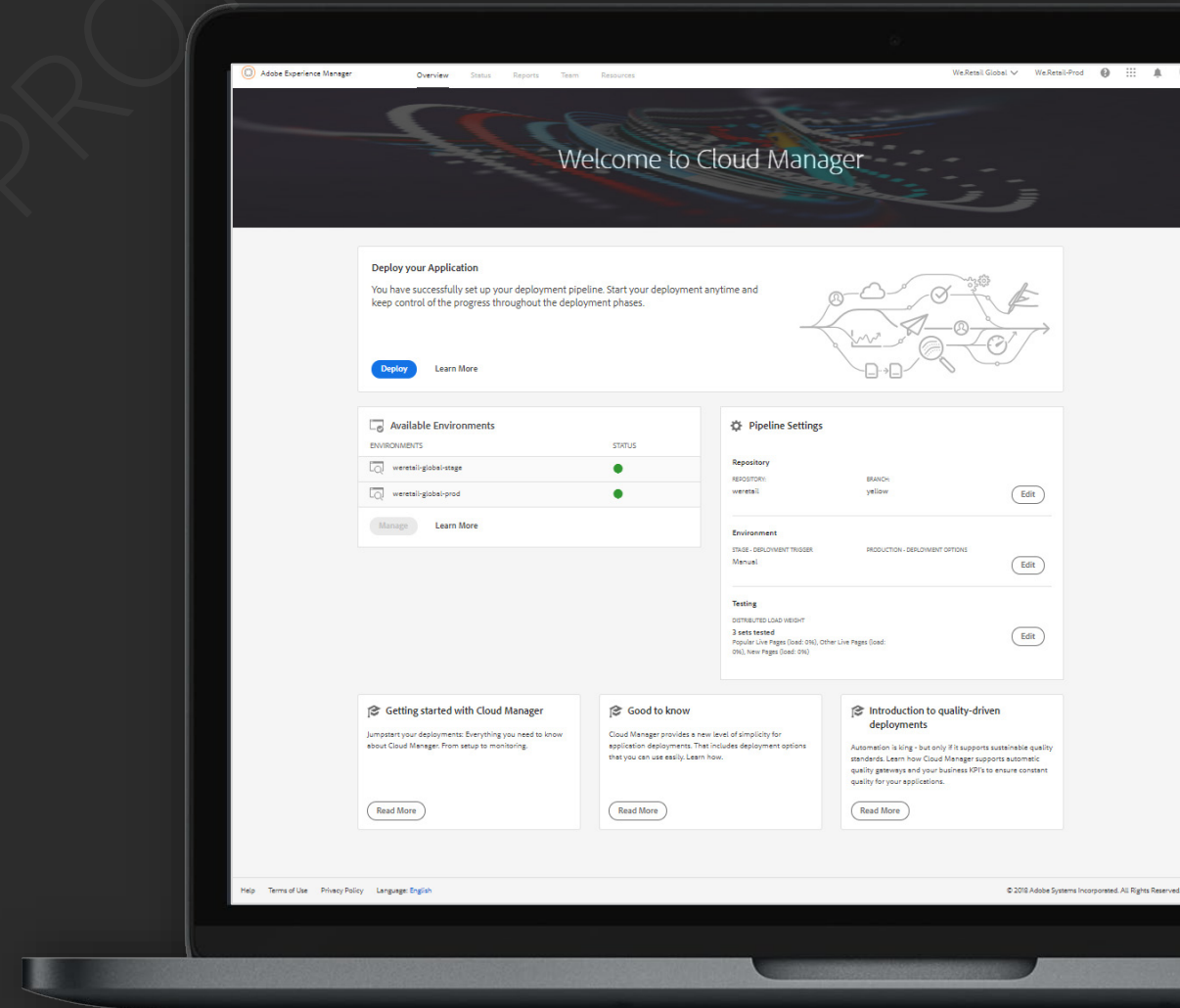
## Flexible Deployments

Schedule code deployments during specified time frames

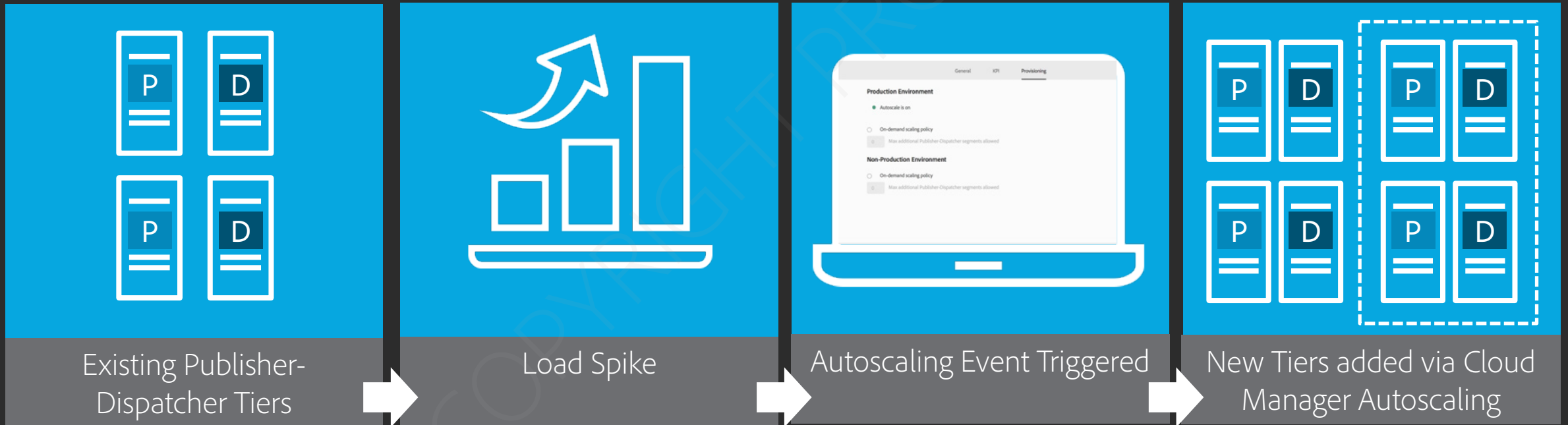


## Auto-scaling

Detects the need for additional capacity during unexpected spikes



# Autoscaling in action



# Cloud manager entities

## AEM Cloud Manager

- Single entry point for the Operations & Developer Personas to create and manage components of AEMaaS

### Programs

Self-service creation of AEM applications (AEM Sites, AEM Assets) with associated code repository

### Environments

Self-service creation of AEM environments (production and non-production – for example, demos, POC, training...)

### Pipelines

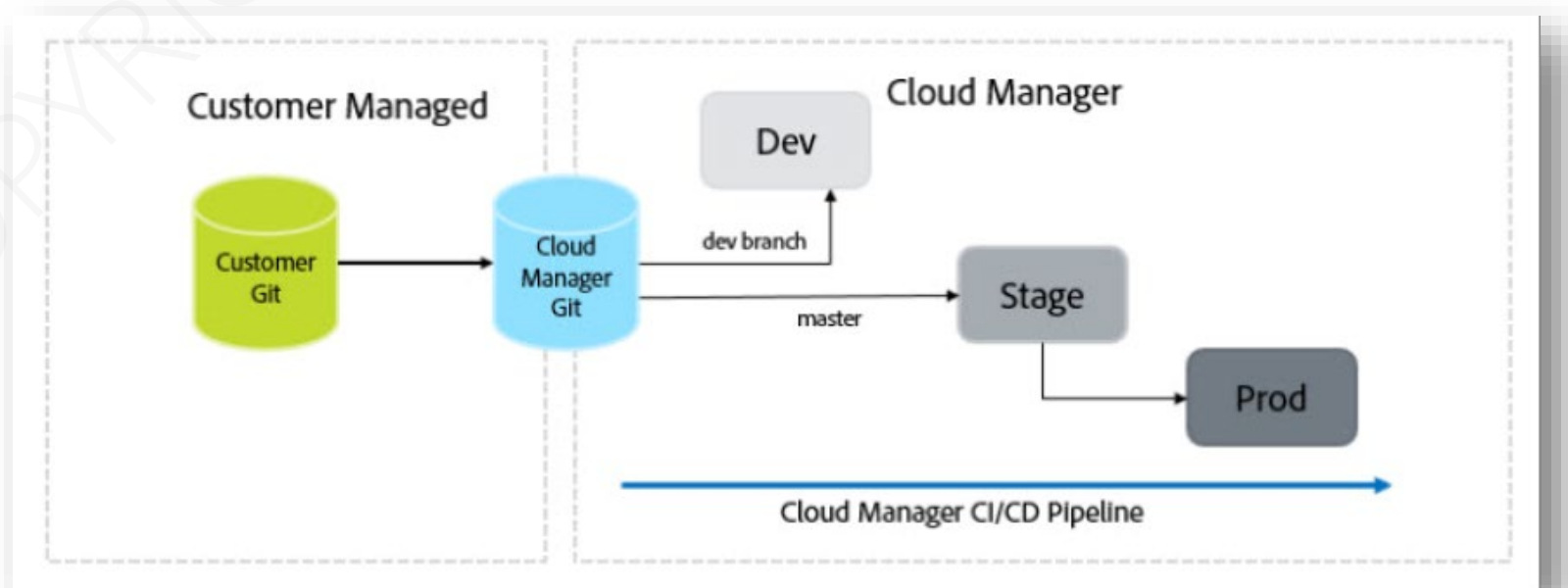
Self-service creation of CI/CD pipelines for best practices

# Cloud Manager Terminology

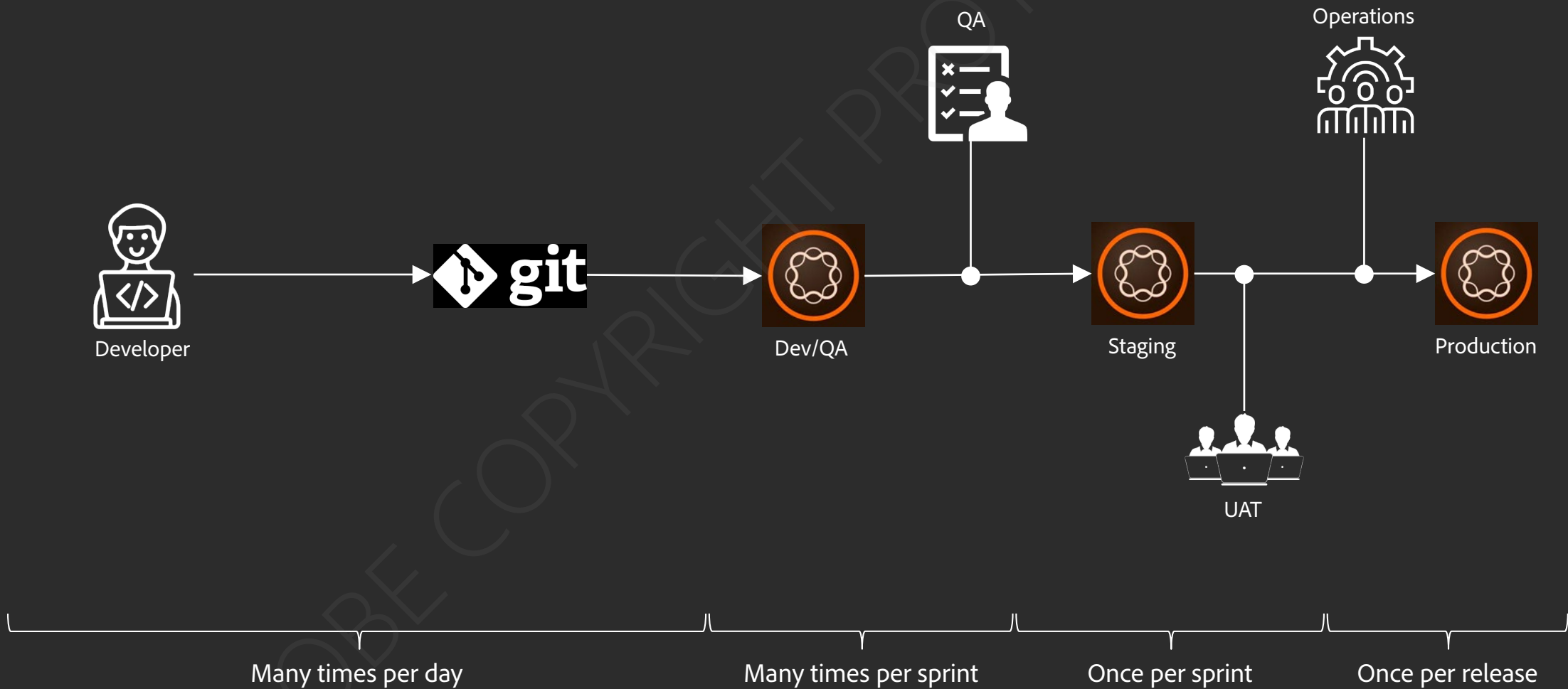
AEM Author Tier	Describes the authoring environment for Sites and Assets
AEM Publish Tier	Describes the publishing environment for Sites
Adobe Pipeline	Mechanism for publishing content from author to publish
Asset Microservices	Cloud-based digital asset processing service
AEM Image	Artifact that contains the AEM product code and customer code
Git repository	Location where customer code is stored

# Loading custom code in AEM

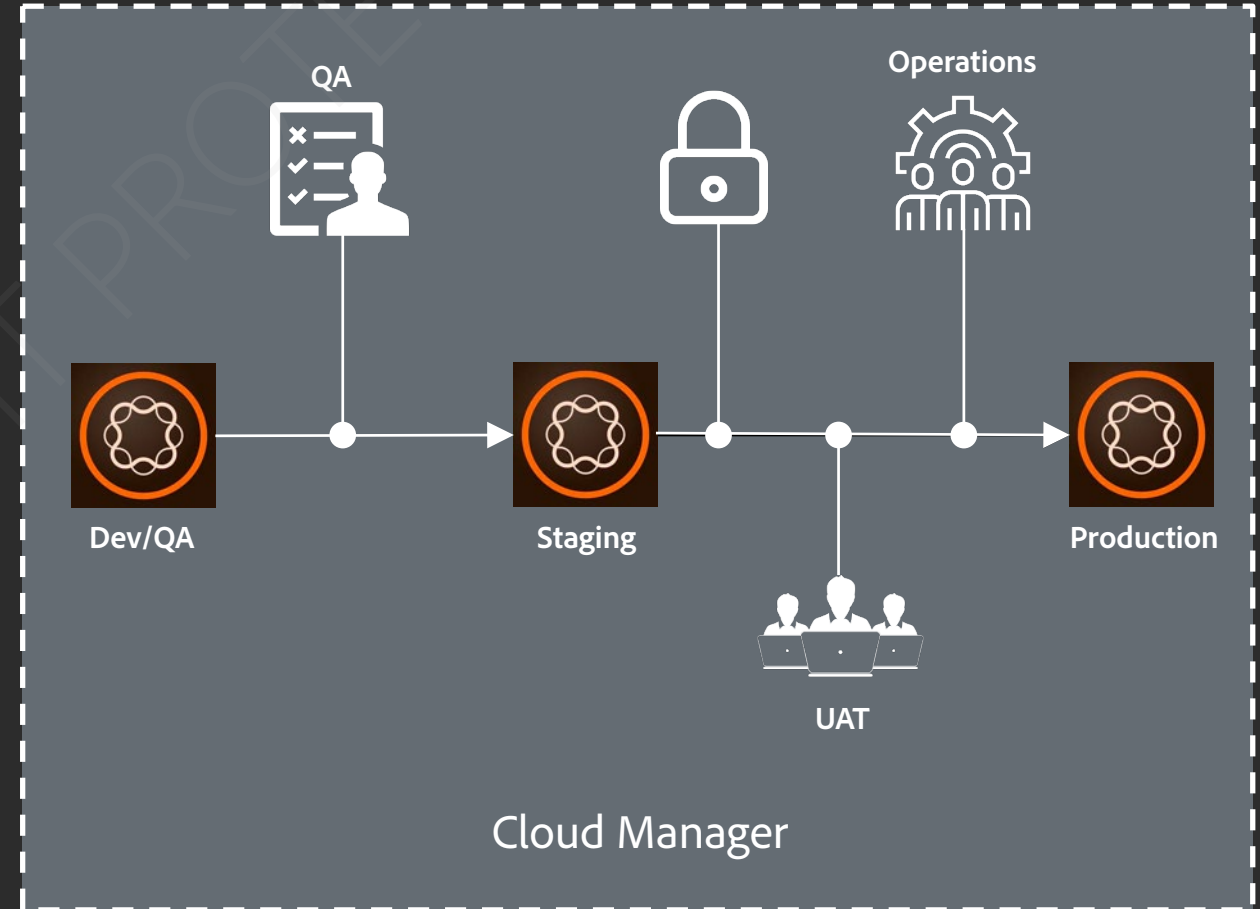
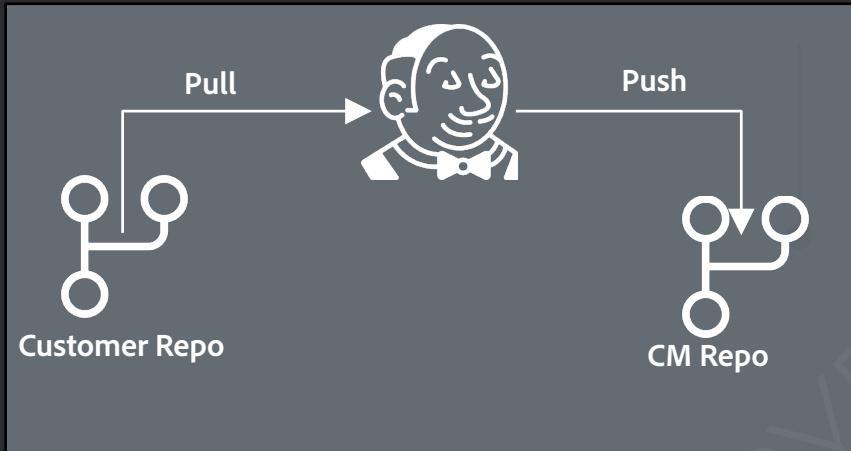
- Every Cloud Manager Program is bound to a single git repository
- Pipelines connect to a CM git branch
  - Branches can be tested by a code quality pipeline
  - Different Branches can be loaded onto different environments
- Production pipelines auto create a release tag



# Traditional AEM deployment workflow



# How does Cloud Manager fit in?



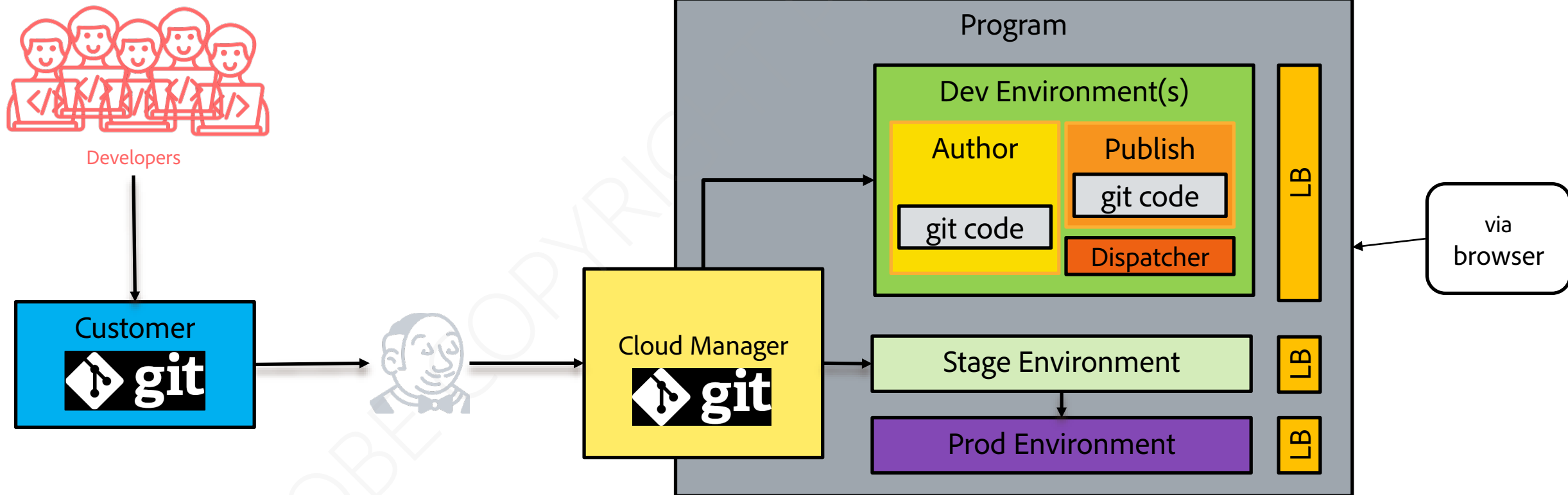
develop/release

master



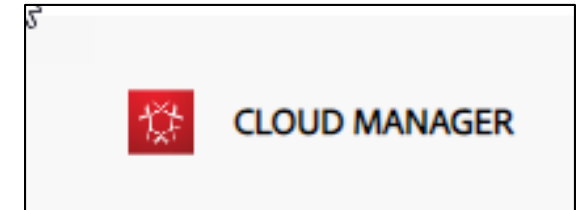
# AEM as a Cloud Service code flow

Develop Maven project on AEMaaCS Quickstart



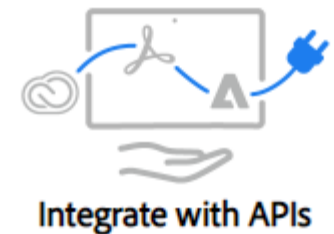
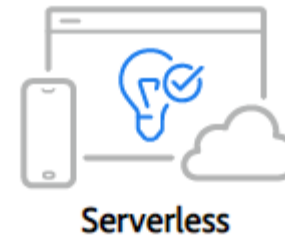
# Cloud Manager API

- Allows access to Cloud Manager programs, pipelines & environments by an authorized technical account
- Allows for integration of the Cloud Manager CI/CD pipeline with other systems
- Composed of two components:
  - An inbound HTTP-based API
    - Reads and manipulates the state of CI/CD pipelines
  - An outbound event system
    - Receives events when key events happen in CI/CD pipelines

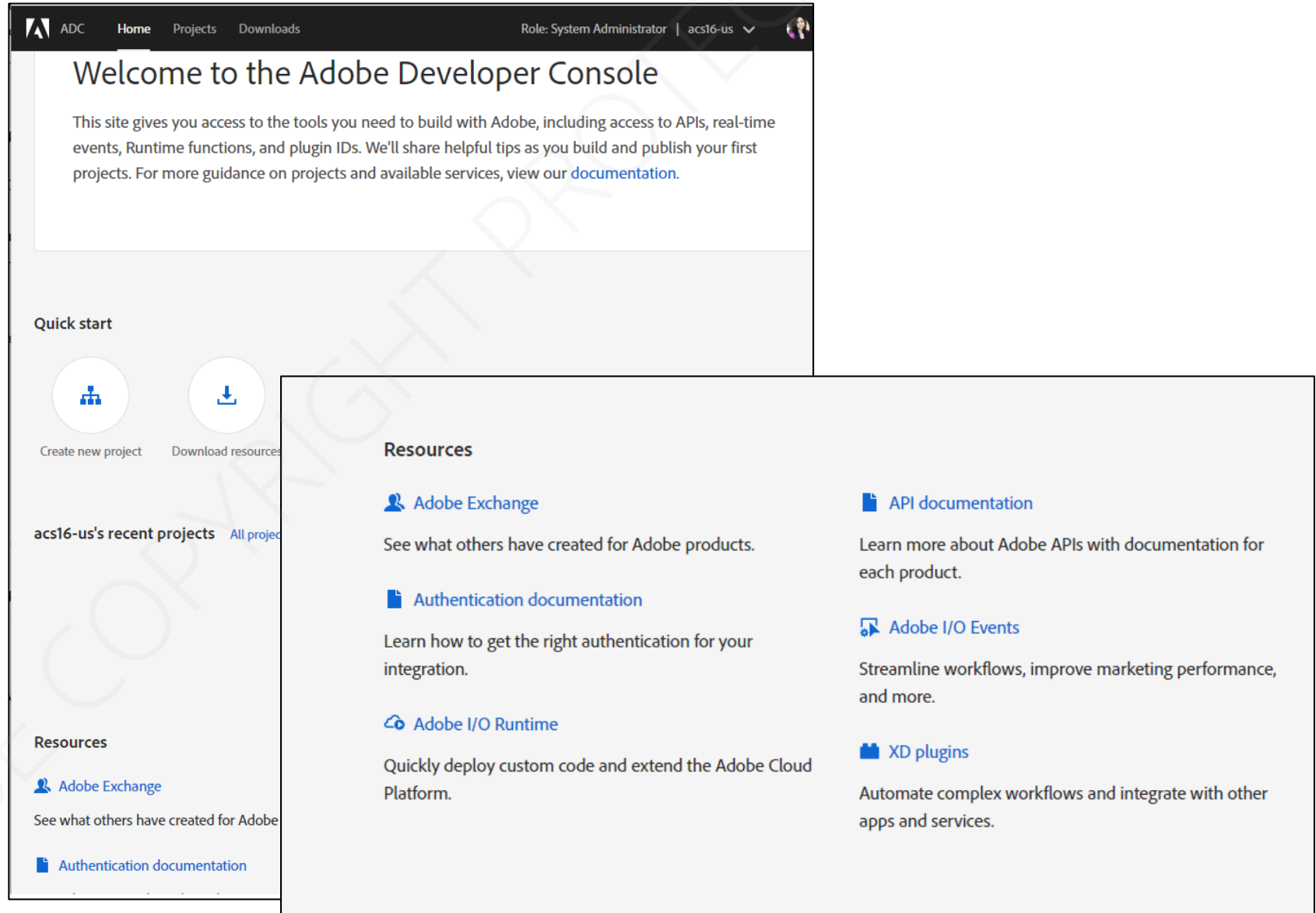


# Adobe I/O

- Adobe developer's portal
  - Serverless platform
- Integrates and extend Adobe's cloud platform
- Allows to securely access Adobe's APIs
- Allows to respond to events across the platform



# Adobe I/O console



**Welcome to the Adobe Developer Console**

This site gives you access to the tools you need to build with Adobe, including access to APIs, real-time events, Runtime functions, and plugin IDs. We'll share helpful tips as you build and publish your first projects. For more guidance on projects and available services, view our [documentation](#).

**Quick start**

- Create new project
- Download resources

**acs16-us's recent projects** [All projects](#)

**Resources**

- [Adobe Exchange](#)  
See what others have created for Adobe products.
- [API documentation](#)  
Learn more about Adobe APIs with documentation for each product.
- [Authentication documentation](#)  
Learn how to get the right authentication for your integration.
- [Adobe I/O Runtime](#)  
Quickly deploy custom code and extend the Adobe Cloud Platform.
- [Adobe I/O Events](#)  
Streamline workflows, improve marketing performance, and more.
- [XD plugins](#)  
Automate complex workflows and integrate with other apps and services.

# Adobe I/O CLI (aio) with Cloud Manager

Provides command line access to a variety of Adobe services

Provides developers the ability to:

- Tail logs from AEMaaCS services
- Manage Cloud Manager pipelines from the CLI

- Installation

```
$npm install -g @adobe/aio-cli
```

```
$ aio plugins:install
```

```
@adobe/aio-cli-plugin-cloudmanager
```

```
C:\WINDOWS\system32>npm install -g @adobe/aio-cli
npm WARN deprecated @hapi/joi@16.1.8: joi is leaving the @hapi organization and moving back to 'j'
npm WARN deprecated @hapi/address@2.1.4: This version has been deprecated and is no longer support
npm WARN deprecated @hapi/formula@1.2.0: This version has been deprecated and is no longer support
npm WARN deprecated @hapi/topo@3.1.6: This version has been deprecated and is no longer supported
npm WARN deprecated @hapi/pinpoint@1.0.2: This version has been deprecated and is no longer support
npm WARN deprecated @hapi/hoek@8.5.1: This version has been deprecated and is no longer supported
npm WARN deprecated core-js@2.6.11: core-js@<3 is no longer maintained and not recommended for use
your dependencies to the actual version of core-js@3.
npm WARN deprecated fsevents@1.2.13: fsevents 1 will break on node v14+ and could be using insecure
npm WARN deprecated request@2.88.2: request has been deprecated, see https://github.com/request/re
npm WARN deprecated request-promise-native@1.0.9: request-promise-native has been deprecated beca
, see https://github.com/request/request/issues/3142
npm WARN deprecated har-validator@5.1.5: this library is no longer supported
C:\Program Files\nodejs\ aio -> C:\Program Files\nodejs\node_modules\@adobe\ aio-cli\bin\run
C:\Program Files\nodejs\adobe -> C:\Program Files\nodejs\node_modules\@adobe\ aio-cli\bin\run

> deasync@0.1.20 install C:\Program Files\nodejs\node_modules\@adobe\ aio-cli\node_modules\deasync
> node ./build.js

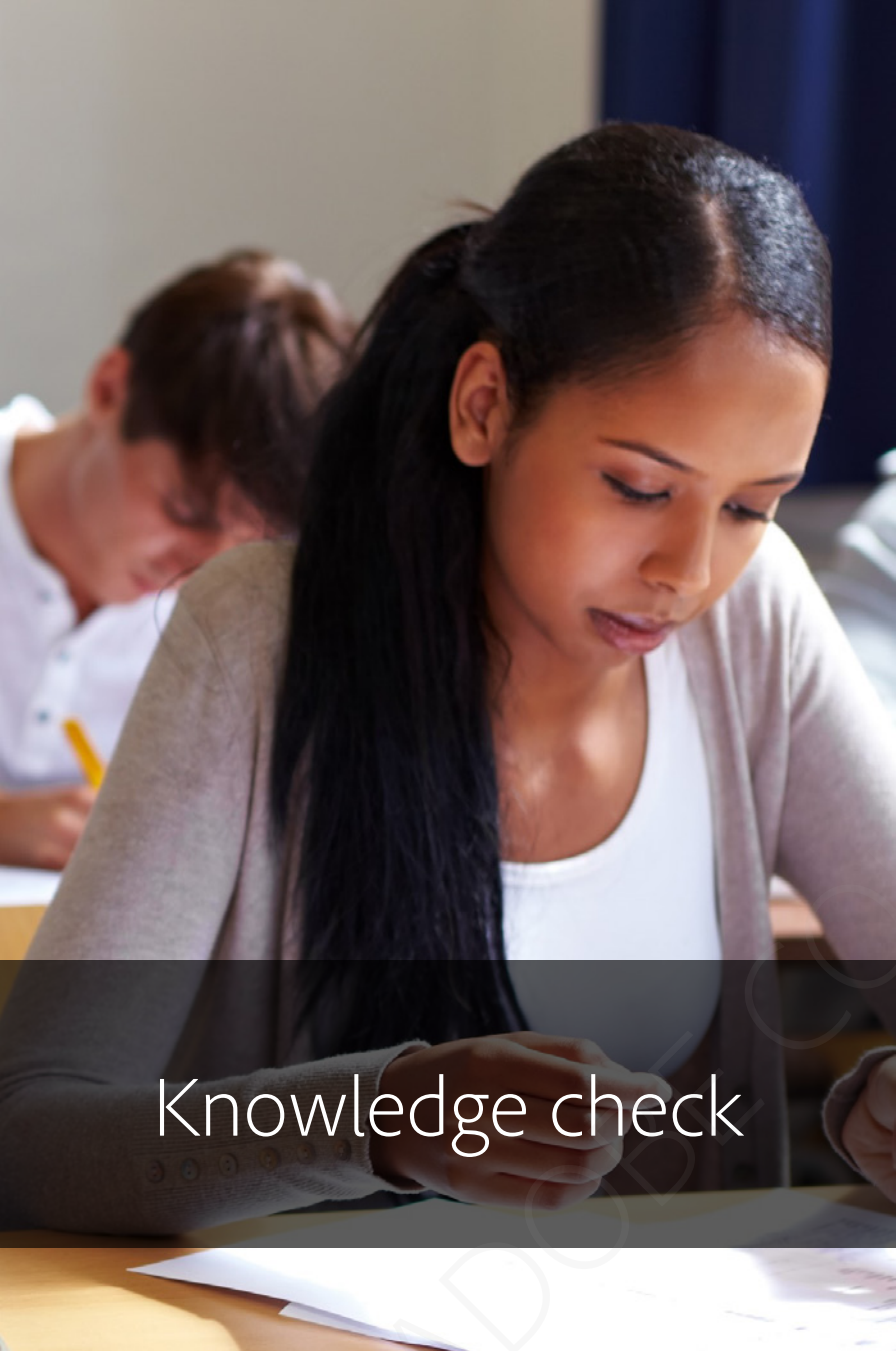
`win32-x64-node-10` exists; testing
Binary is fine; exiting
```

# aio-cli-plugin-cloudmanager commands

- aio cloudmanager
- aio cloudmanager:advance-current-execution PIPELINEID
- aio cloudmanager:cancel-current-execution PIPELINEID
- aio cloudmanager:delete-environment ENVIRONMENTID
- aio cloudmanager:delete-pipeline PIPELINEID
- aio cloudmanager:delete-program PROGRAMID
- aio cloudmanager:get-current-execution PIPELINEID
- aio cloudmanager:get-execution-step-details PIPELINEID EXECUTIONID
- aio cloudmanager:get-execution-step-log PIPELINEID EXECUTIONID ACTION
- aio cloudmanager:get-quality-gate-results PIPELINEID EXECUTIONID ACTION

## **aio-cli-plugin-cloudmanager commands**

- aio cloudmanager:list-available-log-options ENVIRONMENTID
- aio cloudmanager:list-current-executions
- aio cloudmanager:list-environment-variables ENVIRONMENTID
- aio cloudmanager:list-environments
- aio cloudmanager:list-pipeline-variables PIPELINEID
- aio cloudmanager:list-pipelines
- aio cloudmanager:list-programs
- aio cloudmanager:open-developer-console ENVIRONMENTID
- aio cloudmanager:set-environment-variables ENVIRONMENTID
- aio cloudmanager:set-pipeline-variables PIPELINEID
- aio cloudmanager:start-execution PIPELINEID
- aio cloudmanager:tail-log ENVIRONMENTID SERVICE NAME



## Knowledge check

Which of the following are part of Cloud Manager Environment? Select the three correct answers.

- A. Author Instance ✓
- B. LDAP
- C. Publish Instance ✓
- D. Dispatcher ✓





## Key takeaways

- Cloud Manager enables organizations to self-manage Experience Manager in the cloud
- Key Features
  - Self Service Interface
  - CI/CD Pipeline
  - Flexible Deployments
  - Autoscaling
- Continuous Integration Pipeline: Promote code changes and eliminate manual processes remotely