



adaptTo()

EUROPE'S LEADING AEM DEVELOPER CONFERENCE

27th – 29th SEPTEMBER 2021

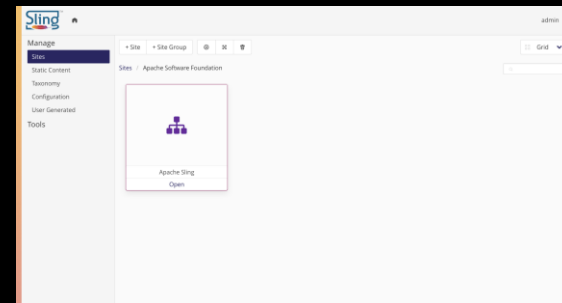
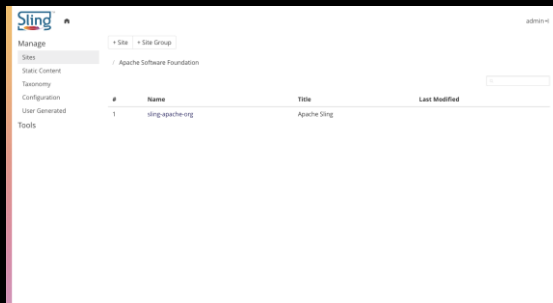
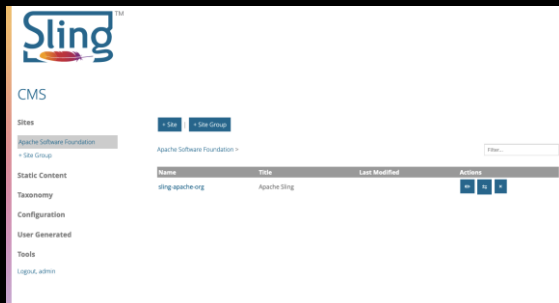
Sling CMS: Building a Simple CMS on Apache Sling

Dan Klco, Adobe



Wait, doesn't Adobe have a CMS?

Sling CMS: Quick History

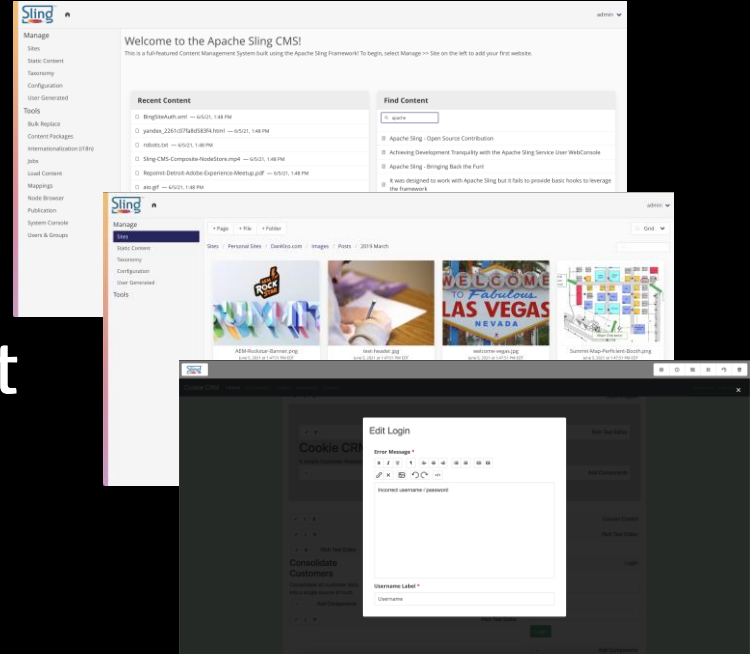


2018 – Sep
UI Redesign to use Bulma UI

2021 – May
Converted to Feature Model

What is Sling CMS?

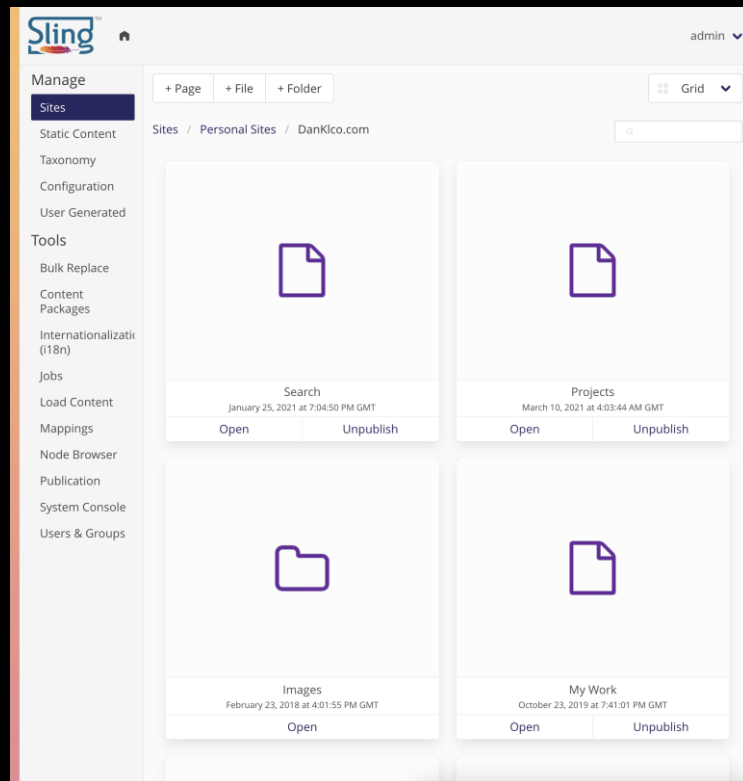
- Simple and lightweight
- Built on Apache Sling + Feature Model
- Built with Apache Sling best practices
- Free and Open Source



What is Sling CMS good at?

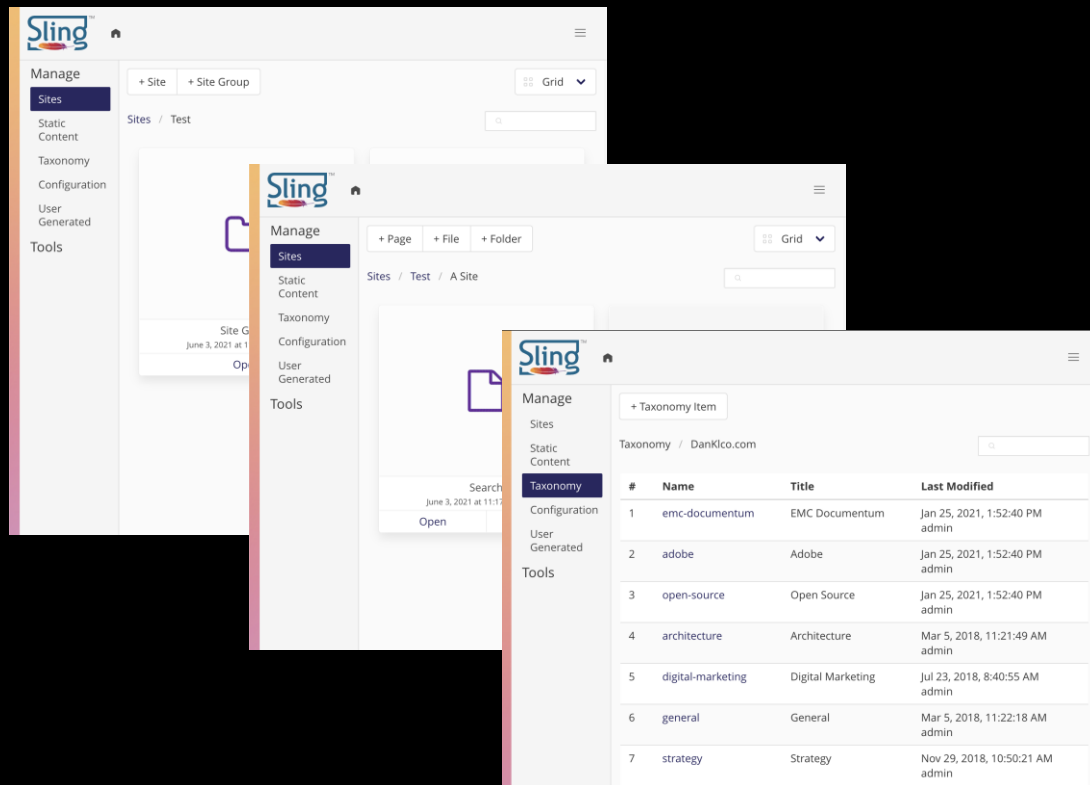
- Single Tenant – Multi-Site Setups
- Docker Deployments
- Asset Support (Metadata Extraction, Thumbnail Generation, Image Compression)
- Drag & Drop WYSIWYG Authoring
- Content-heavy vs interaction heavy sites
- Component and Template Framework

- **Sites / Static Content**
 - Pages
 - Folders
 - Files
- **Taxonomy**
- **User Generated Content**
- **Configuration**
 - File
 - Templates
 - Components
- **Tools**



Sling CMS Content Types

- Sites / Site Groups
- Folders
- Pages
- Files
- Taxonomies



The image displays three overlapping screenshots of the Sling CMS user interface, illustrating different content management views:

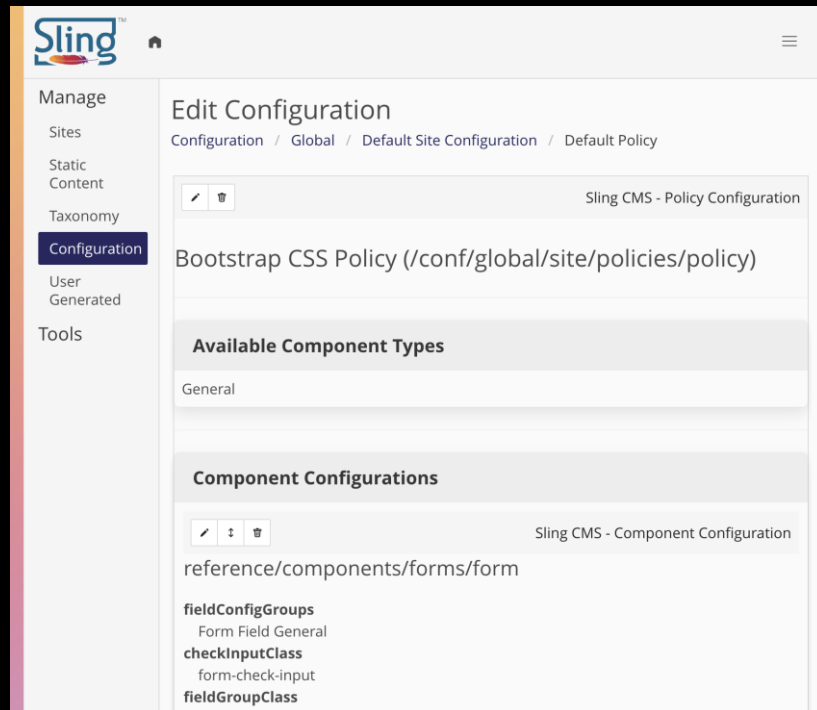
- Top Screenshot (Sites):** Shows the 'Manage' section for 'Sites'. The breadcrumb is 'Sites / Test'. The left sidebar includes 'Manage', 'Static Content', 'Taxonomy', 'Configuration', 'User Generated', and 'Tools'. The main area has '+ Site' and '+ Site Group' buttons.
- Middle Screenshot (Pages/Folders):** Shows the 'Manage' section for 'Pages' or 'Folders'. The breadcrumb is 'Sites / Test / A Site'. The left sidebar is the same. The main area has '+ Page', '+ File', and '+ Folder' buttons.
- Bottom Screenshot (Taxonomies):** Shows the 'Manage' section for 'Taxonomy'. The breadcrumb is 'Taxonomy / Danklco.com'. The left sidebar is the same. The main area has a '+ Taxonomy Item' button and a table of existing taxonomy items.

#	Name	Title	Last Modified
1	emc-documentum	EMC Documentum	Jan 25, 2021, 1:52:40 PM admin
2	adobe	Adobe	Jan 25, 2021, 1:52:40 PM admin
3	open-source	Open Source	Jan 25, 2021, 1:52:40 PM admin
4	architecture	Architecture	Mar 5, 2018, 11:21:49 AM admin
5	digital-marketing	Digital Marketing	Jul 23, 2018, 8:40:55 AM admin
6	general	General	Mar 5, 2018, 11:22:18 AM admin
7	strategy	Strategy	Nov 29, 2018, 10:50:21 AM admin

Demo: Creating Content

Configurations via Sling CA Configs:

- Page Templates
- Component Policies
- Component Configurations
- Rewriter Configuration
- File Transformations
- File Editors



The screenshot displays the Sling Configuration Console interface. The left sidebar shows a navigation menu with 'Configuration' selected. The main content area is titled 'Edit Configuration' and shows the breadcrumb path: Configuration / Global / Default Site Configuration / Default Policy. The configuration being edited is 'Bootstrap CSS Policy (/conf/global/site/policies/policy)'. Below this, there are sections for 'Available Component Types' and 'Component Configurations'. The 'Component Configurations' section shows a configuration for 'reference/components/forms/form' with the following properties:

- fieldConfigGroups**: Form Field General
- checkInputClass**: form-check-input
- fieldGroupClass**

Demo: Creating a Template

How do I get started?

Download a Release

- Get it from Github or the Sling Site:
<https://sling.apache.org/downloads.cgi>
Run `java -jar [cms].jar` to start

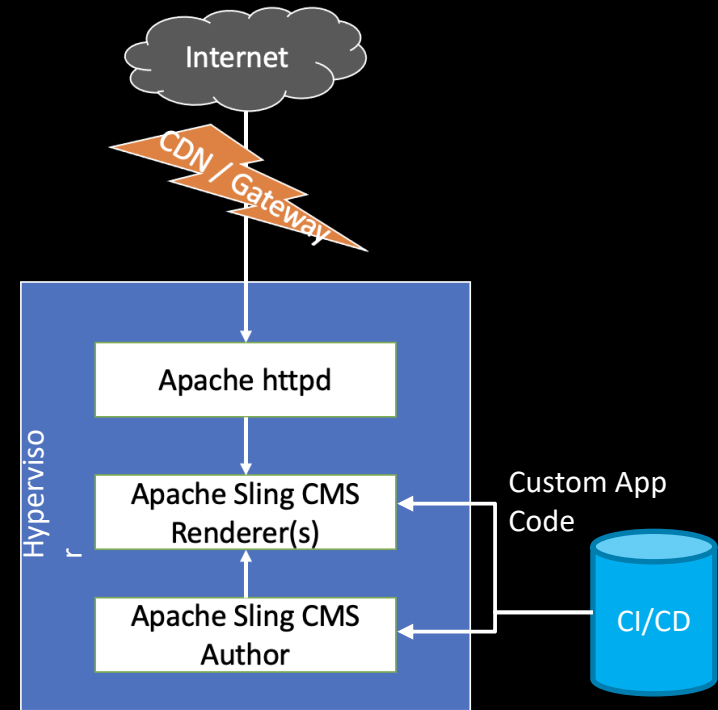
Build from Source

- Clone
<https://github.com/apache/sling-org-apache-sling-app-cms.git>
- Run `mvn clean install`
- Double click the jar at `./feature/target` to start

Sling CMS Deployments: New Way

Deploying Sling CMS – Traditional Way

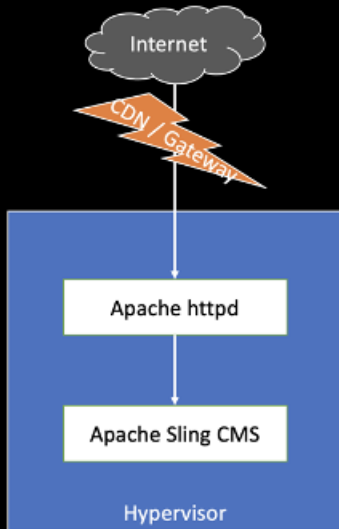
- Deploy as a traditional J2EE app
- Manual upgrades
- Infrastructure not source controlled



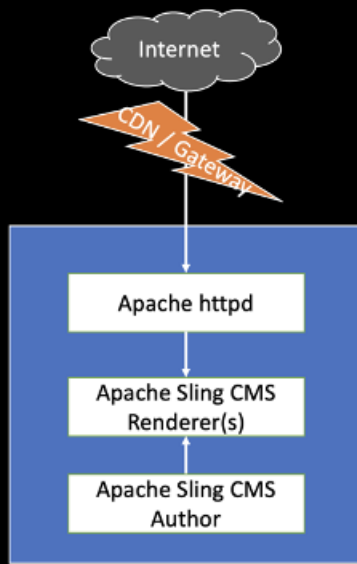
Traditional VM Deployment

Deployment Models

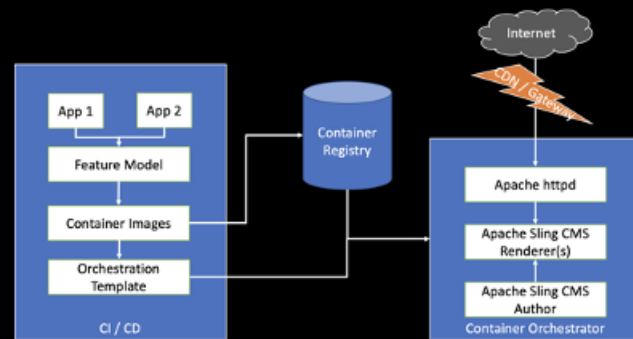
Standalone



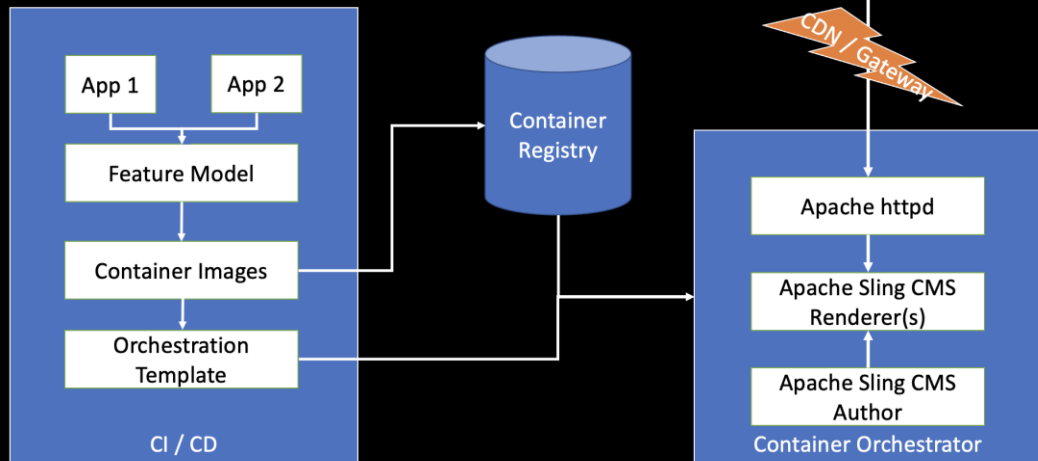
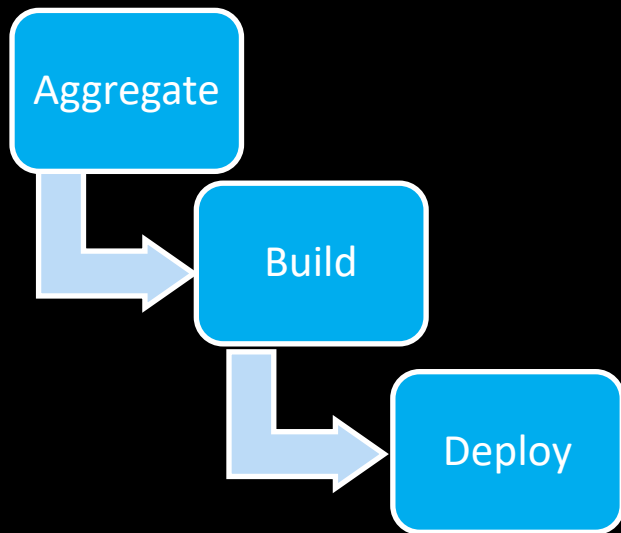
Author - Renderer



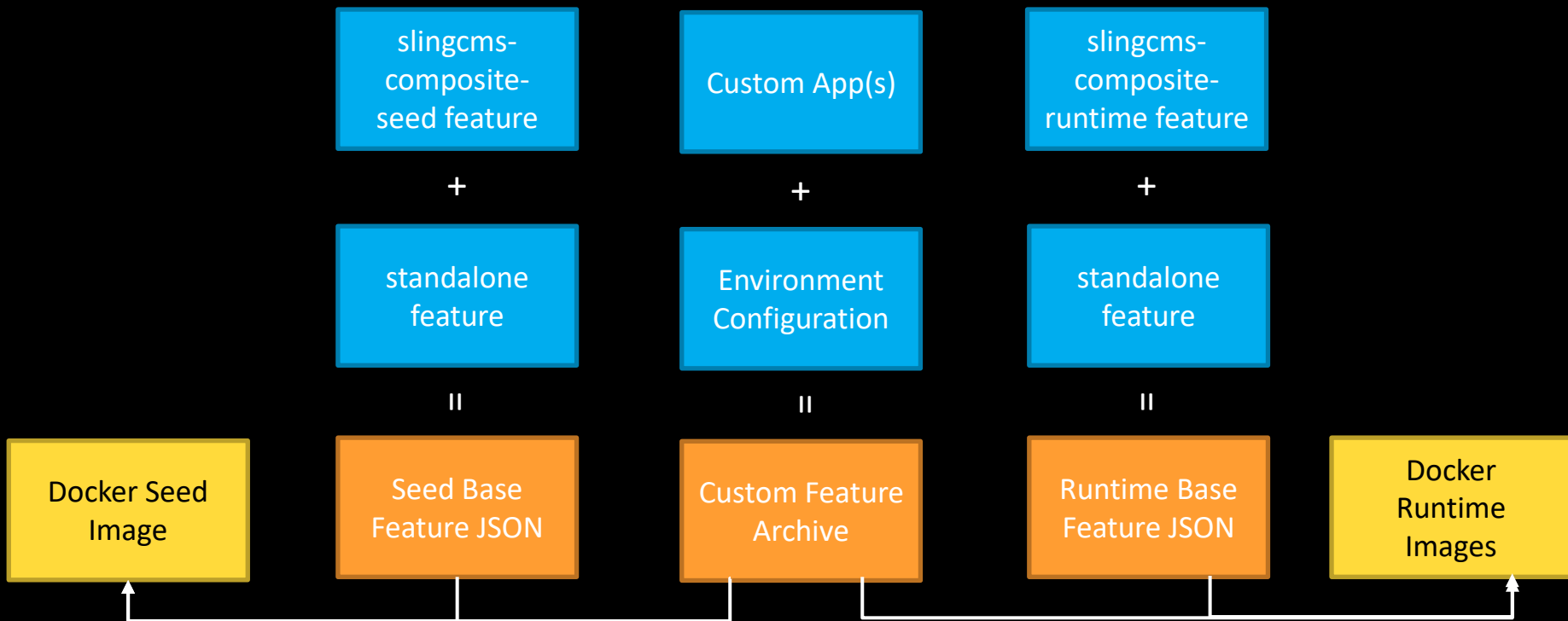
Containerized Composite



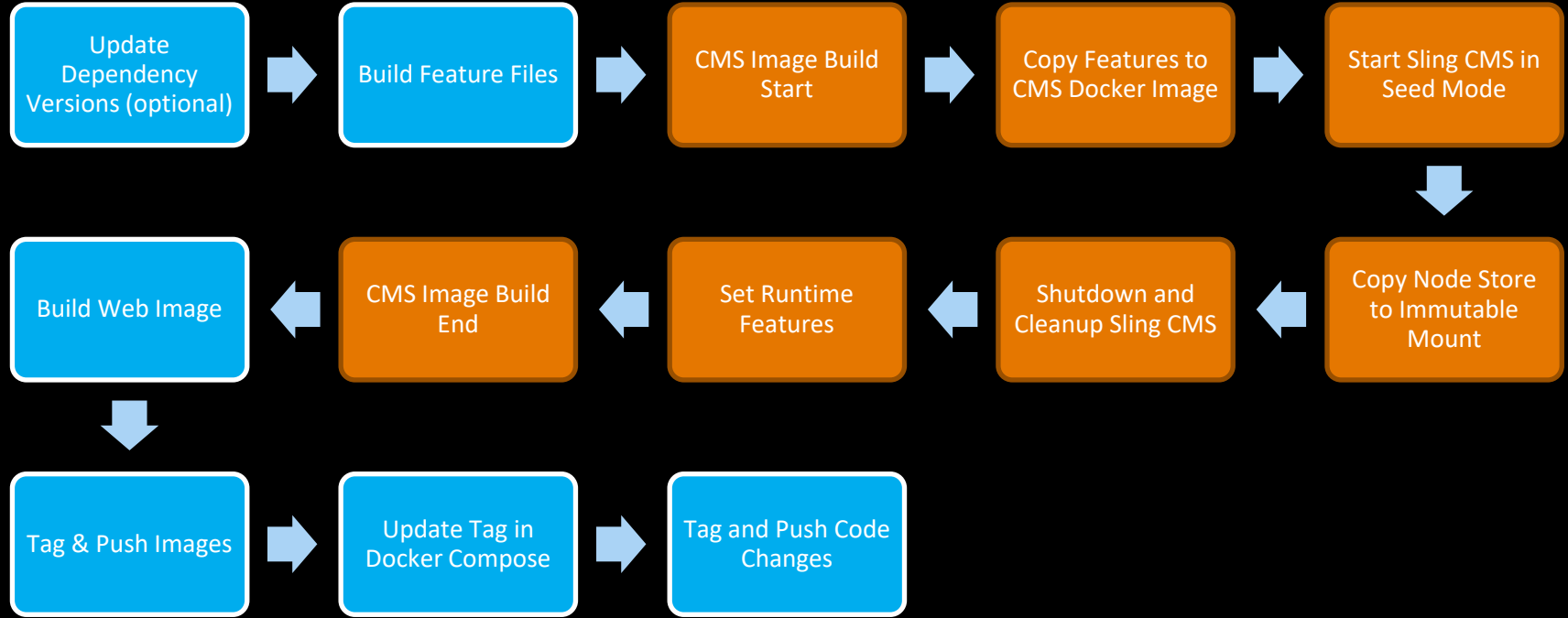
Deploying Sling CMS – Better Way



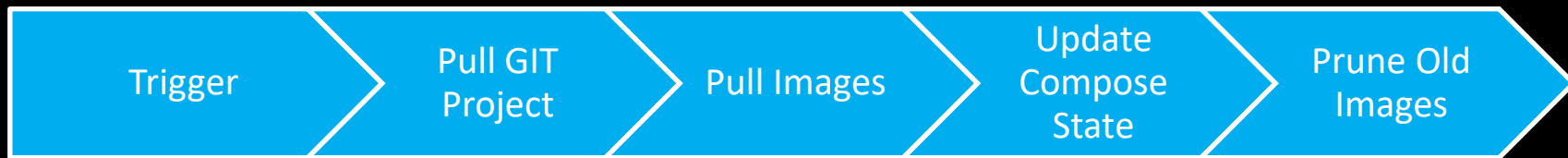
Aggregating Features



Build Steps



Deployment Steps



End to End Demo

Next Steps: Challenges of Cloud Scale

- Traditional App in Docker
- Only ~9/12 Factor App
- Embracing Containerization brings new problems

Questions?