adaptTo()

EUROPE'S LEADING AEM DEVELOPER CONFERENCE

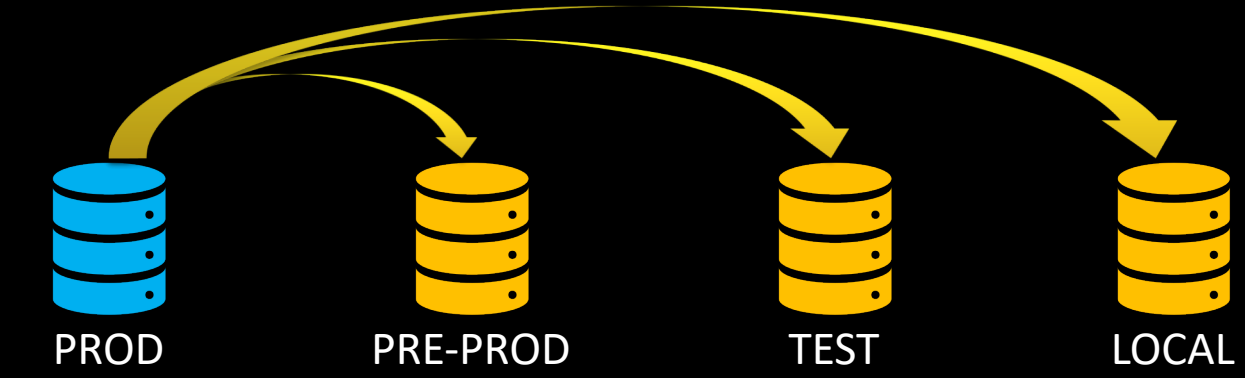
28th – 30th SEPTEMBER 2020

Content Sync Automation

Roland Gruber, Valtech

Content Sync – Why That?

Sync Flows



Why Sync at All?

- Test content requires additional effort
- Faster reaction to production issues
- Better local testing
- QA tests on real pages
- Regular reset of changes

Production content is the best test content!

What to Sync

- Pages + XF
- Assets
- Configuration (templates, CA config)
- Tags
- ...

Concerns

- Disk usage, network traffic, ...
  - We live in 2020
- QA cannot test because content is reset
  - In most cases no issue
  - Keep stories small and testable in one day
  - Issues only for large epics

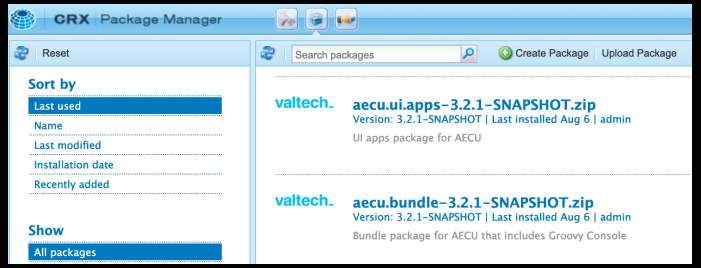
Concerns

- Solutions:
  - Prefill CA config via script/use override provider
  - Exclude test path from sync
  - Content package backup
  - Pause content sync

Tooling

Content Packages

- AEM standard feature
- Well-known and easy to use
- Simple ZIP format
- Exclusion patterns
- Automate with curl




```
curl -u admin:admin -X POST http://localhost:4502/crx/packmgr/service/
script.html/etc/packages/my_packages/test-1.zip?cmd=build
```

vlt rcp

- Command line tool
- Copy via network
- Syncs two node trees
- Exclusion patterns

```
vlt rcp -r http://admin:admin@source:4502/crx/-/jcr:root/content/source
http://admin:admin@destination:4502/crx/-/jcr:root/destination
```

CRX2Oak / oak-upgrade

- Command line tool
- Copy on file system level
- Exclusion patterns
- Supports versions
- Downtime

Comparison

	Content Packages	vlt rcp	CRX2Oak
Easy Handling			
Local development			
Large repositories (> 100GB)			
Filter rules			
Performance			
Disk usage			
Mixed AMS Ep. + self-hosted			

Building the Sync Pipeline

Recommendations

- Sync author/publish separately
- Separate asset sync
- Handle environment specific config
- Handle content upgrades with AECU

Page Content Sync

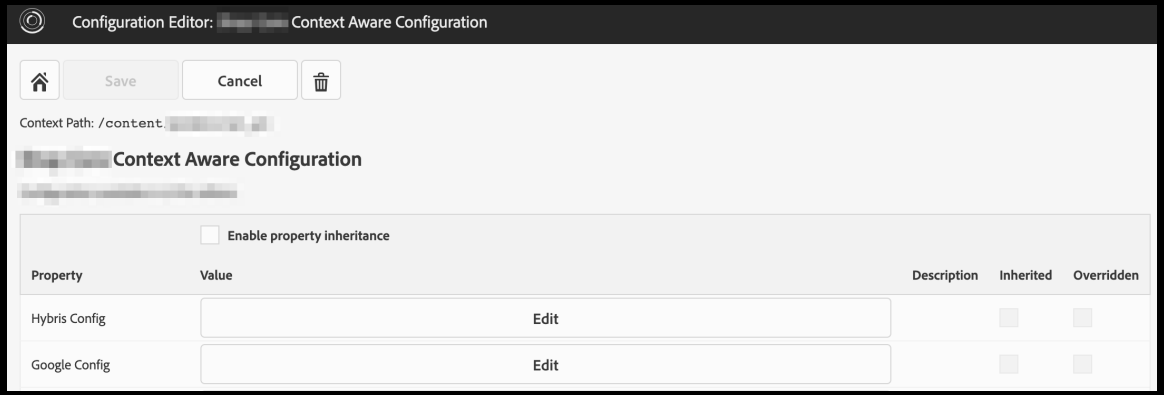
- Pages, XF
- Tags, context aware configuration
- Low volume of data
- Run daily

Asset Sync

- DAM Assets
- High volume of data
- Run weekly
- Disable workflow launcher components
  - com.adobe.granite.workflow.core.launcher.WorkflowLauncherImpl
  - com.adobe.granite.workflow.core.launcher.WorkflowLauncherListener

Environment Specific Configuration

- Sync CA configuration
  - Exclude environment specific nodes
  - Use nested CA configuration



Content Upgrade

- Production content can be incompatible to latest code
- Sync AECU history
  - /var/aecu-installhook
- Rerun AECU scripts with JMX "executeWithHistory()"

Content Upgrade

de.valtech (AECU)

AEM Easy Content Upgrade

Attributes

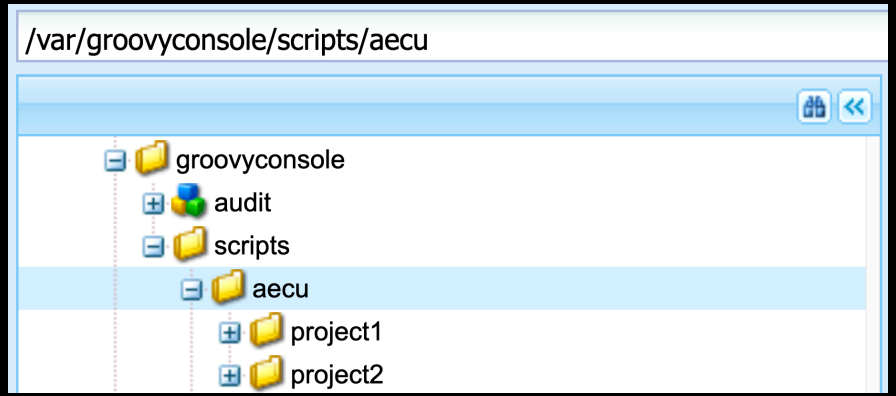
Attribute Name	Attribute Value
Version	3.2.1.SNAPSHOT

Operations

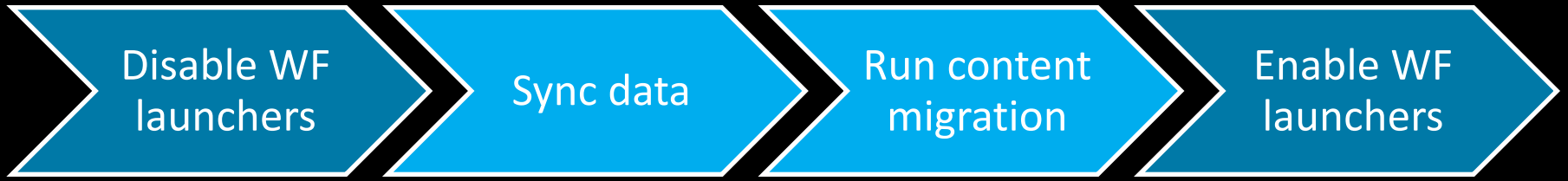
Return Type	Name
java.lang.String	executeWithHistory(java.lang.String Path) Executes a single file or all files of a folder structure. Additionally, the install hook history will be checked if scripts need to be run. History will also be updated for executed scripts.
java.lang.String	getHistory(int Start index, int Count) Returns the last history entries
java.lang.String	execute(java.lang.String Path) Executes a single file or all files of a folder structure

Multiple Teams

- Split sync jobs
- Organize AECU scripts in subfolders
- Sync relevant AECU history



Pipeline



curl
Assets only

curl for packages
vlt

curl
AECU JMX

curl
Assets only

Links

Links

- AECU

https://github.com/valtech/aem-easy-content-upgrade

- vlt rcp

http://jackrabbit.apache.org/filevault/rcp.html

- oak-upgrade

https://jackrabbit.apache.org/oak/docs/migration.html

valtech_

Questions?