Another Configuration Approach for Adobe AEM

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Manage bundles settings

- From web console **/system/console/configMgr**
- Configuration files under '**/apps**' and extension **.cfg** or **.config**
- content-nodes (sling:OsgiConfig) in the repository (this is)

Resolution order

Resolution order is common **apps-then-libs**, so we have this order by default

Startup:
1. /apps/*/config/*
2. /libs/*/config/*
3. /crx-quickstart/launchpad/config

Runtime:
1. Modifications within Web Console
2. /apps/*/config/*
3. /libs/*/config/*

Run mode restrictions

For run mode specific configurations, multiple run modes can be combined:
Ex.: **/apps/*/config.\<runmode1\>.\<runmode2\>/**
If multiple configurations for the same PID are applicable - config with highest number of matching run modes is applied.

Common configuration

- com.**drfits.aem.meetup.configurations.felix.**CityCacheImpl

- @Component
- @Service
- @Property
- ....

Pros and Cons

Pros:
- Described in most of all articles
- Vast majority of developers are familiar with it

Cons:
- Too many boilerplate
- Using custom Felix annotations
- Configs need additional checks on object types

Add OSGI configuration

Prerequisities
- org.osgi.service.component.annotations - 1.3.0
- org.apache.felix.scr.annotations - 1.12.0

*Now annotations from **org.osgi.service.component.annotations.*** available and ald Felix annotations marked as deprecated*
- biz.aQute.bndlib - 3.3.0 (for DS 1.3)

Update maven plugins:
- maven-bundle-plugin - 3.2.0 (for Java 8 support)
- maven-scr-plugin - 1.23.0

Now we are ready to write OSGI Components according to specification.

OSGI configuration example

- com.**drfits.aem.meetup.configurations.osgi.**CityCacheNewImpl

Pros and Cons

Pros:
- More loosely coupled code
- Property type checks
- More easy for mocking
- New scope Prototype in new OSGI spec:

```
o@Component(scope = ServiceScope.PROTOTYPE)
o@Reference(scope = ReferenceScope.PROTOTYPE_REQUIRED)
```

Cons:
- Not so much how-to articles
- AEM Felix console has some issues

Questions?

Summary

1. Code examples - https://github.com/drfits/osgi-configurations
2. OSGI specification - https://www.osgi.org/developer/downloads/release-6/release-6-download/
3. My Blog - http://drfits.com