



Magnolia International Ltd.

Magnolia project review for Obi

Author: Andrew Warinner

Date: 06.05.2019

Version: 1.0

Overview

All the checks in the review are classified by their source, whether they come from Magnolia or are more general.

The classifications are:

Best practice: Magnolia recommended - organization and approaches corresponding to the Magnolia roadmap and avoidance of common Magnolia problems.

Best practice: clean code - general guidelines for writing clean code (usually Java), not necessarily Magnolia specific but helpful to maintaining your Magnolia project.

The review identifies any problems to the classifications by severity or significance:

Problem: immediate correction recommended - a problem that should be corrected as soon as possible, may cause significant headaches if left as is.

Problem: correct soon - a problem that should be addressed in the near future, may cause difficulties in using a new Magnolia release or not be in alignment with the Magnolia roadmap.

Problem: minor concern - a stylistic or cosmetic problem that can affect the readability of code

Summary of findings

Overall, the project is very well implemented and there are few recommendations for improvements or corrections.

However, there are some things to be addressed in supporting future versions of Magnolia.

1. The project uses Magnolia 5.6. We recommend upgrading to Magnolia 5.6.10 soon. Magnolia 5.6.10 and its associated modules contain a number bug fixes of modules used in the project. The upgrade to Magnolia 5.6.10 should not entail any changes to the project other than specifying the Magnolia version in the Maven pom.xml.
2. We recommend considering upgrading the project to use Magnolia 5.7 in the medium term. Magnolia 5.7 contains a number of enhancements and improvements that may be useful in the project. Transitioning from Magnolia 5.6 to Magnolia 5.7 should not entail any major changes to the project.
3. Magnolia 5.6 uses Vaadin 8. The module obi-contentportal-statistikapp uses the Vaadin 7 compatibility libraries. While the Vaadin 7 compatibility libraries will be supported for some time, they ultimately will be discontinued. Converting the app to use Vaadin 8 will also make the migration to Magnolia 5.7 and 6.1 easier.
4. There are a few dependency problems found in the Maven pom files and the module definitions (see the “Magnolia project setup” and “Magnolia module organization” sections). These are easy to correct and would help in avoiding incorrect dependencies when building the Magnolia web app.
5. There were a few minor problems noted with templates and Java code (see the “Magnolia templates” and “Magnolia Java code” for the results) but the problems were cosmetic and should not affect the operation and maintenance of the project.

Review coverage

The review covers the following areas:

1. Magnolia project setup
2. Magnolia module organization
3. Magnolia light development
4. Magnolia themes
5. Magnolia templates
6. Magnolia Java code

Each of the above areas have a number of checks defined for them as described below.

1. Magnolia project setup

Project uses the most recent version of the Magnolia major release.

It is important to keep up with bug fixes and minor improvements in your chosen Magnolia release.

Best practice: Magnolia recommended

Recommendation: upgrade to current version of Magnolia 5.6.

Recommendation: consider upgrading to Magnolia 5.7.

The current available release of Magnolia 5.6 is v5.6.10. In addition to changes and bug fixes, Magnolia 5.6.10 contains updates to the following modules used in the project:

DAM module: v2.3.2 (v2.3 used in project)

REST module: v2.1.1 (v2.0 used in project)

Content tags module: v1.0.2 (v1.0 used in project)

imaging module: v3.4.1 (v3.4 used in project)

Site module: v1.2.2 (v1.2 used in project)

Rendering module: v5.6.9 (v5.6 used in project)

jsonfn module: v1.0.8 (v1.0.7 used in project) (Note: this is a Forge module)

Magnolia 5.7 lays the foundations for many of the user interface improvements in Magnolia 6.1. Migrating to Magnolia 5.7 will be simpler than migrating from Magnolia 5.6 to 6.1.

Project uses Maven to build deployable web app

While it is possible to use other build automation tools, Magnolia uses Maven and ensures that dependencies are assembled correctly into a runnable web app.

Best practice: Magnolia recommended

No recommendations, follows Magnolia recommended practices

Maven dependencies are clearly organized and documented in Maven pom.xml files. Clear organization and comments help in understanding dependencies and their use.

Best practice: Magnolia recommended

No recommendations, follows Magnolia recommended practices.

Versions for Maven dependencies should be parameterized and collected in a central location, ideally in the root pom.xml.

Parameterizing module versions and collecting into one location helps identify Magnolia module dependencies.

Best practice: Magnolia recommended

Minor problem: there are unneeded dependencies specified in the root pom.xml.

Recommendation: remove unneeded dependencies in the root pom.xml and move specific module dependencies to the web app pom.xml.

The root pom.xml specifies dependencies for the following modules (group ID / artifact ID):

- info.magnolia / magnolia-core
- info.magnolia.dam / magnolia-dam-api
- info.magnolia.dam / magnolia-dam-core
- info.magnolia.dam / magnolia-dam-jcr
- info.magnolia.dam / magnolia-dam-app
- info.magnolia.dam / magnolia-dam-templating
- info.magnolia.rest / magnolia-rest-services
- info.magnolia.rest / magnolia-rest-integration
- info.magnolia.rest / magnolia-rest-tools
- info.magnolia.contenttags / magnolia-content-tags-core
- info.magnolia.contenttags / magnolia-content-tags-ui
- info.magnolia.imaging / magnolia-imaging
- info.magnolia.site / magnolia-site
- info.magnolia / magnolia-rendering
- *info.magnolia.templating / magnolia-jsonfn (Note: a Magnolia Forge module)*
- info.magnolia.diff / magnolia-diff
- info.magnolia.diff / magnolia-diff-pages-integration

Except for info.magnolia.templating / magnolia-jsonfn, all of the above dependencies are unnecessary and are defined in the parent pom. The parent pom also defines the current version of the module compatible with the selected Magnolia version.

Module dependencies are usually specified in the web app pom.xml.

To avoid problems when changing the overall Magnolia version, we recommend:

- Move the dependency info.magnolia.templating / magnolia-jsonfn to cms-webapp/pom.xml
- Remove the dependencies for the Magnolia Enterprise modules.

Module definition should use placeholders for module versions, versions should be defined in root pom.xml.

Parameterizing module versions and collecting into one location helps identify Magnolia module dependencies.

Best practice: Magnolia recommended

Minor problem: module definitions have dependencies with hard coded versions.

Recommendation: use placeholders for module version defined in root pom.xml in module definition dependencies.

Minor problem: some module definitions have unneeded dependencies.

Recommendation: remove dependency for ui-framework in obi-contentportal-statistikapp: META-INF/magnolia/obi-contentportal-statistikapp.xml.

The following module definitions could use version placeholders for dependencies in the module definition:

- obi-contentportal-export: META-INF/magnolia/obi-contentportal-export.xml
 - core, rest-integration dependencies
- obi-contentportal-rest: META-INF/magnolia/obi-contentportal-restservice.xml:
 - core, rest-integration dependencies
- obi-contentportal-sitemap: META-INF/magnolia/obi-contentportal-sitemap.xml:
 - core, rest-integration dependencies
- obi-contentportal-statistikapp: META-INF/magnolia/obi-contentportal-statistikapp.xml:
 - core, rest-integration, ui-admincentral
- obi-contentportal-templates: META-INF/magnolia/obi-contentportal-templates.xml:
 - core

In the module definition obi-contentportal-statistikapp: META-INF/magnolia/obi-contentportal-statistikapp.xml, the dependency on ui-framework is unnecessary but does not harm the deployment of the web app.

Module definition should not use hardcoded versions.

Parameterizing module versions and collecting into one location helps identify Magnolia module dependencies.

Best practice: Magnolia recommended

Minor problem: module definitions use hard coded versions for dependencies.

Recommendation: replace hard coded versions with module versions properties defined in root pom.xml.

The following module definitions could use version placeholders for dependencies in the module definition:

- obi-contentportal-export: META-INF/magnolia/obi-contentportal-export.xml
 - core, rest-integration dependencies
- obi-contentportal-rest: META-INF/magnolia/obi-contentportal-restservice.xml:
 - core, rest-integration dependencies
- obi-contentportal-sitemap: META-INF/magnolia/obi-contentportal-sitemap.xml:
 - core, rest-integration dependencies
- obi-contentportal-statistikapp: META-INF/magnolia/obi-contentportal-statistikapp.xml:
 - core, rest-integration, ui-admincentral
- obi-contentportal-templates: META-INF/magnolia/obi-contentportal-templates.xml:
 - core

2. Magnolia module organisation

A version handler is defined for each Magnolia module

Version handlers should handle any configuration updates to an already defined module.

Best practice: Magnolia recommended

No recommendation, follows Magnolia best practices.

Bootstrapped content should be local to module, not dependent on content added by other modules

It's a good idea to build self-contained Magnolia modules that have their own configuration to localise or isolate each module so changes do not affect multiple modules.

Best practice: Magnolia recommended

No recommendations, follows Magnolia best practices.

Note: the module `obi-contentportal-restservice` has bootstrapped content for the caching configuration and security roles. This is perfectly acceptable since the caching configuration and security roles cannot be modified with decoration.

A version handler should not bootstrap an entire file

Version handlers should use the same bootstrap files as used in the first install of the Magnolia module and use `PartialBootstrapSingleModuleResource` to update specific configuration. Using `BootstrapSingleModuleResource` in update content in a version handler can cause problems during a fresh installation of a module.

Best practice: Magnolia recommended

No recommendations, follows Magnolia best practices.

Note: `de.obi.contentportal.restservice.setup.ObiContentportalRestserviceModuleVersionHandler` invokes `BootstrapSingleModuleResource` to load `userroles.obi-rest-anonymous.xml`. This is an acceptable use of bootstrapping since user rules cannot be defined through other means.

Bootstrap tasks in a version handler should not specify an import UUID policy

Setting an import UUID policy can cover up UUID conflicts and problems with changed configuration. It's better to use the default import UUID policy to identify problems in bootstrapped content.

Best practice: Magnolia recommended

No recommendations, follows Magnolia best practices.

Node and property tasks are preferred to bootstrap tasks in a version handler

Using node and property tasks can make small configuration changes and avoid bootstrap problems.

Best practice: Magnolia recommended

No recommendations, follows Magnolia best practices.

Note: version handlers make use of utility classes such as PropertyUtil and NodeUtil to modify configuration.

Version handlers should avoid bootstrapping content into other modules

Bootstrapping content into other modules by the version handler introduces dependencies between modules. While Magnolia can handle dependencies between modules at first install and at update, bootstrapping can fail without notable errors if module dependencies are not correctly defined.

Best practice: Magnolia recommended

No recommendations, follows Magnolia best practices.

Note: bootstrapping of content is limited and acceptable.

Version handlers should use node and properties predicates to check configuration before making modifications.

Version handlers can change anything in Magnolia's configuration and should check for changed configuration before making their changes to avoid overwriting existing configuration changes.

Best practice: Magnolia recommended

No recommendations, follows Magnolia best practices.

Note: module obi-contentportal-templates makes extensive updates to the website workspace but it queries for particular property values. This is preferable to using hardcoded predicates in the version handler.

Version handlers should use version specific tasks to make changes

Version specific tasks predicates indicate what changes were made with each version and give a running history of what was changed in specific versions.

Best practice: Magnolia recommended

No recommendations, follows Magnolia best practices.

The Magnolia module descriptor contains dependencies corresponding to bootstrap content contained in the module.

If it is necessary to bootstrap content into other modules, there should be module dependencies defined in the module descriptor to ensure the correct first installation of the module.

Best practice: Magnolia recommended

Minor problem: module obi-contentportal-restservice is missing a dependency in its module definition.

Module obi-contentportal-restservice should have a dependency on the cache module to ensure that it is installed before the obi-contentportal-restservice module is installed.

Other modules conform to Magnolia best practices.

3. Magnolia Light Development

Templates defined through Light Development are preferred

Using Light Development is easier to create, modify and uninstall templates than definition through JCR configuration.

Best practice: Magnolia recommended

No recommendations, follows Magnolia best practices.

Note: module obi-contentportal-templates defines templates through light dev; no templates are defined in bootstrapped configuration.

Dialogs defined through Light Development are preferred

Using Light Development is easier to create, modify and uninstall templates than definition through JCR configuration.

Best practice: Magnolia recommended

No recommendations, follows Magnolia best practices.

Note: All dialogs defined in module obi-contentportal-templates use yaml.

Avoid excessive includes in YAML definitions

While using includes in YAML allows common content to be shared, too many includes can become confusing and make the YAML definition difficult to understand. Changing included YAML may lead to unexpected changes in other YAML definitions.

Best practice: clean code

No recommendations, follows Magnolia best practices.

Note: in module obi-contentportal-templates:

No includes are used component and page template definitions.

Dialog inclusions:

dialogs/components/linkCta.yaml: 2 includes

dialogs/components/manualStep.yaml: 1 includes

dialogs/components/atom/headline.yaml: 0 includes

dialogs/components/subheadline.yaml: 1 includes

dialogs/components/tagLink.yaml: 1 includes

dialogs/components/organism/manual.yaml: 1 includes

dialogs/components/organism/factOrganism.yaml: 2 includes

dialogs/components/organism/solutionTeaser.yaml: 2 includes

dialogs/components/organism/entry.yaml: 2 includes

dialogs/components/organism/divider.yaml: 1 includes

dialogs/components/organism/imageVideoText.yaml: 3 includes

dialogs/components/organism/stackGrid.yaml: 1 includes

dialogs/components/organism/assortmentTeaser.yaml: 2 includes

dialogs/components/organism/table.yaml: 1 includes

dialogs/components/organism/textImageFiftyFifty.yaml: 3 includes

dialogs/components/organism/teaser/contentTeaser.yaml: 2 includes

dialogs/components/organism/searchStackGrid.yaml: 1 includes

dialogs/components/organism/hotspotTeaser.yaml: 1 includes

dialogs/components/organism/text.yaml: 3 includes

dialogs/components/organism/productOrganism.yaml: 1 includes
dialogs/components/organism/masonryGrid.yaml: 3 includes
dialogs/components/organism/tagCloud.yaml: 1 includes
dialogs/components/hotspot.yaml: 3 includes
dialogs/components/copyText.yaml: 1 includes
dialogs/components/video.yaml: 2 includes
dialogs/components/list.yaml: 2 includes
dialogs/components/tagLinkImage.yaml: 2 includes
dialogs/components/image.yaml: 2 includes
dialogs/components/molecule/stepSlide.yaml: 3 includes
dialogs/components/molecule/fact.yaml: 2 includes
dialogs/components/molecule/imageSlide.yaml: 2 includes
dialogs/components/pullQuote.yaml: 1 includes
dialogs/pages/overviewPage.yaml: 1 includes
dialogs/pages/tagSearchPage.yaml: 2 includes
dialogs/pages/siterootPage.yaml: 7 includes
dialogs/pages/detailPage.yaml: 2 includes
dialogs/pages/manualPage.yaml: 2 includes

Avoid recursive includes in YAML definitions

Recursive includes - included YAML files including other YAML files) - can be difficult to troubleshoot and may obscure dependencies between YAML definitions.

Best practice: clean code

No recommendations, follows Magnolia best practices.

Note: inclusions of yaml from include directory:

includes/xss_validator.yaml: 0 includes

includes/linkCtaField.yaml: 2 includes

Included in:

- /obi-contentportal-templates/includes/linkPageTypeOptions.yaml
- /obi-contentportal-templates/includes/linkTargetOptions.yaml

includes/linkTargetOptions.yaml: 0 includes

includes/fact.yaml: 2 includes

Included in:

- /obi-contentportal-templates/includes/linkPageTypeOptions.yaml
- /obi-contentportal-templates/includes/linkTargetOptions.yaml

includes/articleTypes.yaml: 0 includes

includes/image_no_requirements.yaml: 0 includes

includes/list.yaml: 0 includes

includes/common-actions.yaml: 0 includes

includes/linkPageTypeOptions.yaml: 0 includes

includes/image.yaml: 0 includes

Follow a naming convention between templates, dialogs and YAML definitions

Using a naming convention, such as using the same name for a template, dialog and YAML definition, helps in organising and understanding your light content.

Best practice: clean code

Minor problem: the dialog defined for the template obidigital-contentportal-backend/obi-contentportal-templates/src/main/resources/obi-contentportal-templates/templates/components/molecule/product.yaml does not exist.

Note: dialog definition from template product.yaml:

```
dialog: obi-contentportal-templates:components/molecule/product
```

Avoid use of label properties in YAML definitions

Use auto-generated keys for internationalization instead of labels to reduce the size of your YAML definitions.

cf. <https://documentation.magnolia-cms.com/display/DOCS/>

Generic+i18n+keys+and+their+list#Generic+i18n+keys+and+their+list-Dialog

Best practice: clean code

Minor problem: some dialogs use label definitions shared with other dialogs.

Note: in general, most dialogs do not use label definitions and conform to Magnolia best practices.

Dialogs that use label definitions:

```
obi-contentportal-templates/dialogs/components/organism/solutionTeaser.yaml
obi-contentportal-templates/dialogs/components/organism/imageVideoText.yaml
obi-contentportal-templates/dialogs/components/organism/textImageFiftyFifty.yaml
obi-contentportal-templates/dialogs/components/organism/text.yaml
obi-contentportal-templates/dialogs/components/organism/masonryGrid.yaml
obi-contentportal-templates/dialogs/components/hotspot.yaml
obi-contentportal-templates/dialogs/pages/siterootPage.yaml
```

Cross-referenced label definitions:

```
label: fields.linkTarget.options.blank
  referenced: obi-contentportal-templates/dialogs/components/organism/
  solutionTeaser.yaml
label: fields.linkTarget.options.self
  referenced: obi-contentportal-templates/dialogs/components/organism/
  solutionTeaser.yaml
label: obi-contentportal-templates.components.linkCta.tabMain.linkPageType
  referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
  referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
label: obi-contentportal-templates.components.linkCta.tabMain.linkTarget
  referenced: obi-contentportal-templates/dialogs/components/hotspot.yaml
  referenced: obi-contentportal-templates/dialogs/components/organism/
  imageVideoText.yaml
  referenced: obi-contentportal-templates/dialogs/components/organism/
  masonryGrid.yaml
  referenced: obi-contentportal-templates/dialogs/components/organism/
  solutionTeaser.yaml
  referenced: obi-contentportal-templates/dialogs/components/organism/text.yaml
  referenced: obi-contentportal-templates/dialogs/components/organism/
  textImageFiftyFifty.yaml
  referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
  referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
label: obi-contentportal-templates.components.linkCta.tabMain.linkText
  referenced: obi-contentportal-templates/dialogs/components/hotspot.yaml
  referenced: obi-contentportal-templates/dialogs/components/organism/
  imageVideoText.yaml
```

referenced: obi-contentportal-templates/dialogs/components/organism/masonryGrid.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/solutionTeaser.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/text.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/textImageFiftyFifty.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
label: obi-contentportal-templates.components.linkCta.tabMain.linkType
referenced: obi-contentportal-templates/dialogs/components/hotspot.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/imageVideoText.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/masonryGrid.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/solutionTeaser.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/text.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/textImageFiftyFifty.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
label: obi-contentportal-templates.components.linkCta.tabMain.linkType.linkUrlDownload
referenced: obi-contentportal-templates/dialogs/components/organism/text.yaml
label: obi-contentportal-templates.components.linkCta.tabMain.linkType.linkUrlExternal
referenced: obi-contentportal-templates/dialogs/components/hotspot.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/imageVideoText.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/masonryGrid.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/solutionTeaser.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/text.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/textImageFiftyFifty.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
label: obi-contentportal-templates.components.linkCta.tabMain.linkType.linkUrlInternal
referenced: obi-contentportal-templates/dialogs/components/hotspot.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/imageVideoText.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/masonryGrid.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/solutionTeaser.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/text.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/textImageFiftyFifty.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
label: obi-contentportal-templates.components.linkCta.tabMain.linkType.options.download
referenced: obi-contentportal-templates/dialogs/components/organism/text.yaml

label: obi-contentportal-
templates.components.linkCta.tabMain.linkType.options.external
referenced: obi-contentportal-templates/dialogs/components/hotspot.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/
imageVideoText.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/
masonryGrid.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/
solutionTeaser.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/text.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/
textImageFiftyFifty.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
label: obi-contentportal-
templates.components.linkCta.tabMain.linkType.options.internal
referenced: obi-contentportal-templates/dialogs/components/hotspot.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/
imageVideoText.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/
masonryGrid.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/
solutionTeaser.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/text.yaml
referenced: obi-contentportal-templates/dialogs/components/organism/
textImageFiftyFifty.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml
referenced: obi-contentportal-templates/dialogs/pages/siterootPage.yaml

Avoid hardcoded text in label and description properties

Use I18N keys or auto-generated keys for internationalization.

Best practice: clean code

No recommendations, conforms to Magnolia best practices.

The Definitions app should report no problems with a module

The Definitions app will note any problems Magnolia finds in a light module.

Best practice: Magnolia

Minor problem: some minor errors are reported by the Definitions app.

Errors reported:

Severity type: MINOR

Title: Source data processing problem

Problem details: Property [headlineText] not found in class

[info.magnolia.ui.dialog.definition.ConfiguredFormDialogDefinition], property is not assigned

Severity type: MINOR

Title: Source data processing problem

Problem details: Property [headlineType] not found in class [info.magnolia.ui.dialog.definition.ConfiguredFormDialogDefinition], property is not assigned

Severity type: MINOR

Title: Source data processing problem

Problem details: Property [multiselect] not found in class [info.magnolia.ui.form.field.definition.HiddenFieldDefinition], property is not assigned

Severity type: MINOR

Title: Source data processing problem

Problem details: Property [options] not found in class [info.magnolia.ui.form.field.definition.HiddenFieldDefinition], property is not assigned

4. Magnolia themes

A Magnolia theme is contained within a single module

A theme should be contained by itself in the module to isolate it and future changes to the theme.

Best practice: Magnolia recommended

Not applicable: no themes are defined in the project.

Theme resources are used in one common central script

Theme resources should be used in the prototype's script or a central script for all templates of the same site.

Best practice: Magnolia recommended

Not applicable: no themes are defined in the project.

Avoid legacy resource processing

Resource processing was removed from the standard Resources module. Even though Processed Resources app module brings back this functionality, it's not part of preconfigured Magnolia bundles and it is recommended to move the business logic to page/components model classes or templating functions whenever possible and make use of tools like grunt/sass/etc for static resource processing.

Best practice: Magnolia recommended

Not applicable: no themes are defined in the project.

A theme is associated with a site

A theme should be associated with a site.

Best practice: Magnolia recommended

Not applicable: no themes are defined in the project.

5. Magnolia templates

Freemarker templates should contain HTML only

Templates should define Javascript or non-HTML content. Javascript should be managed through resources.

Best practice: Magnolia recommended

No recommendations, conforms to Magnolia best practices.

Freemarker templates make use of i18n labels if multilanguage is supported

If multi language is being used, templates should use the i18n framework for displaying labels and the i18n properties files should be in the same module as the Freemarker templates.

Best practice: Magnolia recommended

Minor problem: some templates have hardcoded text.

Note: some Freemarker templates do make use of hardcoded text but most of these appear to be fallbacks to produce debugging output or last ditch defaults:

obi-contentportal-templates/templates/pages/footer.ftl: has hardcoded text
obi-contentportal-templates/templates/pages/header.ftl: has hardcoded text
obi-contentportal-templates/templates/components/organism/teaser/
contentTeaser.ftl: has hardcoded text
obi-contentportal-templates/templates/components/organism/assortmentTeaser.ftl:
has hardcoded text
obi-contentportal-templates/templates/components/organism/manual.ftl: has
hardcoded text (probably for debugging use)
obi-contentportal-templates/templates/components/organism/stackGrid.ftl: has
hardcoded text (probably for debugging use)
obi-contentportal-templates/templates/components/organism/text.ftl: has hardcoded
text (probably for debugging use)
obi-contentportal-templates/templates/components/organism/teaser/
contentTeaser.ftl: has hardcoded text (probably for debugging use.)

Freemarker templates make use of includes functionality when possible

As with any programming language, duplicated code should be avoided. In Freemarker the includes functionality lets you prevent code duplication.

Best practice: Magnolia recommended

No recommendations, conforms to Magnolia best practices.

Note: some templates use includes:

obi-contentportal-templates/templates/pages/manualPage.ftl
obi-contentportal-templates/templates/components/organism/teaser/contentTeaser.ftl

Note: templates appeared to be relatively simple and were well implemented and no immediate opportunities for shared code in included templates were obvious.

6. Magnolia Java code

No use of deprecated classes or methods from Magnolia

Use of deprecated classes or methods can cause future problems in your Magnolia project. It is best to keep up to date with the Magnolia API as it evolves.

Best practice: Magnolia recommended

Problem: correct soon - the module obi-contentportal-statistikapp uses the Vaadin 7 compatibility libraries which are deprecated. The module should be migrated to Vaadin 8 and the associated Magnolia UI libraries.

Magnolia 5.6 moved from Vaadin 7 to Vaadin 8. While the Magnolia Vaadin 7 compatibility libraries will be supported for some time, Magnolia's support for Vaadin 8 simplifies app development and reduces the amount of code needed for an app.

Moving to Vaadin 8 will also help migration to Magnolia 6.

Note: see appendix for a listing of classes using the Vaadin 7 compatibility libraries.

Minor problem: obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java uses the deprecated method info.magnolia.cms.core.Path#getTempDirectory.

Calls to info.magnolia.cms.core.Path#getTempDirectory can be replaced with info.magnolia.cms.core.FileSystemHelper#getTempDirectory.

Java code should conform to general clean code conventions

Java coding conventions vary widely, however, some general guidelines for code readability, structure and maintainability should be followed.

Best Practice: clean code

Automated code review

We used an automated code review to assess the Java code contained in your Magnolia project to identify code for special attention. Automated code reviews may be overly strict and identify many problems but we have assessed its findings and provided our own recommendations for the severity or significance of any findings.

We used PMD to analyze the Java in your Magnolia project code:

<https://pmd.github.io>

We used the following PMD rule sets to evaluate the Java code:

Basic: The Basic ruleset contains a collection of good practices which should be followed.

Code Size: The Code Size ruleset contains rules that find problems related to code size or complexity.

Import Statements: These rules deal with different problems that can occur with import statements.

J2EE: Rules specific to the use of J2EE implementations.

Security Code Guidelines: These rules check the security guidelines from Sun, published at <http://java.sun.com/security/seccodeguide.html#gcg>

Unnecessary: The Unnecessary Ruleset contains a collection of rules for unnecessary code.

Unused Code: The Unused Code ruleset contains rules that find unused or ineffective code.

Minor problem: unused import statements in some Java sources, see automated code review appendices for results.

Minor problem: uppercasing or lowercasing of strings without specifying a locale, see automated code review appendices for results.

Minor problem: there are unused private fields in some classes, see automated code review appendices for results.

Minor problem: the method `de.obt.contentportal.templates.form.validation.MultivalueltemCountValidator#validate` has deeply nested if statements, consider refactoring it.

Appendix: deprecated class usage

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/field/SearchTagFieldTransformer.java:[3,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/HotspotDamFilePreviewComponent.java:[6,24] com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java:[8,24] com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java:[9,24] com.vaadin.v7.ui.TextField in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java:[10,30] info.magnolia.cms.core.Path in info.magnolia.cms.core has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/FocalPointsDamFilePreviewComponent.java:[9,24] com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/FocalPointsDamFilePreviewComponent.java:[10,24] com.vaadin.v7.ui.Label in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/CanonicalUrlValidatorFactory.java:[3,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/RichTextLengthValidatorFactory.java:[3,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/MultivalueltemCountValidatorFactory.java:[5,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/CanonicalUrlValidator.java:[3,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/CanonicalUrlValidator.java:[4,36] com.vaadin.v7.data.validator.AbstractStringValidator in com.vaadin.v7.data.validator has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/RichTextLengthValidator.java:[4,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/field/HotSpotLinkFieldTransformer.java:[6,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/field/HotSpotLinkFieldTransformer.java:[7,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/field/HotSpotLinkFieldTransformer.java:[8,31] com.vaadin.v7.data.util.ObjectProperty in com.vaadin.v7.data.util has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/field/RichTextFieldTransformer.java:[3,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/field/RichTextFieldTransformer.java:[4,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/MultivalueltemCountValidator.java:[7,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/MultivalueltemCountValidator.java:[8,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/MultivalueltemCountValidator.java:[9,31] com.vaadin.v7.data.util.PropertysetItem in com.vaadin.v7.data.util has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/SearchTagFieldTransformer.java:[3,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/HotspotDamFilePreviewComponent.java:[6,24] com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/CustomDamFilePreviewComponent.java:[8,24] com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/CustomDamFilePreviewComponent.java:[9,24] com.vaadin.v7.ui.TextField in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/CustomDamFilePreviewComponent.java:[10,30] info.magnolia.cms.core.Path in info.magnolia.cms.core has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/FocalPointsDamFilePreviewComponent.java:[9,24] com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/FocalPointsDamFilePreviewComponent.java:[10,24] com.vaadin.v7.ui.Label in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/CanonicalUrlValidatorFactory.java:[3,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/RichTextLengthValidatorFactory.java:[3,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/MultivalueltemCountValidatorFactory.java:[5,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/CanonicalUrlValidator.java:[3,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/CanonicalUrlValidator.java:[4,36] com.vaadin.v7.data.validator.AbstractStringValidator in com.vaadin.v7.data.validator has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/RichTextLengthValidator.java:[4,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/HotSpotLinkFieldTransformer.java:[6,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/HotSpotLinkFieldTransformer.java:[7,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/HotSpotLinkFieldTransformer.java:[8,31] com.vaadin.v7.data.util.ObjectProperty in com.vaadin.v7.data.util has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/RichTextFieldTransformer.java:[3,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/RichTextFieldTransformer.java:[4,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/MultivalueltemCountValidator.java:[7,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/MultivalueltemCountValidator.java:[8,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/MultivalueltemCountValidator.java:[9,31]

com.vaadin.v7.data.util.PropertysetItem in com.vaadin.v7.data.util has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/SearchTagFieldTransformer.java:[3,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/HotspotDamFilePreviewComponent.java:[6,24]

com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/CustomDamFilePreviewComponent.java:[8,24]

com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/CustomDamFilePreviewComponent.java:[9,24] com.vaadin.v7.ui.TextField in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/CustomDamFilePreviewComponent.java:[10,30] info.magnolia.cms.core.Path in info.magnolia.cms.core has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/FocalPointsDamFilePreviewComponent.java:[9,24]

com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/FocalPointsDamFilePreviewComponent.java:[10,24] com.vaadin.v7.ui.Label in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/CanonicalUrlValidatorFactory.java:[3,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/RichTextLengthValidatorFactory.java:[3,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/MultivalueltemCountValidatorFactory.java:[5,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/CanonicalUrlValidator.java:[3,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/CanonicalUrlValidator.java:[4,36]

com.vaadin.v7.data.validator.AbstractStringValidator in com.vaadin.v7.data.validator has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/RichTextLengthValidator.java:[4,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/HotSpotLinkFieldTransformer.java:[6,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/HotSpotLinkFieldTransformer.java:[7,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/HotSpotLinkFieldTransformer.java:[8,31] com.vaadin.v7.data.util.ObjectProperty in com.vaadin.v7.data.util has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/RichTextFieldTransformer.java:[3,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/RichTextFieldTransformer.java:[4,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/MultivalueltemCountValidator.java:[7,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/MultivalueltemCountValidator.java:[8,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/MultivalueltemCountValidator.java:[9,31] com.vaadin.v7.data.util.PropertysetItem in com.vaadin.v7.data.util has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/SearchTagFieldTransformer.java:[3,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/HotspotDamFilePreviewComponent.java:[6,24] com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/CustomDamFilePreviewComponent.java:[8,24] com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/CustomDamFilePreviewComponent.java:[9,24] com.vaadin.v7.ui.TextField in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/CustomDamFilePreviewComponent.java:[10,30] info.magnolia.cms.core.Path in info.magnolia.cms.core has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/FocalPointsDamFilePreviewComponent.java:[9,24] com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/component/FocalPointsDamFilePreviewComponent.java:[10,24] com.vaadin.v7.ui.Label in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/CanonicalUrlValidatorFactory.java:[3,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/RichTextLengthValidatorFactory.java:[3,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/MultivalueltemCountValidatorFactory.java:[5,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/CanonicalUrlValidator.java:[3,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/CanonicalUrlValidator.java:[4,36] com.vaadin.v7.data.validator.AbstractStringValidator in com.vaadin.v7.data.validator has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/validation/RichTextLengthValidator.java:[4,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/HotSpotLinkFieldTransformer.java:[6,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/HotSpotLinkFieldTransformer.java:[7,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/ templates/form/field/HotSpotLinkFieldTransformer.java:[8,31] com.vaadin.v7.data.util.ObjectProperty in com.vaadin.v7.data.util has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/field/RichTextFieldTransformer.java:[3,26] com.vaadin.v7.data.Item in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/field/RichTextFieldTransformer.java:[4,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/MultivalueltemCountValidator.java:[7,26] com.vaadin.v7.data.Property in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/MultivalueltemCountValidator.java:[8,26] com.vaadin.v7.data.Validator in com.vaadin.v7.data has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/MultivalueltemCountValidator.java:[9,31]

com.vaadin.v7.data.util.PropertysetItem in com.vaadin.v7.data.util has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java:[58,31]

com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java:[98,64] info.magnolia.cms.core.Path in info.magnolia.cms.core has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java:[98,68] getTempDirectory() in info.magnolia.cms.core.Path has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java:[133,42] com.vaadin.v7.ui.TextField in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java:[157,19] com.vaadin.v7.ui.TextField in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java:[157,41] com.vaadin.v7.ui.TextField in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java:[158,19] com.vaadin.v7.ui.TextField in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/CustomDamFilePreviewComponent.java:[158,41] com.vaadin.v7.ui.TextField in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/HotspotDamFilePreviewComponent.java:[23,31]

com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/FocalPointsDamFilePreviewComponent.java:[30,31]

com.vaadin.v7.ui.HorizontalLayout in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/FocalPointsDamFilePreviewComponent.java:[105,15] com.vaadin.v7.ui.Label in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/FocalPointsDamFilePreviewComponent.java:[105,33] com.vaadin.v7.ui.Label in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/FocalPointsDamFilePreviewComponent.java:[115,15] com.vaadin.v7.ui.Label in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/FocalPointsDamFilePreviewComponent.java:[115,33] com.vaadin.v7.ui.Label in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/FocalPointsDamFilePreviewComponent.java:[125,15] com.vaadin.v7.ui.Label in com.vaadin.v7.ui has been deprecated

obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/
templates/form/component/FocalPointsDamFilePreviewComponent.java:[125,33] com.vaadin.v7.ui.Label
in com.vaadin.v7.ui has been deprecated
obidigital-contentportal-backend/obi-contentportal-templates/src/main/java/de/obi/contentportal/
templates/form/component/FocalPointsDamFilePreviewComponent.java: Some input files additionally
use or override a deprecated API.

Appendix: automated code review results

Module obi-contentportal-export results:

obi-contentportal-export/src/main/java/de/obi/contentportal/export/endpoint/v1/ExportEndpoint.java:14: Avoid unused imports such as 'javax.ws.rs'

obi-contentportal-export/src/main/java/de/obi/contentportal/export/services/ExportServiceImpl.java:148: Useless parentheses.

obi-contentportal-export/src/main/java/de/obi/contentportal/export/services/ExportServiceImpl.java:166: Useless parentheses.

obi-contentportal-export/src/main/java/de/obi/contentportal/export/setup/AddEndpointRegistrationTask.java:7: Avoid unused imports such as 'info.magnolia.jcr.nodebuilder.Ops'

Module obi-contentportal-restservice results:

obi-contentportal-restservice/src/main/java/de/obi/contentportal/restservice/endpoint/v1/PagesEndpoint.java:23: Avoid unused imports such as 'javax.ws.rs'

obi-contentportal-restservice/src/main/java/de/obi/contentportal/restservice/setup/AddEndpointRegistrationTask.java:8: Avoid unused imports such as 'info.magnolia.jcr.nodebuilder.Ops'

obi-contentportal-restservice/src/main/java/de/obi/contentportal/restservice/setup/ObiContentportalRestserviceModuleVersionHandler.java:6: Avoid unused imports such as 'info.magnolia.module.delta'

Module obi-contentportal-sitemap results:

obi-contentportal-sitemap/src/main/java/de/obi/contentportal/sitemap/setup/AddEndpointRegistrationTask.java:7: Avoid unused imports such as 'info.magnolia.jcr.nodebuilder.Ops'

obi-contentportal-sitemap/src/main/java/de/obi/contentportal/sitemap/setup/GuiceConfiguration.java:3: Avoid unused imports such as 'de.obi.contentportal.sitemap.model.factory'

obi-contentportal-sitemap/src/main/java/de/obi/contentportal/sitemap/setup/GuiceConfiguration.java:8: Avoid unused imports such as 'de.obi.contentportal.sitemap.service.helper'

Module obi-contentportal-statistikapp results:

obi-contentportal-statistikapp/src/main/java/de/obi/contentportal/statistikapp/StatistikAppView.java:11: Unnecessary modifier 'public' on interface 'Listener': members of interface types are implicitly public

obi-contentportal-statistikapp/src/main/java/de/obi/contentportal/statistikapp/StatistikAppViewImpl.java:21: Avoid unused private fields such as 'listener'.

obi-contentportal-statistikapp/src/main/java/de/obi/contentportal/statistikapp/mapping/CmsExportMapping.java:6: Avoid unused imports such as 'org.apache.jackrabbit.core.state.ItemStateException'

obi-contentportal-statistikapp/src/main/java/de/obi/contentportal/statistikapp/service/ExcelExportService.java:45: Useless parentheses.

Module obi-contentportal-templates results:

obi-contentportal-templates/src/main/java/de/obi/ObiHelper.java:139: When doing a String.toLowerCase()/toUpperCase() call, use a Locale

obi-contentportal-templates/src/main/java/de/obi/ObiHelper.java:139: When doing a String.toLowerCase()/toUpperCase() call, use a Locale

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/PageTransformerImpl.java:5: Avoid unused imports such as 'de.obi.contentportal.templates.model.components'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/
SiteConfigurationProviderImpl.java:90: When doing a String.toLowerCase()/toUpperCase() call, use a
Locale

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/
SiteConfigurationProviderImpl.java:90: When doing a String.toLowerCase()/toUpperCase() call, use a
Locale

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/
SiteConfigurationProviderImpl.java:162: When doing a String.toLowerCase()/toUpperCase() call, use a
Locale

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/
SiteConfigurationProviderImpl.java:162: When doing a String.toLowerCase()/toUpperCase() call, use a
Locale

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/definition/
RestfulTemplateDefinition.java:41: Overriding method merely calls super

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/
CustomDamFilePreviewComponent.java:11: Avoid unused imports such as 'info.magnolia.dam.api'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/
FocalPointsDamFilePreviewComponent.java:12: Avoid unused imports such as 'info.magnolia.dam.api'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/component/
HotspotDamFilePreviewComponent.java:7: Avoid unused imports such as 'info.magnolia.dam.api'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/
CanonicalUrlValidator.java:12: Avoid unused private fields such as 'LOG'.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/
CanonicalUrlValidator.java:39: Useless parentheses.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/
MultivalueltemCountValidator.java:35: The method 'validate(Object)' has a cyclomatic complexity of 15.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/
MultivalueltemCountValidator.java:37: Useless parentheses.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/
MultivalueltemCountValidatorFactory.java:34: Ternary operators that can be simplified with || or &&

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/
RichTextLengthValidator.java:30: Useless parentheses.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/
RichTextLengthValidator.java:31: These nested if statements could be combined

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/form/validation/
RichTextLengthValidatorFactory.java:7: Avoid unused imports such as 'java.text.MessageFormat'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/
ButtonFactory.java:63: Useless parentheses.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/
FactFactory.java:46: Useless parentheses.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/
HotspotFactory.java:18: Avoid unused private fields such as 'LOGGER'.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/
LinkCtaFactory.java:50: Useless parentheses.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/
SubheadlineFactory.java:3: Avoid unused imports such as
'de.obi.contentportal.templates.model.components.atom.HeadlineTypeFactory'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/
SubheadlineFactory.java:4: Avoid unused imports such as
'de.obi.contentportal.templates.model.components.atom.SubHeadlineType'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/molecule/
slider/SlideFactory.java:3: Avoid unused imports such as
'de.obi.contentportal.templates.model.components'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/molecule/slider/SliderFactory.java:5: Avoid unused imports such as 'info.magnolia.dam.templating.functions.DamTemplatingFunctions'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/molecule/slider/SliderFactory.java:6: Avoid unused imports such as 'info.magnolia.templating.functions.TemplatingFunctions'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/HotspotTeaser.java:3: Avoid unused imports such as 'de.obi.contentportal.templates.model.components'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/HotspotTeaserFactory.java:5: Avoid unused imports such as 'de.obi.contentportal.templates.model.components'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/HotspotTeaserFactory.java:7: Avoid unused imports such as 'org.slf4j.Logger'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/HotspotTeaserFactory.java:8: Avoid unused imports such as 'org.slf4j.LoggerFactory'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/MasonryGrid.java:3: Avoid unused imports such as 'de.obi.contentportal.templates.model.components'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/MasonryGridFactory.java:5: Avoid unused imports such as 'de.obi.contentportal.templates.model.components'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/SearchStackGridFactory.java:10: Avoid unused imports such as 'info.magnolia.i18nsystem.SimpleTranslator'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/SolutionTeaserFactory.java:18: Avoid unused private fields such as 'LOGGER'.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/TagCloudFactory.java:3: Avoid unused imports such as 'de.obi.contentportal.templates.model.components'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/TextMedia.java:3: Avoid unused imports such as 'de.obi.contentportal.templates.model.components'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/TextMediaFactory.java:5: Avoid unused imports such as 'de.obi.contentportal.templates.model.components'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/TextOrganism.java:3: Avoid unused imports such as 'de.obi.contentportal.templates.model.components'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/TextOrganismFactory.java:5: Avoid unused imports such as 'de.obi.contentportal.templates.model.components'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/organism/factory/teaser/ContentTeaserFactory.java:13: Avoid unused imports such as 'de.obi.contentportal.templates.model.components.AtomicException'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/components/sharing/PinterestSharingFactory.java:3: Avoid unused imports such as 'de.obi.contentportal.templates.model.components.AtomicException'

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/page/AbstractPageFactory.java:133: Useless parentheses.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/page/AbstractPageFactory.java:137: Useless parentheses.

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/page/AbstractPageFactory.java:251: When doing a String.toLowerCase()/toUpperCase() call, use a Locale

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/page/DetailPageFactory.java:77: When doing a String.toLowerCase()/toUpperCase() call, use a Locale

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/page/OverviewPageFactory.java:62: When doing a String.toLowerCase()/toUpperCase() call, use a Locale

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/page/
OverviewPageFactory.java:83: When doing a String.toLowerCase()/toUpperCase() call, use a Locale

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/model/page/
TagSearchPageFactory.java:56: When doing a String.toLowerCase()/toUpperCase() call, use a Locale

obi-contentportal-templates/src/main/java/de/obi/contentportal/templates/setup/
ObiContentportalTemplatesModuleVersionHandler.java:45: Overriding method merely calls super