Code Style Guide

Formatting Rules

The code style conventions used in the project are based on the style-guide defined of Fedora-3. They should prevent commits cluttered with format changes.

Here are the major rules:

- 1. Four space indents for Java, and 2-space indents for XML. NO TABS
- 2. K&R style braces

```
if (code) {
  // code
} else {
  // code
}
```

- 3. Do not use wildcard imports
- 4. Write Javadocs for public methods and classes. Keep it short and to the point
- 5. Avoid public instance variables; use accessors
- 6. Use public methods sparingly; implementation details are not public
- 7. Maximum length of lines is 120 characters.
- 8. Create Javadocs for types of at least the following descriptivity

```
/**
 * @author Joe Developer
 * @since MMM DD, YYYY
 */
public class MyClass
```

9. Each source file should contain a license header much like the following:

```
/**
 * Copyright 2015 DuraSpace, Inc.
 *
 * Licensed under the Apache License, Version 2.0 (the "License");
 * you may not use this file except in compliance with the License.
 * You may obtain a copy of the License at
 *
 * http://www.apache.org/licenses/LICENSE-2.0
 *
 * Unless required by applicable law or agreed to in writing, software
 * distributed under the License is distributed on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
 * See the License for the specific language governing permissions and
 * limitations under the License.
 */
```

Use the maven-license-plugin to check for and add missing headers:

```
Check for missing headers

mvn license:check
```

```
Add missing headers

mvn license:format
```

IDE settings are located in the project source. IDE users are strongly recommended to apply these formatting settings.

- Eclipse settings are here: fcrepo4/src/site/eclipse
 IntelliJ settings TBD (purportedly, this plugin will let you use the Eclipse settings above within IntelliJ)

Checkstyle

We're in the process of adding checkstyle enforcement to our modules (meaning, if you violate some of the major style rules, the build will fail).

To check for violations, run the following command:

mvn checkstyle:check