Release Testing - 4.7.3

Testing Blocker Tickets

- ...

External Projects

Hydra

Project	Tested by	Success? RC-1	Notes
ActiveFedora	Adam Wead Jennifer Smith	blocked URL ✅	
CurationConcerns	Esmé Cowles	✅	
Hyrax	Darren Weber Jim Coble Jennifer Smith	✅ ✅ ✅	
Plum	Esmé Cowles	✅	
Sufia	Esmé Cowles	✅	

Islandora

Project	Tested by	Success? RC-1	Notes
CLAW	Nick Ruest	✅	#IslandoraCon demo works fine with 4.7.3-RC1

Testing Plan

```
    git clone https://github.com/fcrepo4/fcrepo4
cd fcrepo4
git checkout <version>-RC
```

Sanity Builds

Project	Command	Platform	Tested by	Success?	Notes
fcrepo4	mvn clean install	linux	Andrew Woods	✅	
fcrepo4	mvn clean install	mac	Jared Whiklo	✅	
fcrepo4	mvn clean install	windows	Aaron Birkland	✅	
fcrepo-module-auth-rbacl	mvn clean install	linux	Andrew Woods	✅	
fcrepo-module-auth-rbacl	mvn clean install	mac	Jared Whiklo	✅	
fcrepo-module-auth-rbacl	mvn clean install	windows	Aaron Birkland	✅	
fcrepo-module-auth-xacml	mvn clean install	linux	Andrew Woods	✅	
fcrepo-module-auth-xacml	mvn clean install	mac	Jared Whiklo	✅	
fcrepo-module-auth-xacml	mvn clean install	windows	Aaron Birkland	✅	
fcrepo-module-auth-webac	mvn clean install	linux	Andrew Woods	✅	
fcrepo-module-auth-webac	mvn clean install	mac	Jared Whiklo	✅	
fcrepo-module-auth-webac	mvn clean install	windows	Aaron Birkland	✅	
fcrepo-mint	mvn clean install	linux	Andrew Woods	✅	

fcrepo-mint	mvn clean install	mac	Jared Whiklo	✓	
fcrepo-mint	mvn clean install	windows	Aaron Birkland	✓	
fcrepo-audit	mvn clean install	linux	Andrew Woods	✓	
fcrepo-audit	mvn clean install	mac	Jared Whiklo	✓	
fcrepo-audit	mvn clean install	windows	Aaron Birkland	✓	
fcrepo-webapp-plus	mvn clean install	linux	Andrew Woods	✓	
fcrepo-webapp-plus	mvn clean install	mac	Jared Whiklo	✓	
fcrepo-webapp-plus	mvn clean install	windows	Aaron Birkland	✓	
fcrepo-webapp-plus	mvn clean install -Pwebac	linux	Andrew Woods	✓	
fcrepo-webapp-plus	mvn clean install -Pwebac	mac	Jared Whiklo	✓	
fcrepo-webapp-plus	mvn clean install -Pwebac	windows	Aaron Birkland	✓	
fcrepo-webapp-plus	mvn clean install -Paudit	linux	Andrew Woods	✓	
fcrepo-webapp-plus	mvn clean install -Paudit	mac	Jared Whiklo	✓	
fcrepo-webapp-plus	mvn clean install -Paudit	windows	Aaron Birkland	✓	
fcrepo-webapp-plus	mvn clean install -P\!webac,\!audit	linux	Andrew Woods	✓	
fcrepo-webapp-plus	mvn clean install -P\!webac,\!audit	mac	Jared Whiklo	✓	
fcrepo-webapp-plus	mvn clean install -P\!webac,\!audit	windows	Aaron Birkland	✓	

One-Click Run

```
cd fcrepo-webapp; mvn clean install -Pone-click
```

Command	Platform	Tested by	Success?	Notes
java -jar fcrepo-webapp-<version>-SNAPSHOT-jetty-console.jar	Linux	Andrew Woods Nick Ruest	✓ blocked URL	
java -jar fcrepo-webapp-<version>-SNAPSHOT-jetty-console.jar	Mac	Youn Noh	blocked URL	Namespace prefix bindings in transactions that are rolled back persist.
java -jar fcrepo-webapp-<version>-SNAPSHOT-jetty-console.jar	Windows	Aaron Birkland	✓	

Manual Tests

All of the below should take place in the HTML UI and non-vagrant tests should run against **fcrepo-webapp-plus.**

1. Create nested containers
2. Create binary resources
3. Run fixity on binary
4. Update Properties: Perform SPARQL-Update on container
5. Update Properties: Perform SPARQL-Update on binary
6. Delete container
7. Delete binary
8. Use transactions
9. Create versions
10. View versions
11. Rollback versions

Database Tests

With Tomcat7 deployment, run above manual tests with alternate backend databases (Configuring JDBC Object Store)

Database	Platform	Tested by	Success?	Notes
MySQL	MacOSX 10.11.6 MySQL 5.7.17	Jared Whiklo	✓	
PostgreSQL	MacOSX 10.12.5 PostgreSQL 9.4.5	Esmé Cowles	✓	

fcr:backup/fcr:restore Functionality

These tests are designed to ensure the proper function of the 'fcr:backup/fcr:restore' features by testing them against various Fedora configurations. The validity of the 'restore' can only be determined by crawling the repository and verifying the successful retrieval of the repository's content.

If the anticipated Fedora release is not backwards compatible with the previous version of Fedora, then the "From Fedora Version" should be the previous version. Otherwise, it is sufficient to test the fcr:backup/fcr:restore functionality using the same version.

See: RESTful HTTP API - Backup and Restore

```
# Backup
curl -X POST localhost:8080/rest/fcr:backup

# Restore
curl -X POST -d "/path/to/backup/directory" localhost:8080/rest/fcr:restore
```

Resources

- These python scripts - fcrepo-testing - can be used to load RDF content and binary content to a Fedora repository and verify the integrity of the loaded resources. Output from the load process can be used to verify the integrity of a 'restored' repository. See the README for more info.
- This script can be used to walk your repository, failing if a non-success response is encountered.

Tested by	Platform	Container (Tomcat /Jetty)	Database Backend	From Fedora Version	To Fedora Version	Number of RDF Resources	Number of Binaries	Size of Backup (du -h .)	Success?	Notes
Andrew Woods	Linux	Jetty	file-simple	4.7.2	4.7.3	100	100	32-M	✓	plantpatents dataset

NB: "Success" is measured not by receiving a "204 No Content" message after the 'fcr:restore' command, but by performing a GET on every resource in the repository and receiving "200 OK" messages.

Vagrant Tests

```
    vagrant destroy
vagrant up
```

Test steps	Tested by	Success?	Notes
FEDORA_AUTH=true FEDORA_AUDIT=true	Ben Pennell Andrew Woods	blocked URL ✓	
FEDORA_AUTH=false FEDORA_AUDIT=true	Ben Pennell Andrew Woods	blocked URL ✓	
FEDORA_AUTH=true FEDORA_AUDIT=false	Ben Pennell Andrew Woods	blocked URL ✓	
FEDORA_AUTH=false FEDORA_AUDIT=false	Ben Pennell Andrew Woods	blocked URL ✓	

Manual Tests

Same as above, plus:

1. Verify audit events are in triplestore blocked URL
2. Verify resources are in triplestore blocked URL (Note: indexing works very poorly when using the testing scripts because rapidly adding and then removing items causes the message queue to get very backed up)
3. Verify resources are in Solr blocked URL
4. Verify authorization works for the two auth-enabled configurations blocked URL
5. Verify reindexing to triplestore works blocked URL (tested by looking in fuseki after each step: adding a resource, adding a dc:title, removing dc:title, deleting resource. Did not test the camel separate reindexing feature.)

4.7.0 - 4.7.2 Upgrade Testing

Tests to verify if 4.7.3 resolves errors seen with upgrading from 4.7.0 to 4.7.2

1. 4.7.2
    a. Start 4.7.0 with a new data directory
    b. Create a resource with SKOS namespace
        i. `curl -X POST -d "<> a <http://www.w3.org/2004/02/skos/core#Concept>; <http://www.w3.org/2004/02/skos/core#prefLabel> 'foo' ." -H "Content-type: text/turtle" -D - http://localhost:8080/rest/`
    c. Stop 4.7.0
    d. Start 4.7.2 with the same data directory – *should start successfully*

e. Stop and start 4.7.2 with the same data directory – *should display error on startup*

2. 4.7.3
   a. Repeat 1. with a clean data directory, but deploying 4.7.3 instead of 4.7.2 and verifying that the error does not occur

Tested by	Success?	Notes
Andrew Woods	✅	

[1] Testing scripts

[2] Fedora 4 Release Test Suite