

# Release Testing - 4.7.1

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## Issues found during testing

- RC-1
    - 
    - 
    - 
    - 
    - 
    - 
    -
  - RC-2
    -
- Unable to locate Jira server for this macro. It may be due to Application Link configuration.
- not merged into master
  - not merged into master
  - will not resolve in 4.7.1

## External Projects

### Hydra

Project	Tested by	Success? RC-1	Success? RC-2	Notes
ActiveFedora	<a href="#">Esmé Cowles</a>	✗	✓	I see two test failures when running the ActiveFedora tests with 4.7.1-RC-1 ( <a href="#">error log</a> ). The root cause seems to be that a HEAD request with an invalid namespace returns 400 Bad Request with 4.7.1-RC-1, instead of 404 Not Found (as it does in 4.7.0).
CurationConcerns	<a href="#">Esmé Cowles</a>	✓	✓	
Plum	<a href="#">Esmé Cowles</a>	✓	✓	
Sufia	<a href="#">Esmé Cowles</a>	✓	✓	

### Islandora

Project	Tested by	Success? RC-1	Success? RC-2	Notes
CLAW	<a href="#">Nick Ruest</a>	✓	✓	

## Testing Plan

```
git clone https://github.com/fcrepo4/fcrepo4
cd fcrepo4
git checkout 4.7.1-RC
```

## Sanity Builds

Project	Command	Platform	Tested by	Success? RC-1	Success? RC-2	Notes
fcrepo4	mvn clean install	linux	Andrew Woods	✓	✓	Ubuntu
			Yinlin Chen		✓	CentOS 7
fcrepo4	mvn clean install	mac	Bethany Seeger	✓	✓	OS X Yosemite 10.10.3
fcrepo4	mvn clean install	windows	Aaron Birkland	✓	✓	Test failure fix is in <a href="#">FCREPO-2370</a>
fcrepo-module-auth-rbac1	mvn clean install	linux	Andrew Woods	✓	✓	
fcrepo-module-auth-rbac1	mvn clean install	mac	Bethany Seeger	✓	✓	OS X Yosemite 10.10.3
fcrepo-module-auth-rbac1	mvn clean install	windows	Aaron Birkland	✓	✓	Windows 10
fcrepo-module-auth-xacml	mvn clean install	linux	Andrew Woods	✓	✓	
fcrepo-module-auth-xacml	mvn clean install	mac	Bethany Seeger	✓	✓	OS X Yosemite 10.10.3
fcrepo-module-auth-xacml	mvn clean install	windows	Aaron Birkland	✓	✓	Windows 10
fcrepo-module-auth-webac	mvn clean install	linux	Andrew Woods	✓	✓	
fcrepo-module-auth-webac	mvn clean install	mac	Bethany Seeger	✓	✓	OS X Yosemite 10.10.3
fcrepo-module-auth-webac	mvn clean install	windows	Aaron Birkland	✓	✓	Windows 10
fcrepo-mint	mvn clean install	linux	Andrew Woods	✓	✓	
fcrepo-mint	mvn clean install	mac	Bethany Seeger	✓	✓	OS X Yosemite 10.10.3
fcrepo-mint	mvn clean install	windows	Aaron Birkland	✓	✓	Windows 10
fcrepo-audit	mvn clean install	linux	Andrew Woods	✓	✓	
fcrepo-audit	mvn clean install	mac	Bethany Seeger	✓	✓	OS X Yosemite 10.10.3
fcrepo-audit	mvn clean install	windows	Aaron Birkland	✓	✓	Windows 10
fcrepo-webapp-plus	mvn clean install	linux	Andrew Woods	✓	✓	
fcrepo-webapp-plus	mvn clean install	mac	Bethany Seeger	✓	✓	OS X Yosemite 10.10.3
fcrepo-webapp-plus	mvn clean install	windows	Aaron Birkland	✓	✓	Windows 10
fcrepo-webapp-plus	mvn clean install -Prbac1	linux	Ben Cail	✓	-	
			Andrew Woods		✓	
fcrepo-webapp-plus	mvn clean install -Prbac1	mac	Bethany Seeger	✓	✓	OS X Yosemite 10.10.3
fcrepo-webapp-plus	mvn clean install -Prbac1	windows	Aaron Birkland	✓	✓	Windows 10
fcrepo-webapp-plus	mvn clean install -Pxacml	linux	Ben Cail	✓	-	
			Andrew Woods		✓	
fcrepo-webapp-plus	mvn clean install -Pxacml	mac	Bethany Seeger	✓	✓	OS X Yosemite 10.10.3
fcrepo-webapp-plus	mvn clean install -Pxacml	windows	Aaron Birkland	✓	✓	Windows 10

## One-Click Run

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

Command	Platform	Tested by	Success? RC-1	Success? RC-2	Notes
java -jar fcrepo-webapp-<version>-SNAPSHOT-jetty-console.jar	Linux	Andrew Woods	✓	✓	
		Yinlin Chen		✓	
java -jar fcrepo-webapp-<version>-SNAPSHOT-jetty-console.jar	Mac	Bethany Seeger	✓	✓	
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? RC-1	Success? RC-2	Notes
MySQL	5.6.34 MySQL Community Server (GPL) (rh-mysql56) on RHEL 7.3	<a href="#">Jim Coble</a>		✓	Performed Manual Tests listed above. Also ran script that created 200,000 objects and then versioned them.
PostgreSQL	Postgres9.4 on Docker	<a href="#">Kevin Ford</a>		✓	

## 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
<a href="#">Kevin Ford</a>	Linux	Tomcat (7.0.72)	Postgres (9.4)	4.6.1	4.7.1-RC1	461,568	1,671	48G	✓	
<a href="#">Kevin Ford</a>	Mac	Jetty (Standalone)		4.7.1-RC1	4.7.1-RC1	25,600	0		✓	
<a href="#">Kevin Ford</a>	Mac	Jetty (Standalone)		4.7.1-RC1	4.7.1-RC1	12,800	12,800	13GB	✓	
<a href="#">Kevin Ford</a>	Mac	Jetty (Standalone)		4.7.1-RC1	4.7.1-RC2	12,800	12,800	13GB	✓	
<a href="#">Kevin Ford</a>	Docker	Tomcat7	Postgres 9.4	4.7.1-RC2	4.7.1-RC2	25,600	0	3.8M	✓	
<a href="#">Kevin Ford</a>	Docker	Tomcat7	Postgres 9.4	4.7.1-RC2	4.7.1-RC2	2560	2560	2.7G	✓	
<a href="#">Kevin Ford</a>	Linux	Tomcat (7.0.72)	Postgres 9.4	4.6.1	4.7.1-RC2	461,568	1,671	48G	✓	

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.

## Multi-thread Tests

These tests are designed to ensure the integrity of the repository when loading content in a multi-threaded fashion. Testing for repository corruption should entail confirming the successful load of resources, the successful fetching of resources, and the successful deletion of resources. Prior to 4.6.1, these tests would result in repository corruption.

## 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. See the [README](#) for more info.

Tested by	Platform	Container (Tomcat / Jetty)	Database Backend	Number of Threads	Number of RDF Resources	Number of Binaries	Success? RC-1	Success? RC-2	Notes
<a href="#">Kevin Ford</a>	Mac	Jetty (Standalone)		2	12,800	12,799	✓		Tried to load 12,800 binary resources, but 1 binary resource resulted in a 4xx error during load. This was a failed ingest so in the end the successful 201s matched the 200s during verification.
<a href="#">Kevin Ford</a>	Mac	Jetty (Standalone)		8	12,800	12,706	✓		Tried to load 12,800 binary resources, but 94 binary resources resulted in 500 errors during load. These were failed ingests so in the end the successful 201s matched the 200s during verification.
<a href="#">Kevin Ford</a>	Mac	Jetty (Standalone)		8	25,600	0	✓		
<a href="#">Kevin Ford</a>	Mac	Jetty (Standalone)		8	25,600	0		✓	
<a href="#">Kevin Ford</a>	Docker	Tomcat7	Postgres9.4	8	25,600	0		✓	
<a href="#">Kevin Ford</a>	Docker	Tomcat7	Postgres9.4	4	2560	2560		✓	

NB: "Success" is measured by receiving all 200s when performing a GET on each loaded resource, and all 204s when finally deleting the content.

## Vagrant Tests

```
vagrant destroy
vagrant up
```

Test steps	Tested by	Success? RC-1	Success? RC-2	Notes
FEDORA_AUTH=true FEDORA_AUDIT=true	<a href="#">Bethany Seeger</a> <a href="#">Andrew Woods</a> <a href="#">Yinlin Chen</a>	✓ ✓ -	- ✓ ✓	
FEDORA_AUTH=false FEDORA_AUDIT=true	<a href="#">Bethany Seeger</a> <a href="#">Yinlin Chen</a>	✓ -	- ✓	
FEDORA_AUTH=true FEDORA_AUDIT=false	<a href="#">Bethany Seeger</a> <a href="#">Yinlin Chen</a>	✓ -	- ✓	
FEDORA_AUTH=false FEDORA_AUDIT=false	<a href="#">Bethany Seeger</a> <a href="#">Yinlin Chen</a> <a href="#">Andrew Woods</a>	✓ - -	- ✓ ✓	

## Manual Tests

Same as above, plus:

1. Verify audit events are in triplestore
2. Verify resources are in triplestore
3. Verify resources are in Solr
4. Verify authorization works for the two auth-enabled configurations
5. Verify reindexing to triplestore works

[1] [Testing scripts](#)

[2] [Fedora 4 Release Test Suite](#)