

2017-09-07 - Fedora Tech Meeting

Time/Place

This meeting is a hybrid teleconference and IRC chat. Anyone is welcome to join...here's the info:

- Time: 11:00am Eastern Daylight Time US (UTC-4)
- Dial-in Number: (712) 775-7035
 - Participant Code: 479307#
 - International numbers: [Conference Call Information](#)
 - Web Access: <https://www.freeconferencecallhd.com/wp-content/themes/responsive/flashphone/flash-phone.php>
- IRC:
 - [Join the #fcrepo chat room via Freenode Web IRC](#) (enter a unique nick)
 - Or point your IRC client to #fcrepo on irc.freenode.net

Attendees

- [Danny Bernstein](#)
- [Aaron Birkland](#) (will be late)
- [Jared Whiklo](#)
- [Bethany Seeger](#) blocked URL
- [Unknown User](#) (acoburn)
- [Christopher Johnson](#)
- [Peter Eichman](#)
- [Carrick Rogers](#)

Agenda

1. Upcoming "[Alignment to Spec](#)" sprint
2. Progress on: [Possibilities](#)
3. Need volunteer for:
 - a. Solution is
 - b. <https://github.com/fcrepo4/fcrepo4/pull/1225>
4. [LTS policy proposal](#)
5. Wrapping up fcrepo-import-export-verify: <https://github.com/fcrepo4-labs/fcrepo-import-export-verify/pull/48>
6. [Report on 4.7.4 Benchmarks and Testing](#) (Carrick Rogers)
7. Status of "in-flight" tickets

Ticket Summaries

1. Please squash a bug!

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution
Unable to locate Jira server for this macro. It may be due to Application Link configuration.										

2. Tickets resolved this week:

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution
Unable to locate Jira server for this macro. It may be due to Application Link configuration.										

3. Tickets created this week:

Unable to locate Jira server for this macro. It may be due to Application Link configuration.

4. Avalon R6 4.7.4 Testing



Minutes

Action Items

- Sprint starting next week -
 - Danny Bernstein will not be available for the first day of sprint next week
 - Danny Lamb switching to second sprint
 - Aaron Coburn asking about the consideration of current features that are necessarily API spec features? (like webac, versioning subtrees, pairtree)
 - responses from [Aaron Birkland](#):
 - There may be some changes that might break the existing behaviors of fedora that are not part of the API spec.
 - We do not have a policy that we'll be maintaining some of these hard to maintain behaviors
 - the consensus from last weeks call was that backwards compat is not maintainable
 - no concrete decisions about taking things out yet.
 - based on discussion at start of sprint, things may end up getting taken out.
 - some of the old behavior that's in the way or complicates things may be subject to removal
 - bug regarding [pairtree](#) - [Unknown User \(acoburn\)](#) encourages discussion around this at start of sprint (taking out pairtree behavior)
 - versioning - most concerning regarding implementing momento that's consistent with the spec - it may be the case that we have to change the way that versioning is reflected in modeshape.
 - There was discussion between [Aaron Birkland](#) and [Andrew Woods](#) about sprinters working on issues other than spec alignment. There is probably room to have folks working on other forms of fixes/improvements to fedora that aren't part of the API spec.
- Update on memory leak issue from [Peter Eichman](#)
 - modeshape bug - fixed in modeshape 5.4, he has been unable to reliably get the system to fail and hang in test case.
 - With avoiding transaction rollbacks they were able to run the remainder of the load and it completed successfully.
 - tested with batch loader? Not gotten back to that yet
 - ran into another issue which may or may not be related - there were some binaries where the metadata was there, but the binaries themselves were not in the system and may never have been.
 - binaries were probably large enough to not hit the 4k minimum size (repository.json config)
 - related to modeshape upgrade? no, this was happening in the modeshape 5.3 system causing the failed transactions he was seeing.
 - these files may never have actually gotten written to the file system (based on looking at backups)
 - next steps: might write files directly to the file system to replace them, though knows that's a bit dangerous
 - one file was a xml file - one jp2 (and a few other types) - maybe one of the directories where these files were sitting got deleted? It's two pages in a row that are missing.
- JIRA issue <https://jira.duraspace.org/browse/FCREPO-2544>
 - Do we use the sprint to remove this type of behavior?
 - If we are going to break things, lets do it now
 - Is this a reference implementation or just another impl of the spec? If reference then any out-of-spec features should be carefully considered. Good question for the fedora leaders group.
 - Why do we have pairtrees?
 - technique to control tree structure. JCR ism or specifically Modeshape-ism? 1000 direct children causes performance to slow quite a bit.

- It's a mode shape issue – it has to do with Fedora's use of same-name siblings, which MODE specifically warns against using
 - it's how nodes are constructed and how we place properties on these nodes – you should be able to have a node with lots and lots of children, but the same name siblings causes issues.
 - ldp-contains uses this method getChildren() - causes this to be recursive and collects lots of nodes as a result and is slow. This is how fedora is using modeshape.
 - Any tickets around this? Yes, there have been a few.
 - Part of the root of the whole fedora code base - it's a huge issue. It's a limit that exists in fedora. Pairtrees is how fedora is trying to go around that limitation, but it's half-baked.
 - It's complicated
 - The fix - exposing pairtrees even more as a logic concept that clients could use to control traversing repo. Would further ingrain them into certain client/server workflows.
 - [Unknown User \(acoburn\)](#) has code that hides the pairtrees - might make sense to have something like that become part of main codebase?
 - [Jared Whiklo](#): Do folks feel like we should hold off on this PR going into master and look at this some more?
 - [Aaron Birkland](#) - what are the considerations for import/export (migrations in general) if we remove pair trees?
 - consideration of how the currently exposed web resources are resolved
 - [Danny Bernstein](#) - could imagine a way get beyond this issue via the import mechanism
 - with a little perl code run over an import/export dataset, that should be something one could easily deal with
 - [Unknown User \(acoburn\)](#) This PR code is masking the problem - real problem is time to first byte – what is actually causing the buffer? That's what should be fixed.
 - Solving this problem is more impactful to the client
 - if this is time to first byte can we send chunks of data, so they get something quicker?
 - in principal the JAXRS framework responses should be streamed - we shouldn't have the collect everything and then send pattern, but it's what fedora currently does
- LTS - not going to discuss it now – read through and add comments to the page if you have any and we can dicuss it more next week
 - [Unknown User \(acoburn\)](#) - the JVM support policy will need to change in order to support an LTS policy
 - there was some talk about this at an earier tech meeting;
 - java 9 will be released in about 2-3 weeks - java 8 will reach EOL in Sept. 2018 - if the policy doesn't support EOL JVM's - we would need to change the policy if we want to still support that.
 - "the java version that was in currently in use when LTS version went into effect is the version that is targeted"
- Import / Export PR for the verify tool - can someone from the sprint take a look at this?
- From irc: [Aaron Birkland](#) - by the way, would somebody be willing to review/merge <https://jira.duraspace.org/browse/FCREPO-2578>. Our IT department flagged Fedora re: vulnerability with jquery 1.9.x
 - [Jared Whiklo](#) will take a look at jquery at some point
 - there was some discussion of getting rid of jquery on irc - someone should create a JIRA ticket for this work. (separate from issue above)
- Report on 4.7.4 Benchmarks and Testing ([Carrick Rogers](#))
 - avalon with active fedora
 - setting up test to simulate end user experience
 - anyone looking through the Avalon R6 4.7.4 Testing document (document is above) that notices some test missing - email him so it can potentially be added