

# 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](http://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: [Possibility of a new spec](#)
3. Need volunteer for:

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

  - a. Solution is
  - b. <https://github.com/fcrepo4/fcrepo4/pull/1223>
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:

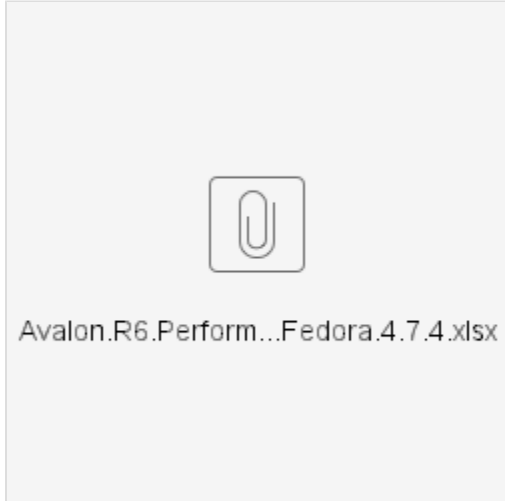
| key                                                                                           | summary | type | created | updated | due | assignee | reporter | priority | status | resolution |
|-----------------------------------------------------------------------------------------------|---------|------|---------|---------|-----|----------|----------|------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

3. Tickets created this week:

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.

#### 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