2018-08-23 DSpace 7 Working Group Meeting

Date
23 Aug 2018 from 14:00-15:00 UTC

Location: DSpace Meeting Room

Agenda

- General development / planning updates (Tim)
  - Sprint Planning: DSpace 7 Community Sprints
  - DSpace 7 Entities Working Group
- Quick updates on Angular UI tickets and/or PRs (Art)
- Quick updates on REST API tickets and/or PRs (Andrea)
- Discussion of Exception Handling in Spring (establish our best practices)
- Scheduling next DSpace 7 Community Sprints
- [Last 10 mins] Development planning/updates in Development Planning Spreadsheet.

Attendees

- Art Lowel (Atmire)
- Andrea Bollini (4Science)
- Tim Donohue
- Pablo Prieto
- Mark H. Wood
- Bill Tantzen
- Tom Desair
- Pascal-Nicolas Becker
- Terrence W Brady

Notes

- General Updates (Tim)
  - DSpace 7 Entities Working Group announcement today.
- Angular Team Updates
  - Merged PRs:
    - https://github.com/DSpace/dspace-angular/pull/271
    - https://github.com/DSpace/dspace-angular/pull/276
  - In Progress tickets / PRs:
    - Tickets / PRs requiring review:
      - Kristoff's Browse By Title / Metadata Pull Request: https://github.com/DSpace/dspace-angular/pull/283
        - Needs tests/reviews. Tim still looking to review
      - Lotte's final Search PR now ready: https://github.com/DSpace/dspace-angular/pull/280
        - Tim will rereview
      - Giuseppe's PR: https://github.com/DSpace/dspace-angular/pull/279
        - Art has reviewed and has added comments. Mostly looks OK, but noticed issues with automatic metadata extraction. See comments on PR
      - Giuseppe returns next week
      - Art looking for feedback on the new Janitor PR: https://github.com/DSpace/dspace-angular/pull/287
      - Terry has looked at it and asked some questions.
        - Seems reasonable overall, but no one actively using Janitor yet. Still seems like an opportunity.
    - Find by UUID endpoint discussions have now been resolved. Will unblock Lotte's PR
      - Discussion on Slack. All have approved the approach in this PR https://github.com/DSpace/DSpace/pull/2179
      - Tim will merge PR and redeploy to Demo Site (UPDATE: Done, see also new docs on this process, Updating DSpace 7 Demo Sites)
- REST Team Updates
  - Merged PRs:
  - In Progress tickets / PRs:
  - Tickets / PRs requiring review:
    - https://github.com/DSpace/DSpace/pull/1976
        - Ready to merge. Merge after #2179 (Update: DONE)
    - https://github.com/DSpace/DSpace/pull/2129
        - Almost ready to go. Needs integration tests. Mark is working on them
    - https://github.com/DSpace/DSpace/pull/2173 (*Starts With* endpoint)
      - The actual implementation of the endpoint looks fine.
      - But, the behavior is actually surprising – as “Starts with” isn’t really jumping to a specific page/offset in the entire list. Instead, it “filters” the list of results to only ones that “Start With” a specific letter(s) and any letter after that. This behavior seems different from 6.x, but unsure as to why
      - Pablo Prieto will investigate how this works in 6.x and report back.
    - https://github.com/DSpace/DSpace/pull/2175 (new metadata as resource endpoint / idea)
      - Idea/concept sounds good overall
Andrea expressed some possible concerns about using RestRepository for the implementation – usually that’s used for new endpoints, and this is more like a subpath / sub-endpoint.

Andrea will look at it further though, and report back his concerns & suggestions in the PR itself

- [https://github.com/DSpace/DSpace/pull/2111](https://github.com/DSpace/DSpace/pull/2111) (Hibernate deprecation updates)
- Almost ready to merge. Fixed minor issues noted by Tim
- Tim to rereview (DONE)
- Terry also to review (DONE)

Art asks about the REST API implementation for Submission/Workflow. Is it ready?

- It has two PRs, but both need more work. No integration tests yet, and have fallen out of date with master (merge conflicts)
- [https://github.com/DSpace/DSpace/pull/2102](https://github.com/DSpace/DSpace/pull/2102)
- [https://github.com/DSpace/DSpace/pull/2103](https://github.com/DSpace/DSpace/pull/2103)
- Andrea Bollini (4Science) plans to work on this (as Andrea P is on holiday). Will also look into splitting them up more, as the PRs are massive and hard to review.

Discussion

- Exception Handling in Spring / REST API
  - We wrap most of our Exceptions in REST API in RuntimeException, e.g. [https://github.com/DSpace/DSpace/blob/master/dspace-spring-rest/src/main/java/org/dspace/app/rest/repository/ItemRestRepository.java#L71](https://github.com/DSpace/DSpace/blob/master/dspace-spring-rest/src/main/java/org/dspace/app/rest/repository/ItemRestRepository.java#L71)
  - Andrea notes the reason for this is that we are extending Spring Data Rest and cannot change the method signatures. For example, in this class: [https://github.com/DSpace/DSpace/blob/master/dspace-spring-rest/src/main/java/org/dspace/app/rest/repository/DSpaceRestRepository.java#L42](https://github.com/DSpace/DSpace/blob/master/dspace-spring-rest/src/main/java/org/dspace/app/rest/repository/DSpaceRestRepository.java#L42)
  - We do have a single “handler” of Exceptions in our REST API at: [https://github.com/DSpace/DSpace/blob/master/dspace-spring-rest/src/main/java/org/dspace/app/rest/exception/DSpaceApiExceptionControllerAdvice.java](https://github.com/DSpace/DSpace/blob/master/dspace-spring-rest/src/main/java/org/dspace/app/rest/exception/DSpaceApiExceptionControllerAdvice.java)
  - Our wrapping of everything in RuntimeException was mostly just for speed of development early on. We should fix this.
  - The best practice from Spring Data REST though is to use other custom exceptions (which all extend RuntimeException), e.g. [https://docs.spring.io/spring-framework/docs/current/javadoc-api/org/springframework/dao/DataAccessException.html](https://docs.spring.io/spring-framework/docs/current/javadoc-api/org/springframework/dao/DataAccessException.html)
    - Spring has more of these Runtime based exceptions at [https://docs.spring.io/spring-framework/docs/current/javadoc-api/org/springframework/core/NestedRuntimeException.html](https://docs.spring.io/spring-framework/docs/current/javadoc-api/org/springframework/core/NestedRuntimeException.html)
  - **Our Best Practice**: We should refrain from using “RuntimeException” directly, and instead look to use Spring Data Rest Exceptions (like “DataAccessException”) which extend RuntimeException. If we find we need a new exception type, we should create it.
  - Andrea Bollini (4Science) will create a ticket to describe this. **DONE:**

- [DS-3992](https://github.com/DSpace/DSpace/issues/3992) - Improve the exception handling in DSpace REST 7 **CODE REVIEW NEEDED**

Next DSpace 7 Community Sprints

- **Tentative for first two weeks of October. Week of October 1 and 8.**
  - Development Planning Spreadsheet
    - Skipped this for today, as we ran out of time.
    - Next week, continue from Submission section
  - **The Next Meeting will be on Thursday, Aug 30 at 14:00UTC (10:00am EDT) in DSpace Meeting Room**
  - Travel / Holidays
    - Giuseppe Digilio (4Science) will be out until week of Aug 27