2016-09-26 Performance - Scale meeting

Time/Place

- Time: 11:00AM Eastern Time US (UTC-5)
- 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

Attendees

- Nick Ruest
- Andrew Woods
- Yinlin Chen
- Daniel Lamb
- Colin Gross
- Danny Bernstein ⭐
- Bill Branan

Agenda

1. Status of current testing
2. Create graphs and summaries of completed tests

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   https://wiki.duraspace.org/display/FF/2016-08-15+Performance+-+Scale+meeting#id-2016-08-15Performance-
   Scalemeeting-CurrentSummaries
   ```

3. Next steps

   a. Finalize remaining tests?
   b. Investigate other features: versioning? batch-ops?
   c. Make call to community?

Minutes

- Status of Current testing
  - Nick will update tests results. 2 month test appears to have failed.   Will run tests again on new equipment.
  - He will run RDF serialization improvements from Aaron Coburn on his new hardware.
  - Yinlin -   100K Items - 230MB files - 20 Mbs per client. Takes about 1 week.
- General agreement on the value of aggregating and summarizing the results of the tests that we have run so far.
- There is general agreement that it would be good to summarize relative improvements between runs of a given test (graphs in addition to any other details/observations)
  - Factors would be good to include in the summary:
    - Hardware specifics
    - Total execution time
    - Average response time over the course of the execution
    - Fedora version
    - Database type/specs
    - Client count

- Colin suggested it might be helpful to have a basic test to establish baseline conditions in the environment to account for variations in network performance characteristics, disk performance, etc.
  - Example script for gathering system info: https://github.com/fcrepo4-archive/ff-jmeter-testResults/blob/master/gatherSystemInfo.sh
- The team sees promise in expending effort to develop an automated system for performance tests that would
  - enable us to perform tests against on a consistent set of hardware hardware and network resources
  - automatically run the test suite against new tags / branches / forked repos?
  - focus on time-limited tests with known inputs and expected execution time framef.
- Aaron Coburn would like a test for understanding how memory is affected by specific kinds of serializations (Turtle and N-Triples) of RDF Sources and differing degrees of concurrency.

Actions

- Colin will look into putting together a script for baselining hardware and network characteristics to be factored into each test run.

- Nick: Add the log files to be added to the performance test results on the Test Plan page (https://wiki.duraspace.org/display/FF/Performance+and+Scalability+Test+Plans)
- Aaron will create a summary of what he would like to see out of a test.
- Danny: Summarize the existing test data.