# 2016-09-26 Performance - Scale meeting

## Time/Place

- Time: 11:00AM Eastern Time US (UTC-5)
- Dial-in Number: (712) 775-7035
  - o 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

 $\label{lem:https://wiki.duraspace.org/display/FF/2016-08-15+Performance+-+Scale+meeting \# id-2016-08-15 Performance-Scalemeeting-Current Summaries$ 

- 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)
  - o 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.
  - $^{\circ} \ \ \text{Example script for gathering system info: https://github.com/fcrepo4-archive/ff-jmeter-testResults/blob/master/gatherSystemInfo.sh}$
- The team sees promise in expending effort to develop an automated system for performance tests that would
  - o enable us to perform tests against on a consistent set of hardware hardware and network resources
  - o automatically run the test suite against new tags / branches / forked repos?
  - o 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.