2017-01-16 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
- Colin Gross
- Kevin Ford
- Kieran Etienne
- Danny Bernstein

Agenda

1. Topics on fedora performance/scaling
    a. https://docs.google.com/document/d/1AVYmsgbI-NuCtpmvfHYMqe2izR7leGEIcDx0Ya7q7YU/edit
2. 2016 work summary
    a. Review Performance and Scalability Test Plans
    b. Graphing of JMeter results, script
    c. I/O benchmarking of test environment, script
    d. Collection of basic test environment characteristics, script
3. Hydra - Fedora performance (?)
4. Islandora - Fedora performance (?)
5. Next meeting time 02/13/2017 11am.

Minutes

Topics on Fedora Performance/Scaling

- Nick - none
- Colin - mocking large-scale tests, alt-methods of doing that
    - desire to test multi-TB loads
- Kieran - interested in testing processes and procedures
    - are both Tomcat and Jetty tested? - mostly Tomcat
- Kevin - interested in validating release candidates
    - now more generally interested in loading issues
    - multi-threading topics
- Danny - interested in scaling as it relates to HyBox
    - "many members" issue
    - multi-tenant support
        - Colin has done this in Hydra... but has not been able to backup single hierarchies
        - using different base-containers
- Yinlin - interested in large files

2016 work summary

- Are the defined tests adequate for the interests above?
    - Challenge in have a test environment that has enough disk space
    - Maybe use OpenSSH:rand to mock many files
    - Is running this on AWS infrastructure a possibility?
        - Who is going to pay for a 20-TB EBS volume?
        - Performant disk i/o can be expensive in AWS
        - AWS tests should include data around size/time/cost of previous tests
- We need to summarize the results of 2016 testing
    - Colin available to help in the visualization of the previous test results
    - Yinlin has created graphs of his tests
    - Colin has modified scripts based on team feedback
- Yinlin - need to write report for each test
- Interest in maintaining results in a GitHub
    - ACTION: create results repo in fcrepo4-labs
    - ACTION: write a report from last year's results
        - Current reports do not provide immediate clarity of the state of Fedora

    - Volunteers:
        - Colin to work on scripts - fcrepo4-labs
        - Nick/Yinlin to work on drafting - will use GitHub
        - Colin to generate R-Script outputs that can be starting point for summary doc
        - Data result locations: post to S3

Actions

- Colin Gross to transfer fcrepo_perf_analysis to fcrepo4-labs
- Andrew Woods to post test outputs to S3
- Colin Gross to push outputs from R-scripts to GitHub
- Nick Ruest and Yinlin Chen to take above R-script output as starting point for performance test summary report