2017-02-20 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

- Andrew Woods
- Yinlin Chen
- Colin Gross
- Danny Bernstein
- Trey Pendragon
- Longshou Situ

Agenda

- 1. Review last meeting 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
 - https://github.com/fcrepo4-labs/fcrepo_perf_analysis/tree/feature/dist-upload/dist
 - Nick Ruest and Yinlin Chen to take above R-script output as starting point for performance test summary report
- 2. Review current GitHub issues: https://github.com/fcrepo4-labs/fcrepo_perf_analysis/issues
- 3. Infrastructure options Research Grant
 - a. AWS Cloud Credits for Research https://aws.amazon.com/research-credits/ Rewards varies from 1 to 2 years.
- 4. Reproduce new performance report?
 - a. If anyone what to know current Fedora 4.7 performance, we can refer him to see the performance report page.
 - b. Performance and Scalability Test Plans
 - c. Baseline performance on these six scenarios in a:
 - i. Select an instance type in AWS
 - ii. other options?
 - d. An Ansible tool to install Fedora 4 on the local machine or AWS.
 - i. https://github.com/VTUL/fcrepo4-ansible
- 5. Define tests of known pain points, e.g.
 - a Performance of "many members"
 - b. Ugliness of pairtree resources
 - c. migration of PIDs from fcrepo3 to fcrepo4
 - d. Migration from fcrepo3 to fcrepo4 in general and in a reasonable amount of time for 1M+ objects
 - e. Loss of system dates, the migration of creation/modification times from fcrepo3 to fcrepo4
 - f. Intra-repository referential integrity can be a pain point, but it has benefits too

Minutes

Previous actions

- 1. Updated scripts to use perf.log instead of the csv
 - GitHub feature branch contains the generated reports
 - · Hydra: would like a concise report
 - version of fedora
 - o configuration of fedora
 - how tests relate to real-world questions
 - o what these tests mean to the fedora development team

GitHub Issues

1. Colin has it covered

Infrastructure options

- 1. Need estimates of storage and instances
 - · sometimes need 20-TB of data, for example
 - i/o latency
 - writes to /dev/null

- o reads are based on hash of path of resource
 - + Self and Yinlin to put in proposal https://aws.amazon.com/research-credits/

New performance reports

- 1. Running against 4.7.1
- Need documented process for end-to-end testing and reporting + create new wiki page : danny

Actions

- Colin Gross will finish up current GitHub issues: https://github.com/fcrepo4-labs/fcrepo_perf_analysis/issues
 Andrew Woods and Yinlin Chen will work on AWS grant proposal, deadline 03/31/17, will have a draft for review on next meeting: https://aws. amazon.com/research-credits/

 • Danny Bernstein and Longshou Situ will have a wiki page about a documented process for end-to-end testing and reporting