

2015-11-30 Performance - Scale Meeting

Time/Place

- Time: 3:00pm Eastern Standard 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](#) (DuraSpace)
- [Brad Spry](#) (UNC Charlotte)
- [Bethany Seeger](#) (Amherst College)
- [Nick Ruest](#) ★
- [James R. Griffin III](#)
- [Terry Reese](#)
- [Andy Wagner](#)

Agenda

1. Review [draft test plans](#)
2. Define/Document clear goals and timelines
 - a. What outputs will this group have beyond answering the following questions:
 - i. How does performance change as the size of the file increases?
 - ii. How does performance change as the number of files increases?
 - iii. How does performance change as the number of objects increases?
 - iv. How does performance change as the number of mixed resources increases?
Note: In all of these cases, "performance" will be measured by requesting CRUD operations after every x-number of ingest events.
 - b. What is our timeline?
 - i. When will test plans be finalized?
 - ii. When will test plans be executed?
 - iii. When will summary be posted?
 - iv. Other?
3. Agree on next meeting day/time

Minutes

- Draft test plans
 - Determine the number of resources
 - Determine if any more REST methods should be added, ex. OPTIONS
 - Determine maximum inodes (small files test)
 - [Terry Reese](#) will get back to the group about capturing: Disk usage, and swapping
 - Determined single thread base line, then move to multi-threaded
 - Determined that there will be a base concurrent client, and then scale until it breaks for: Size of files, Number of files, Number of containers, and Number of mixed resources
 - Determined system resources/characteristics
 - Memory usage
 - inode count
 - Disk usage
 - Swapping (monitor tmp space usage)
 - Number CPU cores, and related how garbage collection is behaving
 - JVM configuration
 - Make sure we have a garbage collection log
 - CPU usage
 - Network performance - watch connection pools (stretch goal)
 - **How do we know when the test is complete?**
 - Non-stop full garbage collection – GAME OVER
 - Requests are taking too long – exceeds 1 minute – GAME OVER
 - Number of containers
 - 2 tests: vanilla resource, and resource with RDF
 - Number of mixed resources
 - Determine what the right mix is
 - [Andrew Woods](#) suggests using [JMeter](#)
- What can we accomplish before end of the year?
 - Finalize tests plans
 - Create an initial JMeter configuration for creating containers
- Goal: Accomplish finalizing test plans, initial JMeter configuration (both asynchronously), and meet again at the same time December 21, 2015.