DSpace 7 Performance Analysis

Overview

This page details security-related checks/analysis which is planned to be performed on DSpace 7 prior to the 7.0 final release.

Past Performance Analysis

- In mid-to-late 2019, Chris Wilper (Atmire) ran a performance analysis of the REST API using these JMeter scripts. This effort helped identify REST API performance issues, which were resolved through the introduction of "projections", used to limit the data returned by the REST API in each request. See also DS-3533 and DSpace 7 Performance Testing.
    - A DSpaceObject Generator was also created to generate large amounts of fake data in a DSpace site.

Necessary Performance Analysis

Prior to DSpace 7.0, the DSpace 7 **User Interface** should be tested with (preferably real) data in the following scenarios:

- **Large site overall (>=100,000 Items)**. *What to test:* overall performance of browsing/searching site.
- **Large Community/Collection hierarchy.** *What to test:* browsing Communities/Collections, creating a new Community, Collection or Item.
- **One Collection with >=1,000 Items.** *What to test:* browsing/searching within that Collection.
- **One Item with >=100 Bitstreams.** *What to test:* test viewing/editing that Item, searching for that Item.
- **One Item with >=50 Authors.** *What to test:* test viewing/editing that individual Item, searching for that Item.

Ideally, one or more institutions will be found that can test an upgrade to DSpace 7 beta 4 or beta 5 (in a dev environment) and use their production-data to validate performance in one or more of the above scenarios.