

Integration of the Earth System Grid Federation (ESGF) with NERSC HPSS module

SDM, CRD, LBNL
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FY18Q1 Quarterly Report

This report covers the first quarter of FY-2018 (October-December 2017). During this period, LBNL staff, in accordance with the task plan mutually agreed upon with LLNL, performed the following activities:

- Project started. In the previous collaboration two years ago, the library package, called Berkeley Archival Storage Encapsulation (BASE) library, has been developed. In this collaboration work, the BASE library module will be integrated into the ESGF Gateway system for data browsing and retrieval functionalities for climate data files on NERSC HPSS based on the expectations from the ESGF. Figure 1 shows the use case scenario for typical data downloads from HPSS.
- Sasha Ames from LLNL visited LBNL for project discussion (10/26/2017), and follow-ups have been discussed over the emails for the prototype and the previous baseJumper effort.
- ESGF portal installation/deployment exercise on VM was done. Developmental VM for integration work was created. The integration effort has started.
- Junmin Gu at LBNL attended ESGF F2F meeting in Dec. 2017 over the teleconferencing.
- In the next quarter (FY18Q2), initial version of the integration will be developed and tested.

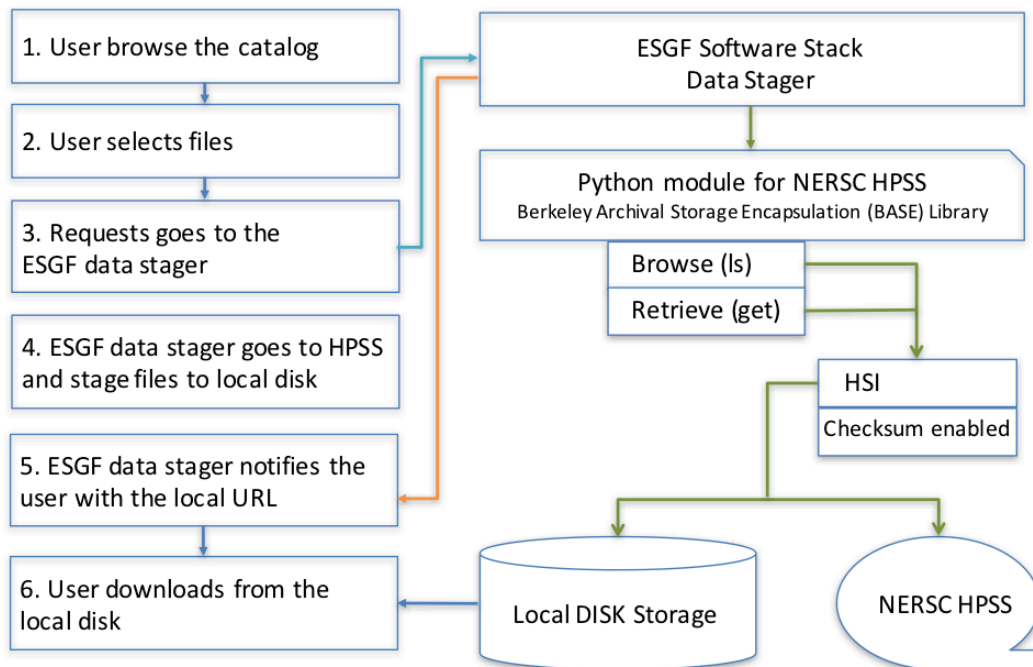


Figure 1: Use case scenario and BASE functionality in ESGF portal.