**HPC DME 1.6.0 Release Notes**

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| Release Name: HPCDME-1.6.0  Version 1.6.0  February 5, 2018  ================================================================                              Contents  ================================================================  1.0 HPC DME Introduction  2.0 Release History  3.0 New Features and Updates  4.0 Bug Reports and Support  5.0 Documentation  6.0 References  ================================================================                        1.0 HPC DME Introduction  ================================================================  The HPC DME, High Performance Computing Data Management Environment, is an adaptable and open ended data storage environment supporting storage and management of biomedical and informatics data, produced from various labs/systems. HPC DME provides capabilities for storing, managing, transferring and sharing data across different systems securely and efficiently.  Users can store data objects on HPC DME object archive, share and transfer their data such that they do not have to redistribute or maintain copies of the data on other systems. HPC DME stores and associates user defined metadata to any registered data at different levels of data life cycle, enabling the environment not only to help identify the data but also to enhance the search and download data files (from archive) capabilities.  ================================================================                        2.0 Release History  ================================================================  v1.0.0 - December 28, 2016  v1.1.0 - May 15, 2017  v1.2.0 - June 23, 2017  v1.3.0 - September 15, 2017  v1.4.0 - November 6, 2017  v1.5.0 - December 11, 2017  v1.6.0 - February 5, 2018  ================================================================                        3.0 New Features and Updates  ================================================================  Several API, Web UI, Client Utility improvements and bug fixes have been made in this release.  **Web UI Features:**   * **Reports:** Generate reports by Base path, collection path and with date range. * **Build and deployment**: Environment specific properties to build and deploy WebUI. * **Retry failed downloads:** Option to retry failed download files from task details * **Bulk Register Data files from Globus:** Register multiple data files and folders asynchronously from a Globus Endpoint. Include or exclude criteria can be given to filter the folders to select specific files.   **CLI Utility:**   * **Bulk registration**:   + In case of failed registration, generate a list of failed files and return appropriate error code   + Add an option to accept list of files to register   + Add an option to use signed S3 URL or default transfers   + Report the transfer speed in terms of bits/second   + Replace white space in the names of files and folder spaces, with '\_'   + Display and verify checksum for registrations with pre-signed URL. Make checksum verification as option * Utility to rename collection or data file logical path   **API:**   * **Data Store:** By default, HPC DME writes into S3 compatible storage device. Support to write into POSIX type file system storage is added. * **Authentication:**    + Non-LDAP authentication (iRODS) is supported. User accounts created with iRODS can be used to access HPC DME if LDAP is turned off   + Using authentication token across HPC DME servers is now allowed. A valid error message is displayed.   + Non-expired authentication token to support long running tasks * **Download:**   + Download through S3 pre-signed URL to improve performance   + Option to overwrite existing files on Asynchronous download * **Globus:**   + To address scalability and performance, HPC DME uses Globus groups with pool of application accounts. Each DOC is assigned with a Globus group. HPC DME manages the pooling of the accounts and assigning data transfer requests with in a group.   + For upload, download tasks, report the effective transfer speed that is generated by Globus. * **General:**   + Keystore update to import iRODS, Cleversafe, LDAP SSL Certs into cacerts through build process   + Update to bulk registration email notification to include source and destination information.   + Populate file sizes for dataObject populated using presigned S3 URL   **Issues:**   * HPCDATAMGM-892 - Auto create collection by default during bulk registration from Globus * HPCDATAMGM-902 - Globus TIMEOUT handling * HPCDATAMGM-913 - Optional Make Globus System Account optional. * HPCDATAMGM-908 - Remove extra slash (/) in the logical path for bulk registration or download.   ================================================================                     4.0 Bug Reports and Support  ================================================================  The preferred approach is to first search the HPC Agile Board for your issue or feature enhancement if you have the access privilege (<https://tracker.nci.nih.gov/secure/RapidBoard.jspa?rapidView=244>).  When there is no entry in the JIRA Tracker, feel free to post your question to the Tracker.  Users are welcome to email their problem or feature request through email to: [HPC\_DME\_Admin@nih.gov](mailto:HPC_DME_Admin@nih.gov).  ================================================================                          5.0 Documentation  ================================================================  The HPC DME Server API, User Guide, Admin Guide documentation, and related documentation can be found on the project's GitHub:  <https://github.com/CBIIT/HPC_DME_APIs/tree/master/doc/guides>  Training related documentation and presentation may be found on the following GitHub directory:  <https://github.com/CBIIT/HPC_DME_APIs/tree/master/doc/training>  ================================================================                          6.0 References  ================================================================  The following URLs access web pages relevant to HPC DME.  HPC DME GitHub Home Page  <https://github.com/CBIIT/HPC_DME_APIs>  NCI HPC DME Agile JIRA Board Home Page:  <https://tracker.nci.nih.gov/secure/RapidBoard.jspa?rapidView=244>  iRODS Open Source Data Management Software home page:  <https://irods.org/>  IBM CleverSafe Object Storage:  <https://www.ibm.com/cloud-computing/products/storage/object-storage/why-cos/> |
| Globus:  www.globus.org |