**DME 1.20.0 Release Notes**

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| Version: 1.20.0  Date: Dec 2, 2019  ==============================================================  **Contents**  ==============================================================  1.0 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 DME Introduction**  ==============================================================  The NCI Data Management Environment (DME) offers open-ended storage and management of large scientific research datasets. It eliminates the need to maintain redundant copies of large heterogenous data and provides the ability to annotate, retrieve, and share datasets for further research, analysis, and collaboration.  The NCI Data Vault serves as the archive store for these datasets. It provides scalable, virtualized, high-reliability storage that is transparent to the end user. Data are stored as objects, which are organized into collections (folders), and a collection might have one or more collections within it. A collection can be identified by a custom collection type such as Project, Study, Sample, and so on, the default being Folder.  DME provides an entry point to archive data to the NCI Data Vault, and to manage, transfer, access, and share data across disparate systems securely and efficiently. DME allows you to associate user-defined metadata to registered data at different points in the data life cycle. In addition, DME offers search capabilities to identify this data. A Division/Office/Center (DOC) can define its own metadata structure and data hierarchy rules, and grant permission to users as needed.  If you have an NIH account, the NCI Data Vault team can give you access to DME. For access requests or any other questions, contact [NCIDataVault@mail.nih.gov](mailto:NCIDataVault@mail.nih.gov).  ==============================================================  **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 7, 2018  v1.7.0 – March 29, 2018  v1.7.1 – May 21, 2018  v1.7.2 - June 12, 2018  v1.7.3 - July 24, 2018  v1.8.0 - September 28, 2018  v1.9.0 – November 20, 2018  v1.10.0 – December 18, 2018  v1.11.0 – March 1, 2019  v1.12.0 – April 1, 2019  v1.13.0 – May 3, 2019  v1.14.0 – June 4, 2019  v1.15.0 – July 9, 2019  v1.16.0 – August 21, 2019  v1.17.0 – September 13, 2019  v1.18.0 – October 11, 2019  v1.19.0 – November 8, 2019  v1.20.0 – December 2, 2019  ==============================================================  **3.0 New Features and Updates**  ==============================================================  The following features, enhancements, and bug fixes have been incorporated in this release:  **Enhancements:**  HPCDATAMGM-1164: Added support for archiving to additional S3 Object Stores (including AWS S3) based on configured values, in preparation for Cloudian integration. This will allow the storage for each archive to be configured independently. Also decoupled download source from upload destination, so that older files can be retrieved correctly from the storage they were archived to, independent of where the new ones are being uploaded to.  HPCDATAMGM-1155: Added API to retrieve users with a specific role. This will help identify (for the purpose of requesting permissions) the group administrators in a specific Division/Office/Center (DOC) or those owning a specific base path. For details, refer to section 5.10 of the [DME API Specification](https://github.com/CBIIT/HPC_DME_APIs/blob/master/doc/guides/HPC_API_Specification.docx).  HPCDATAMGM-1161: Updated the *Create User* dialog box to display the first and last name retrieved from LDAP after successful creation of user account. The system no longer requires the user to input these values. For details, refer to the [Adding a User via the GUI](https://wiki.nci.nih.gov/display/DMEdoc/Adding+a+User+via+the+GUI) page.  HPCDATAMGM-1002: Improved download workflow to check whether the collection being downloaded is empty before the download task begins. If it is empty, the system now displays a failure message to the user instead of starting the download.  **Bug Fixes/Misc. Updates:**  HPCDATAMGM-1183: The system attempts to process S3 download requests as Globus download requests during restart, resulting in error.  HPCDATAMGM-1109: No confirmation dialog box appears when a user deletes a bookmark. For details, refer to the [Deleting a Bookmark via the GUI](https://wiki.nci.nih.gov/display/DMEdoc/Deleting+a+Bookmark+via+the+GUI) page in the DME User Guide.  HPCDATAMGM-1100, 1101, 1074, 1093, 1094, 1096: Replaced variable names with user-friendly labels on the web application’s Dashboard, Register, Search, Manage, and Profile pages.  HPCDATAMGM-1180, 1181, 1182: Upgraded Jackson and Spring-core library versions to address security vulnerabilities flagged by GitHub.  **Operational/Performance Improvements:**  HPCDATAMGM-1169**:** Updated scheduler to process single requests instead of performing batch processing of all requests currently in the queue. This enables more effective request prioritization, improved transaction isolation, and better monitoring and control.  HPCDATAMGM-1170: Improved processing of download transactions by separating out the Globus and S3 schedulers, as well as setting up separate schedulers for *in-process* and *completion* tasks.  HPCDATAMGM-1171: Re-configured Globus pools to improve performance and utilization. Increased service accounts in the default pool from 3 to 10, and removed unused pools for ease of maintenance and usage. For details, refer to the [Preparing to Use Globus with DME](https://wiki.nci.nih.gov/display/DMEdoc/Preparing+to+Use+Globus+with+DME).  ==============================================================  **4.0 Bug Reports and Support**  ==============================================================  For issues, questions or suggestions, contact ncidatavault@nih.gov  ==============================================================  **5.0 Documentation**  ==============================================================  For instructions on how to use the Web User Interface or Command Line Utilities (CLU), visit <https://wiki.nci.nih.gov/display/DMEdoc/DME+User+Guide>  For details on the REST API, refer to the API Specification located at  <https://github.com/CBIIT/HPC_DME_APIs/blob/master/doc/guides/HPC_API_Specification.docx>  Training related documentation and presentation is available at:  <https://github.com/CBIIT/HPC_DME_APIs/tree/master/doc/training>  ==============================================================  **6.0 Resources**  ==============================================================  The following URLs access web pages relevant to HPC DME.  DME User Guide  <https://wiki.nci.nih.gov/display/DMEdoc/DME+User+Guide>  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:  <https://www.globus.org> |