**Data Management Environment (DME) Release Notes**

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Data are stored as objects, which are organized into collections (folders), and a collection might have one or more subcollections within it. A collection can be identified by a custom collection type such as Project, Study, Sample, and so on, the default being collection type 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  v1.21.0 – January 9, 2020  v1.22.0 – February 6, 2020  v1.23.0 – March 9, 2020  v1.24.0 – April 1, 2020  v1.25.0 – May 8, 2020  v1.26.0 – June 4, 2020  v1.27.0 – July 8, 2020  v2.0.0 – August 27, 2020  v2.1.0 – September 24, 2020  v2.2.0 – October 16, 2020  v2.3.0 – December 29, 2020  v2.4.0 – January 26, 2021  v2.5.0 - February 25, 2021  v2.6.0 - March 31, 2021  v2.7.0 - April 30, 2021  v2.8.0 - May 28, 2021  v2.9.0 - June 30, 2021  v2.10.0 - July 28, 2021  v2.11.0 - August 27, 2021  v2.12.0 - September 21, 2021  v2.13.0 - October 29, 2021  v2.14.0 - November 29, 2021  v2.15.0 - December 20, 2021  v2.16.0 - January 31, 2022  v2.17.0 - February 25, 2022  ==============================================================  **3.0 New Features and Updates**  ==============================================================  The following features, enhancements, and bug fixes have been incorporated in this Release:  **Functional/GUI Enhancements:**  HPCDATAMGM-1556: Enhanced the Browse page of the DME web application to show the data hierarchy of the displayed archive (base path) through an info icon. Previously, users had to navigate to the Register Collection page to obtain this information.  HPCDATAMGM-1560: Enhanced the Browse page of the DME web application to show the mandatory metadata associated with each collection type in the hierarchy of the displayed archive (base path). Previously, the user had to navigate to the Register Collection page and select each item from the Collection Type dropdown to obtain this information.  **Improvements and Bug Fixes:**  HPCDATAMGM-1567: Excluded group administrators from the maximum limit on the number of collections that can be downloaded in parallel to a Globus endpoint. This limit now applies only to non-administrators.  HPCDATAMGM-1555: Display the header row for base path in the DME report (accessed from Reports tab) only if that field is valid for that report. Previously, an empty header row with *Base Path* label was displayed for the DOC and User reports.  HPCDATAMGM-1542: Added the ability to optionally include a canned String for the DOC in the *from* line of the collection DME collection update notification that is dispatched to subscribed users.  HPCDATAMGM-1525: Enhanced the DME web application to indicate the reason for failure when a file deletion request fails. Previously, only the failed status was provided. The failure may be due to the age of the file (greater than 90 days) or inadequate permissions.  HPCDATAMGM-1553: Removed caching of Google Cloud refresh token so that stale tokens do not cause errors. The refresh token is now obtained from the Google Authorization server when the users access their Google Cloud account through DME.  HPCDATAMGM-1557: Fixed issue with a restarted download transaction showing the name of the user who restarted the transaction rather than the name of the user who initiated the original transaction.  HPCDATAMGM-1568: Fixed SQL error generated by the Search Users by Role REST API. For details on this API, refer to section 5.12 of the [DME API Specification](https://github.com/CBIIT/HPC_DME_APIs/blob/master/doc/guides/HPC_API_Specification.docx).  **Operational/Performance Improvements:**  HPCDATAMGM-1551: Added DME managed thread pool to limit the number of threads during streaming transfers (such as downloads or uploads to Cloudian or AWS S3). This replaces the default AWS thread pool, providing the ability to control the number of parts that can be transferred in parallel based on the availability of system resources.  HPCDATAMGM-1552: Add internal retries to enable automatic recovery of transactions from failures caused by temporary connection errors. The retries are performed for a configured duration after which the transaction is set as failed. Previously, the transactions were set to failed as soon as the error occurred.  HPCDATAMGM-1563 Added throttling to regulate the download of the same file to multiple Globus endpoints to execute it serially. Previously, the download was being initiated as soon as the request was made.  ==============================================================  **4.0 Bug Reports and Support**  ==============================================================  For issues, questions or suggestions, contact [ncidatavault@nih.gov](mailto: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>.  ==============================================================  **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>  DME GitHub Home Page  <https://github.com/CBIIT/HPC_DME_APIs>  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/> |
| Globus:  <https://www.globus.org> |