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

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| **Release 2.27.0: December 19, 2022**  ==============================================================  **Contents**  ==============================================================   1. DME Overview 2. Release History 3. New Features and Updates 4. Important Notes 5. Bug Reports and Support 6. Documentation 7. References   ============================================================== DME Overview ==============================================================  The NCI Data Management Environment (DME) offers open-ended storage and management of 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 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).  ============================================================== 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  v2.18.0 - March 23, 2022  v2.19.0 - April 14, 2022  v2.20.0 - May 17, 2022  v2.21.0 - June 15, 2022  v2.22.0 - July 28, 2022  v2.23.0 - August 30, 2022  v2.24.0 - September 29, 2022  v2.25.0 - October 27, 2022  v2.26.0 - November 17, 2022  v2.27.0 - December 19, 2022  ============================================================== New Features and Updates ==============================================================  The following features, enhancements, and bug fixes have been incorporated in this Release:  **Functional/GUI Enhancements:**  HPCDATAMGM-1703: Enhanced the Complete Multi-Part/Single-Part Upload API invoked by the *dm\_register\_directory* CLU command to also perform the additional steps required for changing the status of the presigned URL upload transaction from URL\_GENERATED to ARCHIVED. This eliminates the delays caused by the scheduled task set up for performing the completion when the load is high. For details, refer to section 5.32 of the [DME API Specification](https://github.com/CBIIT/HPC_DME_APIs/blob/master/doc/guides/HPC_API_Specification.docx).  HPCDATAMGM-1702: Added the ability for users to optionally transition the state of a single part presigned URL upload transaction from URL\_GENERATED to ARCHIVED by calling the Complete Multi-Part/Single-Part Upload API. This eliminates the delays caused in the scheduled task set up for performing this completion when the load is high. The existing API to request the pre-signed URL will now accept a new flag indicating that user will call the completion API themselves. For details, refer to section 5.31 of the [DME API Specification](https://github.com/CBIIT/HPC_DME_APIs/blob/master/doc/guides/HPC_API_Specification.docx).  HPCDATAMGM-1660: Enhanced the DOC and Base Path reports in the Reports page of the DME web application to enable text entry in the DOC and Base Path selection drop-down lists respectively.  **Improvements and Bug Fixes:**  HPCDATAMGM-1666: Added the ability to sort the human readable size column in the Base Path, DOC and Data Owner reports in the DME web application.  HPCDATAMGM-1701: Improved the screen real estate usage in the DME web application by removing redundant sub-header rows.  HPCDATAMGM-1685, 1683: Fixed intermittent issue with the completion of bulk data registration task due to integer overflow of the transfer speed. Also fixed issue with the destination directory path getting corrupted when it contains the same string pattern as that specified for the destination file path.  HPCDATAMGM-1691: Updated the instructions on the Register Bulk Data page in the DME web application to remove obsolete information and improve clarity.  **Operational/Performance Improvements:**  HPCDATAMGM-1703: Enhanced the Complete Multipart Upload API to also perform the additional steps required for fully completing the file registration including toggling the URL\_GENERATED status to ARCHIVED. This eliminates the delays caused by the scheduled task setup for performing the completion when the load is high.  HPCDATAMGM-1674: Added the ability to track percentage completion during file migration and record it in the DME migration task table.  HPCDATAMGM-1682: Added auditing of all REST APIs request URLs sent to DME along with the response code and the timestamps.  ============================================================== Important Notes ==============================================================  The [Building a Compound Query](https://wiki.nci.nih.gov/x/HAYXG) page of the DME User Guide has been updated per user request to add an example for a complex query containing nested compound queries.  The DME API server keystore was updated in production in Release 2.25.0.  If you are using CLU, please update your public key at **utils/hpc-client/keystore/keystore-prod.jks**  from GitHub master before running any commands if you have not used the CLU post Release 2.25.0.  ============================================================== Bug Reports and Support ==============================================================  For issues, questions or suggestions, contact [ncidatavault@nih.gov](mailto:ncidatavault@nih.gov).  ============================================================== 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>.  ============================================================== 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/> |
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| Globus:  <https://www.globus.org> |