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

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| **Release 3.4.0: July 30, 2024** 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 with 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@nih.gov](mailto:NCIDataVault@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  v2.28.0 - January 30, 2023  v2.29.0 - February 27, 2023  v2.30.0 - March 28, 2023  v2.31.0 - April 24, 2023  v2.32.0 - May 22, 2023  v2.33.0 - June 30, 2023  v2.34.0 - July 29, 2023  v2.35.0 - August 30, 2023  v2.36.0 - September 29, 2023  v2.37.0 - October 27, 2023  v2.38.0 - November 17, 2023  v2.39.0 - December 28, 2023  v2.40.0 – January 30, 2024  v2.41.0 - February 28, 2024  v3.0.0 – March 27, 2024  v3.1.0 – April 29, 2024  v3.2.0 – May 31, 2024  v3.3.0 – June 27, 2024  v3.4.0 – July 30, 2024 New Features and Updates The following features, enhancements, and bug fixes were incorporated in this release.  **New Features/GUI Enhancements:**  HPCDATAMGM-1933: Redesigned the *dm\_register\_dataobject* command line utility (CLU) to display the status of asynchronous registrations (from S3 buckets and Globus endpoints) on the Manage Registration dashboard of the DME web application. For details, see [Using dm\_register\_dataobject](https://wiki.nci.nih.gov/x/ARtGFw).  **Improvements and Bug Fixes:**  HPCDATAMGM-1957: Reorganized the UI components on the Download page of the DME web application to align with the order in which the user performs the steps. For details on using the Download page, see [Downloading Data via the GUI](https://wiki.nci.nih.gov/x/_QuKFg).  HPCDATAMGM-1953: Fixed issue with some of the CLU utilities exiting on error, causing the user to get logged out when on Helix or Biowulf.  HPCDATAMGM-1954: Fixed the issue of the year not being considered for sorting the *Created On* and *Completed On* columns in the Registration Tasks dashboard of the DME web application.  HPCDATAMGM-1955: Fixed the issue of the Globus download transactions not being picked up in the order the users requested.  HPCDATAMGM-1967: Fixed the issue of an error appearing during the download of collections from the DME web application to the Google Cloud endpoint.  **Operational Support/Performance Improvements:**  HPCDATAMGM-1843: Redesigned the Globus account allocation mechanism to maximize data transfers by optimizing the use of the Globus account pool.  HPCDATAMGM-1956: Optimized the data migration process to prevent transactions from getting orphaned when the migration server restarts. Important Notes  * If you use the DME command line utilities (CLU), please note the following: * The CLU was upgraded in Release 3.1.0 to run on Java 11. To obtain the new jar file, perform a git pull. * If you run the commands on Helix/Biowulf, execute module load java/11.0.21before running them. * The DME API server keystore was updated in this release.  To obtain the new public key, update **utils/hpc-client/keystore/keystore-prod.jks** from GitHub master.  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> |