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

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| Release 2.14.0: November 29, 2021  ==============================================================  **Contents**  ==============================================================  1.0 DME Overview  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 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).  ==============================================================  **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  ==============================================================  **3.0 New Features and Updates**  ==============================================================  The following features, enhancements, and bug fixes have been incorporated in this Release:  **Functional/GUI Enhancements:** HPCDATAMGM-1495: Enhanced the DME web application to enable download of files and folders from the NCI Data Vault to Google Cloud Storage. For details, refer to [Downloading to Google Cloud Storage via the GUI.](https://wiki.nci.nih.gov/x/woBFH)HPCDATAMGM-1519: Added new optimized REST API to retrieve user metadata of all data files within all levels in a given path. For details, refer to section 5.85 of the [DME API Specification](https://github.com/CBIIT/HPC_DME_APIs/blob/master/doc/guides/HPC_API_Specification.docx). **Misc/Bug Fixes:**  HPCDATAMGM-1526: Reworked the Globus download request processing logic to send the transfer requests to Globus serially instead of in parallel, so that the number of open endpoints is determined accurately, and no request gets queued on a busy endpoint when free ones are available. HPCDATAMGM-1524: Excluded system accounts from the response JSON returned by the Get Permission API since these accounts are for internal DME use only. HPCDATAMGM-1516: Enhanced the Task Details page of download requests to display the original, retried task ID if this download request was created to re-initiate failed transfers.  **Operational/Performance Improvements:**  HPCDATAMGM-1320: Optimized the response time of the Data Object Query REST API (Find Data By Compound Metadata Query) to return results in less than 10 secs instead of over a minute for the case where the parent collection path is specified. For details on this API, refer to section 5.37 of the [DME API Specification](https://github.com/CBIIT/HPC_DME_APIs/blob/master/doc/guides/HPC_API_Specification.docx).  HPCDATAMGM-1521: Created a configurable property for the S3 client socket timeout in order to obtain flexibility in setting the amount of time to wait (in milliseconds) for data to be transferred before the connection times out.  HPCDATAMGM-1527: Re-distributed scheduled tasks across multiple new API servers to enable higher throughput in requests processing.  ==============================================================  **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> |