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

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| Release 2.18.0: March 23, 2022  ==============================================================  **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  v2.15.0 - December 20, 2021  v2.16.0 - January 31, 2022  v2.17.0 - February 25, 2022  v2.18.0 - March 24, 2022  ==============================================================  **3.0 New Features and Updates**  ==============================================================  The following features, enhancements, and bug fixes have been incorporated in this Release:  **Functional/GUI Enhancements:**  HPCDATAMGM-1571, 1578: Enhanced the Search Results page of the DME web application to display the aggregate size of the collections or data objects selected for download. For details, refer to [Downloading Data](https://wiki.nci.nih.gov/x/eaI7Fg). Previously, users had to navigate to the individual Collection or Data Object page for the size and aggregate the values obtained manually to determine this information.  HPCDATAMGM-1569, 1596: Enhanced the Collection Download Task page to begin updating the status on the progress bar for the collection as well as the individual files as soon as the download starts for a file. Previously, progress bar updates began only after all the files in the collection were staged for download, which takes time for a large collection. Additionally, the refresh frequency of the page has been increased from 10 to 5 seconds.  **Improvements and Bug Fixes:**  HPCDATAMGM-1591: Setup detailed search as the default mode in the Search page of the DME web application. Users can disable this mode by unchecking the *Detailed Results* checkbox. For additional information, see [Searching for data via the GUI](https://wiki.nci.nih.gov/x/aoJbG).  HPCDATAMGM-1574: Enhanced the Download Tasks page of the DME web application to display a new Destination Type column on the task table to indicate the type of the endpoint (S3, Globus, Google cloud and Google Drive). For details, refer to [Viewing Download Status](https://wiki.nci.nih.gov/x/x4tbG).  HPCDATAMGM-1572: Enhanced the email notification sent to subscribed users for collection list downloads and data object list downloads to hyperlink the task id in the body of the email so that users can navigate directly to the appropriate Download Task page on DME.  HPCDATAMGM-1566: Updated the Download page of the DME web application to disable the submit button while the download task is being created. This is to prevent multiple submissions of the same download request by a user.  HPCDATAMGM-1581: Added a new CLU command *dm\_list\_commands* to list all the commands supported by DME.  HPCDATAMGM-1554, 1580: Added a new [Quick Reference Guide](https://wiki.nci.nih.gov/x/wIqhH) to help users get started with the command line utilities (CLU) easily. Also revised the [Registering Data via the CLU](https://wiki.nci.nih.gov/x/aKM7Fg) page.  HPCDATAMGM-1593: Fixed issue with percentage complete calculation used to update the progress bar during Globus downloads, which was causing the percentage to reset to 0 under certain conditions.  HPCDATAMGM-1597: Fixed error message that appeared when a Data Object page that for a soft link is accessed.  **Operational/Performance Improvements:**  HPCDATAMGM-1583: Updated the AWS transfer manager thread pool that controls the number of S3 connections at the integration (data transfer) layer to align with the number of cores on the server to optimize CPU utilization. Previously the alignment was done at the upper application layer only.  ==============================================================  **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> |