

Adding Metadata to a File Using iRODS imeta (Metadata) Commands

Metadata is data about data. You can add metadata in a terminal window using the imeta commands after giving QuickShare read/write permissions. iRODS metadata (*imeta*) includes user-defined and iRODS system attributes stored in the iCAT database related to a data object, collection, resource, or user, etc. For information on using iCommands, see [Sharing Data from the Command Line \(iCommands\)](#).

 You also can [add metadata within the Discovery Environment](#).

About the metadata databases

Prior to the 2.7 release of the Discovery Environment, all metadata both from within the Discovery Environment (DE) and via iCommands was written to and accessed from the **iRODS metadata database**. However, the iRODS metadata database allows only three fields (attribute, value, and unit, or A,V,U), so it is not ideally suited for the dense data needs of semantic data (e.g., metadata linked to ontology terms).

As a result, CyVerse launched the **CyVerse metadata database** with the 2.7 DE release. This database can store an unlimited number of metadata fields, providing a much more scalable framework for the needs of semantic data used in the CyVerse Data Store. Metadata created in the DE after the 2.7 release is stored in the new CyVerse metadata database.

Both databases are indexed, searchable, and accessible through the DE.

Metadata created **before** the 2.7 release as part of a **metadata template** (e.g., SRA submission or [DOI request](#)) was already stored in and remains in the DE metadata database.

Metadata that was created **before** the 2.7 release **without a template** remains safely stored in the iRODS metadata database. That metadata can still be read and searched for within the DE, and both written and read using iCommands imeta, but it cannot be used in templates. Users can transfer their data from the iRODS metadata database to the CyVerse metadata database, but the operation **cannot be undone**. **User who require command-line access to metadata should continue to use iCommands until command-lines access to the DE metadata database is available.**

Using iCommands to edit metadata

iRODS metadata is defined as a Attribute-Value-Unit triplet, for example:

Description	Example	Help command
Attribute Name (AttName)	<pre>Example: AttName name: length</pre>	imeta -h
Attribute Value (AttVal)	<pre>Example: AttVal value: 2.5</pre>	imeta -h

Attribute Unit (AttUnits)	<div style="border: 1px solid black; padding: 5px; text-align: center;">Example: AttUnits</div> <pre>unit: meter</pre>	imeta -h
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For basics on using iCommands, see [Using iCommands](#). Writing, deleting, editing, and listing metadata are possible with the 'imeta' command.

For more information on using imeta commands, see [imeta - iRODS](#), view the [quick tutorial on iRODS metadata](#) on the iRODS website, or enter **imeta -h** in the terminal window.

Need help?

If you have problems or need assistance, see [Get Help](#) on the CyVerse website or email Support (support@cyverse.org).

Helpful Links

On This Page:

- [Sharing Data from the Command Line \(iCommands\)](#)
- [Adding metadata within the Discovery Environment](#)

Related Pages:

- [Using Metadata with the CyVerse Data Store](#)
- [meta - iRODS](#)
- [Quick video tutorial on iRODS metadata](#)
- [Using Metadata in the D](#)