# **irods**®

# Metalnx v3.1.0

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1

Metalnx is a web application that is a web based file browser for iRODS.

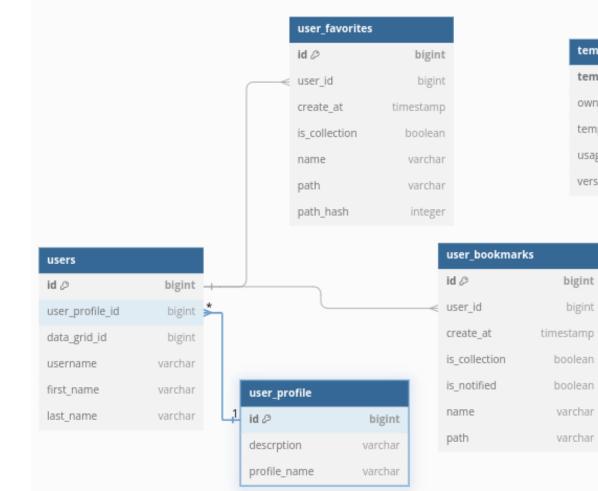
Version 3.1.0 of Metalnx was released in June.

- Removal of the irods-ext database.
  - Removal of favorites, templates, user profiles, and bookmarks.
  - Removal of user fields that only exist in the irods-ext database.
- Configuration option added to hide the left sidebar.
- Added support for the 10 level permission model in iRODS.
- Upgraded third party packages.

- New User Form Changes
  - User creation form defaults user type to "rodsuser" (was "rodsadmin")
  - Removed "Personal Information" section
    - $\circ~$  Not stored in the iRODS catalog
  - No group assignments at the time of user creation
    - Now must be done via the "Groups" page
- Added configuration option to enable/disable the public link
  - Default is disabled
- Removed admin credentials in configuration file
  - Metalnx now authenticates directly with user credentials (no proxy user)
- Update library dependencies
- Bug fixes



### To give an idea of what has been deleted....



template_id bigintownervarchartemplate_namevarcharusage_infovarchar
template_name varchar usage_info varchar
usage_info varchar
-
version integer

metadata_fields	
id 🖉	bigint
template_id	bigint
attribute	varchar
attribute_unit	varchar
attribute_value	varchar
start_range	real
end_range	real
field_order	integer

template_fields	
template_field_id 🖉	bigint
 template_id	bigint
max_attr_length	integer
max_unt_length	integer
max_val_length	integer
field_order	integer

4

## Metalnx Database (irods-ext)

The Metalnx database provided the following additional functionality:

- Additional user information (last name, first name, department, etc.)
- User profiles
- Bookmarks
- Favorites
- Metadata Templates

Rationale for removing the database

- Wanted a generic stateless iRODS GUI.
  - Code is simplified and more maintainable.
- Only wanted a single source of truth.
  - No longer require a background jobs with admin credentials to keep duplicated data in sync.
  - Synchronization was buggy.
- Some features can be implemented in the iRODS server.

## Before 3.0.0

3.0.0

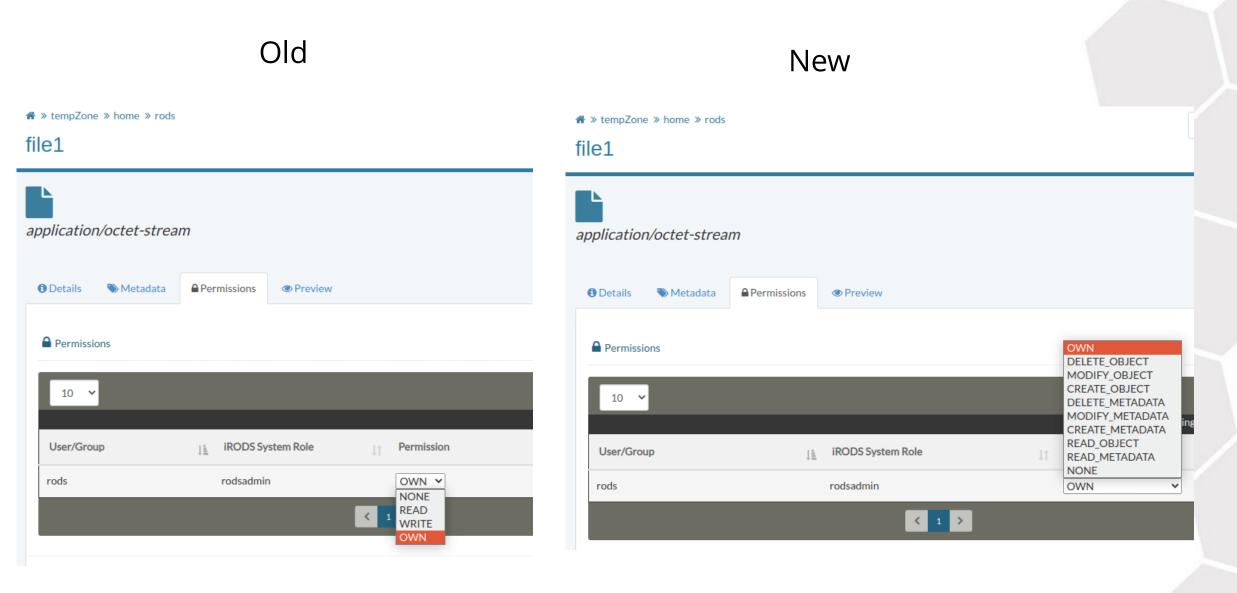
#### **...meta**lnx Resources 🛢 tempZone » home » rods Rules 📑 Navigation Tools -Users 🔒 Groups 🖀 Action 👻 Collections Search Q Name 11 Templates 🚳 file1 Shared Links file10 Favorites 🖈 file11 Public 🔮 Trash 🛍 file12 file13

#### **...meta**lnx Resources 🛢 tempZone » home » rods Rules 🗎 Navigation Tools -Users 🔒 Groups 🖀 Action -Collections Search Q Name 14 Trash 🛍 file1 $\Box$ $\Box$ file10 $\Box$ file11 file12 file13

iRODS

## Support for Ten Level Permission Model

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## New User Form Changes

iRODS

Old

Resourc		New User				Resources	
Rul	les 🖹			Users > New U	Jser		
Use	ers 🛔	Account Settings		Personal Information		Rules	ľ
Group	ps 🐮	*Username	*Zone	First Name		Users	-
Collectio	ns 🖿	newuser	tempZone 🗸	Enter first name			
Sear	ch <b>Q</b>	Password	*iRODS System Role	Last Name		Groups	-
Template	is 🗞	•••••	rodsadmin 🗸	Enter last name		Collections	
Shared Lin	iks <	Password Confirmation		Email address			
Favorit	es ★	Re-enter password		Enter email		Search	Q
Pub	lic 🚱					Trash	Û
Tra	ish 🛍	Attached Groups		✓ Ec	dit		
		10 🗸	Showing C	0 to 0 of 0 entries Search			
		Group Name	La Zone	↓↑ Details	lt -		
			No da	ata available			

New

Account Settings		
*Username	*Zone	
newuser	tempZone	~
Password	*iRODS System Role	e
••••	rodsuser	~

- The "Public" link on the left sidebar is now disabled by default.
- To enable the public link update /etc/irods-ext/metalnx.properties:

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## Library Updates

irods

- metalnx-web
  - tomcat docker image tomcat:jdk11-adoptopenjdk-hotspot -> tomcat:9.0.98-jdk21-temurin-noble
  - spring 4.3.18 -> 5.3.39
  - spring security 3.0.10 -> 5.8.16
  - spring batch 3.0.10 -> 4.3.10
  - servlet api 3.0.1 -> 4.0.1
  - logging slf4j 1.7.7 -> log4j 2.24.3
  - jettison 1.4.0 -> 1.5.2
  - commons-fileupload 1.3.3 -> 1.5
  - commons-io 2.7 -> 2.14.0
- jargon-irods-ext
  - spring 4.3.18 -> 5.3.39
  - spring security 3.23.10 -> 5.8.16
  - spring batch 3.0.8 -> 4.3.10

**#133** - iRODS connections remain open when **CAT\_INVALID\_USER** is returned. Connection now closed when Jargon throws *InvalidUserException* is thrown from Jargon.

**#189** - CSV download failure when exporting CSV from a metadata query when only data objects match the query. Fixed logic around CSV download.

**#307** - spring4shell vulnerability. Remedied with spring version updates.

**#327** - Users created outside of Metalnx are not listed in Metalnx. iRODS is now the single source of truth.

**#373** - Uploads fail when Metalnx's default resource is blank. Now we allow iRODS to determine the resource in this instance.

**#392** - Fix calculation for default max total bytes for zip service. Report download limit violation to client. **jargon #510** - Fix handling of passwords with backslash and semicolon.

Other issues deemed no longer applicable due to the removal of the Metalnx database and templates.



- Migrate from Jargon to irods4j
- Update from Spring 5 to Spring 6
  - Some of this work has been completed but this requires a major refactor of the code.

• More bug fixes



## Thank you.