# MetaInx v3.1.0

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# Overview of Changes

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

Version 3.1.0 of MetaInx was released in June.

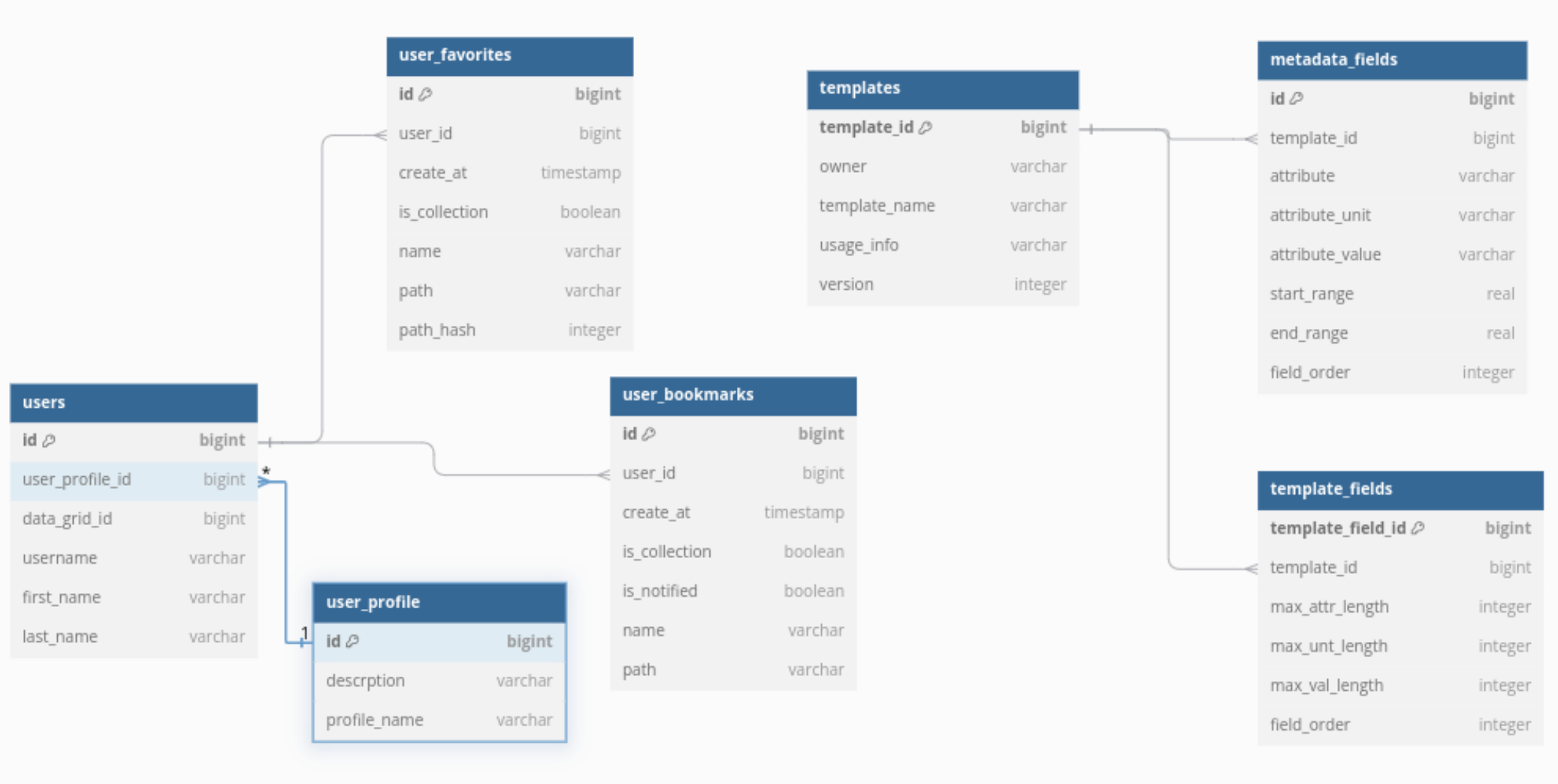
- Removal of the irods-ext database.
  - Removal of favorites, templates, user profiles, and bookmarks.
  - Removal of user fields that only exist in the irods-ext database.
- Configuration option added to hide the left sidebar.
- Added support for the 10 level permission model in iRODS.
- Upgraded third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

# Overview of Changes (continued)

- New User Form Changes
  - User creation form defaults user type to "rodsuser" (was "rodsadmin")
  - Removed "Personal Information" section
    - 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

# MetaInx Database (irods-ext)

To give an idea of what has been deleted….



# MetaInx Database (irods-ext)

The MetaInx database provided the following additional functionality:

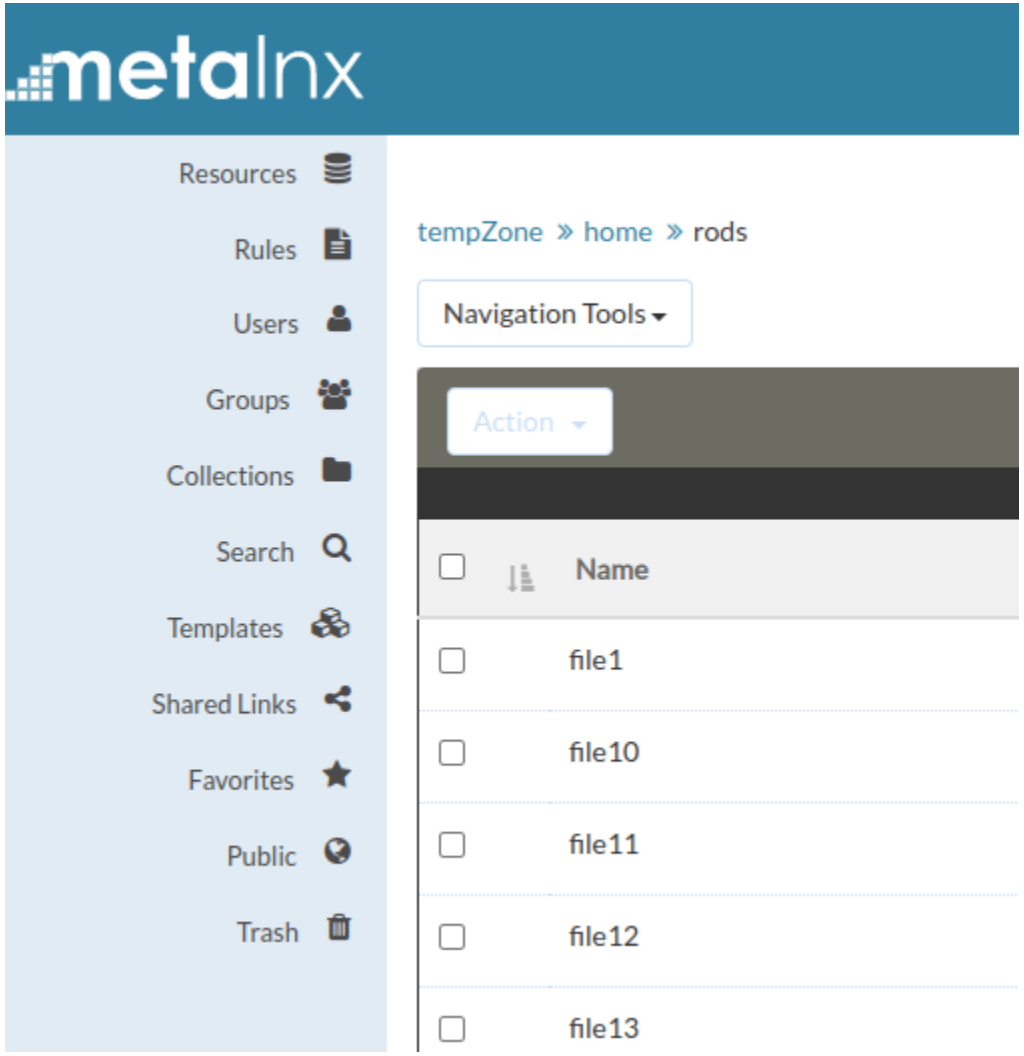
- Additional user information (last name, first name, department, etc.)
- User profiles
- Bookmarks
- Favorites
- Metadata Templates

Rationale for removing the database

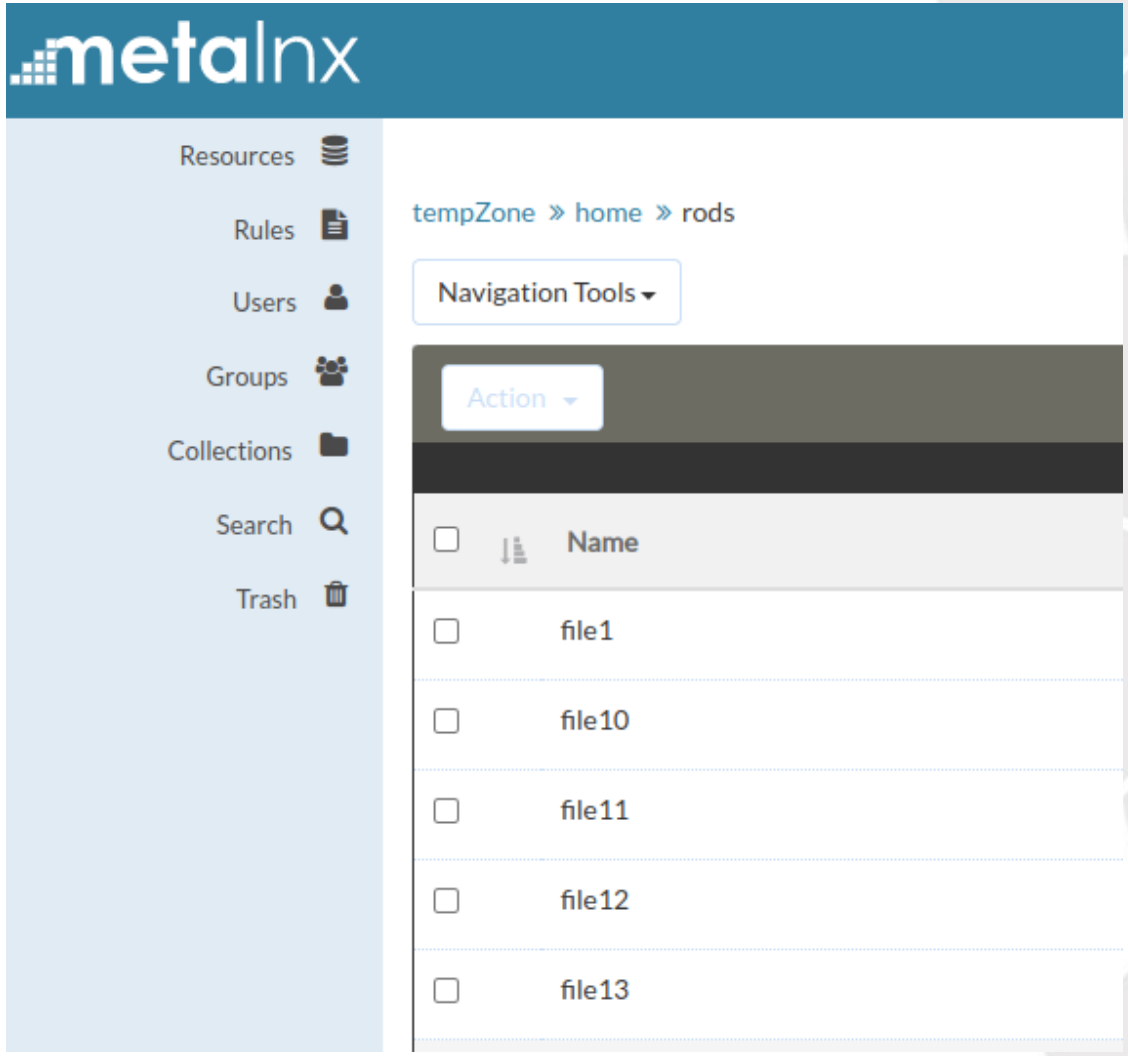
- Wanted a generic stateless iRODS GUI.
  - Code is simplified and more maintainable.
- Only wanted a single source of truth.
  - No longer require a background jobs with admin credentials to keep duplicated data in sync.
  - Synchronization was buggy.
- Some features can be implemented in the iRODS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

# Left Sidebar Changes - rodsadmin version

## Before 3.0.0

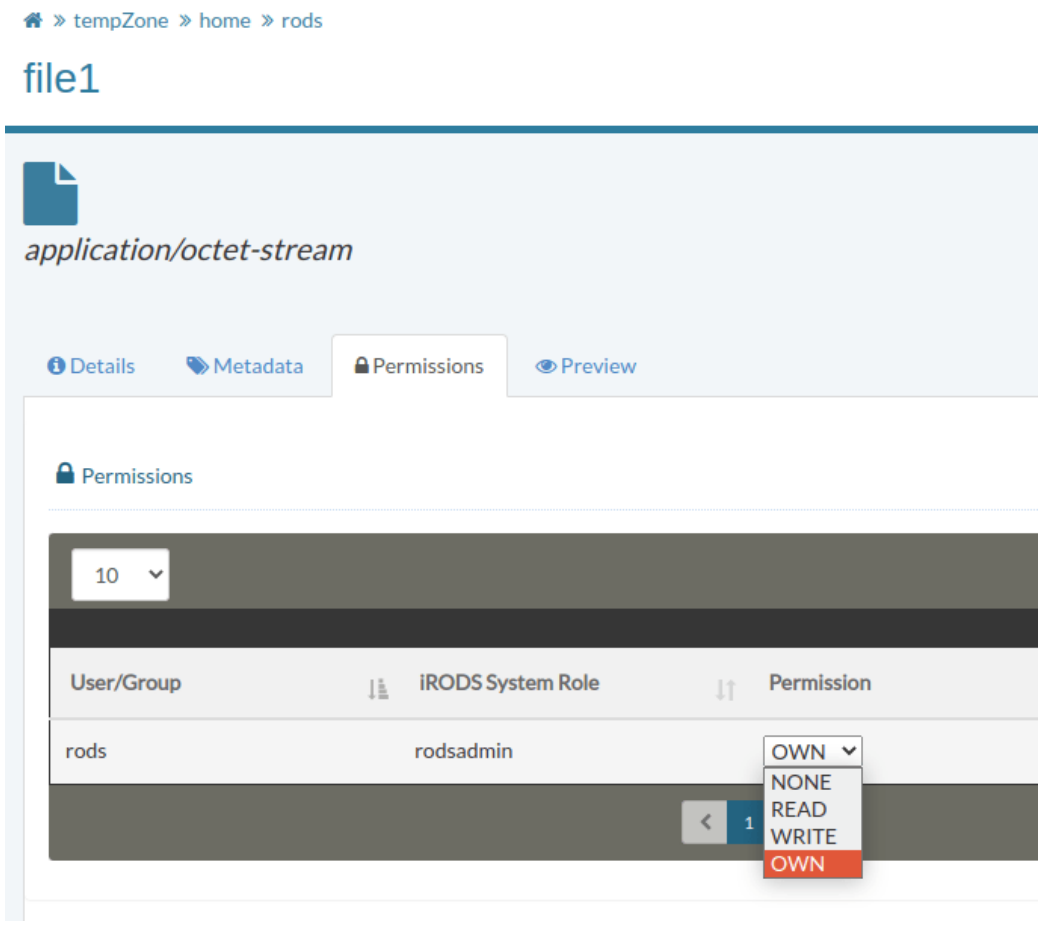



## 3.0.0

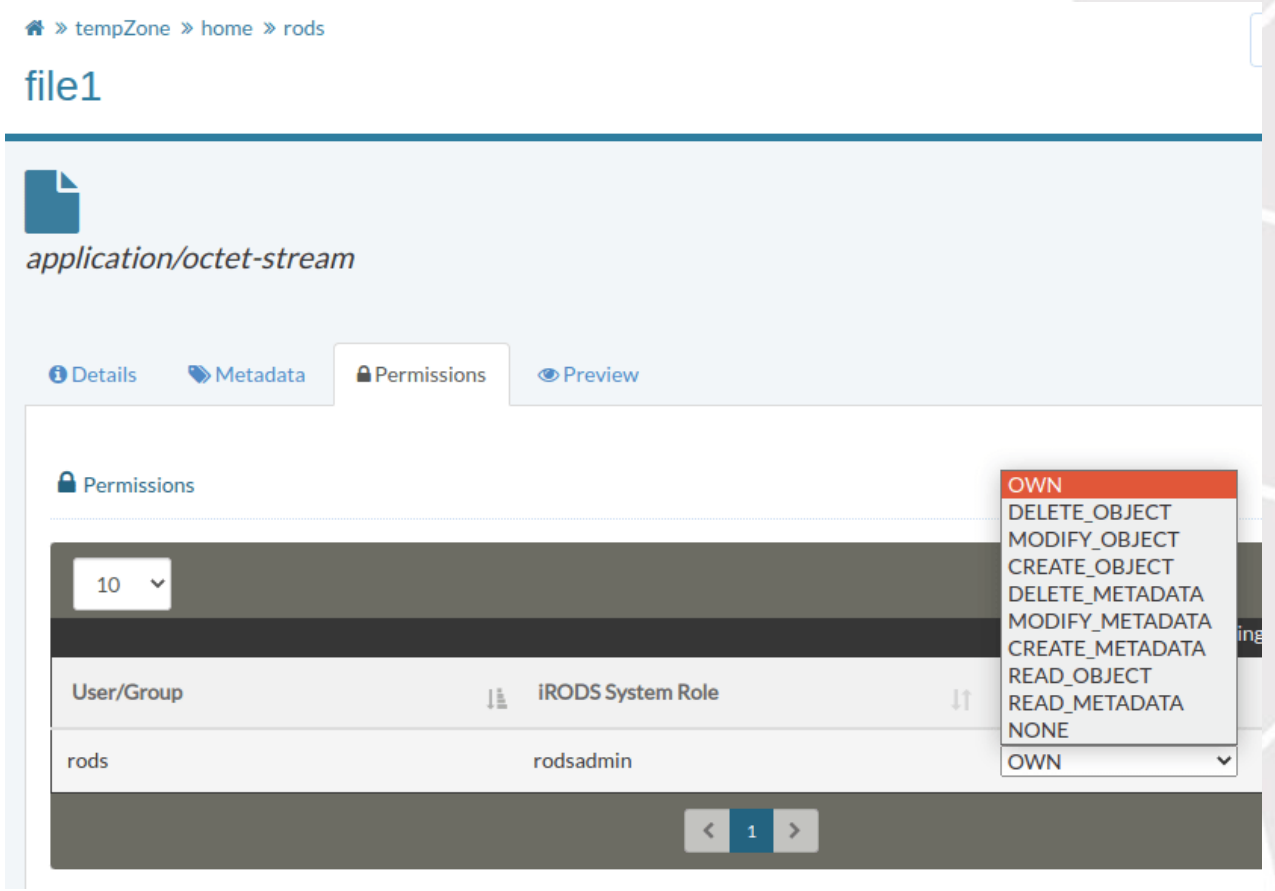


# Support for Ten Level Permission Model

## Old

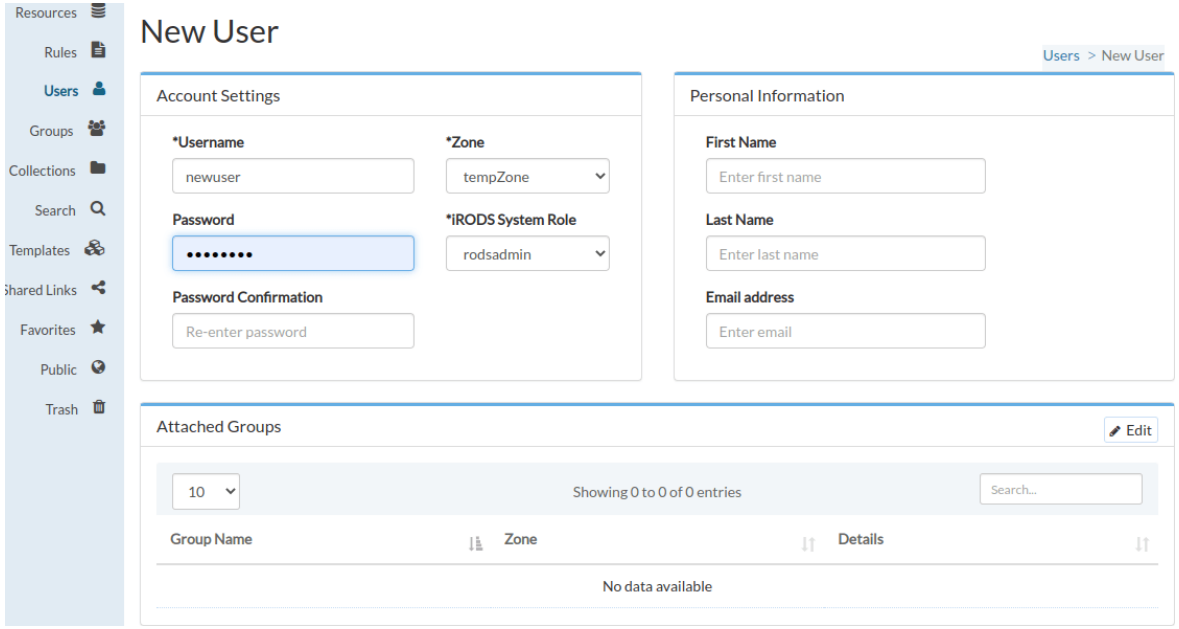



## New

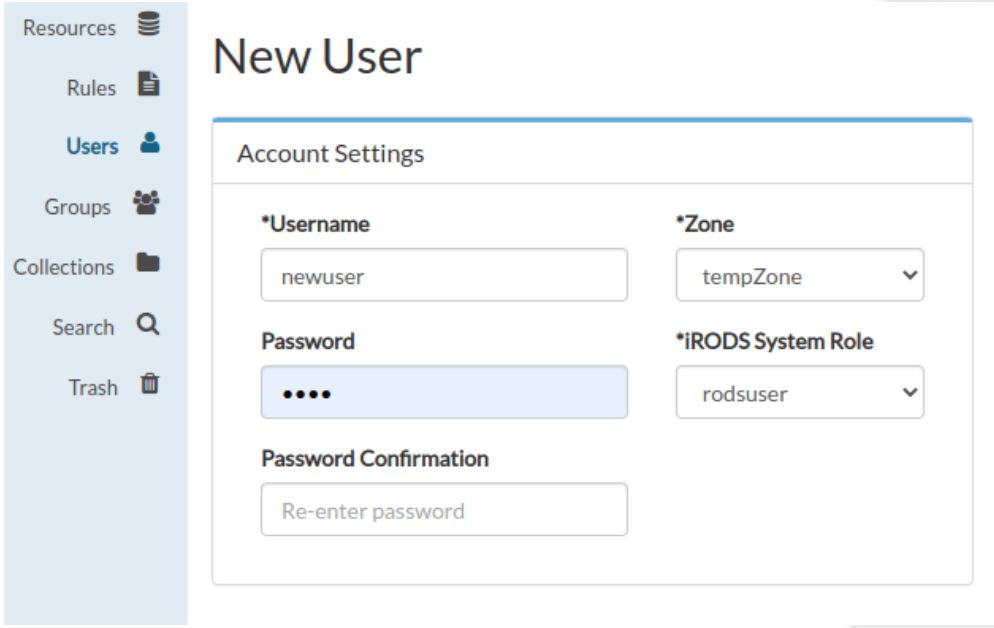


# New User Form Changes

## Old




## New



# Enabling the "Public" Link

- The "Public" link on the left sidebar is now disabled by default.

- To enable the public link update /etc/irods-ext/metalnx.properties:

```
1 ##########################################################
2 # Setting to enable/disable the "Public" sidebar link.
3 # The default is "false" (hidden)
4 ##########################################################
5 sidebar.show.public=true
```

# Library Updates

- 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

# Bugs Fixed

**#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.

# Future Work

- 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

# Questions and Demo

Thank you.