



Zone Management Tool (ZMT)

Bo Zhou
Web Developer
iRODS Consortium

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Develop a user-friendly, easy to deploy, fast, and light-weight GUI to manage an iRODS Zone

- Based on React.JS SPA Framework
- Talks to iRODS C++ REST API
- Exposes reporting and configuration of all iRODS Servers
- Assumes the administration duties of Metalnx
- Focuses on administrator concerns

https://github.com/irods/irods_client_zone_management_tool

Minimum required configuration:

- URL of your iRODS Zone's C++ REST API endpoint

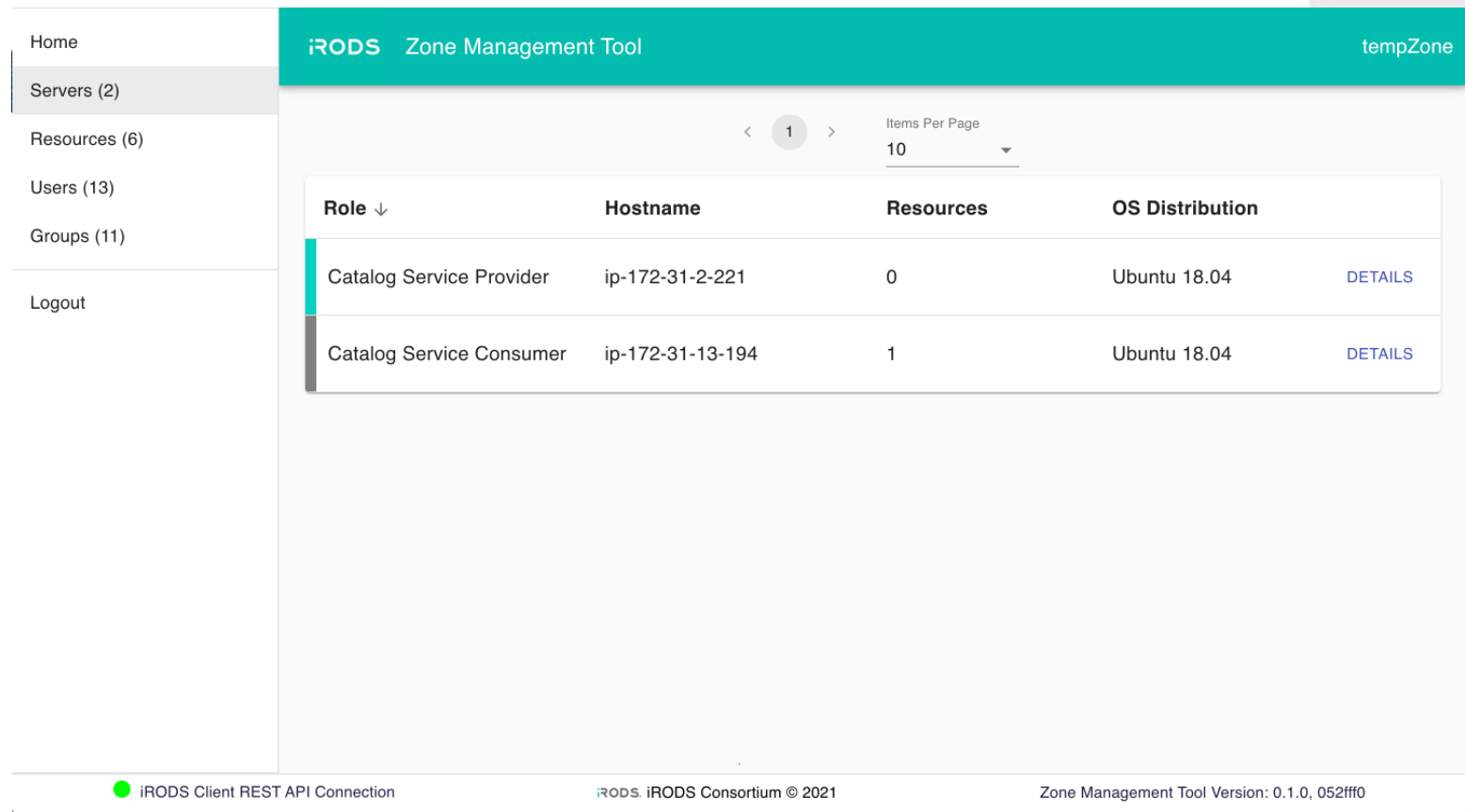
Additional configuration available:

- Listen port for ZMT
- An image to serve as the login logo
- An image to serve as the branding logo
- A branding name
- Theme colors (primary & secondary)

A sample.env file is provided for reference...

```
1 LISTEN_PORT=3000
2 REACT_APP_REST_API_URL=protocol://host:port
3 REACT_APP_APPBAR_LOGO=iRODS-logo.jpg
4 REACT_APP_LOGIN_LOGO=iRODS-logo-1.png
5 REACT_APP_BRANDING_NAME=Zone Management Tool
6 REACT_APP_PRIMARY_COLOR=#04bdaf
7 REACT_APP_SECONDARY_COLOR=#ffffff
```


- Loads data from /zone_report REST endpoint
- A sortable table view of all servers in the iRODS Zone
- Displays basic server information
- Detail view available for each server



The screenshot displays the iRODS Zone Management Tool interface. On the left is a sidebar with navigation links: Home, Servers (2), Resources (6), Users (13), Groups (11), and Logout. The main content area has a teal header with the iRODS logo, 'Zone Management Tool', and a 'tempZone' label. Below the header, there's a pagination control showing page 1 of 1 and an 'Items Per Page' dropdown set to 10. A table lists the servers with columns for Role, Hostname, Resources, and OS Distribution. Each row has a 'DETAILS' link. The table contains two entries: a 'Catalog Service Provider' at ip-172-31-2-221 with 0 resources, and a 'Catalog Service Consumer' at ip-172-31-13-194 with 1 resource. Both are running Ubuntu 18.04. The footer includes a green dot for 'iRODS Client REST API Connection', the copyright 'iRODS. iRODS Consortium © 2021', and the version 'Zone Management Tool Version: 0.1.0, 052ff0'.

Role ↓	Hostname	Resources	OS Distribution	
Catalog Service Provider	ip-172-31-2-221	0	Ubuntu 18.04	DETAILS
Catalog Service Consumer	ip-172-31-13-194	1	Ubuntu 18.04	DETAILS

Home

Servers (2)

Resources (6)

Users (13)

Groups (11)

Logout

iRODS Zone Management Tool

tempZone

Role ↓

Catalog Service

Catalog Service

Server Details

General

Service Configuration

Service Account Environment

Plugin (34)

Catalog Provider Hosts: ip-172-31-2-221.ec2.internal

Catalog Service Role: provider

Client Api Whitelist Policy: enforce

Default Dir Mode: 0750

Default File Mode: 0600

Default Hash Scheme: SHA256

Default Resource Name: demoResc

Match Hash Policy: compatible

Server Control Plane Encryption Algorithm: AES-256-CBC

Server Control Plane Encryption Num Hash Rounds: 16

Server Control Plane Port: 1248

Server Port Range: 20000 ~ 20199

XMSG Port: 1279

Zone Auth Scheme: native

Zone Port: 1247

Zone User: rods

OS Distribution

Ubuntu 18.04

DETAILS

Ubuntu 18.04

DETAILS

iRODS Client REST API Connection

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Zone Management Tool Version: 0.1.0, 052fff0

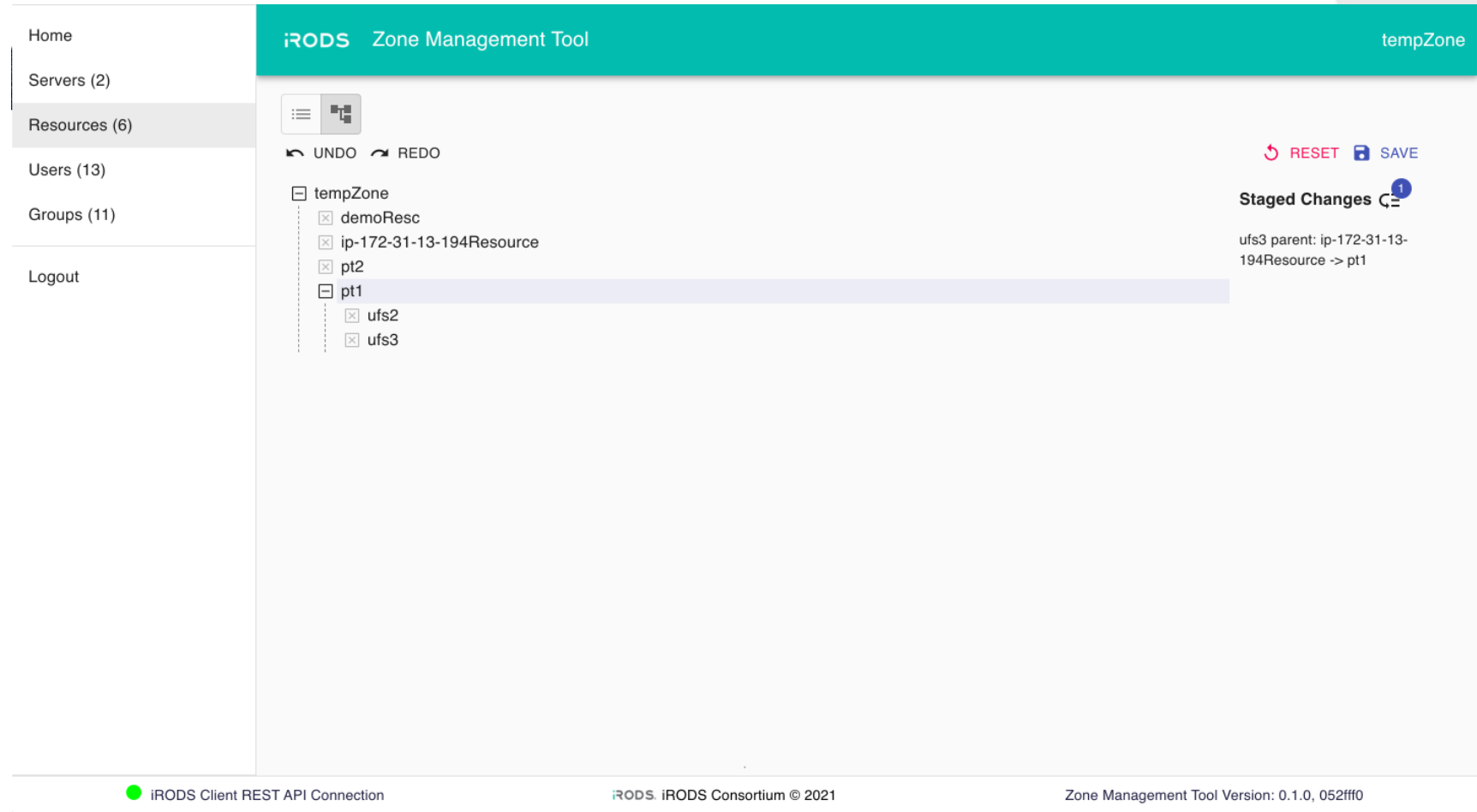
Resources section has two views - table view and tree view.

Table view allows administrator to:

- view the name, hostname, type, and vault path of a resource
- sort each column
- filter results by name, live per keystroke
- edit a resource
- remove a resource
- add a new resource

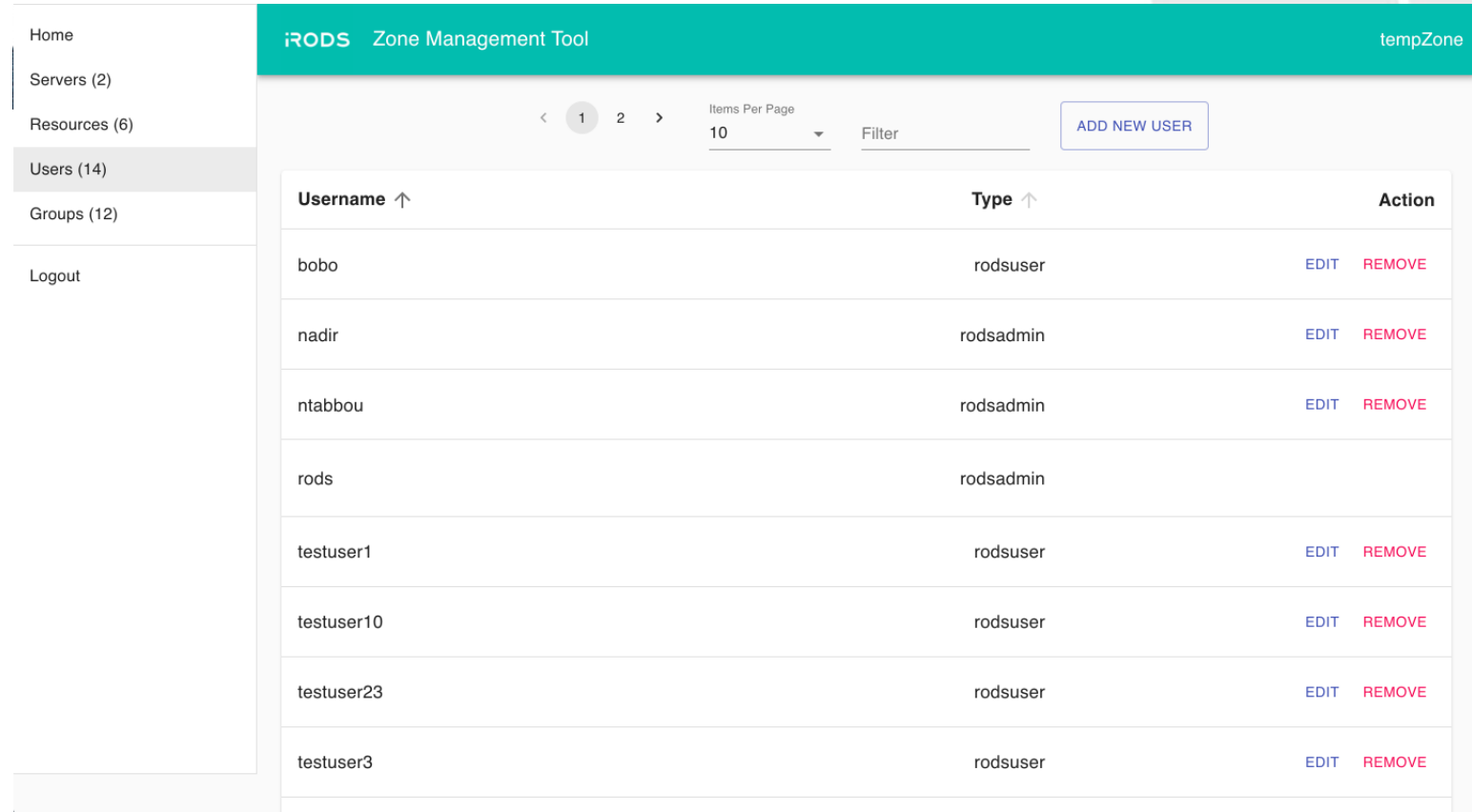
Demo #1: Updating the context string of a resource

- Shows the resource hierarchy with parent/child relationships
- Allows administrators to
 - stage multiple drag and drop operations
 - undo/redo staged operations
 - reset staged operations
- Sends staged changes to iRODS REST API



The screenshot displays the iRODS Zone Management Tool interface. On the left is a sidebar with navigation links: Home, Servers (2), Resources (6) (highlighted), Users (13), Groups (11), and Logout. The main area has a teal header with the iRODS logo, 'Zone Management Tool', and 'tempZone'. Below the header, there are icons for a list and a tree view, followed by 'UNDO' and 'REDO' buttons. The tree view shows a hierarchy: 'tempZone' (expanded) contains 'demoResc', 'ip-172-31-13-194Resource', 'pt2', and 'pt1' (expanded). 'pt1' contains 'ufs2' and 'ufs3'. On the right, there are 'RESET' and 'SAVE' buttons, a 'Staged Changes' indicator with a blue circle containing the number '1', and a text message: 'ufs3 parent: ip-172-31-13-194Resource -> pt1'. The footer contains three items: a green dot and 'iRODS Client REST API Connection', 'iRODS. iRODS Consortium © 2021', and 'Zone Management Tool Version: 0.1.0, 052fff0'.

- Listing of users and groups
- Filtering for large lists
- Create/delete a user/group
- Manage group membership



The screenshot displays the iRODS Zone Management Tool interface. On the left is a sidebar with navigation links: Home, Servers (2), Resources (6), Users (14) (which is highlighted), Groups (12), and Logout. The main content area has a teal header with the iRODS logo, 'Zone Management Tool', and 'tempZone'. Below the header, there are pagination controls showing page 1 of 2, a dropdown for 'Items Per Page' set to 10, a 'Filter' input field, and an 'ADD NEW USER' button. The main part of the interface is a table listing users.

Username ↑	Type ↑	Action
bobo	rodsuser	EDIT REMOVE
nadir	rodsadmin	EDIT REMOVE
ntabbou	rodsadmin	EDIT REMOVE
rods	rodsadmin	
testuser1	rodsuser	EDIT REMOVE
testuser10	rodsuser	EDIT REMOVE
testuser23	rodsuser	EDIT REMOVE
testuser3	rodsuser	EDIT REMOVE

Demo #2: Adding and Removing a user from a group

Home

Servers (2)

Resources (6)

Users (14)

Groups (12)

Logout

iRODS

Zone Management Tool

tempZone

< 1 >

Items Per Page

10

Filter

ADD NEW RESOURCE

Name ↑	Type ↑	Hostname ↑	Vault Path ↑
demoResc			/var/lib/irods/Vault
ip-172-31-13-194Resource			/var/lib/irods/Vault
pt1			EMPTY_RESC_PATH
pt2			EMPTY_RESC_PATH
ufs2	unixfilesystem	localhost	sdf
ufs3	unixfilesystem	localhost	/test/ufs3

Endpoint Connection

Rest API URL: http://54.210.60.122:80/irods-rest/1.0.0

/admin:

/auth:

/query:

/zone_report:

OK

OK

OK

OK

Last checked: Wed, 09 Jun 2021 18:11:53 GMT

TEST CONNECTION

iRODS Client REST API Connection

iRODS

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Zone Management Tool Version: 0.1.0, 052fff0

Future Work

- Delay queue administration
- Ticket administration
- Monitoring and metrics
- Policy administration

Status

- iRODS C++ REST API - Not Yet Released
- ZMT - Not Yet Released
- First releases - Summer 2021?

