

# z/OS 3.1 IBM Education Assistant

Solution Name: zMSC New Enhancements 1.3, zMSC New Sample Services 1.3

Solution Element(s): z/OS Management Services Catalog

July 2023



# Agenda

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- Trademarks
- Terminology
- Objectives
- Overview
- Usage & Invocation
- Interactions & Dependencies
- Upgrade & Coexistence Considerations
- Installation & Configuration
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# Trademarks

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- See url <http://www.ibm.com/legal/copytrade.shtml> for a list of trademarks.
- Additional Trademarks:
  - None

# Terminology

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- **Services** – Services help you perform management tasks on a z/OS system. You provide values and information the service needs. When you run the service, it completes the steps automatically. Administrators create services and publish them to the Catalog for other users to run.
- **Sample services** – Services created by IBM and included in z/OS Management Services Catalog for customization and use (Create a z/OS file system, Mount a zFS file system, Delete an alias from a catalog, and more).
- **Service submissions** – An instance of a service that runs on a target system.
- **Categories** – Created by Administrators to organize and group services in the Catalog.
- **Target system** – The z/OS systems on which a service submission runs. Target systems are enabled by Administrators in Global settings and are obtained from the z/OSMF Systems app.

# Objectives

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- Problem Statement / Need Addressed / User Stories:
  - **Management Complexity:** z/OS management is complex, especially for system programmers who are new to the platform. Even routine tasks are manual and involve institutional knowledge and processes that often take years to learn.
  - **Skills Transfer and Fewer Errors:** The average years to retirement for mainframe personnel sits at three years and continues to decrease. As new system programmers are onboarded, the learning curve needs to decrease for them to start contributing quickly and with fewer errors.
- Solution:
  - z/OS Management Services Catalog
- Benefit / Value:
  - An early tenure Systems Programmer can perform z/OS management tasks by using a modern interface that does not expose them to the complexities of ISPF, command line, operator console, or JCL jobs.
  - An experienced Systems Programmer can reduce the complexity of their organization's z/OS management processes so they can transfer their knowledge to the next generation.

# Objectives

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This solution consists of two initiatives.

Services help users streamline repetitive and frequent tasks as well as complex, infrequent tasks. z/OS Management Services Catalog will provide the following new sample services to help system programmers accomplish their z/OS management tasks:

- New capabilities for z/OS Management Services Catalog 1.3
  - Service creation enhancements
- New Sample Services for z/OS Management Services Catalog 1.3
  - Remove Expired Certificates from RACF Keyring
  - Add load library to LNKLIST

# Objectives

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The new capabilities include:

## **Service creation enhancements**

- Enable users to update the Workflow definition file after starting to build a service so that they can avoid wasted time on revisions
- Redesign flow/interaction for duplicating a service submission
- Support identifying inputs that should be hidden when running the service and hide these pre-identified set of inputs when running the service
- Support inconsequential changes to published services
  - Allow users to make inconsequential changes to a published service such as changing the service description, category assignment, page descriptions, helper text, etc. without having to archive and re-create/publish the service. This only includes changes that don't affect the service/workflow processing.

# Overview

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- Who (Audience)
  - Seasoned System Programmers and Early tenure System Programmers
- What (Solution)
  - z/OS Management Services Catalog is designed to transform how z/OS systems programmers manage their z/OS environments. With the ability to translate z/OS management processes into modern services based on workflows, system programmers can independently complete tasks simply and with fewer errors. zMSC will provide a number of new enhancements which will allow greater flexibility in performing z/OS tasks. z/OS Management services will provide new sample services in addition to existing ones.
- Wow (Benefit / Value, Need Addressed)
  - Enable users to update the Workflow definition file after starting to build a service so that they can avoid wasted time on revisions
  - Redesign flow/interaction for duplicating a service submission
  - Support identifying inputs that should be hidden when running the service and hide these pre-identified sets of inputs when running the service
  - Support changes to published services. Allow users to make inconsequential changes to a published service such as changing the service description, category assignment, page descriptions, helper text, etc. without having to archive and re-create/publish the service. This only includes changes that don't affect the service/workflow processing.)



# Usage & Invocation

## Replace workflow definition files

CatalogActivityHistoryAdministration

New service

Help

← Administration

Create and format a new zFS data set

Saved moments ago

Unpublished

DetailsInputs

Service information

Name

Create and format a new zFS data set

Description (optional)600/600

Creates a new zFS data set either as a standard allocation or using Shared Managed Storage (SMS). The data set is then formatted. Creates a new zFS data set either as a standard allocation or using Shared Managed Storage (SMS). The data set is then formatted.

Category ⓘ

zFS Management

runAsUser steps (2)

Steps in the workflow definition that are performed as a specific user ID. Use of the user IDs must be approved.

Step name

Workflow

The service uses a copy of the reference file as its workflow. You can replace or edit the workflow while the service is Unpublished. Changes to the reference file do not apply to the service until you replace the file. You cannot update the workflow after you publish the service.  
[Learn about updating the workflow for your service](#)

Last updated

Dec 12, 2022, 11:32:23 AM EST by zmscadmin

Reference file path ⓘ

/u/ibmuser/workflow-definitions/create-new-zfs.xml

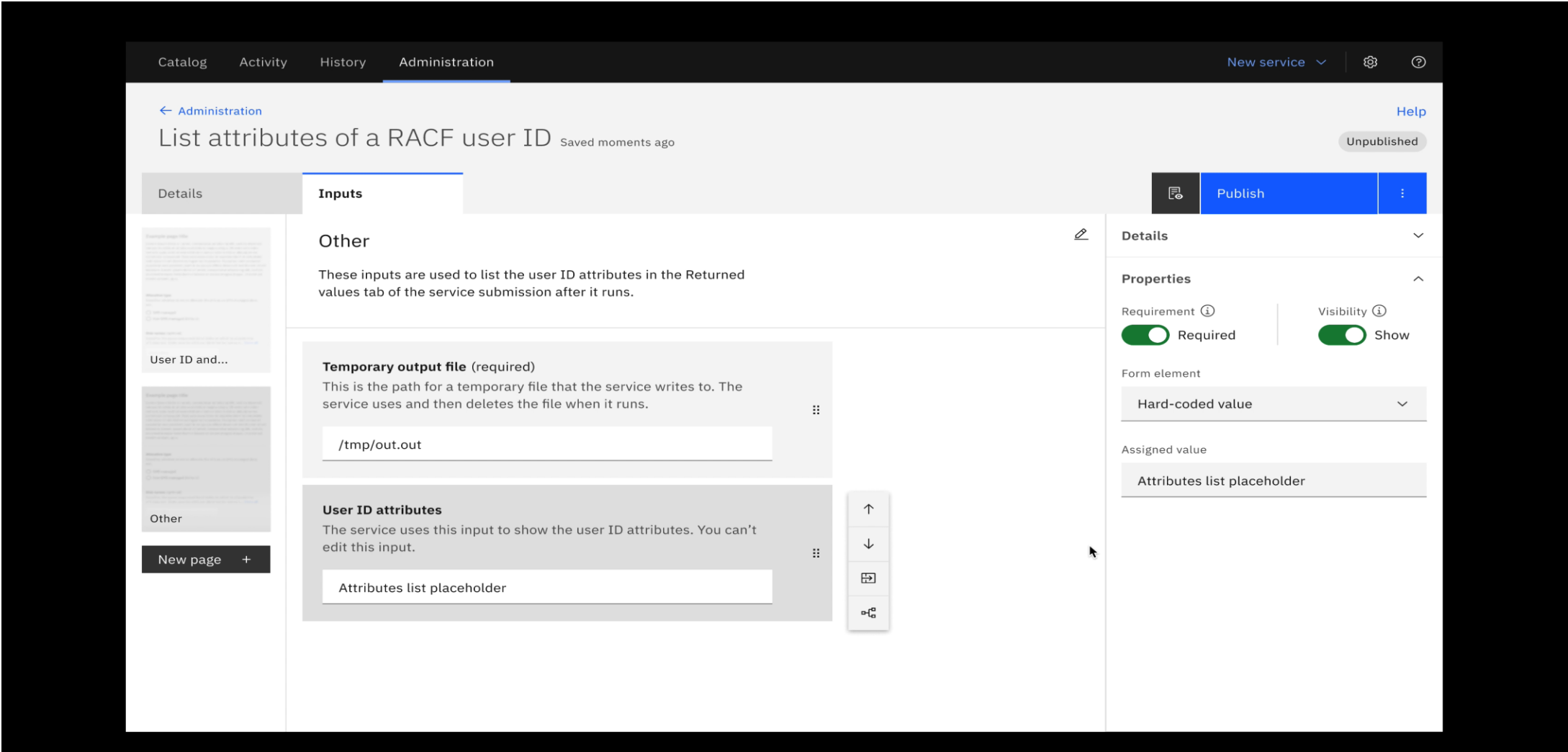
Variable name	Input name
allocationType	Allocation type
catalogName	Catalog name
dataClass	Data class
encryptFileSystem	Encrypt file system
func_ID	Function ID
managementClass	Management class
megabytesPrimaryAllocation	Megabytes primary allocation
megabytesSecondaryAllocation	Megabytes secondary allocation

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# Usage & Invocation

## Service Details - Show/Hide inputs while running a service



# Usage & Invocation

- Allowing changing service descriptions, input help text, and category for published services.

CatalogActivityHistoryAdministration

New service

Help

← Administration

Create and format a new zFS data set

Saved moments ago

Unpublished

DetailsInputs

Next

Service information

Name

Create and format a new zFS data set

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Category ⓘ Categories organize services in the Catalog.

zFS Management

runAsUser steps (2)

Steps in the workflow definition that are performed as a specific user ID. Use of the user IDs must be approved.

Step name

userID

func\_ID

Approvers

gendreau, serenaho or 2 others

func\_ID

Workflow

Services are built using workflow definitions. Workflow definitions define variables and steps. Values for variables are typically entered as inputs each time someone submits the service. You can assign a hard-coded value to any variable. Hard-coded values cannot be changed and are used each time the service runs. Variables assigned to runAsUser steps must have hard-coded values. [Learn about Workflows](#)

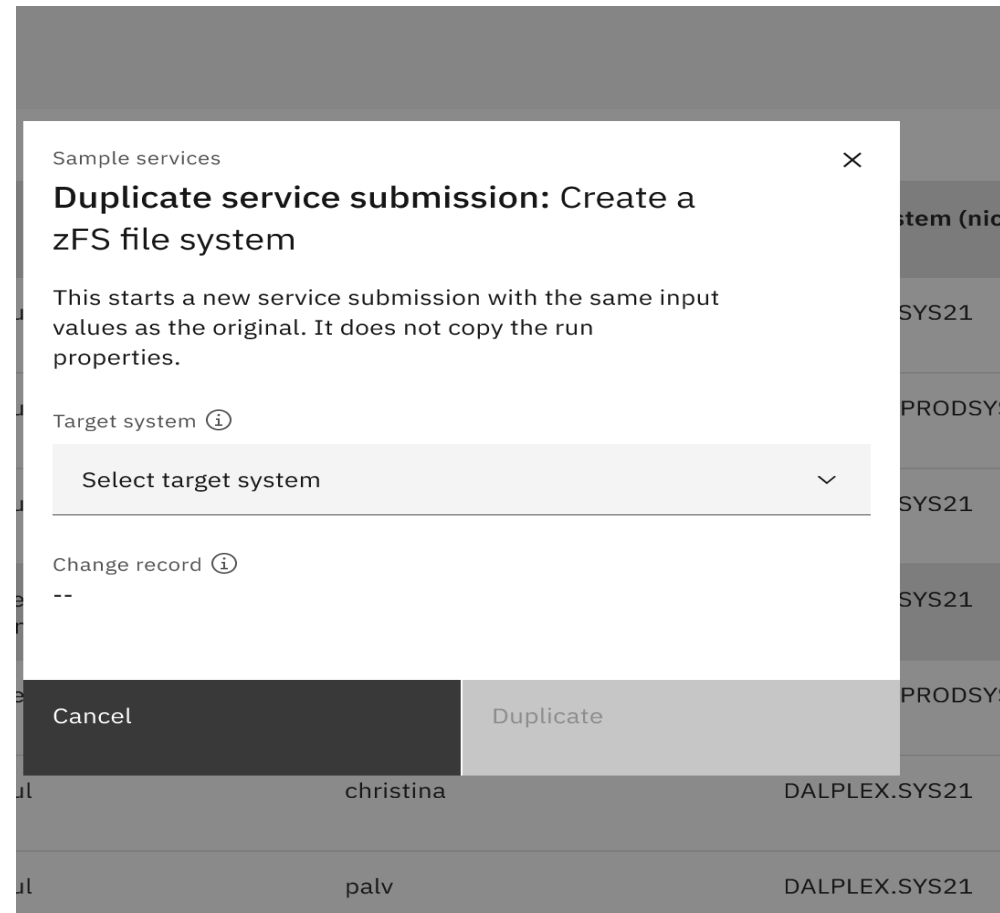
Workflow definition file

create\_dataset.xml ⓘ ⬇️ ⬇️

Variable name	Hard-coded value
allocationType	—
catalogName	—
dataClass	—
encryptFileSystem	—
func_ID	zach_fid
managementClass	—
megabytesPrimaryAllocation	—
megabytesSecondaryAllocation	—
sysplexRwShare	—
volumes	—

# Usage & Invocation

Redesign Service Submission Duplication flow to remove modal to modal transition of actions.



# Interactions & Dependencies

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- Software Dependencies
  - None
- Hardware Dependencies
  - None
- Exploiters
  - None

# Upgrade & Coexistence Considerations

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- None

# Installation & Configuration

- Standard SMP/E installation of the PTF for zMSC 1.3 and the Core, Configuration, and Workflow prerequisite PTFs.

- Initialization

- Optional plug-in must be enabled using [z/OSMF General Settings](#)
- Starts automatically by z/OSMF on subsequent server restarts.
- Can also be disabled using [z/OSMF General Settings](#)
- Enabling/disabling requires a server restart

## Optional Services

Enable All

Capacity Provisioning	<input checked="" type="checkbox"/> Enabled
IBM z/OS Encryption Readiness Technology (zERT) Network Analyzer	<input type="checkbox"/> Disabled
ISPF	<input checked="" type="checkbox"/> Enabled
Incident Log	<input checked="" type="checkbox"/> Enabled
Network Configuration Assistant	<input checked="" type="checkbox"/> Enabled
Resource Monitoring	<input checked="" type="checkbox"/> Enabled
Software Management	<input checked="" type="checkbox"/> Enabled
Storage Management	<input type="checkbox"/> Disabled
Sysplex Management	<input checked="" type="checkbox"/> Enabled
Workload Management	<input checked="" type="checkbox"/> Enabled
z/OS Management Services Catalog	<input type="checkbox"/> Disabled

To disable this function completely, you must restart the z/OSMF server. Before doing so, verify that the function is not enabled in the IZUPRMxx parmlib member, which causes it to become active again when the z/OSMF server is restarted. For greater flexibility, it is recommended that you only use the z/OSMF General Settings page

# Summary

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- The following two initiatives for z/OS Management Services Catalog have been discussed:
  - Two new sample services
  - New functionality:
    - Update a Workflow definition file after user starts to build a service
    - Show/hide inputs while running a service
    - Category management enhancements
    - Re-design of duplicating a submission



# Appendix

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## Publications

- IBM z/OS Management Facility Configuration Guide
- IBM z/OS Management Facility Programming Guide
- Content Solutions page: <https://www.ibm.com/support/z-content-solutions/management-services/>