

z/OS V2.5 IBM Education Assistant

Solution Name: Workflow Deep Search

Solution Element(s): z/OSMF Workflows

July 2021



Agenda

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

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

Objectives

- Explain the purpose of working on z/OSMF Workflows

Overview

- Who (Audience)
 - z/OSMF Workflow users
- What (Solution)
 - z/OSMF Workflow is enhanced to support users to type keywords in the UI and do a 'deep' search against the steps under the workflow instance. The search scope includes the step title, step description, step notes, step instructions, inline template, file template and the steps table columns data. The related steps will be filtered in the steps table.
- Wow (Benefit / Value, Need Addressed)
 - Workflow users can search keywords in workflow step content so that they can quickly locate related steps in workflow instead of having to open every step.

Usage & Invocation – Perform deep search

1. Do “Deep Search” against the steps under the workflow instance.
- 1) Check the “All step content” checkbox and clicks the search button, deep search will be performed. If the checkbox is unchecked, the original search function will be done. When do deep search, the Workflow engine will search all the steps of the current Workflow, return the steps containing the searched keywords and display them on the UI.

The screenshot displays the 'Workflows' application interface. The main header shows 'Workflows' and a breadcrumb 'e0zm100_v2r3 - Workflow_0'. Below this, the 'Workflow Details' section is visible. The 'Workflow Steps' section shows a search for the keyword 'upgrade'. The search results are displayed in a table with columns: State Filter, No. Filter, Title Filter, CalledWorkflow Filter, and Automated Filter. The search results show 4 steps, all in 'In Progress' state. The first step is 'Chapter 1. Migration: Introduction', the second is 'Chapter 2. General migration actions for everyone migrating to z/OS V2R3', and the third is 'Chapter 3. Migration from z/OS V2R2'. The search results are filtered by 'Step content search applied: 'upgrade''. The search button is labeled 'Search' and the 'All step content' checkbox is checked. The search results are displayed in a table with columns: State Filter, No. Filter, Title Filter, CalledWorkflow Filter, and Automated Filter. The search results show 4 steps, all in 'In Progress' state. The first step is 'Chapter 1. Migration: Introduction', the second is 'Chapter 2. General migration actions for everyone migrating to z/OS V2R3', and the third is 'Chapter 3. Migration from z/OS V2R2'. The search results are filtered by 'Step content search applied: 'upgrade''. The search button is labeled 'Search' and the 'All step content' checkbox is checked.

Workflows

e0zm100_v2r3 - Workflow_0

Workflow Details

Workflow Steps

Actions 50 Matches in 24 Steps upgrade Search ☒ All step content ?

No filter applied Step content search applied: 'upgrade'. Clear search

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter
<input type="checkbox"/> In Progress	2	Chapter 1. Migration: Introduction		
<input type="checkbox"/> In Progress	3	Chapter 2. General migration actions for everyone migrating to z/OS V2R3		
<input type="checkbox"/> In Progress	4	Chapter 3. Migration from z/OS V2R2		

Total: 42 Selected: 0

Return to Workflows Refresh Last refresh: Sep 23, 2020, 5:10:48 PM local time (Sep 23, 2020, 9:10:48 AM GMT)

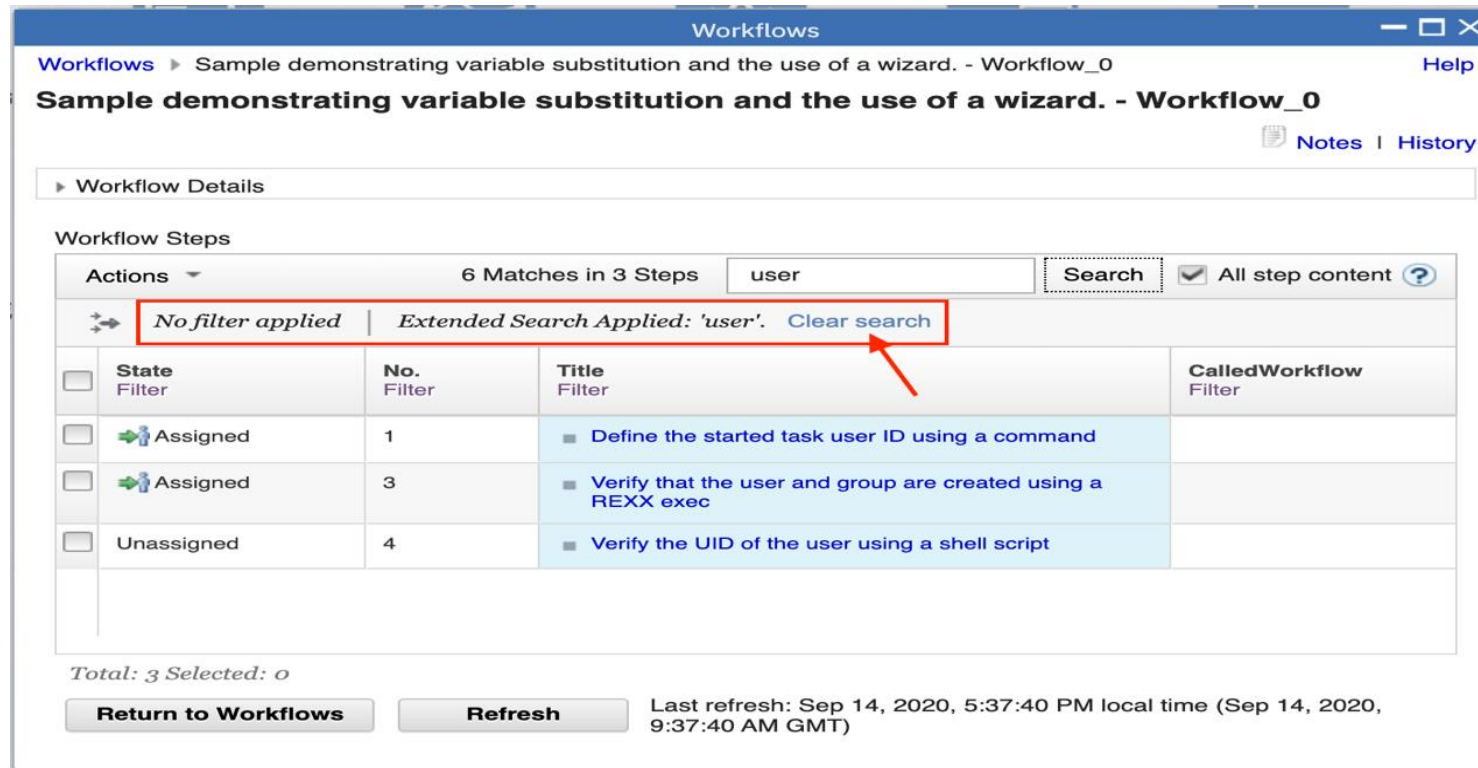
Usage & Invocation – Perform deep search

- 2) Steps that do not match the searched keywords will not be displayed. If there is no matching step, the Workflow engine will return empty, and no steps will be displayed on the UI.
- 3) The search scope includes step title, step description, step notes, step instructions and step templates. The columns information displayed on the Steps table will also be searched.
- 4) For the parent and child step, if the child step contains the keyword, but the parent step does not contain the keyword, the parent step will also be displayed on the UI.
- 5) The number of steps indicates the number of steps that contain the keyword. For the parent and child step, if the child step contains the keyword, but the parent step does not contain the keyword, the parent step will also be displayed on the UI, but the parent step will not be counted in the number of steps.

Usage & Invocation – Perform deep search

2. Perform “Clear Search” to get all the steps of the Workflow instance. There are 3 ways to Clear Search:

1) Click the “Clear search” link in the filter bar.



The screenshot shows the 'Workflows' application interface. At the top, there's a title bar 'Workflows' and a breadcrumb 'Workflows > Sample demonstrating variable substitution and the use of a wizard. - Workflow_0'. Below this is a header 'Sample demonstrating variable substitution and the use of a wizard. - Workflow_0' with links for 'Notes' and 'History'. A 'Workflow Details' section is visible. The main area is titled 'Workflow Steps' and contains a search bar with 'user' entered, a 'Search' button, and a checked 'All step content' option. Below the search bar, a filter bar shows 'No filter applied' and 'Extended Search Applied: 'user''. A red box highlights the 'Clear search' link in the filter bar, with a red arrow pointing to it. Below the filter bar is a table with columns: State Filter, No. Filter, Title Filter, and CalledWorkflow Filter. The table lists three steps: 1 (Assigned), 3 (Assigned), and 4 (Unassigned). At the bottom, there's a 'Total: 3 Selected: 0' summary, a 'Return to Workflows' button, a 'Refresh' button, and a timestamp 'Last refresh: Sep 14, 2020, 5:37:40 PM local time (Sep 14, 2020, 9:37:40 AM GMT)'.

State Filter	No. Filter	Title Filter	CalledWorkflow Filter
<input type="checkbox"/> Assigned	1	■ Define the started task user ID using a command	
<input type="checkbox"/> Assigned	3	■ Verify that the user and group are created using a REXX exec	
<input type="checkbox"/> Unassigned	4	■ Verify the UID of the user using a shell script	

Usage & Invocation – Perform deep search

- 2) Enter an empty value in the search input text box of Steps Table and check “All step content” checkbox, then click the “Search” button.

The screenshot displays the 'Workflows' application window. The breadcrumb path is 'Workflows > e0zm100_v2r3 - Workflow_0'. The main title is 'e0zm100_v2r3 - Workflow_0'. There are links for 'Notes' and 'History'. A 'Workflow Details' section is visible. The 'Workflow Steps' section shows a search bar with the text '50 Matches in 24 Steps'. To the right of the search bar is a 'Search' button and a checkbox labeled 'All step content' which is checked. Red arrows point to the search bar with the text 'Search an empty value', to the 'Search' button with 'Click Search', and to the 'All step content' checkbox with 'Check it'. Below the search bar, it says 'No filter applied' and 'Step content search applied: 'upgrade''. A table lists workflow steps with columns for State, No., Title, CalledWorkflow, and Automated. The table shows three steps, all in 'In Progress' state. At the bottom, there are buttons for 'Return to Workflows' and 'Refresh', and a timestamp: 'Last refresh: Sep 23, 2020, 5:10:48 PM local time (Sep 23, 2020, 9:10:48 AM GMT)'.

Workflows

Workflows > e0zm100_v2r3 - Workflow_0

e0zm100_v2r3 - Workflow_0

Notes | History

Workflow Details

Workflow Steps

Actions 50 Matches in 24 Steps

Search

☒ All step content

No filter applied | Step content search applied: 'upgrade'. Clear search

State Filter	No. Filter	Title Filter	CalledWorkflow Filter	Automated Filter
<input type="checkbox"/> In Progress	2	Chapter 1. Migration: Introduction		
<input type="checkbox"/> In Progress	3	Chapter 2. General migration actions for everyone migrating to z/OS V2R3		
<input type="checkbox"/> In Progress	4	Chapter 3. Migration from z/OS V2R2		

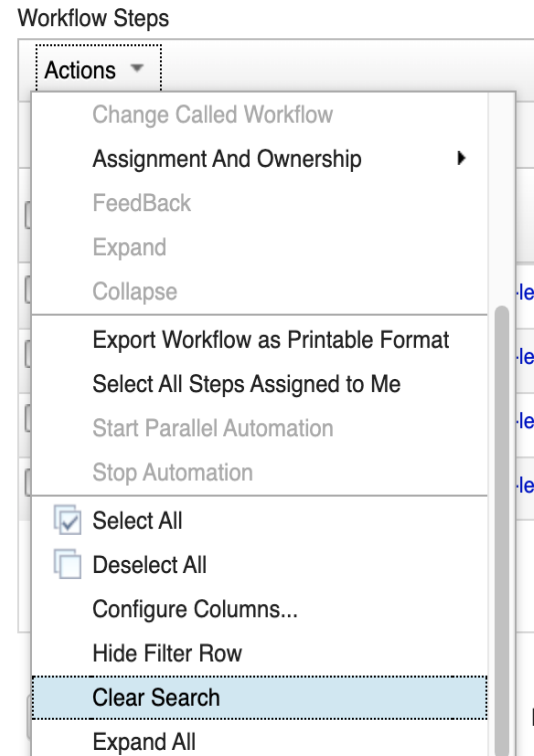
Total: 42 Selected: 0

Return to Workflows Refresh

Last refresh: Sep 23, 2020, 5:10:48 PM local time (Sep 23, 2020, 9:10:48 AM GMT)

Usage & Invocation – Perform deep search

3) Click the “Clear Search” item in the “Actions” menu of the Workflow Steps table.



Usage & Invocation – Highlight results

- 3. Highlight the searched keywords in the “General” tab and the “Perform” tab.
- 1) In the “General” tab, the searched keywords in the step title and step description will be highlighted.

[Workflows](#) ▶ [Sample demonstrating sub-steps and dependencies - Workflow_0](#) ▶ 2. Top-level step 2

Properties for Workflow Step 2. Top-level step 2

General

Details

Dependencies

Notes

Perform

Status

Input Variables

Feedback

Title:

Top-level **step** 2

Description:

This is a top-level **step**.

Usage & Invocation – Highlight results

2) In the “Perform” tab, the searched keywords in the step instructions will be highlighted.

Workflows ▶ Sample demonstrating sub-steps and dependencies - Workflow_0 ▶ 2. Top-level step 2

Properties for Workflow Step 2. Top-level step 2

GeneralDetailsDependenciesNotesPerformStatusInput VariablesFeedback

➡ Review Instructions

Review Instructions

Review and confirm the instructions provided below have been performed complete.

Instructions:

Examine this sample **step**

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Interactions & Dependencies

- Software Dependencies
 - None.
- Hardware Dependencies
 - None.
- Exploiters
 - z/OSMF Software Management and etc.

Upgrade & Coexistence Considerations

- To exploit this solution, all systems in the Plex must be at the new z/OS level:
 - No.
- List any toleration/coexistence APARs/PTFs.
 - None.
- List anything that doesn't work the same anymore.
 - None.

Installation & Configuration

- None.

Summary

- The following z/OS V2R5 z/OSMF Workflows item has been explained:
 - Workflow deep search

Appendix

- Book updates
 - None