## z/OS V2.5 IBM Education Assistant

Solution Name: Support saving job output in z/OSMF Workflows

Solution Element(s): z/OSMF Workflows

July 2021





# Agenda

- Trademarks
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- Overview
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#### Trademarks

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

# Objectives

• Explain the purpose of working on z/OSMF Workflows

#### Overview

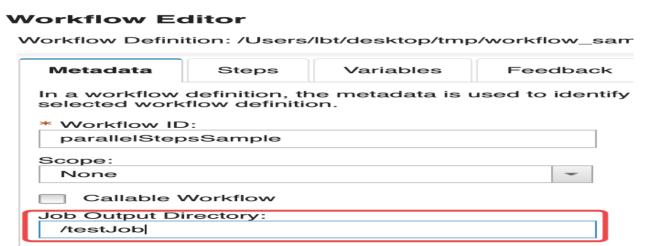
- Who (Audience)
  - z/OSMF Workflows users
- What (Solution)
  - z/OSMF Workflows is enhanced to support to save job output files of the workflow instance to the z/OS Unix file directory.
    - Job output files: The z/OS Unix files to save the content of different job spool files, each job output file corresponds to a job spool file
- Wow (Benefit / Value, Need Addressed)
  - As a workflow user, I can save the job output files of a workflow to the z/OS Unix file directory, so
    that the user can have a permanent record of the work that was done in the workflow.

### Usage & Invocation — Set "jobsOutputDirectory" in workflow definition

• New optional element "jobsOutputDirectory" is added in workflow schema file to indicate the default Unix file directory where to save the job output files.

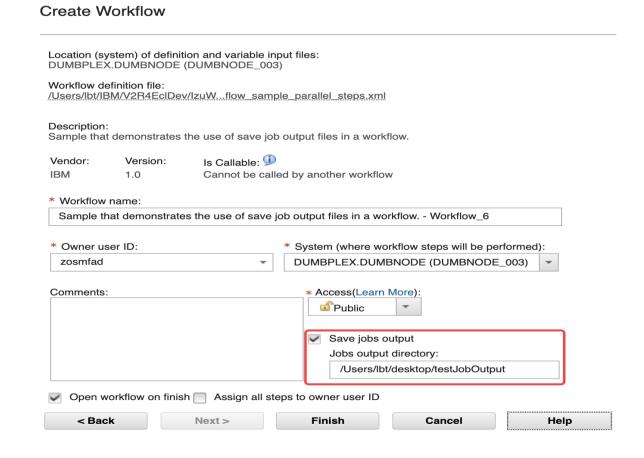
```
<xs:complexType name="workflowInfoType">
20
          <xs:sequence>
              <!-- Workflow contains parallel steps or not -->
              <xs:element name ="parallelSteps" type="workflowBooleanType" default="false" minOccurs="0" maxOcc</pre>
              <!-- Workflow information is not optional -->
              <xs:element name="workflowID" type="workflowIDType"/>
              <!-- Workflow Default Name is optional -->
              <xs:element name="workflowDefaultName" type="nonNullString" min0ccurs="0"/>
              <!-- Workflow description. Displayed on screen. -->
              <xs:element name="workflowDescription" type="nlsString"/>
              <!-- Workflow XML document version. Any text. Release/Feature/bug
              <xs:element name="workflowVersion" type="nonNullString"/>
              <!-- "vendor" can be anything for a non-configuration workflow. -->
              <xs:element name="vendor" type="nonNullString"/>
              <xs:choice>...
              <!-- Jobs output directory is optional -->
              <xs:element name="jobs0utputDirectory" type="nonNullString" min0ccurs="0" max0ccurs="1"/>
      </xs:complexType>
```

It is also supported in Workflow Editor.



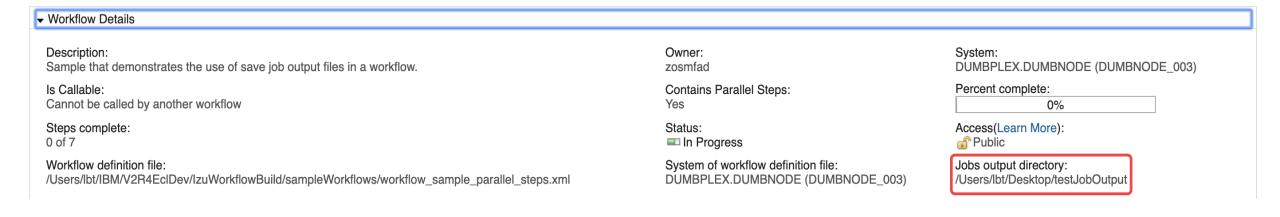
#### Usage & Invocation — Create workflow with "jobsOutputDirectory"

- New field "Save jobs output" is added in "Create Workflow" dialog.
- The checkbox is unchecked by default if "jobsOutputDirectory" is not defined in the workflow definition file.



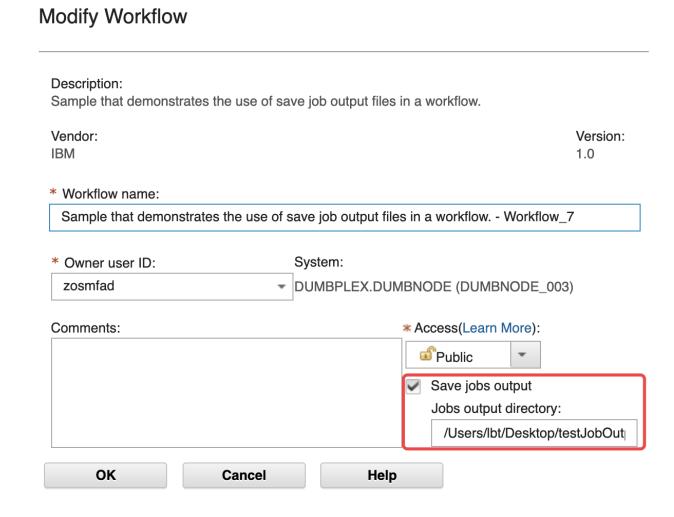
### Usage & Invocation — View "JobsOutputDirectory"

■ The jobs output directory is displayed in Workflow Details panel.



#### Usage & Invocation — Modify "jobsOutputDirectory" in workflow

■ The jobs output directory can be modified in the "Modify Workflow" dialog.



#### Usage & Invocation — Save "job output files" under the directory

Jobs output directory/files naming convention

{jobs output directory}/{workflow name}/{job id}-{job name}-{DD name}-{job file id} YYYY-MM-dd HH-mm-ss

Example:

```
The directory to save job output files:
/u/IBMUSER/jobFiles/Sample save job files
The directory is made up of "user-specified path" and "workflow name"
Filename ^
  JOB00062-IZUWF04-JESJCL-3 2020-01-15 10-37-14
  JOB00062-IZUWF04-JESMSGLG-2 2020-01-15 10-37-14. The job output file name:
                                               "jobid"-"jobname"-"DD name"-"jobfile id" YYYY-MM-dd HH-mm-ss
  JOB00062-IZUWF04-JESYSMSG-4 2020-01-15 10-37-14
  JOB00062-IZUWF04-STDERR-106 2020-01-15 10-37-14
                                                    Job output files for the
  JOB00063-IZUWF01-JESJCL-3 2020-01-15 10-40-18
                                                    step "subStep1"
  JOB00063-IZUWF01-JESMSGLG-2 2020-01-15 10-40-18
  JOB00063-IZUWF01-JESYSMSG-4 2020-01-15 10-40-18
  JOB00064-IZUWF02-JESJCL-3 2020-01-15 10-41-50
                                                     Job output files for the
  JOB00064-IZUWF02-JESMSGLG-2 2020-01-15 10-41-50
                                                    step "subStep2"
  JOB00064-IZUWF02-JESYSMSG-4 2020-01-15 10-41-50
```

## Usage & Invocation — Rest API update

• Rest API update: a new parameter "jobsOutputDirectory" is added in the response.

POST	/zosmf/workflow/rest/{version}/workflows	Create a workflow
GET	/zosmf/workflow/rest/{version}/workflowDefinition	Retrieve a workflow definition
GET	/zosmf/workflow/rest/{version}/workflows/{workflowKey}	Get the properties of a workflow

jobsOutputDirectory (string, optional): Name of the UNIX directory that is used for automatically saving job spool files from the workflow.,

## Interactions & Dependencies

- Software Dependencies
  - None.
- Hardware Dependencies
  - None.
- Exploiters
  - CICS and others

## 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:
  - Support saving job output in z/OSMF Workflows

# Appendix

- Book updates
  - z/OSMF Programming Guide