Agenda

z/OSMF Guild Meeting 14 - January 18th, 2023

z/OSMF Requests for Enhancements(RFEs) & Ideas Portal

Li Qi

z/OSMF Product Owner & Master Inventor, IBM

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NOTICE

This is a public conversation and is NOT protected by any non-disclosure agreement.

Please keep all topics publicly available.

If you would like more information about joining sponsor user programs please reach out to the steering committee.

Includes planned future deliverables

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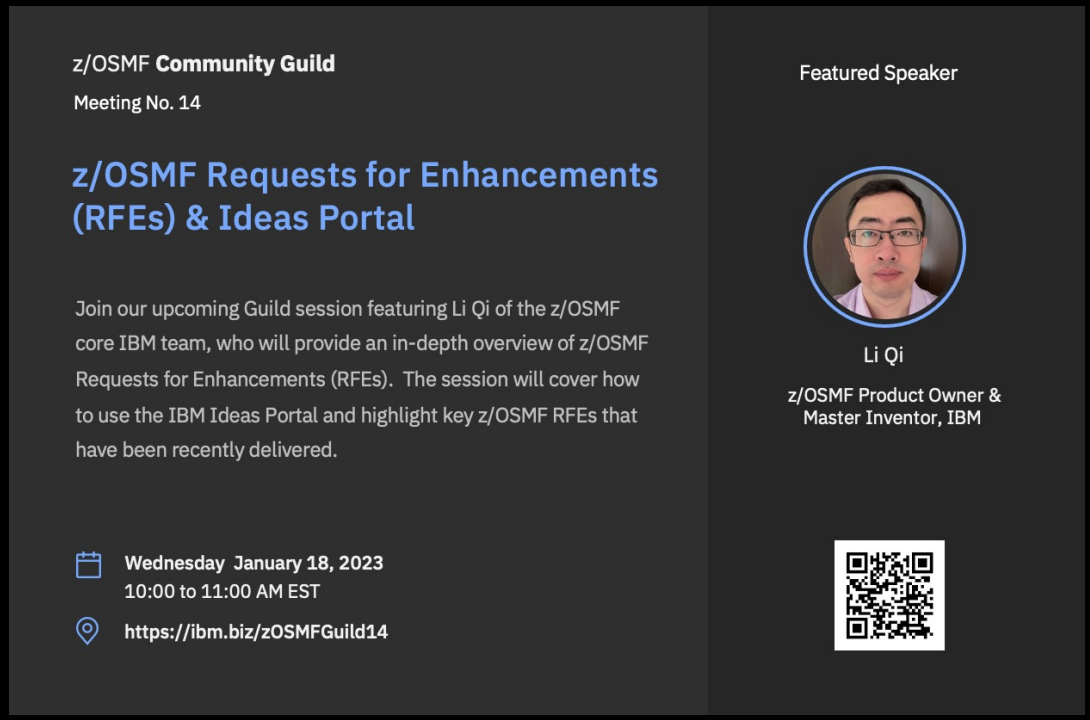
Please reach out to us with any questions or concerns.

Guild Session 14 Website

https://ibm.biz/zOSMFGuild14

Meeting Details

- Agenda
- Recordings
- Discussion Forum
- Presentation
- Poll
- Additional Resources

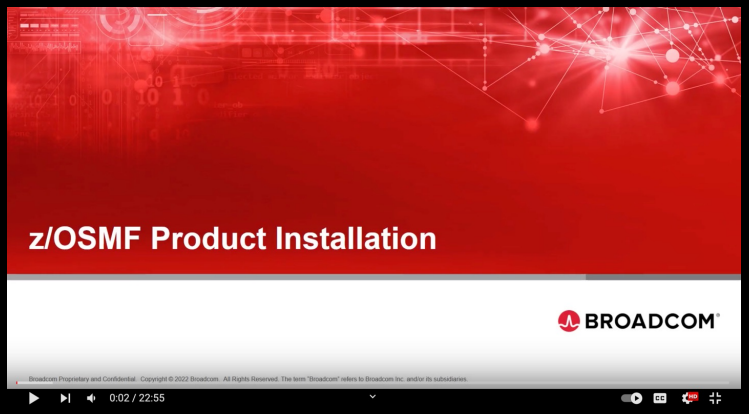


Statements regarding IBM future direction and intent are subject to change or withdrawal, and represent goals and objectives only

z/OSMF News

- Community Blog Article by Fiona King: [Why z/OSMF may be the right tool for your modernization toolbox]

- Installing a Broadcom Product with z/OSMF [Broadcom z/OSMF Install YouTube Video]



What's Next!

ibm.biz/zOSMFGuildHome
Guild Home Page for access to all materials presented during the Guild

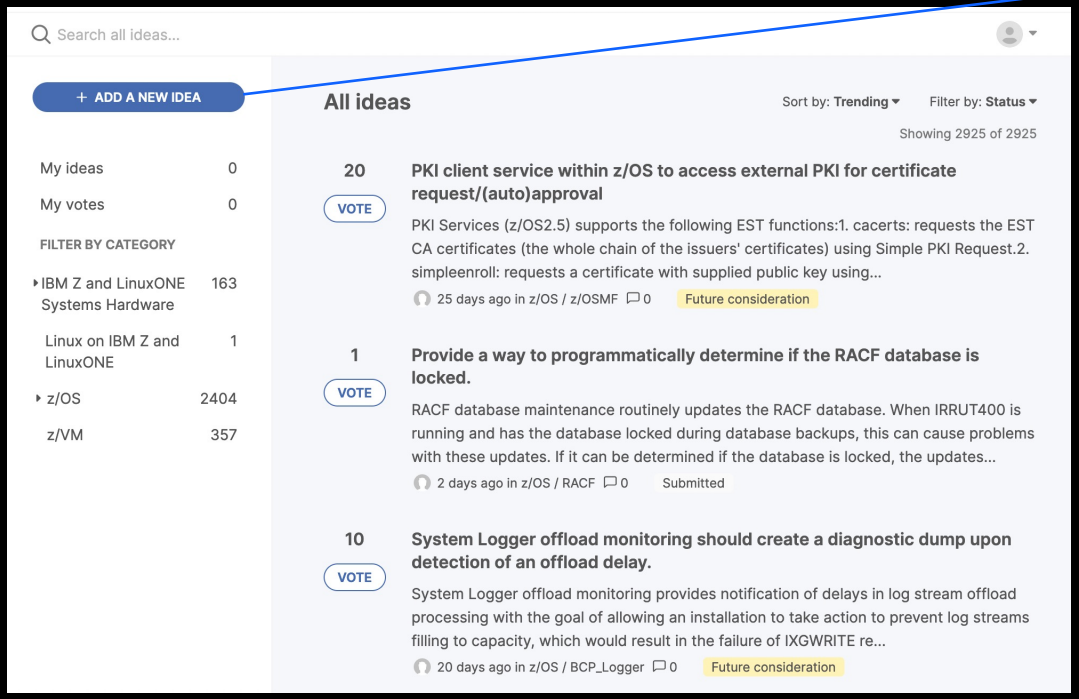
ibm.biz/zOSMFCommunity
Join our Community page for updates and new content

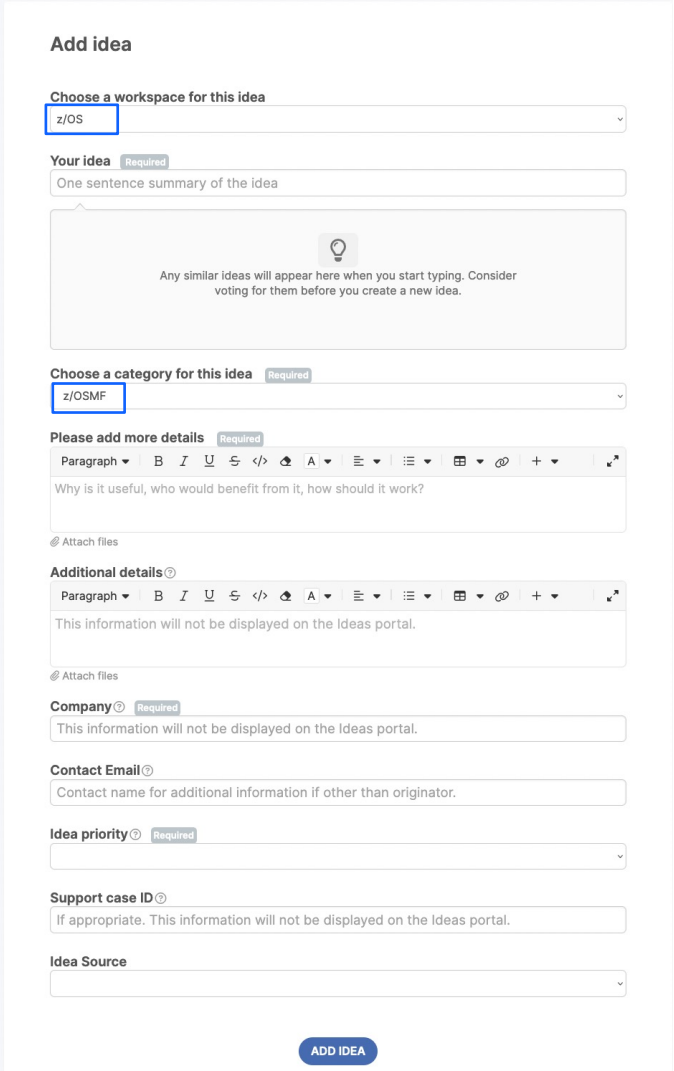
Agenda

- How to open and vote z/OSMF RFEs
- Highlights of the recent z/OSMF RFE deliveries

How to Open z/OSMF RFEs – You Speak, We Listen!

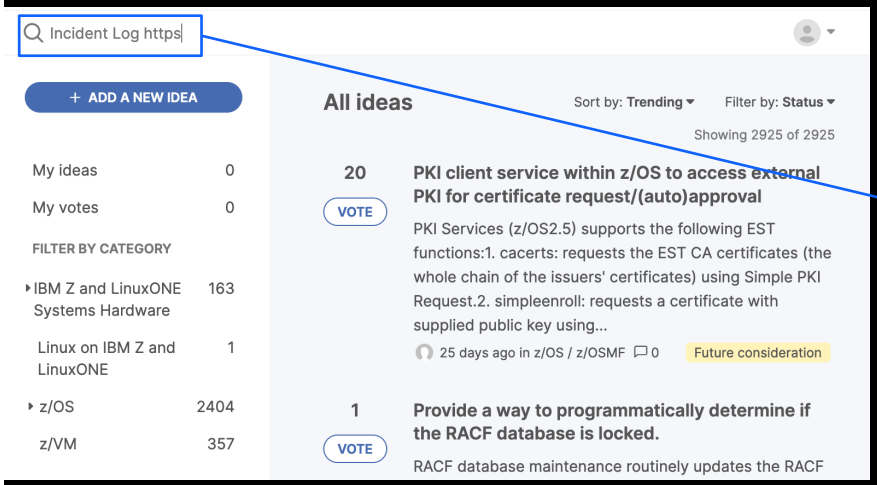
[IBM Z Hardware and Operating Systems Ideas portal]



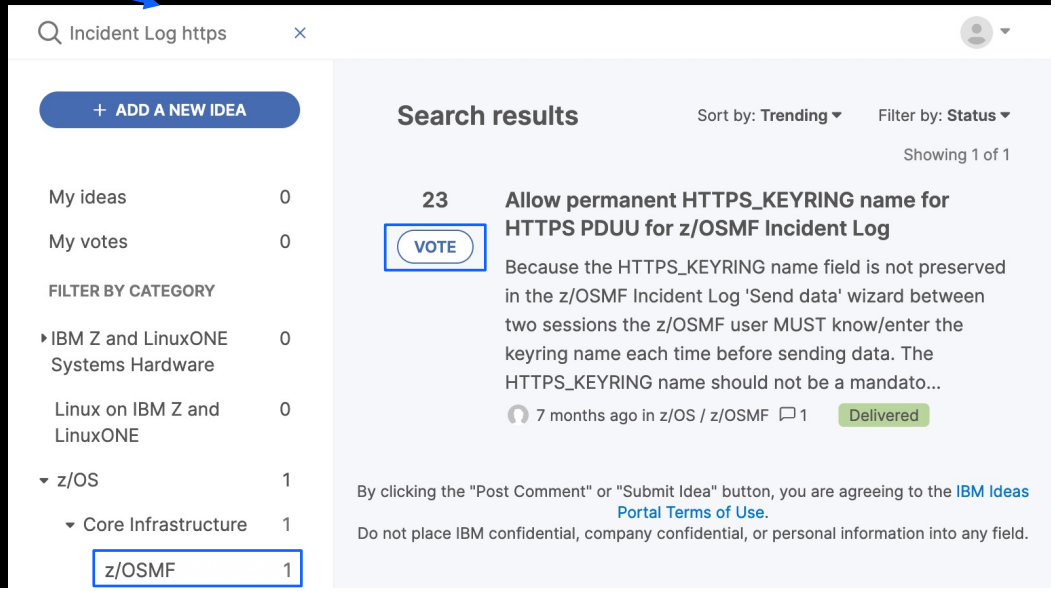


How to Vote z/OSMF RFEs
– Increase the chances IBM takes the action!

[IBM Z Hardware and Operating Systems Ideas portal]



- If the details of your use case are different from the raiser, join the discussion by adding a comment
- Click Subscribe to be notified of when the status of the Idea changes



Agenda

- How to open and vote z/OSMF RFEs
- Highlights of the recent z/OSMF RFE deliveries

Highlights of the Recent z/OSMF RFE Deliveries

- Workflow
  - Store Job execution history information (APAR PH21919, 2020)
  - Increase the maximum # of workflows (APAR PH39153, 2022)
  - Provide file selection list to choose a workflow definition file (APAR PH28532, 2020)
  - Provide JCL editor capabilities in Workflow Editor (**29 votes**, APAR PH24190, 2020)
  - Show the location of the workflow definition file (**19 votes**, 3 RFEs, APAR PH21919, 2020)
  - Provide a column of date created (**10 votes**, 2 RFEs, APAR PH24190, 2020)
- Incident Log
  - Transfer diagnostic data to IBM HTTPS server (**106 votes**, APAR PH39848, 2022)
  - Allow permanent HTTPS_KEYRING name (**23 votes**, APAR PH47683, 2022)
- z/OS Operator Console
  - Support for WTOR and HOLD messages (2 RFEs, APAR PH30881, 2020)

Highlights of the Recent z/OSMF RFE Deliveries (cont.)

- Sysplex Management
  - Allow export of CFRM policy to CSV-format file(**11 votes**, APAR PH44343, 2022)
- Web ISPF
  - Allow to define global settings (APAR PH34102, 2021)
- Security Configuration Assistant
  - Validate security for z/OSMF Nucleus and SCA before first starting z/OSMF (**17 votes**, APAR PH45350, 2022)
- Desktop
  - Update z/OSMF password (**61 votes**, APAR PH34912, 2021)
- z/OSMF Log Files
  - View the z/OSMF log files through the UI (**12 votes**, APAR PH16076&PH21896, 2020)

Workflow
- Support saving jobs output in user defined directory

Problem Statement / Need Addressed / User Stories

Today some customers want to track the work that was done in a workflow instance outside the workflow “user interface”, but there is no way for the workflow owner to track the job output files associated with the instance outside the workflow “user interface”. What’s more, after a workflow instance is deleted, it’s hard for the workflow users to track what was done in the workflow instance.

Solution

Workflow supports to save the jobs output files to the z/OS Unix file directory.

Benefit / Value

As a z/OSMF workflow owner, I can save the jobs output files of the workflow instance to the z/OS Unix file directory, so that I can have a permanent record of the work that was done in a workflow.

Workflow
- Support saving jobs output in user defined directory (cont.)

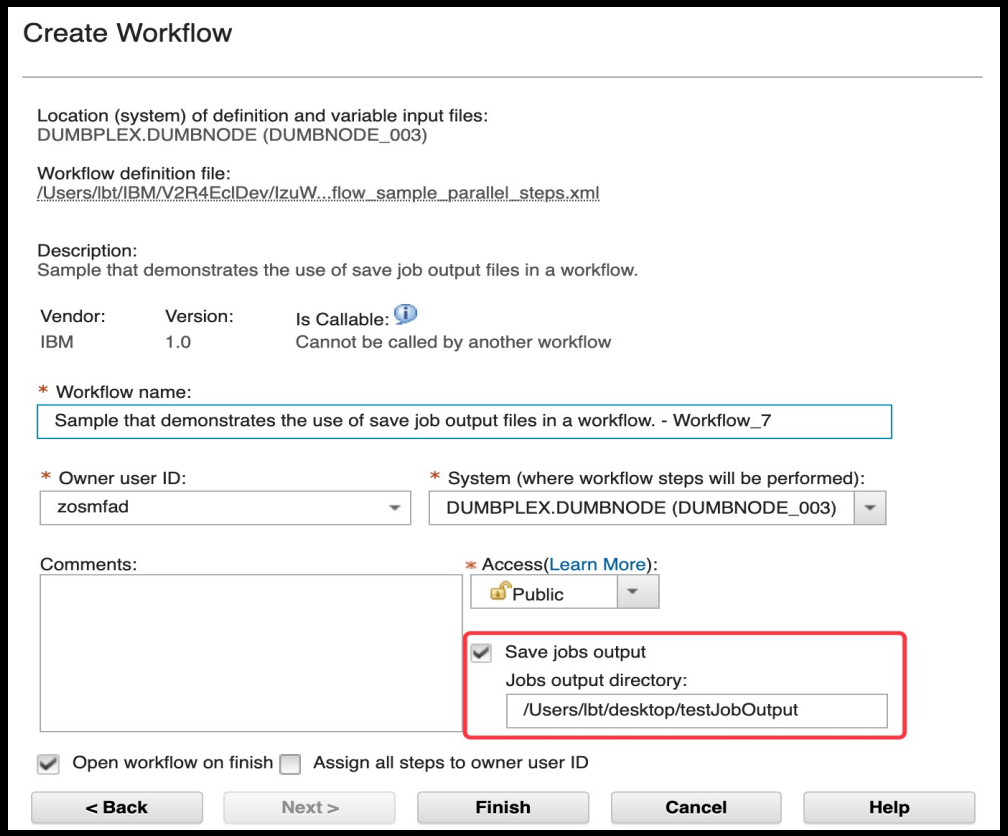
- New optional element "*jobsOutputDirectory*" is added in workflow schema file to indicate the default Unix file directory where to save the job output files.
- It is also supported in Workflow Editor.

```
<xs:complexType name="workflowInfoType">
    <xs:sequence>
        <!-- Workflow contains parallel steps or not -->
        <xs:element name ="parallelSteps" type="workflowBooleanType" default="false" minOccurs="0" maxOccurs="1"/>
        <!-- Workflow information is not optional -->
        <xs:element name="workflowID" type="workflowIDType"/>
        <!-- Workflow Default Name is optional -->
        <xs:element name="workflowDefaultName" type="nonNullString" minOccurs="0"/>
        <!-- Workflow description.  Displayed on screen. -->
        <xs:element name="workflowDescription" type="nlsString"/>
        <!-- Workflow XML document version. Any text. Release/Feature/bug
             number if applicable. Displayed on workflow info screen. -->
        <xs:element name="workflowVersion" type="nonNullString"/>
        <!-- "vendor" can be anything for a non-configuration workflow. -->
        <xs:element name="vendor" type="nonNullString"/>
        <xs:choice>
            <!-- A (software) Configuration workflow has additional product info  -->
            <xs:element name="Configuration" type="configType"/>
            <!-- A provisioning workflow has additional product info relating to provisioning -->
            <xs:element name="Provisioning" type="provisioningType"/>
            <!-- A general workflow could be anything. For example, a
                 new-hire check-list, an apple pie recipe, or driving directions. -->
            <xs:element name="General" type="emptyType" minOccurs="0"/>
        </xs:choice>
        <!-- Jobs output directory is optional -->
        <xs:element name="jobsOutputDirectory" type="nonNullString" minOccurs="0" maxOccurs="1"/>
    </xs:sequence>
</xs:complexType>
```

```
<workflowInfo>
    <workflowID>simpleSample</workflowID>
    <workflowDefaultName>Default Workflow Name</workflowDefaultName>
    <workflowDescription>A simple workflow with only one step</workflowDescription>
    <workflowVersion>1.0</workflowVersion>
    <vendor>IBM</vendor>
    <General/> <!-- This element is optional. It is empty, by default. -->
    <jobsOutputDirectory>/u/IBMUSER/jobFiles</jobsOutputDirectory>
</workflowInfo>
```

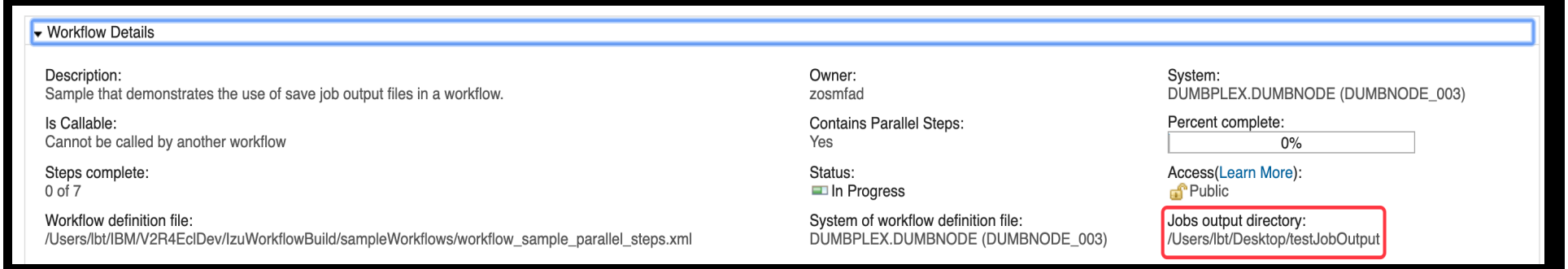
Workflow
- Support saving jobs output in user defined directory (cont.)

- 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.



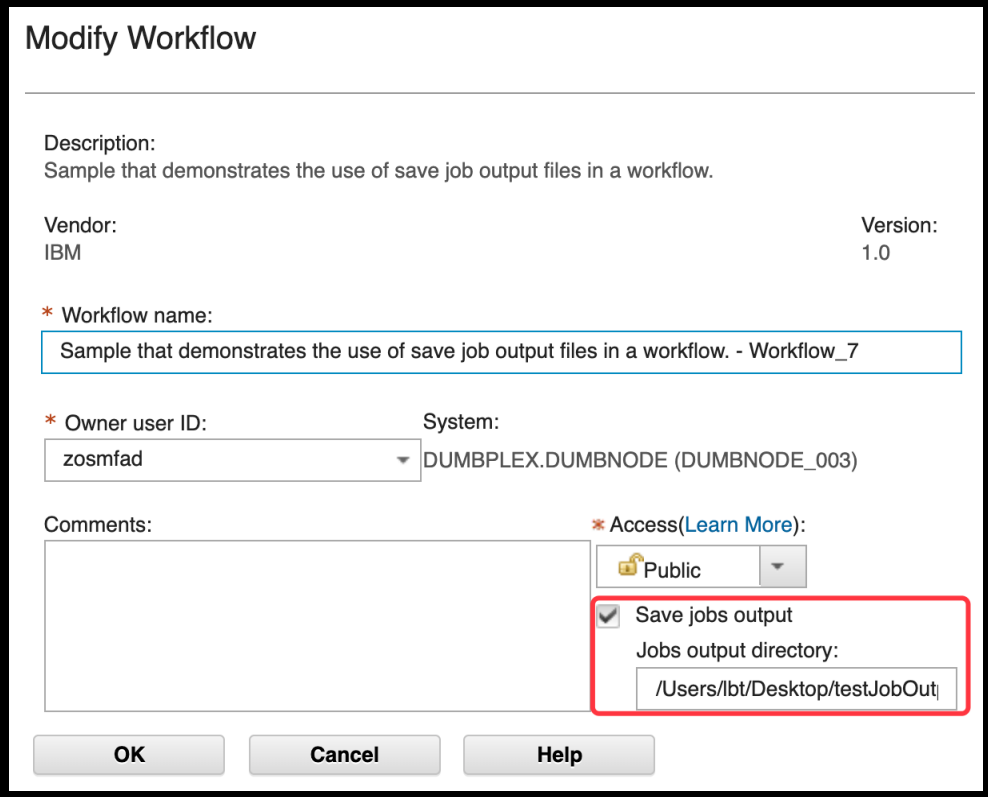
Workflow
- Support saving jobs output in user defined directory (cont.)

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



Workflow
- Support saving jobs output in user defined directory (cont.)

- The jobs output directory can be modified in the “Modify Workflow” dialog.

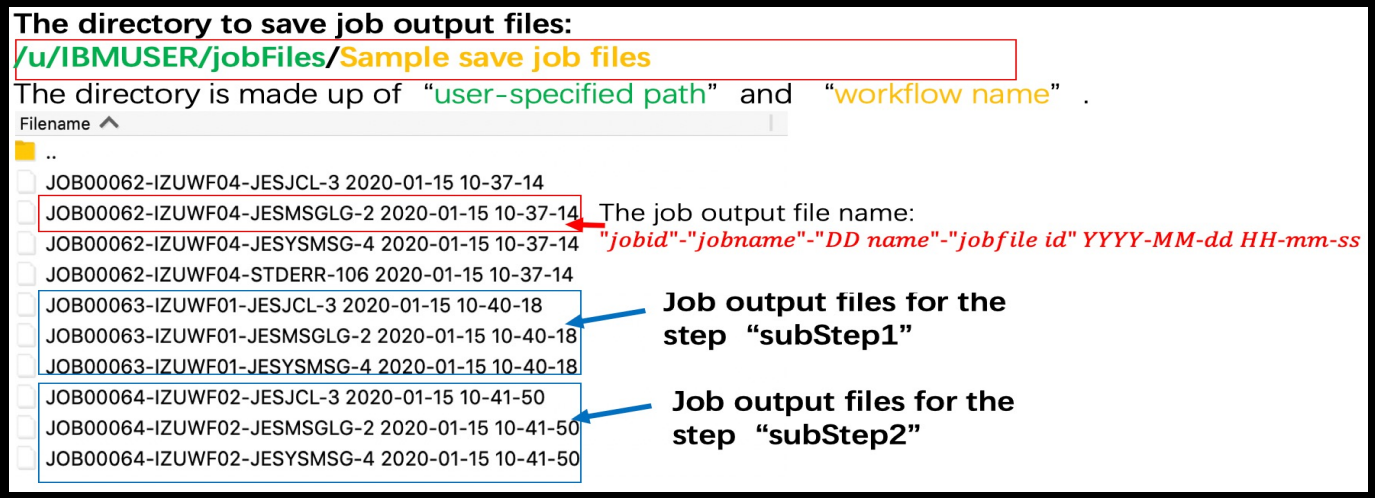


Workflow
- Support saving jobs output in user defined directory (cont.)

- 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:



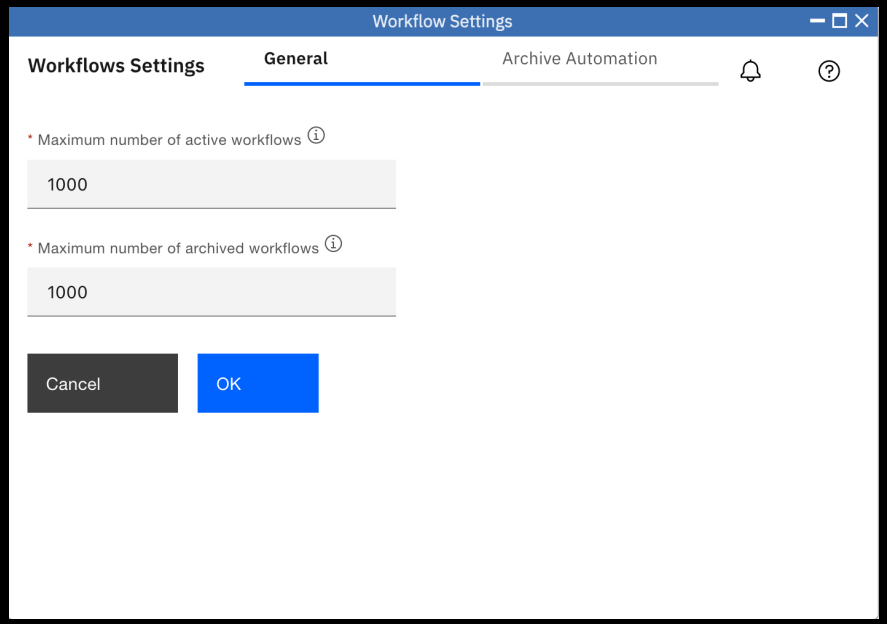
Workflow
- Support saving jobs output in user defined directory (cont.)

- New optional parameter “jobsOutputDirectory” is supported in the following Rest APIs.

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

Workflow

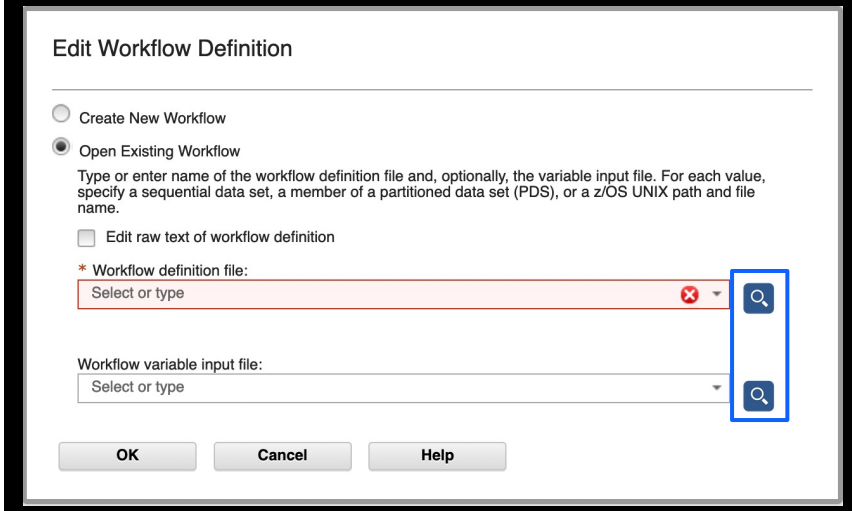
- Extends the maximum number of active or archived workflows to 1000



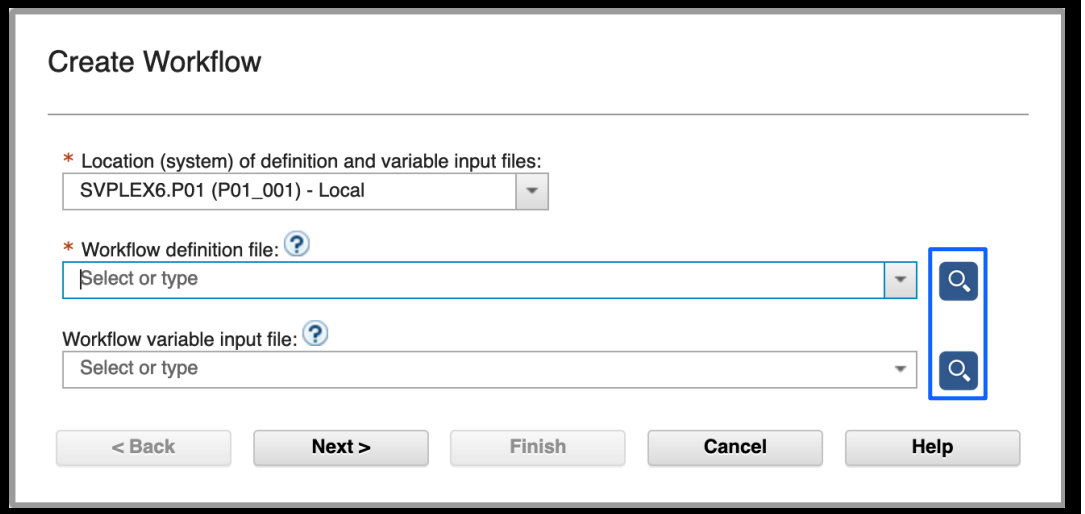
- The maximum number of active or archived workflows can be specified in Workflow Settings panel. An integer value from 200 to 1000 can be specified.

Workflow
- Type ahead search

- The workflow UI is changed to support typing in workflow definition and workflow variable input file with Angular based type ahead search
  - The type ahead search icon is added to the Workflows and Workflow Editor
  - The type ahead search is only available on local system. If the system is not local, the search icon is not displayed.



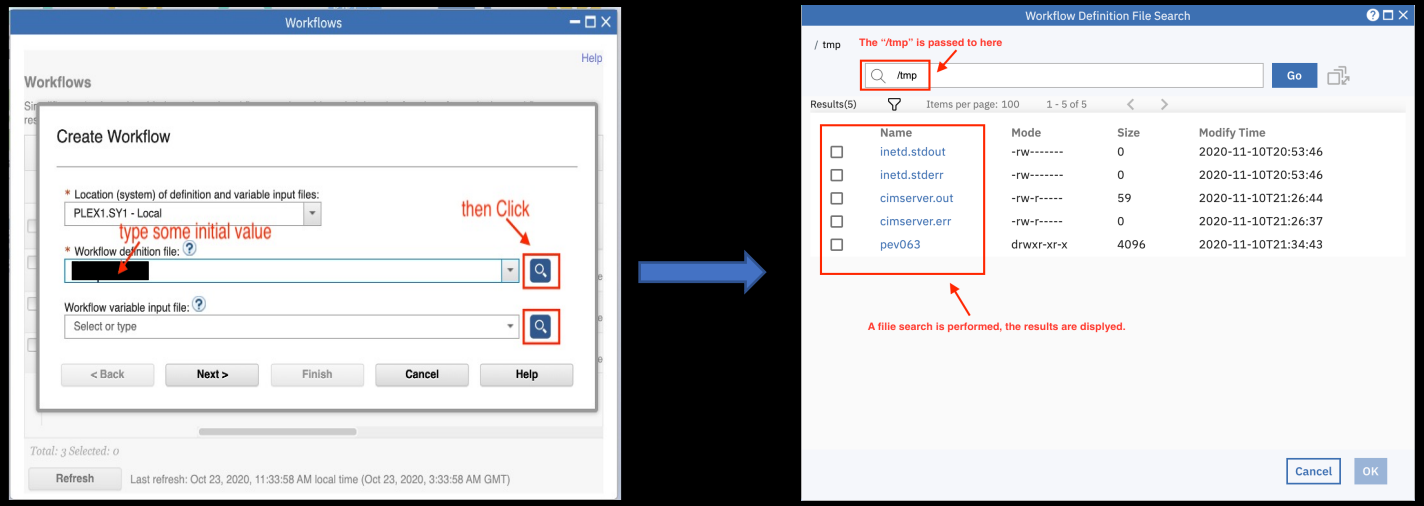
Edit Workflow Definition dialog



Create Workflow dialog

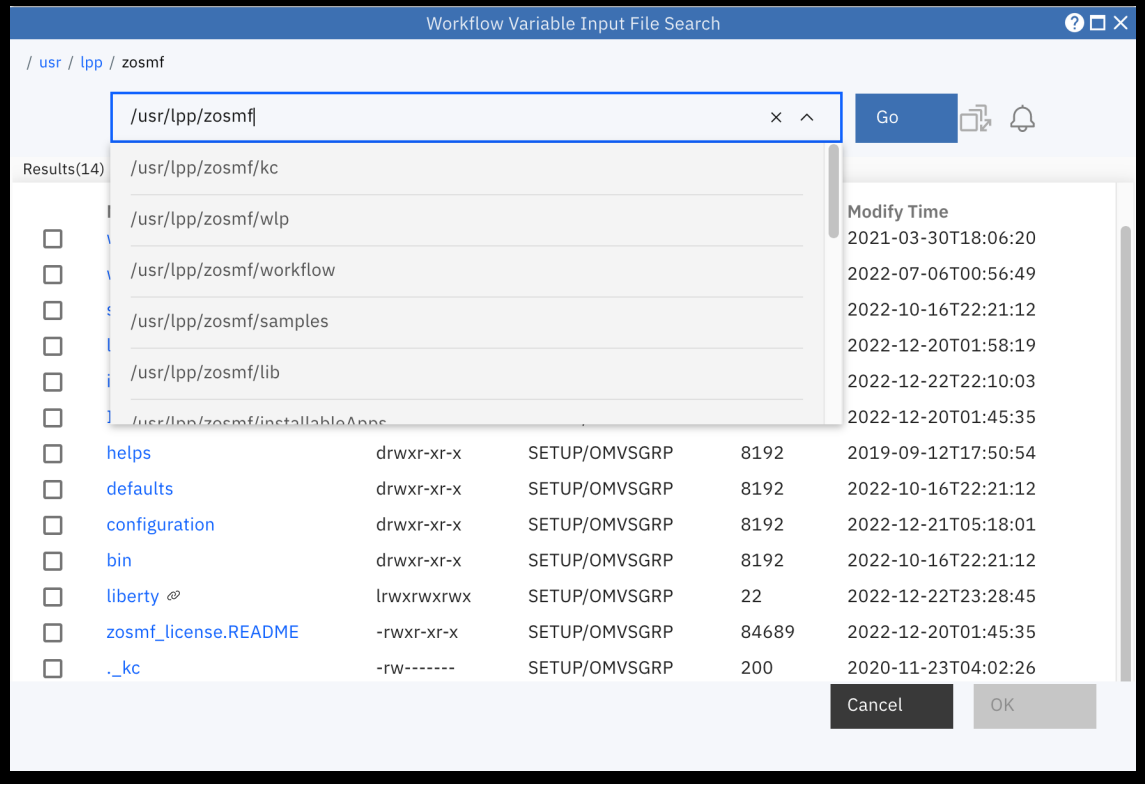
Workflow
- Type ahead search (cont.)

- If the user types some initial value in the input box, then clicks the search icon, the initial value will be passed to the path selector window, and a file search will be performed automatically. If the user doesn't input any initial value in the input box, no value will be passed to the path selector window, and the file search will not be performed.



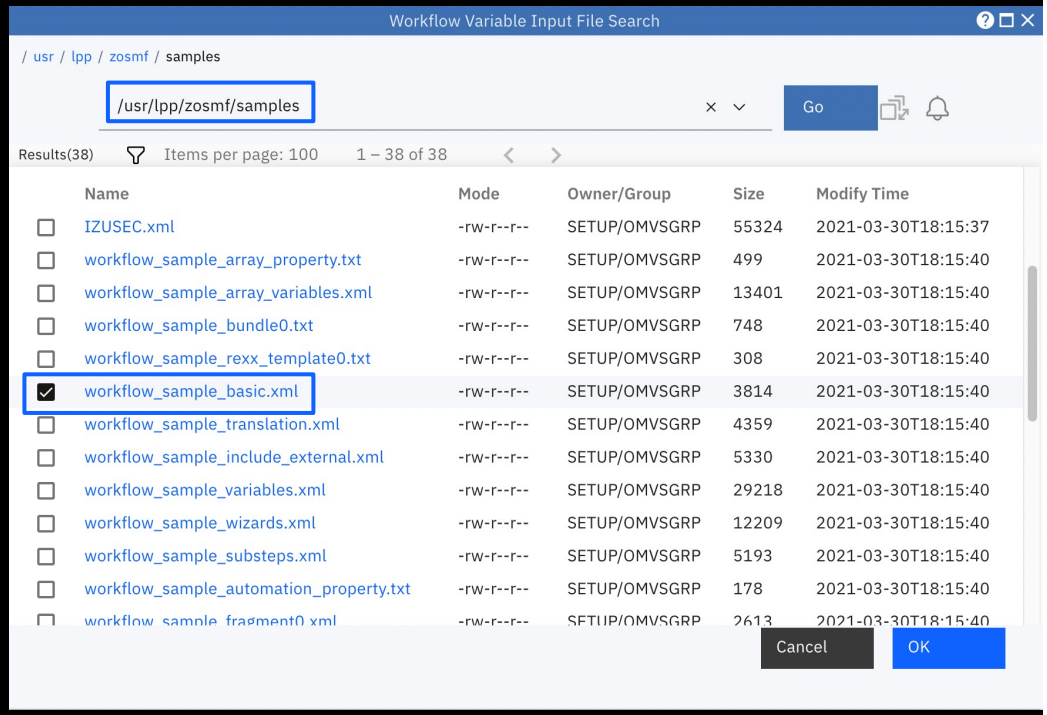
Workflow
- Type ahead search (cont.)

- The user can also type something in the input box. The content of the search input box dropdown list will be changed according to the input.



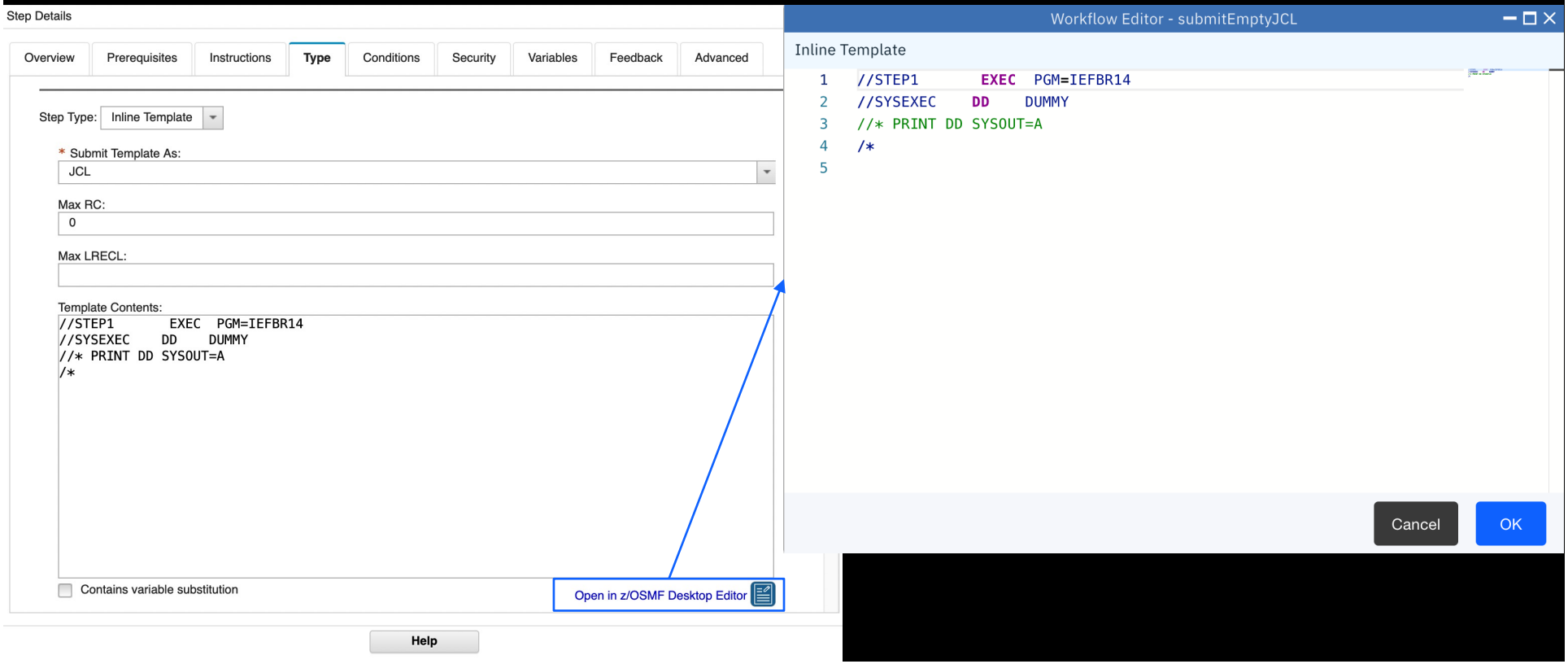
Workflow
- Type ahead search (cont.)

- When the user selects one path from the dropdown list and then clicks “Go” button, the related paths will be displayed on the UI, then the user can select one of them and click “OK” button, the path will be returned and displayed on the Workflow UI. The search dialog will be closed.



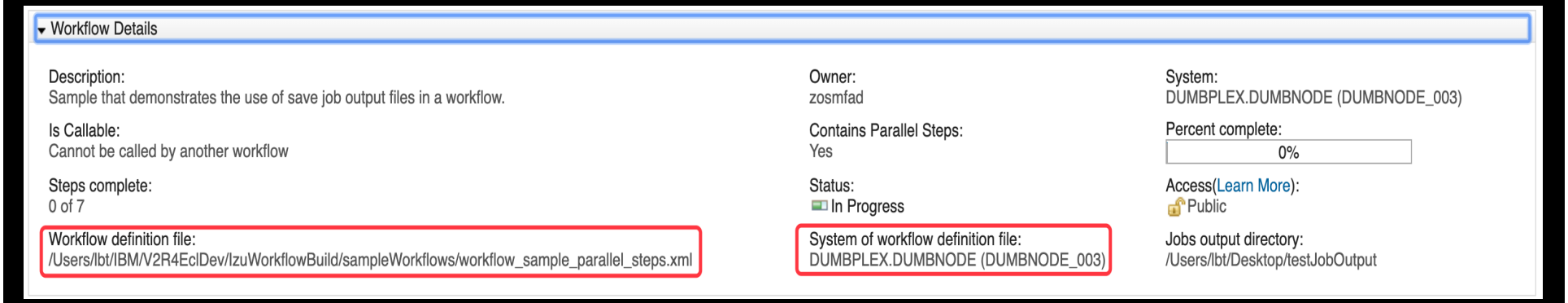
Workflow Editor
- Using z/OSMF Desktop Editor

- Inline template and file template can be opened in z/OSMF Desktop Editor



Workflow
- Display workflow definition name in workflow details panel

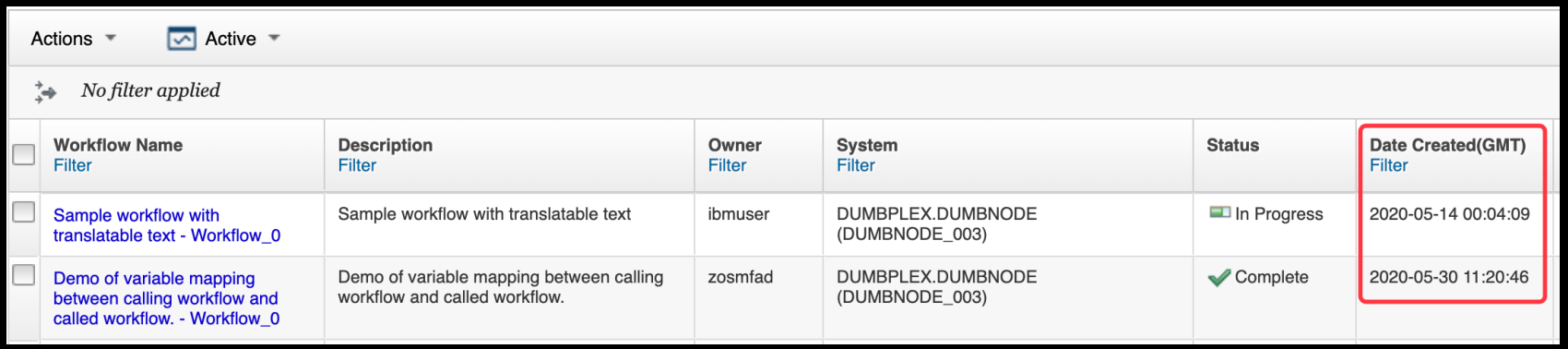
- “Workflow definition file” and “System of workflow definition file” are displayed in Workflow Details panel.



Workflow

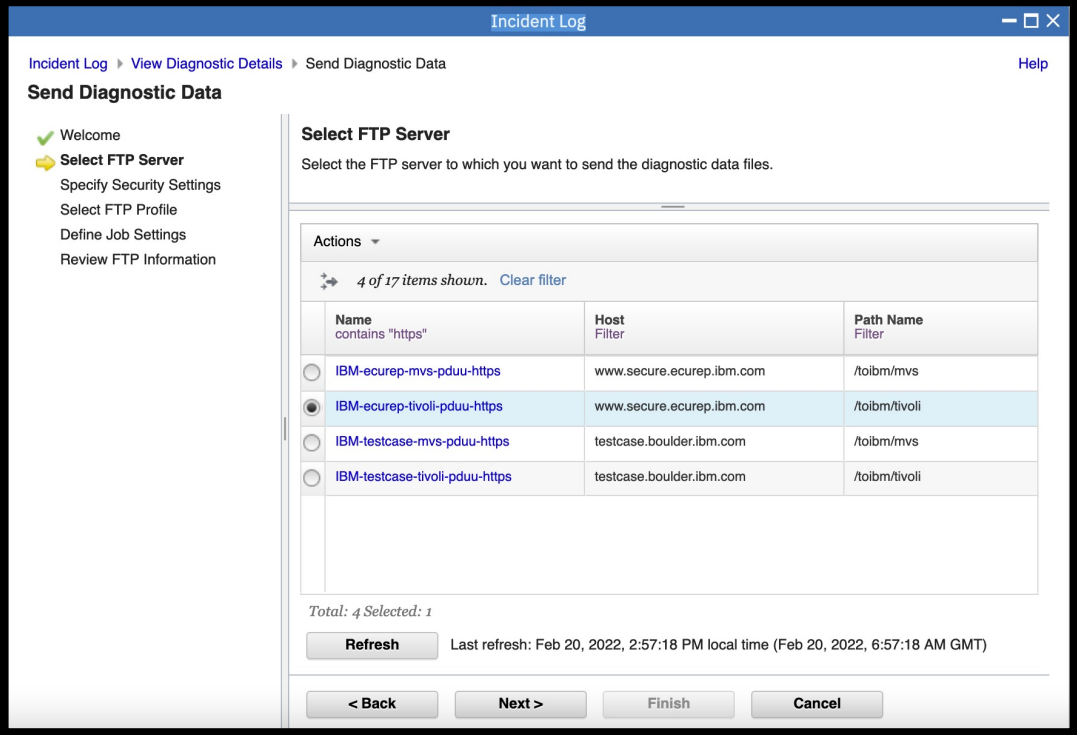
- View the creation date and time of the workflow

- Workflow user can view the creation time of the workflow from the Workflows page.



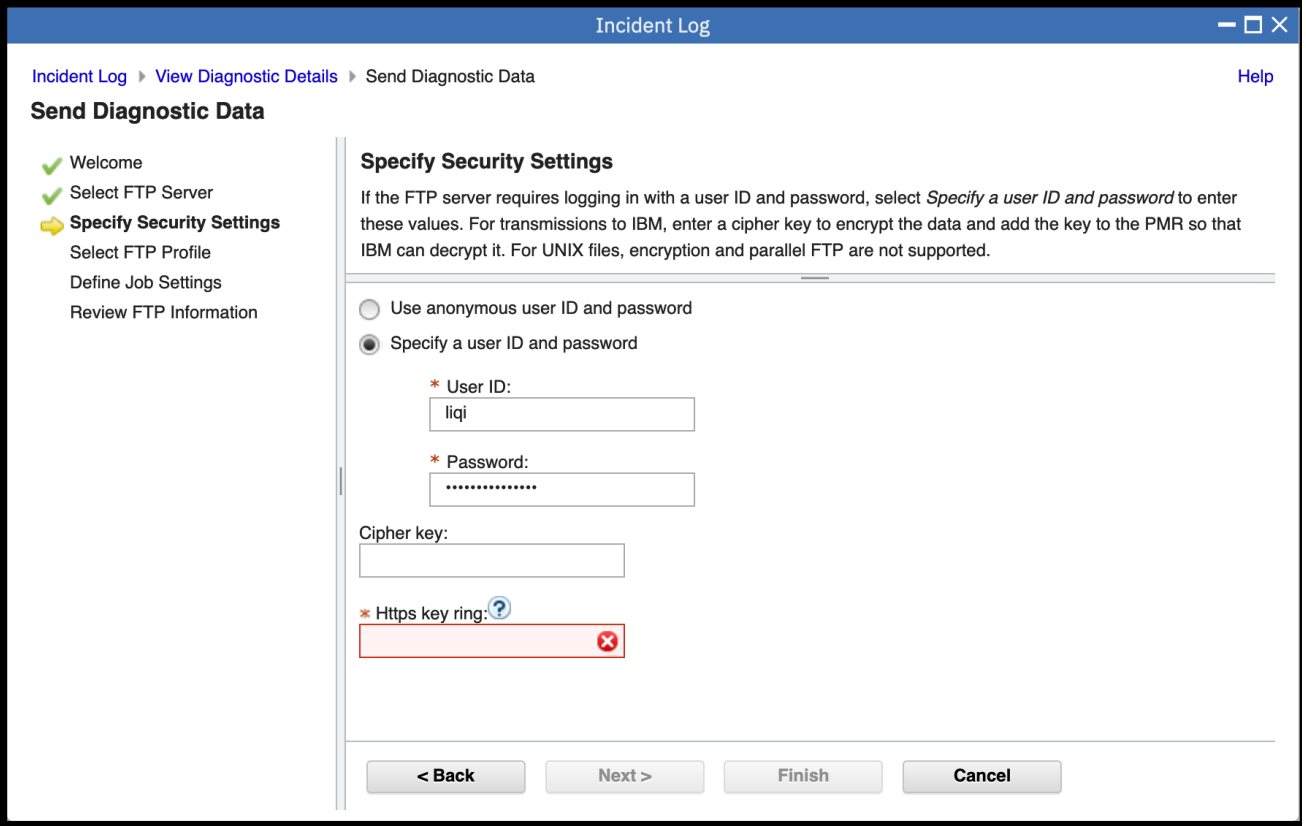
Incident Log
- PDUU HTTPS Support

- Incident Log is enhanced to support sending diagnostic data to IBM through HTTPS using PDUU HTTPS options. The following 4 new IBM HTTPS server entries are added by default.



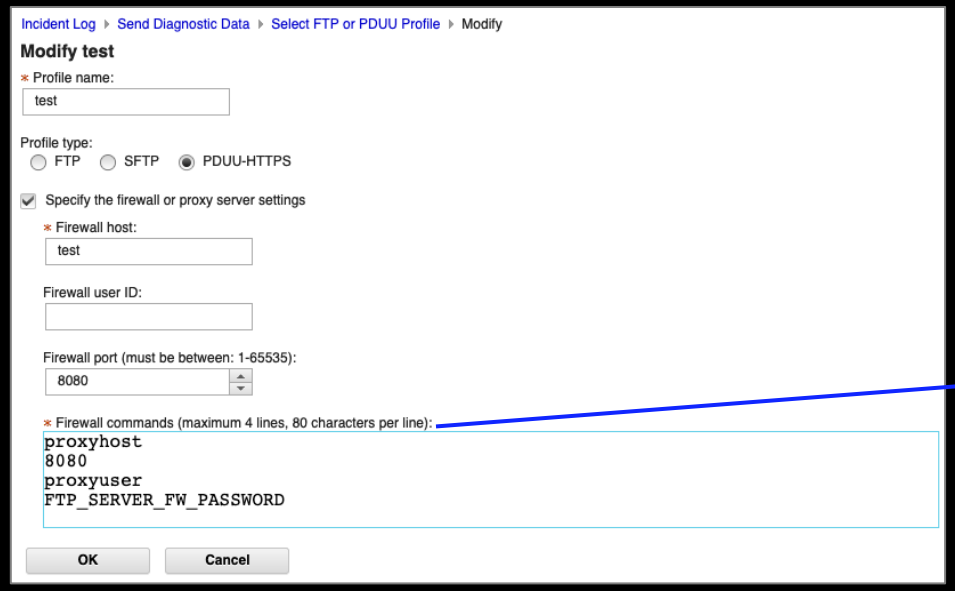
Incident Log
- PDUU HTTPS Support (cont.)

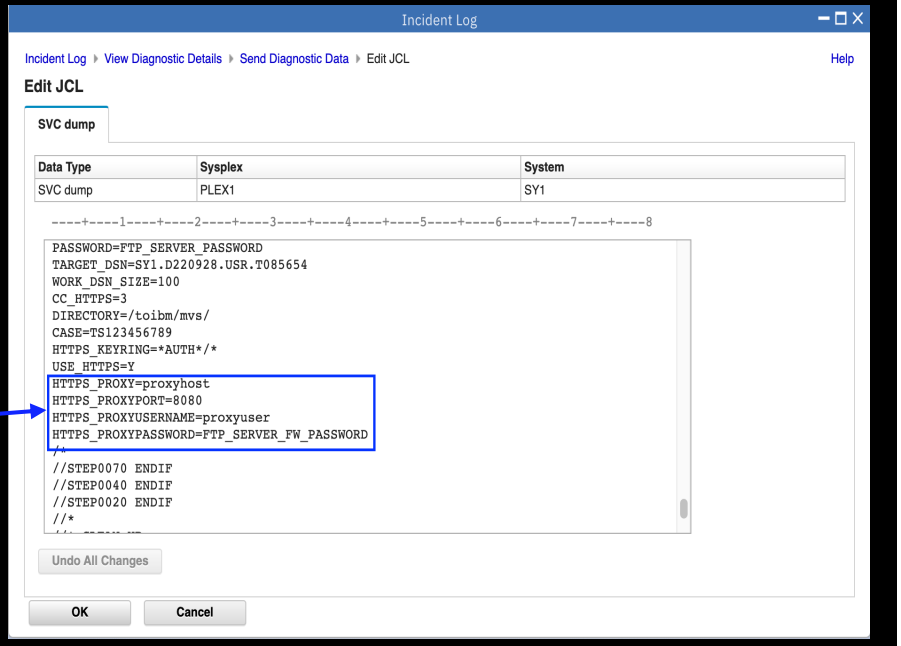
- SAF keyring name OR PKCS #11 token is required to connect to the HTTPS servers.



Incident Log
- PDUU HTTPS enhancement

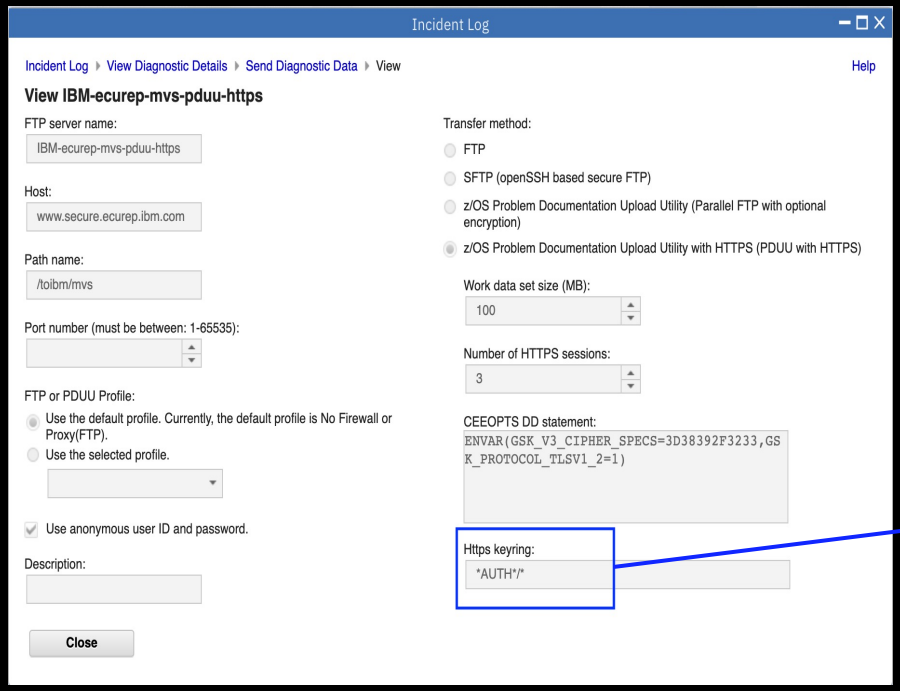
- A new profile type “PDUU-HTTPS” is added for PDUU HTTPS proxy settings. If the profile is associated with the IBM HTTPS server, the proxy settings will be imported into Incident Log when sending data to IBM.

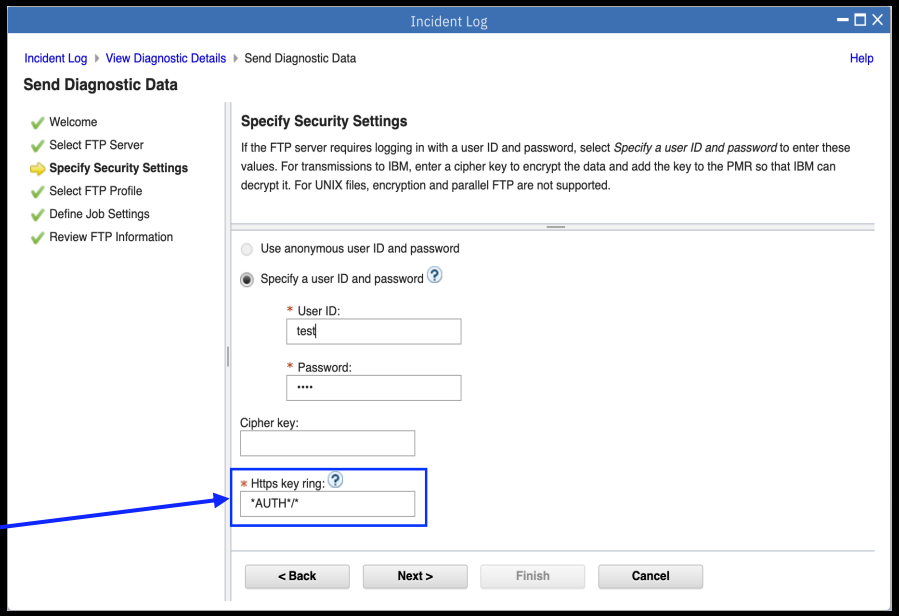




Incident Log
- PDUU HTTPS enhancement (cont.)

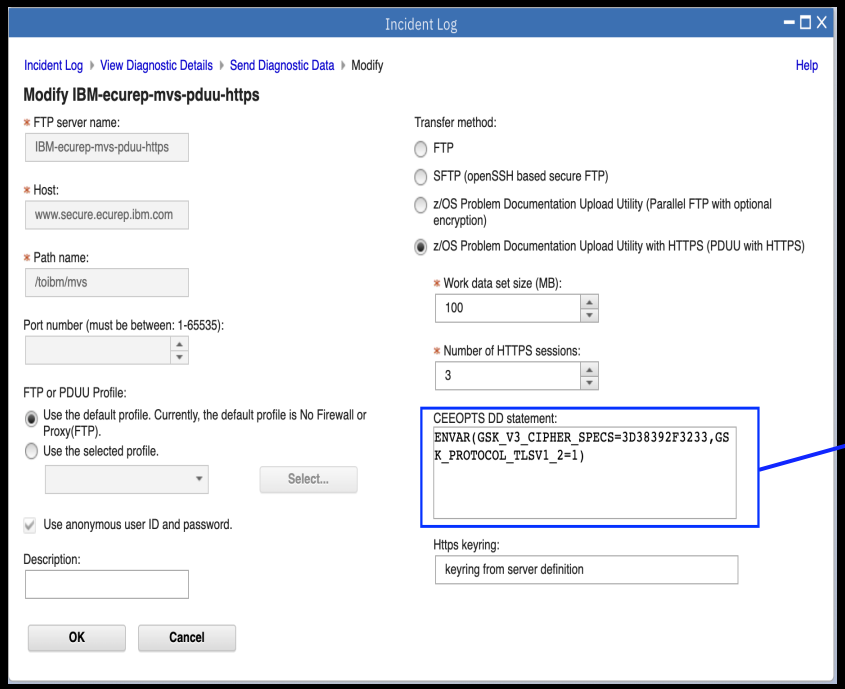
- The HTTPS key ring can be specified in the PDUU HTTPS server definition, and the value can be used when sending diagnostic data to IBM in Incident Log. The end user doesn't have to manually input the value in Incident Log.

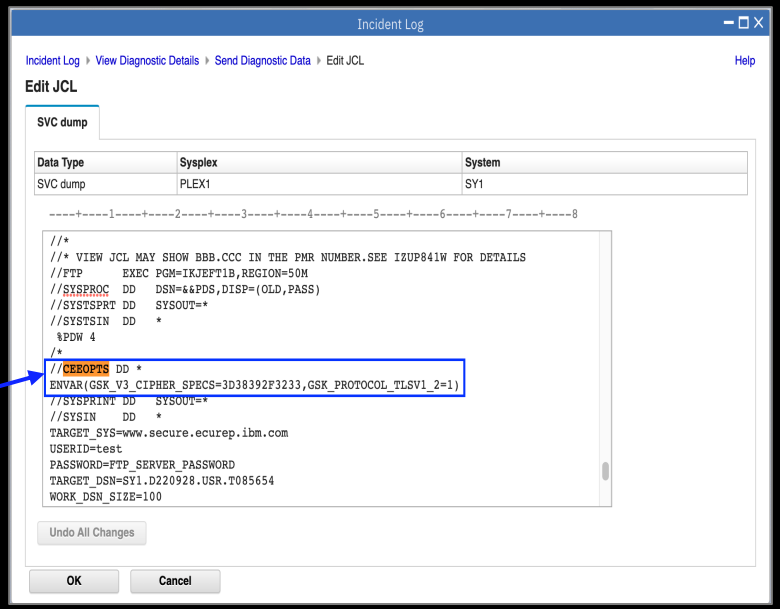




Incident Log
- PDUU HTTPS enhancement (cont.)

- The CEEOPTS DD statement can be specified in the PDUU HTTPS server definition, and the value can be used when sending diagnostic data to IBM in Incident Log. The end user doesn't have to manually edit the JCL in Incident Log.

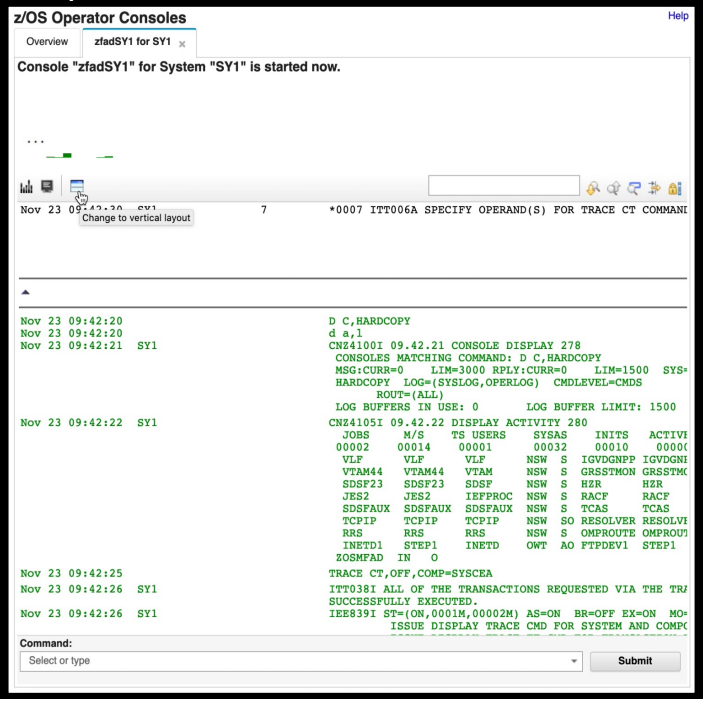


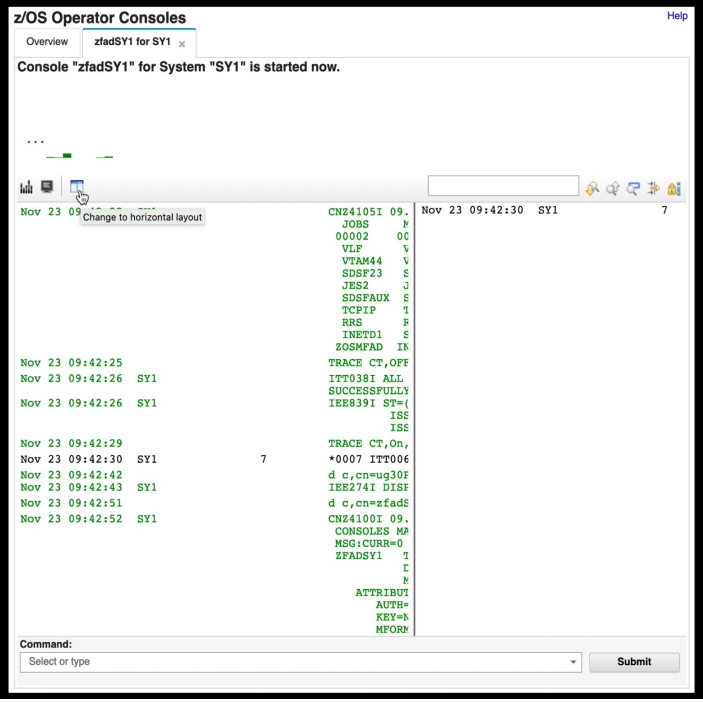


Operator Console

- Support for bigger view of WTOR/HOLD messages

- In the Console tab of z/OS Operator Consoles task, you can use the WTOR icon in the control bar to show and hide the “WTOR and HOLD view”. After it is shown, you can use the Layout icon or in the control bar to display the “WTOR and HOLD view” vertically or horizontally. The selection can be persisted.

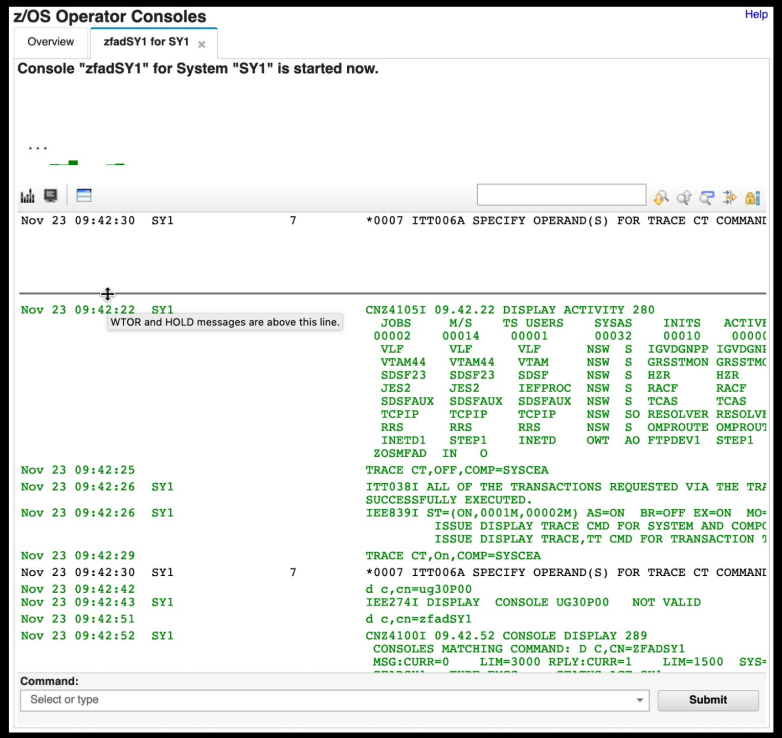


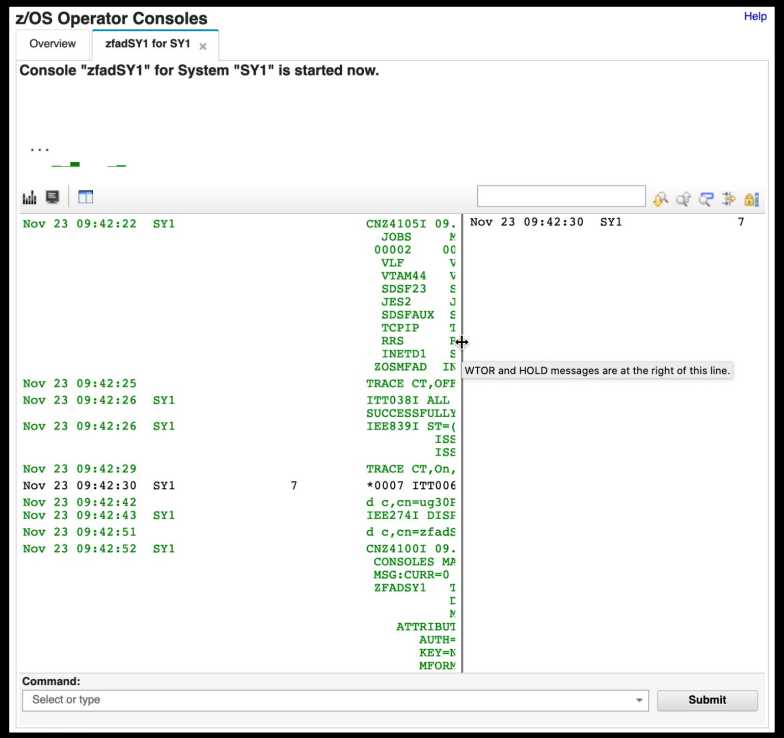


Operator Console

- Support for bigger view of WTOR/HOLD messages (cont.)

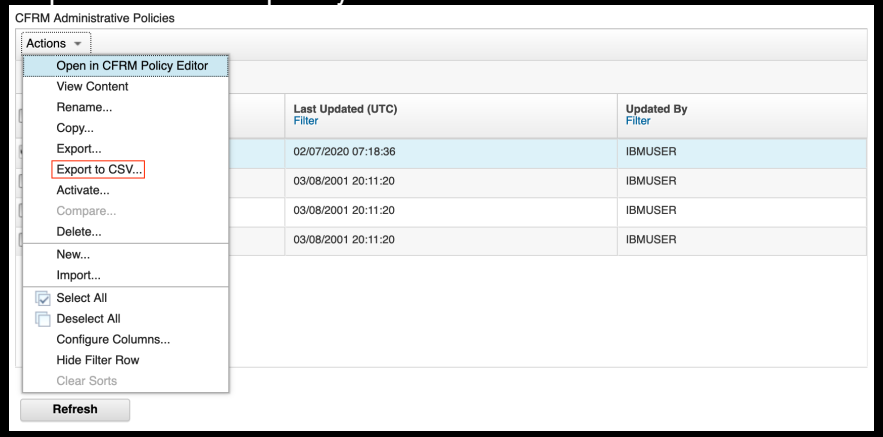
- To increase the size of the “WTOR and HOLD view” so that you can see more messages, you can use the mouse pointer to drag the horizontal line or vertical line.

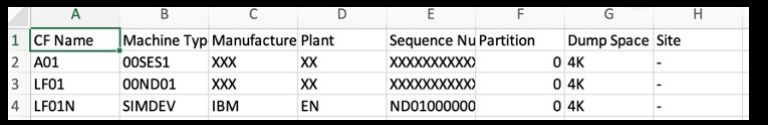




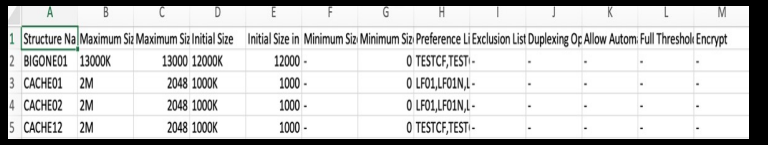
CFRM Policy Editor
- Export policy to CSV file

Export the whole policy:





	A	B	C	D	E	F	G	H
1	CF Name	Machine Typ	Manufacture	Plant	Sequence Nu	Partition	Dump Space	Site
2	A01	00SES1	XXX	XX	XXXXXXXXX0	0	4K	-
3	LF01	00ND01	XXX	XX	XXXXXXXXX0	0	4K	-
4	LF01N	SIMDEV	IBM	EN	ND01000000	0	4K	-

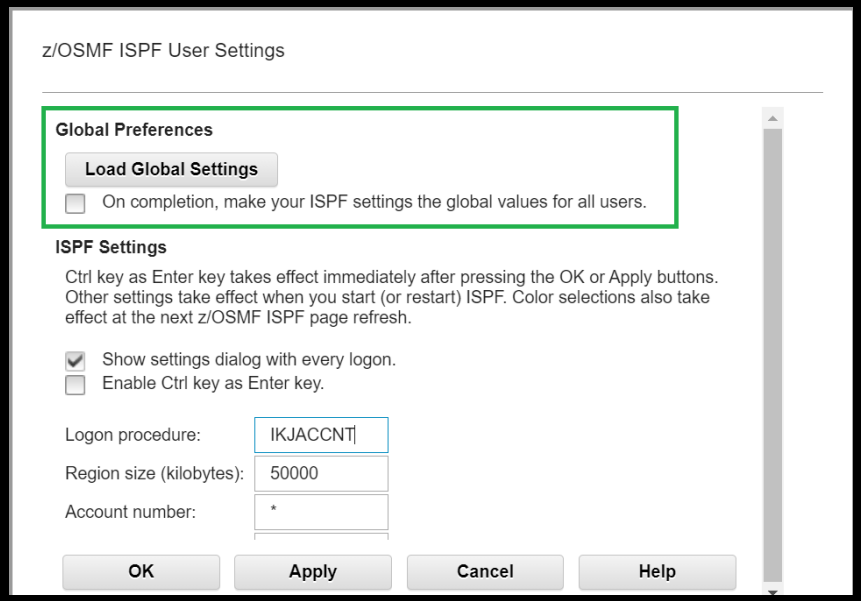


	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Structure Na	Maximum Siz	Maximum Siz	Initial Size	Initial Size in	Minimum Siz	Minimum Siz	Preference Li	Exclusion List	Duplexing Op	Allow Autom	Full Threshol	Encrypt
2	BIGONE01	13000K	13000	12000K	12000	-	0	TESTCF,TEST	-	-	-	-	-
3	CACHE01	2M	2048	1000K	1000	-	0	LF01,LF01N,L	-	-	-	-	-
4	CACHE02	2M	2048	1000K	1000	-	0	LF01,LF01N,L	-	-	-	-	-
5	CACHE12	2M	2048	1000K	1000	-	0	TESTCF,TEST	-	-	-	-	-

OR export selected CF/Structures:

WebISPF
- Support global settings

- Support saving the WebISPF settings as Global Settings which can be reused by all users.



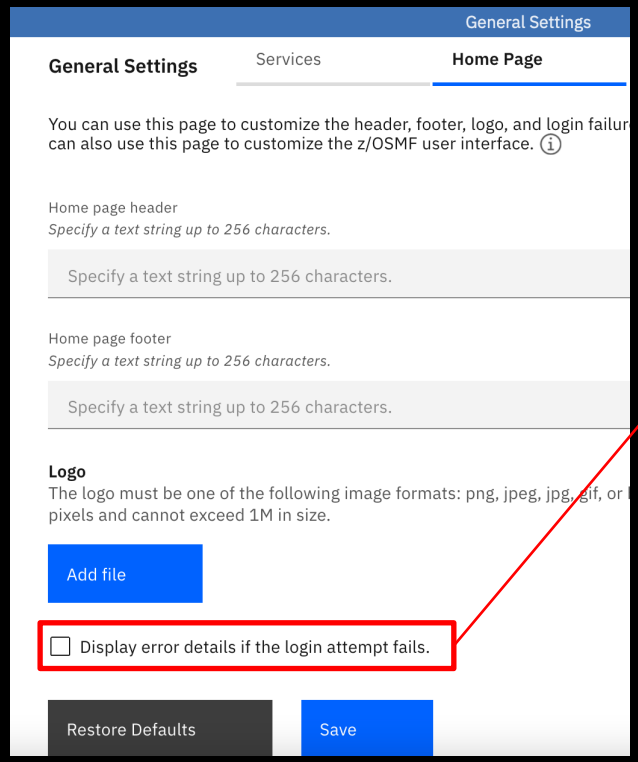
Security Configuration Assistant
- Validate security for z/OSMF Nucleus and SCA before first starting z/OSMF

- JCL IZUSECJL and PROC IZUSECSV are provided to validate if the necessary security profiles are set up properly after running job IZUNUSEC or before starting the z/OSMF server
- The validation includes
  - if the z/OSMF started task ID has the needed authorization to the security profiles for the z/OSMF nucleus
  - if a specified user has the needed authorization to the security profiles for z/OSMF Security Configuration Assistant

SYS1.SAMPLIB(IZUSECJL)

```
----+----1----+----2----+----3----+----4----+----5----+----6----+----7--
1  //IZUSECJL JOB MSGCLASS=C,MSGLEVEL=(1,1),USER=XXXXXXX,NOTIFY=XXXXX
2  //*****************************************************************
3  //* PROPRIETARY STATEMENT:
4  //* Licensed Materials - Property of IBM
5  //* 5650-ZOS
6  //* Copyright IBM Corp. 2022
7  //*
8  //* Status = HSMA250
9  //*---------------------------------------------------------------
10 //*
11 //* DESCRIPTIVE NAME:
12 //*    z/OSMF Security Validation
13 //*
14 //*    The JCL is intended to be refered for Security Validation.
15 //*
16 //*****************************************************************
17 //DO      EXEC PROC=IZUSECSV,
18 //             ROOT='/usr/lpp/zosmf',  /* zOSMF install root */
19 //             USERDIR='/tmp',         /* tmp dir */
20 //             TRACE=N,                /* Trace option */
21 //             OUTCLS='*',             /* Sysout class */
22 //             IZUPRM='NONE',          /* Parmlib suffixes */
23 //             USERID='NOT_SPECIFIED', /* User ID validated */
24 //             LOGLEVEL='WARNING',     /* LOG LEVEL */
25 //             SVRID='NOT_SPECIFIED'   /* Server ID validated */
26
```

Desktop
- Changing password when it is expired

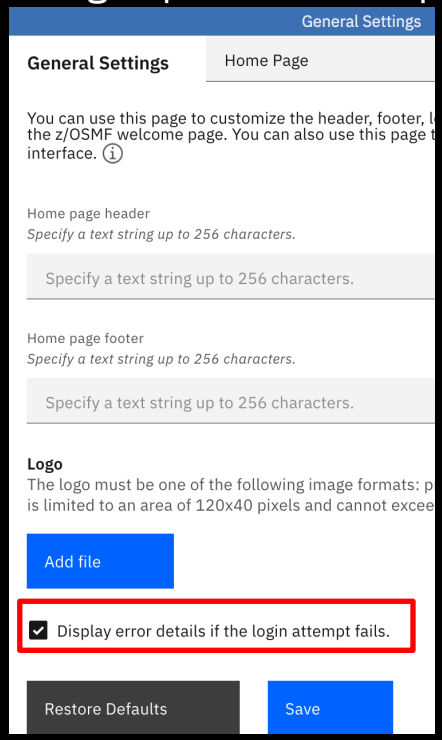


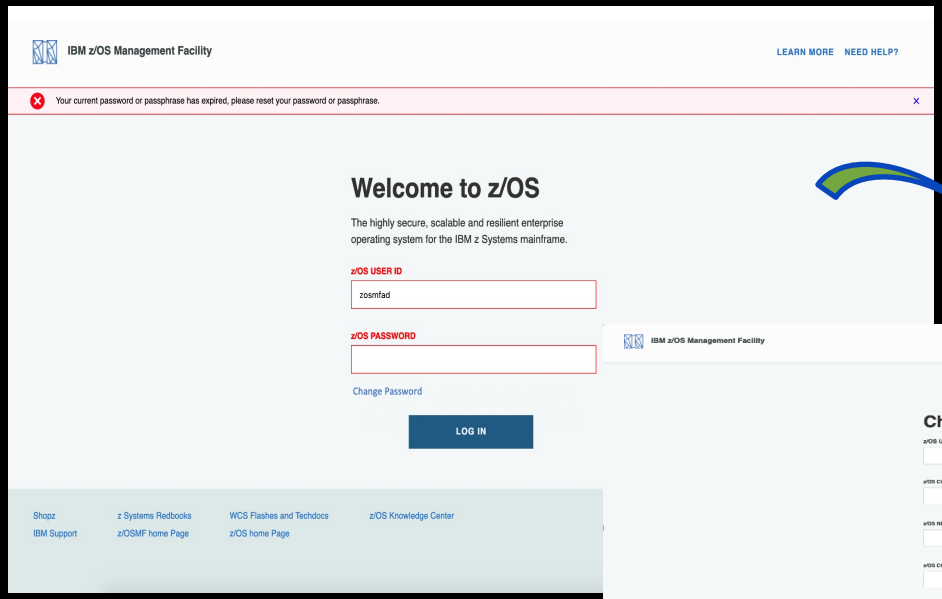
- Select this option if you want to see the details of error messages for an expired password or a revoked user ID. This option is not selected by default.

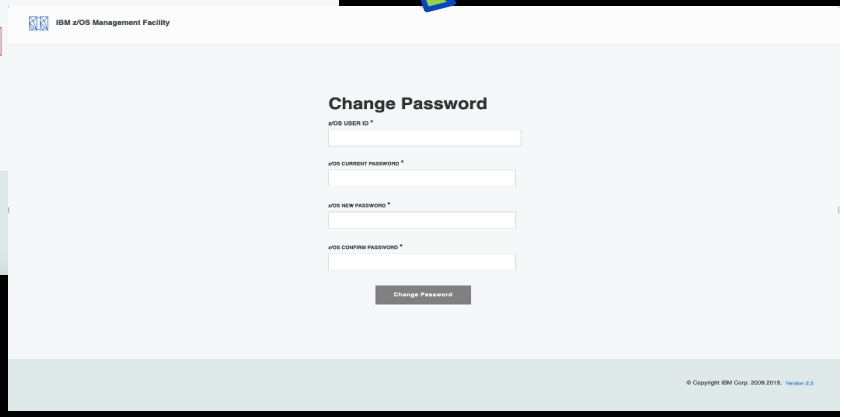
Desktop

- Changing password when it is expired (cont.)

- When the error details option is selected, you can change your password or passphrase in the logon panel if it is expired.







Desktop
- REST Service to change user’s password or passphrase

PUT	/zosmf/services/authenticate	Change user's Password

Request example:

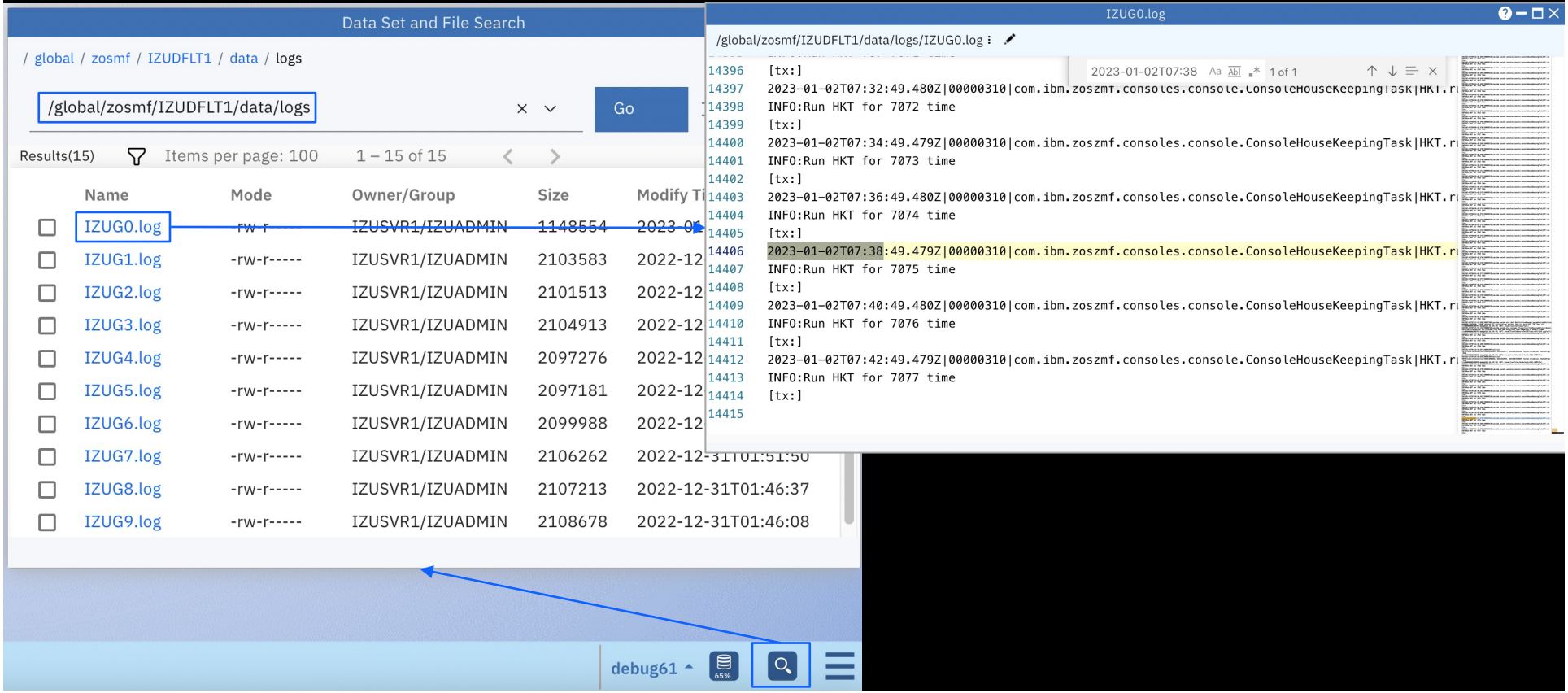
```
{
 "userID": "ZOSMFT1",
 "oldPwd": "OLDZOSM",
 "newPwd": "NEWZOSM"
}
```

Response:

```
{
 "returnCode": "0",
 "reasonCode": "0",
 "message": "Success"
}
```

z/OSMF Log Files

- Checking z/OSMF Logs using Desktop Editor



Appendix

Leverage z/OSMF Value Proposition chart to determine what plugin/service you would like to enable

Incident Log

Use Case	Without Incident Log	With Incident Log
Recognizing a system-detected (dumped) problem occurred	• Requires 5 to 7 manual steps, • Skill in effective use of IPCS to extract data from each of the dumps. **Up to 5-6 minutes**	• Display in 1 click. Greatly reduced skill required **As little as 5 seconds**
Allow new dump to be taken for the same symptom	• Requires 7 to 12 manual steps • Skill in effect dump data s get into the I matching sy trivial) and ir display **Up to 15 minu**	• Make the update happen in 3 mouse clicks
Collecting and sending diagnostic data	• Requires 7 to • Skill to locate • Build and ru • Rename the • Use an FTP j sets and add target destin **Up to 20 minu** **Up to 30 minu**	

Network Configuration Assistant

Use Case	Without Network Configuration Assistant (using Policy Agent only)	With Network Configuration Assistant

Filter unwanted network traffic from your z/OS system	• Learn how to set up IP filters
	• Review the IP Configuration Guide
	  • Configure the Policy Agent application
	  • Create configuration policy for IP Filter rules
	  • Configure default filter rules in the TCP/IP profile
	  • Configure the TRMD application
	  • Configure the Syslogd application
	Hours (or even days for initial setup)
		• Configuration Assistant provides guidance
		• Go to IP Security Perspective
		• Add a connectivity rule for an IP Filter
		• Use Application S
		configuration an
		• The Configuratio
		deploy the config
		As little as 30 minu

Secure your TN3270 server connections with TLS	• Manual process
	• Review the IP Configuration Guide
	  • Configure the Policy Agent application
	  • Configure TTLS in the TCP/IP profile
	  • Configure the Syslogd application
	  • Create configuration policy for AT-TLS for your TN3270 Server
	Hours (or even days for initial setup)
		• Configuration As
		• Go to AT-TLS Pe
		• Select the AT-TL
		• Use Application S
		configuration an
		• The Configuratio
		deploy the config
		As little as 30 minu

Security Configuration Assistant

Use Case	Without Security Configuration Assistant	With Security Configuration Assistant
Discover security requirement for specific function/product/solution	• Look up the information from the product's setup or configuration book or online help • Cross-book references can be a challenge if a solution references several products **Minutes to Hours**	• A flexible, well-organized and browser-based Web UI that displays the security requirements at once from top to bottom by function/product/solution • The JSON format is used to document the security requirements. JSON is an industry standard with education and skill widely available **Seconds**
Investigate if security requirement of specific function/product/solution is satisfied.	• Enter commands one by one to verify the security requirement • It takes some time when there are many security requirements for a product • Manual steps may have to be repeated across different products or the user may create a custom script for each product. **Minutes to Hours**	• 1 click from browser-based Web UI to automatically check if security requirements are satisfied or not. • Avoid repeated execution/failure/fix loops **Seconds**
Take care differences of all Enterprise Security Manager (ESM).	• Normally user has to translate RACF commands into sample jobs for other non-RACF ESM products • Then they need to issue commands of specific ESM accordingly to validate if security requirements are satisfied or not **Minutes to Hours**	• 1 click to validate if security requirements are satisfied or not which is consistent among all ESM products. **Seconds**

Closing

Thank You!