Tips and Tricks for Workflow Administration
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Session ID 82919
About the speakers

Susan Keohan
• SAP Workflow Specialist
• You won’t believe I’ve been working with SAP for 24 years

Martin Maguth
• Managing Partner at MaxECM Solutions LLC and long-time ASUG Volunteer
• Fun fact: Workflow Hacker
1. Basis and Runtime customizing
2. Workflow diagnosis
3. Workflow Reports
4. Event and traces
5. Real Life advice
Key Outcomes/Objectives

• The most important tasks of a workflow administrator
• Key reports available for SAP Workflow reporting
• How to troubleshoot and diagnose errors
What is a Workflow Administrator anyway?

Running SAP workflows without a Workflow Administrator is like running SAP without a Basis team

- Unknown Workflow Administrator
Introduction

Your Workflow Administrator

• Makes sure that your workflow development and runtime environment are properly configured and maintained on an ongoing basis
• Coordinates workflow development and enhancements
• Is the point of contact for your users when workflows are not behaving as expected
• Communicates issues to the basis and/or ABAP team if changes in SAP are necessary
Agenda

1. Basis and Runtime customizing
2. Workflow diagnosis
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5. Real Life advice
Basis Customizing (TX SWU3)

- No exceptions! Must be complete

Fun Fact: Edit System Workflow Administrator will identify you (or someone else) as the recipient of Workflow error messages.
Basis Customizing

• Workflow basis customizing is necessary to configure the SAP workflow engine and its definition and runtime environment
• Use transaction SWU3 to access basis customizing
• Basis customizing is generally a one time setup task
• **MUST** be completed **BEFORE** you start developing and running workflows in your SAP system
Runtime Configuration (TX SWPA)

• Workflow runtime should be configured to ensure best possible workflow performance
• Use transaction SWPA to access basis customizing
• Runtime customizing is also generally a one time setup task and manages system data volume and size, template levels, buffering, etc.
Runtime Configuration

In general, the defaults you see here are sufficient. If you start to see performance issues, it’s worth revisiting this transaction.
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Workflow Diagnosis

- Workflow diagnosis allows you to run most diagnosis and setup steps from one screen for a workflow template
- Use transaction SWUD to access workflow diagnosis
- Transaction allows you to execute troubleshooting for a template based on certain symptoms, e.g. workflow is hanging or not started
- Should be run before a workflow template is activated in SAP production and monitored on an ongoing basis for frequently used workflow templates to detect issues early
Perform specific troubleshooting steps for a template. Use this when a new WF Template goes to Prod!
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Workflow Reports

- **SWI2_FREQ**: Work Items per Task
- **SWI1 or SWIA**: more granular, with more Admin options
- **SWI2_DIAG**: Workflows with Errors
- **SWI2_ADM1**: Work Items Without Agents
- **SWI2_ADM2**: Work Items with Deleted Users
No matter which way you use to get there, you’ll end up looking at the WF Log.
From the Workflow reports, you can perform many administrative actions.
Workitems without users (TX SWI2_ADM1)

Select step and perform user determination, forward, etc.
“Just do it”– Execute items without check

• Workflows can get “stuck” when no agent can be determined or when the selected agent is not available to execute the item
• Use transaction SWIA to access and execute the work items without agent check
• This transaction can be used by administrators to continue with a workflow that has been put on hold and cannot continue; the administrator can access and execute a work item even if he/she is not the selected agent for the step
“Just do it” – Execute items without check (TX SWIA)

Execute items as an administrator or complete manually
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Event Trace – What’s going on?

https://www.youtube.com/watch?v=H-kA3UtBj4M
“What’s going on?” – Event trace

• If a task or template is supposed to be triggered or terminated by an event, the failure of the event will result in incorrect or no processing of the task.

• This can be a result of the event not being raised or a failure in the event processing, such as bindings, check functions, incorrect linkage, etc.

• The event trace is a technical tool that gives you details about the processing of the event, publishing, and receivers.
Event Trace: What’s going on?

- Use transaction SWELS to start and stop the event trace
- Use transaction SWEL to access the event trace
- Remember to **turn on the trace only when needed** and to turn it off after usage
- Use SWEQADM to access event queue, if active
“What’s going on?” – Event trace

Drill into the event log for more details
"What’s going on?" – SWEQADM

You have the ability to re-deliver any events stored in the event queue.
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Real life advice

• Spending time getting to know the Workflows in the development process will be invaluable

• The majority of issues will be with Agent Determination (make sure your WF Developer uses ‘Terminate if no agent found’ or some such logic
Scenario 1 - Where’s my approval

- Whenever possible, get the document/object/cart number!
- Run your favorite WF report – Drill in to see multiple instances of the WF, identify the one in question
- Someone may have reserved the task (or already executed it)
- WF has not yet reached their level of approval
  - Check to see if user is logged on to the correct system, because, hey, it happens
Scenario 1 - Where's my approval

• ... Here’s where your in depth knowledge of HOW a workflow finds an approver will come in handy. You may need to know about Agent Resolution, HR Org structures, Rules and Responsibilities.
Scenario 2 - Why did or So-and-So get this?

• You can view what is in a user’s inbox with transaction SWI5
  – Was it forwarded to them?
• Check Substitutions (table HRUS_D2)
  – Are they a substitute for the actual agent?
Scenario 3 – It’s dead, Jim

A user may call and say ‘The workflow for XXX isn’t flowing’

SWI2_DIAG will show you any workflows that have gone into error.

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Scenario 3 – It’s dead, Jim
Scenario 3 - It’s dead, Jim

- Check for Short Dumps
- Check for RFC calls
- If dialog task, check for Agent Resolution
Daily checklist

• SWI2_DIA – All WFs in error
• SM58 – failed RFC calls
• ST22 – Short Dumps
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Presentation Materials

Access the slides from 2019 ASUG Annual Conference here:

http://info.asug.com/2019-ac-slides
Q&A

For questions after this session, contact us at [email] and [email].
But wait, that’s not all!
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