

## SAP Workflow: A Comprehensive Guide to Troubleshooting and Debugging

## **Summary of Trouble Shooting Transactions**

Once you are able to initiate the debugging sessions, all the standard ABAP debugging principles apply. Here's a review of some important transactions to assist in troubleshooting your workflows.

#	Transaction	Description	Relevant Notes
1.	SWI1	Work item overview	This is the most used transaction to display workflows created in the SAP systems. Use the technical workflow log to analyze single-step tasks in a multistep workflow. Review the container element parameter values passed in to each task, change container element parameters to test different variations of the workflow, and determine to whom the work items are assigned (agent resolution).
2.	PFTC	This is the general task maintenance transaction used to develop multi-step and single-step tasks. This is the entrance point to the workflow builder process diagram.	Later versions of SAP use the following transactions:  PFTC_CHG Change Tasks PFTC_COP Copy Tasks PFTC_DEL Delete Tasks PFTC_DIS Display Tasks PFTC_INS Create Tasks PFTC_STR Task Maintenance ->  Be sure to request authorization to PFTC since it is less cumbersome to use than the individual transactions.  In single-step tasks, use the menu and go to 'Additional Data' > 'Agent Assignment' to check the task attributes. Remember 'General' tasks can be executed by anybody.
3.	SWU3	The area menu IMG for setting up the workflow engine.	Several steps are required to set up the engine. Errors usually occur w/ the RFC destination (see transaction SWUB) below.  Use the 'Start verification workflow' to validate that the workflow engine is set up correctly.
4.	SWUB	Workflow RFC destination	Synchronize the password and use the test button to make sure the RFC destination is working correctly.  Often errors exist because someone



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			changed the WF-BATCH user id password.
5.	SM21	System Log	If you cannot figure out why a particular workflow is <b>not</b> working, always check the system log.
6.	ST22	Short Dump Log	If you cannot figure out why a particular workflow is <b>not</b> working, always check for short dumps.
7.	SWE2	Event Linkage Table	If you are expecting workflows and not receiving any, make sure the event is linked to a workflow receiver.
8.	SWELS	Turn on/off the event trace log	This can help resolving event issues. Validate, at minimum, that an event is being created and then check SWE2 for the event linkage. If no event is being created, then there's most likely a problem with the activation of events in the application configuration or other areas.  IMPORTANT: in production, you should turn off the event log for daily use and only turn it on when troubleshooting. If the log is on, it has a tendency to fill up the log tables and cause errors if the system is not properly maintained.
9.	SWEL	Display Event Trace	Display any events you expected to be triggered.
10.	SWU_OBUF	Synchronize run time buffer	As of 4,6, SAP includes a task and org assignment buffer for increased performance. Any time org assignments to tasks have been made, <b>be sure to sync the buffers</b> . Otherwise, new agent assignment rules may not be taken into consideration, i.e., you may have fixed an issue but the buffer is using the old data!



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11.	SWUS	The workflow test tool.	This is very helpful to start workflows for transactions where no workflows were created but were supposed to have been.
			It's also a GREAT tool to start debugging tasks after you inserted a breakpoint.
			Review other work items for similar tasks via transaction SWI1 (display the container elements) if you need help identifying values for the 'Input Data'.
12.	SWUE	Workflow event test tool.	Similar to the SWUS, but this creates the event. Again, use SWI1 to identify container elements (event > ws).
13.	SM58	tRFC buffer errors	If any workflow engine issues exist, the workflow will log errors in the tRFC event tables.
			The use of SM21, ST22, and SM58 are essential in identifying workflow issues.
14.	SCOT	SAP Connect Configuration	Any notifications (not work items) will be logged here. If there are issues with end users receiving notifications review SCOT.
			Most often, the issue is that program RSCONN01 is not running to send notification out to the SENDMAIL or exchange server.
15.	SWLD	Old area menu for workflow development	Exit out of the easy menu (/n), then enter /nSWLD to get to the old area menu.
16.	SWPC	Re-start workflows after system crash	
17.	SWIA	Execute work item w/o agent check	This is a great transaction to bypass agent resolution issues and focus on other problems.
18.	SWPR	Re-start workflow after error.	