

2197117 - Debugging of background work items

Version	4	Type	SAP Note
Language	English	Master Language	German
Priority	Correction with medium priority	Category	Program error
Release Status	Released for Customer	Released On	08.05.2018
Component	BC-BMT-WFM-RUN (Runtime)		

Please find the original document at <https://launchpad.support.sap.com/#/notes/2197117>

Symptom

Improvement Request

It is not possible to debug methods that are executed in workflow background work items.

Request Reason

The debugging is possible only with increased configuration effort. System authorizations are required for the necessary configuration changes. Furthermore, the system changes are active for the entire workflow runtime system.

Other Terms

Workflow Customer Connect 2015, breakpoint, debugging

Reason and Prerequisites

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Solution

Improvement

After you import the relevant Support Package, a simple option for debugging a workflow background work item is available. To activate the debugging, carry out the following steps:

1. In the relevant background method, set an external breakpoint.
2. Activate the workflow debugging with the new transaction SWW_BREAKPOINT.
 - The debugging of the workflow runtime system can be activated for a workflow. Enter the relevant top-level workflow in the field "Top Task". With this configuration, the debugging is activated for all background work items started from within the context of the current user. A simple case, for example, is the restart of an incorrect workflow.
 - If you also want to debug methods that are started from within the context of an event, enter the name of the object type as well. As a result, the debugging is activated for all use cases (such as start events, termination events, and so on).
 - The workflow breakpoint is active for half an hour.
3. After you have executed the actions described, the workflow debugging is active. After the relevant workflow activity (such as restarting) is executed, the external debugging of the ABAP runtime is activated. In a new mode, the system displays the debugger in place of the source code at which you set the external breakpoint.

Note that the workflow debugging is activated for a specific server and you therefore must execute the activation of the breakpoint and the triggering of the action (such as restarting) on the same application server.

Technical background information:

The external debugging is possible only for dialog users because the debugging is linked to the WINGUI session. Due to this specified general condition, the workflow debugging is realized as follows: The destination NONE, which always exists, is used instead of the standard workflow destination. This means the background steps or the event receiver are executed in a new tRFC context, but under the current user and no longer under the workflow system user WF-BATCH.

Benefit

The testing and verification of methods used in workflow is simplified to a large degree. The workflow developer or workflow support can be analyzed very quickly using the option for debugging problems.

Delivery

The delivery can be carried out only via a Support Package because the development includes some objects that cannot be implemented using correction instructions.

Note that the setting of an external breakpoint in BOR methods is made possible with SAP Note 2192237.

To assign the authorization for the new transaction SWW_BREAKPOINT, carry out the following manual steps for the delivered role SAP_BC_BMT_WFM_DEVELOPER or for corresponding customer-specific roles in the system:

- Call transaction PFCG and open the role SAP_BC_BMT_WFM_DEVELOPER or the customer-specified role in change mode.
- On the "Authorizations" tab page, choose "Change Authorization Data".
- Expand the "Cross-application Authorization Objects" node and the "Transaction Code Check at Transaction Start" subnode.
- From the menu, choose "Edit -> Insert authorization(s) -> Manual input", enter the authorization object "S_TCODE" there, and choose "Continue".
- Change the manually inserted authorization object "Transaction Code" and add the value "SWW_BREAKPOINT".
- Choose "Save" and "Generate" to return to the screen for changing roles.
- Update the master records of the users assigned to this role by going to the "User" tab and choosing "User comparison".
- If necessary, you can add the role to a Customizing request. To do so, go to the initial screen of transaction PFCG, choose "Transport role", and then release the transport.

Software Components

Software Component	Release
SAP_BASIS	731 - 731
SAP_BASIS	740 - 740

SAP_BASIS	750 - 752
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Support Package

Software Component	Release	Support Package
SAP_BASIS	731	SAPKB73117
SAP_BASIS	731	SAPKB73123
SAP_BASIS	740	SAPKB74020
SAP_BASIS	740	SAPKB74013
SAP_BASIS	750	SAPK-75001INSAPBASIS
SAP_BASIS	750	SAPK-75013INSAPBASIS
SAP_BASIS	751	SAPK-75107INSAPBASIS
SAP_BASIS	752	SAPK-75203INSAPBASIS

This document refers to

SAP Note/KBA	Title
2192237	Support of external breakpoints in BOR objects