Read the Workflow Technical Log

Purpose

The purpose of this page is to give technical users a starting point on how to read the workflow technical log (New and Classic).

Overview

The best way to start troubleshooting a problem with a work item is to read the workflow technical log. There is a new layout as of Basis Release 7.00 which is covered here along with the classic technical log.

Read the Workflow Technical Log (New since Basis Release 700)

Once you have the work item ID you can then view the workflow technical log in order to see how the workflow has progressed from step to step and if necessary view any errors that may have occurred. You can use transaction SWI1 or view the log via the inbox SBWP (See page Find a work item ID ) for more details on this.

When you click on the workflow log button you will initially get the Active X version of the workflow log. In order to get the technical view you need to click on the button 'List with technical details'.

This will then bring you into the technical work item screen where you can view each step in much more detail.

Useful Information

You can configure your Personal settings so that the Active X log is skipped and the Technical log is displayed right away. You must go to the SAP Business Workplace (Transaction SBWP) and via the menu: Settings => Workflow Settings => Personal Settings you can change the Workflow Log value from 'User View' (Which displays the Active X log first) to 'Technical view' or 'Classic Technical View'. Once this has been change you will then go directly to the Technical workflow log via the Log button.

Below is the Technical Log
The layout of the technical workflow log is now more oriented towards the definition of workflows. As a result, it is now easier to see which steps were executed in parallel and how often a loop was executed (however many people find it easier to use the Classic Technical Log). Below is an example of the layout of the new log. The screen is divided into 2 sections (See below)

![Workflow log (View with technical details)](image)

The top half of the screen contains the steps in the workflow and the bottom half of the screen holds the details and data of each step. This data is all contained in a number of tabs e.g. Details, Step History, Deadlines, Task Description, Container and Message.

**Details** You can see in the Details tab that it holds the work item ID, Task ID, Actual Agent and so on.
**Step History** tab lists the executed actions on each step. If there are any errors they will also be listed here.

<table>
<thead>
<tr>
<th>Executed Action</th>
<th>Error Message</th>
<th>Last Agent</th>
<th>End Date/Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Start Event Received]</td>
<td>No errors</td>
<td>Brendan Behan</td>
<td>14.02.2012 - 15:02:33</td>
</tr>
<tr>
<td>![Sub)workflow created]</td>
<td>Es sind keine Fehler au...</td>
<td>Brendan Behan</td>
<td>14.02.2012 - 15:02:33</td>
</tr>
<tr>
<td>![Workflow started]</td>
<td>Es sind keine Fehler au...</td>
<td>Workflow Background User</td>
<td>14.02.2012 - 15:02:34</td>
</tr>
</tbody>
</table>

**Container** This shows all the data in the container at runtime.
Read the Workflow Classical Technical Log

In order to get the Classical Technical Log you can click the 'Print Log' button or set your Personal Workflow setting as details above already.

The header data displayed at the top of the log just provides information regarding who started the workflow, date & time started and also the Instance number. The instance number is the Parent Work item ID. All work items within the workflow are associated with this work item ID. In this case it is work item 7002. Once we move below the header data we will see the log itself. I will first explain the 2 header rows and what data is associated with them. I will then explain what the various icons represent in the workflow technical log.

Level 1 of the Technical work item log
Level 1 has the following elements:

- Error
- St (Status)
- ID (Work item ID)
- Node Number
- Task
- Result
- Date, Time & Processing time

Error corresponds to the boxed icon with 3 traffic lights. In the case above the third light is green which means no error and all is well. If there is a warning then the middle light will have a yellow triangle and if there is an error the first traffic light will be red.

ST (Status) tells us the current status of the work item. The first status icon in the image above is half filled which means the status 'In Process'. The second example is fully filled which means the stem is in status 'Completed'. The third has no colour which means it is in status 'Ready'. There are other icons to represent other status which we will not cover here.

D (Work item ID) This is the unique identifier which is automatically assigned to each work item upon creation. Each step (Activity) which is inserted into the workflow definition at design time will have a corresponding work item ID at runtime. The exception to this are steps like conditions, container operations, forks where there is no interaction with users or they do not execute an object method.

Node Number is the number of the step as defined in the workflow builder. When a step is created in a workflow definition it receives a step number automatically. From the workflow log you can check the node number and then go to the workflow builder and find the corresponding step in the definition.

Task This is simply the name of the task/step in the workflow definition.

Result If there is a result from the work item e.g. If it is a Leave Approval step and it was approved then the result would be 'Approved'.

Date, Time & Processing time This is the date and time that each step was created. The Processing time lets you know how long the workflow has been in process since it was triggered. In the example, the workflow was created on the 14.02.2012 at 15:02:33.

Level 2 of the Technical work item log

Level 2 has the following elements

- Error
- Agent
- Executed Action
- Date & Time
- Object
- Object Name

Error again corresponds to the boxed icon with 3 traffic lights. However in this case the 3 light icon is aligned with each execution step for each work item. For example, in the first work item 7002 we can see that there are green lights for all 3 action Start Event Received’, ‘(Sub)workflow created’ and ‘Workflow started’. It just gives a quick indication if there were any issues with each action within each step (e.g. No Error, Warning or Error)

Useful Information

You can click on the icon for more information. This is especially helpful if you have a red light (Meaning error). It will give you a popup
with the error description. Please then click the 'Help(F1)' button for the message ID. E.g. Click on the error icon as detailed in the screenshot below which gives you the 'Information' popup. Then click on the 'Help' button (B) to get the message number. It is SWF_RUN544 in this case. You can now do a more effective notes search on Service Marketplace.
**Workflow Log (View With Technical Details)**

Workflow: Process notification of absence (Eddie)
Workflow instance: Process notification of absence (Eddie)
Instance number: 000000007044
Start date: 14.02.2012
Start time: 13:14:53
Current status: In Process

View: Workflow chronicle

**Error Log**

<table>
<thead>
<tr>
<th>Error</th>
<th>St</th>
<th>ID</th>
<th>Step Task</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>7044</td>
<td>1 Process notification of absence (Eddie)</td>
<td>14.02.2012</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7044</td>
<td>Start Event Received</td>
<td>14.02.2012</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7044</td>
<td>(Sub)workflow created</td>
<td>14.02.2012</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7044</td>
<td>Workflow started</td>
<td>14.02.2012</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7046</td>
<td>48 Employee Brendan Behan: Approve notification</td>
<td>14.02.2012</td>
<td>18</td>
</tr>
</tbody>
</table>

**Information**

Result of agent resolution does not agree with agents of task

**Performance Assistant**

Result of agent resolution does not agree with agents of task

Message no. SWF_RUN544

**Diagnosis**

When determining the recipient, the system established that none of the responsible agents determined belong to the possible agents of the task used in this step.

**System Response**

The work item is created without recipients and appears in no workflow inbox.

**Procedure**

Refer to your workflow system administrator.

**Procedure for System Administration**
Agent: This lists what users are responsible for each execution action. In the log we can see that user 'Brendan Behan' is the one responsible for execution action 'Start event received' e.g. User 'Brendan Behan' was responsible for saving the leave request via a transaction that then raised the triggering event (Via application code) and triggered the workflow. The second action '(Sub)workflow created' is also executed by user 'Brendan Behan' and the third execution action is executed under user Workflow System (This is the workflow background user WF-BATCH). Further down the log you can see user 'James Joyce' is also involved in execution step 48 (Work item 7005).

Executed Action: This just describes the action that has taken place in relation to the work item. For work item 7005 the first executed action is 'Dialog work item created' followed by 'Deadline reached', followed by 'Execution started' and so on. For each action you can see which user was responsible for executing it.

Date & Time: This shows the date & time that each executed action took place.

Object & Object Name: This just gives the business object that is involved in the workflow.

ICONS: The most important icons to know about are listed below (A - E)

(A) When you open the technical log initially, each step in the log is compacted and you can then expand each step by clicking on the icon and then contract or compress the step with the icon. However, if the log is quite large and spans several pages you can expand all steps with the icon and then contract them again with the icon.

(B) The "Graphical Log" icon allows you to view the layout of workflow definition in combination with the runtime information so you can see
with once glance how far the execution has regressed. See image below. The green markings indicate how far the execution has progressed.

(C) The “Show Container” icon will display all the data that is in the container at runtime time. The container icon associated with step 1 of the workflow is always the workflow container. This will hold data that is available to all steps within the workflow during its lifetime. The container icon associated with the remaining steps in the workflow is the task container of each step and will only be available or changed during the lifetime of the work item. In the image below we can see the Workflow container and the task container of step 48.

When you click on the container icon you get the popup below. You can view the runtime data of the workflow container.
The "Show Agent" icon gives you a popup which allows you to view the Agents, the Possible Agents and also the Excluded Agents.

The Agents button gives a list of the current agents/users that have the work item in their inbox. The Possible Agents lists all the user who are assigned to the Task behind the work item and the Excluded Agents lists any agents who have been excluded from being an Agent in this step (This is specified at design time in the workflow builder).

Useful Information
If the Show Agent icon does not exist in the step in the log then there is no user interaction involved in this step. E.g. it is a background step (And therefore executed by the workflow background user WF-BATCH) or it is Container Operation/Fork/Loop step.

(E) The Status icon indicates the current status of the work item.

Various status of a work item:

- **WAITING** - Waiting (Also: Work Items in Resubmission)
- **READY** - Ready
- **SELECTED** - Reserved
- **STARTED** - In Process
- **ERROR** - Error
- **COMMITTED** - Executed (Only If Explicit End Confirmation Is Expected)
- **COMPLETED** - Completed
- **CANCELLED** - Logically Deleted
- **CHECKED** - In Preparation
- **EXCPCHAUGHT** - Exception Caught
- **EXCPHANDLR** - Exception Being Handled

Related Content

Related Documents
See page Find a work item ID

Related Notes

- 1239325 Workflow log: Technical view (classic)