Workflow Customizings in Travel Management

Purpose:
The purpose of this wiki article is to address several of the more common issues that may arise from workflow customizing.

Overview:
SAP ships a defined workflow template for the travel management scenario and these can be customized to allow the user to adapt this to your own requirement as well as to allow via the UWL display of documents, facsimiles and business documents via the optical archive which will be outlined in sections 1 and 2. In section 3 and 4, the wiki will cover several of the most common problems related to workflow customizing that might be encountered.

The standard system includes the following workflow templates for Travel Management:

Workflow Scenarios in Travel Management

These standard templates include the following:

Approve Travel Request
Automatically Approve Travel Requests
Approve Travel Plan
Automatically Approve Trips
Approve Trip
Mail: Trip on Hold
Mail: Trip has been settled
Mail: Trip has been Transferred to FI

From these provided templates, you can then modify this for your own process using the BUS2089 method.

It is important to note also that whilst the standard template is delivered, if you require additional steps, then these can also be configured as an additional step using "created" as well as "changed" to trigger the additional workflow needed prior to "save for approval" as well as the steps delivered inside the workflow template.

The reason for this is that the event "changed" works in the following way;

- "CHANGED" is NOT meant for triggering a workflow as a start event. This event is raised in order to end any existing workflow instance already created for the object. Subsequently this requires the workflow model to contain a step 'waiting for event CHANGED' which ends the workflow whenever it is raised.
- The CHANGED and CREATED event is raised EVERY time a trip is saved. This leads to the workflow to be "actual" all the time.

Finally in this section, please ensure to check in Transaction PE03 for TRVPA and the feature "WRP", in relation to your requirement as this feature allows for various settings to trigger workflow event depending on the CHANGE status selected.

2. Customizing workflow to display attachments and documents.
The standard workflows in travel management also use the object BUS2089 with status "CREATED" "CHANGED" etc. and this object is then attached to display the travel request PDF or whichever custom method you might decide to create for BUS2089. Subsequently the manager or approver the trip is then sent for approval via the standard workflow WS2000040 or WS2000050 and received in the users UWL.

For users approving trips using UWL in a Portal (MSS) scenario, the Note 1054416 will be of relevance for more information to ensure that the bindings for the workflow and attachment are correctly defined and that for the backend transactions, the services for object have also been maintained in order to store objects via GOS.

Some additional information to consider:

- Document types for attachments to a trip are shown depending on the customizing for BUS2089.
- Document types as archived business documents are shown due to the use of TRAVEL.

So you must customize this accordingly. Please use transaction PE03 and the feature TRVPA as you see below:

Here you will define for "OOA" whether you will use display business documents (e.g. Facscimilies, scanned documents etc) or attachments.

Attachments  > BUS2089, Business documents  > TRAVEL.
Dependency on the TRVPA feature: when OAA is 0, you will only see attachments to a trip (BUS2089), if it is 1, you will see both attachments to a trip and also stored business documents (TRAVEL).

3. Customizing for workflow to display approver ID.

As per the note 452116 the behaviour for a background workflow job follows that the approver ID is logically replaced by the workflow user ID (e.g. WF-BATCH) but for reporting purposes this can prove problematic if you wish to keep a history of approvals by user ID. However, for workflows that are not run as part of a background process, this can be changed via the following customizing.

Firstly, if you run transaction SWDD and enter the standard workflow task WS20000050 or WS20000040, you can then enter either the task TS20000130 (Step 00377: Set trip status to Approved) (for WS20000050) or for WS20000040: Step 000421 Set trip status to approved
Now, having clicked on the task, if you select the checkbox “Background Processing”, the user ID will no longer process in the background but instead process directly and ensure that the actual user ID for the approver will be displayed on the PDF expense form, in the cluster table PRTE (AEND) and in the trip itself.

It is extremely important to note though, that the above steps are only relevant for workflows that are not run as part of a background process!

4. Workflow issue "Pernr is Locked".

First of all, it is important that the correct authorizations are added for the WF-BATCH user, this can be checked by transaction SU01 to ensure that the WF-BATCH user has authorization to approve trips for the object P_TRAVL (In general WF-Batch should have authorization SAP_ALL and SAP_NEW)

It is also relevant to know that the behaviour of the WF_USER is that the workflow locks the personnel number when processing the trip so that the user cannot use it. However, if the user is inside the personnel number and the workflow is started in background, at this point it is possible that an error could occur in your workflow.

It is best practise to therefore ensure that before the workflow will start there are no users editing the personnel numbers concerned or start it overnight but with the solution in note 452116 you can increase the amount of attempts and intervals to allow the following possibilities.

- Repeats for work items with temporary errors.
- Time from creation of work item until timeout.

So you need to ensure that as with the setting above, try perhaps that the workflow task setting of maybe 3 times with interval of 20mins which should be sufficient for the task activities to be completed.

Unfortunately, system logic in the standard version is such that there is no way to avoid PERNR not being locked during this task in order to avoid data inconsistency.
Related Content:

Related Documentation:

Workflow Scenarios in Travel Management
User Locking errors in Travel Management
Viewing AEND entries with transaction PRTE

Related Notes:

1772588 - How to replace workflow user/WF-BATCH with approver User ID
1727373 - Workflow formatting output for request estimated
452116 - Workflow travel expenses, task TS20000130
632424 - Workflow Travel Management and web inbox (BWSP)
1055416 - Portal: Display form from the UWL (Workflow Bindings)
530792 - Storing documents in the generic object services
904711 - SAPoffice: Where are documents physically stored?