Transport Workflow

Overview

The transport workflow provides a framework for transporting enhancements or new developments of existing business functions through a system landscape. It provides a direct connection between developers, approvers and transport administration. The transport workflow manages the transport process, determines the user for each individual step automatically, sends FYI notices and emails as necessary and then displays an interface which they can use to perform the task directly. It is an efficient method of transporting a selected number of requests into a group of transport targets and uses clearly defined approval steps to ensure the quality of your target systems.

SAP recommends the following: "If you have production systems in your landscape that can only accept approved transports, we recommend that you use the transport workflow to organize and coordinate the transport process." This method is called *Workflow-controlled transports*.

When a transport request is released under a workflow-controlled transport configuration, the screen **Create Transport Proposal** appears and the transport workflow starts automatically when the proposal is saved. Transport Proposals specify the transport requests and the target systems/clients into which you want to transport them. You can also specify an import time, import options and add notes for the approvers or transport administrator to see.

When you create a transport proposal, you place it in the TMS work-list for the appropriate approver and then the transport administrator. If the approver and transport administrator is the same person, the import begins immediately after the approval without the approver having to do anything extra. After it has been approved and transport administrator executes the "Import" work item, it is then imported automatically into the target systems. The transport proposal then appears in the initiator's transport proposal inbox for him/her to confirm that the move was successful. The initiator can complete the proposal by confirming it, or apply to have it transported into other systems.

Please remember to confirm your proposals after they have been applied to the last target system (i.e. PRD/TRN). This completes the workflow thus providing the ability to more accurately report on transports that are still "in the pipeline". Use transaction ZWF_XPORTS to report on transports in various stages of completion.

The approver can also reject the transport proposal. It then appears in your transport proposal inbox again, hopefully accompanied by a note explaining the reason. You can then modify the transport proposal and resubmit it for approval or withdraw it.

Transport Workflow

Developer's Perspective

The developer creates a **Transport Proposal** which contains the required transport requests. The transport proposal can either be created "manually" in the Transport Organizer (**SE10**) or automatically when the transport request is released. After one changes to a workflow-controlled transport strategy, the transport proposal screen appears immediately after the requests are *released*. Transport Proposals are created in the **Development System**.

The transport proposal then appears in the Inbox of the approver who has been assigned approval responsibility for the combination of: *Target System (e.g. PRD, QA2)*, *Target Client Number* (e.g. 300, 250) and *Project (e.g. FI, HR, Workflow)*. After it passes the approver level, the transport proposal then appears in the **TMS Work-list** (transaction **STMS** Inbox icon) of the assigned transport administrator. If the approver and transport administrator is the same person, the import begins immediately after the approval without the approver having to do anything extra. The approver can approve/reject the transport proposal or make changes such as transport target or import time.

After a transport proposal has been approved, the TMS imports the transport requests automatically into the specified target systems. If the proposal is rejected, it is sent back to the transport proposal inbox for revision by the originator of the proposal (hopefully accompanied by an attachment explaining the reason for rejection). If the import is successful, the proposal is sent back to the transport proposal inbox to be **"Confirmed"** by the originator of the proposal. He/she can then complete the proposal by confirming it, or apply to have it transported into other systems. After the confirmation step, the system prompts the originator to send an FYI to a list of Users, Distribution Lists, Work Centers, Org Units, or a combination thereof. He/she must select at least one person to whom to send an FYI.

SAP recommends that you use the transport workflow to transport into only those target systems defined by the **direct transport routes**. The transport administrator can configure the transport workflow so that only the direct target systems defined on the transport routes can be selected in the *Create Transport Proposal* step, and not the whole transport landscape. This means that only QAS would be available from DEV and from QAS all the subsequent systems (PRD, PRE, TRN) would be available/visible.

The transport workflow writes an action log for each transport proposal. This log contains all development and transport activities, allowing you to check on the entire process. Developers, approvers and transport administrators can communicate directly by writing **attachments** that are associated with the transport proposal.
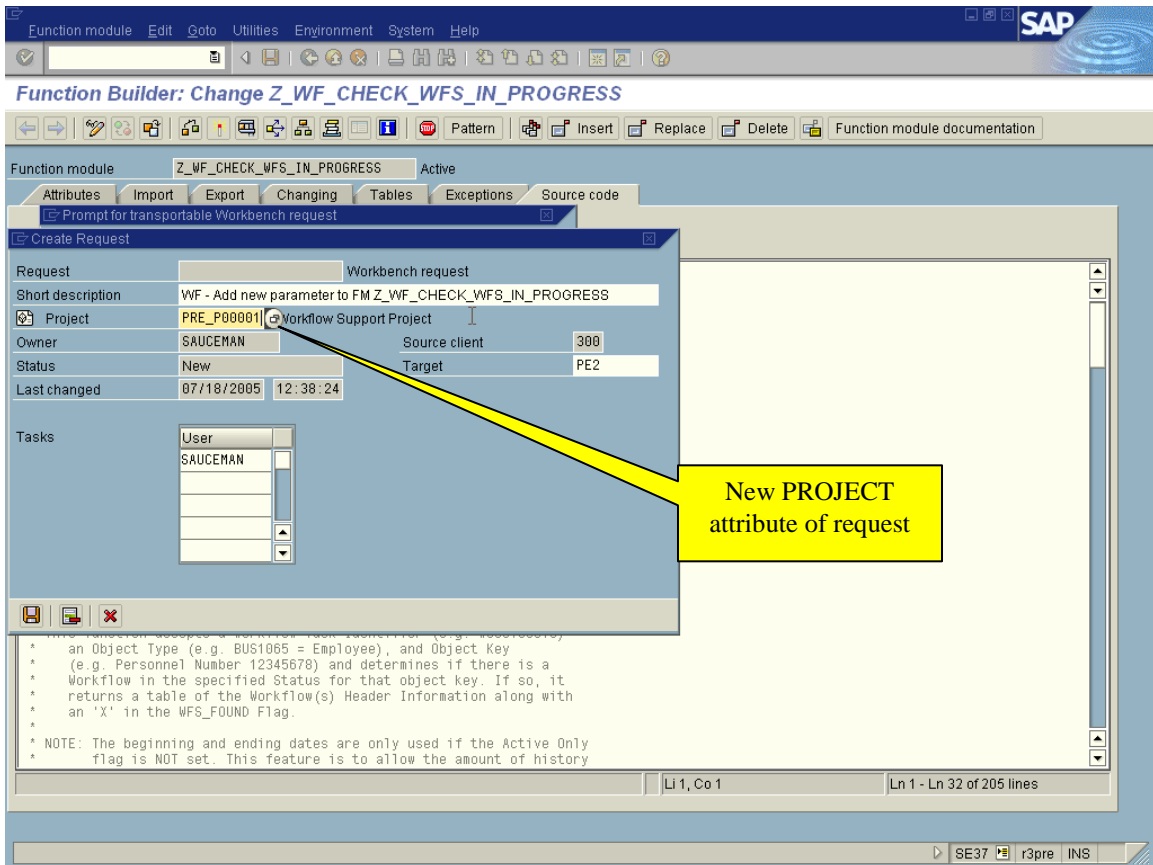
Transport Workflow
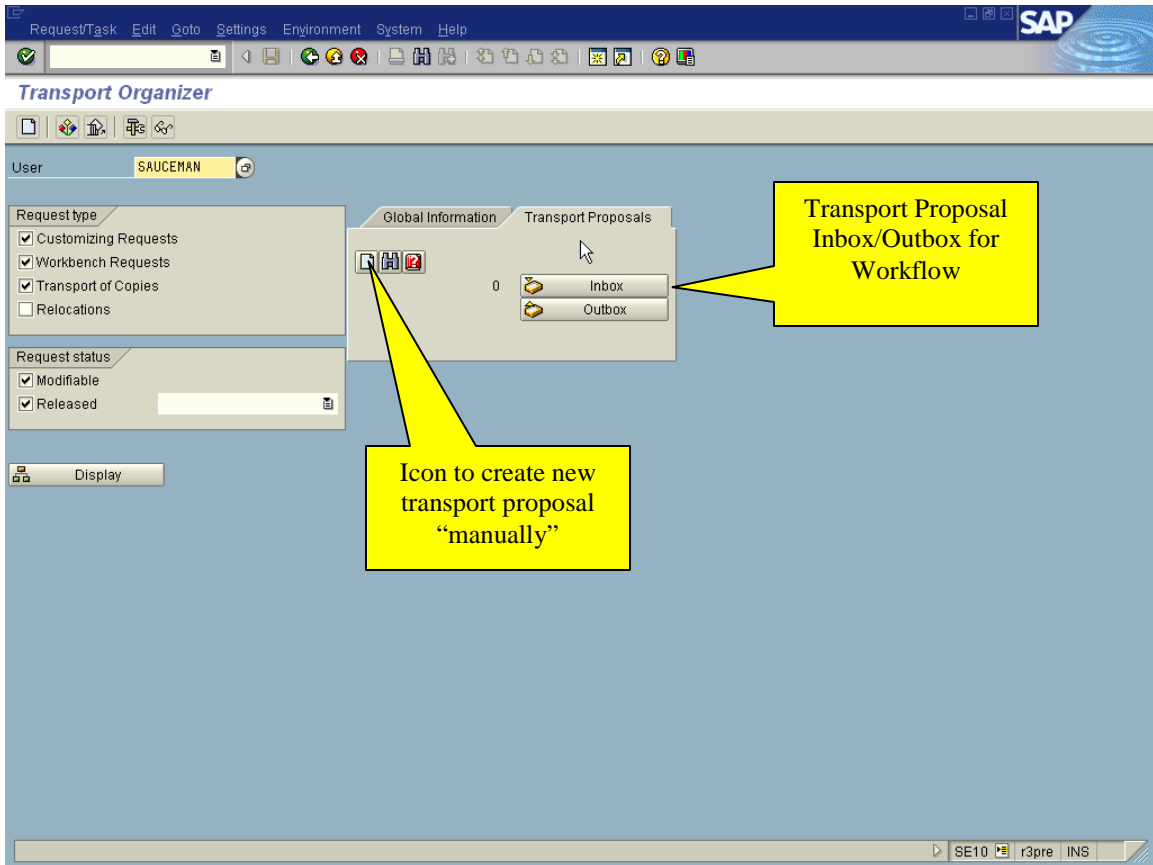
**Transport Organizer (SE10)**

Transport Workflow

Transport Requests

The transport workflow requires one additional piece of information when a new transport request is created. The transport request must now be assigned to a *Project*. Projects are high-level groupings such as: Financial, Human Resources, Workflow, etc. that indicate the particular workflow approval path that the transport request should take. Press F4 for a list of projects that have been defined to workflow or refer to transaction SPRO_ADMIN. It is essential that every transport request be assigned to the correct project so that it flows to the proper approver and transport administrator. Additional projects can be created and a corresponding approval path established by contacting the Workflow Administrator.

Transport Workflow

In addition to the project attribute, auditors also want us to enter supporting documentation for the change. To add documentation when you first create the transport, double-click on the transport request number.
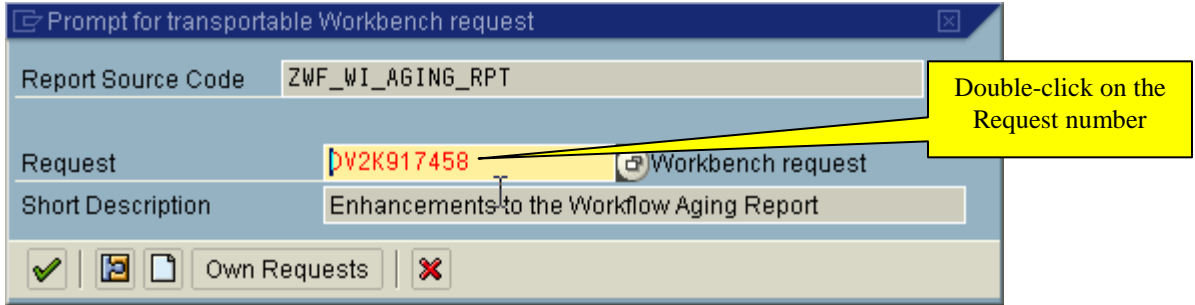
Then double-click on the request number in the window that pops up.
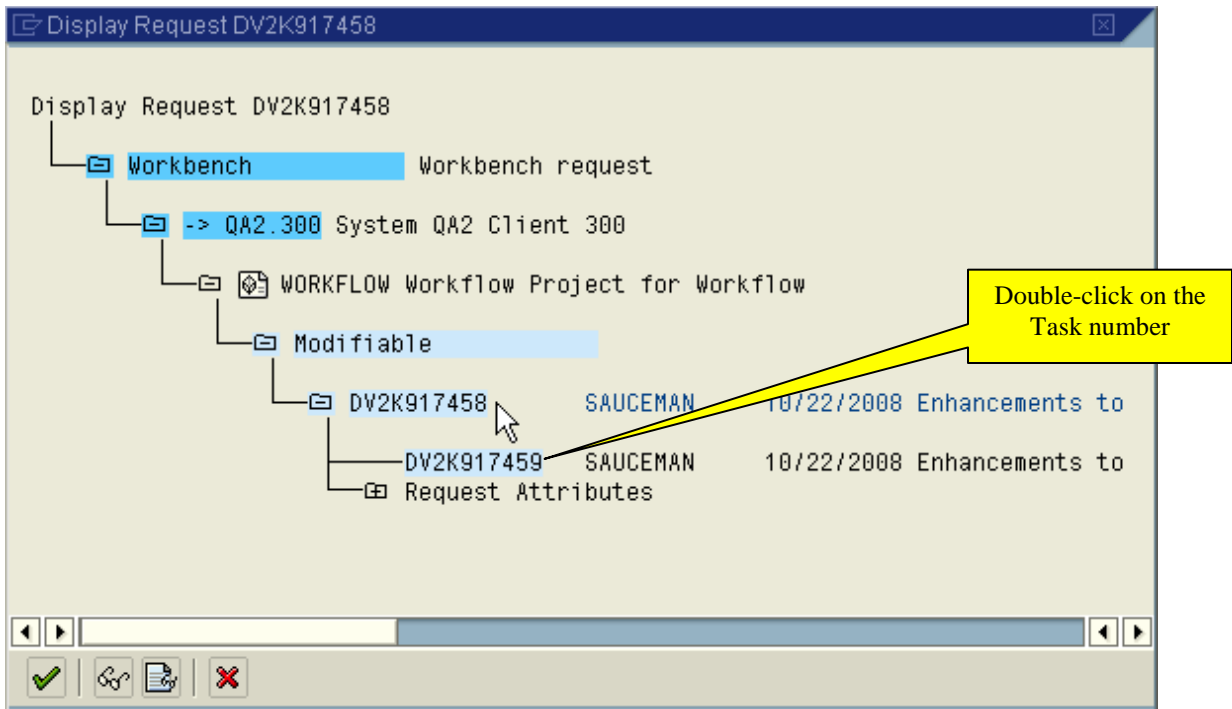
Transport Workflow

Click on the *Documentation* tab (highlighted below) to enter a description/justification for this change/transport. You will have to click ✏️ to enter change mode. The documentation template will be automatically imported and should be used as a guide to the type of information that is expected for each task. Remember that as each task is released, its documentation is copied up to its associated request.

Note: Auditors want as much supporting documentation as possible about who requested the change (copy and pasting emails works), when, and what all is contained in the change/transport. The more information the better. This information will also be sent to the approver in an email.
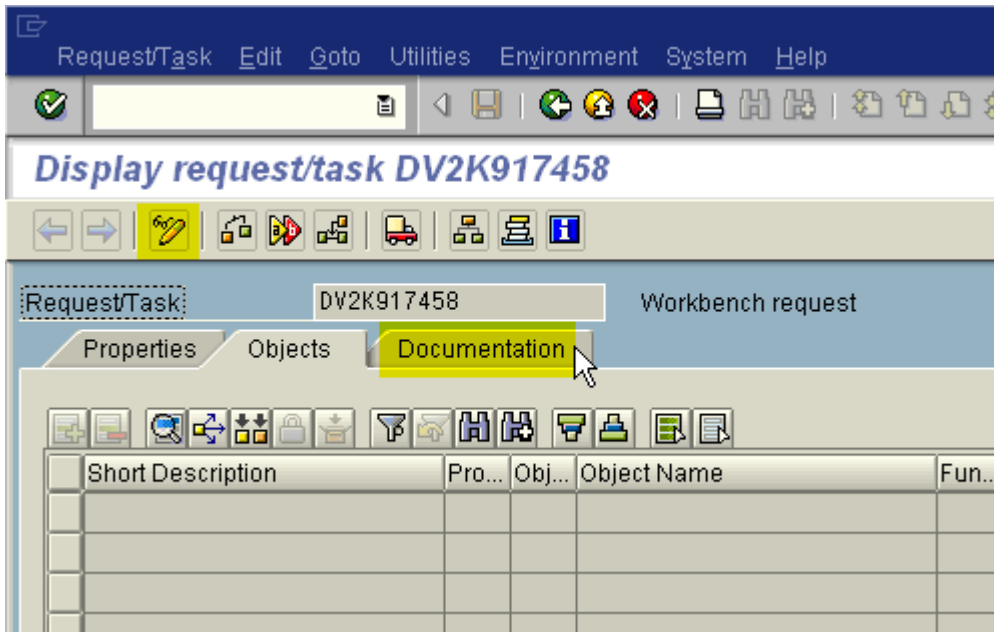
Warning! You can only enter and edit documentation PRIOR TO the transport or task being released. If you release the transport, you will NOT have the opportunity to add or edit its documentation. If you don't enter documentation at the time you create the transport, you can enter or edit it later using transaction SE10 until you release the transport.

Transport Workflow

Transport Proposals

Under workflow-controlled transports, when a *Transport Request* is released, the system prompts the developer to create a *Transport Proposal*. This is the "source document" of the transport workflow and replaces our current word documents, spreadsheets and emails that describe and request a transport. The window shown below pops up when the transport request itself is released (but not the subordinate tasks). The system will not let you add requests to the proposal unless they are released. Furthermore, if you cancel out of a transport proposal without creating it after releasing a request, the system will not mark the request as released.

Icon to create new transport proposal
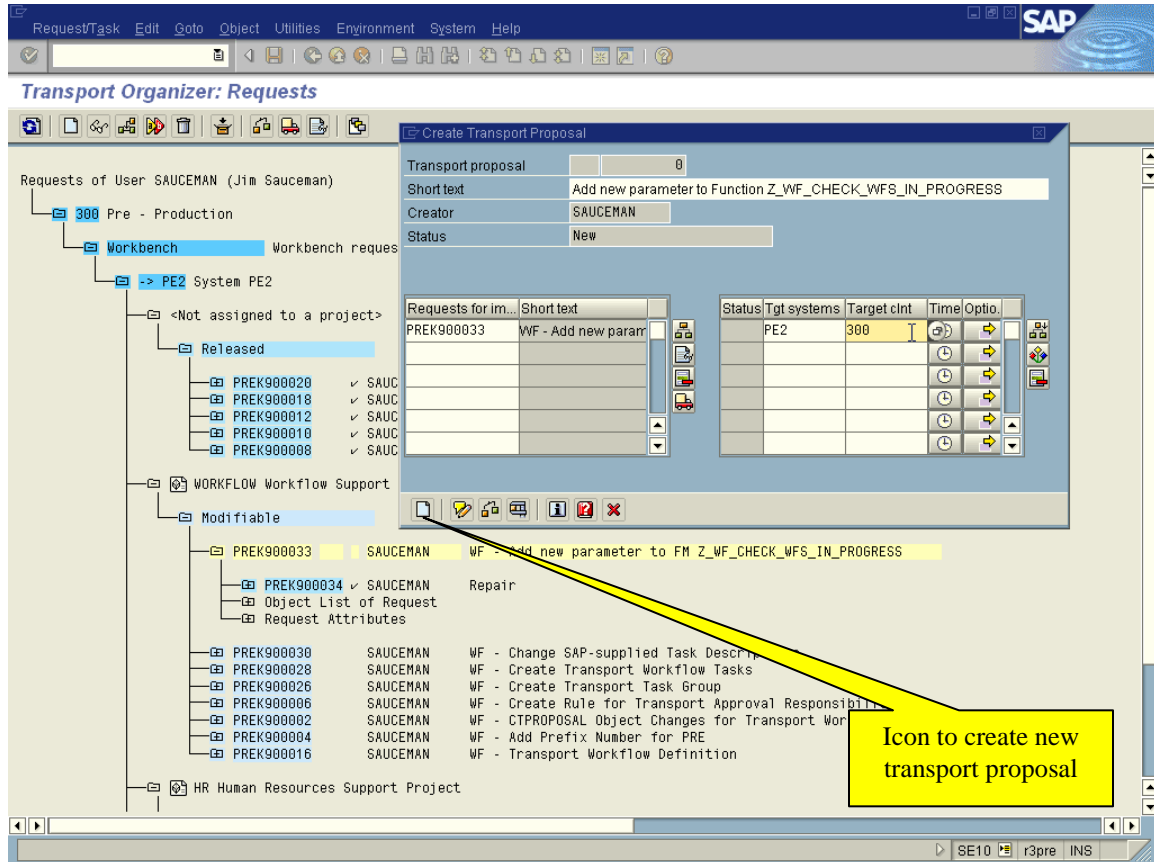
After you have specified the Target System and Client, click on the ⬜ icon to create the proposal and send it for approval. You might also want to create an attachment 📝 with special handling instructions or maybe the justification for the change for the benefit of auditors.

Note: the Test icon does not seem to work correctly until after the request has been released.

If you click the 🛈 icon for short instructions, the following information is displayed:

Transport Workflow

Creating a Transport Proposal

1. Enter the transport requests and the target systems in the proposal form.
2. Set an import time and the import options.

If you do not specify the start time, the system starts the import immediately. If you have not set the transport strategy in the transport tool of TMS to single transports, the system uses the import option *Leave transport proposal in queue for later import*.
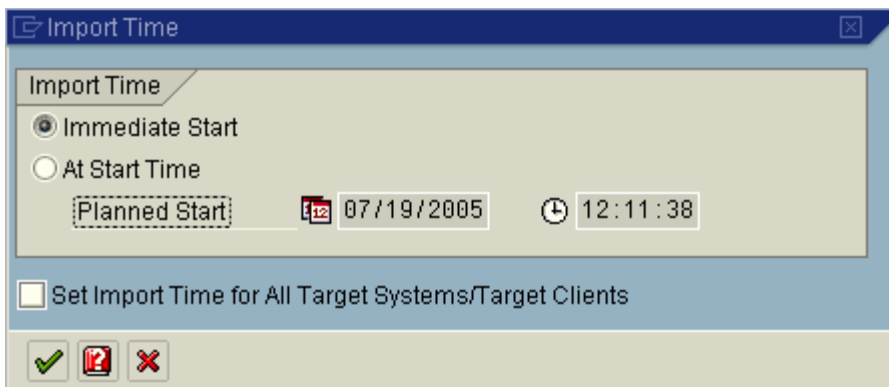
1. You can also insert a note with information for the transport administration.
2. Choose *Create* to save the transport proposal and forward it automatically to transport administration.

A message similar to the one below will be displayed when you have successfully submitted a proposal for approval:

Proposal PRE 0000000036 created and forwarded to transport administration

Once the transport is created, the system automatically routes it to the appropriate person(s) for approval and later import into the target system.

If you need to schedule a specific time for the import to occur (after business hours for example), you can click the icon and the following information is requested:

Import Time

Import Time
- ⦿ Immediate Start
- ◯ At Start Time
  - Planned Start   07/19/2005   12:11:38

☐ Set Import Time for All Target Systems/Target Clients

Simply specify the desired start date/time and the import into the target system will not occur until then. Click the checkbox to make every request in the transport proposal import at that time.

Transport Workflow

After the transport has been approved and the import into the target system is attempted, a work item is sent to the originator of the transport proposal asking him/her to **Confirm** that the transport was successful. This work item is created in the **Production System**.
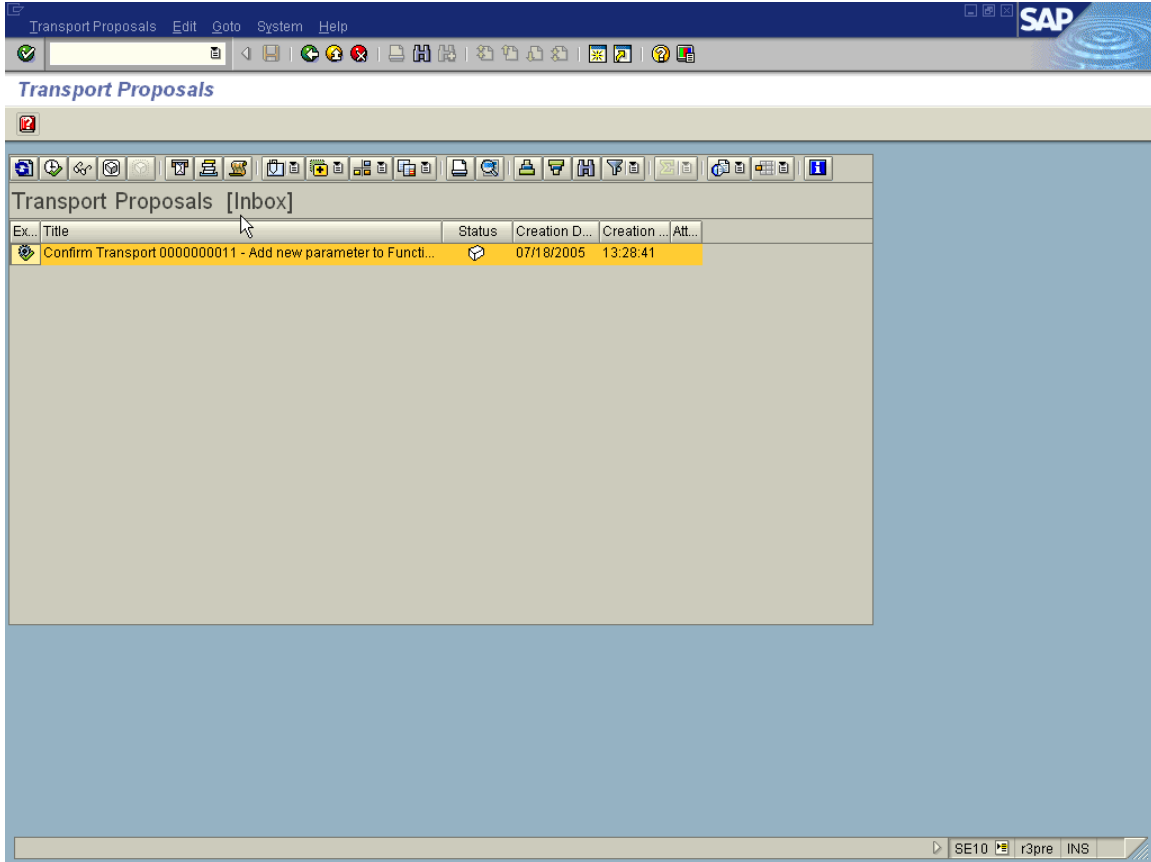
At the same time, the workflow also sends an *FYI Notice* telling the originator that the proposal was approved, the import was attempted and it is ready to be confirmed. If the proposal is rejected, the workflow sends an *FYI Notice* informing the originator of this fact and provides the name of the person who rejected it. These FYI Notices are forwarded immediately to the originator's email system if he/she has set up email forwarding in R/3. If not, they can be found under the *Documents* subfolder of the Business Workplace Inbox.

Transport Workflow

Executing the confirmation work item displays a pop-up window like the one shown below.
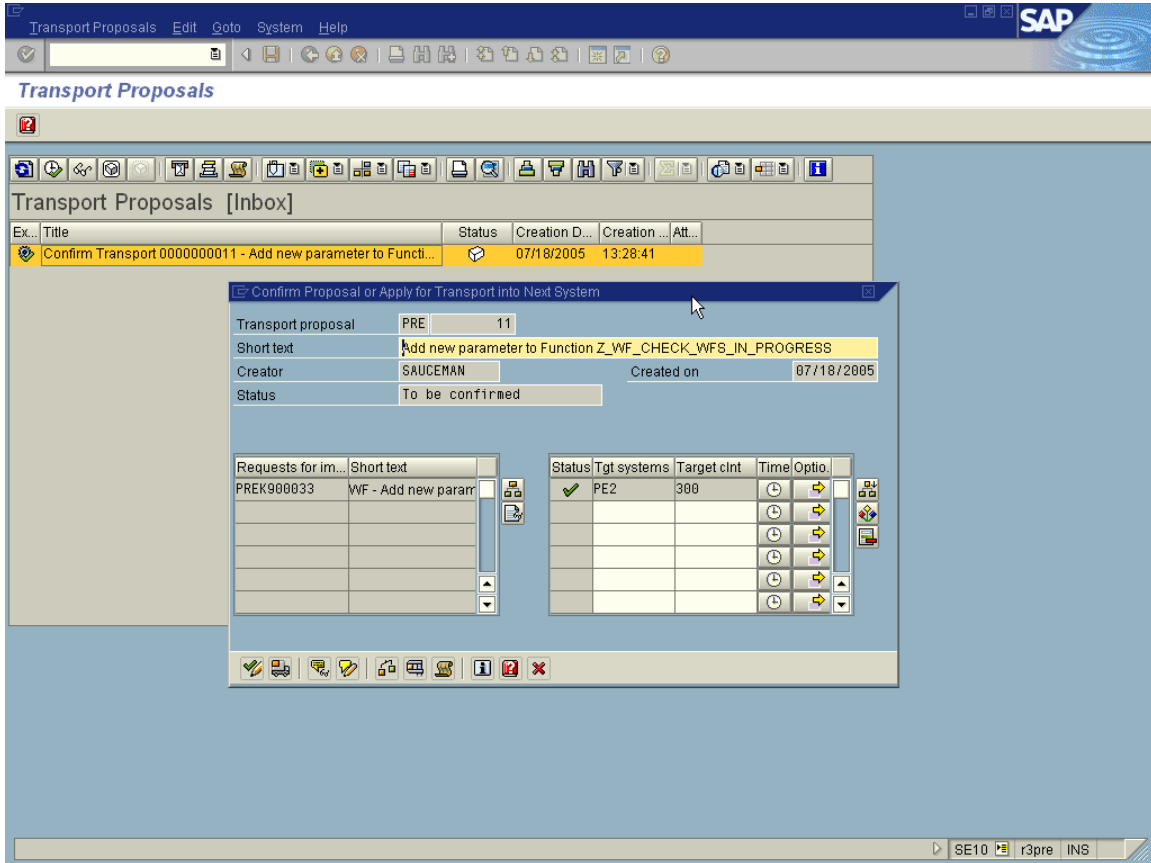
The originator should first use the [icon] icon to display the transport history and verify that the import was successful in the target system. Then, he/she should either confirm that this request is complete [icon] or enter another target system and/or client and click the [icon] icon to apply for transport into the next system. Confirming a transport proposal means that it is "irreversibly ended" and should be done only after you are completely finished with it.

Transport Workflow

The transport proposal has been approved and the import has started.

Check the progress of the transport in the transport logs.

If any errors occur, contact the transport administration.

If the transport is successful, you can confirm the proposal by choosing **Confirm**. Proceed as follows:

1. In the entry fields, enter the new target systems.
2. Set the import time and the import options.

If you do not specify the start time, the system starts the import immediately. If you have not set the transport strategy in the transport tool of TMS to single transports, the system uses the import option **Leave transport proposal in queue for later import**.

1. You can also insert a note with information for the transport administration.
2. If you choose **Apply for transport into next system**, the transport proposal is saved and automatically forwarded to the transport administration.

If you click the 🛈 icon for short instructions, the information shown above is displayed:

Transport Workflow

After confirming the transport proposal, the following screen is displayed asking for a list of Users, Distribution Lists, Org Units or combination thereof to which an FYI concerning this transport should be sent. You must send an FYI to at least one person. Again, this process takes place on the **Production System**.
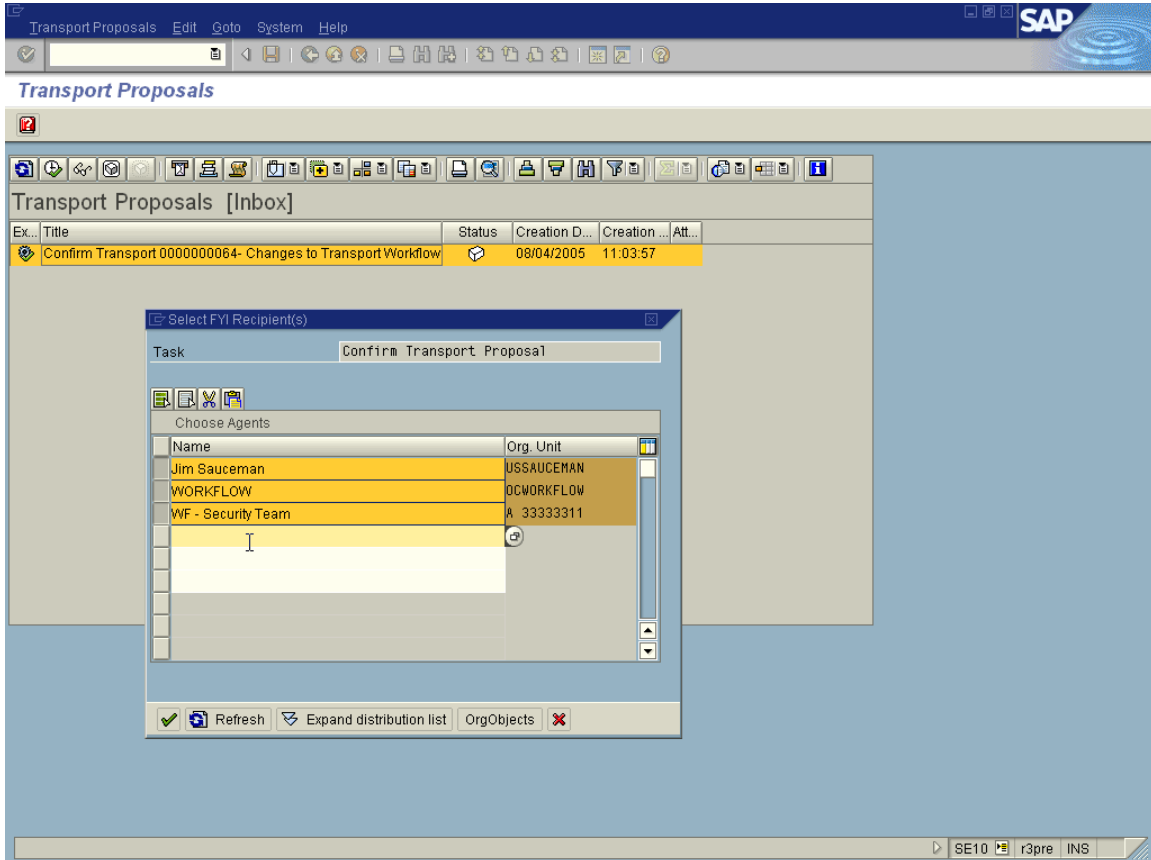
Transport Workflow

If the transport proposal has been rejected, the system will send the originator a work item to modify and resubmit it as shown below. In addition, it also sends an FYI Notice informing him/her of the rejection and the person who rejected it. This process takes place on the **Production System**.
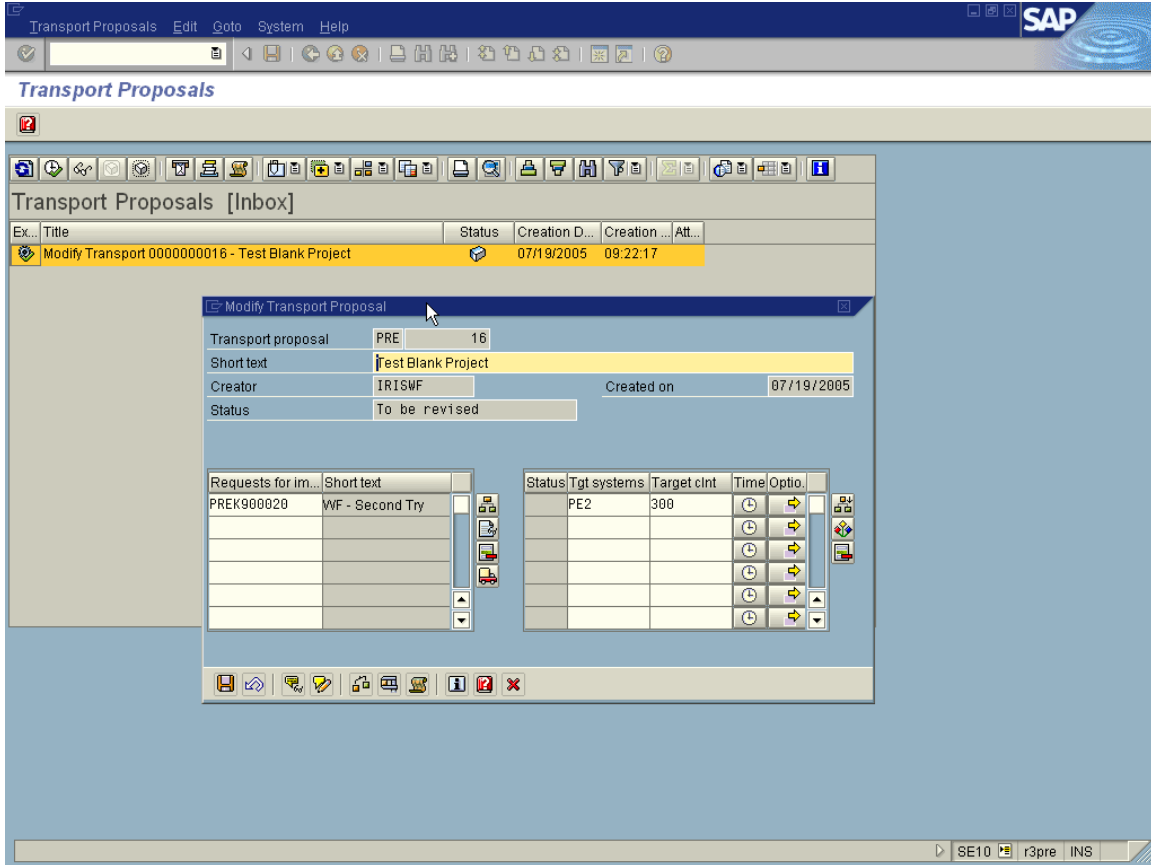
One should display the attachments ![icon] to determine why the transport proposal was rejected. Then, either change and resubmit it ![icon] or withdraw it ![icon].

Transport Workflow

Approver's Perspective

The approver for the transport proposal will receive a work item both in his/her Business Workplace Inbox (**SBWP**) and the Inbox of his/her transaction **SE10** *Transport Proposals* tab. Both locations point to the same work item so executing it in either place will produce the same results. The SE10 Inbox only displays those work items related to transports so it provides an automatic filter if you typically have lots of work items. These work items are generated and must be executed on the **Production System**.
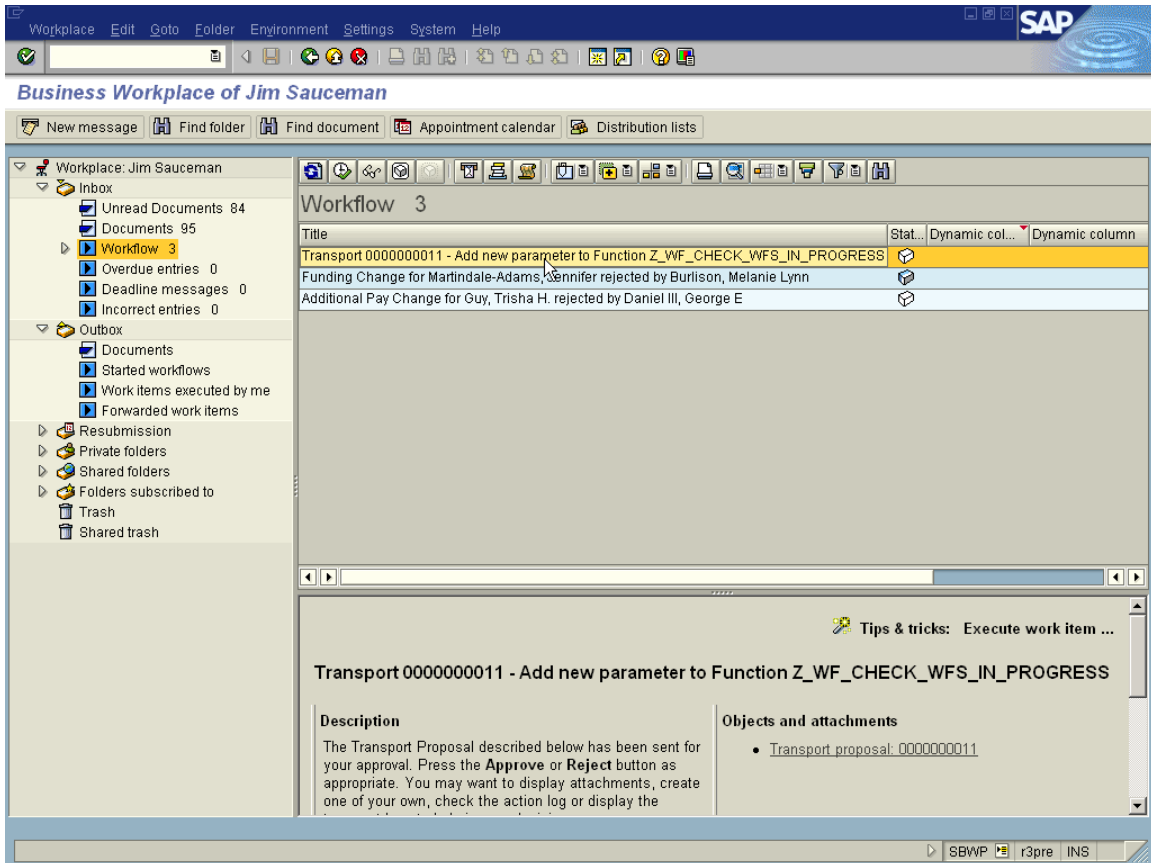
Business Workplace Inbox View

Transport Workflow

The SE10 view filters out any other work items allowing you to focus on transports:
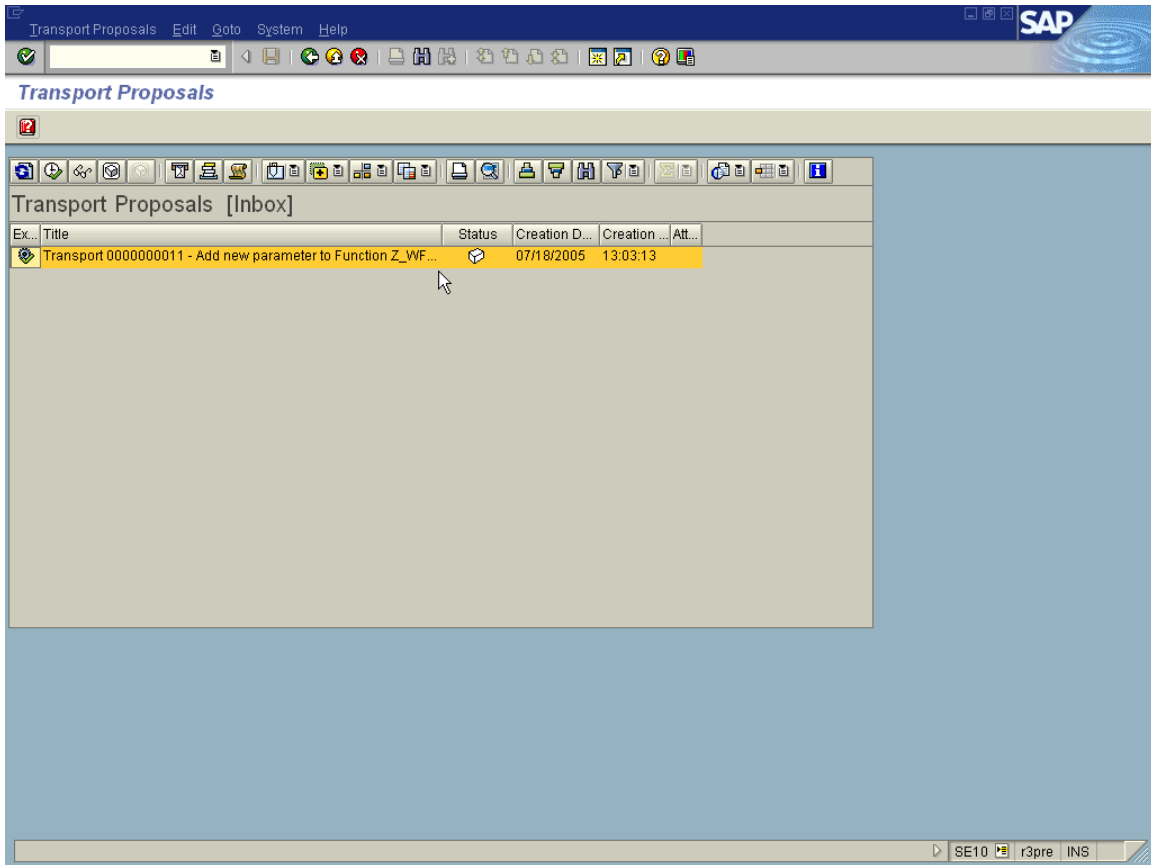
Transport Organizer (SE10) Inbox View

Transport Workflow

When the approver executes the transport approval work item, a window similar to the one shown below pops up:
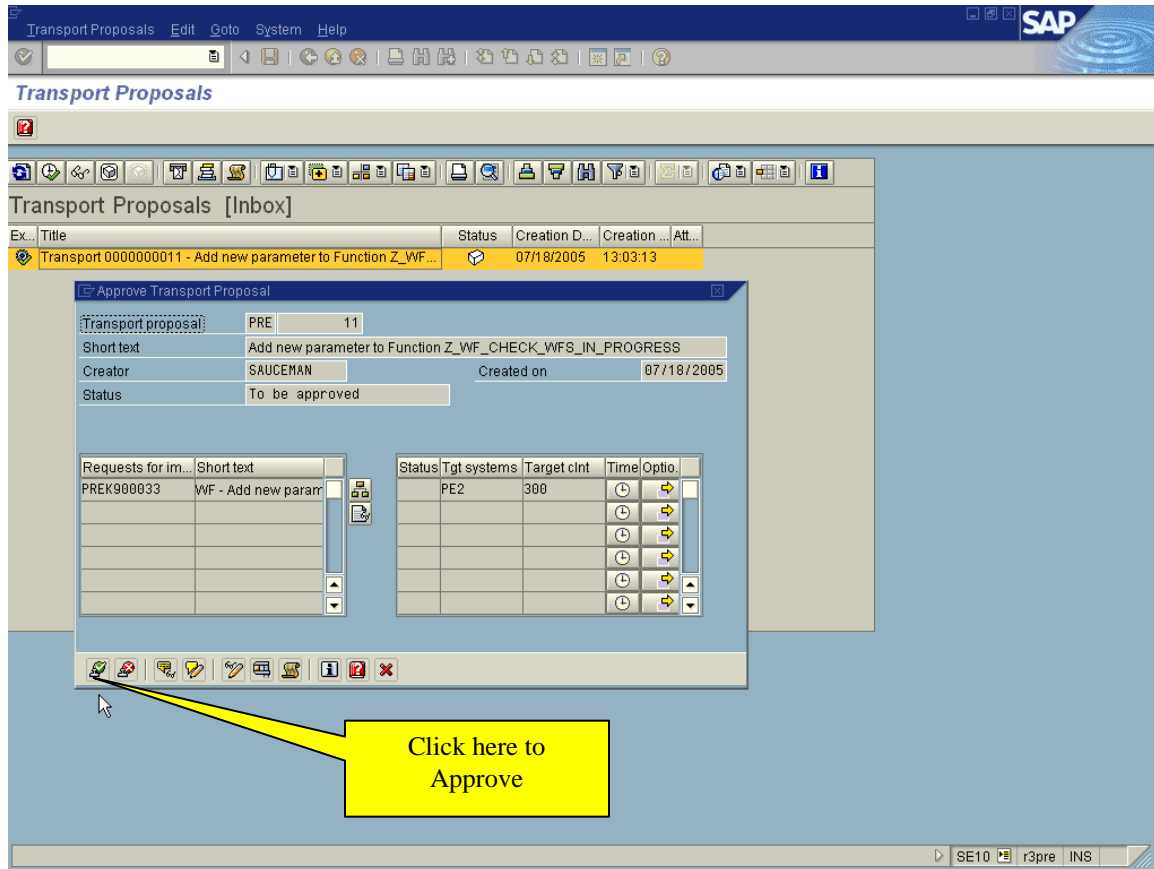
The approver can click to **Approve** or to **Reject**. One can click to display any attachments or to create a new one. Note: If you are rejecting a transport proposal, It is **very important** to create an attachment to inform the originator of the reason for the rejection.

The icon allows approvers to make changes to the proposal and the icon can be used to test the import into the target system to see if there will be any issues. Use the icon to display the transport logs.

When you are approving a transport proposal, you can add more requests to the proposal, delete requests from it, change the list of target systems, or change the import time and import options. If you make changes, please create an attachment describing what was done before you approve or reject the proposal.
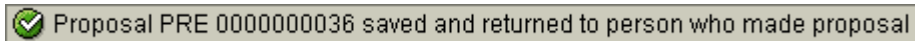
Transport Workflow

When you click the [icon] button to approve a transport proposal, the following message is displayed:
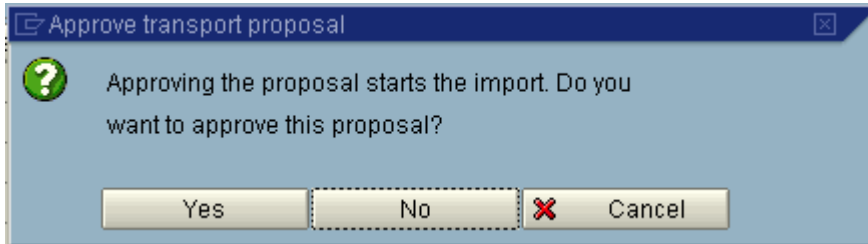
The statement "Approving the proposal starts the import." is *only* correct if you are both the approver AND the transport administrator for the combination of Project, Target System and Client of this transport proposal. If the transport administrator is a different agent, the import will be done by him/her as a separate work item/task. This can be a useful feature if you want to be able to move to your Quality Assurance System without involving anyone else.

If you click the [icon] button to reject it, a message similar to the one below is displayed:

Transport Workflow

Transport Administrator's Perspective

Note: If the approver and transport administrator are the same person, the import begins immediately after the approval without generating another work item. The *Transport Administrator* can either display his/her worklist in transaction **STMS** or via his/her Business Workplace Inbox (**SBWP**) on the **Production System**. The screen shown below illustrates how a transport administrator might access the transport proposal "worklist" using the ![inbox icon] Inbox icon in **STMS**.
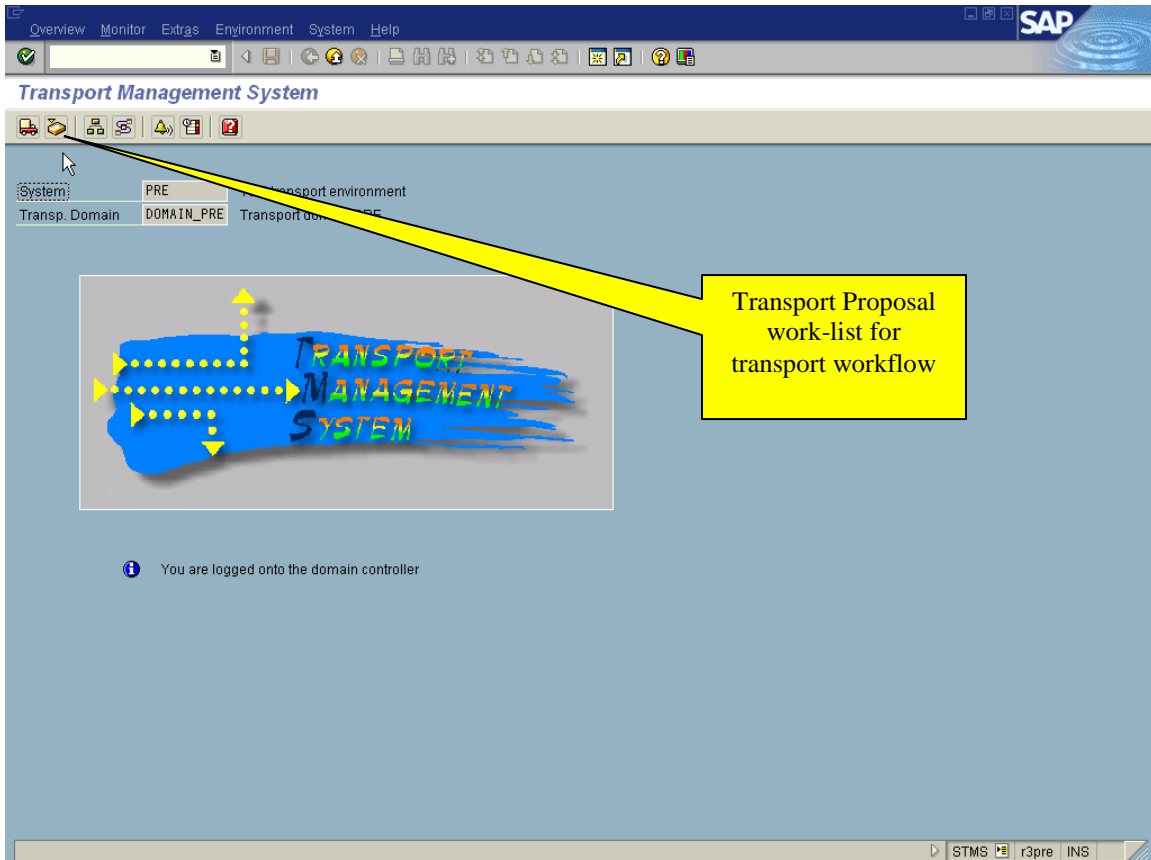
Transport Workflow

When the transport administrator executes the work item, the window shown below pops up:
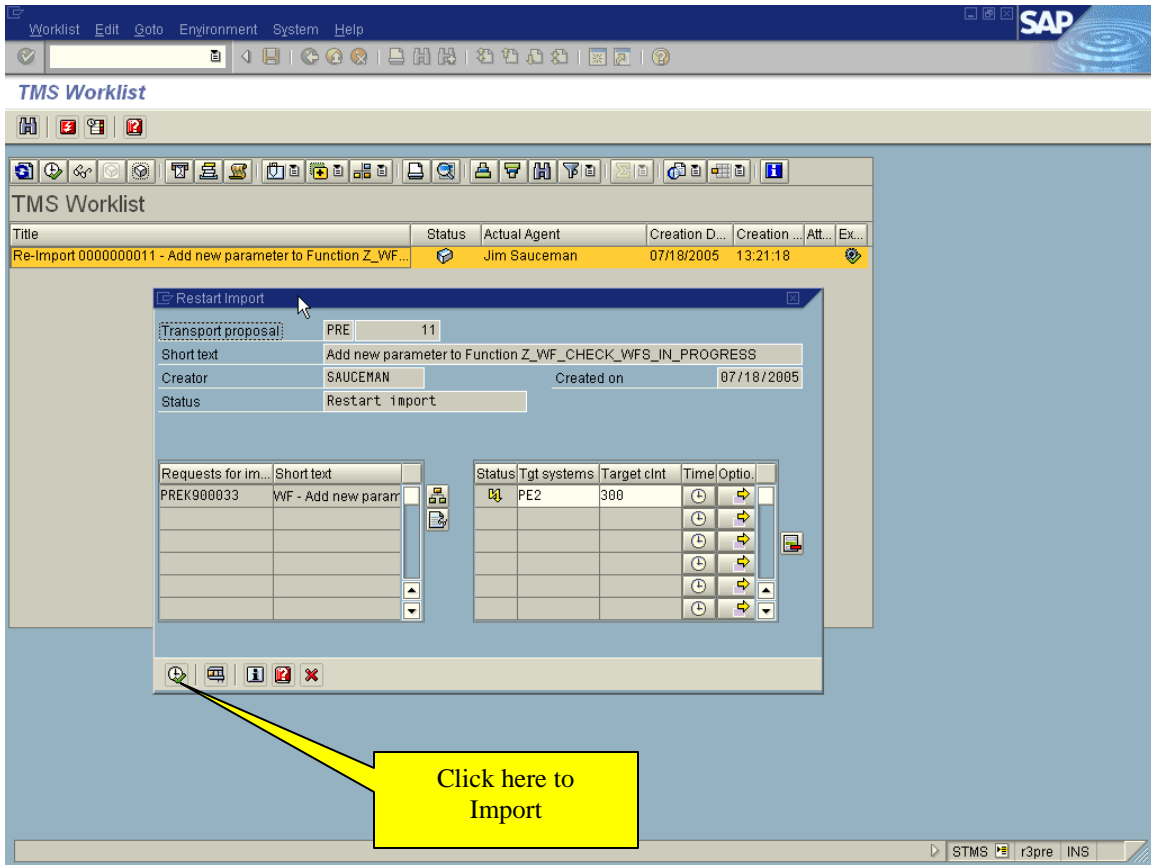
Click the ⊕ icon to perform the import. The transport administrator can not reject or change a transport proposal.

Note: In this case the task title says "Restart Import". This is because I had already attempted the import once and this would be the second attempt. Also note the lightning bolt under the "Status" column; you can click on it to see the message from the previous attempt. The system distinguishes between imports and re-imports of the same transport proposal.

If you need to restart the import for a transport proposal it typically means that an approved transport proposal has encountered import errors. Correct the errors and restart the import.

Transport Workflow

Note: The screen shown below is *normally* suppressed based on configuration by the Security Team. However, it sometimes sporadically appears, so I wanted to show it here. If you have to log on to client 000 to perform the import, remember that it is a different password from the default client password (e.g. 300, etc.).

When the transport administrator either executes the import work item or clicks the icon to restart the import, a logon to client 000 in the target system *may* be presented as shown below:
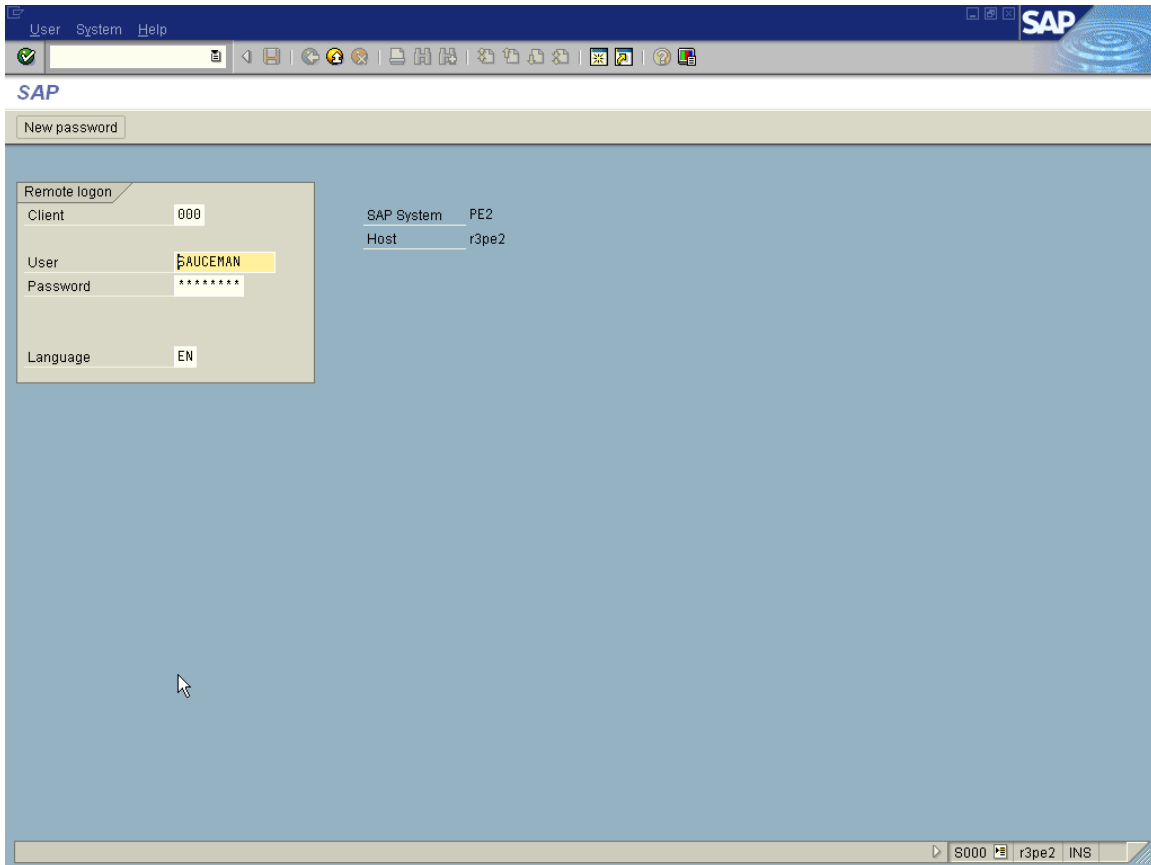
Log on to the remote system to perform the import. After a successful logon, a message similar to the following should be displayed:

If an import time/date was specified (instead of Immediate Start), the message will indicate that the import was *scheduled* instead of *started*.

The system takes care of sending the originator a work item so he/she can confirm that the import into the target system was successful. Thus, the transport administrator should only have to work this Inbox executing work items in the sequence they were received and let the workflow system take care of notifications. Note that the most recent work items are typically listed first.