Step by Step Procedure to Block and Debug a CIF Queue Flowing from R/3 to APO System

Applies to:

SAP R/3 and SAP APO. For more information, visit the ABAP homepage.

Summary

This article gives a detailed step-by-step procedure to block and analyze a CIF queue – which is sent from R/3 system and processed in APO system. By using this technique, CIF queue is blocked in APO system which can then be processed or even debugged using transaction SMQ2 (qRFC monitor of Inbound queue).

Author: Ramachandran Venkateswara Babu

Company: Infosys Technologies Ltd

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Author Bio

Ramachandran Babu has been working with Infosys as a Technology Lead. Ramachandran has worked in many implementation and development projects in areas including APO.

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Scenario Explained

There are many instances in a project where you want to block a CIF queue and analyze,

1) When you are not able to generate desired result in the APO system (there is no error in the queue though), it is preferable to stop the queue and analyze - which otherwise will directly get processed and post a transaction.

2) When you do not have a clue about - what actually happened when the CIF was processed.

Some examples of undesirable results are,

- ➢ Change in demand of a PR in R/3 is not reflected in APO system
- ➢ Change in demand of a PR in R/3 system completely deletes demand in APO system.

Note: When there is an error in queue it is automatically blocked at the inbound side of the APO. When there is no error in the queue, but still not producing desirable results, the procedures mentioned below are very handy to over ride the system and carry analysis.

Prerequisite

- ➢ RFC connection is established between R/3 and APO system
- ➢ Active integration model exist in the R/3 system

Creation of Outbound CIF from R/3 System with Queue Registered at APO System

Let us take a simple example to send Material master from R/3 to APO system. An integration model is created in R/3 system as follows,

Step by step procedure

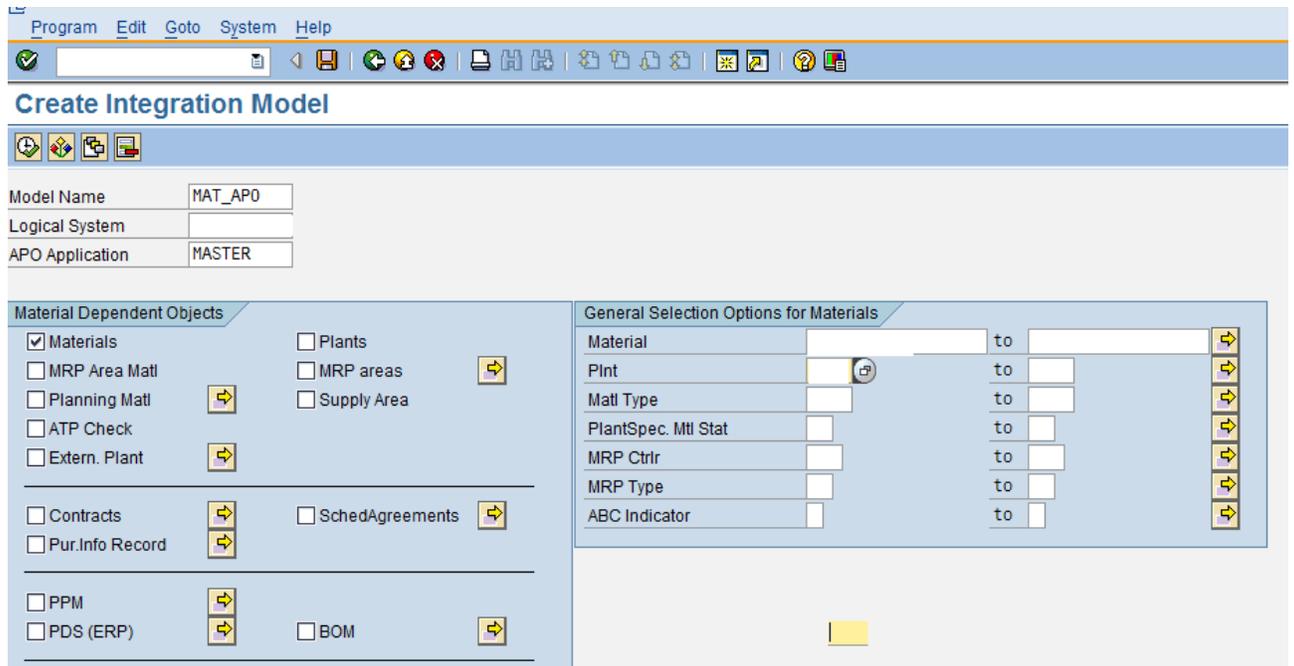1) Go to transaction CFM1 – Creation of Integration model.

Screenshot - ECC

2) Create an integration model with a material for plant. Make sure correct logical system name is provided and the Material is checked.

Screenshot - ECC

3) Execute the integration model and save it.
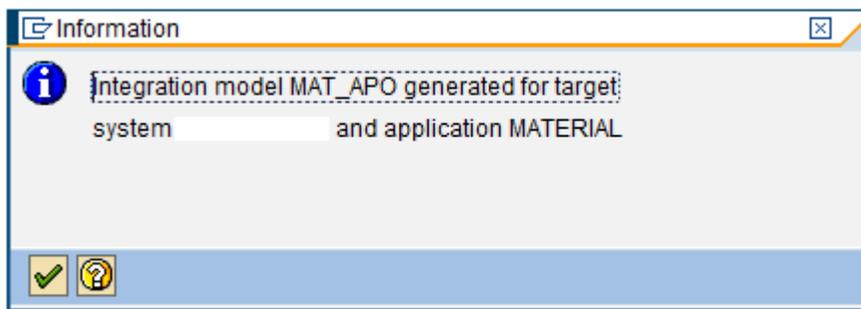
Screenshot - ECC

4) Go to transaction CFM2 – 'Activate or Deactivate integration model' and execute for the model just created.

Screenshot – ECC

5) Screen below shows integration model created is not active.

Screenshot - ECC

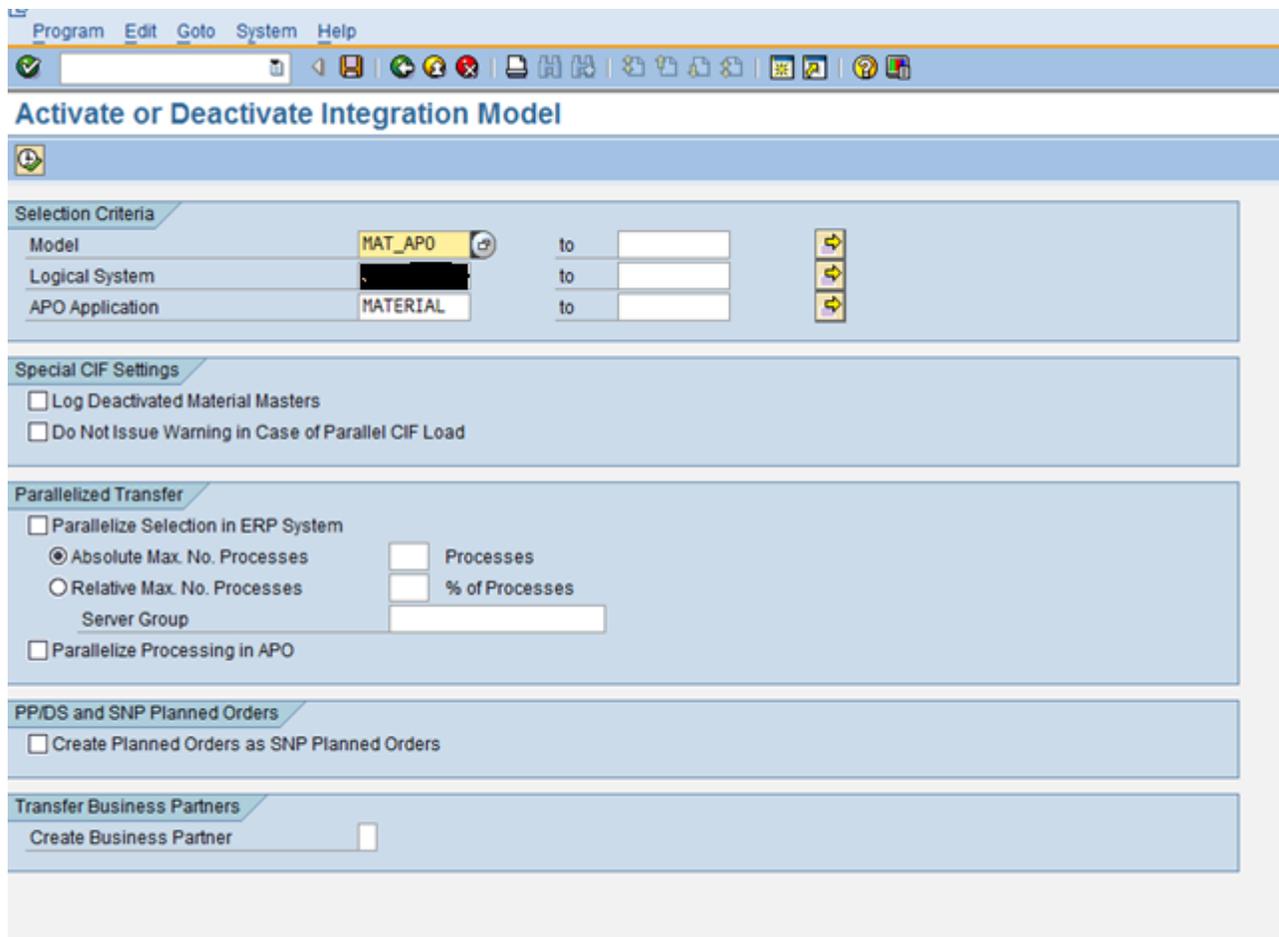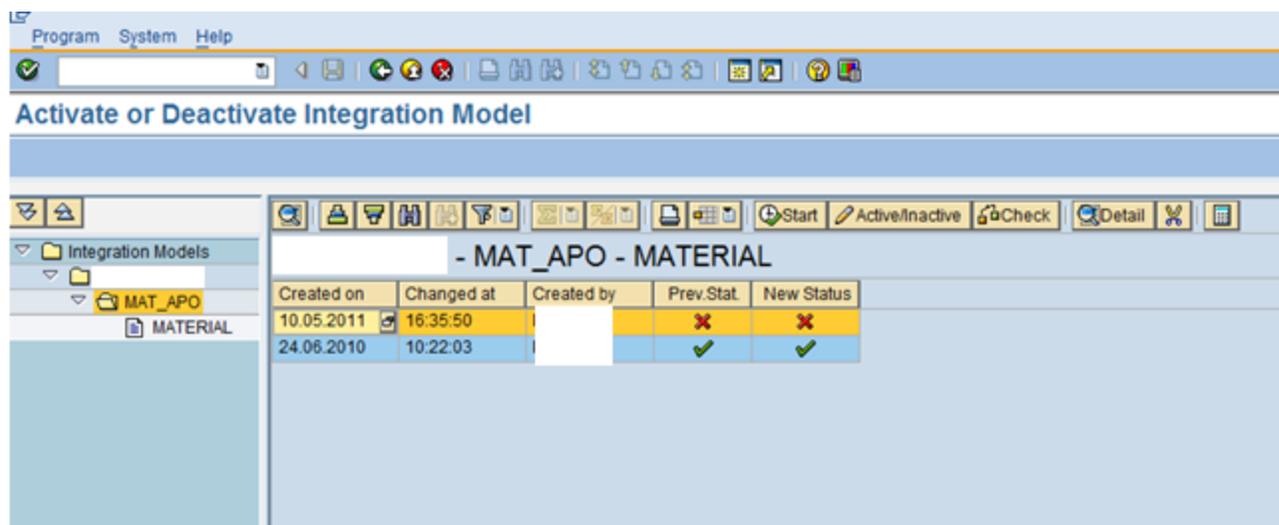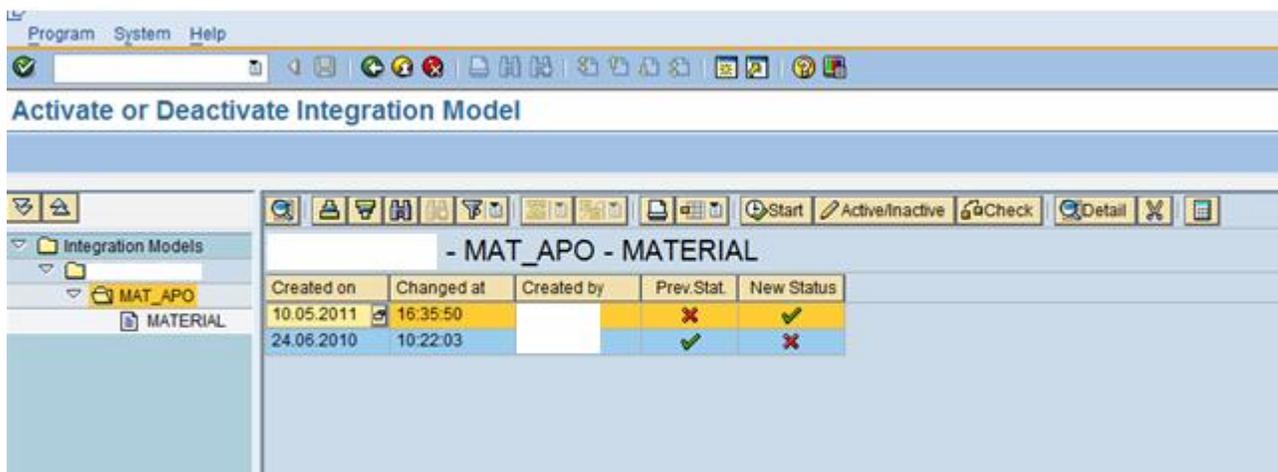6) Choose the integration module you want to activate and press 'Active/Inactive' button. Integration model status is changed from Inactive to active as shown below.

Screenshot - ECC

7) Transaction SMQR is used to register or de-register queues. In the screen shot shown below – at the APO side queue name starting with 'CF' are registered which means incoming queues will be processed without stopping it.

Screenshot - APO

8) Transaction SMQ2 is qRFC monitor for inbound queues. It is used to view and re-process any stuck queues. It can also be used to analyze a stuck queue by debugging it.

The below screen shows there is no queue that is stuck and the material we sent got processed and posted.
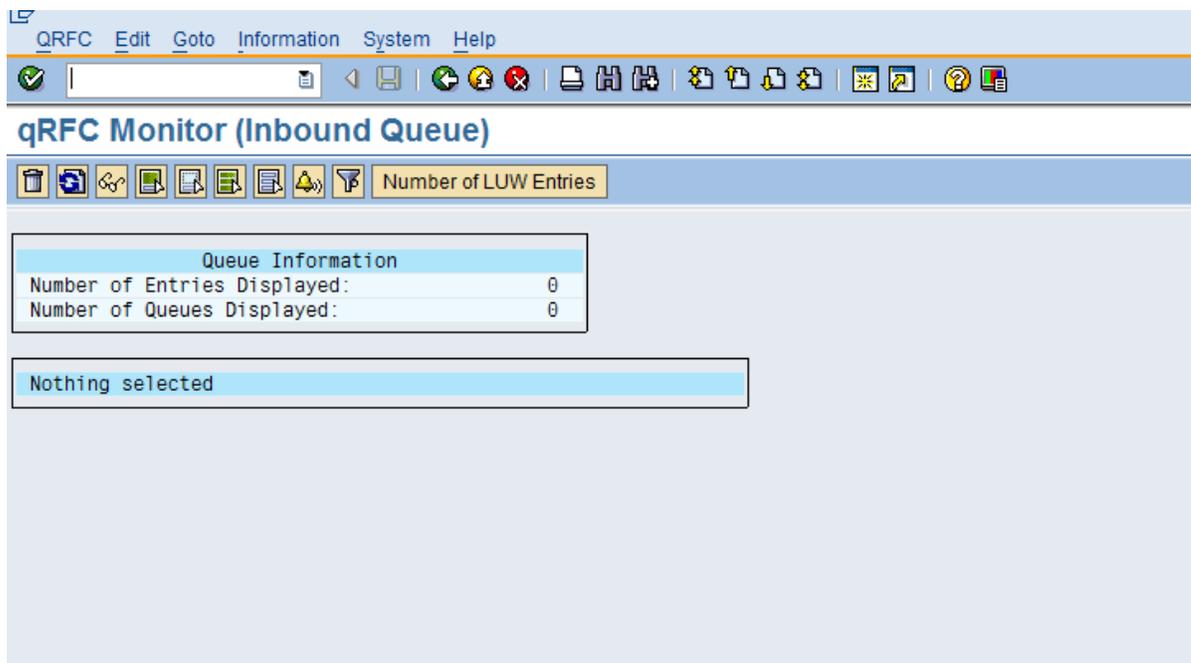
Screenshot - APO

Creation of Outbound CIF from R/3 system with Queue Deregistered at APO System

9) Let us try the same procedure by deregistering queue at APO side. Use transaction SMQR to de-register.

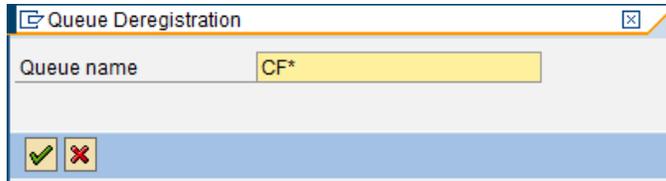|	C1.	Queue name	Type	Mode	Max. Runtime	Attempts	Pause	Destination with LOGON Data
	001	CF*	R	D	60	30	300	

Screenshot – APO

10) Check the queue name CF* and press button 'Deregistration'. You will get a pop-up. Press the tick button to deregister the same.

Screenshot - APO

11) Queue starting with CF is successfully deregistered,

	C1.	Queue name	Type	Mode	Max. Runtime	Attempts	Pause	Destination with LOGON Data
	001	CF*	U	D	60	30	300	

Screenshot - APO

12) Create an integration model for a material as shown below.

Screenshot – ECC

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© 2011 SAP AG 8
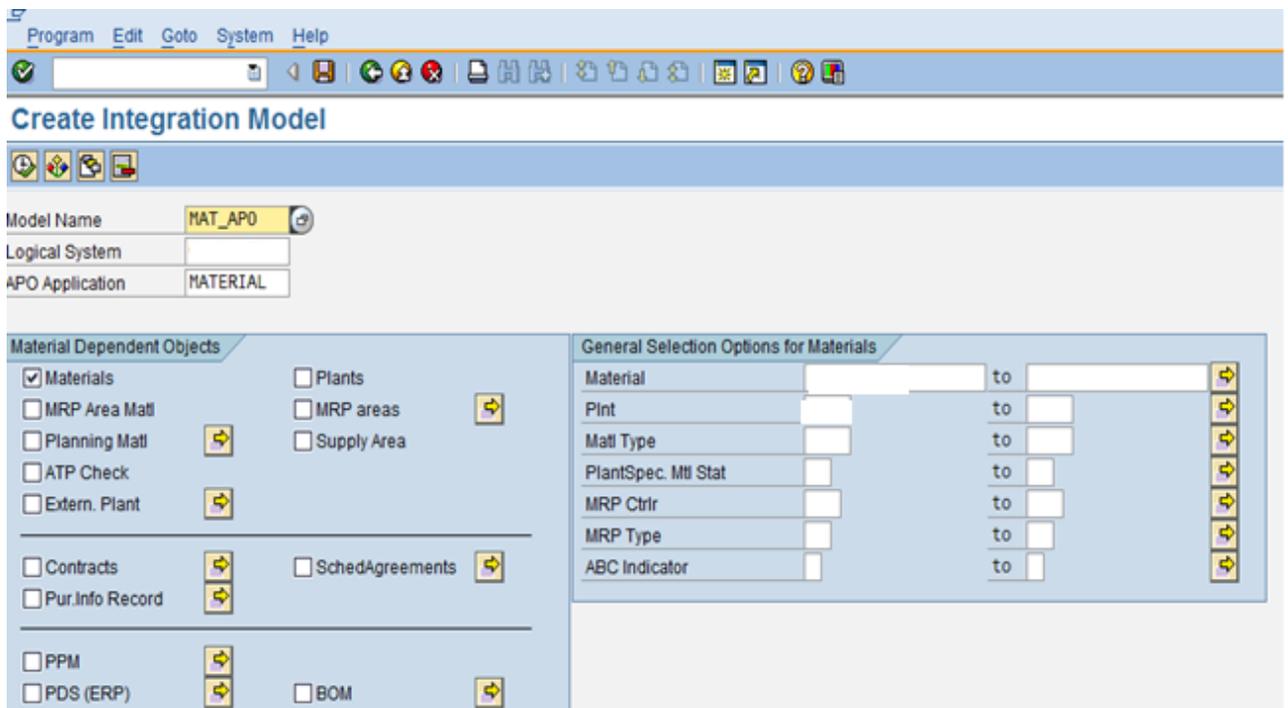
13) On saving the integration model you get a pop-up as shown below.
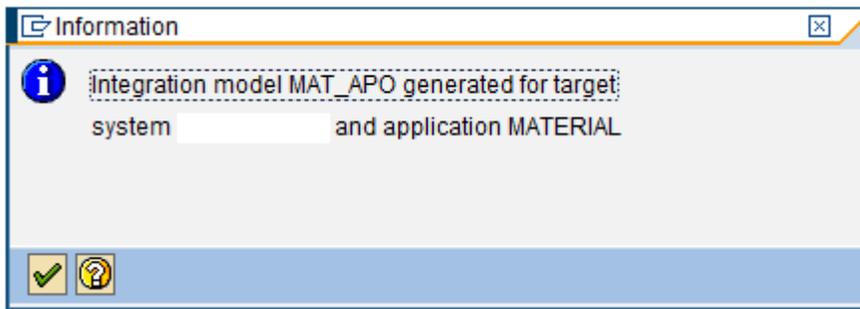
Screenshot - ECC

14) Use transaction CFM2 to activate the integration model as shown below. Choose the integration model just created and execute.
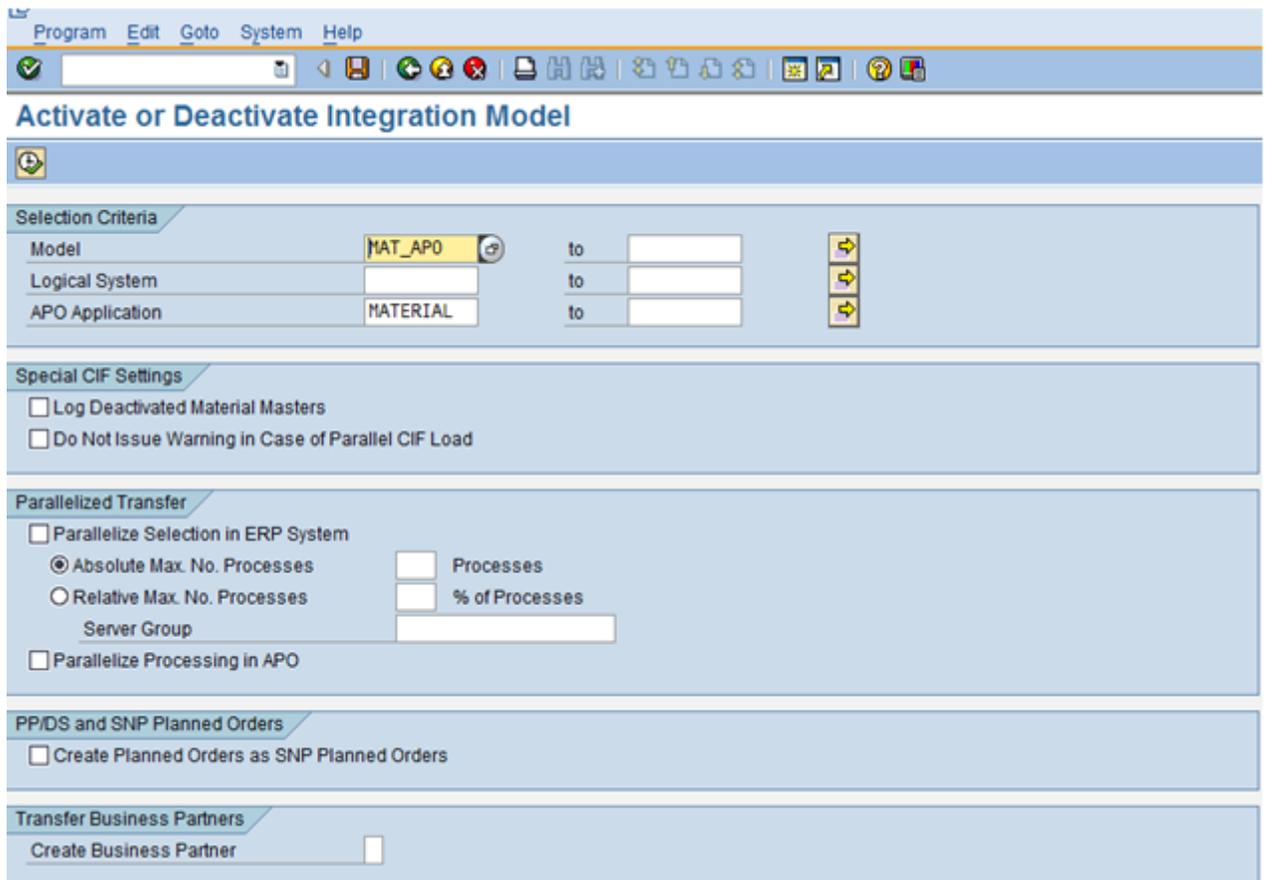
Screenshot – ECC

15) The screen below shows integration model is not active.
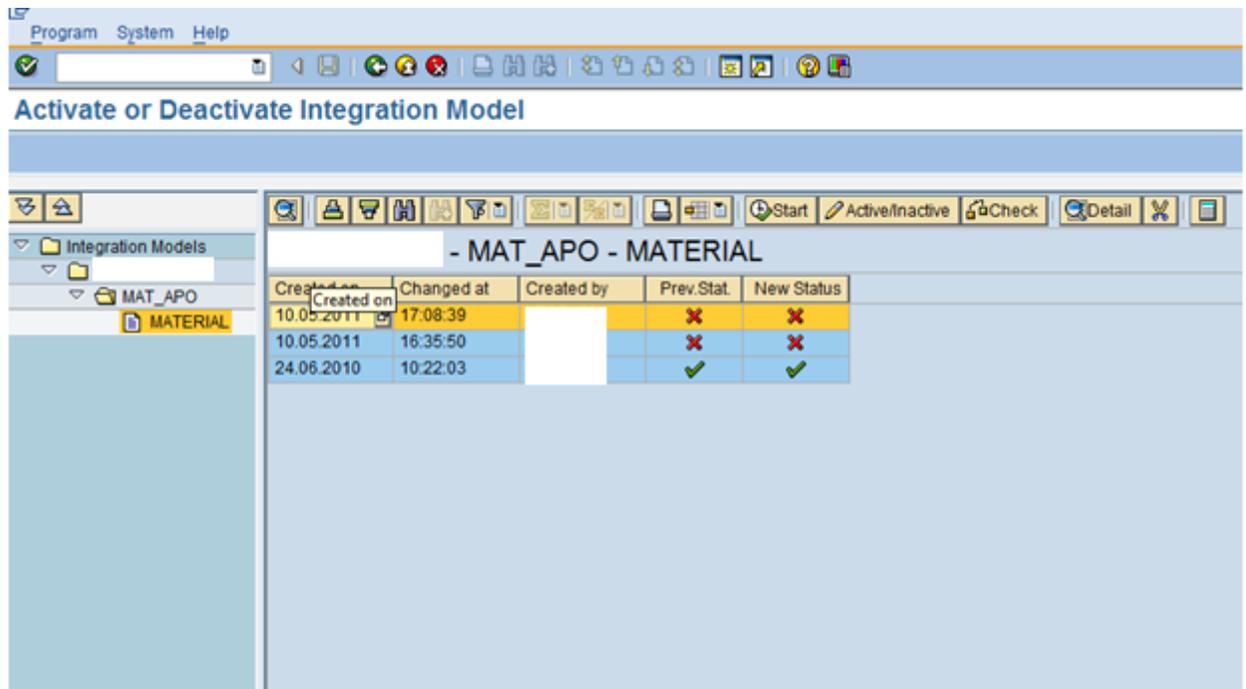
Screenshot - ECC

16) Choose the integration model and press button 'Active/Inactive'. The integration model gets activated.
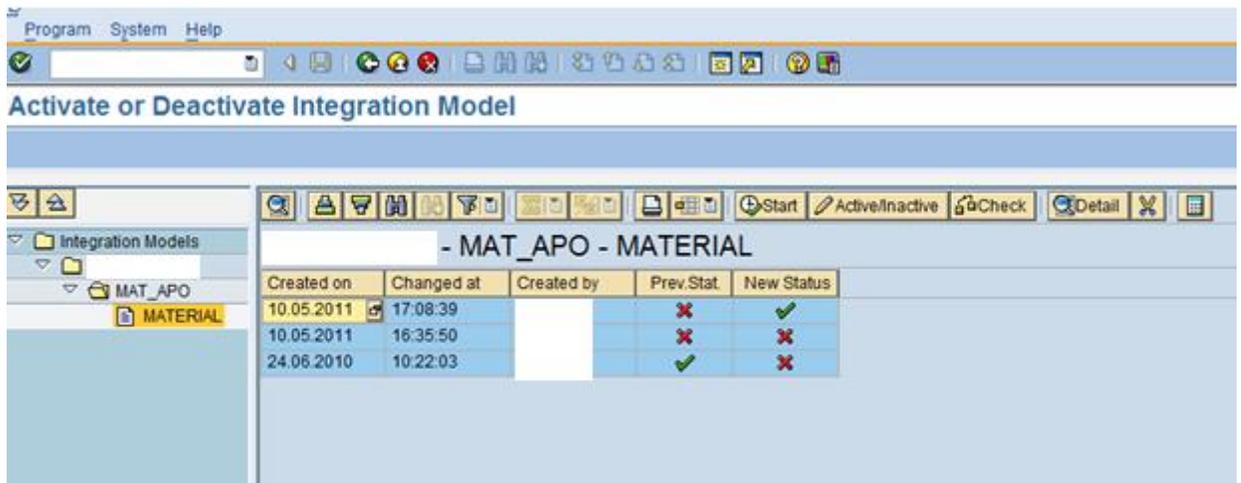
Screenshot – ECC

17) Since the queues are blocked (Deregistered) at the APO side you get a pop-up as shown below. Please ignore this pop-up.

Screenshot - ECC

18) Go to transaction SMQ2 in APO system. There is a queue displayed waiting to be processed.

Screenshot - APO

19) Double click on the queue which takes you to the next screen.

Screenshot - APO

20) Double-click again which displays queue name which can either be processed directly or can be debugged. Choose queue and press execution button if you want to process it directly or press button with a small arrow to process in debugging mode.

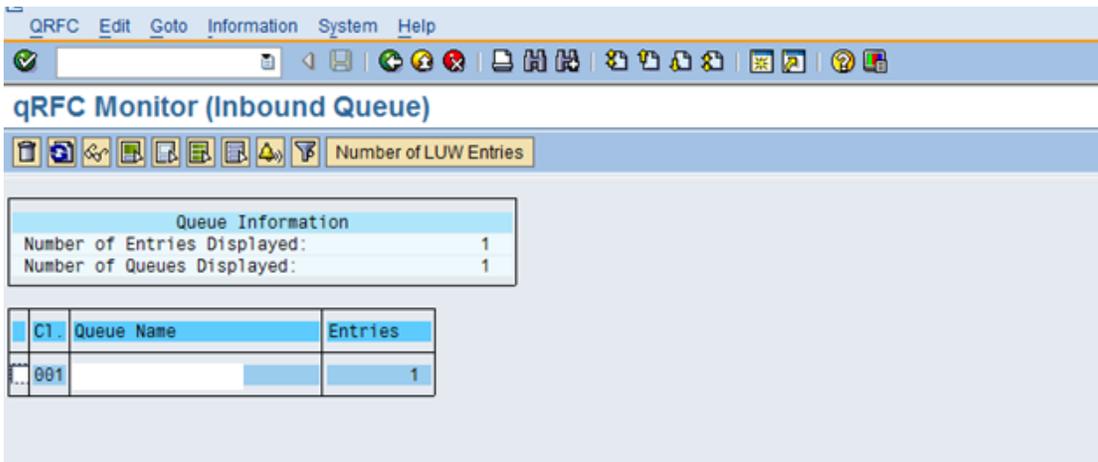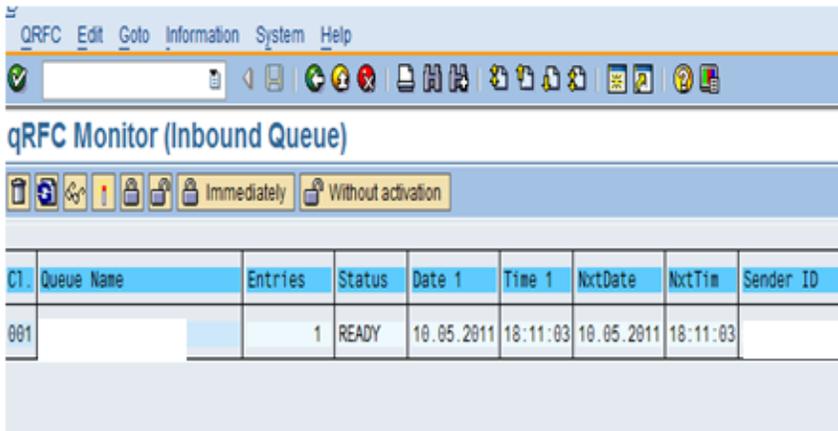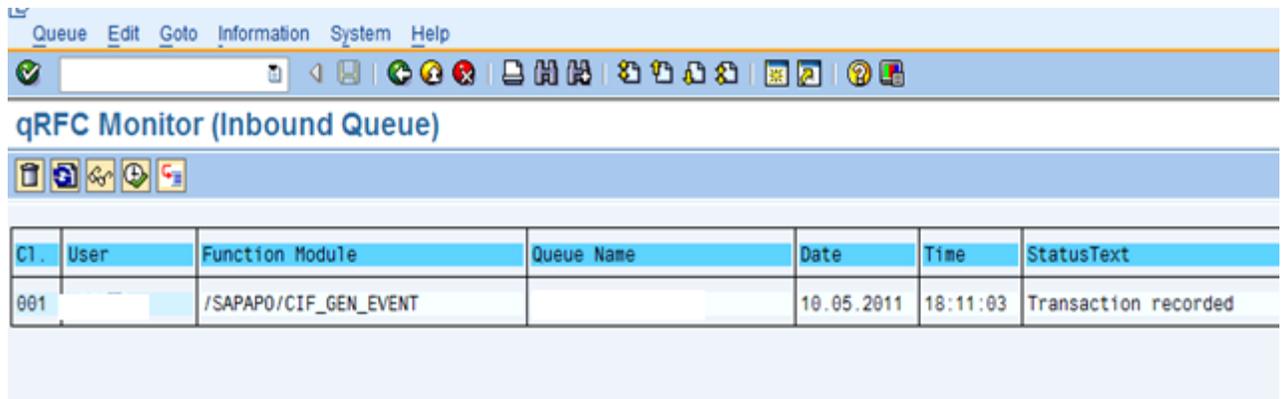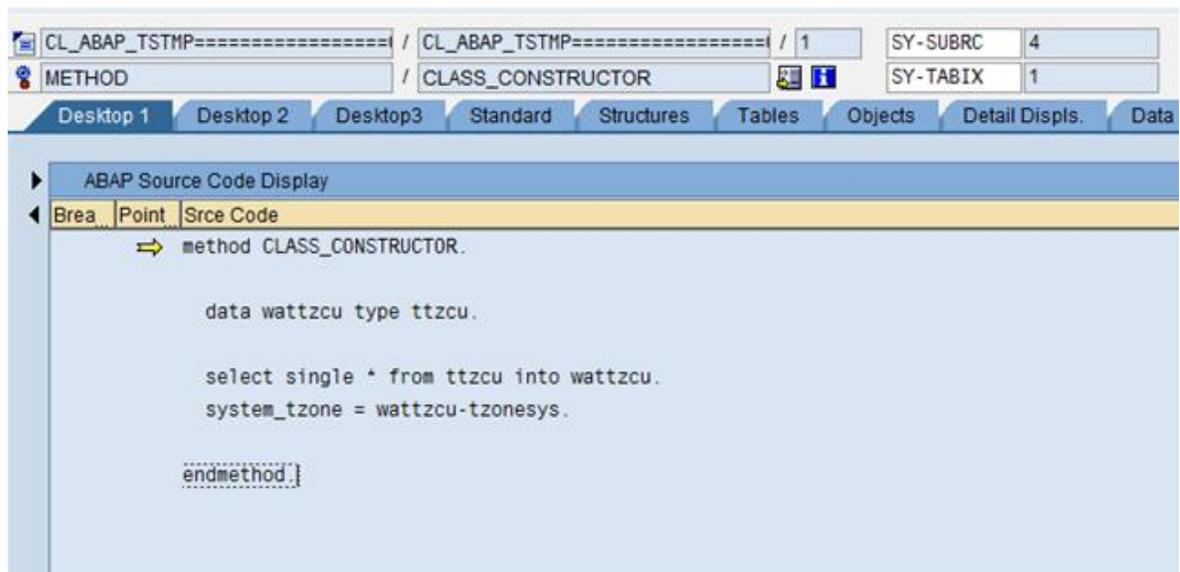| Queue | Edit | Goto | Information | System | Help |

qRFC Monitor (Inbound Queue)

Cl.	User	Function Module	Queue Name	Date	Time	StatusText
001		/SAPAPO/CIF_GEN_EVENT		10.05.2011	18:11:03	Transaction recorded

Screenshot - APO

21) In debugging mode, analysis can be made on how the CIF data is handled by APO and transaction being posted.

| CL_ABAP_TSTMP================= | / | CL_ABAP_TSTMP================= | / | 1 | SY-SUBRC | 4 |
| METHOD | / | CLASS_CONSTRUCTOR | | | SY-TABIX | 1 |

Desktop 1 | Desktop 2 | Desktop3 | Standard | Structures | Tables | Objects | Detail Displs. | Data

ABAP Source Code Display

| Brea | Point | Srce Code |

```
⇒  method CLASS_CONSTRUCTOR.

    data wattzcu type ttzcu.

    select single * from ttzcu into wattzcu.
    system_tzone = wattzcu-tzonesys.

    endmethod.
```

Screenshot - APO

22) On completing the debugging the queue is successfully processed and the inbound queue becomes empty.

| Queue | Edit | Goto | Information | System | Help |

qRFC Monitor (Inbound Queue)

Nothing was selected
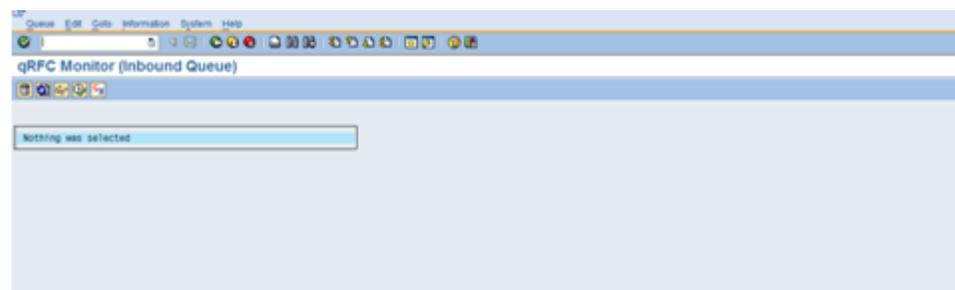
Screenshot - APO

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[Thread: Debugging CIF -BADI -/SAPAPO/CURTO](#)

[Thread: debugging CIF user exit](#)

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