



**How-to Guide
SAP NetWeaver 2004s**

How To... Create Monitor Entries from a Transformation routine

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**Applicable Releases:
SAP NetWeaver 2004s
(BI Capability)**

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1 Business Scenario

On the upload of transactional data, you want to prevent the application of business rules for certain criteria, e.g. a certain cost centre should be treated differently or the records affecting this cost centre should not be processed at all (skipped on the transfer population of data targets). In addition to implementing the criteria in the coding of a transformation routine, you also want to provide information about what has happened to the administrator. You can do so by writing messages to the monitor from within the transformation routine. These messages (standard messages defined with transaction code SE91) are displayed in the Data Transfer Process (DTP) monitor.

2 The Result

The user can check the monitor entries for this DTP after a data load. In our example we have chosen a specific cost centre (cost centre '1000') for which the processing of the record should be skipped. The DTP monitor indicates that messages have been triggered for a certain number of records. Details on the message can be obtained by further drilling-down on the monitor entry.

The screenshot shows the SAP Data Transfer Process Monitor interface. The top menu includes 'Request', 'Edit', 'Goto', 'Extras', 'Environment', 'System', and 'Help'. Below the menu, there are buttons for 'Job Overview' and 'Error Stack'. The main area displays the following information:

- Request ID: 140.593
- Start Time: 08.06.2006 17:35:16
- Finish Time: 08.06.2006 17:35:52

The 'Details' tab is active, showing a table of request processing steps. The table has columns for 'Me', 'Da', 'Time Stamp', and 'Duration'. A warning icon is present next to the message entry.

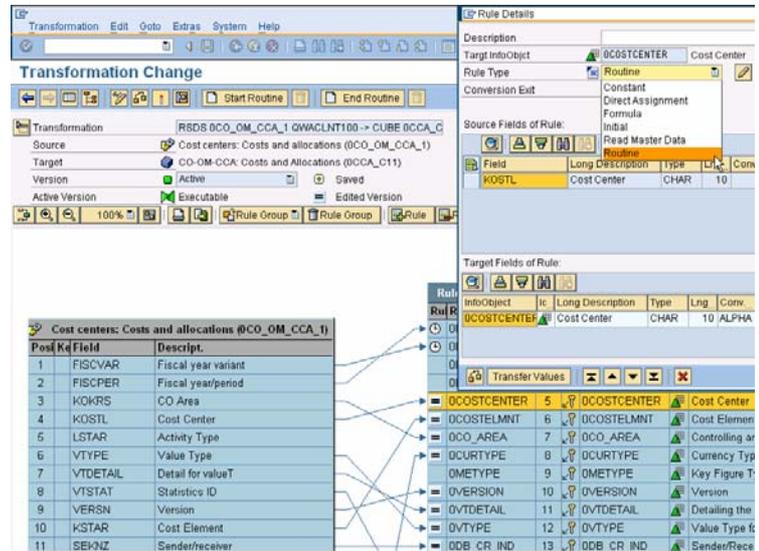
Request Processing	Me	Da	Time Stamp	Duration
Request 140593			08.06.2006 17:35:16	
Generate Request			08.06.2006 17:35:16	17 Sec.
Set Status to 'Executable'			08.06.2006 17:35:34	
Process Request			08.06.2006 17:35:41	10 Sec.
Prepare for Extraction			08.06.2006 17:35:42	1 Sec.
Data Package 1: Processing Terminated			08.06.2006 17:35:48	2 Sec.
Extraction DataSource 0CO_OM_CCA_1 : 72 Data Rec			08.06.2006 17:35:45	3 Sec.
Prepare Error Handling : 72 -> 72 Data Records			08.06.2006 17:35:49	
RSDS 0CO_OM_CCA_1 QWACLNT100 -> CUBE 0CC/			08.06.2006 17:35:49	1 Sec.
Transformation Start			08.06.2006 17:35:49	1 Sec.
Rules			08.06.2006 17:35:49	
Transformation End			08.06.2006 17:35:49	
Messages for 72 data records saved; request is ret			08.06.2006 17:35:50	
Updating to InfoCube 0CCA_C11 : 0 -> 0 Data Records			08.06.2006 17:35:50	
Data Package 2: Processing Terminated			08.06.2006 17:35:50	2 Sec.
End of Main Process			08.06.2006 17:35:44	
Set Technical Status to Red			08.06.2006 17:35:52	
Set Overall Status to Red			08.06.2006 17:35:52	

3 The Step By Step Solution

3.1 Create transformation routine

1. Create a transformation. Within the maintenance of the transformation double-click on a field, in the example the characteristic "OCOSTCENTER".

In the 'Rule details' dialog choose the rule type 'Routine'.



2. Enter the source code (see [Appendix](#) for source code example).

Please note that the field names of the sample coding are not relevant (and will be different in your scenario).

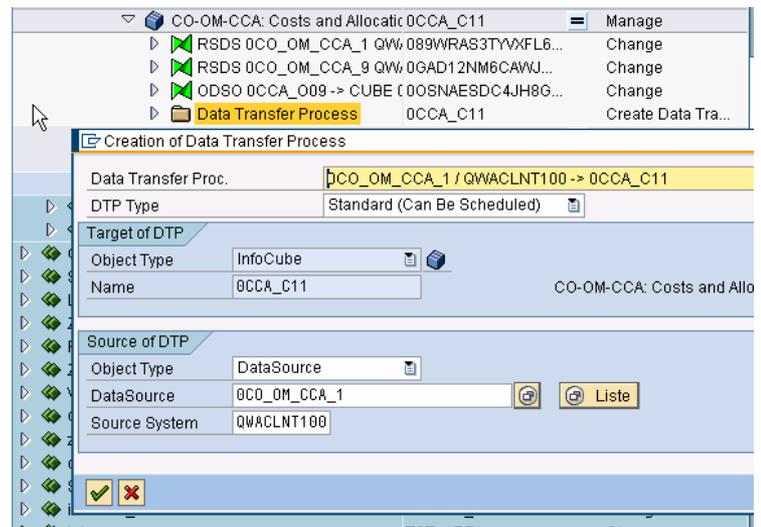
```

58 *-----*
59 *          CLASS routine IMPLEMENTATION
60 *-----*
61 *
62 *-----*
63 CLASS routine IMPLEMENTATION.
64
65 METHOD compute_OCOSTCENTER.
66
67 * IMPORTING
68 *   request         type rsrequest
69 *   datapackid     type rsdatapid
70 *   SOURCE_FIELDS-KOSTL TYPE C LENGTH 000010
71 * EXPORTING
72 *   RESULT type _ty_s_TG_1-COSTCENTER
73
74 DATA:
75   MONITOR_REC TYPE rsmonitor.
76
77 *$$$ begin of routine - insert your code only below this line *--
78 ... "insert your code here
79 *-- fill table "MONITOR" with values of structure "MONITOR_REC"
80 *-- to make monitor entries
81 ... "to cancel the update process
82 * raise exception type CX_RSROUT_ABORT.
83 ... "to skip a record
84 * raise exception type CX_RSROUT_SKIP_RECORD.
85 ... "to clear target fields
86 * raise exception type CX_RSROUT_SKIP_VAL.
87
88 IF SOURCE_FIELDS-KOSTL = '0000001000' .
89   MONITOR_REC-MSGID = 'RSM' .
90   MONITOR_REC-MSGTY = 'E' .
91   MONITOR_REC-MSGNO = '799' .
92   MONITOR_REC-MSGV1 = 'Cost Center ' .
93   MONITOR_REC-MSGV2 = SOURCE_FIELDS-KOSTL .
94   APPEND MONITOR_REC TO MONITOR.
95 * ... Skip a record
96 RAISE EXCEPTION TYPE CX_RSROUT_SKIP_RECORD.
97 ENDF.
98
99 *$$$ end of routine - insert your code only before this line *--
100 ENDMETHOD.           "compute OCOSTCENTER
  
```

3.2 Load data into your InfoCube

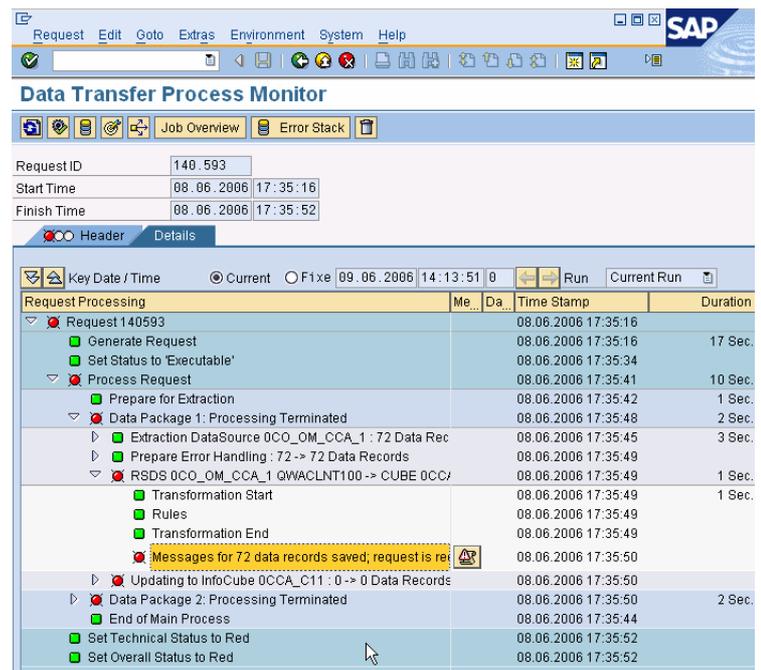
1. Create a Data Transfer Process (DTP) to update the InfoCube with the data from the PSA.

Execute the DTP by including it in a process chain or by direct execution from within the DTP maintenance.

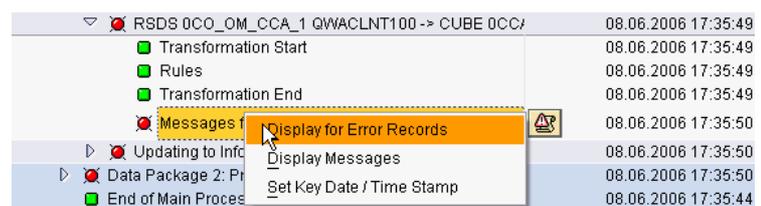


2. To see potential messages triggered in the custom routine, please go to the monitor for the DTP (🖨️).

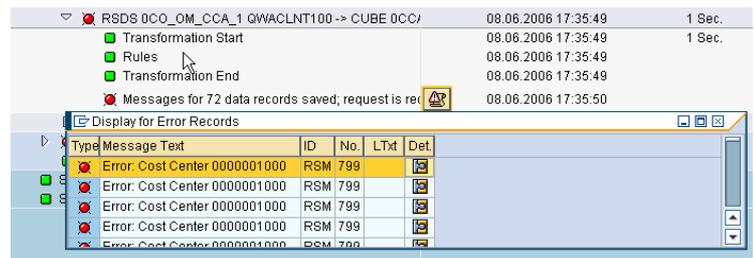
Depending on whether you skip the record, abort the whole DTP, or continue with the processing without raising an exception, the monitor entry might be slightly different, e.g. 'Error Handling', etc. Yet you should find a similar output as shown on the screen shot.



3. Position on the monitor entry and select the 'Display for Error Records' from the context menu or press the 🖨️ icon located in the next to the entry.



4. As a result you get a pop-up with all the single messages displayed.



4 Appendix

Sample source code for the method to compute the characteristic "0COSTCENTER".

CLASS routine IMPLEMENTATION.

METHOD compute_0COSTCENTER.

```

* IMPORTING
*   request      type rsrequest
*   datapackid  type rsdatapid
*   SOURCE_FIELDS-KOSTL TYPE C LENGTH 000010
* EXPORTING
*   RESULT type _ty_s_TG_1-COSTCENTER

DATA:
  MONITOR_REC      TYPE rsmonitor.

*$$$ begin of routine - insert your code only below this line          *-*
... "insert your code here
*-- fill table "MONITOR" with values of structure "MONITOR_REC"
*- to make monitor entries
... "to cancel the update process
*   raise exception type CX_RSROUT_ABORT.
... "to skip a record
*   raise exception type CX_RSROUT_SKIP_RECORD.
... "to clear target fields
*   raise exception type CX_RSROUT_SKIP_VAL.

IF SOURCE_FIELDS-KOSTL = '0000001000'.
  MONITOR_REC-MSGID = 'RSM'.
  MONITOR_REC-MSGTY = 'E'.
  MONITOR_REC-MSGNO = '799'.
  MONITOR_REC-MSGV1 = 'Cost Center '.
  MONITOR_REC-MSGV2 = SOURCE_FIELDS-KOSTL.
  APPEND MONITOR_REC to MONITOR.
*   ... Skip a record
  raise exception type CX_RSROUT_SKIP_RECORD.
ENDIF.

*$$$ end of routine - insert your code only before this line          *-*
ENDMETHOD.
"compute_0COSTC

```

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