User Guide

Centralized Error Logging and Reporting

(Informatica Power Center)

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To best describe this utility let's discuss a scenario.

Scenario:

Need to load Employee flat file to two target instances

1. Employees
2. Departments

Below is the sample mapping for loading Employees and Departments table (as shown in Fig. 1)

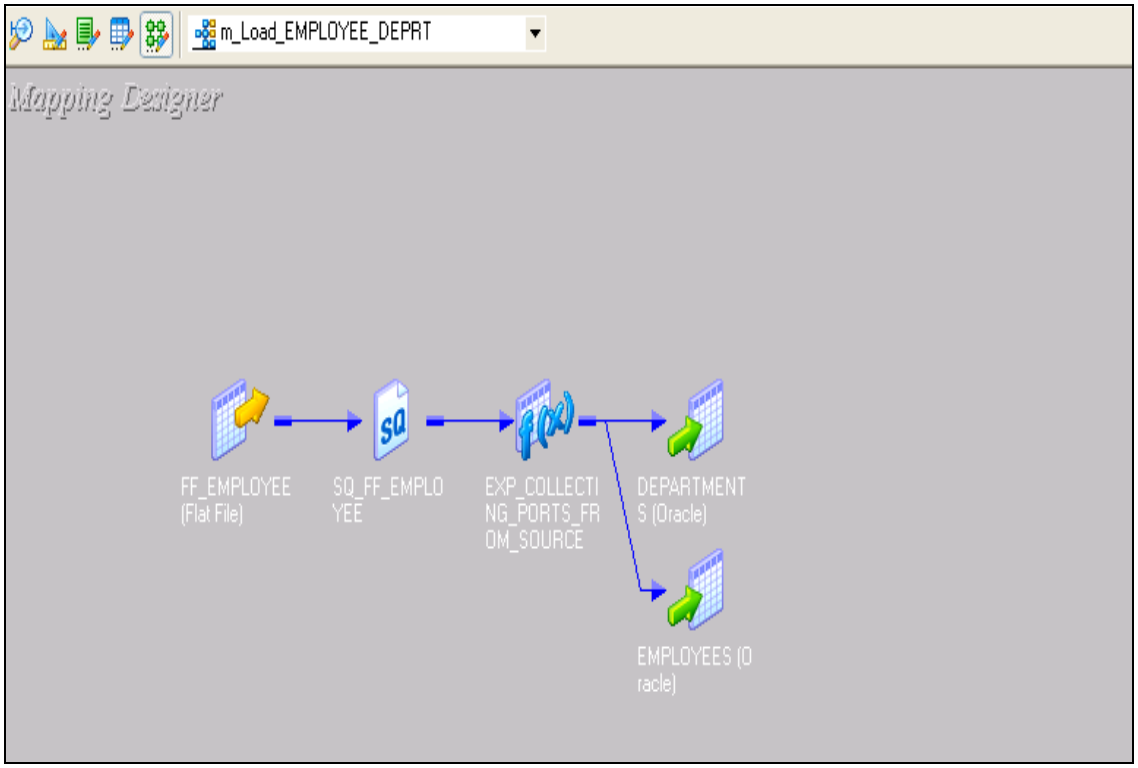


Fig 1.

Objective is to report the rejected records from this mapping for each target instance (Employees and Departments). To achieve this enable the marked property (as shown in Fig. 2) in the config object in the session to collect the error records into the Informatica error tables.

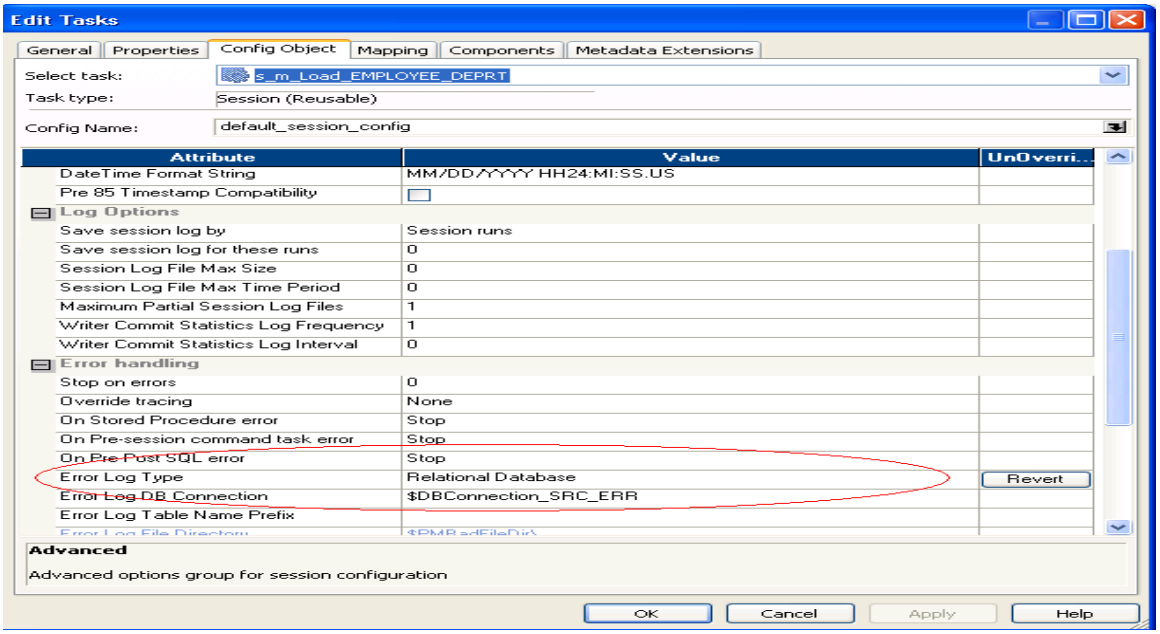


Fig 2.

The value for connection parameter ($DBConnection_SRC_ERR) should be given in parameter file or connection can be selected directly. This connection should point to database where Informatica PM Error tables are created.

After executing the mapping (m_Load_EMPLOYEE_DEPRT), 4 records got rejected from each target transformation (DEPARTMENTS & EMPLOYEES) (as shown in Fig. 3)

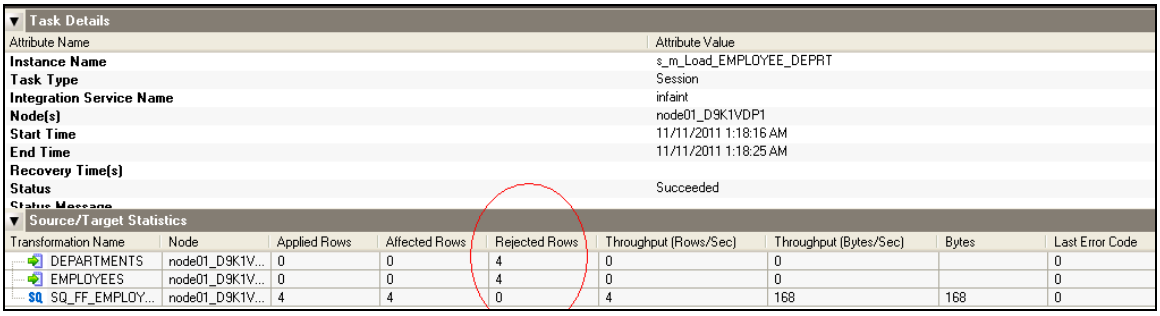


Fig. 3

Rejected records from this session are stored into four error logging tables.

1. PMERR_MSG
2. PMERR_SESS
3. PMERR_TRANS
4. PMERR_DATA

Functionality of Reusable Utility:

Reusable mapping m_Create_Rejection_file (as shown in Fig. 4) will extract the data from these error logging tables. To improve the performance of the session where condition (PMERR_SESS.SESS_START_TIME > $$LAST_RUN_TIME ($$LAST_RUN_TIME is mapping parameter)) is added to extract daily or weekly data.

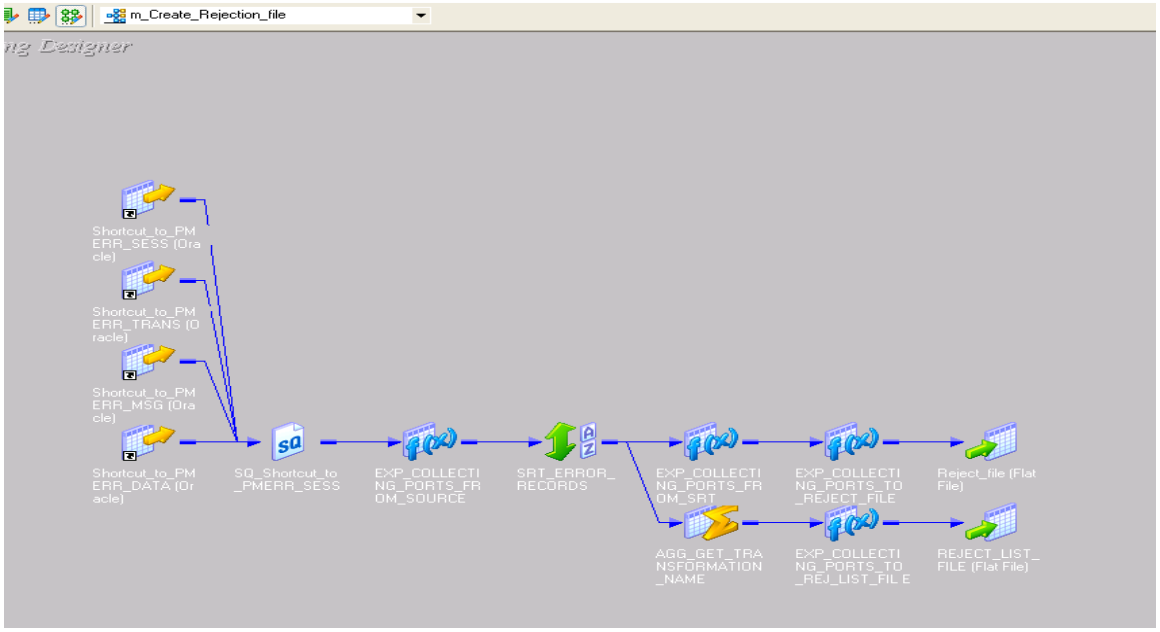


Fig. 4

On execution of this mapping (as shown in Fig. 5) error records are loaded into flat files

1. Rejection_file.txt (8 Error Records)
2. Reject_List.txt (2 Records with SessionName_TransformationName)

s_m_Create_Rejection_file [11/11/2011 11:05:52 AM]

Task Details

Attribute Name	Attribute Value
Instance Name	s_m_Create_Rejection_file
Task Type	Session
Integration Service Name	infaint
Node(s)	node01_D9K1VDP1
Start Time	11/11/2011 11:05:52 AM
End Time	11/11/2011 11:05:59 AM
Recovery Time(s)	
Status	Succeeded

Source/Target Statistics

Transformation Name	Node	Applied Rows	Affected Rows	Rejected Rows	Throughput (Rows/Sec)	Throughput (Bytes/Sec)	Bytes
Reject_file	node01_D9K1V...	8	8	0	8	16016	16016
REJECT_LIST_FILE	node01_D9K1V...	2	2	0	2	404	404
SQ_Shortcut_to_PMERR_SESS	node01_D9K1V...	8	8	0	8	119632	119632

Fig. 5

Screen shot (Fig. 6 and Fig. 7) of these flat files is given below.

Rejection_file.txt:

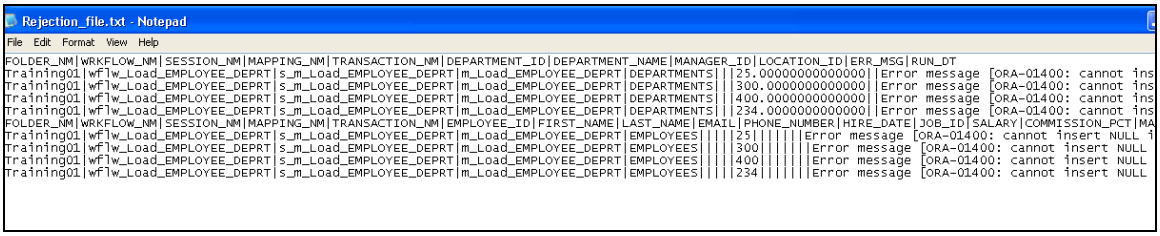


Fig. 6

Reject_List.txt:

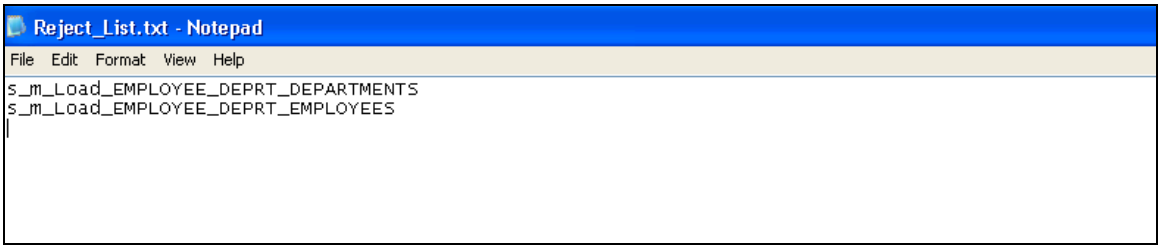


Fig. 7

On executing the UNIX script (as show in Fig. 8) Rejection_file.txt will be split into different files according to the file name given in Reject_List.txt.

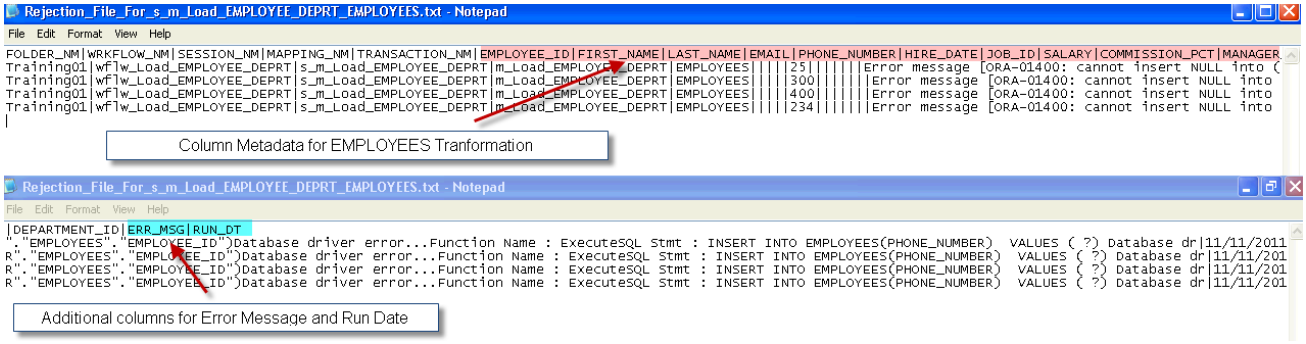
This will help to create error files with column metadata for each transformation where the error has occurred during session execution.

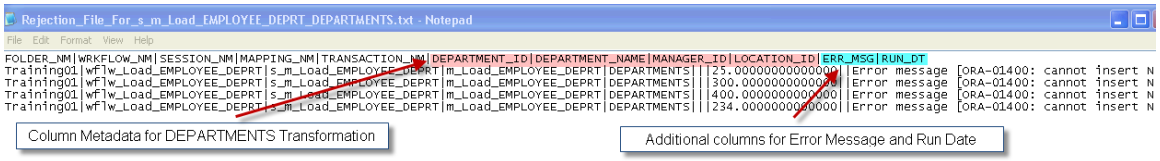
```
#!/usr/bin/ksh
mCnt=0
filename="RejectFile_For_"
while read line
do
if [[ ${line} = *FOLDER* ]] ; then
((mCnt = mCnt + 1))
var1=$(awk "NR==$mCnt" <Reject_List.txt>)
fname=$filename$var1
echo $line > $fname
else
echo $line >> $fname
fi
done < <$$ Target File>/<Rejection_file.txt>
```

Fig. 8

Note: $$TargetFile is a parameter for directory path (Example /opt/Informatica/server/TgtFiles) for Rejection_file.txt

Output files after the execution of the script:





This will help to get more insight to error records during session execution.

Summary:

To achieve centralized error logging and reporting follow below steps:

1. Enable error logging in all the sessions of Informatica workflows.
2. Run workflow wflw_To_Create_Files_For_Rejected_Records after providing the appropriate value to parameter ($$LAST_RUN_DATE).
3. Execute the script to split the Rejection_file.txt (File created in Step 2) file into different flat files as per the file name in Reject_File.txt (File created in Step 2).

Note:

Download the workflow wflw_To_Create_Files_For_Rejected_Records.

Download the UNIX script splitfile.sh.

Additional Information:

DDL for the creating Informatica Error Tables:

PMERR_MSG:

```
CREATE TABLE PMERR_MSG
(
  REPOSITORY_GID VARCHAR2(240 ),
  WORKFLOW_RUN_ID NUMBER(15, 0) NOT NULL,
  WORKLET_RUN_ID NUMBER(15, 0),
  SESS_INST_ID NUMBER(15, 0) NOT NULL,
  TRANS_MAPPLET_INST VARCHAR2(240 ),
  TRANS_NAME VARCHAR2(240 ) NOT NULL,
  TRANS_GROUP VARCHAR2(240 ),
  TRANS_PART_INDEX NUMBER(15, 0),
  TRANS_ROW_ID NUMBER(15, 0) NOT NULL,
  ERROR_SEQ_NUM NUMBER(15, 0) NOT NULL,
  ERROR_TIMESTAMP TIMESTAMP(6),
  ERROR_UTC_TIME NUMBER(15, 0),
  ERROR_CODE NUMBER(15, 0),
  ERROR_MSG VARCHAR2(2000 ),
  ERROR_TYPE NUMBER(15, 0),
  LINE_NO NUMBER(15, 0) NOT NULL,
CONSTRAINT PMERR_MSG_PK PRIMARY KEY
  (
    WORKFLOW_RUN_ID,
    SESS_INST_ID,
    TRANS_NAME,
    TRANS_ROW_ID,
    ERROR_SEQ_NUM,
    LINE_NO
  )
)
```

PMERR_SESS:

```
CREATE TABLE PMERR_SESS
(
  REPOSITORY_GID VARCHAR2(240 ),
  WORKFLOW_RUN_ID NUMBER(15, 0) NOT NULL,
  WORKLET_RUN_ID NUMBER(15, 0),
  SESS_INST_ID NUMBER(15, 0) NOT NULL,
  SESS_START_TIME TIMESTAMP(6),
  SESS_UTC_TIME NUMBER(15, 0),
  REPOSITORY_NAME VARCHAR2(240 ),
  FOLDER_NAME VARCHAR2(240 ),
  WORKFLOW_NAME VARCHAR2(240 ),
  TASK_INST_PATH VARCHAR2(240 ),
  MAPPING_NAME VARCHAR2(240 ),
  LINE_NO NUMBER(15, 0) NOT NULL,
 CONSTRAINT PMERR_SESS_PK PRIMARY KEY
  (
    WORKFLOW_RUN_ID,
    SESS_INST_ID,
    LINE_NO
  )
)
```

PMERR_TRANS:

```
CREATE TABLE PMERR_TRANS
(
  REPOSITORY_GID VARCHAR2(240 ),
  WORKFLOW_RUN_ID NUMBER(15, 0) NOT NULL,
  WORKLET_RUN_ID NUMBER(15, 0),
  SESS_INST_ID NUMBER(15, 0) NOT NULL,
  TRANS_MAPPLET_INST VARCHAR2(240 ),
  TRANS_NAME VARCHAR2(240 ) NOT NULL,
  TRANS_GROUP VARCHAR2(240 ),
  TRANS_ATTR VARCHAR2(2000 ),
  SRC_MAPPLET_INST VARCHAR2(240 ),
  SOURCE_NAME VARCHAR2(240 ),
  SOURCE_ATTR VARCHAR2(2000 ),
  LINE_NO NUMBER(15, 0) NOT NULL,
 CONSTRAINT PMERR_TRANS_PK PRIMARY KEY
  (
    WORKFLOW_RUN_ID,
    SESS_INST_ID,
    TRANS_NAME,
    LINE_NO
  )
)
```

PMERR_DATA:

```
CREATE TABLE PMERR_DATA
(
  REPOSITORY_GID VARCHAR2(240 ),
  WORKFLOW_RUN_ID NUMBER(15, 0) NOT NULL,
  WORKLET_RUN_ID NUMBER(15, 0),
  SESS_INST_ID NUMBER(15, 0) NOT NULL,
  TRANS_MAPPLET_INST VARCHAR2(240 ),
  TRANS_NAME VARCHAR2(240 ) NOT NULL,
  TRANS_GROUP VARCHAR2(240 ),
  TRANS_PART_INDEX NUMBER(15, 0),
  TRANS_ROW_ID NUMBER(15, 0) NOT NULL,
  TRANS_ROWDATA VARCHAR2(2000 ),
  SOURCE_ROW_ID NUMBER(15, 0),
  SOURCE_ROW_TYPE NUMBER(15, 0),
  SOURCE_ROW_DATA VARCHAR2(2000 ),
  LINE_NO NUMBER(15, 0) NOT NULL,
 CONSTRAINT PMERR_DATA_PK PRIMARY KEY
  (
    WORKFLOW_RUN_ID,
    SESS_INST_ID,
    TRANS_NAME,
    TRANS_ROW_ID,
    LINE_NO
  )
)
```