

## Add05 Wait different files



Related articles in Stambia.org

- <http://www.stambia.org/doc/80-development-hints-and-tips/how-to/19-how-to-iterate-a-process-on-a-list-of-files>

## ❖ Context

- Integrate in database a set of files stored in a folder.
- Each group of files has the same prefix (B00001 for example)
- You must integrate the group of files only if the group contains the 3 suffixes BIL, LIN and LOG

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- The target will be two tables in a new schema in Datamart database

*Those groups are complete  
The files must be treated*

B00001.BIL  
B00001.LIN  
B00001.LOG  
B00002.BIL  
B00002.LIN  
B00002.LOG  
B00003.BIL  
B00003.LIN

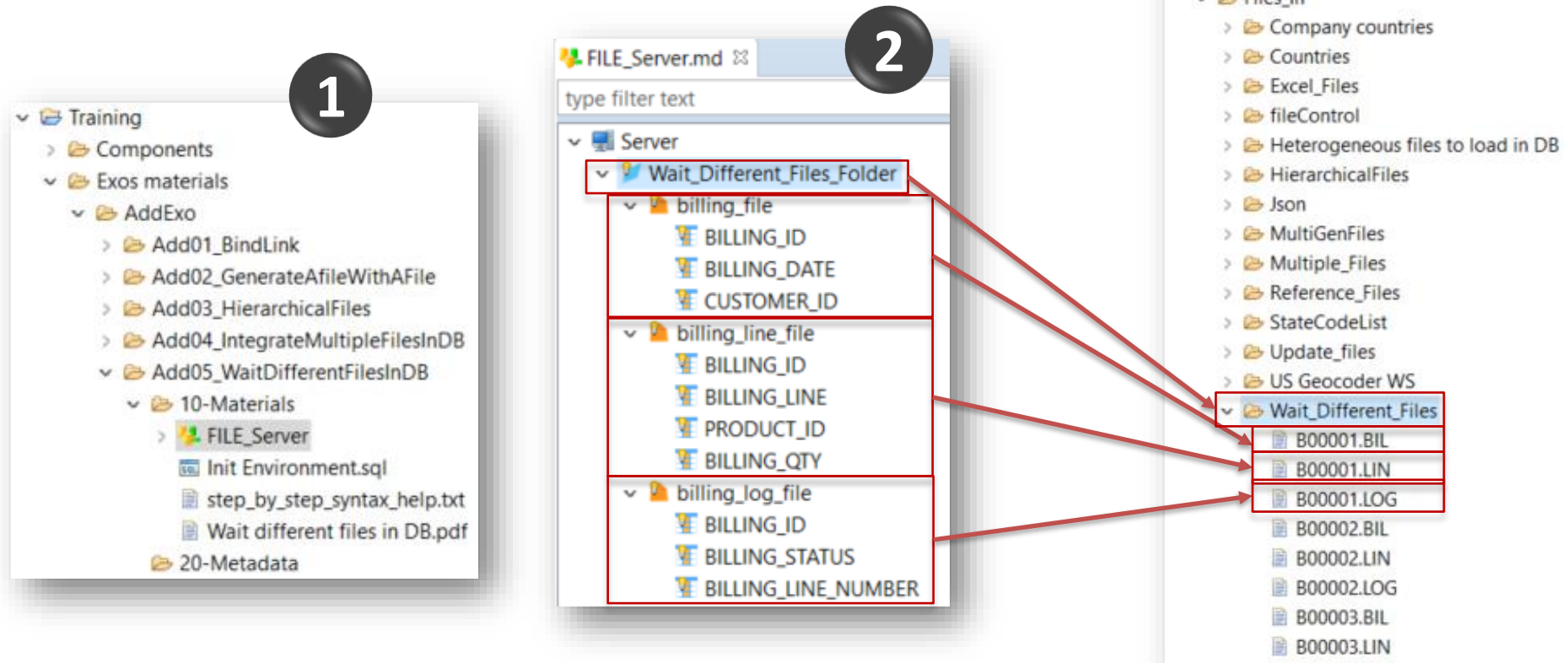
*This group is not complete  
The files must not be treated*

CREATE SCHEMA THREE FILES;

CREATE TABLE THREE FILES.BILLING (  
BILLING\_ID INTEGER NOT NULL,  
BILLING\_CREATION\_DATE NUMERIC(8) ,  
CUSTOMER\_ID INTEGER,  
BILLING\_STATUS INTEGER,  
BILLING\_LINES\_NUMBER\_SENT INTEGER,  
BILLING\_LINES\_NUMBER\_LOG INTEGER,  
CONSTRAINT PK\_BILLING PRIMARY KEY (BILLING\_ID));

CREATE TABLE THREE FILES.BILLING LINE (  
BILLING\_ID INTEGER NOT NULL,  
BILLING\_LINE INTEGER NOT NULL,  
PRODUCT\_ID INTEGER,  
BILLING\_QTY INTEGER,  
CONSTRAINT PK\_BILLING\_LINE PRIMARY KEY (BILLING\_ID,BILLING\_LINE));

## ❖ 1 – Use the file metadata



## ❖ 2 - Reverse one of each file with different suffix and rename them with a generic name

- billing\_file for <prefix\_file>.BIL
- billing\_line\_file for <prefix\_file>.LIN
- billing\_log\_file for <prefix\_file>.LOG

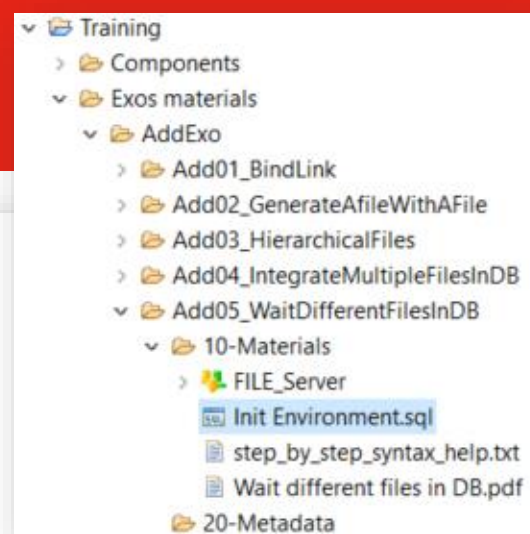
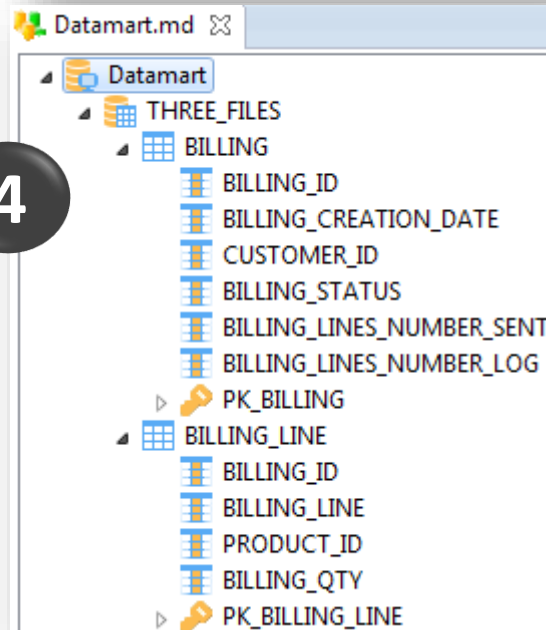
- ❖ 3 - Execute the SQL file (Init Environment.sql) to create the required schema and tables on a Datamart connection

- ❖ 4 - Reverse the schema and the table

```
CREATE SCHEMA THREE_FILES;

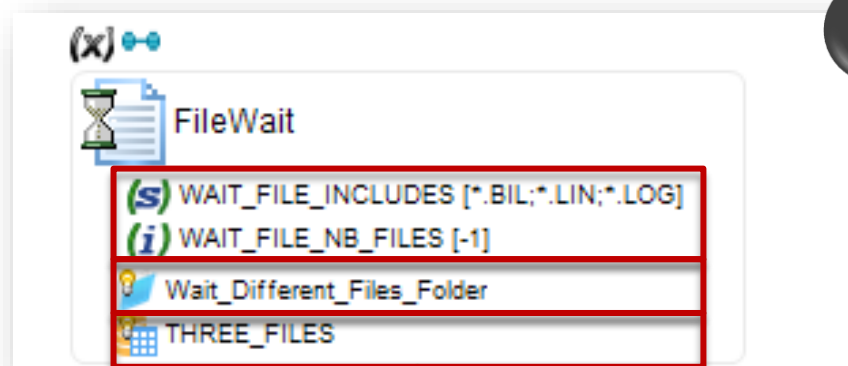
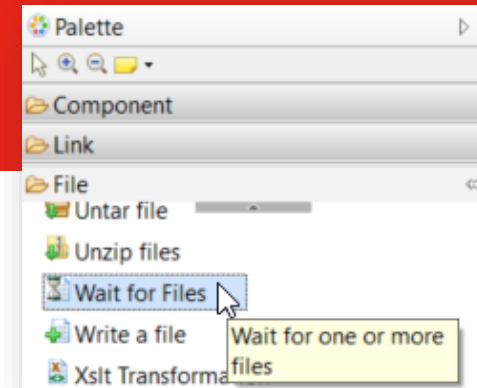
CREATE TABLE THREE_FILES.BILLING (
  BILLING_ID INTEGER NOT NULL,
  BILLING_CREATION_DATE NUMERIC(8),
  CUSTOMER_ID INTEGER,
  BILLING_STATUS INTEGER,
  BILLING_LINES_NUMBER_SENT INTEGER,
  BILLING_LINES_NUMBER_LOG INTEGER,
  CONSTRAINT PK_BILLING PRIMARY KEY (BILLING_ID));

CREATE TABLE THREE_FILES.BILLING_LINE (
  BILLING_ID INTEGER NOT NULL,
  BILLING_LINE INTEGER NOT NULL,
  PRODUCT_ID INTEGER,
  BILLING_QTY INTEGER,
  CONSTRAINT PK_BILLING_LINE PRIMARY KEY (BILLING_ID,BILLING_LINE));
```

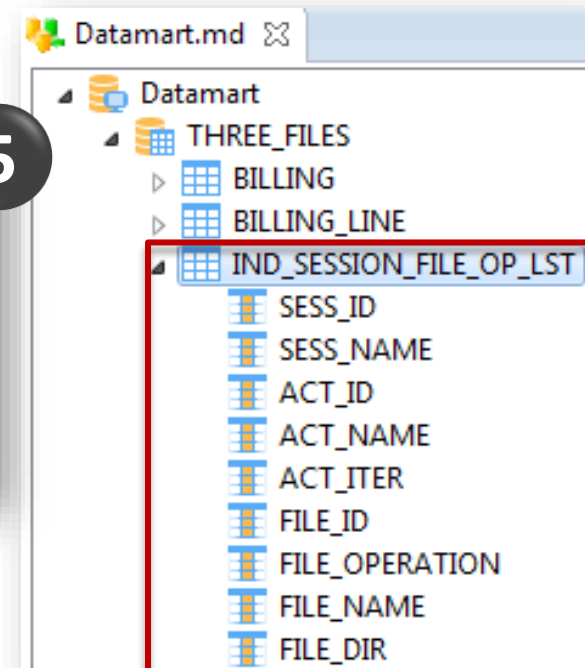


- ❖ 5 - Create a process and a “FileWait” action
  - Drag & Drop on it the folder metadata
  - Drag & Drop the “THREE\_FILES” schema to allow Stambia to insert all the files in a temporary table named “**IND\_SESSION\_FILE\_OP\_LST**”
 

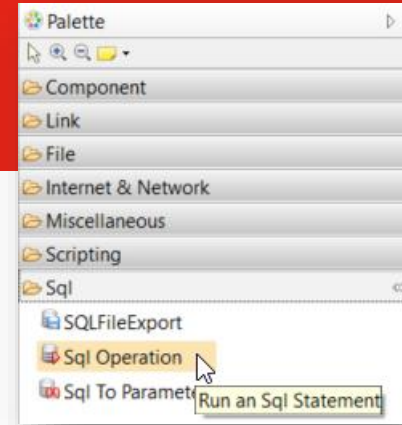
This table will be created at the first execution of the FileWait action
  - Complete the other required properties (WAIT\_FILE\_INCLUDES and WAIT\_FILE\_NB\_FILES)
  - Execute the process a first time to allow Stambia to create the temporary table and be able to reverse it



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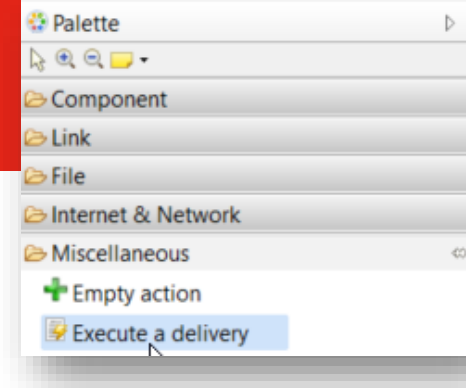
- ❖ 6 – Add a “SqlOperation” action
  - Drag & drop the “IND\_SESSION\_FILE\_OP\_LST” table in the action
  - Define the “SQL\_ACTION\_TYPE” to “SELECT”
  - Link the “FileWait” action with the “SqlOperation” action
  - Define the Expression Editor of the “SqlOperation” action

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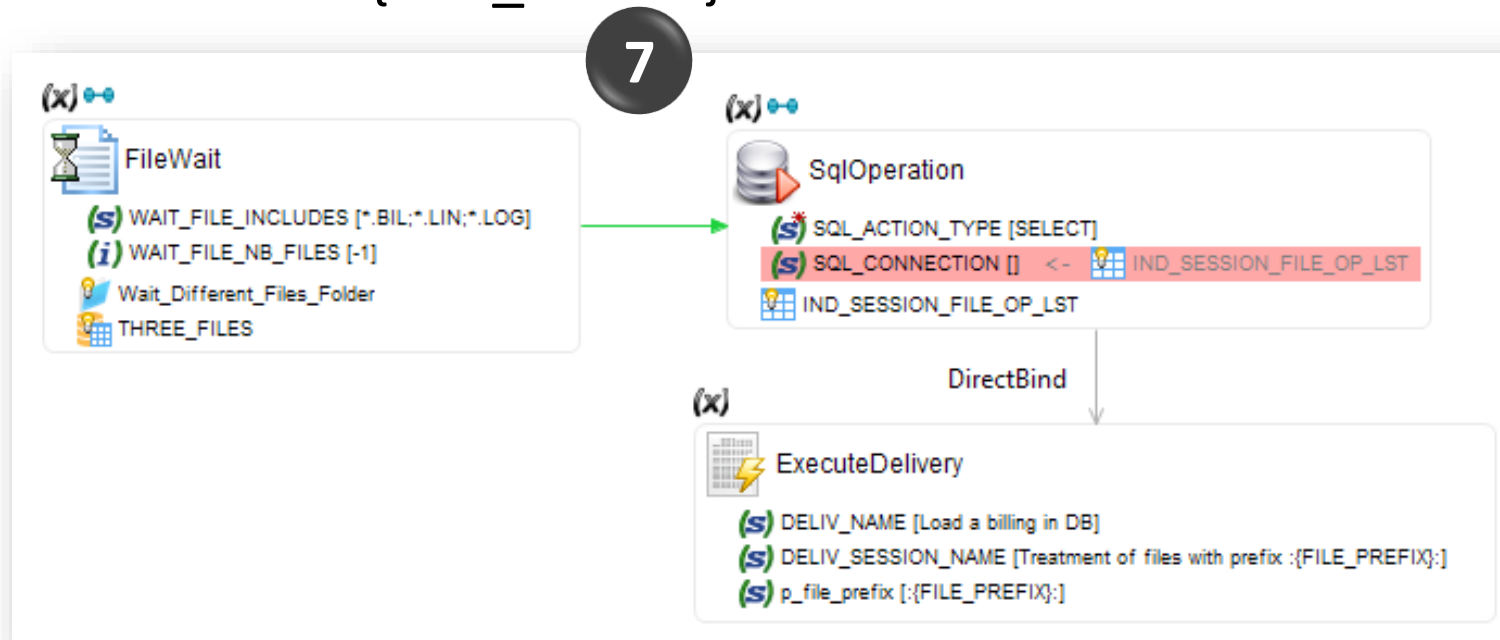
```

SELECT LEFT(FILE_NAME,6) AS FILE_PREFIX
FROM   %x{$IND_SESSION_FILE_OP_LST/tech:physicalPath()}x%
WHERE  RIGHT(FILE_NAME,3) IN ('BIL','LIN','LOG')
AND    SESS_ID='${CORE_SESSION_ID}$'
GROUP BY LEFT(FILE_NAME,6)
HAVING COUNT(*)=3
    
```

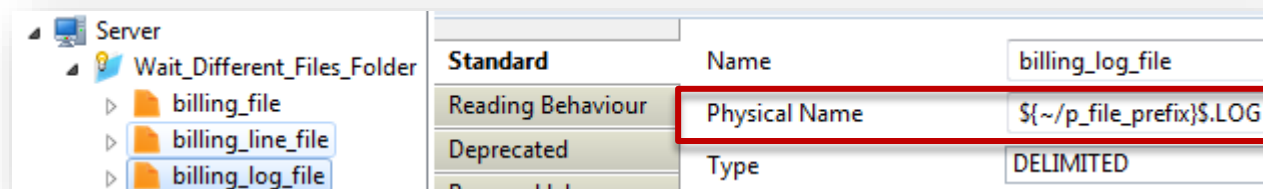
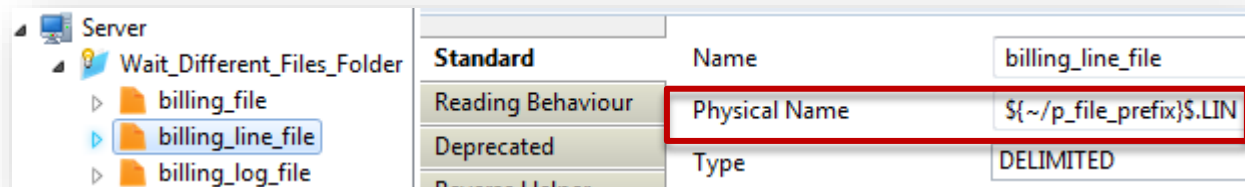
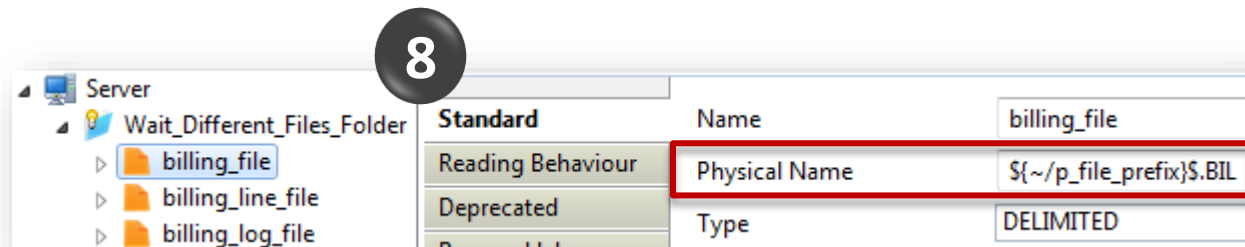
**Note :** All the alias (here *FILE\_PREFIX*) of the *SELECT* clause of a “SqlOperation” action will be availables as bind variables (with the syntax **:{FILE\_PREFIX}:** )



- ❖ 7 – Add an “ExecuteDelivery” action in the process
- Create a Bind link between the “SqlOperation” and this action
- Complete the “DELIV\_NAME” parameter with the name of a sub delivery (process/mapping, the name of a mapping developed after in this case) used to integrate each group of 3 files in the tables
- Complete the “DELIV\_SESSION\_NAME” parameter
- Create a parameter named “p\_file\_prefix” with the value of the bind variable “:{FILE\_PREFIX}:

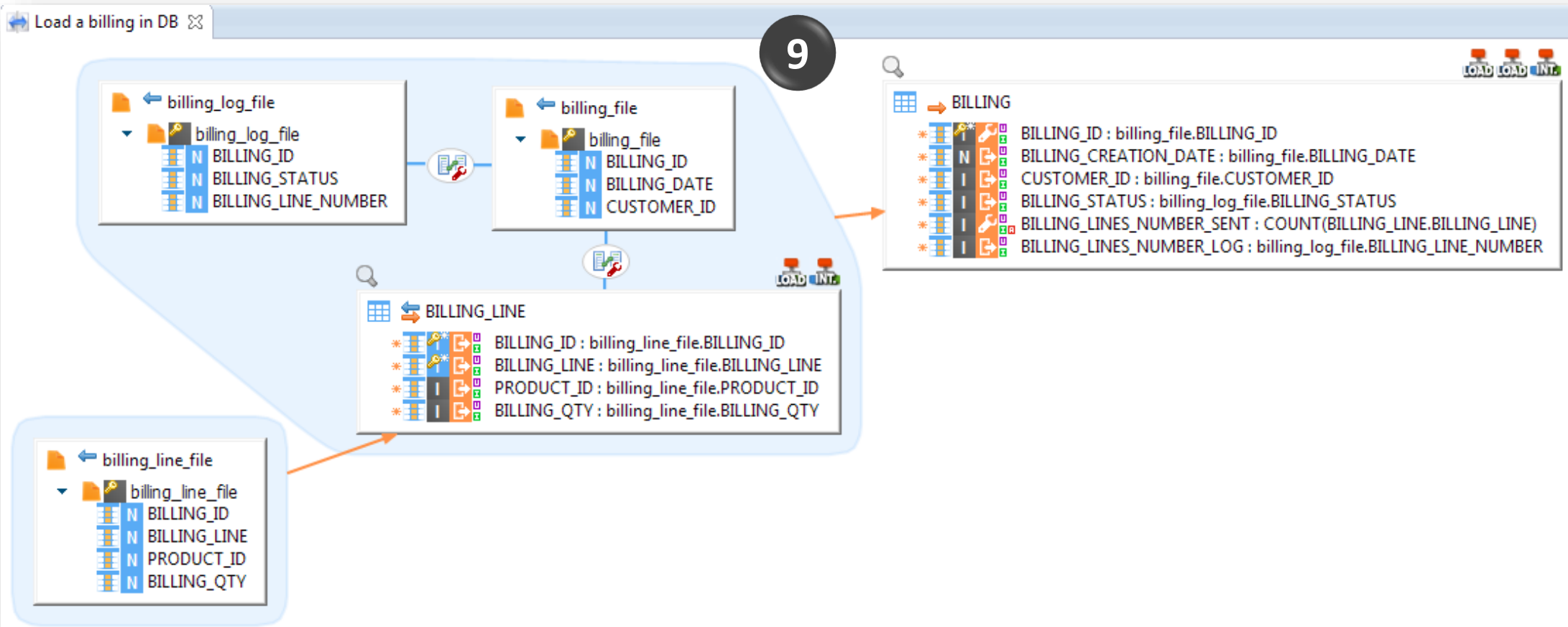


- ❖ 8 - Modify each physical name of the 3 Metadata files with the value of the “p\_file\_prefix” parameter





- ❖ 9 - Create the mapping to integrate the 3 files in the 2 tables
  - Note : As BILLING\_ID is used in a join and in a map, set it in staging not to have 2 columns references in the temporary tables
  - Set Aggregate on BILLING\_LINES\_NUMBER\_SET column



- ❖ 10 - Add a condition on the “BILLING” table
  - Enable the rejects
  - Unset the “Delete Rejects on Checked Table” on the reject template
  - Publish the mapping to allow the parent process to find it during execution

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Standard	
Name	CK_BILLING
Customization	
Externalize	
Core	
Sql Condition	BILLING.BILLING_LINES_NUMBER_SENT=BILLING.BILLING_LINES_NUMBER_LOG
User Message	Sent problem
Reject Code	BIL_001
Description	There is a sent problem as the number of lines received is not the same as the number of lines planed
Severity Level	Reject

- ❖ 11 - Analyze the result
  - Only 2 groups of files are treated, the 3<sup>rd</sup> one is not complete (no .LOG file)
  - One reject for billing\_id=2, as number\_sent is different of number\_log

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select \* from THREE\_FILES.BILLING

BILLING_ID	BILLING_CREATION_DATE	CUSTOMER_ID	BILLING_STATUS	BILLING_LINES_NUMBER_SENT	BILLING_LINES_NUMBER_LOG
1	20150718	10	1	3	3
2	20150916	256	1	4	20

Ctrl BILLING(14).sql

select \* from THREE\_FILES.R\_BILLING

BILLING_ID	BILLING_CREATION_DATE	CUSTOMER_ID	BILLING_STATUS	BILLING_LINES_NUMBER_SENT	BILLING_LINES_NUMBER_LOG
2	20150916	256	1	4	20

Sessions Session Detail Expression Editor

Name: Count: 50 My

Start Time	Name
2015/11/12 19:37:45.394	Wait Different Files Treatment
2015/11/12 19:37:47.	Treatment of files with prefix B00002
2015/11/12 19:37:46.	Treatment of files with prefix B00001

select \* from THREE\_FILES.BILLING\_LINE

BILLING_ID	BILLING_LINE	PRODUCT_ID	BILLING_QTY
1	1	20	100
1	2	30	10
1	3	35	12
2	1	20	27
2	2	30	103
2	3	35	11
2	4	127	15