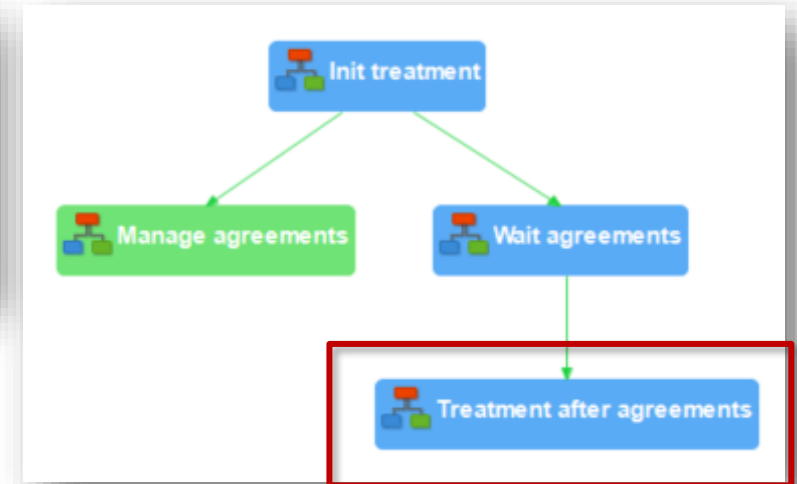**Appendices - Advanced exercises**

ADV09 Asynchronous actions

❖ Context : a treatment must be executed

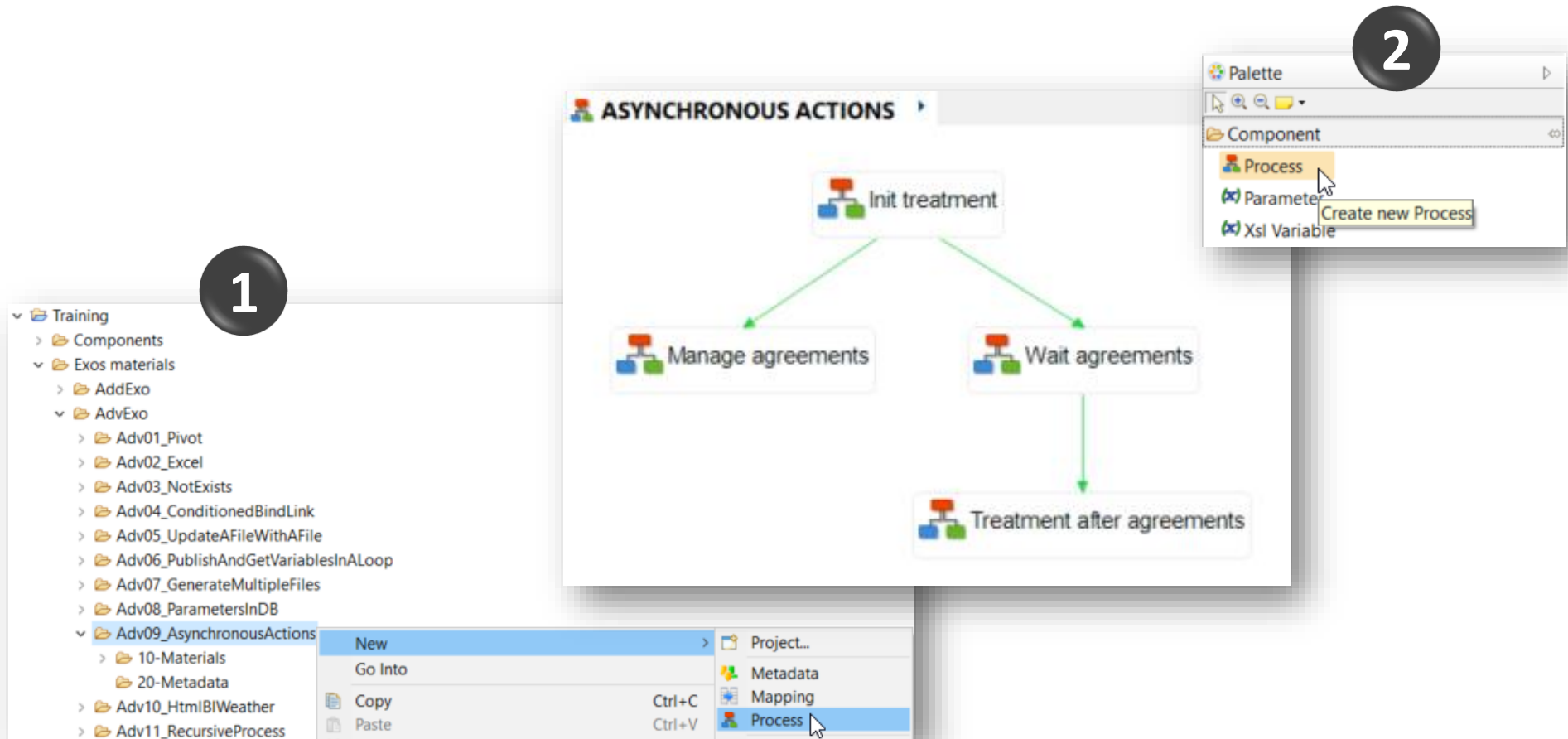- only after, at least, two managers' agreements

- Agreements and treatments are logged in the file

1

❖ **1 - Create a process from the project explorer**

▪ **2 - Create four sub-processes from the Palette in the process**

❖ **3 - Create a scripting action and a write a file action in the "Init treatment" sub-process**

3

ASYNCHRONOUS ACTIONS ▸ Init treatment ⊠

(x)

Scripting Publish p_agreement_number

(s) SCRIPTING_LANGUAGE [jython]

Sessions | Session Detail | Expression Editor ⊠

1 `__ctx__.publishVariable("/p_agreement_number","0")`

(x) ↔

WriteTxtFile Header

Asynchronous_Action_Log_Folder

Sessions | Session Detail | Expression Editor ⊠

1 `Timestamp;Action;Person;SignatureKey`

Action Code WriteTxtFile Header

Standard	Name	WriteTxtFile Header	☑ Enable
Generation			
Meta-Inf	☑ Txt Write Append Line Separator		
Description			
Advanced	Txt Write Filename	%x{$Asynchronous_Action_Log_Folder/tech:path()}x%/Signature_log.csv	
Core	Txt Write Append	false	

Palette ▷

Component
Link
File
Internet & Network
Miscellaneous
Scripting ∞
  Bean Scripting Framework action
  Java native scripting action
    Scripting action

Palette ▷

Component
Link
File ∞
  Delete Files
  GUnzip files
  GZip files
  Make a directory
  Move Files
  Tar files
  Untar file
  Unzip files
  Wait for Files
  Write a file
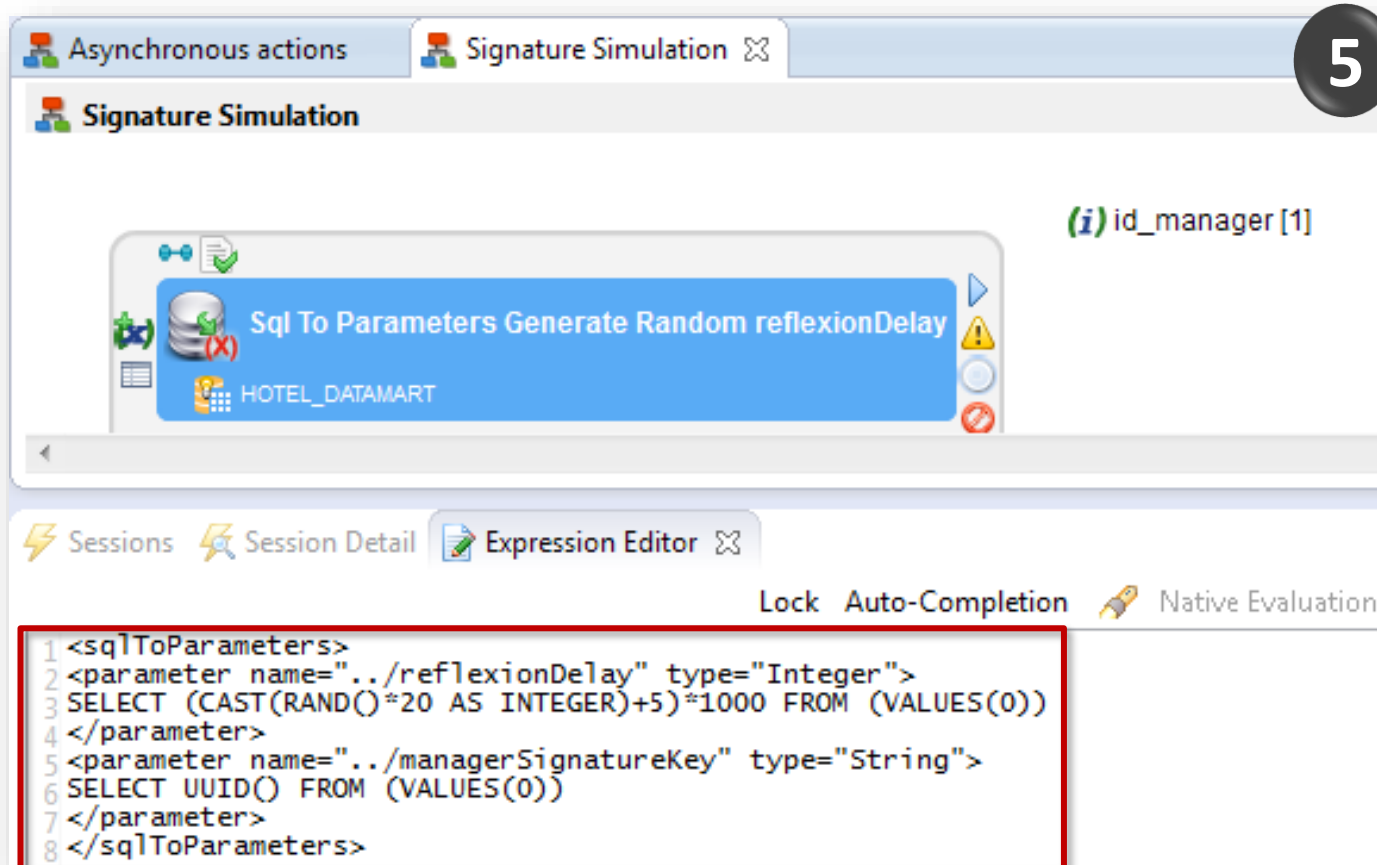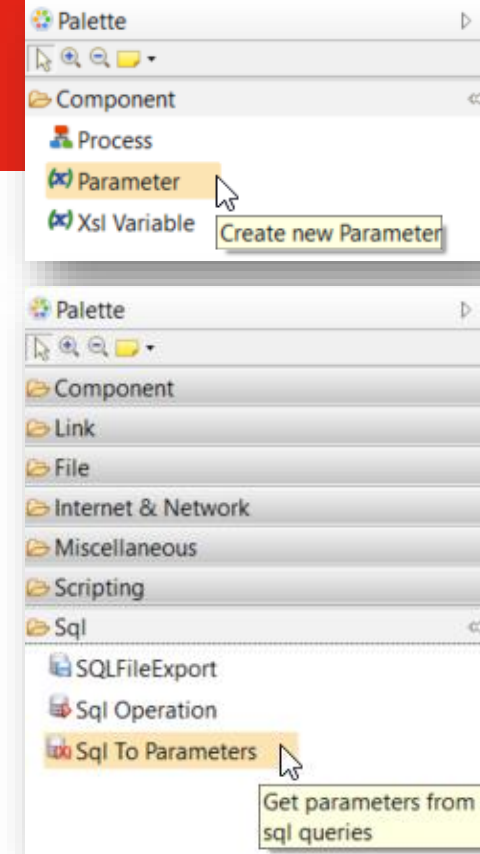 Xslt Transform — Write a text file
  Zip files

3
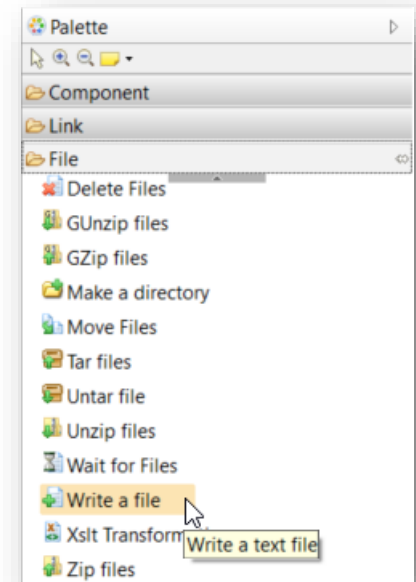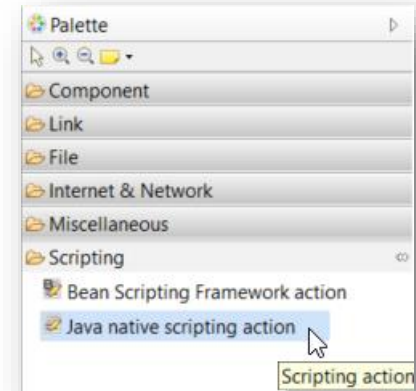
❖ 4 - Add a sleep action and two empty actions in the "Wait agreements" sub-process

- Add two opposite execution conditions
- Don't change default value on sleep action
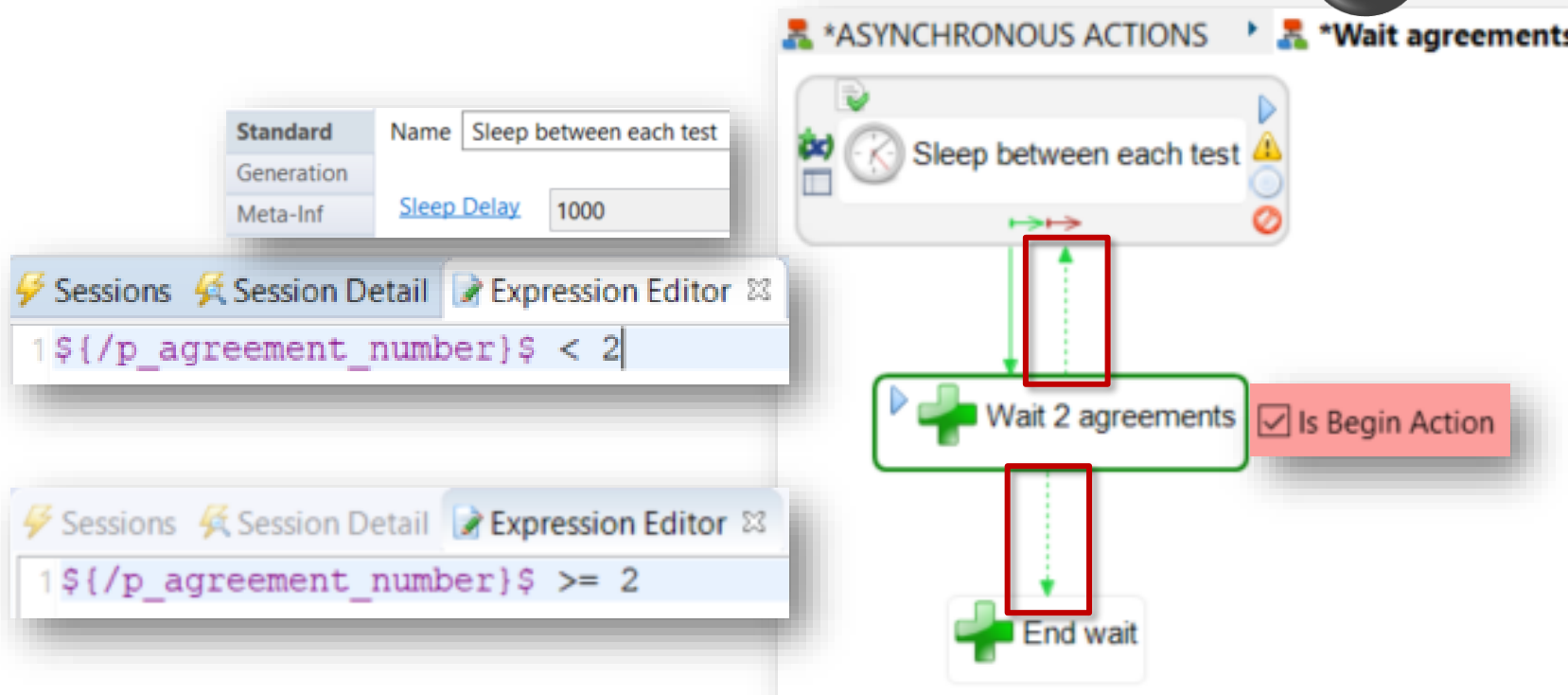
❖ **5 - Create a new process with a parameter and a "Sql To Parameters" action**

- Drag & drop a HSQL database schema on the "Sql To Parameters" action

- The "Sql To Parameters" action publish 2 parameters
  - reflexionDelay & managerSignatureKey

Palette items shown:
- Component
  - Process
  - Parameter — Create new Parameter
  - Xsl Variable

- Component
- Link
- File
- Internet & Network
- Miscellaneous
- Scripting
- Sql
  - SQLFileExport
  - Sql Operation
  - Sql To Parameters — Get parameters from sql queries

Signature Simulation view:

id_manager [1]

Sql To Parameters Generate Random reflexionDelay
HOTEL_DATAMART

Sessions | Session Detail | Expression Editor

Lock   Auto-Completion   Native Evaluation

```
1 <sqlToParameters>
2 <parameter name="../reflexionDelay" type="Integer">
3 SELECT (CAST(RAND()*20 AS INTEGER)+5)*1000 FROM (VALUES(0))
4 </parameter>
5 <parameter name="../managerSignatureKey" type="String">
6 SELECT UUID() FROM (VALUES(0))
7 </parameter>
8 </sqlToParameters>
```

5

❖ **6 - Add a sleep, a scripting and a WriteTxtFile actions**

❖ 8 – Complete the sub-process named "Manage agreements" in the main process

- Drag & drop a empty action

- Drag & drop three times the "Signature Simulation" process in the sub-process

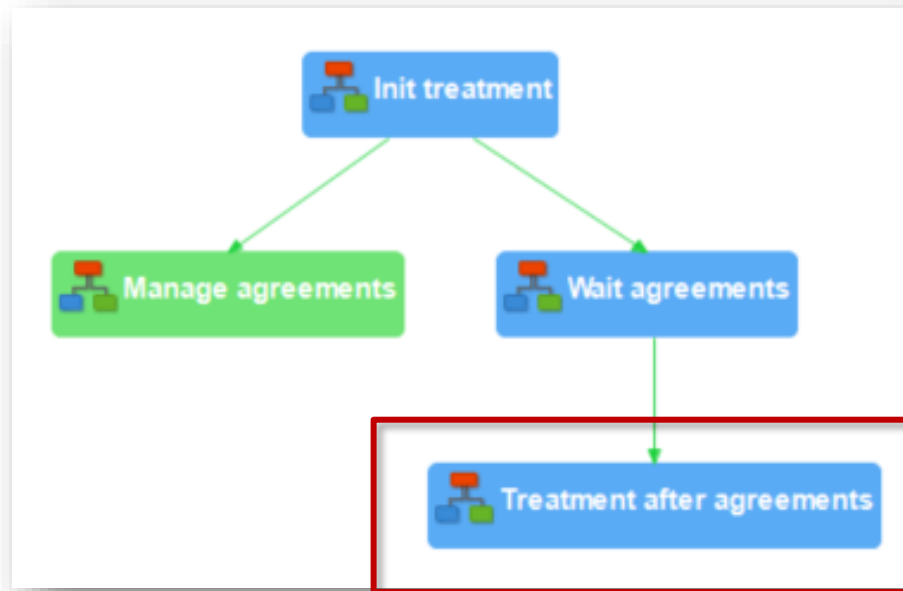- define the id_manager parameter value (1, 2, 3)

❖ **8 - Add a WriteTxtFile action in the "Treatment after agreements" sub-process**
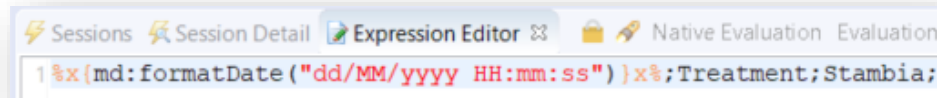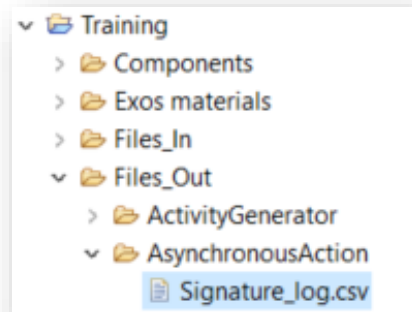
❖ Result

- The treatment at the right of the process begin before the end of the last of the three treatment (at the left in this case)

- The file result :