

Add03 Hierarchical files

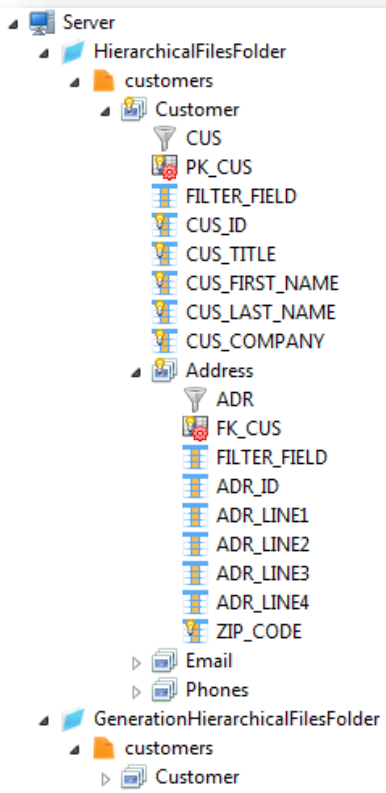


Related articles in Stambia.org

- <http://stambia.org/doc/130-technologies/file/multirecord-files/237-getting-started-with-hierarchical-files>
- <http://stambia.org/doc/130-technologies/file/multirecord-files/196-loading-data-when-source-and-target-are-hierarchical-files>
- <http://stambia.org/doc/130-technologies/file/multirecord-files/186-using-computed-fields>
- <http://stambia.org/doc/130-technologies/file/multirecord-files/166-ordering-data-when-loading-a-hierarchical-file>

❖ Context

- The objective is to manipulate hierarchical files in 3 different ways/exercices
 - Hierarchical file Replication in RDBMS (process)
 - Read hierarchical file and load the data in tables (mapping)
 - Generate multiple hierarchical files (mapping)
- To allow this, we will use the following metadata, corresponding to the following file :



```

customers.txt
1 CUS 1 .. Mister .. Jason
2 ADR 1 .. 610 Beacon St
3 PHO 1 .. Home .. (413) 454-5663 2 .. VoIP .. (413) 442-5252 3 .. Office
4 EML 1 .. igibbs@hotmail.com .. home .. CRLF
5 CUS 2 .. Mister .. Michael
6 ADR 7 .. 225 Friend St
7 PHO 16 .. Home .. (413) 476-2929 131 .. Office .. (413) 476-2955 CRLF
8 EML 2 .. michael.oneal@uspostal.us .. office .. CRLF
9 EML 8 .. m.oneal@springfield_ltd.com .. office .. CRLF
10 EML 40 .. moneal@springfield-ltd.com .. office .. CRLF
11 CUS 3 .. Mister .. Tony
    
```

- ❖ 1 – In the Materials folder, a hierarchical (HierarchicalFileServer.md) metadata file is available to manage the hierarchical files

Add03_HierarchicalFiles

- 10-Materials
 - Hierarchical Files.pdf
 - HierarchicalFileServer**
 - step_by_step_syntax_help.txt
- 20-Metadata

HierarchicalFileServer.md

type filter text

- Server
 - GenerationHierarchicalFilesFolder**
 - customers
 - Customer
 - CUS
 - PK_CUS
 - FILTER_FIELD
 - CUS_ID
 - CUS_TITLE
 - CUS_FIRST_NAME
 - CUS_LAST_NAME
 - CUS_COMPANY
 - Address
 - Email
 - Phones
 - HierarchicalFilesFolder**
 - customers
 - Customer

GenerationHierarchicalFilesFolder

Standard	Name	Value
Standard	Name	GenerationHierarchicalFilesFolder
Customization	Path	%{env.workspace_loc}%/Training/Files_Out/HierarchicalFiles

HierarchicalFilesFolder

Standard	Name	Value
Standard	Name	HierarchicalFilesFolder
Customization	Path	%{env.workspace_loc}%/Training/Files_In/HierarchicalFiles

Training

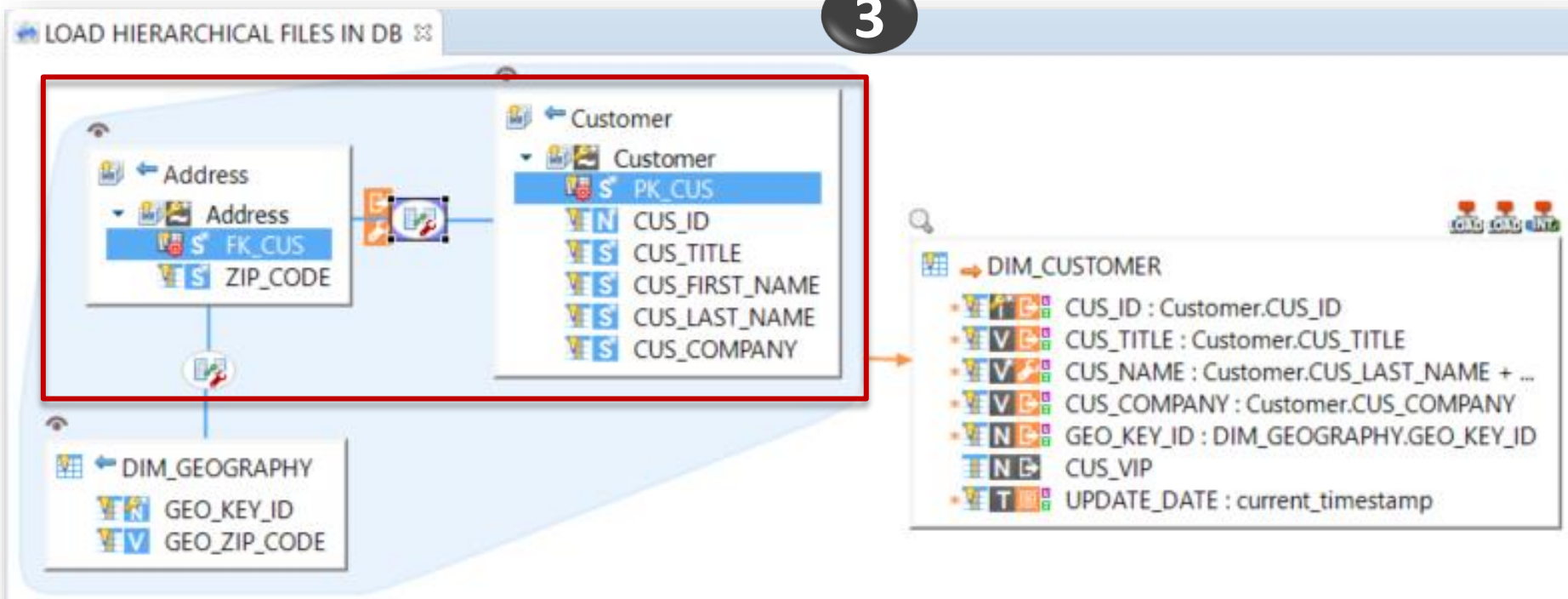
- Components
- Exos materials
- Files_In**
 - Company countries
 - Countries
 - Excel_Files
 - fileControl
 - Heterogeneous files to load in DB
- HierarchicalFiles**
 - customers.txt

- ❖ 2 – Exo1 : Create a replication process (Drag & drop replication template)
 - Drag & drop the hierarchical file and rename it SOURCE
 - Drag & drop a RDBMS schema and rename it TARGET (REPLIC in the sample)
 - Reverse the new tables

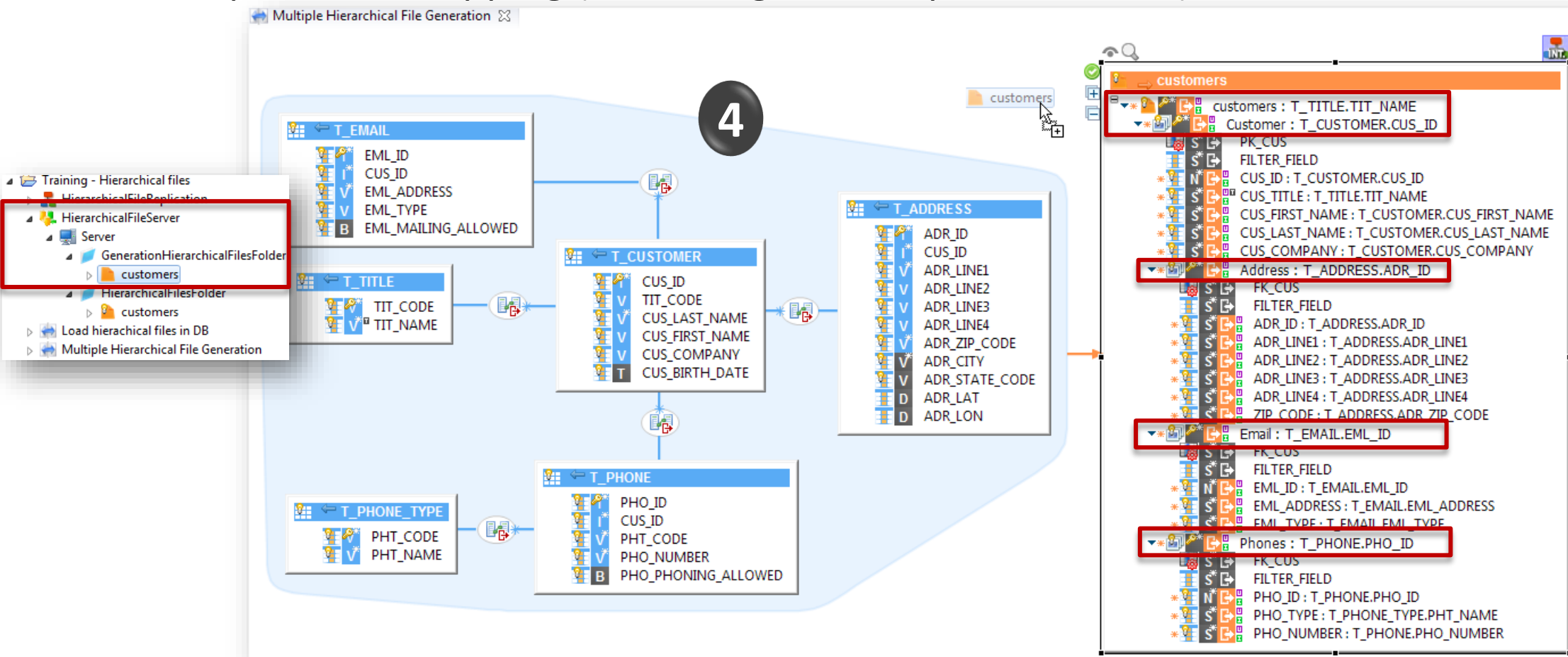
The screenshot displays the 'HierarchicalFileReplication' tool interface. A red arrow points from the '2' in the list to the 'REPLICATOR Rdbms.tp' component in the tool's workspace. Below the workspace, the 'Action Process Ref REPLICATOR Rdbms.tp' configuration window is open. The 'Standard' tab is selected, showing various options for table and index management. A red box highlights the 'Delete Tables', 'Create Fk', 'Drop Fk', 'Drop Tables', 'Drop Indexes', 'Drop Pk', 'Create Tables', 'Disable Constraints', 'Create Pk', 'Create Indexes', 'Enable Constraints', 'Force Generic Rdbms Mode', 'Normalize Column Names', 'Add Comments', 'Local Mode', 'Synchronize Deletions From CDC', 'Use CDC', and 'Load Data' options. The 'Load Data' checkbox is checked, and the 'true' value is entered in the adjacent text field. To the right, the 'HSQL_Datamart.md' file is open, showing a tree view of the datamart structure. A red box highlights the 'REPLIC' folder, which contains sub-folders for 'ADDRESS', 'CUSTOMER', 'EMAIL', and 'PHONES'. A red arrow points from the 'Load Data' checkbox in the configuration window to the 'REPLIC' folder in the datamart structure.

- ❖ 3 – Exo2 : Create a mapping to use hierarchical file as a source
 - Drag & drop the first level of the hierarchical file named “Customer”
 - Drag & drop a second level of the hierarchical file named “Address”
 - Do a join between the FK_CUS and the PK_CUS
 - Drag & drop DIM_CUSTOMER table as target of the mapping

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- ❖ 4 – Exo3 : Create a mapping to generate multiple hierarchical files
 - Drag & drop the file present in the GenerationHierarchicalFilesFolder
 - Drag & drop the required tables and define required joins (outer joins)
 - Complete the mapping (don't forget the repetition blocs)



- ❖ 5 - Define the integration template properties
 - Choose the Integration Hierarchical File template
 - Add TITLE_NAME on first level of the hierarchical file
 - Define a tag on TITLE and complete the Out_File_Mask

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