LO Extraction - Part 6
Implementation Methodology

Applies to:
SAP BI, Business Intelligence, NW2004s. For more information, visit the EDW homepage.

Summary
This part of the article gives you about the implementation methodology in LO extraction.

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Author Bio
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Introduction
First we will check the steps in ECC system followed by steps in BI system. Assume that you need to load cube 0SD_C05. For this you need two datasource 2LIS_11_VAHDR and 2LIS_11_VAITM. As the name depicts, it is of application component 11 and it belongs to VA (Sales) and HDR, ITM represents header and item data.

Steps in ECC system side

Activate datasource
Tr.RSA5

This will make the datasource to be activated from D version to A version. You can check this in table ROOSOURCE.

Data Browser: Table ROOSOURCE Select Entries

You can see that DELTA is ABR. It means, this datasource supports delta and the Type is ABR (After, before, reverse image). This is compatible with DSO and cube.
To know more about delta check in table RODELTAM

**Table RODELTAM Display**

<table>
<thead>
<tr>
<th>Delta Process</th>
<th>ABR</th>
</tr>
</thead>
<tbody>
<tr>
<td>FullUpdate Only</td>
<td></td>
</tr>
<tr>
<td>New image</td>
<td>X</td>
</tr>
<tr>
<td>Before-image</td>
<td>X</td>
</tr>
<tr>
<td>After-image</td>
<td>X</td>
</tr>
<tr>
<td>Accumulated</td>
<td></td>
</tr>
<tr>
<td>Deletion Flag</td>
<td></td>
</tr>
<tr>
<td>Reverse-Image</td>
<td>X</td>
</tr>
<tr>
<td>Serializtn Req.</td>
<td>2</td>
</tr>
<tr>
<td>Processing type</td>
<td>D</td>
</tr>
<tr>
<td>Long description</td>
<td>Complete Delta with Deletion Flag Via Delta Queue(Cube-Comp)</td>
</tr>
</tbody>
</table>

Once datasource is activated, for any post processing actions like enhancements etc .. you can check in RSA6

**Postprocess DataSources and Hierarchy**

<table>
<thead>
<tr>
<th>DataSource</th>
<th>ID</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>211S_01_S001</td>
<td>Customer</td>
<td>Sales Master Data</td>
</tr>
<tr>
<td>211S_01_S002</td>
<td>Sales Document Condition</td>
<td></td>
</tr>
<tr>
<td>211S_01_S003</td>
<td>Sales Document Schedule Line</td>
<td></td>
</tr>
<tr>
<td>211S_01_S004</td>
<td>Sales-Shopping Allocation Item Data</td>
<td></td>
</tr>
<tr>
<td>211S_01_S005</td>
<td>Sales-Shopping Allocation Schedule Line</td>
<td></td>
</tr>
<tr>
<td>211S_01_S006</td>
<td>Sales-Shopping Order Delivery</td>
<td></td>
</tr>
<tr>
<td>211S_01_S007</td>
<td>Delivery Header Data</td>
<td></td>
</tr>
<tr>
<td>211S_01_S008</td>
<td>Delivery Item Data</td>
<td></td>
</tr>
<tr>
<td>211S_01_S009</td>
<td>Sales-Shopping Schedule Line Delivery</td>
<td></td>
</tr>
<tr>
<td>211S_01_S010</td>
<td>Billing Doc Header Data</td>
<td></td>
</tr>
<tr>
<td>211S_01_S011</td>
<td>Billing Document Item Data</td>
<td></td>
</tr>
<tr>
<td>211S_01_S012</td>
<td>Billing Document Condition</td>
<td></td>
</tr>
</tbody>
</table>
Activate extract structure

Before filling setup table you need to activate the extract structure. Follow the steps given below

**Tr.LBWE**

**LO Data Extraction: Customizing Cockpit**

<table>
<thead>
<tr>
<th>Source data</th>
<th>Structure</th>
<th>Data Source</th>
<th>Update</th>
<th>Update Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Logistics applications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02: Purchasing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>03: Inventory Controlling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>04: Quality Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>05: Invoice Verification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>06: Shipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Update activated**

*Always observe long text*

**Notifications MCEX 146**

**Diagnosis**

You have activated the extraction of an extraction structure.

By setting the V3 update to active for the affected application, update *entries that contain "collective processing" modules are created for every document change.*

These cannot be processed automatically either immediately or later, as is possible for a V1 or V2 update. You have to start the process for these update entries explicitly. For logistics extraction, you can set the time that you want to begin the explicit start-up using the function "Job control".

If changes are made to the ABAP dictionary objects used in the update module between the time of creating an update entry and the V3 update...
Now schedule the V3 job

**Filling setup table**

Once the activation is done, we can fill setup table from SBIW.

**Tr.SBIW**
This invokes the report as shown below; the same screen can be called by transaction OL17BW

**Statistical Setup from Old Documents: Orders**

Now provide the name of run and give the date in future. Selections can be provided. Execute
Checking Extracted Data

Since the extract table is cluster table, it is meaningless to see in data dictionary, so we have some other method to read data from extract structure.

Tr.RSA3 Give the datasource name to check the data that is extracted. Execute
Select Display list
Double click on record

Extractor Checker S-API

So 11 records are extracted.
**Steps in BI side.**

Replicate the datasource from source system and follow the dataloading process.

Upload the data from setup table.

Need to migrate this datasource, you can see datasource with square, this is 3.x datasource icon.
Do this for both the datasource, now you can see the datasource like this

- Sales Document Order Delivery 2LIS_11_V_SSL
- Sales Document Schedule Line 2LIS_11_VASCL
- Sales- Shipping Allocation Item D 2LIS_11_V_JTM
- Sales- Shipping Allocation Sched 2LIS_11_V_SCL
- Sales- Shipping Schedule Line D 2LIS_12_VCSCL
- Shipment Costs at Delivery Item 2LIS_08TRFKZ
- Shipment Costs at Item Level 2LIS_08TRFKP
- Shipment: Delivery Item Data by t 2LIS_08TRTLP
- Billing Document Item Data 2LIS_13_VDITM
- Sales Document Header Data 2LIS_11_VAHDR
- Sales Document Item Data 2LIS_11_VAIMT

Create an Infopackage to load the data from setup table

For BI the processing of Infopackage is by default only to PSA
The update is full upload; this will fetch data from setup table. For more info read my previous articles

Start the extraction

Once you get this, go to monitor, check for data in PSA
Loading to cube

To load data to cube you need to create a DTP from datasource to cube.

Create Transformation

Target of the Transformation

Object Type: InfoCube
Name: 0SD_C05

Source of the Transformation

Object Type: DataSource
DataSource: 2LIS_11_VAHDR
Source System: 04ACLNT002
Similarly load the 2LIS_11_VAITM datasource from Infopackage.
Now create transformation for that too

Create a DTP for each datasource

Activate and start the execution
Similarly load for 2LIS_11_VAITM also
## DTP Request 755.959

**Request ID**: 755.959  
**Start Time**: 2010.10.23 09:17:03  
**Finish Time**: 2010.10.23 09:17:33

### Header Details

<table>
<thead>
<tr>
<th>Overall Status</th>
<th>Technical Status</th>
<th>Runtime</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>39s</td>
</tr>
</tbody>
</table>

**Source**: 2LIS_11_VAITH  
**Transformation**: RSDS 2LIS_11_VAITH Q4ACLNT002 -> CUBE OSD_C05 (OCTV021RJ08)  
**Target**: OSD_C05 (Offers/Orders)  
**Selections**: REQUID = 755954  
**Data Transfer Proc**: DTP_4JLA7MTXA13901TY5W2100EM (VAITH)  
**User**: I344912  
**Extraction Mode**: Delta  
**Package Size**: 2147.483.646  
**Error Handling**: Valid Records Update, No Reporting (Request Red)  
**Processing Mode**: Serial Extraction, Immediate Parallel Processing  
**Inserted Data Records**: 0  
**Request ID**: DTPR_4JLA7VS2NCVLJQOR8NE8YTIA

### Offers/Orders

- RSDS 2LIS_11_VAHDR Q4ACLNT002 -> CUBE OSD_C05 0TVU1E9/CPYK/IPMD/GTQV/KR/W3LXB4BKX  
- RSDS 2LIS_11_VAITH Q4ACLNT002 -> CUBE OSD_C05 0TVU021RJ080T8L8NMGB6T3N6L3586T  
- OSD_C05 2LIS_01_S250  
- OSD_C05 2LIS_01_S254  
- OSD_C05 2LIS_11_VAHDR  
- OSD_C05 2LIS_11_VAITH  
- Data Transfer Processes
  - VAHDR  
  - Sales Document Header Data 2LIS_11_VAHDR  
  - VAHDR_IP  
  - VAITH  
  - Sales Document Item Data 2LIS_11_VAITH  
  - VAITH_IP  
- ZPAK_4JLA4U4CIEILYOZ4TRNC090RW2
Now you can check the contents of the cube context menu ‘Manage’ from cube.
**Delta Update**

Check RSA7 in source system, you will not find entries for this datasource as of now.

Now from Infopackage do and ‘Init without data transfer’, this will initialize the delta.

---

**BW Delta Queue Maintenance**

Now from Infopackage do and ‘Init without data transfer’, this will initialize the delta.
Similarly do for 2LIS_11_VAITM Infopackage also.

Now check RSA7 in source system
Now create a Delta Infopackage for both the datasource and schedule it. You can group all these things in a process chain and monitor the loads daily.

Now any change in the ECC system will trigger a delta record which will be picked by the delta Infopackage and from there the DTP will send the delta data to cube.

This completes the LO extraction implementation methodology, this is very short overview, do read all the previous articles to know in detail about each process.
Related Content

SDN

SAP Help

Reference to my previous articles

LO Extraction Part 1 – SD Overview
LO Extraction Part 2 – Database Update Logic
LO Extraction Part 3 – Extractor Logic
LO Extraction Part 4 – Update Methods
LO Extraction Part 5 – DataSource Overview
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