BI Inventory Management- Data Loading

Applies to:

ECC 6.0 and SAP BI 7.0 system. For more information, visit the Business Intelligence homepage.

Summary

The paper is about what all steps to be followed to load data into Inventory related cube in Business Intelligence. The steps illustrate the end to end procedure to be followed while loading the data.

Author: Gaurav Kanungo
Company: Deloitte Consulting India private limited.
Created on: 06/07/2009

Author Bio

Gaurav Kanungo is working with Deloitte Consulting. He has 2 years of full time experience in SAP Business Intelligence 7.0
Table of Contents

Introduction ......................................................................................................................................................... 3

Entries in ECC tables: ......................................................................................................................................... 3
  Table TBE11: .................................................................................................................................................. 3
  Transaction BF11: ........................................................................................................................................... 4

Data Load Steps ................................................................................................................................................. 6
  Step 1: Install the Business Content ............................................................................................................... 6
  Step 2: Delete Historical Data. ........................................................................................................................ 6
  Step 2: Delete Data from setup Tables. .......................................................................................................... 6
  Step 3: Shutdown ECC .................................................................................................................................. 6
  Step 4: Stock Initialization.................................................................................................................. 7
  Step 5: Fill Setup Tables............................................................................................................................... 8
  Step 6: Pull Data for 2LIS_03_BX................................................................................................................ 10
  Step 7: Pull Data for 2LIS_03_BF ................................................................................................................ 12
  Step 8: Pull Data for 2LIS_03_UM ............................................................................................................... 13
  Step 9: Job scheduling to fill delta queue .................................................................................................... 13
  Step 10: Delta Scheduling ............................................................................................................................ 14

Related Content ................................................................................................................................................ 15

Disclaimer and Liability Notice .......................................................................................................................... 16
Introduction

Inventory Management has always been a critical process in Business Intelligence. The data load process in Inventory data sources is different from other scenarios. If we miss even one step during loading, we may get wrong entries. Even after following the steps perfectly, we may sometimes find anomalies in the data loaded.

In the following document, I have tried to include all those extra steps also which sometimes if not included create some or the other problem.

In Inventory management, the most important cube to load data to is 0IC_C03. Here we load data from three data sources namely 2LIS_03_BX, 2LIS_03_BF and 2LIS_03_UM.

- **2LIS_03_BX**: This structure is used to extract the stock data from MM Inventory Management for initialization to a BW system.
- **2LIS_03_BF**: This structure is used to extract the material movement data from MM Inventory Management (MM-IM) consistently to a BW system.
- **2LIS_03_UM**: This structure is used to extract the revaluation data from MM Inventory Management (MM-IM) consistently to a BW system.

In the following steps we will specifically show the process of data load to 0IC_C03.

**Entries in ECC tables:**

Maintain the following entries in the specified tables in the ECC System:

**Table TBE11:**

Maintain entry ‘NDI’ (text: New dimension integration) and ‘BW’ and the flag Active. We have transaction FIBF available, with which you can branch to the table via the menu option Settings -> Identification -> SAP applications.
(Or)

**Transaction BF11:**

Set the flag as active for application component BW & NDI

In some scenarios, if this activity is not performed, it creates problems while loading data. If we proceed with the loading activity without performing the above steps, records are transferred but no records are added in the cube.
Note: For more details please refer OSS note 315880 and 571669.
Note: The above mentioned activities need to be done only if the system is fresh and inventory loading is done for the first time.
Data Load Steps
Follow the mentioned steps accordingly in ECC system.

Step 1: Install the Business Content
Go to transaction RSA5 and activate the content for 2LIS_03_BX, 2LIS_03_BF, 2LIS_03_UM data sources.

Step 2: Delete Historical Data.
Go to transaction SM13. Use Collective Run (Program Name → RMBWV303) and pull data into BW using the Info Sources 2LIS_03_BF & 2LIS_03_UM and delete the data in BW.

(Or)
Select Queue Name MCEX03 and delete it in Transaction Code LBWQ in ECC.

Step 2: Delete Data from setup Tables.
Go to transaction LBWG. Using F4 help select the setup of Inventory Controlling (03) and execute.

Step 3: Shutdown ECC.
Take downtime according to the volume of data.

Note: Just check the historical data to check if there are still some undeleted entries.
Step 4: Stock Initialization.

Stock Initialization is basically done to set an entry into the system which leads to the opening stock.
Initialize stock using transaction MCNB for 2LIS_03_BX data source.

(Or)

You can also find the initialization of the opening stock in transaction SBIW in the ECC source system under the menu entry specified below:

After executing the menu entry you will come to the definition of the initialization run where you can restrict by plant, material and storage location. The definition screen is shown below. Please consider that the termination date is in the future.
Step 5: Fill Setup Tables.

- Fill Setup Table for 2LIS_03_BF > Transaction OLI1BW.
  
  You will be asked for the Back Ground Job Print Parameters.
  
  Just give LOCL as the Output Device and press Tick Mark.
  
  (Or)
  
  You can find the setup of statistical data under transaction SBIW in the ECC system by following the menu entry shown in the following screenshot:
### BI Inventory Management - Data Loading

#### Display IMG

- **General Settings**
  - Business Content Data Sources
  - Settings for Application Specific Data Sources
- **Cross-Application Components**
  - Financial Accounting - Special Purpose Ledger
  - Profitability Analysis
  - Investment Management
  - Enterprise Controlling
  - Real Estate Management
- **Logistics**
  - Managing Extract Structures
    - Create Extract Structures Customizing cockpit
    - ENV Log
  - Initialization
    - Delete the Contents of the Setup Table
  - Filling in the Setup Table
    - Cross-application Selection Parameters
    - Application-Specific Setup of Statistical Data
    - Platform Setup
      - Inventory Management
        - Purchase
        - HDI - Activity
      - Production
      - Quality Management
      - Plant Maintenance - Set Up Recognition
      - Service Management - Set Up
      - Platform Setup - BD Sales Orders
      - Platform Setup - LE Deliveries
      - Platform Setup - BD Billing Documents
      - LEB - Shipment Costs - Carry Out Restructure
      - LEB - Transportation - Carry Out Restructure
      - Retail - Platform Setup
• Fill Setup Table for 2LIS_03_UM > Transaction OLI1BW.
   You will be asked for the Back Ground Job Print Parameters.
   Just give LOCL as the Output Device and press Tick Mark.
   (Or)
   You can find the setup of statistical data under transaction SBIW in the ECC system by
   following the menu entry as done in case of previous step.

**Note:** Ideally you still keep the posting block during this run. If this is not possible you have to make sure that by
restrictions for posting date or the material document number you only select those material documents that have
created the opening stock in previous step.

**Step 6: Pull Data for 2LIS_03_BX.**

It’s a onetime activity and needs to be done carefully. In the Info Package, choose the upload mode “Create
opening balance”

In the info cube (0IC_C03), release request with Marker Update (No Tick).

   Marker update is just like check point ie it will give the snapshot of the stock on a particular date
   when it was updated. As we are using Noncumulative key figure it will take lot of time to calculate the
   current stock for example at report time. To overcome this we use marker update.
Step 7: Pull Data for 2LIS_03_BF.

- Init Delta (2LIS_03_BF) without data transfer. The marker has no importance for (only) this request since no data was transferred.

- Do full load. Release Request with No Marker Update (Tick).

In the above case we use No marker update because we have initialized the stock by calculating all the historical data and then we are loading historical data. It would lead to data mismatch so to avoid that we use no marker so that it will not add to the reference point.

- Successive delta uploads must always be compressed with marker Updates (No Tick). Compression is optional where no historical data has been transferred into the BW, though it is recommended for performance reasons.
### Step 8: Pull Data for 2LIS_03_UM.
- Init Delta (2LIS_03_BF) without data transfer.
- Do full load. Release Request with No Marker Update (Tick).
- Successive delta uploads must always be compressed with marker Updates (No Tick).

### Step 9: Job scheduling to fill delta queue.
You can schedule this activity Daily/Hourly as per your needs.
- SM36 → Schedule Collective Run (Program Name- RMBWV303)
  - Job wizard → Job Name (Collective Run For 0IC_C03) →
  - ABAP Program Step → Program Name (RMBWV303)
  - Date & Time Period (Tick)
  - Daily → Complete

(Or)
You can directly do the collective run scheduling from LBWE”Job Control”.
Step 10: Delta Scheduling

Schedule delta update through process chain for both the data sources: 2LIS_03_BF and 2LIS_03_UM. In process chain also select the variant for compression with marker update.

Note: ECC downtime is required only for Setup table filling. As we use Un-serialized V3 update, it is not necessary for ini process.
Related Content

For more details please refer OSS note 315880 and 571669 and the link
https://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/f83be790-0201-0010-4fb0-98bd7c01e328?overridelayout=true

Reference 3

For more information, visit the Business Intelligence homepage.
Disclaimer and Liability Notice

This document may discuss sample coding or other information that does not include SAP official interfaces and therefore is not supported by SAP. Changes made based on this information are not supported and can be overwritten during an upgrade.

SAP will not be held liable for any damages caused by using or misusing the information, code or methods suggested in this document, and anyone using these methods does so at his/her own risk.

SAP offers no guarantees and assumes no responsibility or liability of any type with respect to the content of this technical article or code sample, including any liability resulting from incompatibility between the content within this document and the materials and services offered by SAP. You agree that you will not hold, or seek to hold, SAP responsible or liable with respect to the content of this document.