

# 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.

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## Author Bio



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## 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 OIC\_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 OIC\_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.

APPLK	AKTIV	TXTSU
<input type="checkbox"/>		
<input type="checkbox"/> BCA_US		US Banking Events
<input type="checkbox"/> BKK	X	Bankenkontokorrent
<input type="checkbox"/> BW		Business Information Warehouse
<input type="checkbox"/> CA	X	Anwendungsübergreifende Obj.
<input type="checkbox"/> CACS	X	IS-IS-CS
<input type="checkbox"/> CIN	X	IN: India functions
<input type="checkbox"/> CO	X	Controlling
<input type="checkbox"/> CRMATP		ATP aus dem CRM mit Sperren
<input type="checkbox"/> CS	X	Logistik Stücklisten
<input type="checkbox"/> DI-DPC	X	Anzahlungsketten
<input type="checkbox"/> DI-TAX	X	AZ-Ketten (gestundete Steuer)
<input type="checkbox"/> EA-CP		Consumer Products
<input type="checkbox"/> EA-DFP		DefenseForces&PublicSecurity
<input type="checkbox"/> EA-FIN	X	Financials Extension
<input type="checkbox"/> EA-FRC		FERC: Regulatory Reporting
<input type="checkbox"/> EA-FS		Financial Services
<input type="checkbox"/> EA-GLT		Global Trade
<input type="checkbox"/> EA-HR		Human Resources Extension
<input type="checkbox"/> EA-ICM		Incentive & Commission Mgmt
<input type="checkbox"/> EA-ISE		Industry spec. Sales Enhancem.
<input type="checkbox"/> EA-PLM		PLM Extension
<input type="checkbox"/> EA-RET		Retail
<input type="checkbox"/> EA-SCM		SCM Extension
<input type="checkbox"/> EA-TRV		Travel Management Extension
<input type="checkbox"/> FI-AA	X	Anlagenbuchhaltung
<input type="checkbox"/> FI-BA	X	FI-Bankbuchhaltung
<input type="checkbox"/> FI-CDA		Zuordnung von Gutschriften
<input type="checkbox"/> FI-CM		SAP Collections Management
<input type="checkbox"/> FI-DM		FSCM Dispute Management
<input type="checkbox"/> FI-FI	X	Standard FI
<input type="checkbox"/> FI-IHC	X	Anschluß an Inhouse Cash Syst.
<input type="checkbox"/> FI-PDP	X	Anzahlungen
<input type="checkbox"/> FI-PRL	X	Zahlungsfreigabeliste
<input type="checkbox"/> FI-RL		Retail Ledger
<input type="checkbox"/> FI-TAX	X	FI Taxes
<input type="checkbox"/> FI-TRX	X	Anbindung an TREX-Suchmaschine
<input type="checkbox"/> FS-CMS	X	Collateral management system

(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.

Appl.	A	Text
BCA_US	<input type="checkbox"/>	US Banking Events
BKK	<input checked="" type="checkbox"/>	Bankenkontokorrent
BW	<input type="checkbox"/>	Business Information Warehouse
CA	<input checked="" type="checkbox"/>	Anwendungsübergreifende Obj.
CACS	<input checked="" type="checkbox"/>	IS-IS-CS
CIN	<input checked="" type="checkbox"/>	IN: India functions
CO	<input checked="" type="checkbox"/>	Controlling
CRMATP	<input type="checkbox"/>	ATP aus dem CRM mit Sperren
CS	<input checked="" type="checkbox"/>	Logistik Stücklisten
DI-DPC	<input checked="" type="checkbox"/>	Anzahlungsketten
DI-TAX	<input checked="" type="checkbox"/>	AZ-Ketten (gestundete Steuer)
EA-CP	<input type="checkbox"/>	Consumer Products
EA-DFP	<input type="checkbox"/>	DefenseForces&PublicSecurity
EA-FIN	<input checked="" type="checkbox"/>	Financials Extension
EA-FRC	<input type="checkbox"/>	FERC: Regulatory Reporting
EA-FS	<input type="checkbox"/>	Financial Services
EA-GLT	<input type="checkbox"/>	Global Trade
EA-HR	<input type="checkbox"/>	Human Resources Extension
EA-ICM	<input type="checkbox"/>	Incentive & Commission Mgmt
EA-ISE	<input type="checkbox"/>	Industry spec. Sales Enhancem.
EA-PLM	<input type="checkbox"/>	PLM Extension
EA-RET	<input type="checkbox"/>	Retail
EA-SCM	<input type="checkbox"/>	SCM Extension
EA-TRV	<input type="checkbox"/>	Travel Management Extension
FI-AA	<input checked="" type="checkbox"/>	Anlagenbuchhaltung
FI-BA	<input checked="" type="checkbox"/>	FI-Bankbuchhaltung

**Note:** For more details please refer OSS note 315880 and 571669.

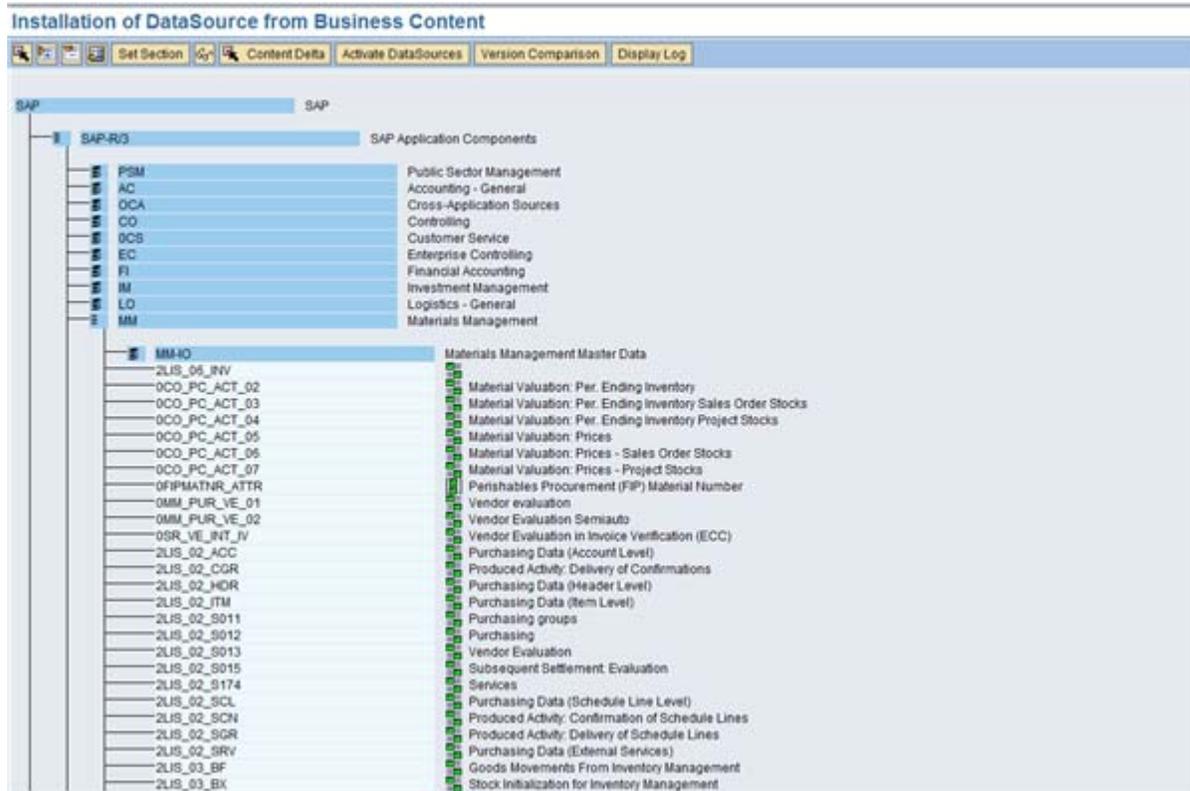
**Note:** The above mentioned activities need to be done only if the system is fresh and inventory loading is done for the first time.

## 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.

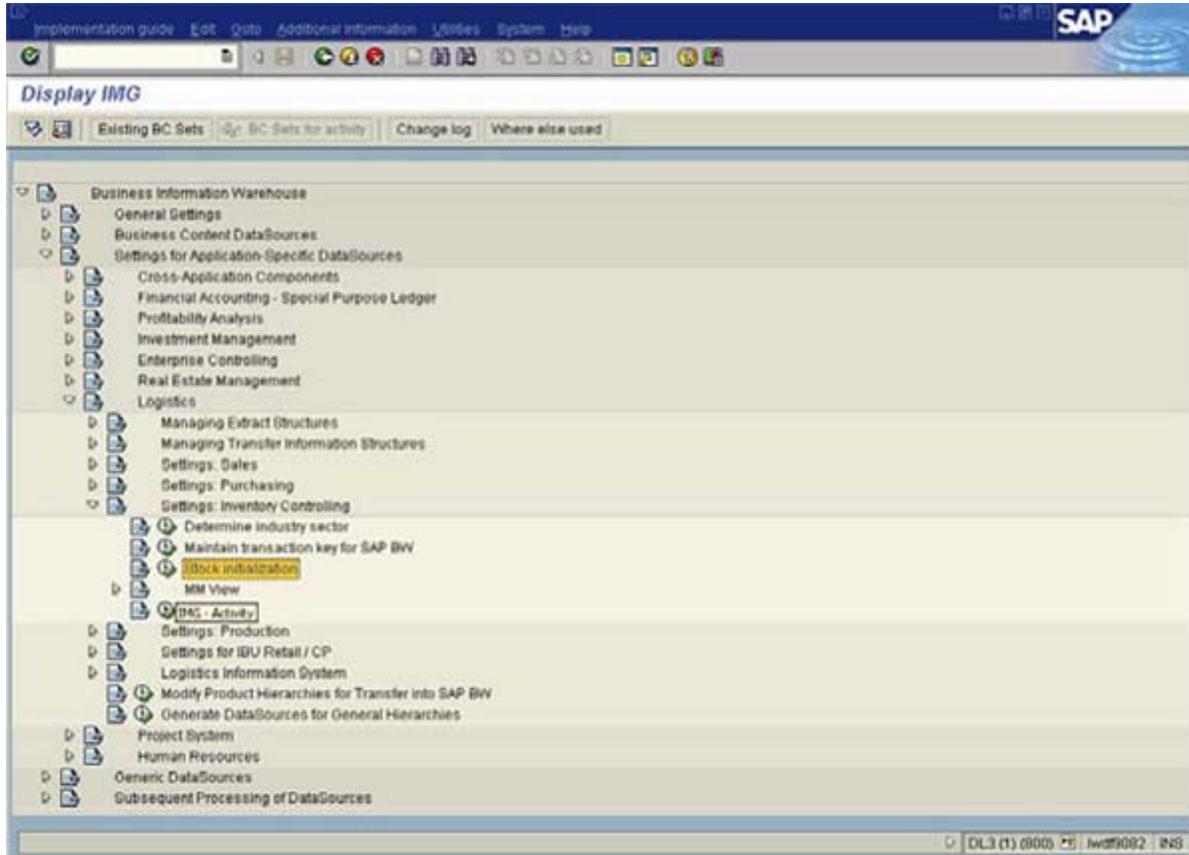
**Note:** Just check the historical data to check if there are still some undeleted entries.

#### 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.

The screenshot shows the SAP BW initialization screen for opening stocks in transfer structure. The window title is "BW: Initialization of opening stocks in transfer structure". The interface is divided into three main sections: General control info, Data destination info, and Data source info.

**General control info:**

Name of run	STOCK_INIT	<input checked="" type="checkbox"/> New run
Termination date	20.01.2003	
Time of termination	20:00:00	5000 No. of data recs per LUW

**Data destination info:**

Transfer structur	2LIS_03_BX
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**Data source info:**

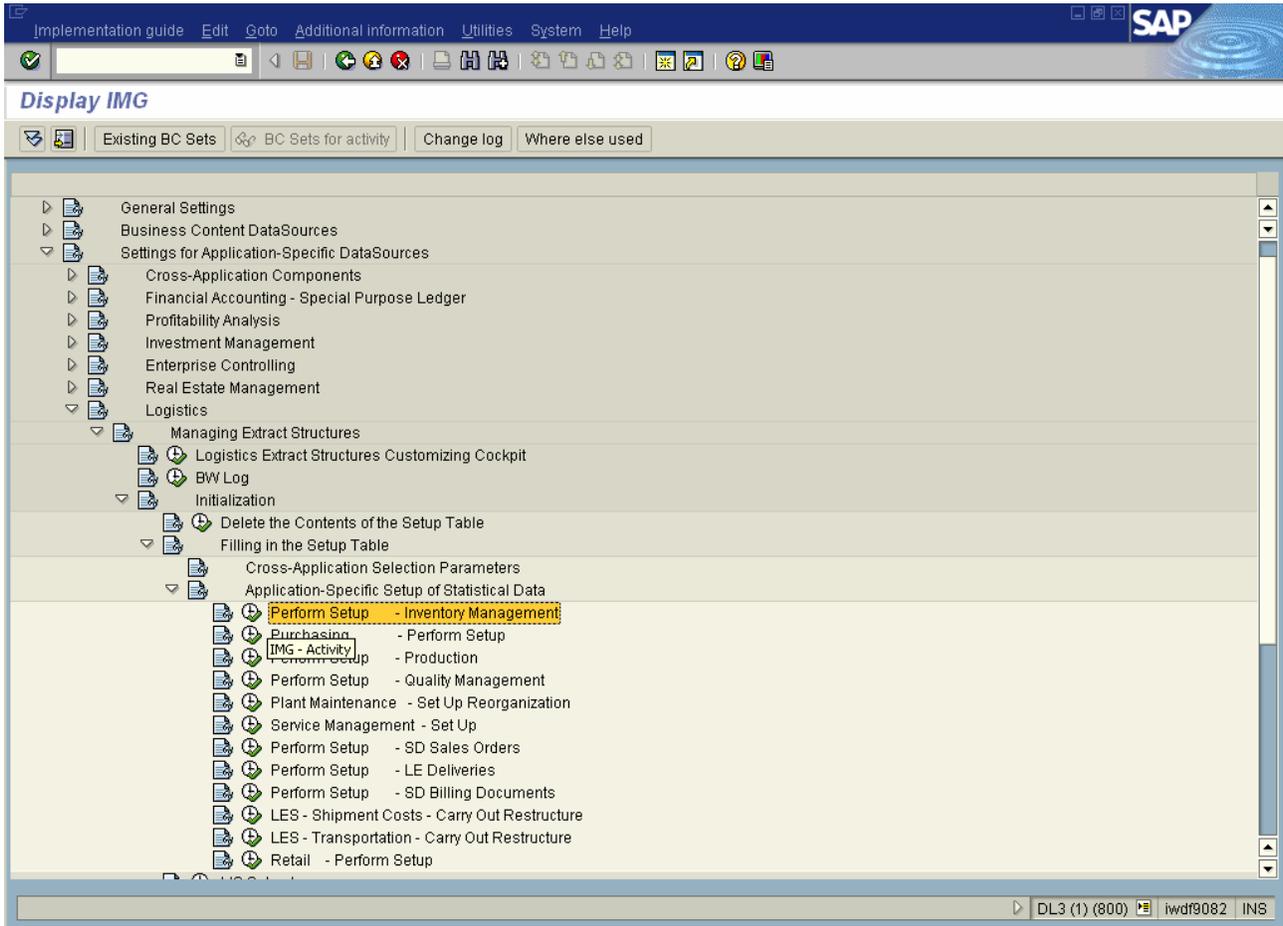
Plant		to		<input type="button" value="→"/>
Material		to		<input type="button" value="→"/>
Storage location		to		<input type="button" value="→"/>

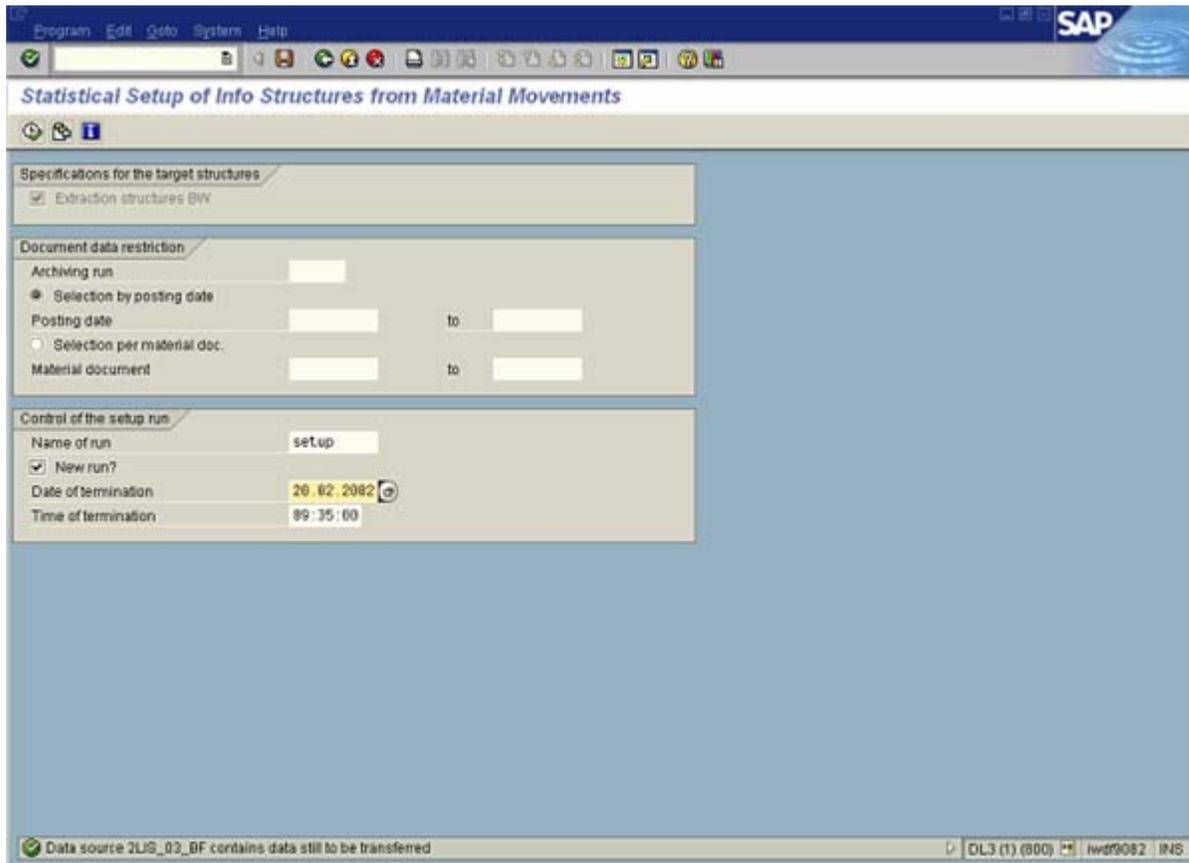
Options for stock selection:

- only valuated stocks
- All stocks (including non-valuat)
- Zero stock to be transferd

#### 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:





- 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.

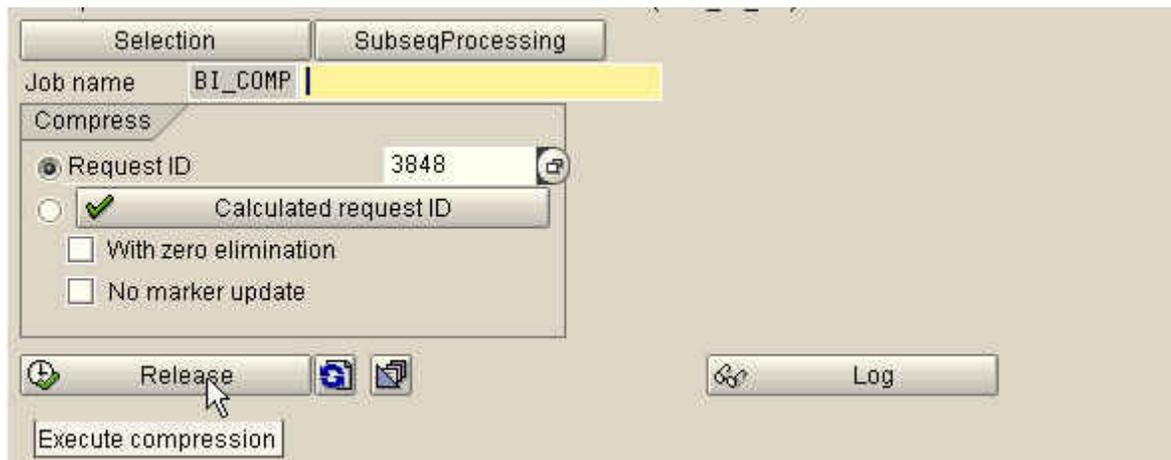
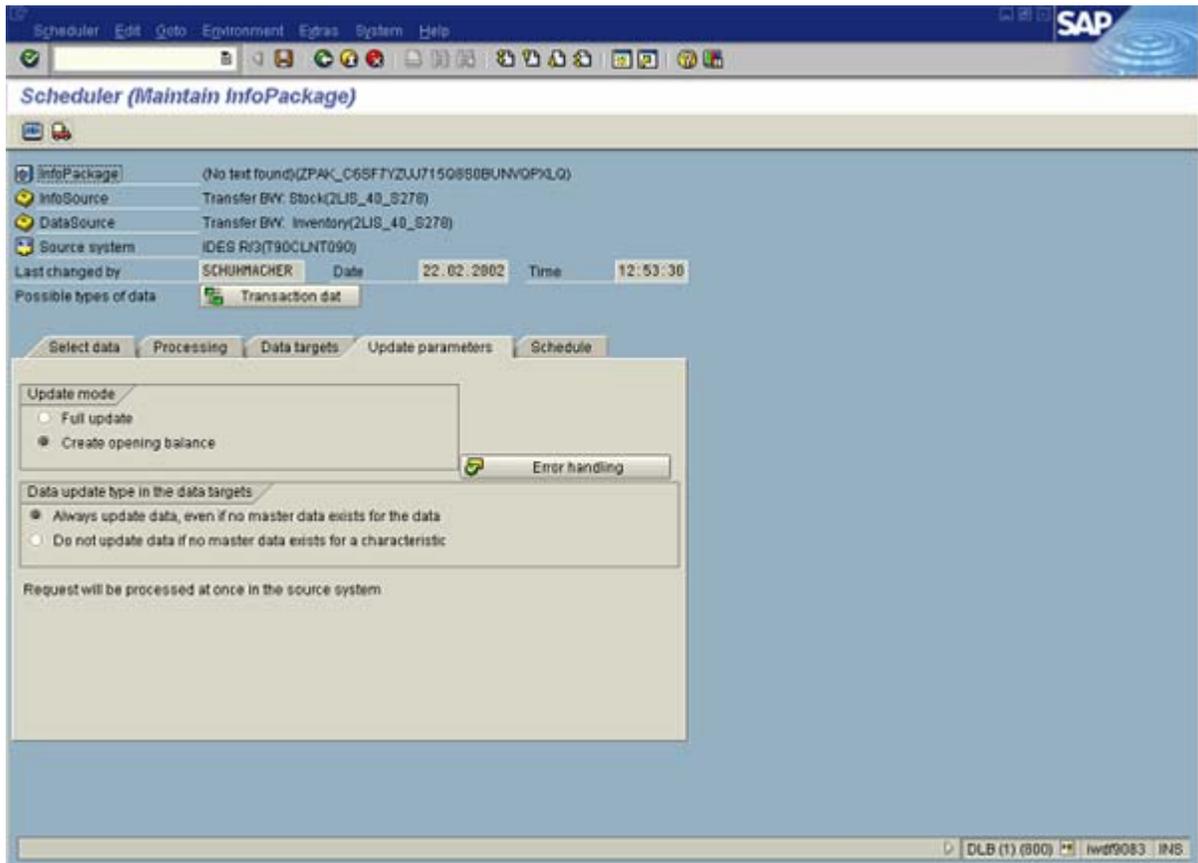
**Note:** Ideally you still keep the posting block during this run. If this is not possible you have to make sure that by restrictions for posting date or the material document number you only select those material documents that have created the opening stock in previous step.

### 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"

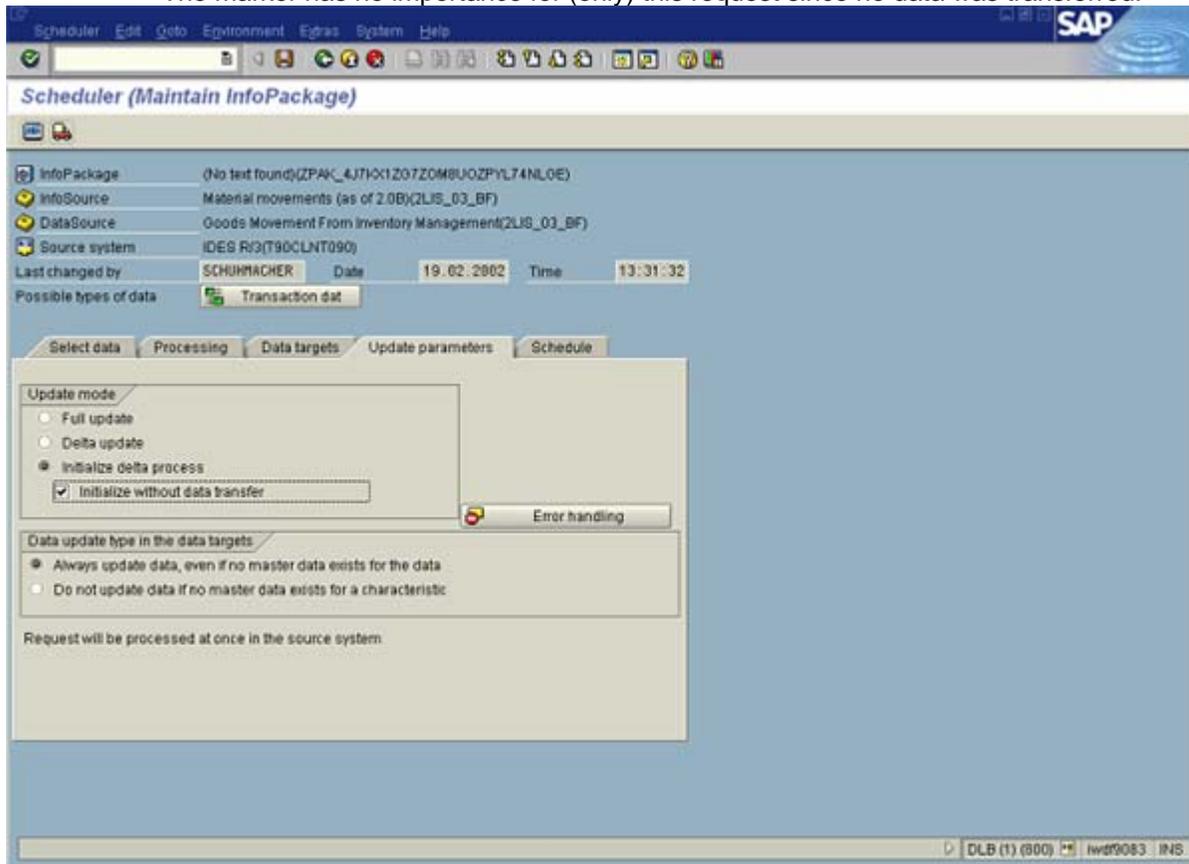
In the info cube (0IC\_C03), release request with Marker Update (No Tick).

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.

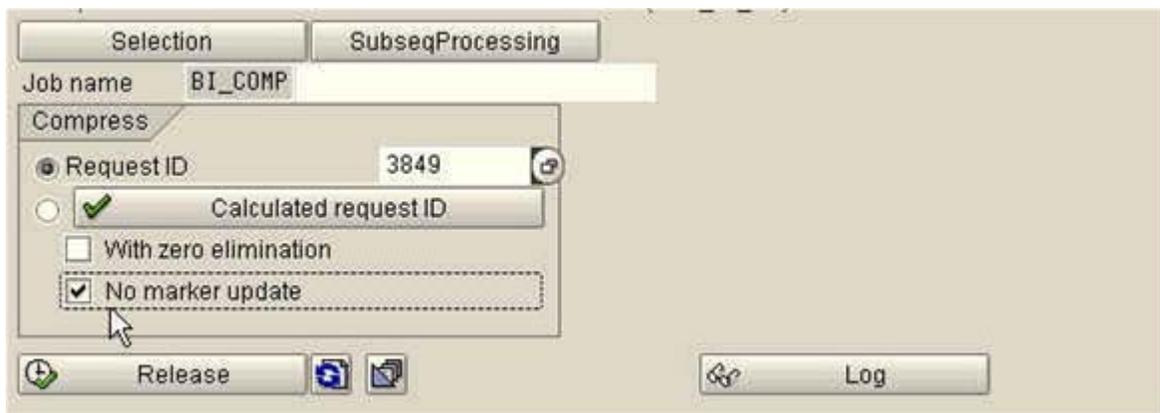


**Step 7: Pull Data for 2LIS\_03\_BF.**

- 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.

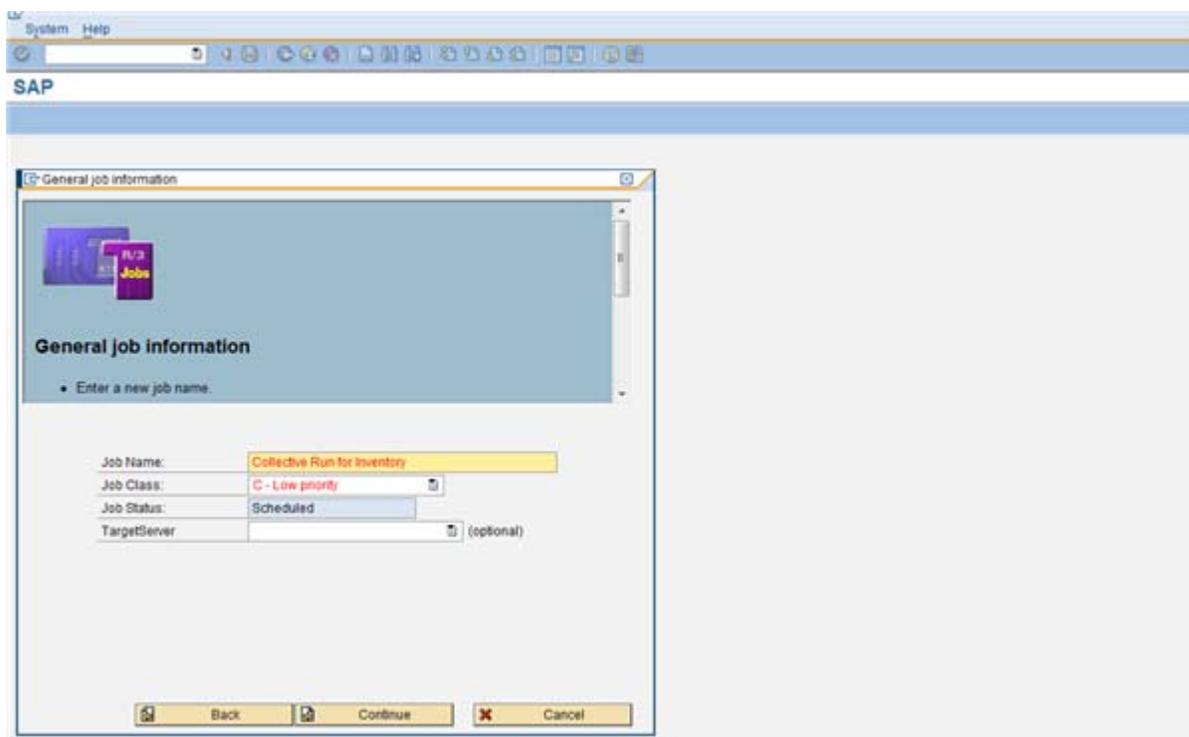
**Step 8: Pull Data for 2LIS\_03\_UM.**

- 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".

The screenshot shows the SAP LO Data Extraction Cockpit interface. The title bar reads "LO Data Extraction: Customizing Cockpit". The main window is divided into several panes:

- Source Data:** A tree view on the left showing a hierarchy of Logistics Applications, including:
  - 02 : Purchasing
  - 03 : Inventory Controlling
    - Extract Structures
    - 04 : Shop Floor Control
    - 05 : Quality Management
    - 08 : Shipment
    - 11 : SD-Verkauf BW
    - 12 : LE-Versand BW
    - 13 : SD-Faktura BW
    - 17 : Instandhaltung BW
    - 18 : Kundenservice BW
    - 40 : Retailing
    - 43 : BW: Retail POS Daten: Kassierer
    - 44 : BW: Retail POS Daten: Kassensbons
    - 45 : Agency Business
    - 20 : Workflow
- Job Maintenance for Collective Update:** A central dialog box with two sections:
  - Job parameters:** Contains buttons for "Start date..." and "Print param...". To the right, there are two status indicators, both labeled "Not Maintained" with a red square icon.
  - Job control:** Contains buttons for "Schedule job..." and "Job overview...".
- Update Table:** A table on the right with columns "Update" and "Update Mode". It lists multiple "Job Control" entries, each with a pencil icon and the text "Queued Delta".

### 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 init process.

## Related Content

For more details please refer OSS note 315880 and 571669 and the link  
<https://forums.sdn.sap.com/thread.jspa?forumID=131&threadID=787870>

<https://forums.sdn.sap.com/thread.jspa?forumID=131&threadID=787870>

<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

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