

SAP BW Accelerator for Beginners



Applies to:

SAP BI 7.0. For more information, visit the [EDW homepage](#).

Summary

This is basic introduction to SAP BI accelerator concepts and quick method to use them in project. This document will give basic information for beginners and help them to work with BIA in SAP environment.

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Created on: 29 July 2010

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Table of Contents

BI Accelerator Concept	3
Implementing BIA	3
Related Content	9
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BI Accelerator Concept

The BI Accelerator is a approach for enhancing SAP NetWeaver BI performance based on SAP's search and classification engine, TREX, and on preconfigured hardware. It is packaged as an appliance for use with SAP NetWeaver Business Intelligence (BI) and provides enhanced performance for online analytical processing in an Enterprise Data Warehousing IT scenario.

A TREX aggregation engine for processing structured business data enhances this performance. The data from the BI InfoCubes is indexed in the BI Accelerator and stored as TREX indexes in the storage subsystem. The BIA indexes are loaded into the memory and used to answer OLAP queries entirely in memory. The BI Accelerator clearly reduces the response time, particularly for large data volumes.

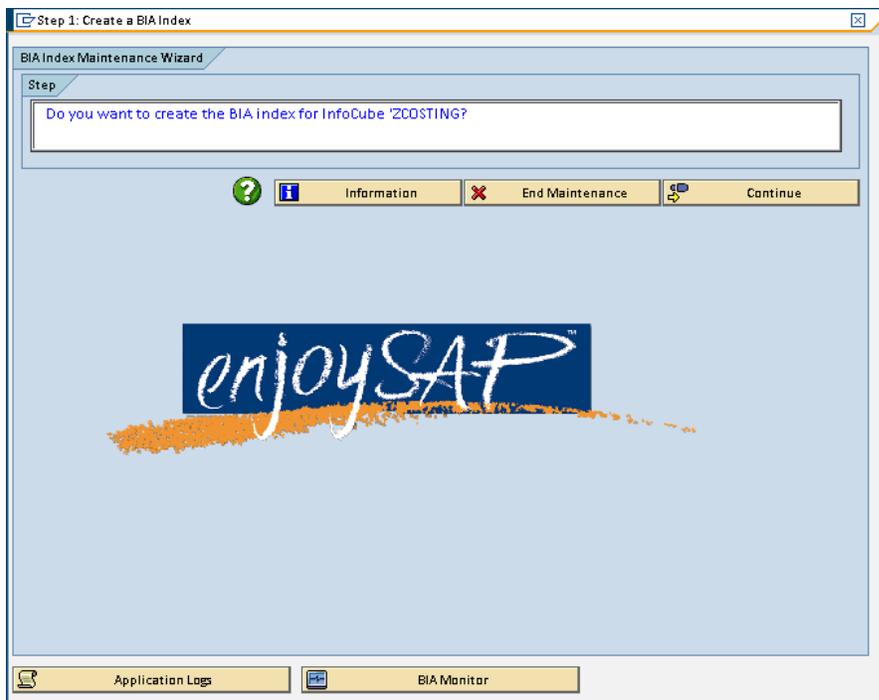
BI Accelerator is connected to BI using RFC connection.

Implementing BIA

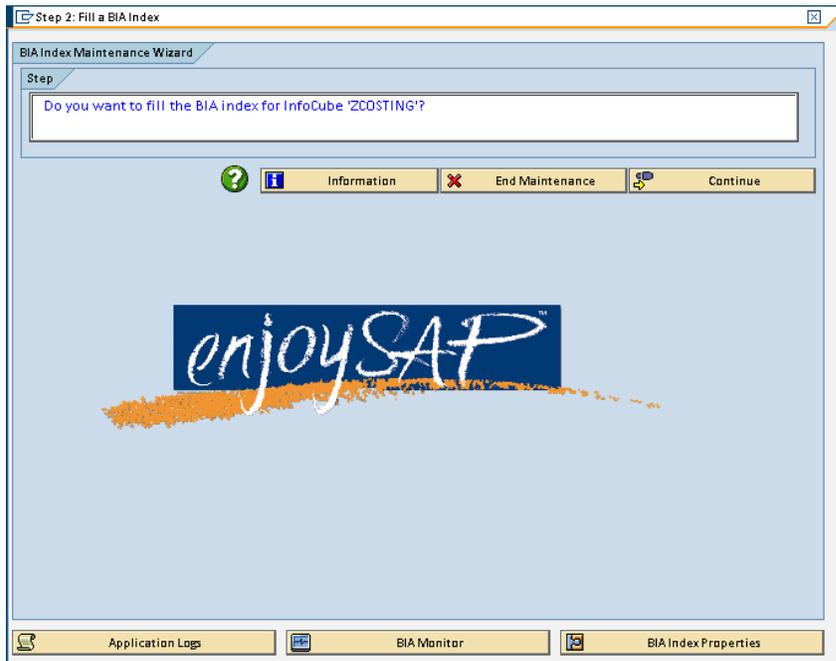
Once BIA hardware is in place and RFC connection are done (using SM59), using **RSDDBIAMON2** t-code one can monitor BIA. From this monitor BIA server can be restarted, all indexes can be rebuild in one go. One can even check for BIA connectivity and monitor the load.

Steps to implement BIA:

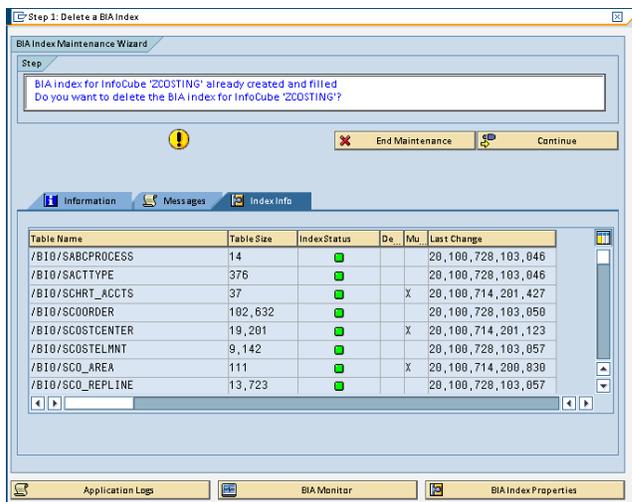
1. Identify the query and underline cube, for which performance enhancement is required.
2. Once cube is identified, BIA index can be created. It can either be created by using T-code RSDDV > BIA Index wizard or in RSA1, select the cube, right click > maintain BI Accelerator index.



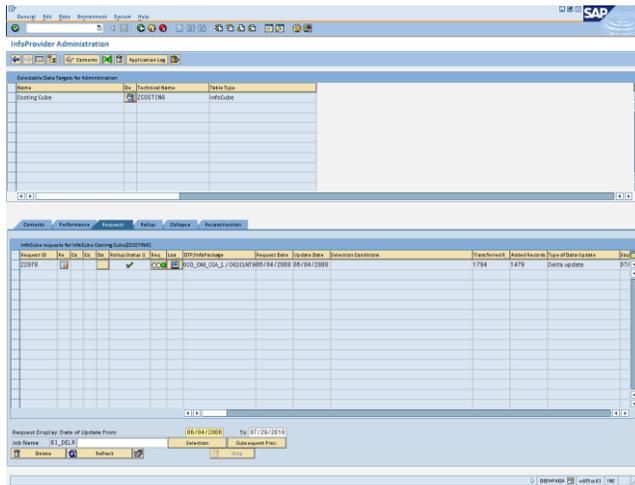
3. Click Continue. BIA index will be created. Fill the index with initial data.



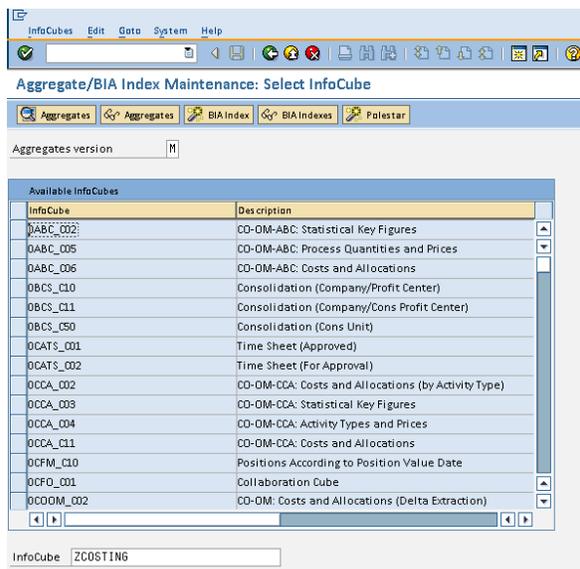
4. In **RSDDV**, BIA Index wizard, detail information for each index cube is available. Also the details about which tables are index is present.

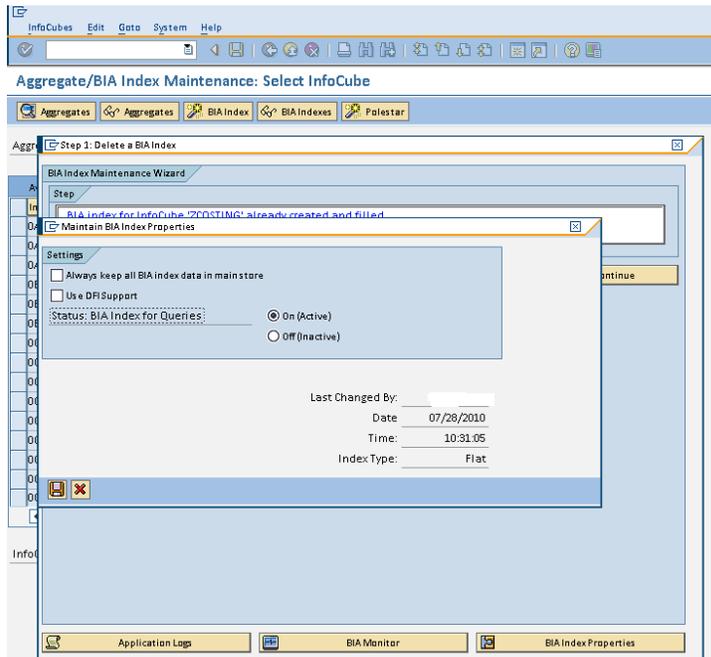


5. Once indexing is done, rollup status will be checked and data will be available for reporting.

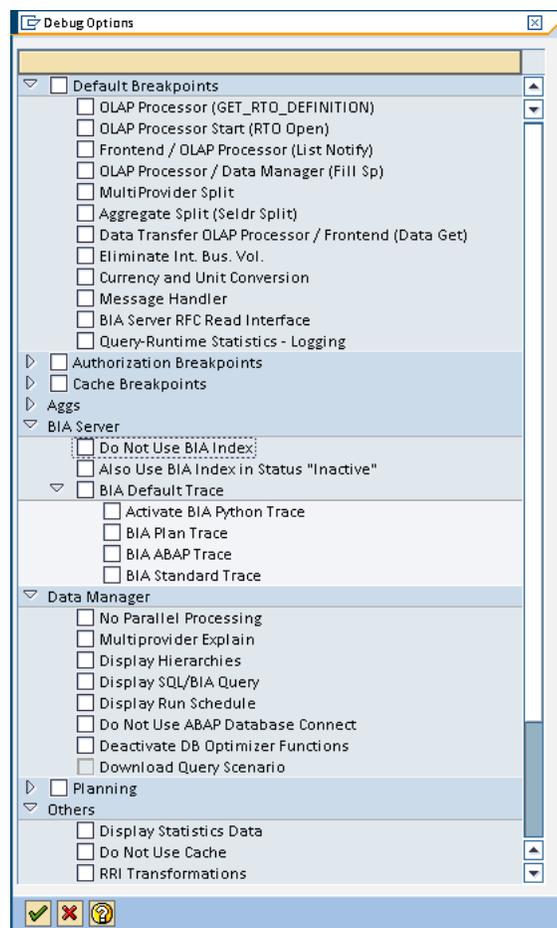


6. For each delta / full load, roll up step need to be done. This will ensure latest data being available for reporting. The roll up step can either be done manually under Cube > Manage Tab. Or step can be added in process chain.
7. In **RSDDV**, option to use BIA indexing for query can be disabled / enabled.

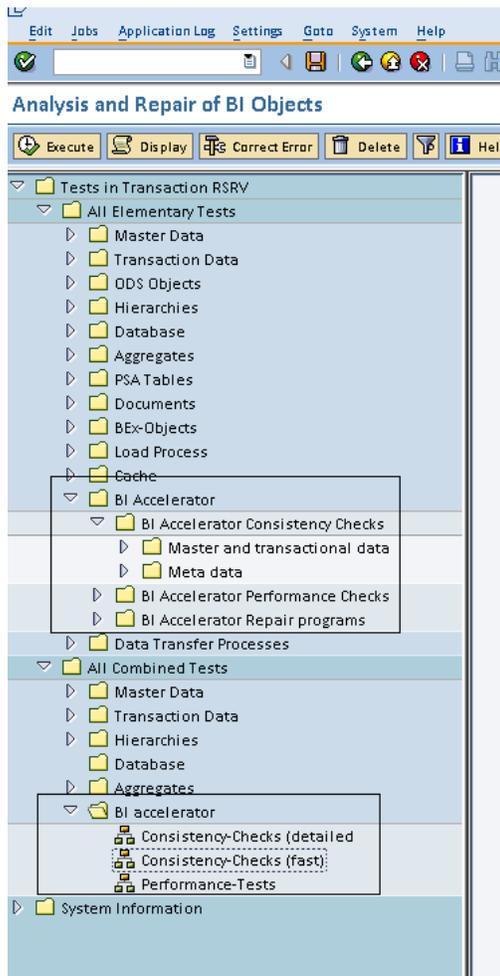




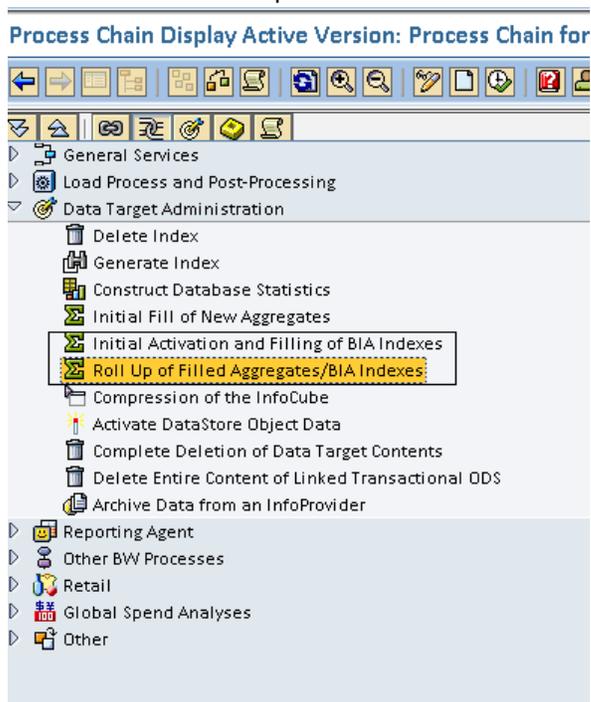
8. To check if the query is using BIA, use **RSRT** t-code. In this specify the query name and execute + debug. Specify to select BIA while execution.



9. To check the BIA index consistency, use t-code **RSRV**. Here BIA consistency check for master data & transactional data can be done or for complete consistency check for info provider can be done.



10. In process chain, there are two process steps that can be added to cube: Initial activation and filling of BIA index and Roll up filled indexes.



In the roll up step, there are various options to select. One can specify roll up only xxx days old request or no of request. Also, there is option to make this step green in process chain, if roll up is included as part of process chain but indexing is not done on the same.

The screenshot shows the 'Process Display: Roll Up of Filled Aggregates/BIA Indexes' dialog box in SAP BW Accelerator. The interface includes a menu bar (Variant, Edit, Goto, System, Help), a toolbar with various icons, and a main area with the following elements:

- Variant:** A dropdown menu showing 'INFOCUBE' and a 'ROLL UP' button.
- Last Changed By:** A field with an upward arrow.
- Changed On:** 06/08/2010
- At:** 01:15:09
- Instructions:** 'To Select, Press F4 On The Object Type, Then F4 on the Name'
- Selections Table:** A table with columns 'Obj.', 'Object Type', and 'Object Name'. The first row is selected and shows 'InfoCube' in the 'Object Type' column. The 'Obj.' column contains a cube icon.
- Parallel Processing Section:**
 - Parallel Processing
 - Roll up only those requests that were loaded xxx days ago (with a text input field containing '0')
 - Number of requests that you do not want to roll up (with a text input field containing '0')
 - End Process Successfully If No Aggregates Exist

Related Content

Reference: <http://www.sdn.sap.com/irj/sdn/bwa>

For more information, visit the [EDW homepage](#).

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