Applies to:
SAP NetWeaver Business Warehouse (Formerly BI) & ECC 6.0, Will also work on SAP BI 3.5 & SAP R/3. [Business Intelligence homepage](#).

Summary
This article tells about the requirement and significance of the Inventory Management for any organization and the data flow diagram of the Inventory data from ECC to BI/BW System.

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Created on: 14 November 2009

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Introduction:

This article addresses the requirement and significance of the Inventory Management Module. Basically this Article will give the overview of the Inventory Management, in coming Articles we are going to discuss complete Inventory Management scenarios on 0IC_C03 InfoCube using 2LIS_03_BX, 2LIS_03_BF and 2LIS_03_UM DataSources along with some important reports.

The Challenges and Objectives of any Company:

Today Inventory management is one of the most challenging and expensive aspects of supply chain management. Companies are constantly balancing inventory carrying costs and obsolescence with customer fulfillment requirements. Retaining too much stock incurs unnecessary warehousing costs, ties up valuable capital, and can expose vendors to significant financial losses if demand drops. With little or no insight into available upstream inventory, downstream manufacturers, distributors, and retailers cannot commit to large or rush orders with any confidence and may not even be able to deliver on forecast. The lost opportunity and overage costs can be significant for all members in the supply chain.

To help distributors/customers reduce the 5%–15% (Minimum) out-of-stock situations (per Week/Month).

To Increase the efficiency of inventory control over complex distributor network.

Enable a distributor with low stock to access information about stock levels at other nearby distributors and effect a stock transfer.

Reduce shipping costs by scheduling shipments from the nearest fulfillment center.

Direct fulfillment from multiple warehouses at once, thus optimizing the use of each warehouse.

What is Inventory Management?

Inventory management is primarily about specifying the size and placement of stocked goods. Inventory management is required at different locations within a facility or within multiple locations of a supply network to protect the regular and planned course of production against the random disturbance of running out of materials or goods. The scope of inventory management also concerns the fine lines between replenishment lead time, carrying costs of inventory, asset management, inventory forecasting, inventory valuation, inventory visibility, future inventory price forecasting, physical inventory, available physical space for inventory, quality management, replenishment, returns and defective goods and demand forecasting.

The Inventory Management system provides information to efficiently manage the flow of materials, effectively utilize people and equipment, coordinate internal activities, and communicate with customers. Inventory Management and the activities of Inventory Control do not make decisions or manage operations; they provide the information to Managers who make more accurate and timely decisions to manage their operations.

Building blocks for the Inventory Management system:

Sales Forecasting or Demand Management

Sales and Operations Planning

Production Planning

Material Requirements Planning

Inventory Reduction
**Inventory Management Process:**

This process allows users to manage all the Materials/items purchased, manufactured, sold, or kept in stock. For each Material/item, users enter the data relevant for a particular area in the system. This data is used automatically by the system for purchasing, sales, production, inventory management, accounting, etc... It provides optimum support for business. Helps create orders, delivery notes, and outgoing invoices, automatically calculating prices, sales units, and gross profit. Enables complete control over stock quantities at all times and lets users analyze the financial aspects of stockholding at the same time. Allows users to control production on the basis of the items that are used for production and on the basis of the finished product and any by-products created.

**The Purpose of SAP - Inventory Management:**

Today most of the industries/companies implemented SAP and also implementing SAP, because SAP is giving the full-fledged solution for their Business Requirements and it is meeting Customer/Client requirements without huge Customization.

For example, If you take FMCG industries, they want to know the status of their Inventory on Daily/Weekly/Monthly/Yearly basis. Because at the end of the day, Management wants to know the movements of the Goods/Products for their future planning and also to maintain the balance between Demand and Supply.

The main components are:

Management of material stocks on a quantity and value basis.

Planning, Entry, and Documentation of all Goods Movements.

Carrying out the Physical Inventory.

Look into the following Business Process & Inventory Analyses diagram:
**Integration with other Modules:**

Inventory Management is part of the Materials Management and it is fully integrated with the following other modules in SAP. So with this we can easily track the whole information/transactions of the

Materials Management
Production Planning
Sales & Distribution
Quality Management
Plant Maintenance
Logistics Information System

**How to Monitor?**

In any organization to Monitor the all Inventory Management activities, from Shop Floor Executive’s to Top Manager’s they need good reports, so it is highly difficult to take such kind of MM reports in ECC (OTLP System), so for that we need to implement SAP-BI/BW and generate reports in SAP-BI/BW (OLAP System).

Especially, if you want to generate the reports for all Materials and Plant combinations which contain MTD and YTD calculations, it is very difficult in ECC (OLTP Server).

**Inventory Data Flow Diagram from ECC to BI/BW:**

To take all kind of Inventory Management SAP given 0IC_C03 InfoCube, which will use three DataSources, see the below figure.
In the coming Articles we are going to discuss about the above Dataflow. I.e. configuring the DataSources in ECC, Mapping to InfoCube in BI/BW, Data Loads to InfoCube and Reports.
Some important Reports Details:
Few important reports names given below…
Stock Ledger Report
Stock Overview Report.
Demand Supply Match Report.
Valuated Stock Report.
Inventory Aging Report.
Inventory Turnover Report.
Stock in Transit Report.
Scrap Report.
Blocked Stock Report.
Days’ Supply Report.
Receipt and Issue Consignment Stock at Customer Report.

Conclusion & Benefits:
For optimal inventory management processes, we need robust functionality for managing our logistics facilities. Support for Inventory Management helps us record and track of each materials on the basis of both Quantity and Value.

We can reduce the cost for warehousing, transportation, order fulfillment, and material handling – while improving customer service. We can significantly improve inventory turns, optimize the flow of goods, and shorten routes within our warehouse or HUB/distribution center. Additional benefits of inventory management include improved cash flow, visibility, and fast and good decision making.

Inventory management offers one of the largest opportunities in supply chain management. End-to-end inventory visibility increases buyer purchasing power, minimizes inventory levels, ensures product balance, and ultimately reduces warehousing costs.

Key Components:
Projected 5% to 6% (this is what I saw) reduction in Out-of-Stock Situations.
Improve the margins for independent Dealers/Customers.
Increase the market share due to helping ensure that supply meets customer demand.
Related Content

Using Customer Exit Variables in BW Reports Part - 3
How to use Customer Exit Variables in BW Reports: Part - 2
Using Customer Exit Variables in BW or BI Reports Part - 1
Using Text Variables with Customer Exits in Report Headings

SAP NetWeaver Business Intelligence
For more information, visit the Business Intelligence homepage.
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