Batch Activation: - Real-Time Challenges and Solution

Applies to:

Releases 4.6B, 4.6C, 4.7 / R/3-Enterprise onwards. For more information, visit the Supply Chain Management homepage.

Summary:

This article deals with real-time challenges and its solution while activating batch. Article will help to understand business requirement of batch activation and its solution with minimal effort and time.

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**Introduction**

Batch is a unit, which represents identical and homogenous property of material. Now a day many business organizations are facing strict rules and regulation regarding product liabilities legislations.

In the R/3 System, a batch is thus a quantity of a certain material produced in one manufacturing process that thus represents one homogeneous, non-reproducible unit with unique specifications.

Batch management facilitates to administrate and process material movement in all areas of logistics execution. It also enables clear, universal documentation and identification of batches throughout the entire logistics chain. Most of the industry sector is using batch management solution provided by SAP which includes:

- Pharmaceutical
- Food
- FMCG
- High-tech automotive
- Manufacturing etc.

Batch management plays a vital role throughout the supply chain. It is linked with all application and module of supply chain which starts with inbound logistics and ends with customer delivery point (outbound logistics).

Available logistics function in SAP R/3 systems which integrates batch management:

- Inventory management (MM-IM)
- Materials management (MM)
In SAP R/3 system; we can define batches in three levels

**Client level**

The batch number is unique for a material in the whole client.

**Plant level**

The batch number is unique in connection with the plant and material.

**Material level**

The batch number is unique in all plants in connection with the material.

**Business Requirements**

In real time scenario batch can be activated with SAP R/3 implementation or can be activated later. While implementing batch management, the requirement of batch activation has to be taken from business, else later, on business requirement batch activation needs to be done.

**Below is the some of business requirement:**

- Track material quantities more effectively as per FIFO/LIFO in SCM
- Track expired materials and blocks those materials in IM/WM
- Defect tracing, recall activities, recourse requirement in QM/PP
- Differentiate based on quantity and value in inventory management, for example, through heterogeneous yield/result quantities or unequal constituents in production
- Production or technical requirements, for example, material quantity calculations on the basis of different batch specifications
- Usability differences and the monitoring there of in Materials Planning, Sales & Distribution, and Production
- Legal requirements (for example, guidelines on Good Manufacturing Practice GMP) or regulations on hazardous materials
Real Time Challenges

In the SAP System to maintain stocks in batches, first we have to maintain customization according to the business requirements and then we have to activate the batch management indicator in the material master.

To activate/de-activate batch management indicator in the material master for a material, the material should not have any stocks, quantities, values and open documents.

If the materials is having stocks, quantities, values and open documents then SAP system doesn’t allow to activating batch management directly in material master.

If we want to activate/ de-activate then we need to perform below steps.

- Check the Status of material in MMBE (stock overview company code/plant/storage location /batch) ; ideally stock should not be present for material at any levels
- There should not be any open purchase order for material; we can check entries in table EKPO.
- There should not be any open production order. we can check entries in table AFPO.
- There should not be any sales order. We can check entries in table VBAP.
- There should not be any purchase requisition. we can check entries in table EBAN.
- There should not be any stock in transit. we can check MB5T (display of stock in transit)
- There should not be any Plant availability Stock, use MB53 to validate.
- There should not be any reservation for material. we can check in MB25(reservation list)
- Stock requirement should be zero we can check in MD04 (stock requirement list).
- There should not be any open delivery we can check entries in table LIPS.
• There should not be any open warehouse Transfer Requirement. We can check entries in table LTBP and LTAP;

• There should not be any open Warehouse transfer orders. We can check entries in table LTAK.

• The Batch Corresponding to the plant has to be set for deletion indicator in MSC2N, if previous period stocks exist, we can make a withdrawal posting also.

After cross checking all above steps we can activate / de-activate batch management in material master. But in most of the cases, number of material master date is huge and it is not possible to follow above steps for all material. To solve this issues SAP have provided standard programs.

Solution

Now SAP provided two reports which can update or remove BATCH MANAGEMENT INDICATOR and BATCHES without removing the material stocks and documents. We need to close only open physical inventory documents.

The below reports update, all relevant documents based on batch activation/de-activation:

• RVBCONVMAT2BM - Sets the batch management requirement indicator.

• RVBREVMATBM - Removes the batch management requirement indicator.
### Program RVBCONVMAT2BM

**Database selections**

<table>
<thead>
<tr>
<th>Material</th>
<th>to</th>
<th>Material type</th>
<th>to</th>
<th>Plant</th>
<th>to</th>
</tr>
</thead>
</table>

- [ ] Read from table VBR24_MOF

**Batch numbers**

- Default Prefix: PLANT_
- Default batch number: 
- Table VBR24_BATCH_KEY

*In separated valued plants, valuation types will be taken as batch numbers, default settings will be ignored.*

**Control parameter**

- [ ] Test mode
- [ ] Log Display
- [ ] Put batch into outbound delivery items
- [ ] Adjust MRp documents (not applied for separate valued plants)
  - [ ] Current Period
  - [ ] Current and previous Period
- [ ] Adjust confirmed transfer orders (not applied for separate valued plants)
  - [ ] Current Period
  - [ ] Current and previous Period
- [ ] Set no lock enabled for SD documents
- [ ] Select SD documents material number related
These reports can be run with combination of material / plant. Estimated run time depends on volume of data.

The RVBCONVMAT2BM will convert all existing non batch managed materials into batch managed materials. Once activated for batch, it is necessary to provide batch information during all SAP transactions. Batch information will help identifying the aging of the material. In general, batch information is provided by vendor by either stamping the batch numbers on each part or providing identification in terms of labels indicating batch numbers. This helps in identifying correct material with correct batch from bunch of same materials.

The RVBREVMATBM will convert all existing batch managed materials into non batch managed materials. Once de-activated we don’t need to give batches for any business transaction even batches will be removed from the existing documents.
Prerequisites

One of the major requirements of above SAP report is to close all open physical inventory document for materials, which are being converted. This is the only open document which needs to be closed before conversion.

In addition to above there are some more prerequisites:

- R/3 system should not be integrated with other industry solution.
- R/3-system should not be linked with components such as APO.
- If decentralize warehouse management system is implemented then Material should not have stock in a decentralize warehouse.
- Storage location with handling unit requirement is not supported by tool material should not have stock in a storage location with handling-unit requirement.
- Batch at client level is not supported by tool. Batch level must be set to ‘plant’ or ‘material’ level.
Related Content


These programs should be applied with in preview of the following SAP notes

- [Note 533276](http://help.sap.com) - Setting the batch management requirement indicator
- [Note 533383](http://help.sap.com) - Deselecting the batch management requirement indicator
- For more information, visit the [Supply Chain Management homepage](http://help.sap.com).
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