

# **JD Edwards – Item Balance/Item Ledger Integrity**

**By**

**Natarajan Duraisamy**

**w.r.t**

**JD Edwards OneWorldXe/Enterprise One/ WorldSoft**

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# 1. Introduction

- Inventory is the basis of Supply Chain Management. Companies move inventory within and among their facilities.
- As we are aware that ERP being an integrated system, for an item, maintaining integrity between Running Balance and the summary of transactions due to processes such as Inventory Transactions, Procurement, Sales and Distribution, Manufacturing etc where inventory plays a major role, is necessary.
- Data consistency is a necessity to ensure balancing of inventory transactions with financial records of any organization

## 1.1 Objectives

- To Identify integrity problems in Inventory management within JDE.
- To Solve identified integrity problems in Inventory management within JDE.
- To find out the possible causes of integrity problems
- To know about the risk involved with not running the integrity report
- Be able to run the integrity report

## 1.2 Target Audience

- This white paper intends to guide a JD Edwards Functional Consultant quickly and simply resolve the issues related to Item Balance/Item ledger integrity. Further, some guide lines are also mentioned to identify the causes of the integrity problems. The paper would be found useful by a JD Edwards Technical consultant also to gain insights into the general logic and mapping of this Integrity report.

## 2. Additional information

When should you run Integrity reports?

Integrity reports are an integral part of the JD Edwards system. You should run them:

- During implementation to test the legacy data moved into the JDE system
- Up gradation from one version to another version of JDE
- Migration from one ERP Package to another.
- Before Purging and Archiving.
- Periodically, Necessary.
- Daily, if necessary

Why should you run integrity reports?

Running the integrity reports helps you to

- Ensure that the system function correctly and tables/ files remain in balance .
- Correct any integrity problem in a timely and efficient manner.
- Locate data inconsistencies.

What do the standard integrity reports provide?

- Most of the standard integrity reports provide information that is **current at the time** that you **run** them. That is, they **have no 'as of capability'**. Exceptions to this are some of the Accounts payable to general ledger and Accounts receivable to general ledger.

# 3. Integrity Report (R41544) Illustration

- Item Balance/Item Ledger Integrity (R41544) report displays **discrepancies for both quantity and amount** between the Item Location **F41021** and Item Ledger **F4111** tables, in combination with the Item As Of **F41112** table.

The report displays summary lines that represent specific totals by:

- Branch /Plant
- Second Item number
- Location
- Lot number

Unless you set the processing option to print all records, a **blank report or without Variance** indicates that **no discrepancies exist**.

## 3.1 Column's Data:

- Item ledger quantity and amount are from combination of F4111 and F41112 tables.
- Item Balance quantity (On Hand) is from F41021 table.
- Quantities are in Primary Unit of Measure.
- Item Balance amount is by multiplying quantity with unit cost from F4105 table at the time you run the report.
- Variance is Item balance minus Item ledger.
- Percentage variance is derived by  $(\text{Item Balance} - \text{Item Ledger}) / \text{Item Balance} \times 100$
- Branch/ Plant, Second Item number, Location and Lot Number are from F41021 table

# 3.2 Report (R41544)Output-Example

| R41544             |          | Worldwide Company                |              | 2/26/2008 9:56:22 |          |              |             |           |                     |
|--------------------|----------|----------------------------------|--------------|-------------------|----------|--------------|-------------|-----------|---------------------|
|                    |          | Item Balance/Ledger Integrity    |              | Page - 1          |          |              |             |           |                     |
| Branch/Plant . . . |          | M30 Eastern Manufacturing Center |              |                   |          |              |             |           |                     |
| Item<br>Number     | Location | Lot<br>Lot Number                | Quantity     |                   |          | Amount       |             |           | Percent<br>Variance |
|                    |          |                                  | Item Balance | Item Ledger       | Variance | Item Balance | Item Ledger | Variance  |                     |
| 210                | . .      |                                  | 531          | 530               | 1        | 281,483.10   | 280,963.00  | 530.10    | .19                 |
| 210                | 1.A .1   |                                  | 60           |                   | 60       | 26,605.00    |             | 26,605.00 |                     |

# 4. Issues, Causes and Resolutions

| Issues  | Causes   | Resolutions  |
|---|--|--|
| 1. Item balance is greater than item ledger   | <ol style="list-style-type: none"><li>1. As of processing is not done.</li><li>2. GL date for transactions in Item ledger is missing.</li><li>3. Tables update failure during transaction.</li><li>4. SQL might be executed.</li></ol> | <ol style="list-style-type: none"><li>1. As of processing is to be done.</li><li>2. GL date for transactions in item ledger should be available.</li><li>3. Executing SQL for tables update failure.</li><li>4. Avoiding executing SQL</li></ol> |
| 2. Item balance is less than Item ledger  | <ol style="list-style-type: none"><li>1. SQL might be executed at the tables to meet the requirements.</li><li>2. Tables update failure during transaction.</li></ol>  | <ol style="list-style-type: none"><li>1. Avoiding executing SQL at the tables to meet the requirements.</li><li>2. Executing SQL for tables update failure</li></ol>   |
| 3. Item balance is greater or less than Item ledger even though As Of Processing is done. | <ol style="list-style-type: none"><li>1. Transactions in item ledger might be in future GL date.</li><li>2. Tables update failure during transaction</li></ol>   | <ol style="list-style-type: none"><li>1. Report can't be run 'As of Date'</li><li>2. Executing SQL for tables update failure.</li></ol>  |

| Issues  | Causes  | Resolutions  |
|---|---|--|
| 4. Item balance is equal to Item ledger i.e. blank report but As Of Processing is not done. | <ol style="list-style-type: none"> <li>1. All Transactions in item ledger might be in Current period GL dates</li> </ol>  | <ol style="list-style-type: none"> <li>1. It is not an issue. There are no transactions in previous periods.</li> <li>2. As Of Processing may be done.</li> </ol>                                  |
| 5. Item balance is showing data but item ledger is blank                                    | <ol style="list-style-type: none"> <li>1. As of processing is not done.</li> <li>2. No transactions for current period when you run the report.</li> </ol>                      | <ol style="list-style-type: none"> <li>1. As of processing is to be done.</li> <li>2. Transactions for current period should be available.</li> <li>3. Report can't be run 'As of Date'</li> </ol> |
| 6. Quantity invariance but Amount variance occurs   | <ol style="list-style-type: none"> <li>1. As of processing is not done properly</li> <li>2. Incomplete process</li> <li>3. Tables update failure during transaction.</li> </ol> | <ol style="list-style-type: none"> <li>1. As of processing is to be done</li> <li>2. Process like work order is to be completed</li> </ol>   |



# 5. How to Resolve? –An Issue Demo

## 5.1 Running the Report R41544

### Processing Option:

Out of three processing options the first one to print all items on the report may be given 'Y'. Remaining may be blank or as you require. Specific Cost method can also be given. Here for demo, print all items and others blank. Cost method will be from table F4105 as per set ups.

### Data Selection:

Business Unit (F41021)="M30"

Item Number-Short(F41021)=60011

Processing option and data selection can be as per the requirement

### In output of the report (R41544) with discrepancies(Page-10):

**Issue Identified** : Item Balance quantity and amount are greater than Item Ledger.

**Causes found out:** 1. As Of Processing was not done.

2. There is no transaction on current year/period.

### Resolution:

1. Run the As of File Integrity (R41760) report– Supported with screen shot.
2. Inventory transaction (P4114) being done on current year/period.--Supported with screen shots.
3. Run the Item Ledger As of Generation (R41542) batch version --Supported with screen shots.
4. Run the Item Balance /Item Ledger Integrity report (R41544)-- Supported with screen shots.

# 5.2 Report(R41544) with Discrepancies

|                    |                               |                              |                    |          |                  |             |           |        |
|--------------------|-------------------------------|------------------------------|--------------------|----------|------------------|-------------|-----------|--------|
| R41544             | Worldwide Company             |                              | 2/26/2008 10:52:04 |          |                  |             |           |        |
|                    | Item Balance/Ledger Integrity |                              | Page - 1           |          |                  |             |           |        |
| Branch/Plant . . . | M30                           | Eastern Manufacturing Center |                    |          |                  |             |           |        |
| Item Number        | Location                      | Lot Lot Number               | Quantity           | Amount   | Percent Variance |             |           |        |
|                    |                               | Item Balance                 | Item Ledger        | Variance | Item Balance     | Item Ledger | Variance  |        |
| 210                | . .                           | 561                          | 535                | 26       | 297,388.10       | 283,603.50  | 13,782.60 | 4.86   |
| 210                | 1 .A .1                       | 30                           | 20-                | 50       | 15,903.00        | 10,602.00-  | 26,505.00 | 250.00 |

# 5.3 ASOF File Integrity(R41760)-Example

R41760

Worldwide Company  
Item Ledger/Item ASOF Table  
Integrity

2/29/2008 9:51:07  
Page - 1 of 1

| Century               | 20            | Fiscal Year     | 5         |                       |                 |              |                    |                 |               |
|-----------------------|---------------|-----------------|-----------|-----------------------|-----------------|--------------|--------------------|-----------------|---------------|
| Item Number           | 210           | Branch / Plant  | M30       | Location              | Lot / SN        | G/L Category | IN30               |                 |               |
| -----ASOF File-----   |               |                 |           | -----Item Ledger----- |                 |              | -----Variance----- |                 |               |
|                       | <u>Period</u> | <u>Quantity</u> | <u>UM</u> | <u>Amount</u>         | <u>Quantity</u> | <u>UM</u>    | <u>Amount</u>      | <u>Quantity</u> | <u>Amount</u> |
| Record Does Not Exist | 6             |                 |           |                       | 1               | EA           | 530.10             | 1               | 530.10        |

| Century               | 20            | Fiscal Year     | 8         |                       |                 |              |                    |                 |               |
|-----------------------|---------------|-----------------|-----------|-----------------------|-----------------|--------------|--------------------|-----------------|---------------|
| Item Number           | 210           | Branch / Plant  | M30       | Location              | Lot / SN        | G/L Category | IN30               |                 |               |
| -----ASOF File-----   |               |                 |           | -----Item Ledger----- |                 |              | -----Variance----- |                 |               |
|                       | <u>Period</u> | <u>Quantity</u> | <u>UM</u> | <u>Amount</u>         | <u>Quantity</u> | <u>UM</u>    | <u>Amount</u>      | <u>Quantity</u> | <u>Amount</u> |
| Record Does Not Exist | 2             |                 |           |                       | 530             | EA           | 280,953.00         | 530             | 280,953.00    |

| Century               | 20            | Fiscal Year     | 5         |                       |                 |           |                    |                 |               |
|-----------------------|---------------|-----------------|-----------|-----------------------|-----------------|-----------|--------------------|-----------------|---------------|
| Item Number           | 210           | Branch / Plant  | M30       | Location              | 1 A 1           | Lot / SN  | G/L Category       | IN30            |               |
| -----ASOF File-----   |               |                 |           | -----Item Ledger----- |                 |           | -----Variance----- |                 |               |
|                       | <u>Period</u> | <u>Quantity</u> | <u>UM</u> | <u>Amount</u>         | <u>Quantity</u> | <u>UM</u> | <u>Amount</u>      | <u>Quantity</u> | <u>Amount</u> |
| Record Does Not Exist | 6             |                 |           |                       | 50              | EA        | 26,505.00          | 50              | 26,505.00     |

# ASOF File Integrity Report (R41760)- Example

- The report displays those items for which As Of Processing is not done.
- The report will be blank if As Of Processing is done for the item. Here report displays records of Item number-short 60011 before doing As Of Processing.
- It is not necessary to run this report but it is better to run to ensure that the records in item ledger have been generated to Item As of File F41112.
- The data displayed are not related to the complete transactions which are used for demo on upcoming pages. Just an Example.

For this Report:

**Processing Option:** NIL

**Data Selection:**

1. Business Unit='M30'
2. Item Number-Short=60011

Data selection can be as per the requirement.

## Item Ledger Transactions(Pages- 13):

- Inventory transactions are done in Current period so that during AS Of Generation, Balance from previous year can be carry forwarded to the current year.
- Transaction for future date (Highlighted) is also done. But you may notice that transaction is not counted for Integrity which also shows this report will run '**as on date**'

# View: Item Ledger Current Year Transactions

**P4111 - [Work With Item Ledger]**

File Edit Preferences Row Window Help

Tools: Select Find Close Seg... New... Dis... Abo Links Detail OLE ... Internet

Item Number: 210 Mountain Bike, Red  
 Branch/Plant: M30  
 Location: \* Transaction Date: \* - \*  
 Lot/Serial: \* Document Type: \*  
 Quantity On Hand: 526 EA Value: 327,398.00  
 Secondary On Hand: EA

| Document Number | Doc Type | Doc Co | Transaction Date | Branch/Plant | Quantity | Trans UoM | Unit Cost | Extended Cost | Location | GL Date   | Secondary Transaction Qty |
|-----------------|----------|--------|------------------|--------------|----------|-----------|-----------|---------------|----------|-----------|---------------------------|
| 106             | II       | 00200  | 2/26/2008        | M30          | 20-      | EA        | 530.1000  | 10,602.00-    | 1.A .1   | 2/26/2008 |                           |
| 105             | IA       | 00200  | 2/26/2008        | M30          | 25       | EA        | 530.1000  | 13,252.50     | ...      | 1/10/2008 |                           |
| 3872            | IB       | 00200  | 2/26/2008        | M30          |          | EA        | 7.1000-   | 3,983.10-     | ...      | 2/26/2008 |                           |
| 3872            | IB       | 00200  | 2/26/2008        | M30          |          | EA        | 7.1000-   | 213.00-       | 1.A .1   | 2/26/2008 |                           |
| 107             | IA       | 00200  | 2/26/2008        | M30          | 10       | EA        | 523.0000  | 5,230.00      | ...      | 3/4/2008  |                           |
| 104             | IA       | 00200  | 2/25/2008        | M30          | 530      | EA        | 530.1000  | 280,953.00    | ...      | 2/25/2008 |                           |
| 106             | IA       | 00200  | 1/10/2008        | M30          | 5        | EA        | 530.1000  | 2,650.50      | ...      | 2/26/2008 |                           |
| 3600            | IB       | 00200  | 6/1/2005         | M30          |          |           | .0000     |               | 1.A .1   | 6/1/2005  |                           |
| 3600            | IA       | 00200  | 6/1/2005         | M30          | 50       | EA        | 530.1000  | 26,505.00     | 1.A .1   | 6/1/2005  |                           |
| 3669            | IA       | 00200  | 6/1/2005         | M30          | 1        | EA        | 530.1000  | 530.10        | ...      | 6/1/2005  |                           |
| 41021           | IB       |        | 3/28/1997        | M30          |          | EA        | .0000     |               | ...      | 3/28/1997 |                           |

Row:12

Work With Item Ledger

start Inbo... Micro... Subm... prese... Micro... 2 O... Search Desktop 3:55 PM

# 5.4 Item Ledger As of Record Generation (R41542)

The Batch Version will update Item As Of File table F41112 where there are buckets for fiscal periods. The report will summarize the transactions of each period in Item ledger table F4111 And update those buckets in Item As Of File table F41112

## **Processing Option:**

- Option 1: Enter '1' to Regenerate the entire As Of File (F41112). If left blank, records in Item ledger (F4111) which are not yet processed will be taken.
- Option 2: Enter '1' to print a completion report. If left blank it will print only if there are errors.

Here option 1 as 'blank' and option 2 as '1'

## **Data Selection:**

1. As of Posted Code(F4111) <> 'S,X,Y'
2. Business Unit (F4111) = 'M30'
3. 2<sup>nd</sup> Item Number(F4111) = '210'

Processing option and data selection can be as per the requirement

# View: As Of Generation for the Year 2008

Item Ledger (Running Balance) - [Item Ledger - Running Balance Summary]

File Edit Preferences Row Window Help

Select Find Close Beg... New... Dis... Abo Links Details OLE ... Internet

Tools  
Row  
Details

Item Number: 210 Mountain Bike, Red  
 Branch/Plant: M30 G/L Class: \*  
 Location: \* Year: 2008  
 Lot/SN: \* Unit of Measure: EA

| Ending Period   | Period Quantity | Cumulative Quantity | Period Amount | Cumulative Amount |
|-----------------|-----------------|---------------------|---------------|-------------------|
| Balance Forward | 51              | 51                  | 27,035.10     | 27,035.10         |
| 1/31/08         | 25              | 76                  | 13,252.50     | 40,287.60         |
| 2/29/08         | 515             | 591                 | 268,805.40    | 309,093.00        |
| 3/31/08         | 10              | 601                 | 5,230.00      | 314,323.00        |
| 4/30/08         |                 | 601                 |               | 314,323.00        |
| 5/31/08         |                 | 601                 |               | 314,323.00        |
| 6/30/08         |                 | 601                 |               | 314,323.00        |
| 7/31/08         |                 | 601                 |               | 314,323.00        |
| 8/31/08         |                 | 601                 |               | 314,323.00        |
| 9/30/08         |                 | 601                 |               | 314,323.00        |
| 10/31/08        |                 | 601                 |               | 314,323.00        |
| 11/30/08        |                 | 601                 |               | 314,323.00        |
| 12/31/08        |                 | 601                 |               | 314,323.00        |

Find records Row:1

start | [Icons] | 12:06 PM

# 5.5 ASOF File Integrity after As Of Generation- Example

R4-1760

Worldwide Company  
Item LedgerItem ASOF Table  
Integrity

2/26/2008 14:13:35  
Page - 1 of 1



# 5.6 Report (R41544) without Discrepancies- Showing All Items

|                    |                                  |                    |   |   |                     |
|--------------------|----------------------------------|--------------------|---|---|---------------------|
| R41544             | Worldwide Company                | 2/26/2008 11:30:59 |   |   |                     |
|                    | Item Balance/Ledger Integrity    | Page - 1           |   |   |                     |
| Branch/Plant . . . | M30 Eastern Manufacturing Center |                    |   |   |                     |
| Item<br>Number     | Location                         | Lot<br>Lot Number  | Quantity<br>Item Balance    Item Ledger    Variance | Amount<br>Item Balance    Item Ledger    Variance | Percent<br>Variance |
| 210                | . .                              |                    | 561            561                                  | 297,386.10    297,386.10                          |                     |
| 210                | 1.A .1                           |                    | 30             30                                   | 16,903.00     16,903.00                           |                     |

# 5.6 Report (R41544) without Discrepancies- Blank report

R41544

Worldwide Company  
Item Balance/Ledger Integrity

2/26/2008 11:11:16  
Page - 1

## 6. References

- JD Edwards –E-Guide
- Case studies from JDE Projects