

Reporting on Special Stock Values: Snap-shot/Detailed



Applies to:

Business Warehouse, for versions 3.0B and above. For more information, visit the [EDW homepage](#).

Summary

The paper titled “Reporting on Special Stock Values – Snap-shot/Detailed” presents an alternative approach to report on Special Stock Values in Inventory Management. This paper provides step by step instructions on how to capture and report the values of special stocks part of Inventory Management module in Business Warehouse module along with screen-shots.

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Background

SAP delivered only 'Qty' key figures for special stocks as part of standard content (2LIS_03_BF & 2LIS_03_BX) data sources. These stocks identified by stock type includes *blocked*, *stock in transfer*, *quality* are part of the Valuated Inventory but not available for Consumption due to its stock type. Just by looking at the 'Qty' numbers, Business Analysts can't assess the impact of these stocks on total inventory value. By having a summarized report listing the values of these stocks compared to the Valuated Inventory will help in expediting the release of these stocks into 'Unrestricted' inventory thereby avoiding the purchase of new materials.

In SAP R/3, there are no summarized reports available listing the values of these special stocks at high level. Warehouse stocks report accessed thru' Transaction MB52 lists all stocks type but it's very detailed and the report run thru' hundreds of pages when executed for one plant it-self.

SAP Reference material related to this topic

OSS Note [589024](#) explains the basic concept of deriving the 'VALUE' key figures of these special stocks at the query level but this method returns values pertaining to a single storage location at one time. In case, if there are several plants and each of the plant consist multiple storage locations then it becomes tedious to derive the values of these special stocks.

SAP published a 'How to' paper on the topic "Realize summarized display of stock values on storage location level" based on query but the solution suggested in this guide mayn't work in all scenarios. Ex: If there are large number of materials exists at a Plant level then it would take very long time to respond

Proposed Solution:

The proposed solution in this article includes deployment of a summarized snap-shot Info provider which holds all special stocks. This Info provider can be used for generating summarized special stocks reports and can be included as part of multi-provider combining valuated stocks to produce consolidated stock reporting.

Steps include:

1. Creating a query which returns exclusively special pertaining to multiple plants and storage locations. The output of the query is very detailed similar of MB52 report output
2. Creating a DSO which holds summarized special stocks
3. Creating an APD which consumes detailed queries pertaining to various special stocks, aggregates the data, combining the special stocks and updates the results into DSO (created in step 2)

1.Special Stock Query

Value of the special stock is derived at material level based on Valuated Stock Value (0VALSTCKVAL) and Qty (0VALSTCKQTY) key figures. In case if *Split valuation* is active at plant level then *Valuation type* should be included along side with the material for determining the special stock value.

The following calculations are applied:

Deriving the Unit price of the material based on the formula: Valuated stock value/ Qty

Special stock price: Unit price * Special stock qty

Typical characteristics include: Plant, Storage loc, Material, Valuation Type**

** If the material is split valuated then valuation type should be part of the query output. In this case, typical characteristics includes: Plant (0PLANT), Storage location (0STOR_LOC), Material (0MATERIAL), Valuation type (0VAL_TYPE)

Typical Key figures include: Valuated stock qty (0VALSTCKQTY), Valuated Stock Value (0VALSTCKVAL), Special stock qty

Create a condition based on special stock qty so the query output is limited to this stock only.



Create a condition based on special stock qty so the query output is limited to special stocks. Ex: If you are working on deriving the value of 'Blocked stocks' then create a condition which includes 'Blocked Stock Qty (0BLOCKEDSTK)' greater than '0' to display materials which consists of Blocked stocks.

Query Definition:

Include the following Characteristics:

- Plant (OPLANT),
- Storage location (0STOR_LOC),
- Material (OMATERIAL),
- Valuated type (0VAL_TYPE)

Include the following Key figures:

- Valuation Stock Qty 0VALSTCKQTYL
- Valuation Stock and qty (0VALSTCKVAL
- Blocked stock Qty: 0BLOCKEDSTK

Refer to the **Fig 1** for detailed definition of the query. This query refers to Blocked Stock but these steps can be followed for generating other special stocks which includes stock in transit, quality etc.,

Restricted Key figures:

Create 2 new restricted Key figures namely:

- **Plant Total Value** which holds the value of the material (Fig 2)
- **Total Plant Quantity** which includes the material quantity (Fig 3)

The above key figures are required for determining the **Unit Price** of the material thereby determining the special stock values based on the formula as given below:

Unit Price: Plant Total Value/ Total Plant Quantity

Special Stock Value = Special Stock Qty * Unit Price (Fig 4)

Valuation type – When to include in the query

Below example demonstrates the importance of including valuation type in the query for 'split' valuated material.

Scenario 1: Material is split valuated and valuation type is included in the query

Plant	Storage Location	Material	Valuation Type	Stock Value	Stock Qty	Unit Price	Blocked stock qty	Blocked stock value
1000	0001	Motor	New	\$ 500	10	500/10 = \$ 50	2	2 * 50 = \$ 100
1000	0001	Motor	Refurbished	\$ 100	5	100/5 = \$ 20	5	5 * 20 = \$ 100
Summarized Blocked stock value of material Motor							7	\$ 200

Scenario 2: Material is split valuated and valuation type is **not** included in the query

Plant	Storage Location	Material		Stock Value	Stock Qty	Unit Price	Blocked stock qty	Blocked stock value
1000	0001	Motor		\$ 600	15	600/15 =40	7	7 *40 = \$ 280
Summarized Blocked stock value of material <i>Motor</i> without considering <i>Val Type</i>							7	\$ 280



From the above example, it is clear that **scenario 1** is producing correct results

Query Properties:

Make sure selecting “Summation” as the result property for key figures Blocked stock value, Plant Total Value & Total Plant Quantity as shown in Fig 5

Context menu -> Properties-> Calculate Result as -> Summation

Condition displaying the special stocks

The main intent of this condition is to limit the query output to display materials having special stocks.. In this example, create a condition based on Blocked Stock qty as shown in Fig 6.

Suggest hiding the key figures Plant Total Value & Total Plant Quantity since their presence doesn't add any value to the report. *Context menu -> Properties-> Hide → Always Hide (Fig 7)*



Suggest creating separate queries for each of special stock query Ex: Quality stock, Stock in Transit etc., Combine and store the results using APD in a direct update DSO. These steps are explained in detail in the next section

2. Snap-shot DSO

The main purpose of this DSO is storing the snap-shot values of special stock values and quantities. Since the data is highly summarized, report response time will be much faster and helps the Analysts in monitoring the situation of special stocks at high level without going in to details.

Key fields in the DSO:

Include key fields in accordance with the requirements. Typical fields include Plant and Storage location i.e. special stocks get summarized at this level. Optional fields can include material type, material group etc.,

Data fields in the DSO:

Blocked Stock Quantity, Blocked stock value, Stock in transit Qty and value etc., Depending on the requirements, additional special stock key figures can be added



*Make sure you are using regular special stock key figures i.e. **cumulative** in the Snap-shot DSO*

Type of DSO: Direct update

Refer to **Fig. 8** for more details related to the DSO

3. APD for updating the Query results into DSO

Create a new APD using transaction RSANWB for updating the query results into the snapshot DSO. Refer to **Fig 9** for more details. APD includes:

Data Source: Use Queries  created in Step1 (Blocked stock query & Stock in Transit query) as data source

Transformations:

- Aggregation  This step aggregates the query results. In this example Plant & Storage location objects are included as part of “Grouping” fields i.e. special stock values are aggregated at Plant & Storage location level. Refer to **Fig 10** for more details.



Fields part of the Grouping and key fields part of DSO are to be in sync otherwise the results won't match

- Union  : This step is used for combining the aggregated output from various queries

Data Targets: Include the snapshot DSO  been created in step 2 for storing the aggregated output pertaining to special stocks. Provide the appropriate field assignment  connecting the output from the ‘Union’ process to the DSO. Refer to Fig. 09

Fig 1: Definition of Blocked Stock Query

Filter			
Stock category LIS		OSTOCKCAT	
Valuated Stock		#	
InfoProvider		OINFORPROV	
Material Stock Movements-Z plants		ZSCMNWZP	

Free Characteristics		Columns	
Material group	OMATERIAL_OMATL_GROUP	Key Figures	
Matl type	OMATERIAL_OMATL_TYPE	Plant Total Value	
Material category	OMATL_CAT	Total Plant Quantity	
Special stock	ZSPSTOCK	Blocked Stock Qty	OBLOCKEDSTK
Calendar Year/Month	OCALMONTH	Blocked Stock Value	
Calendar Year	OCALYEAR		
Calendar Day	OCALDAY		

Rows						
Plant	OPLANT	a-Plant	a-Stora...	a-Mate...	a-Valu...	Blocke...
Plant	OS_PLANT				b-Valu...	
Storage location.	OSTOR_LOC			b-Mate...	a-Valu...	
Material	OMATERIAL				b-Valu...	
Material (Selection Options, Optional)	OS_MAT		b-Stora...	a-Mate...	a-Valu...	
Valuation type	OVAL_TYPE				b-Valu...	
				b-Mate...	a-Valu...	
					b-Valu...	
		b-Plant	a-Stora...	a-Mate...	a-Valu...	

Fig 2: Restricted Key figures (RKF) for deriving the Unit Price

The screenshot shows the 'Edit Selection' dialog in SAP. The 'Description' field is set to 'Plant Total Value'. The left pane shows a tree structure with 'Key Figure' selected. The right pane shows the following configuration:

Description	Technical Name
Plant	OPLANT
Plant	OS_PLANT
Stock type	OSTOCKTYPE
Storage location.	OSTOR_LOC
Key Figure	1KYFNM
Valuated stock value	OVALSTCKVAL

Fig 3: RKF - Total Plant Quantity

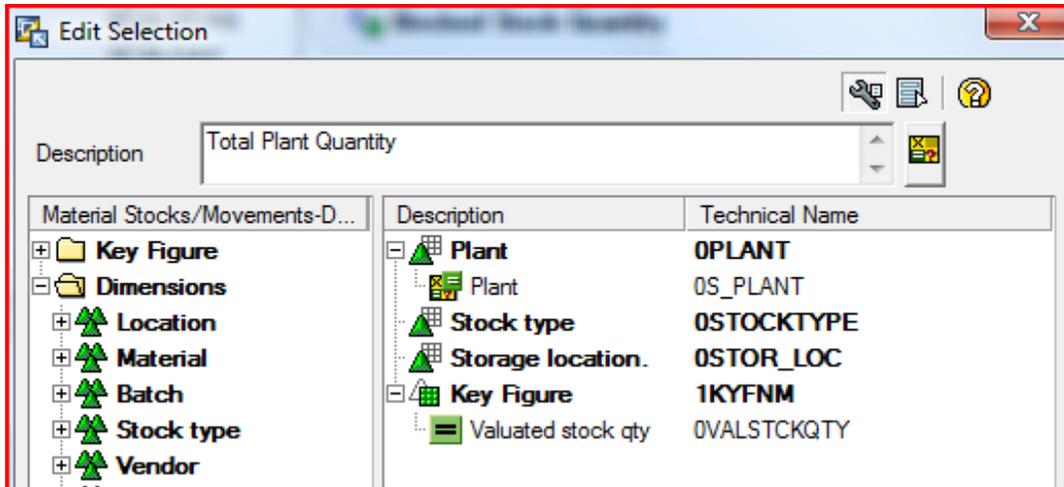


Fig 4: Formula to derive the Blocked stock value

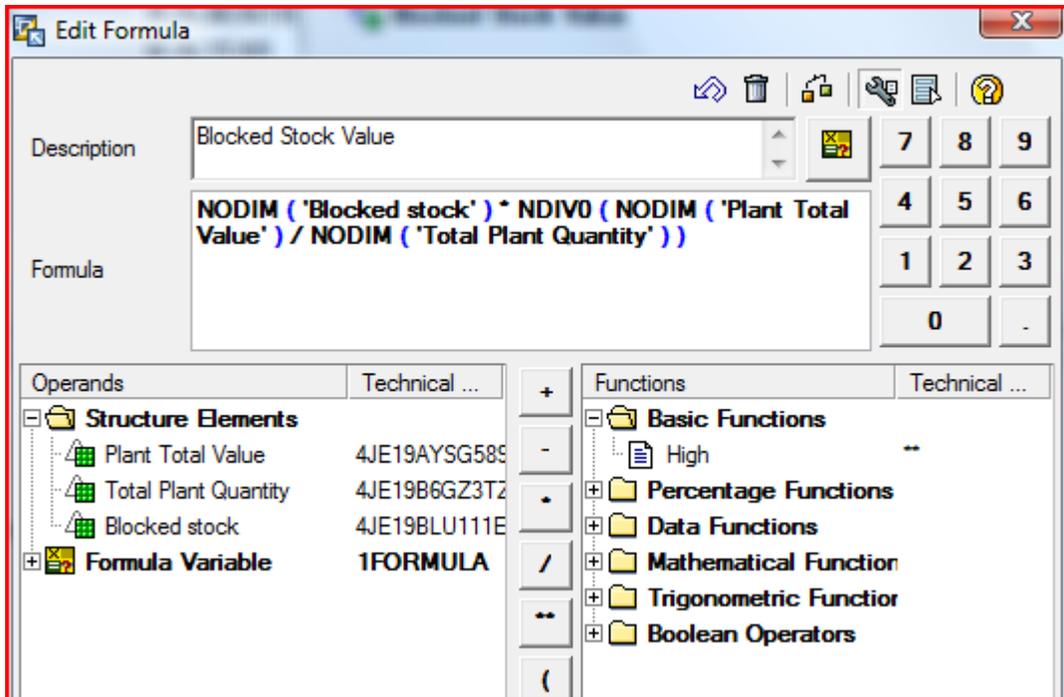


Fig 5: Properties of all the Key figures

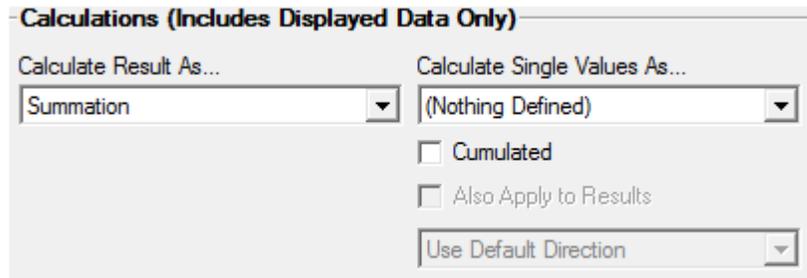


Fig 6: Condition to display only the Blocked stock materials. This condition limits the output to blocked stocks

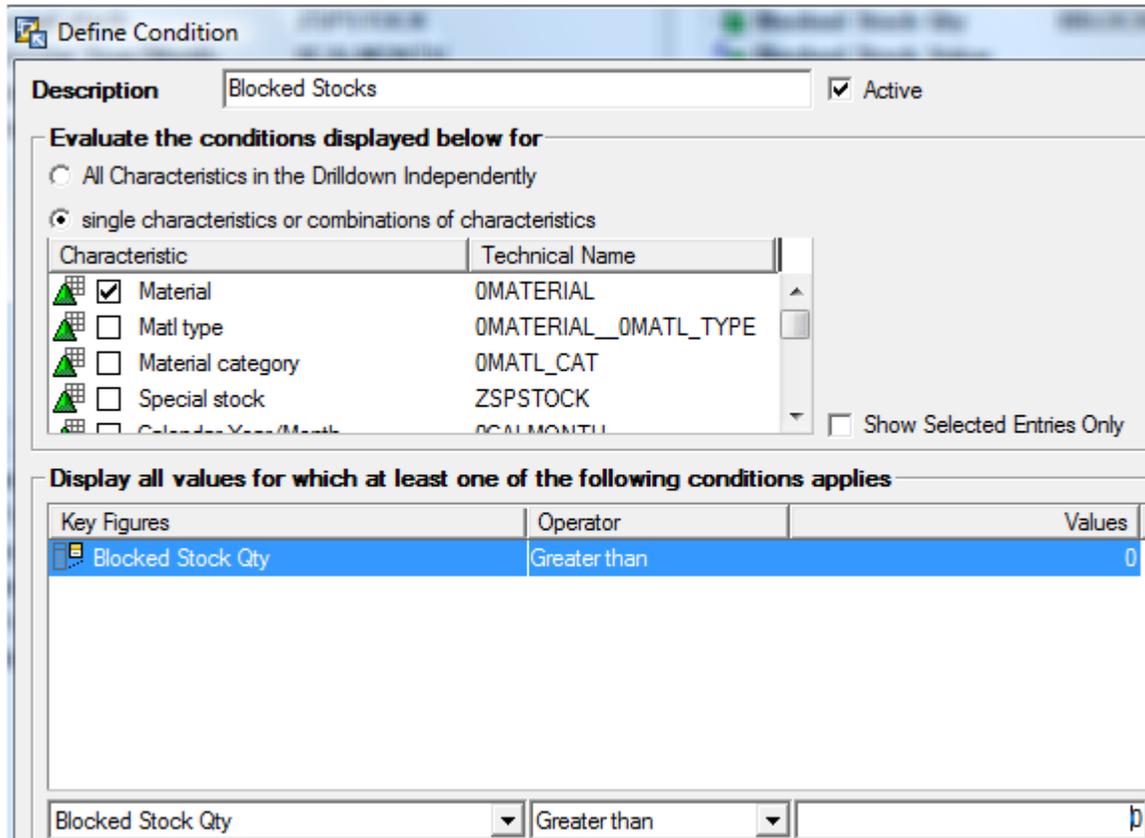


Fig 7: Hide the RKF's – Plant Total Value & Total Plant Qty

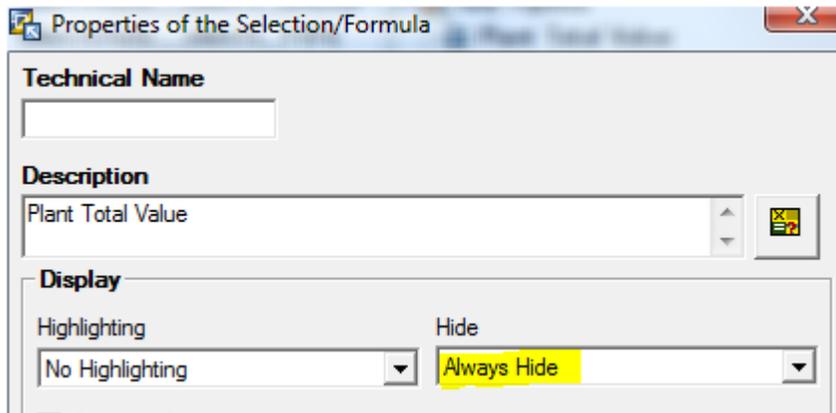


Fig 8: Snap-shot DSO for storing the special stocks

Special Stocks DSO -Direct update by APD	ZOSCSPST
Object Information	
Version	In Process
Save	Not saved
Revised Version	Active Version
Object Status	Active, executable
Settings	
Type of DataStore Object	Direct Update
Key fields	
Plant	0PLANT CHAR 04
Storage location	0STOR_LOC CHAR 04
Data Fields	
Blocked Stk Value	0ISSVS_VAL CURR 09 A
Blocked Stk Qty	0RECBLOSTCK QUAN 09 C
Base Unit of Measure	0BASE_UOM UNIT 03
Local currency	0LOC_CURRCY CUKY 05
Transit Stock Value	0ISSVALSCRP CURR 09 A
Transit Stock Qty	0RECTRANSST QUAN 09 C

Fig 9: APD for updating the Snap-Shot DSO

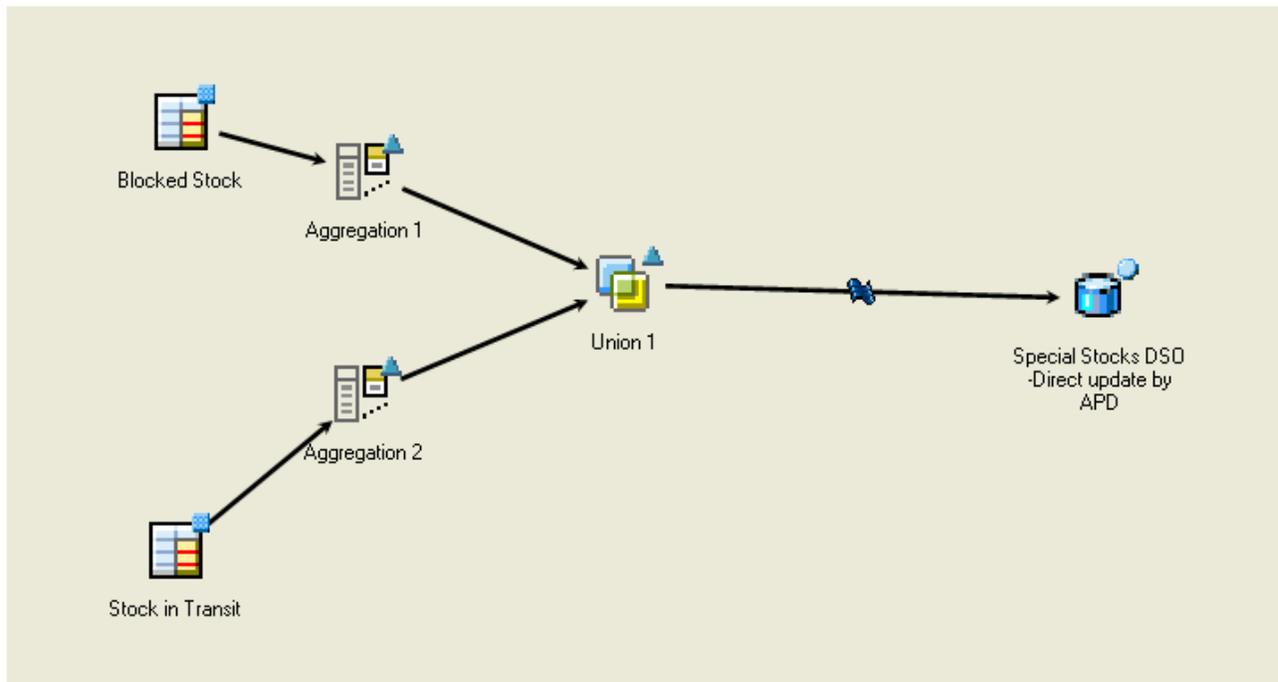


Fig 10: Properties of Node “Aggregation”

Transformation Aggregation

Aggregation

Description: Aggregation 1

Select the fields to be used in the formation of groups and the fields for which the values are to be aggregated

Selected Grouping Fields

Description	Field Name
Plant	0PLANT
Storage location.	0STOR_LOC

Selected Aggregation Fields

Description	Aggr...	Field Name
Blocked Stock Value	SUM	4IDTMAH2AJLWJ...
Blocked Stock Quantity	SUM	4IDTM9U0PNSR...

Related Content

[Reports with Storage location & Stock Type - Note 589024](#)

[Value Key Figures - Note 637927](#)

[How to Handle Inventory Scenarios](#)

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

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