

Handling of Structured Articles in ECC 6.0 at the time of PO,GR and SO



Applies to:

SAP Retail ECC6.0.

Summary

This document gives a brief understanding of Structured articles in ECC 6.0 and how they are handled during the creation of Purchase Order, Goods Receipt and Sales order.

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Author Bio



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Brief Introduction on Structured Articles

Structured articles are created and changed with the article master transactions MM41 and MM42, using the button 'Components' on the basic data tab page. Technically structured article components are assigned to a structured article header using a bill of material. In SAP for Retail, structured articles have a well-defined meaning and are therefore subject to some restrictions that don't exist for standard bills of material.

There are 3 types of Structured Articles which are commonly used

1. Sales Set – Components which can be packaged together or can also be sold individually – For Eg a Shaving Kit (comprises of Shaving Razor, Shaving Foam and a Brush)
2. Pre Pack – Components of the prepack must belong to the same Merchandise Category as the prepack itself. They can be grouped together by the retailer as well as by the manufacturer or vendor and a typical example would be in the case of Fashion Retailing. Generally stocks are managed at prepack level for DC and individual component level for Stores.
3. Display – Display articles are Similar to Prepack but components may belong to different MCs. Generally stocks are managed at display level in DC and individual component level at stores.

→Article Categories for the above mentioned structured articles are 10, 11 & 12 respectively

NOTE: This document has relevant snapshots relating to Purchase Order, Goods Receipt and Sales Order for a Sales Set which are covered in the later part of this document

Customizing of Structured Articles







You'll find the customizing for structured articles under the following path:

Logistics General – Material Master – Retail-Specific Settings – Settings for Structured Materials



Click on Structured Article Maintenance

Change View "Structured article maintenance": Overview

New Entries      

SM category	Description	BOM Usage	Usage text	Item Category	Item category text
D	Display	3	Universal	L	Stock item
L	Prepack	3	Universal	L	Stock item
P	Empties	7	Empties	L	Stock item
S	Set	5	Sales and Distribution	N	Non-stock item

Structured Article is used in the following Logistics Processes



1. Purchase Order (Transaction Key 100)
2. Goods Receipt (Transaction Key 200)

Structure

Logistics - General

Determine Work Area: Entry

Field Name	Work Area
Transaction key	<input type="text"/>







Further select cond. Append  

Transaction key (1) 2 Entries found

Transaction ...	Short Descri..
100	Purchase order
200	Goods receipt

Let's say you choose the Transaction Key as 100 – Purchase Order and then the screen would look as shown below(Similar screen appears for Goods Receipt as well)

Change View "Structured article in logistics process": Overview

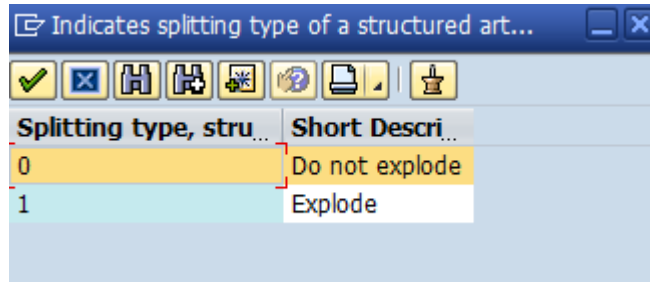
New Entries       BC Set: Change Field Values

Transaction key Purchase order

Artl Cat.	Site cat.	SOrg.	Name	DChl	Name	Site	Name 1	Structured artl	Description	SpTypeStrc
10	A									1
10	B									0
11	A									1
11	B									1
12	A									1
12	B									0

This configuration helps in deciding which article category (10-sales set,11-prepack or display) should explode for which site category(DC or store) and for what combination of Sales Organization and Distribution channel.

Please Note explosion at DC or Store is primarily decided by the article category (Prepack or Display) and only in Sales sets; stocks can be managed both at individual component and at the set level.



As per the standard settings Prepacks, Display, Sets are broken down into individual components at the time of Ordering (PO) & and at the time of receiving (GR.) ie the header item will no longer have stock since they are managed at the individual component level

NOTE: Don't forget to change the Item category Group to LUMF (In lieu of NORM) in Basic data and Sales View of the Article Master Data

Creation of Structured Article Header

Movement type 317 is used to create a structured article header from the individual components and this posting leads to the stock of the header article being increased and that of the components decreased. The Transaction is reversed using reversal movement type 318

Splitting up of Structured Article Header

You can use movement type 319 to split up a structured article (such as a lot or prepack) into its constituent components. A structured article is split into its constituent components automatically, either in the purchase order or at goods receipt, depending on how your system is configured.

The stock of the header article is debited and the components credited. The transaction is reversed using reversal movement type 320

Purchase Order

The below screen shows how an item is exploded at the time of creating a Purchase Order and the price of the item is maintained at the header level

Create Purchase Order

Document Overview On | Hold | Print Preview | Messages | Personal Setting | Save As Template | Load from Template

NB Standard PO | Vendor: ACE_VEN02 Trikomsel Vendor 02 | Doc. date: 07.06.2011

S...	Itm	A	I	Article	Short Text	PO Quantity	O...	C	Deliv. Date	Net Price	Curr...	Per	O...	Mdse Cat.	Site	Stor. Loc...
	10			164	Nokia E72 Mobile Phone Package	1 EA	D		17.06.2011	1,000	IDR	1	EA	Smart Phon...	Jakarta Store	PCS Whse
	11			160	Nokia E72 Mobile Handset	1 EA	D		17.06.2011	0	IDR	0	EA	Smart Phon...	Jakarta Store	PCS Whse
	12			161	Nokia E72 Mobile Battery	1 EA	D		17.06.2011	0	IDR	0	EA	Smart Phon...	Jakarta Store	PCS Whse
	13			162	Nokia E72 Mobile Charger	1 EA	D		17.06.2011	0	IDR	0	EA	Smart Phon...	Jakarta Store	PCS Whse

Item: 1 [10] 164, Nokia E72 Mobile Phone Package

Article Data | Quantities/Weights | Delivery Schedule | Delivery | Invoice | Conditions | Texts | Delivery Address | Confirmations | Condition Control | Retail

Qty: 1 EA | Net: 1,000 IDR

N...	CnTy	Name	Amount	Crcy	per	U...	Condition value	Curr.	Status	Num...	OU	CCon...	Un	Condition value	CdCur	S...
		Net Price	1,000	IDR	1 EA		1,000	IDR			1 EA	1 EA		0.00		
		Net value incl. disc	1,000	IDR	1 EA		1,000	IDR			1 EA	1 EA		0.00		
		Non-Deductible Tax	0	IDR			0	IDR			0	0		0.00		
		Net value incl. tax	1,000	IDR	1 EA		1,000	IDR			1 EA	1 EA		0.00		
			0	IDR	1 EA		0	IDR			1 EA	1 EA		0.00		
			1,000	IDR	1 EA		1,000	IDR			1 EA	1 EA		0.00		

Condition rec. | Analysis | Update

Goods Receipt

For Goods Receipt the header and the components are exploded and are shown below

Goods Receipt Other - NWBC

Hide Overview | Hold | Check | Post | Help

A01 Goods Receipt | R10 Other | Init. entry of stBal: 561

Document Date: 07.06.2011 | Article Slip: | Posting Date: 07.06.2011 | Doc. Header Text: | 1 Individual Slip

Line	Art.	Short Text	OK	Qty in UnE	E...	Sloc	G/L Account	Batch	Valuation ...	Move...	D	Stock Type	Site
1	IPHONE 3GS 16GB R/WH		10	EA	PCS Whse (WM)				561	+	Unrestrict...	Trikomse	
1	IPHONE 3GS 16GB R/WH		10	EA	PCS Whse (WM)				319	-	Unrestrict...	Trikomse	
1	IPHONE 3GS 16GB R/WH Handset		10	EA	PCS Whse (WM)				319	+	Unrestrict...	Trikomse	
1	IPHONE 3GS 16GB R/WH Battery		10	EA	PCS Whse (WM)				319	+	Unrestrict...	Trikomse	
1	IPHONE 3GS 16GB R/WH Charger		10	EA	PCS Whse (WM)				319	+	Unrestrict...	Trikomse	

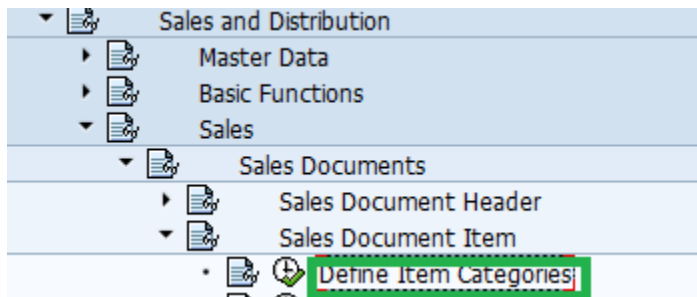
Article | Quantity | Where | Partner | Batch | Serial Numbers | WM

Movement Type: 561 | Init. entry of stBal. | Stock type: Unrestricted use

Site: Trikomsel Central DC | DC01 | Storage Location: PCS Whse (WM) | 1003

Unloading Point: | Reason for Movement: |

Item Categories



Item categories play a key role in deciding whether the pricing of the structured article should be kept at the header level or at the component (item) level based on which the selling price is determined at the time of creating a sale order.

TAQ – Pricing at Header Level

Change View "Maintain Item Categories": Details

New Entries
BC Set: Change Field Values

Item category: TAQ Pric.at Header Level

Business Data

Item Type	<input type="checkbox"/>	<input checked="" type="checkbox"/> Business Item
Completion Rule	<input type="checkbox"/>	<input checked="" type="checkbox"/> Sched.Line Allowed
Special Stock	<input type="checkbox"/>	<input type="checkbox"/> Item Relev.for Dlv
Billing Relevance	A	<input type="checkbox"/> Returns
Billing Plan Type	<input type="checkbox"/>	<input checked="" type="checkbox"/> Wght/Vol.Relevant
Billing Block	<input type="checkbox"/>	<input checked="" type="checkbox"/> Credit active
Pricing	X	<input checked="" type="checkbox"/> Determine Cost
Statistical value	<input type="checkbox"/>	
Revenue Recognition	<input type="checkbox"/>	
Delimit. Start Date	<input type="checkbox"/>	

General Control

Autom.batch determ.
 Rounding permitted
 Order qty = 1

Transaction Flow

Incompletion Proc.	20	Standard Item	Screen Seq.Grp	N
PartnerDetermProc.	N	Standard item		
TextDetermProcedure	01	Sales Item	Status Profile	
Item Cat.Stats.Group	1	Order, Debit Memo	<input type="checkbox"/> Create PO Automatic.	

Bill of Material/Configuration

Config. Strategy	<input type="checkbox"/>	
Art. Variant Action	<input type="checkbox"/>	<input type="checkbox"/> Variant Matching
ATP article variant	<input type="checkbox"/>	

TAP – Pricing at Item Level

Change View "Maintain Item Categories": Details

New Entries [Icons]

Item category: TAP [Pric.at Item Level]

Business Data

Item Type	<input type="checkbox"/>	<input type="checkbox"/> Business Item
Completion Rule	<input type="checkbox"/>	<input checked="" type="checkbox"/> Sched.Line Allowed
Special Stock	<input type="checkbox"/>	<input type="checkbox"/> Item Relev.for Div
Billing Relevance	A	<input type="checkbox"/> Returns
Billing Plan Type	<input type="checkbox"/>	<input type="checkbox"/> Wght/Vol.Relevant
Billing Block	<input type="checkbox"/>	<input checked="" type="checkbox"/> Credit active
Pricing	<input type="checkbox"/>	<input type="checkbox"/> Determine Cost
Statistical value	X	
Revenue Recognition	<input type="checkbox"/>	
Delimit. Start Date	<input type="checkbox"/>	

General Control

Autom.batch determ. Rounding permitted Order qty = 1

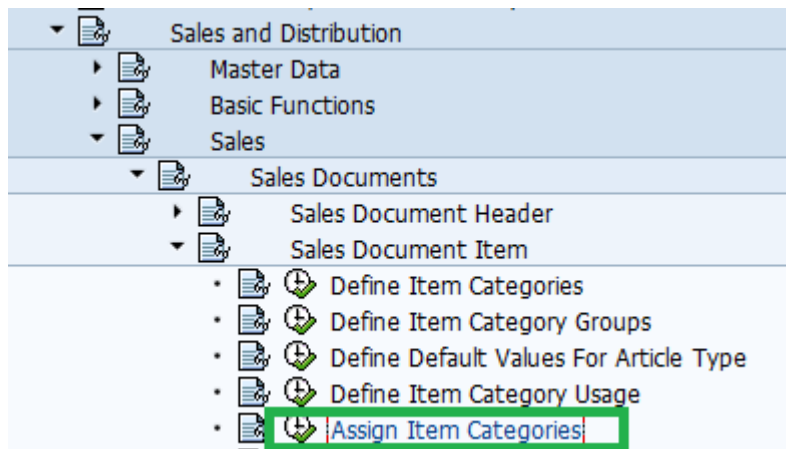
Transaction Flow

Incompletion Proced.	26	Free of Charge Serv.	Screen Seq.Grp	N
PartnerDetermProced.	T	No Item Partner		
TextDetermProcedure	01	Sales Item	Status Profile	
Item Cat.Stats.Group	1	Order, Debit Memo	<input type="checkbox"/> Create PO Automatic.	





Bill of Material/Configuration




Config. Strategy	<input type="checkbox"/>	
Art. Variant Action	<input type="checkbox"/>	<input type="checkbox"/> Variant Matching
ATP article variant	<input type="checkbox"/>	
Structure scope	A	<input checked="" type="checkbox"/> Create Delivery Group
Application	SD01	<input checked="" type="checkbox"/> Manual Alternative

The Following Item category Assignment is required for Sales Document Type OR – Standard Order




Change View "Item Category Assignment": Overview

  New Entries       BC Set: Change Field Values








SaTy	ItCGr	Usg.	HLevItCa	DfItC	MItCa	MItCa	MItCa	
OR	LUMF			TAP	TAQ			
OR	LUMF		TAP	TAN				
OR	LUMF		TAQ	TAN				

Change View "Item Category Assignment": Details

 New Entries      








Sales Doc. Type	OR
Item cat.group	LUMF
Item usage	
ItemCat-HgLvItm	
Item category	TAP
Manual item cat	TAQ 
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	

Change View "Item Category Assignment": Details

New Entries       

Sales Doc. Type	OR
Item cat.group	LUMF
Item usage	
ItemCat-HgLvItm	TAP
Item category	TAN
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	

Change View "Item Category Assignment": Details

New Entries        BC Set: Change Field Values

Sales Doc. Type	OR
Item cat.group	LUMF
Item usage	
ItemCat-HgLvItm	TAQ
Item category	TAN
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	
Manual item cat	

Sales Order

Use Transaction Code VA01 to create a Sales Order

Create Standard order: Overview

Standard order: [] Net value: 1,553 IDR
 Sold-To Party: 3100000017 Triyani Ade / Jl. Ariuna Selatan No. 4, Kemanggisan / 11470 Ja...
 Ship-To Party: 3100000017 Triyani Ade / Jl. Ariuna Selatan No. 4, Kemanggisan / 11470 Ja...
 PO Number: [] PO date: 07.06.2011

Sales | Item overview | Item detail | Ordering party | Procurement | Shipping | Reason for rejection

Req. deliv.date: D 07.06.2011 Delivering Site: []
 Complete div. Total Weight: 250 G
 Delivery block: [] Volume: 0.000
 Billing block: [] Pricing date: 07.06.2011
 Payment card: [] Exp.date: []
 Card Verif.Code: []
 Payment terms: 0001 Pay immediately w/... Incoterms: []
 Order reason: []

Item	Article	Order Quantity	Un	S	Description	Customer Article Numbe	ItCa	DGIP	HL Itm	D	First date	Site	Batch
10	143		1 EA	<input type="checkbox"/>	Mobile Phone Package		TAQ		0 D	07.06.2011	AC01		
11	141		1 EA	<input type="checkbox"/>	Mobile Handset		TAE		10 D	07.06.2011	AC01		
12	142		1 EA	<input type="checkbox"/>	Mobile Battery		TAE		10 D	07.06.2011	AC01		
13	145		1 EA	<input type="checkbox"/>	Mobile Charger		TAE		10 D	07.06.2011	AC01		

Pricing is carried at Header level for item 143 using Item Category TAQ which is assigned for Sales Document type OR-standard order and for item category group LUMF

Header Conditions for Item 10 – Article 143 reveals it is priced at header level

Create Standard order: Overview

Standard order: [] Net value: 1,553 IDR
 Sold-To Party: 3100000017 Triyani Ade / Jl. Ariuna Selatan No. 4, Kemanggisan / 11470 Ja...
 Ship-To Party: 3100000017 Triyani Ade / Jl. Ariuna Selatan No. 4, Kemanggisan / 11470 Ja...
 PO Number: [] PO date: 07.06.2011

Sales | Item overview | Item detail | Ordering party | Procurement | Shipping | Reason for rejection

Req. deliv.date: D 07.06.2011 Delivering Site: []
 Complete div. Total Weight: 250 G
 Delivery block: [] Volume: 0.000
 Billing block: [] Pricing date: 07.06.2011
 Payment card: [] Exp.date: []
 Card Verif.Code: []
 Payment terms: 0001 Pay immediately w/... Incoterms: []
 Order reason: []

Item	Article	Order Quantity	Un	S	Description	Customer Article Numbe	ItCa	DGIP	HL Itm	D	First date	Site	Batch
10	143		1 EA	<input type="checkbox"/>	Mobile Phone Package		TAQ		0 D	07.06.2011	AC01		
11	141		1 EA	<input type="checkbox"/>	Mobile Handset		TAE		10 D	07.06.2011	AC01		
12	142		1 EA	<input type="checkbox"/>	Mobile Battery		TAE		10 D	07.06.2011	AC01		
13	145		1 EA	<input type="checkbox"/>	Mobile Charger		TAE		10 D	07.06.2011	AC01		

Click on Display Document Header Details -> Conditions

Create Standard order: Header Data

Standard order: Purchase order no.:
 Sold-to party: 3100000017 Triyani Ade / Jl. Arjuna Selatan No. 4, Kemanggisan / 11470...

Sales Shipping Billing Document Payment cards Accounting **Conditions** Account assignment Partners Texts Order

Net: IDR
 Tax:

Pricing Elements												
N..	CnTy	Name	Amount	Crcy	per	U...	Condition value	Curr.	Status	Condition value	CdCur	S...
PR00		Price					1,553	IDR		0.00		<input type="checkbox"/>
		Gross Value					1,553	IDR		0.00		<input type="checkbox"/>
		Discount Amount					0	IDR		0.00		<input type="checkbox"/>
		Rebate Basis					1,553	IDR		0.00		<input type="checkbox"/>
		Net Value for Item					1,553	IDR		0.00		<input type="checkbox"/>
		Net Value 2					1,553	IDR		0.00		<input type="checkbox"/>
		Net Value 3					1,553	IDR		0.00		<input type="checkbox"/>
MWST		Output Tax	10.000	€			155	IDR		0.00		<input type="checkbox"/>
		Total					1,708	IDR		0.00		<input type="checkbox"/>
SKTO		Cash Discount					0	IDR		0.00		<input checked="" type="checkbox"/>
		Profit Margin					1,553	IDR		0.00		<input type="checkbox"/>
AZWB		Down paym./Settlemen					0	IDR		0.00		<input checked="" type="checkbox"/>

NOTE: Similarly if you want the prices to be handled/maintained at item level you can use item category TAP and assign it to the relevant sales document type to achieve the same.

Important Notes for Structured Articles

- 1114045 – Incorrect Explosion of Structured articles
- 175266 – GR of Structured articles without components
- 1131841 – Incorrect check on availability of structured articles
- 671074 – Deleting components of structured material/listing
- 688846 – Structured article: Consistency checks in Customizing
- 115784 – ALE: ALE distribution of multiple BOMs
- 316056 – Decimal places for component quantities of structured materials
- 323491 – Customizing in the environment of structured articles

Related Content

http://help.sap.com/erp2005_ehp_05/helpdata/en/12/0842df470311d1894a0000e8323352/frameset.htm

http://help.sap.com/saphelp_45b/helpdata/en/12/085efd470311d1894a0000e8323352/content.htm

<http://www.sdn.sap.com/irj/scn/index?rid=/library/uuid/90ae41e3-72a3-2b10-aa8d-aa2015f9fbb2>

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