

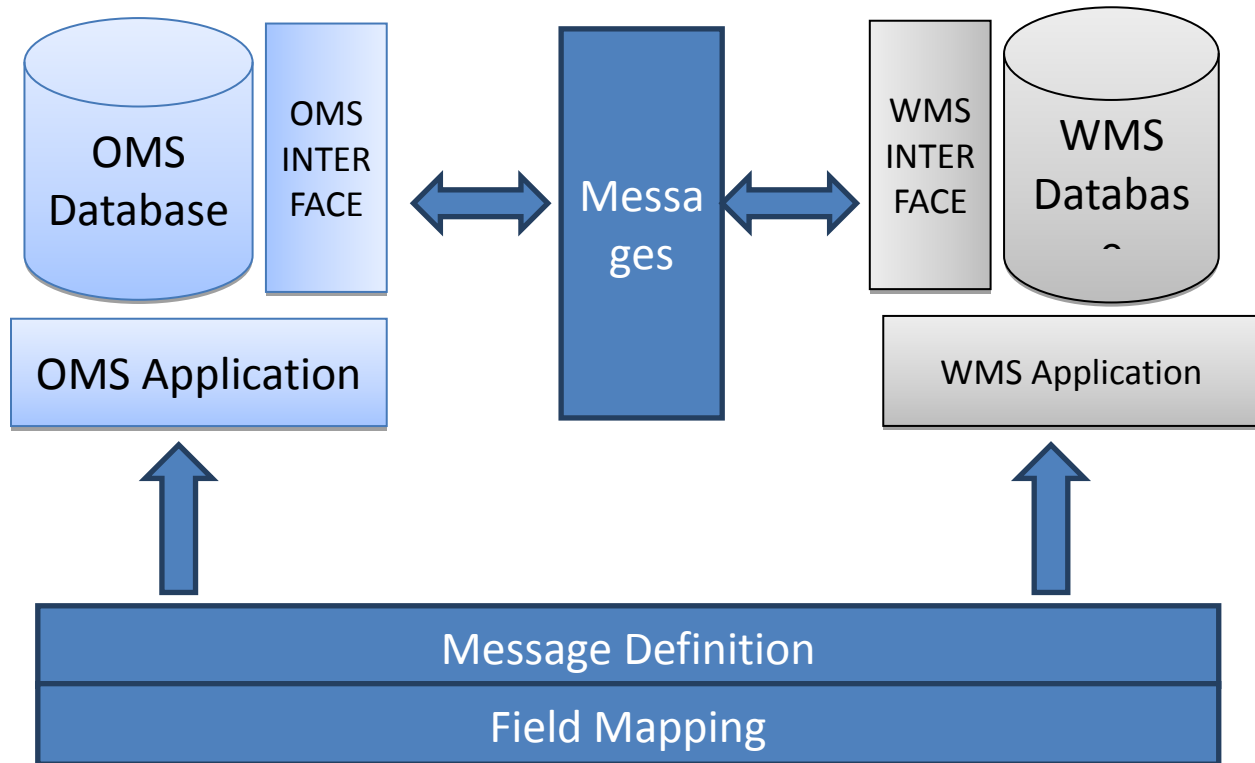
Order Management System

Interface Specification Document

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Document Title	OMS Interface Specification document	Ver	2.3
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Release History			
Version	Date	Remark	
1.0	Aug 21, 2016	Initial Draft	
2.0	Aug 24, 2016	Update for Maged Review comment	
2.1	Sept 30, 2016	Blank Message replaced by “N.A”	
2.2	Oct 21 , 2017	In case of Blank WMS will send Message as “ ” , Lottable rename as “UDF”	
2.3	Jan 21 ,2017	Message Destination field be replaced by “DEPARTMENT-CODE” New Message #13 Pack failure due to duplicate & #14 Due to Sku Duplicate added	

Integration Overview



Field Mapping – System will allow admin user to configure Interface Table (SKU , Order , Pack) fieldsforMapping , This function will generate table with data as field , Table , Field Type , Is Null and Is Duplicates Mapping table will be used by OMS and WMS for table and field identification

Message Definition– System will allow admin user to define the message. This message will be generated by OMS and WMS and data will be exchange using the message definition. Message definition will contained information like Message Destination (OMS or WMS , In case of Order for WMS , It will send the Department Code) , Action Type (Insert / Update) , Table Name (SKU / PACK / BOM / ORDER) , Field Name. Message Definition table will be referred by OMS and WMS to read and write message.

Message - WMS / OMS Application will use this function to generate message for communication. This message will be read by WMS & OMS Interface. With the help of Message Definition appropriate database action will be taken by WMS / OMS interface .

OMS Interface –This function will read the message from Message table and perform database action (insert / update OMS for SKU , PACK , Order , BOM details) as defined in Message Definition table.

WMS Interface - This function will read the message from Message table and perform database action (insert / update WMS for SKU , PACK , Order , BOM details) as defined in Message Definition table.

Table Definition

Interface Object	PACK	Source	WMS
Remark	This table provide the UOM options for the SKU , Pack and SKU will be link through PackKey . This information will be listed in Pack Tab of SKU and will offer for the user through Ordering Options (UOM)		
Field Name	FieldType	Remark	
PACKKEY	nvarchar(50)	PackKey which Link to SKU Code , Expected this to be Unique	
PACKDESCR	nvarchar(45)	Pack Description	
PACKUOM1	nvarchar(10)	User Option for Ordering SKU using this UOM , By default this will have Qty as 1	
PACKUOM2	nvarchar(10)	User Option for Ordering SKU using this UOM	
INNERPACK	Float	Qty for UOM2 Option	
PACKUOM3	nvarchar(10)	User Option for Ordering SKU using this UOM	
QTY	decimal(22, 5)	Qty for UOM3 Option	
PACKUOM4	nvarchar(10)	User Option for Ordering SKU using this UOM	
PALLET	Float	Qty for UOM4 Option	

Interface Object	SKU	Source	WMS
Remark	This Table provide SKU List , Sku Parameter , Department , Description , Qty		
Field Name	FieldType	Remark	
SKU	nvarchar(50)	SKU ID – SKU Unique ID	
DESCR	nvarchar(60)	SKU Description – This will support Arabic and English content	
STORERKEY	nvarchar(15)	Store / Department Code	
PACKKEY	nvarchar(50)	Pack Key – Linking with Pack Table	
UDF01	nvarchar(20)	SKU Specification -1	
UDF02	nvarchar(20)	SKU Specification - 2	
UDF03	nvarchar(20)	SKU Specification - 3	
UDF04	nvarchar(20)	SKU Specification - 4	
UDF05	nvarchar(20)	SKU Specification - 5	
UDF06	nvarchar(20)	SKU Specification - 6	
UDF07	nvarchar(20)	SKU Specification – 7	

UDF08	nvarchar(20)	SKU Specification - 8
UDF09	nvarchar(20)	SKU Specification - 9
UDF10	nvarchar(20)	SKU Specification - 10
PRICE	decimal(19, 4)	SKU Price (Optional) – Price should be maintained in OMS
COST	decimal(19, 4)	SKU Cost (Optional) - Cost should be maintained in OMS
RFDEFAULTUOM	nvarchar(10)	Default UOM – from Pack
QTY	decimal(19, 4)	Available Quantity for Order

Interface Object	OrderHeader	Source	OMS
Remark	This Table provide Order Header ,Address , Contact , External Order No , Expected Delivery date , Order Status ,		
Field Name	FieldType	Remark	
ORDERKEY	nvarchar(10)	Unique Order / Request No	
STORERKEY	nvarchar(15)	Department code	
EXTERNORDERKEY	nvarchar(32)	Customer Order No	
ORDERDATE	Datetime	Current date	
DELIVERYDATE	Datetime	Expected Delivery date	
PRIORITY	nvarchar(10)	Order Priority	
CONSIGNEEKEY	nvarchar(15)	Address	
C_CONTACT1	nvarchar(30)	Contact	
C_CONTACT2	nvarchar(30)	Contact	
C_COMPANY	nvarchar(45)	Company	
C_ADDRESS1	nvarchar(45)	Address	
C_ADDRESS2	nvarchar(45)	Address	
C_ADDRESS3	nvarchar(45)	Address	
C_ADDRESS4	nvarchar(45)	Address	
C_CITY	nvarchar(45)	City	
C_STATE	nvarchar(25)	State	
C_ZIP	nvarchar(18)	Zip	
C_COUNTRY	nvarchar(30)	Country	
C_ISOCNTRYCODE	nvarchar(10)	Country Code	
C_PHONE1	nvarchar(18)	Phone No	
C_PHONE2	nvarchar(18)	Phone No	
C_FAX1	nvarchar(18)	Phone No	
C_FAX2	nvarchar(18)	Phone No	
STATUS	nvarchar(10)	Phone No	
Notes2	Ntext	Notes	
Notes	Ntext	Notes	

Interface Object	OrderDetails	Source	OMS
Remark	This table provide Order Details like SKU , Department , Qty , UOM , Assuming no customer will have the ability to force pick certain lot through the interface.		
Field Name	FieldType	Remark	
SKU	nvarchar(50)	SKU ID	
STORERKEY	nvarchar(15)	Department / Store ID	
ORIGINALQTY	decimal(22, 5)	Qty Requested	
UOM	nvarchar(10)	UOM from Pack	
EXTERNORDERKEY	nvarchar(32)	ORDER ID – Reference	

Interface Object	InterfaceMap	Source	OMS & WMS
Remark	This is Interface table refer by WMS & OMS for field Definition		
Field Name	FieldType	Remark	
FieldKey	nvarchar(50)	Unique System Generated No	
Fieldname	nvarchar(50)	Field Name from WMS or OMS	
FieldType	Int	Database field type like nText , nVarcharetc	
InNull	Boolean	True or False to indicate Null	
IsDuplicate	Boolean	True or False to indicate Duplicate allowed	
Object	nvarchar(50)	Table Name – SKU / ORDER / PACK / BOM	
Description	nvarchar(200)	Field Description if any	

Interface Object	MessageHeader	Source	OMS & WMS
Remark	System will allow admin user to define the message Header. This message will be generated by OMS and WMS and data will be exchange using this message definition. Message definition will contained information like Message Destination (OMS or WMS) , Action Type (Insert / Update) , Table Name (SKU / PACK / BOM / ORDER).This Message Definition table will be used by OMS and WMS to read and write message.		
Field Name	FieldType	Remark	
MessageHdrKey	nvarchar(10)	Message Definition id	
Destination	nvarchar(10)	WMS or OMS	
ActionType	nvarchar(20)	Message Action like Insert update	
Object	nvarchar(50)	Select the Object like SKU , ORDER , PACK , BOM HEADER , BOM DETAIL	
Action	nvarchar(200)	Any Specific Consideration for this action	
Description	nvarchar(200)	Description the purpose of the Message	

Interface Object	MessageDetails	Source	OMS & WMS
Remark	This message details will contained information like Message Destination , Table Name (SKU / PACK / BOM / ORDER) , Field Name. This Message Definition table will be used by OMS and WMS to read and write message. Need more clarifications		
Field Name	FieldType	Remark	
MessageDetKey	nvarchar(10)	Message Definition id	
Sequence	nvarchar(10)	WMS or OMS	
FieldId	nvarchar(20)	Message Action like Insert update	
MessageHdrKey	nvarchar(20)	Message Header Key	
FieldSpecification	nvarchar(200)	Additional Details if any	

Interface Object	Message	Source	OMS & WMS
Remark	Message will be read by WMS & OMS Interface and with the help of Message Definition appropriate database action will be taken. Need more clarifications		
Field Name	FieldType	Remark	
MessageTrnId	nvarchar(10)	Message ID	
MessageHrdKey	nvarchar(10)	Message Definition Key	
MessageDesc	nvarchar(10000)	Message – with Field value details	

Message Definition

Message ID	01	Message Title	Order Request				
Purpose	OMS send the new order Message to WMS , WMS read the message and consider the order for further processing						
Message Structure	Destination	DEPARTMENT CODE		Action	INSERT	Object	ORDER
	Interface Field Name		Name		Specification		
	ID		Order No		Not Null		
	OrderNumber		External Order Number		Not Null		
	OrderDate		Order Date		Not Null		
	DeliveryDate		Expected order dispatch date		Not Null		
	StoreCode		Department Code		Not Null		
	Name		Contact 1		Not Null		
	Name		Contact 2		Not Null		
	AddressLine1		Address Details		Not Null		
	Remark		Order Note		If Blank – Please insert value as “N.A.”		
	ProductCode		SKU Code		Not Null - Multiple Sku Record		
	Name		Unit of Measurement/ PACK				
	OrderQty		Order Quantity				
Message Sample	61 0003 9/30/2016 12:00:00 AM 10/7/2016 12:00:00 AM VX00101 Vijay Singh Manoj Singh Kothrud Req 3 TBL102 CS 1.00 TBL103 CS 1.00						
Message	One Message per Order						
Event	Any time (Real Time)						

Message ID	02	Message Title	Order Status - Ready For Dispatch			
Purpose	WMS send the Messagewith Order ready for dispatch status to OWS , OMS read the message marked the order as ready for dispatch and notify the stake holders					
Message Structure	Destination	OMS	Action	UPDATE	Object	ORDER
	Interface Field Name	Name				Specification
	ID	Order No				Not Null
	DispatchDate	Dispatch Date				Not Null
	Status	Order Status as – “Ready for Dispatch”				Not Null
	WMSRemark	Order Comments from WMS				If Blank – Insert value as N.A.
Message Sample	00101 9/30/2016 12:00:00 AM Ready for Dispatch Order is Ready for Dispatch					
Message	One Message per Order					
Event	Any time					

Message ID	04	Message Title	Order Status – Dispatch			
Purpose	For Order Dispatch i.e. Dispatch with and without Qtyrevision WMS will send the Message to OMS ; OMS read the message and marked the Order status as dispatch and check for the revision, For Difference in Order and Shipp Qty update the Inventory for adjustment entry and update available Qty					
Message Structure	Destination	OMS	Action	UPDATE	Object	ORDER
	Interface Field Name		Name		Specification	
	ID		Order No		Not Null	
	CompletedDate		Dispatch Date		Not Null	
	Status		Order Status as – “Dispatch”		Not Null	
	WMSRemark		Order Comments from WMS		If Blank – Insert value as “N.A.”	
	ProductCode		Sku Code		Not Null - Multiple SKU items	
	OrderQty		Order Qty			
ShipQty		Ship Qty				
Message Sample	00101 9/30/2016 12:00:00 AM Dispatch Dispatch with Revision TBL01 10 11 TBL02 10 20 TBL03 10 30					
Message	One Message per Order					
Event	Any time					
Note	WMS will be sending orderqty and shipqty for particular order regardless of revision qty.					

Message ID	05	Message Title	Order Status – Cancelled			
Purpose	WMS send the Message to OWS , , OMS read the message and marked order status as cancelled , Update the Available Qty and notify the stake holders					
Message Structure	Destination	OMS	Action	UPDATE	Object	Order
	Interface Field Name	Name			Specification	
	ID	Order No			Not Null	
	CancelledDate	Cancellation Date			Not Null	
	Status	Order Status as – “Cancelled”			Not Null	
	WMSRemark	Order Comments from WMS			If Blank – Insert value as N.A.	
Message Sample	00101 9/30/2016 12:00:00 AM Cancelled Cancelled By WMS					
Message	One Message for One Order					
Event	Any time					

Message ID	06	Message Title	ASN - Sku Receipt			
Purpose	GWC WMS Interface will send Shipment receipt input to OMS ,This can be single message for Multiple sku or single message per Sku. OMS will read SKU qty and update available Qty					
Message Structure	Destination	OMS	Action	UPDATE	Object	SKU

	Interface Field Name	Name	Specification
	StoreCode	Department Code	Not Null
	Remark	ASN Remark	If Blank – Insert value as N.A.
	TransactionDate	Receipt Date	Not Null
	ProductCode	Sku Code	Not Null - Multiple SKU
	ReceivedQty	Received Qty	
Message Sample	VDX001 SHIPMENT RECEIVED NOTE – ASN 0001 9/30/2016 12:00:00 AM TBL102 1.00 TBL101 1.00 TBL103 1.00 TBL104 1.00		
Message	One Message with multiple SKU or One Message One SKU		
Event	Any Time		

Message ID	07	Message Title	SkuChange			
Purpose	GWC interface will send the Sku update input to OMS. OMS will assume that required pack key is already available in the OMS. OMS will read this message and update Sku with its pack and UDFs structure					
Message Structure	Destination	OMS	Action	Update	Object	Sku
	Interface Field Name		Name		Specification	
	ProductCode		Sku Code		Not Null	
	Name		Product Name		If Blank – Insert value as N.A.	
	Description		Sku Description		If Blank – Insert value as N.A.	
	StoreCode		Department Code		Not Null	
	Packkey		Pack Key		Not Null	
	SpecificationDescription		UDF Value		Not Null , Multiple Entry , Sequence no – 1 to 10 , Unique	
	Sequence		Sequence No			
Message Sample	TBL101 TABLE TABLE STRUCTURE VDX001 PCK101010 EXPIRY DATE 1 MFD DATE 2 3 4 5 6 7 8 9 10					
Message	One Message one record					
Event	Any Time / Weekly					
Note	GWC comments :-As we discussed we can't trigger the changes to the sku. Need to discuss more on this.					

Message ID	09	Message Title	Pack Key Change			
Purpose	WMS will send Packkey change to OMS , OMS will read the Pack key and update OMS pack Key table					
Message Structure	Destination	OMS	Action	UPDATE	Object	PACK
	Interface Field Name		Name		Specification	
	Packkey		Unique Pack Identifier		Not Null	
	Description		Pack Description		If Blank – Insert value as “ ”	
	PackUOM1		UOM 1		Not Null	

	Quantity1	UOM 1 Qty	Not Null
	PackUOM2	UOM 2	Not Null
	Quantity2	UOM 2 Qty	Not Null
	PackUOM3	UOM 3	Not Null
	Quantity3	UOM 3 Qty	Not Null
	PackUOM4	UOM 4	Not Null
	Quantity4	UOM 4 Qty	Not Null
Message Sample	PACK008 Pack for 008 EA 1 IP 15 DZ 12 PLT 7		
Message	One Message One PackKey		
Event	Any Time / Before inserting product for the said packkey combination		
Note	GWC comments :-As we discussed we can't trigger the changes to the sku. Need to discuss more on this.		

Message ID	10	Message Title	Add New Pack			
Purpose	WMS will send new Packkey combinations to OMS , OMS will read the Pack key and update OMS pack Key table					
Message Structure	Destination	OMS	Action	INSERT	Object	PACK
	Interface Field Name		Name		Specification	
	Packkey		Unique Pack Identifier		Not Null	
	Description		Pack Description		If Blank – Insert value as “ ”	
	PackUOM1		UOM 1		Not Null	
	Quantity1		UOM 1 Qty		Not Null	
	PackUOM2		UOM 2		Not Null	
	Quantity2		UOM 2 Qty		Not Null	
	PackUOM3		UOM 3		Not Null	
	Quantity3		UOM 3 Qty		Not Null	
	PackUOM4		UOM 4		Not Null	
	Quantity4		UOM 4 Qty		Not Null	
	Message Sample	PACK008 Pack for 008 EA 1 IP 15 DZ 12 PLT 7				
Message	One Message One PackKey					
Event	Any Time / Before inserting product for the said packkey combination					

Message ID	11	Message Title	Add New Sku			
Purpose	GWC interface will send the New Sku creation input to OMS. OMS will assume that required pack key is already available in the OMS. OMS will read this message and create Sku with its pack and UDFs structure					
Message Structure	Destination	OMS	Action	INSERT	Object	SKU
	Interface Field Name		Name		Specification	
	ProductCode		Sku Code		Not Null	

	Name	Product Name	If Blank – Insert value as “ “
	Description	Sku Description	If Blank – Insert value as “ “
	StoreCode	Department Code	Not Null
	Packkey	Pack Key	Not Null
	AvailableBalance	Available Balance	If Blank – Insert value 0.00
	SpecificationDescription	UDF Value	Not Null , Multiple Entry , Sequence no – 1 to 10 , Unique
	Sequence	Sequence No	
Message Sample	TBL101 TABLE TABLE STRUCUTURE VDX001 PCK101010 0.00 EXPIRY DATE 1 MFD DATE 2 3 4 5 6 7 8 9 10		
Message	One Message one SKU		
Event	Any Time / Weekly		
Note	GWC comments :- Instead of NA I will be providing blank value if fields are not having any values.		

Message ID	12	Message Title	CycleCount			
Purpose	GWC WMS Interface will send Weekly Stock Input to OMS ,This can be single message for Multiple sku or single message per Sku. OMS will read SKU qty and compare with available quantity in OMS. In case of difference create adjustment records.					
Message Structure	Destination	OMS	Action	INSERT	Object	SKU
	Interface Field Name		Details		Specification	
	StoreCode		Department Code		Not Null	
	Remark		Cycle Count Remark		If Blank – Insert value as “ ”	
	TransactionDate		CycleCount Date		Not Null	
	ProductCode		Sku Code		SKU multiple items – Not Null	
	AvailableBalance		Available Qty			
Message Sample	VDX001 Cycle Count for VDX001 store on July 1 Week 9/30/2016 12:00:00 AM TBL102 1.00 TBL101 1.00 TBL103 1.00 TBL104 1.00					
Message	One Message one SKU or One Message Multiple SKU					
Event	Weekly / Any time					

Message ID	13	Message Title	Insert Pack Error			
Purpose	Generate Error Message for Duplication of Pack key					
Message Structure	Destination	OMS	Action	INSERT	Object	PACK
	Interface Field Name		Name		Specification	
	Error Message		Error Message		NotNull	
	Packkey		Unique Pack Identifier		Not Null	
	Description		Pack Description		If Blank – Insert value as “ ”	
	PackUOM1		UOM 1		Not Null	

	Quantity1	UOM 1 Qty	Not Null
	PackUOM2	UOM 2	Not Null
	Quantity2	UOM 2 Qty	Not Null
	PackUOM3	UOM 3	Not Null
	Quantity3	UOM 3 Qty	Not Null
	PackUOM4	UOM 4	Not Null
	Quantity4	UOM 4 Qty	Not Null
Message Sample	Pack key Available PACK008 Pack for 008 EA 1 IP 15 DZ 12 PLT 7		
Message	One Message One Pack Key Duplication		
Event	Any Time		

Message ID	14	Message Title	Insert Sku Error			
Purpose	Generate Error upon non availability of Pack & Duplicate Sku					
Message Structure	Destination	OMS	Action	INSERT	Object	SKU
	Interface Field Name		Name		Specification	
	ErrorMessage		ErrorMessage		Not Null	
	ProductCode		Sku Code		Not Null	
	Name		Product Name		If Blank – Insert value as “ ”	
	Description		Sku Description		If Blank – Insert value as “ ”	
	StoreCode		Department Code		Not Null	
	Packkey		Pack Key		Not Null	
	AvailableBalance		Available Balance		If Blank – Insert value 0.00	
	SpecificationDescription		UDF Value		Not Null , Multiple Entry , Sequence no – 1 to 10 , Unique	
	Sequence		Sequence No			
Message Sample	Pack Key not Available TBL101 TABLE TABLE STRUCUTURE VDX001 PCK101010 0.00 EXPIRY DATE 1 MFD DATE 2 3 4 5 6 7 8 9 10 Product with Same Product , Same Company , Same Department already available TBL101 TABLE TABLE STRUCUTURE VDX001 PCK101010 0.00 EXPIRY DATE 1 MFD DATE 2 3 4 5 6 7 8 9 10					
Message	One Message one SKU Generation					
Event	Any Time					
Note						