

# ACHIEVE WAREHOUSE MANAGEMENT ADVANCED SHIPPING NOTICE (ASN) SERIAL NUMBERS

USER MANUAL Version 6.5

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**Achieve Warehouse Management: ASN** is part of the Achieve One Suite, which has been certified by SAP as conforming to SAP's standards for Business One add-on solutions.

## **SAP**<sup>®</sup> Certified SAP Business One Integration

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### ACHIEVE WAREHOUSE MANAGEMENT ADVANCED SHIPPING NOTICE (ASN) SERIAL NUMBERS

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#### Introduction

With standard SAP Business One and **Achieve Warehouse Management** you have the ability to manage both internal and external serial numbers. When dealing with those serial numbers, some vendors may be able to provide you a list of the ones they are shipping to you prior to them arriving at your warehouse. This is typically sent using a document called an Advanced Shipping Notice or ASN.

The ASN Serial Number functionality in *Achieve Warehouse Management* allows you to import those ASN Serial Numbers into SAP and then have the system provide validation against them when you actually receive them in.

Before reading this document, you may need to familiarize yourself with the *Achieve Warehouse Management User Manual* which explains all the basic functionality that WMS provides. This knowledge will be helpful with understanding how to use the ASN Serial Number functionality.



#### Setup

There are a couple of setups that need to be done before using the ASN Serial Number functionality.

#### **WMS Configuration**

The first thing you need to do is turn on the ASN Serial Number option. To do that, we need to go to the WMS Configuration screen:

(Administration > Achieve One Setup > Achieve Warehouse Management > WMS Configuration)

Once you are in there, go to the Handheld Options > Receiving tab, find the Use ASN Serial Numbers option, and check the box.

WMS Configuration					
Document Processor Options	Handheld Op	otions	Notification Options		
General Shipping	Receiving	Inventory T	ransactions	Productions	
Receiving		Lo	ntainers		
Auto Hill Receiving Qty			Scan PO Silver De Container		
Derault 0 - Oser enters quantity     Always 1 - Ose scap per upit		×	Filter By Container		
Default Purchase Order Quantity - Liser can override		•	Scarrbin		
Default Full Batch Oty					
Enable Quick Scan					
Allow Over Receipt					
Prevent Duplicate Batch Scan					
Print Item Label during Receiving None					
Use ASN Serial Numbers					
Enable Blind Receive					
Lindate					



Right below that setting is another option called "Enable Blind Receive". If this is enabled, users will have the option to "blind receive" all Items and Serial Numbers from an ASN file that has already been imported. This option can help when receiving in large shipments. We will talk more about this function later in this document.

If you want to allow this option, just check the box.

Receiving
Auto Fill Receiving Qty
O Default 0 - User enters quantity
Always 1 - One scan per unit
<ul> <li>Default Purchase Order Quantity - User can override</li> </ul>
Default Full Batch Qty
Enable Quick Scan
Allow Over Receipt
Prevent Duplicate Batch Scan
Print Item Label during Receiving None 💌
✓ Use &SN Serial Numbers
Enable Blind Receive



#### **ASN Serial Number UDFs**

With standard SAP, you are able to add User Defined Fields (UDFs) to forms. This includes the ASN Serial Number Detail form that is created by enabling ASN Serial Numbers. We then provide the ability to select up to 30 of those UDFs to be captured during the ASN Import so that you may track additional properties for the serial numbers.

To set this up, you first need to create the UDFs on the ASN Serial Number Details table. For help on how to create UDFs please contact your SAP Support Team or SAP Business One Documentation.

User-Defined Fields - Manage	ment					
Category	Title	Description	Туре	Dflt	Mand.	Index
🔷 🗢 ASN Serial Number Details						
	ItemCode	Item Code	Alphanumeric (20)			
	ItemName	Item Name	Alphanumeric (25			
	ASNSerial	ASN Serial Number	Alphanumeric (32)			
	Status	Status	Alphanumeric (1)	U		
	FileID	File ID	Alphanumeric (10			
	FileImport	File Import Date	Date			
	PODocEntr	PO DocEntry	Numeric (11)			
	PODocNun	PO DocNum	Alphanumeric (10			
	ExpectedD	Expected Date	Date			
	ReceivedD	PO Received Date	Date			
	WMSScanE	WMS Scanned Date	Date			
	DocType	Document Type	Alphanumeric (1)	P		
	ASNUDE	ASN UDF	Alphanumeric (10)			

After you create the UDFs, the next step is to go to the ASN Serial Number UDFs screen to select them (*Administration* > *Achieve One Setup* > *Achieve Warehouse Management* > *ASN Serial Number UDFs*)

Once you are in the screen, choose the UDFs you want to use, in the order you want to see them on the ASN Serial Number screen and in the import file.



ASN Serial Number UDFs					
UDF Field 1	ASN UDF			Ŧ	
UDF Field 2	Not Used				
		-	Not Used		
	U_ASNUDF	-	ASN UDF		
	U_DocType	-	Document Type		
Add Cancel					

Once you have made your selections, hit Add or Update to save them. You will now be able to capture data in those fields during your ASN file import, which we will talk about a little later in this document.

#### Item Master Data

There is no setup necessary on the Item Master Data screen but there is a WMS option that becomes unavailable once you enable ASN Serial Numbers, and that is the "Use Outgoing External Serial Number" option on the WMS Scan tab.



Item Mast	er Data									
Item No. Description Foreign Nam Item Type Item Group UoM Group Price List	Manual re i i i i i i i i i i i i i i i i i i	OutExternalS Outgoing Ex Items Items Standard Price List 01	5er ternal Serialized It	em Bar Cod Unit Pric	e outexea e Primary (	Each urre Each \$2.5	↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	nventory Iter Sales Item Ourchase Item s Quality Che	n 📃 .ck Required ?	Rental Item Hourly Item
General Serialize Requ Requ Requ	Purchasing Data ed Items ire Internal Serial S ire Manufacturer S ire Lot Number Sca	Sales Data can erial Scan n	Inventory Data	Planning Data	Production Data	Dynamic Period Setti	ngs P <u>r</u> operties	Remar <u>k</u> s	Attachments	WMS Scan
Batched Requ Requ Requ Requ Requ Requ	Items ire Batch Attribute ire Batch Attribute ire Batch Attribute ire Batch Expiration ire Batch Expiration ire Batch Admission	1 Scan 2 Scan 1 Date Scan 1 ring Date Sc 1 Date Scan	an		PMS HH Labels					
ок	Cancel	2D Barcode	]							

This is because the ASN functionality requires that you track your serial numbers for all of your transactions, not just outgoing ones.

#### **SAP Procedures**

Now that we are done with the set up let's take a look at the ASN Serial Number screens and functions inside of SAP.

#### **ASN Serial Number Validation**

Achieve One > Achieve Warehouse Management > ASN Serial Numbers > ASN Serial Number Validation



This screen is where you set up validations for the ASN Serial Number imports. Once they are set up, the system will then check these validations as you import in your ASN Serial Number file and determine if the data inside them is valid or not.

ASN Serial Number Valid	ation	
Item Item Description		
Starts With		
Alphanumeric	Min Length Max Length	
Add Cancel		
	1	

You have the option to set one validation record for all items or to set validation records for each item individually.

If you want to set a default for all items, start by checking the DEFAULT box. Since this will not be item specific, the Item and Item Description boxes will be grayed out.

Next, if the serial numbers all start with a specific prefix, you will want to enter that into the Starts With field. Also, if the serial number will contain both letters and numbers make sure you check the alphanumeric box. Lastly, enter in the minimum and maximum character length of the serial numbers and hit Add.

All of the entered information will be validated as you import in your ASN Serial Number file, and if the records in the file do not match these settings, the file will not be imported.



ASN Serial Number Valida	ation				
DEFAULT Item					] 🗉
Item Description					)
Starts With	SNM				]
<ul> <li>Alphanumeric</li> </ul>	Min Length	14	Max Length	16	]
Add Cancel					

If you want to set a validation for a specific item, start by entering in your item code. If you want to pull up a list of items to select from, just use the list picker button to the right of the Item field. After you enter your item, the item description should default in as well.

Then, just like with the default validation setup, enter the serial number prefix, choose your Alphanumeric setting, and enter in the minimum and maximum character length of the serial numbers. After all that is completed, hit Add to save the validation. Do this for as many different items as you need to.

All of the entered information will be validated as you import in your ASN Serial Number file, and if the records in the file are for this specific item and do not match these settings, the file will not be imported.

ASN Serial Number Valida	tion					
Item 🗢	Serialized				8	
Item Description	Serialized Item					
Starts With	SER					
Alphanumeric	Min Length	6	Max Length	8		
Add Cancel						
- Hod Carleer						



#### **ASN Serial Number Import**

Achieve One > Achieve Warehouse Management > ASN Serial Numbers > ASN Serial Number Import

Now that we have the validations set up, this screen is where you will import in the ASN Serial Number files.

ASN Serial Number Impo	rt	
Document Type	Purchase Order	
Purchase Order	3	
File Name		
Browse Cancel	Import	

First you need to choose the document type you are going to import the ASN Serial Numbers against, a Purchase Order or a Goods Receipt. If you choose Purchase Order, then you will need to specify the Purchase Order number in the next field. If you choose Goods Receipt, then you can skip the Purchase Order field and just go straight to the File Name field.

If you know the exact path and name for the import file you can enter it into the File Name field. Otherwise use the Browse button on the bottom to search, locate, and select the import file. Either way, once you have the File Name field filled in, click the Import button.

Before the import begins, a window will pop up showing you the proper format for the ASN file. As you can see in the screenshot the first two columns, Item Code and ASN Serial Number, are mandatory. The rest of the columns, which are the UDFs we set up earlier, are optional. If you are all set, click on Yes to begin the import.



Achieve One System Message	×
Please use the following format:	3
Column 1* (A) is the Item Code.	<u> </u>
Column 2* (B) is the ASN Serial.	
Column 3 (C) is the ASN UDF.	
Column 4 (D) is the Document Type.	
Please note: * Columns are required.	
Do you with to continue?	
Yes No	

Whether you are importing a Goods Receipt or Purchase Order, as the file begins to import it will go through all of the following checks:

#### Column Format of the file



#### Item codes in file exist in the database





#### ASN Number matches Validations that were setup



#### Existing serial numbers in the ASN Serial Number table



When importing against a Purchase Order the following checks will also be done:

Items in file match open line items from PO/PO is Open





Quantity in the file does not exceed open quantity on PO

Achieve One System Message	×
Could not import Serial Numbers due to: File: C:\ASN Files\ASN Test 3.xls item 'Serialized' quantity of '10' exceeds PO open quantity of '9'.	
ОК	

If all the above conditions are met, the file import will complete and all of the ASN Serial Numbers will be added to the database for validation when the items reach the warehouse.

Achieve One System Message	×
Import of Serial Numbers was successful.	
ОК	



#### **ASN Serial Number Details**

Achieve One > Achieve Warehouse Management > ASN Serial Numbers > ASN Serial Number Details

The ASN Serial Number Details screen is where you can view, update or add ASN Serial Numbers individually.

If you enter new ASN Serial Numbers against a Purchase Order via this screen, and it is before the GRPO is created, then when the items are received they will be validated.

ASN Serial Number Deta	ails				
Item	Serialized		File ID	ASN Test 3	
Item Description	Serialized Item		File Import Date	01/08/16	
ASN Serial Number	SER615		Document Type	Purchase Order	•
Status	Unconfirmed	*	Doc #	-> 10142	
			Expected Date	01/08/16	
			PO Receipt Date		
			WMS Scan Date		
ASN UDF Document Type	Purchase Order	<b></b>			
OK Cancel					

Item Item Description	The item number that the ASN Serial Number belongs to. The description of the item that the ASN Serial Number belongs to.
ASN Serial Number Status	<ul> <li>The ASN Serial Number for this record.</li> <li>An ASN Serial Number can have 2 status: <ul> <li>Unconfirmed – The ASN Serial Number exists in the database but has not yet been scanned by WMS.</li> </ul> </li> </ul>
File ID File Import Date	<ul> <li>Confirmed – The ASN Serial Number exists in the database and has been scanned by WMS.</li> <li>The name of the import file for this ASN Serial Number.</li> <li>The date that the file was imported for this ASN Serial Number.</li> </ul>



Document Type	The document type that this ASN Serial Number was imported against.
Doc #	If the Document Type is a Purchase Order, this is the PO Number that the ASN Serial Number was imported against. If the Document Type is a Purchase Order, this is the PO's
Expected Date	estimated delivery date. Note, this date will be updated at time of file import only and will not refresh if a user changes it on the PO after the file import. If the Document Type is a Purchase Order, this is the Goods
PO Receipt Date	Receipt PO's actual date. This is the date that the ASN Serial Number was first scanned by
WMS Scan Date	the WMS handheld. Note, if you use the Blind Receive function, this date may differ than the PO Receipt date.

On the bottom half of screen you will also see any UDFs that were added during the ASN setup configuration.

Once you are done entering or editing the data you can click on Add/Update to save it.

#### **ASN Serial Number Removal**

Achieve One > Achieve Warehouse Management > ASN Serial Numbers > ASN Serial Number Removal

The ASN Serial Number Removal utility can be used to find and remove incorrect or historical ASN Serial Number information that is no longer needed. You can remove ASN Serial Numbers one at a time or in bulk.



ASN Serial Number R	emoval		
Item Number		Serialized	Ð
ASN Serial Number			
Create Date	From	То	
WMS Scan Date	From	То	
Status		Unconfirmed 🔹	
File ID		ASN Test 1	Ð
Remove	el		

Start by filling in as much or as little criteria for the ASN Serial Number(s) you want to remove.

Item Number	Enter in the SAP item number or leave blank for all items.
ASN Serial Number	Enter in the WMS ASN Serial Number or leave blank for all serial numbers.
Create Date	Enter a date range for the create dates of the ASN Serial
	Numbers you want to remove or leave blank to include all create dates .
WMS Scan Date	Enter a date range for the WMS scan dates of the ASN Serial Numbers you want to remove or leave blank to include all scan dates.
Status	Choose either Confirmed or Unconfirmed ASNs. Select the ASN Import File ID for the serial numbers you want to
File ID	remove.

Once all of your criteria has been entered, you can hit the Remove button on the bottom. That will pop up a window that tells you how many ASN Serial Numbers will be removed and confirm the removal criteria information. If everything looks good you can select YES to complete the removal of the ASN Serial Numbers.



Achieve One System Message	×
This will remove 10 records.	?
Item Code: Serialized	<u> </u>
Create Date: From Beginning To: Ending	
WMS Scan Date: From Beginning To: Ending	
Status: Unconfirmed	
File ID: ASN Test 1	
Proceed ?	
Yes No Cancel	

Achieve One System Message	×
10 Records Were Removed.	
Removal was successful.	
ОК	

**Note**: There is no way to undo the removal, so make sure that removing the selected ASN Serial Numbers is what you want to do before hitting Yes.

#### **ASN Serial Number Blind Receive**

Achieve One > Achieve Warehouse Management > ASN Serial Numbers > ASN Serial Number Blind Receive

If the Enable Blind Receive option is checked in your WMS Configuration, then this screen will be available to you. It will allow you to receive in serialized items based on an ASN import file, without using the WMS handheld or manually creating a Receipt in standard SAP. When using this feature you are assuming that the ASN file the vendor sent you is accurate for the receipt and therefore will confirm the serial numbers during the transfer/put away process (which we will see later on in this document).

To start, select the document type that you want to receive; Goods Receipt or Purchase Order.



If you select Goods Receipt you will not have to select a PO number, but you will have to select which Warehouse and Price List to use for the Goods Receipt.

ASN Serial Number B	lind Receive		
Document Type	Goods Receipt	▼	
Purchase Order		(=)	
Warehouse	Miami, FL	*	
Price List	Price List 03	*	
File ID		(3)	
Receive	:el		

If you select Purchase Order you will have to select which PO number you are receiving against, but you will not have to choose a Warehouse or Price List since the PO will already have that information in it.

ASN Serial Number Blind R	teceive
Document Type	Purchase Order
Purchase Order	10142
Warehouse	Port Jefferson, NY
Price List	Last Purchase Price
File ID	
Receive	



Next, select the File ID for the ASN Serial Number import that you want to receive. Once all the information looks good you can hit the Receive button on the bottom.

ASN Serial Number E	lind Receive	
Document Type	Purchase Order	
Purchase Order	10142	
Warehouse	Port Jefferson, NY	
Price List	Last Purchase Price	
File ID	ASN Test 3	
	>	
Receive	Processing 8 Serials for line U	

If the receipt cannot be added it will pop up a window explaining why, otherwise you will receive a message that the receipt was successful.

Achieve One System Message	×
Creation of Blind Receipt was successful.	
ок	

If you go to the ASN Serial Number Detail screen and look up one of the serial numbers that was just received, you will see that the PO Receipt Date has been filled in but the WMS Scan Date is still blank and the Status is still "Unconfirmed". That is because an ASN Serial Number does not get confirmed until it has been scanned by the WMS handheld. When using the blind receive function, since the serial numbers will already be received, they will not be scanned until they are transferred or put away. Their status will be changed to "Confirmed" and their WMS Scan date will be set once the transfer/put away process is completed on the handheld.



#### **Handheld Procedures**

With ASN Serial Numbers enabled, the WMS handheld will perform certain checks when working with serial numbers in the Receive PO, Transfer, and Directed Put Away screens.

#### **Receive PO**

🔡 A1	WM E	mulato	۲		_ 🗆 X	
Hea	ader	ltem	]			
		_	Receiving			
w.	areho	<b>use</b>  02		Ψ.		
PO # 10148						
	Item			Finish		
				0	ancel	
	Item	1	Description		Bin	
►	Seri	alized	Serialized It	tem	02-RE(	
4						
	Hide	Finishe	d			
		Rec	eiving Men	u		

When receiving in a serial managed item, the handheld will first check the following conditions before allowing a serial number to be added; 1. Does this serial number exist in the ASN Serial Number data? 2. Does this serial number belong to the same item code that is being received? 3. Is the status of this ASN Serial Number "Unconfirmed"?

If the answer to any of these questions is no, then the user will not be able to receive that serial number.





When that happens, your options are to continue on and set this serial number aside for review or manually add the serial number to the ASN Serial Number Detail screen like we saw earlier, so that it can be received now.

If the answer to all of the above questions is yes, then the system will allow you to continue on with the receipt. Once the receipt is finished on the handheld, the ASN Serial Number Detail records will have their statuses updated to "Confirmed" and their WMS Scan Dates set to today.

item 🤟	Serialized		File ID	ASN Test 2	
(tem Description	Serialized Item		File Import Date	01/08/16	
ASN Serial Number	SER601		Document Type	Purchase Order	•
Status	Confirmed	•	Doc #		
			Expected Date		
			PO Receipt Date		
			WMS Scan Date	01/12/16	
Document Type	Purchase Order	*			
	1				



#### **Transfers and Directed Put Aways**

🔜 AWM Emulator	🛃 AWM Emulator
Warehouse Transfer	Header Item
From Wh 02	Directed Put Away
ToWh 02	Warehouse 02
Item Serialized	Receive Bin 02-REC
Qty 1 Each ▼	Item
From Bin 02-REC Add	Clear Load
To Bin 02-D-9 Clear	Bin Item Qty UOM [
Item Qty UOM From Whse	▶ 02-SER Serialized 2 Pack 8
Cancel Finish	I
Inventory Menu	Receiving Menu

When using the blind receive option with ASN Serial Numbers, you will not be doing your receiving on the handheld since the receipt will have already been completed. That means, as we mentioned earlier, those serial numbers will not be Confirmed or have a WMS Scan Date yet. However, once you use the Transfer or Direct Put Away screen from the handheld, those fields will be set.

As you enter in your serial numbers, the handheld will perform a couple of checks; Does this serial number exist in the ASN Serial Number data? Does this serial number belong to the same item code that is being received?

If the answer to either of these questions is no, then the user will not be able to transfer or put away the serial number.

At this point, your options are to continue on and set this serial number aside for review or manually add the serial number to the ASN Serial Number Detail screen like we saw earlier so that it can be transferred or put away now.



If the answers to the questions are yes, then the system will allow you to continue on with the transfer or put away. Once you have finished on the handheld, the ASN Serial Number Detail records will have their statuses updated to "Confirmed" and their WMS Scan Dates set to today.

200	🗢 Serialized		File ID	ASN Test 3	
Item Description	Serialized Item		File Import Date	01/08/16	
ASN Serial Number	SER617		Document Type	Purchase Order	•
Status	Confirmed	•	Doc #	-> 10142	
			Expected Date	01/08/16	
			PO Receipt Date	01/11/16	
			WMS Scan Date	01/12/16	
ASN UDF					
ASN UDF Document Type	Purchase Order	•			
ASN UDF Document Type	Purchase Order	T			
ASN UDF Document Type	Purchase Order	<b></b>			
ASN UDF Document Type	Purchase Order	<b>*</b>			

**Note**: If you are using the transfer or put away screen and the ASN Serial Numbers have already been scanned, then their status and WMS Scan Date will not be updated again.



#### **Goods Receipt**

When using the Goods Receipt screen on the handheld, WMS will not provide any of the above validations for the serial numbers, however it will add ASN Serial Number Detail records for them when you finish.

ASN Serial Number Details	5			
Item 📫	Serialized	File ID		
Item Description	Serialized Item	File Import Date	01/12/16	
ASN Serial Number	SERSER	Document Type	Goods Receipt	
Status	Confirmed 💌	Doc # 🔷	78	
		Expected Date	01/12/16	
		PO Receipt Date	01/12/16	
		WMS Scan Date	01/12/16	
ASN UDF Document Type OK Cancel	Goods Receipt 💌			

#### **Production Receipt**

When using the Production Receipt screen on the handheld, WMS will not provide any of the above validations for the serial numbers, however it will add ASN Serial Number Detail records for them when you finish.



ASN Serial Number Detai	ls				
Item 🗧	Serialized		File ID	ASN Test 3	
Item Description	Serialized Item		File Import Date	01/08/16	
ASN Serial Number	SER615		Document Type	Production Receipt	•
Status	Confirmed	*	Doc #	-> 10142	
			Expected Date	01/08/16	
			PO Receipt Date	01/11/16	
			WMS Scan Date	01/12/16	
Document Type	Production Receipt				
Document Type	Production Receipt	•			
Update Cancel					