RESOLV ADVANCED ALLOCATIONS

USER MANUAL

Version 10.0

PRESENTED BY

VISTAVU SOLUTIONS

Resolv Advanced Allocations is part of the Resolv Suite, which has been certified by SAP as conforming to SAP's standards for Business One add-on solutions.

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SAP Business One Integration

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RESOLV ADVANCED ALLOCATIONS
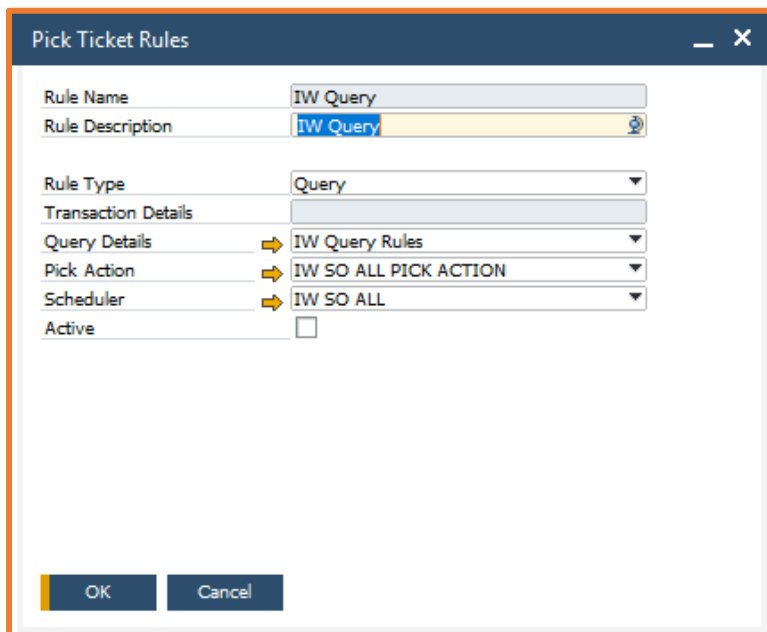**USER GUIDE**

Table of Contents

Advanced Allocations

We have created a module called Advanced Allocations that allows you to create rules for auto-generating pick lists, so you do not have to manually use the Pick Pack manager all day long to create and release pick lists to your warehouse. This utilizes the Resolv Processor to automate this process based on the rules and schedules you set up.

Note, if you also have **Resolv Order Reservations**, this new module will take that into account when deciding what item quantities are available for creating/releasing pick lists.

Configuration

Once the module is installed you need to define your Pick Ticket Rules. This is so the module knows what documents and items to create pick lists for, how often to create them, and how to configure them (what bins to allocate from, who to assign to the pick list, etc.). You will define this all in the Pick Ticket Rules screen.
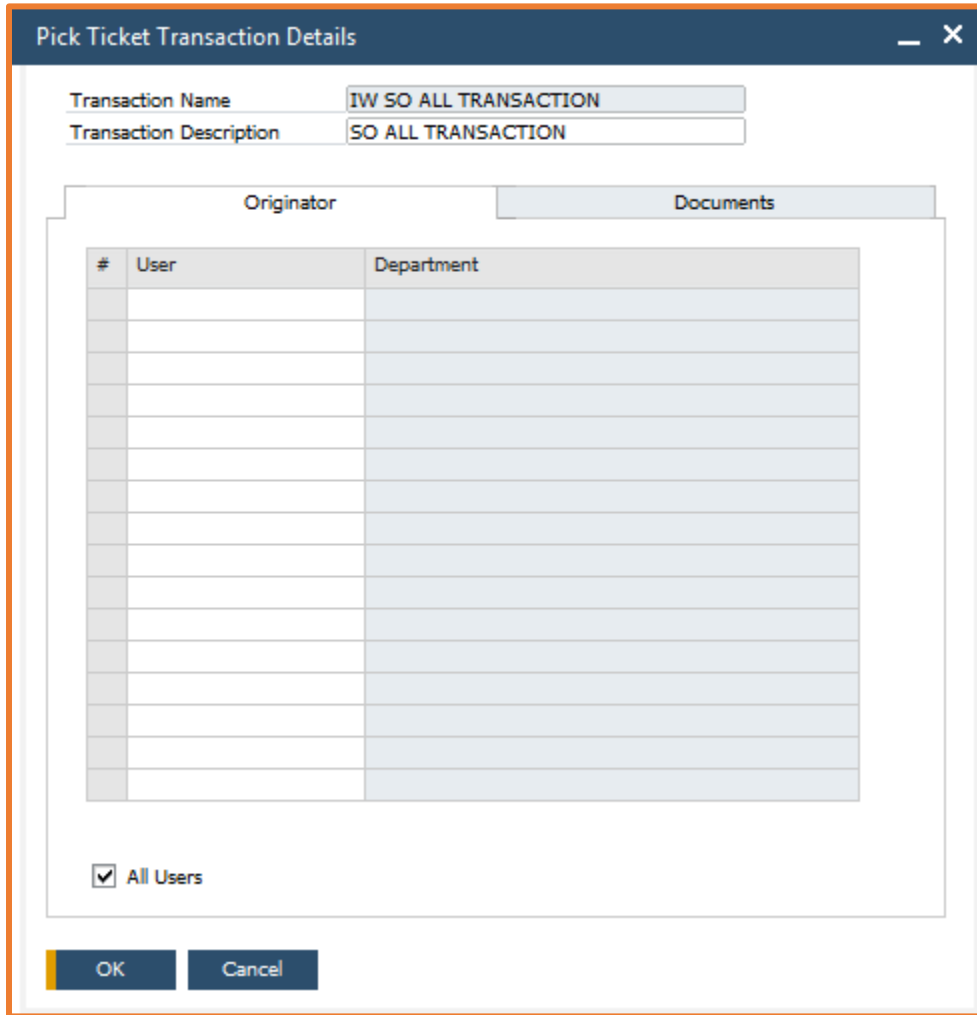

But before you can create the rules themselves you have to define a few other things, starting with determining whether you want to set up a Query Rule or a Transactional Rule.

The main difference between the 2 is that a query rule will run a query every X minutes (determined by your scheduler, which we will discuss in a little bit) and the results of that query will be the transactions the module evaluates for pick list generation. A transactional rule will check ALL selected transactions every X minutes and evaluate them for pick list generation. We will start by looking at the Transactional Rule type.

Transaction Detail

To set up a Transactional Rule type we first will need to set up a Pick List Transaction Detail record, so start by opening that screen from the main menu. Once in the screen give the record a name and description, then on the Originators tab enter in the users whose transactions you want evaluated. If you want all user transactions evaluated, then just select the All Users checkbox at the bottom of the screen.

Then on the Documents tab choose which document type this rule is going to be for (you can only choose one document type per rule).

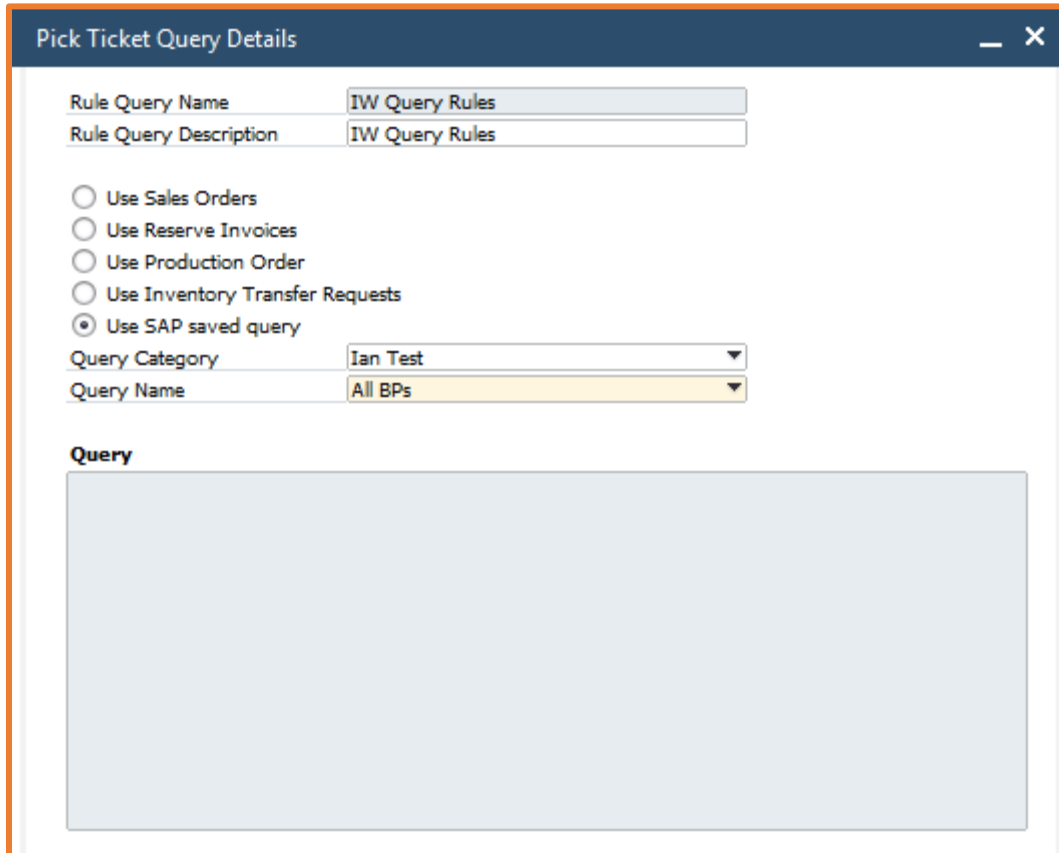## Pick Ticket Transaction Details

Transaction Name: IW SO ALL TRANSACTION
Transaction Description: SO ALL TRANSACTION

Originator | **Documents**

- ⦿ Use Sales Orders
- ○ Use Reserve Invoices
- ○ Use Production Order
- ○ Use Inventory Transfer Requests

- ⦿ Always
- ○ When the following query applies

OK   Cancel

Query Detail

Now let's look at a Query Rule type. For this we will need to set up a Pick List Query Detail record, so start by opening that screen from the main menu. Once in the screen give the record a name and description. Then you need to decide if you want to enter in a document specific query directly in this screen or use a query that you have already created inside of the SAP Query Manager. If you want to use a saved SAP Query, then choose that radio option and select the appropriate SAP query.

If you want to enter in a document specific query, then first we need to select the document type this rule is going to be for (you can only choose one document type per rule). Then in the Query box below, enter in your query for this rule.

Here are some basic query templates to use if you like. The main one will release all Open and Approved Sales Orders.

SELECT
'Picker 1' AS "Name",
IFNULL(OUSR."U_NAME",'') AS "Owner Code",
ORDR."DocDate" AS "Pick Date",
ORDR."Comments" AS "Remarks",
'Y' AS "Inventory UoM",
ORDR."DocEntry" AS "Order Entry",
ORDR."DocNum" AS "Doc No",
RDR1."LineNum" AS "Order Row ID",
RDR1."OpenInvQty" - SUM(IFNULL(PKL1."PrevReleas",0)) AS "Released Quantity",
ORDR."ObjType" AS "Base Object Type",
RDR1."ItemCode" AS "Item No."

FROM ORDR
LEFT JOIN RDR1 ON RDR1."DocEntry" = ORDR."DocEntry"

LEFT JOIN OUSR ON OUSR."USERID" = ORDR."UserSign"
LEFT JOIN OSHP ON OSHP."TrnspCode" = ORDR."TrnspCode"
LEFT OUTER JOIN PKL1 ON PKL1."BaseObject" = ORDR."ObjType" AND PKL1."OrderEntry" =
ORDR."DocEntry" AND PKL1."OrderLine"= RDR1."LineNum" AND PKL1."PickStatus" NOT IN ('C')

WHERE ORDR."Confirmed" = 'Y' AND ORDR."DocStatus" = 'O'

GROUP BY
1,
OUSR."U_NAME",
ORDR."DocDate",
ORDR."Comments",
5,
ORDR."DocEntry",
ORDR."DocNum",
RDR1."LineNum",
RDR1."OpenInvQty",
ORDR."ObjType",
RDR1."ItemCode"

And then these are some additional filters you can add to the query:

a specific BP code
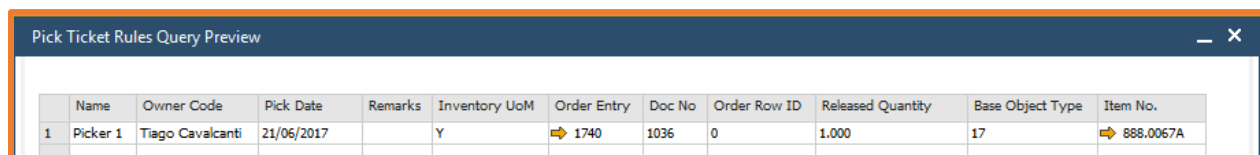*AND ORDR."CardCode" = 'C100'*

a specific item code
AND RDR1."ItemCode" = 'ps001'

a specific shipping type
AND OSHP."TrnspName" = 'UPS Ground'

a specific warehouse
AND RDR1."WhsCode" = '01'

all with delivery dates of today or prior
AND ORDR."DocDueDate" < (SELECT CURRENT_TIMESTAMP FROM DUMMY)

Once you have your query written, you can use the Preview button on the bottom to first see if your query is valid, and then see its results. That way you know if the query is written the way you want and evaluating the correct documents.

	Name	Owner Code	Pick Date	Remarks	Inventory UoM	Order Entry	Doc No	Order Row ID	Released Quantity	Base Object Type	Item No.
1	Picker 1	Tiago Cavalcanti	21/06/2017		Y	➡ 1740	1036	0	1.000	17	➡ 888.0067A

Pick Ticket Rules Query Preview

Actions Detail

Now that we have our Transaction or Query Details set up, we can move onto the next step; setting up the Actions Details.

In this screen we will choose different criteria for creating the pick lists starting with the Input Actions tab. On this tab you will decide if you only want to release lines from a document that can be 100% fulfilled, release all lines with whatever quantities you have currently available, or only release lines if the entire document is 100% fulfillable. There is also a checkbox to include Non-Inventory Items as well.

Also, if you are utilizing Resolv Order Reservations, you can choose to only release lines if the entire document has been Consolidated. This is a function you can read more about in the **Resolv 10.0 Order Reservation User Guide.**

Next on the Bin Allocations tab you will choose any warehouse bin filters you want to use when creating these pick lists. These will work the same as the filters you find in the standard SAP Pick List Generation Wizard, meaning if you set values in here, the pick lists will only allocate from bins that fall within them.

There are 2 sub-tabs on the Pick List Generation Parameters tab, and they are both right out of the SAP Pick List Generation Wizard also; Split Pick Lists By and Automatic Allocation. They both function the same exact way here in Advanced Allocations as they do in standard SAP.

On the Automatic Allocation tab there are 2 additional Resolv related options; the first, is to use your own Custom Allocation Rule (which we will discuss later on in this document), and the second, would be to enable the Consolidated Order Reservations (which you just mentioned above) for this particular Pick Ticket Action.

There are 4 sub-tabs on the Pick List Details tab; Pick Date, User, Picker, and Remarks. You can use these to determine the specific data to be used on the generated pick lists such as the assigned picker or pick list date.

Pick Date	User	Picker	Remarks

Specific User [▼]

Automatic Assignment
- ○ User With Least Open Pick Tickets
- ○ User With Least Open Pick Ticket Rows
- ○ User With Least Open Pick Ticket Quantity
- ◉ Query Field 'Owner Code'

Employee Filters
Role [▼]
Team [▼]

Pick Date	User	Picker	Remarks

Specific Picker [Mr Pickerson   ]

Automatic Assignment
- ◉ Match User
- ○ Query Field 'Name'

Pick Date	User	Picker	Remarks

Specified Remarks [Pick my stuff   ]

Automatic Assignment
- ◉ Demand Documents 'Pick and Pack Remarks'
- ○ Query Field 'Remarks'

Service Scheduler

After you have your Action Details set up we now have to create schedules for the rules to run on. To do this open the Advanced Allocations Scheduler Setup screen from the main menu and choose your options.

Note, there is a button on the top right that says Rules In Schedule. After you have set up all your Advanced Allocation rules and schedules, you can come into this screen anytime you want, pull up a specific schedule, click on that button, and it will show you which rules are assigned to it.

Custom Allocation Rules

As I mentioned above, if you do not want to use the standard SAP Bin Allocation options, you can create your own Custom Bin Allocation Rules based on a query.

At the top of the screen, we give you the available query parameters you can use and their correct syntax. We also give you the mandatory list and order of the columns needed for your query to work. This query can be as simple or as complex as you like, but since you can use the standard SAP rules and our Pick Action filters for more simple allocation rules, the queries used in this screen will most likely be complex. If you ever need assistance feel free to reach out to support and we can connect you with the professional services team to get you going.

Once you think you have your query set, you can click the Preview button at the bottom to see what the allocations may look like.

Pick Ticket Rules

So now that we have our Transaction/Query Details, Pick Actions, and Schedules set up, we can set up the actual Rules themselves. Start by opening the Pick ticket Rules screen from the main menu.

Giving the Rule a name and description, then choose your Rule Type (Query or Transactional) and corresponding Query or Transaction Detail record.

Next select your Pick Action for this rule as well as which schedule you want this rule to run on. There is also an Active checkbox on the bottom that you can use to activate and deactivate your Pick Ticket Rules as you continue your use of Advanced Allocations.

Now that you have configured Advanced Allocations, let's see how it works.

Processes

Advanced Allocations will use the Resolv Processor to run your Pick Ticket Rules on the schedules you have set up. As each schedule runs it will select which documents to evaluate for pick ticket generation and then determine how to create those pick tickets that it wants to release, all based on your rule configurations. This will all happen automatically but there are a couple of screens that will be of use to you to help monitor this automated process.

Pick Ticket Manager

The Pick Ticket Manager will allow you to preview the documents that will be evaluated on the next scheduled run of the Resolv Processor. You can use different filters like Rule, BP Code, or Posting Date to narrow down your search.

You can also use this screen to manually push documents through Advanced Allocations if you do not want to wait for the next scheduled run or you just feel like running it manually. To do this select the rows you want to send through and hit the Process button at the bottom.

	Document Type	Doc Num	BP Code	BP Name	Contact	Created By	Entry Date	Document Date	Document Amount
1	Sales Order	1229	L10001	Andreas Ackermann	James Sanders	Cuadra, Christine	03/04/2020	03/04/2020	15,000.00
2	Sales Order	1230	SBC	South Branch Customer		Cuadra, Christine	03/04/2020	03/04/2020	15,000.00
3	Sales Order	1240	C23900	Parameter Technology	Daniel Brown	Cuadra, Christine	10/04/2020	10/04/2020	4,222.00
4	Sales Order	1241	C23900	Parameter Technology	Daniel Brown	Cuadra, Christine	10/04/2020	10/04/2020	4,222.00
5	Sales Order	1242	C23900	Parameter Technology	Daniel Brown	Cuadra, Christine	10/04/2020	10/04/2020	4,222.00
6	Sales Order	1259	C20000	Centerport Components	Amanda Costner	Ian O'Walsh User	20/11/2020	20/11/2020	0.00
7	Sales Order	1260	C20000	Centerport Components	Amanda Costner	Ian O'Walsh User	20/11/2020	20/11/2020	0.00
8	Sales Order	1261	C20000	Centerport Components	Amanda Costner	Ian O'Walsh User	20/11/2020	20/11/2020	0.00
9	Sales Order	1262	C20000	Centerport Components	Amanda Costner	Ian O'Walsh User	20/11/2020	20/11/2020	0.00
10	Sales Order	1263	C20000	Centerport Components	Amanda Costner	Ian O'Walsh User	20/11/2020	20/11/2020	0.00
11	Sales Order	1264	C20000	Centerport Components	Amanda Costner	Ian O'Walsh User	20/11/2020	20/11/2020	6.50
12	Sales Order	1267	C99999	One Time Customer		Cuadra, Christine	13/01/2021	13/01/2021	1,000.00
13	Sales Order	1268	C954000	Walkup Inc	Daryl	Cuadra, Christine	13/01/2021	13/01/2021	900.00

Pick Ticket History

The Pick Ticket History screen is extremely helpful when trying to see what happened during a pick list run. First filter by date range and then choose if you want to see runs that were successful (Completed) or runs that had issues (Errors). After you do that click on the Search button at the bottom of the screen and it will bring up the matching pick list run results.

The grid will show you information about the matching runs such as which rule it was, if it ran manually or by the processor, the date and time it ran as well as how many successes and/or failures there were.

If you then highlight a row and click on the Details button at the bottom of the screen, it will bring up a secondary screen showing you each individual document and row in that run, how it was evaluated, and what issues, if any, the system had generating a pick list.

You may notice the button on the bottom labelled Transfer. If you are using a pick rule with the setting of "Only Release lines if Document is 100% fulfillable", and your pick list has some items with quantities available, but those quantities are in bins that do not allow allocations (standard SAP "Exclude from Auto. Alloc. On Issue" checkbox), the system will fail the generation of the pick list but put a letter "T" in the Completed column. It will also give you information on those bins where the item has quantities but it is not allowed to allocate from.
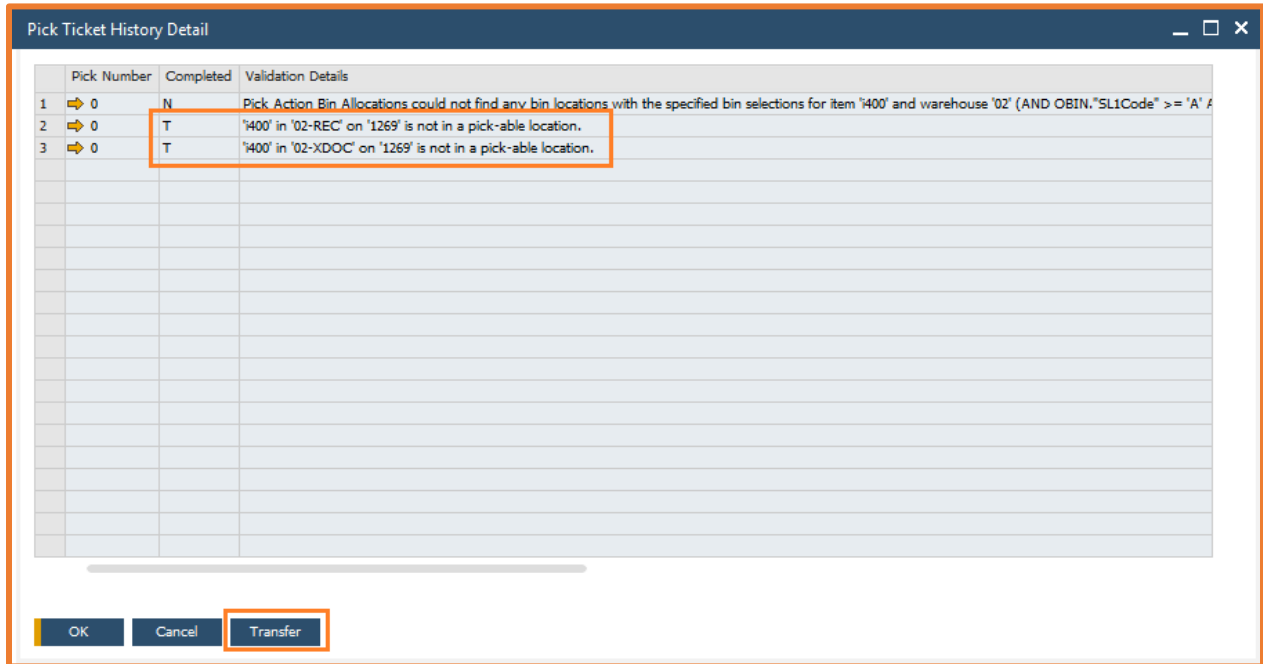
If you see this, you can click on that Transfer button and it will open a new window called Pick Ticket History Transfers. This will show all these instances for the entire pick list schedule that you are reviewing in one clean list. You can then use this list as a guide for creating a transfer document to move the items into allocatable bins, so that you can re-run the Advanced Allocation rule and your pick lists will now be able to be generated.