



ERP-1493 System Interface - Allocation.tab interface to Maestro

Status	Approved
Owner	BROWN-ext, Kevin
Stakeholders	NARAHARI-ext, Bhargavi GARG-ext, Praful
Jira Request ID	 ERP-1213 - Jira project doesn't exist or you don't have permission to view it.
Jira Development ID	 ERP-1493 - Jira project doesn't exist or you don't have permission to view it.

High- Level Specification

Implementing System	Kinaxis Maestro
Invoked by/Invokes	 ERP-1492 - Jira project doesn't exist or you don't have permission to view it.
Business Process Reference	04.04.06.01. Data provisioning ERP to Maestro

Functional Overview

Allocation identifies dependent demand items generated because a Work Order (Scheduled Receipt) is created for a Make item. This demand represents requirements for Shop Orders that have not yet been Released. It exists to show inventory that is committed to production, even if the order is still in progress.

For example, when a Work Order has begun on the production floor and components have already been kitted (pulled from Inventory) and delivered to the floor, the Scheduled Receipt should reflect a status of "Released/Allocated" so the BOM does not explode for components already taken. However, if there is still an outstanding requirement, such as Packaging Material that has not yet been issued, an Allocated record is created against the Scheduled Receipt to represent that remaining requirement. This allows the system to track what is already consumed versus what is still needed.

Scope and Objectives

The scope of this interface is between Global Integration Suite and Maestro. This document includes details of the Allocation.tab object.

The objective is to populate the Allocation and it's referenced tables based on the file provided by Global Integration Suite.

Process Flow Diagram



Source page access restriction: Click the link below to check if the page is accessible.

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Step	Description
1	Global Integration Suite transfers transformed Composites / Rest of World data from S/4, and performs some formatting, and sends the data to Maestro.
2	China Integration Suite transfers transformed China data from S/4, and performs some formatting, and sends the data to Maestro.
3	Transferred files will be sent to Maestro's Client SFTP server. This sits outside of the Maestro firewall and is accessible by client using a user id/ password. Files are transferred from this component to the Planning Server SFTP by a Kinaxis automatic process once the trigger file has been placed (see below)
4	Files are moved to this SFTP server automatically, where they await loading into Maestro.
5	Maestro uses the configured DSM (Data Sources and Mapping) setup to load the data into the Allocation table, with the load initiated either manually or through a scheduled system task.
6	The Data Tables which store information in Maestro

Assumptions

See [OnHand.tab System Interface](#) document for assumptions.

Dependencies

See [OnHand.tab System Interface](#) document for dependencies.

Security, Integrity and Controls

See [Application Architecture Kinaxis Maestro](#) for security requirements for SFTP/REST based authentication and security.

Configuration Requirements

The Data Sources and Mapping for this interface should be configured once, according to the structure in the Data Structure section below.

The Data Model needs to be configured with the Syway-specific fields shown in the Data Model Custom Fields section below.

Special Requirements

None

Design Rationale

The base of this design has been taken from the existing Maestro implementation, as designed during the Advanced Planning System (APS) Project.

A fit-gap analysis was undertaken within Syway, and changes were identified which have been incorporated into the Syway spec as shown.

API Use

The data object provided by either Integration Suite will be **consumed** by Maestro.

For more information see the [Data Integration Document](#).

Data Structure

The following Maestro fields will be populated by the file provided by Integration Suite:

Column Number	Field Name	Technical Field Name	Data Type	Key	Field Type	Autocreate	Description
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0	BOMAlternate	ScheduledReceipt.BOMAlternate.Value	Ref String	Y	FixedValue	Default	Alternate Bill of Material associated with the scheduled receipt used for allocation. This value is fixed in the Allocation object.
0	Line	ScheduledReceipt.Line	Ref String	Y	FixedValue	Default	Line number of the scheduled receipt. Fixed value in Allocation to support receipt line identification.
1	OrderId	ScheduledReceipt.Order.Id	Ref String	Y	ExtractField	Default	Unique identifier of the scheduled receipt order that drives the allocation.
2	OrderType	ScheduledReceipt.Order.Type.Value	Ref String	Y	ExtractField	Default	Type of the originating order for the allocation (for example, purchase or production order).
3	OrderSite	ScheduledReceipt.Order.Site.Value	Ref String	Y	ExtractField	Default	Site / plant associated with the scheduled receipt order.
4	BaseKey	BaseKey	String	N	ExtractField	Default	Unique technical key used to uniquely identify the allocation record.
5	BatchPartName	Batch.Part.Name	Ref String	Y	ExtractField	Default	Batch-level part associated with the allocated quantity.
5	PartName	Part.Name	Ref String	Y	ExtractField	Default	Part identifier being allocated. Shares the same ordinal as the batch part name.
6	BatchPartSite	Batch.Part.Site.Value	Ref String	Y	ExtractField	Default	Site associated with the batch-level part for the allocation.
6	PartSite	Part.Site.Value	Ref String	Y	ExtractField	Default	Site / plant of the part being allocated. Shares the same ordinal as the batch part site.
7	DueDate	DueDate	Date	N	ExtractField	Default	Required date by which the allocated quantity is needed.
8	TotalQuantity	TotalQuantity	Quantity	N	ExtractField	Default	Total quantity allocated to the scheduled receipt.
9	RemainingQuantity	RemainingQuantity	Quantity	N	ExtractField	Default	Quantity remaining to be allocated or fulfilled.
10	BatchId	Batch.Id	Ref String	N	ExtractField	Y	Unique identifier of the batch associated with the allocation.

File Formats

See *File Formats - SFTP* section in the [Data Integration Document](#).

Data Model Allocation table settings:

Allow Data update to:		Currency		
Insert, Modify and Delete records	Insert and Modify records only	Allow automatic record creation	Determined by Maestro	Expression
Y	-	N	Y	-

Data Model Allocation custom fields:

There are no custom fields for this data object.

Processing Logic

See *Processing Logic - SFTP* section in the [Data Integration Document](#).

Delta or Full Load Requirements

~~This file will be a Full Load, sent 3 times a day, so the file has been loaded at the beginning of day for each global region. If Allocation is omitted from any of these loads, the Allocation data within Maestro will be unchanged.~~

The preference is to do a full load.

For more information on the difference between Full and Delta loads, see the *Full Loads and Delta Loads - SFTP* section in the [Data Integration Document](#).

Interface Alert & Monitoring

See the *Interface Alert & Monitoring - SFTP* section in the [Data Integration Document](#),

Language Requirements

None

User Interface Requirements

Not required.

Sequencing

Reference tables to support Allocation table data have to be either loaded manually before loading the Allocation table or at the same time as the Allocation table is loaded or set to be created automatically in data model or in DSM.

Below tables need to be taken into account before Allocation table data load:

Table	SyWay configuration
Batch	To be loaded before or with Allocation
Part	To be loaded before or with Allocation
Scheduled Receipt	To be loaded before or with Allocation

Volumetrics

Current APS Volume of Allocation records is 127,000. Because APS makes up approximately 60% of Syway projected records, an expected estimate for Syway is therefore 210,000

This value is expected to grow by 1-2% per year.

Performance Consideration

N/A

Error Handling

See Interface Alert & Monitoring section.

Testing

How to Test

Testing of the interface consists of executing the data load into Maestro and validating the results using standard monitoring and validation tools. After each load, the **Data Import and Update** log is reviewed to confirm successful execution and to identify any errors or warnings generated during the load process.

Loaded data is then validated using a **Data Validation** workbook to ensure data completeness and correctness. Validation checks include confirming that required fields are populated, values are displayed in the correct format, and that data quality issues such as blank fields, incorrect quantities, or zero or invalid unit costs are not present. Additional checks may be performed to ensure consistency across key attributes such as part, location, and quantity.

Any errors or data issues identified during testing are documented in the agreed issue tracking mechanism (for example, in Jira or an action log). Most common error types are duplicate errors, missing references, junk values in input fields.

Duplicate errors need further investigation, in case valid data is flagged as duplicate by Maestro during data load and key field combinations have to be looked into for data uniqueness.

Missing references are to be resolved by either providing the missing data that is required to support the file upload (this could be in the form of a file or Maestro settings to allow for the data to be created automatically) or removing the references from the file.

Required corrections are implemented in the middleware (Integration Suite), and the data is reloaded. Validation steps are repeated until no errors are present (or reasons are fully understood).

Test Conditions and Expected Results

1	Data Load Successful	The Data in the data file matches the data in the Maestro table, and there are no errors.										
2	Data File contains 0 records	The Data Update should fail with a status of Pending.										
3	Data File contains invalid references (or other error)	<p>The Data Update should Fail, the invalid references should be visible in the error log and the records with the error are not loaded into Maestro, and an alert is sent to the Admin team <Or whatever action is needed></p> <p>Fields for Allocation.tab which should be checked for invalid references are shown in the Data Structure table above as "Ref String" and are:</p> <table border="1" style="margin-left: 20px;"> <tr><td>ScheduledReceipt.BOMAlternate.Value</td></tr> <tr><td>ScheduledReceipt.Line</td></tr> <tr><td>ScheduledReceipt.Order.Id</td></tr> <tr><td>ScheduledReceipt.Order.Type.Value</td></tr> <tr><td>ScheduledReceipt.Order.Site.Value</td></tr> <tr><td>Batch.Part.Name</td></tr> <tr><td>Part.Name</td></tr> <tr><td>Batch.Part.Site.Value</td></tr> <tr><td>Part.Site.Value</td></tr> <tr><td>Batch.Id</td></tr> </table>	ScheduledReceipt.BOMAlternate.Value	ScheduledReceipt.Line	ScheduledReceipt.Order.Id	ScheduledReceipt.Order.Type.Value	ScheduledReceipt.Order.Site.Value	Batch.Part.Name	Part.Name	Batch.Part.Site.Value	Part.Site.Value	Batch.Id
ScheduledReceipt.BOMAlternate.Value												
ScheduledReceipt.Line												
ScheduledReceipt.Order.Id												
ScheduledReceipt.Order.Type.Value												
ScheduledReceipt.Order.Site.Value												
Batch.Part.Name												
Part.Name												
Batch.Part.Site.Value												
Part.Site.Value												
Batch.Id												
4	Data file contains duplicates	The Allocation.tab file must be checked further for data uniqueness with respect to the key fields, in case data is available in file but not in Maestro										

Test Considerations/Dependencies

Dependent files should already be loaded into Maestro for these tests to complete. See Sequencing section above.

Other Information

Development Details

Package

Package Name	Parent Package

Other Development Objects

Object Type	Object Name	Purpose/High Level Logic	Design Rationale Reference

Appendix

See also

File **Modified**







No files shared here yet.

Change log

Version	Published	Changed By	Comment
CURRENT (v. 5)	Apr 02, 2026 12:23	JAIN-ext, Dhiraj	
v. 4	Mar 03, 2026 16:27	MOHAMOUD-ext, Ahmed	
v. 3	Feb 05, 2026 12:51	BROWN-ext, Kevin	
v. 2	Feb 04, 2026 16:49	MOHAMOUD-ext, Ahmed	
v. 1	Feb 03, 2026 17:49	MOHAMOUD-ext, Ahmed	

Workflow history

This view shows the 5 most recent entries. The complete workflow log is available from the 'Document Activity' menu item.

Apr 04, 2026	Actor	Type	Activity	Version
Approved	 NARAHARI-ext, Bhargavi	State	changed state to Approved at 12:22 pm	v5
Lead Approval	 NARAHARI-ext, Bhargavi	State	gave <i>POD Lead Review</i> approval at 12:22 pm	
Apr 02, 2026				
	 JAIN-ext, Dhiraj	Edit	updated the page at 12:23 pm	
		State	changed expiry date to '09 Apr, 2026 10:23 am' at 10:23 am	
		State	changed state to Lead Approval at 10:23 am	v5
Tech Review	 JAIN-ext, Dhiraj	State	gave <i>Tech Review</i> approval at 10:23 am	
Mar 05, 2026				
	 GARG-ext, Praful	State	assigned approval <i>Tech Review</i> to  JAIN-ext, Dhiraj at 5:35 am	
		State	changed expiry date to '10 Mar, 2026 05:35 am' at 5:35 am	
		State	changed state to Tech Review at 5:35 am	v4