



ERP-1666 System Interface - ReferencePart.tab interface to Maestro

Status	Approved
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Jira Request ID	<div style="border: 1px solid orange; padding: 5px;">  ERP-1214 - Jira project doesn't exist or you don't have permission to view it. </div>
Jira Development ID	<div style="border: 1px solid orange; padding: 5px;">  ERP-1666 - Jira project doesn't exist or you don't have permission to view it. </div>

High- Level Specification

Implementing System	Kinaxis Maestro
Invoked by/Invokes	<div style="border: 1px solid orange; padding: 5px;">  ERP-1653 - Jira project doesn't exist or you don't have permission to view it. </div>
Business Process Reference	04.04.06.01. Data provisioning ERP to Maestro

Functional Overview

The ReferencePart table lists alternate names for parts. The alternate name could be an old name for the part, the name of a product line, or the name used by a different site or a contract manufacturer. The relationship between this table and the Part table varies depending on how it is used. For example, if this table is used to group parts together, many parts will have the same reference part. However, if this table is used to hold old names for parts, each part will have a unique reference part.

This table is primarily used to show relationships between part names for data publishers and subscribers. It holds the name of the part as used by the subscriber and is referenced by the Part.ReferencePart field (Part.Name holds the name of the part as used by the publisher). This allows a subscriber to see part data in a context that makes sense to them.

This table can also be used in any of the following ways:

- To hold a generic part name to be used by different company divisions that identify the same part using different naming conventions.
- To allow multi-site part analysis by grouping the parts from different locations into a common reference part.
- To group multiple parts into a common product line.
- To maintain and display old part names if a new part naming convention has been adopted.
- Left empty if not being used.

Scope and Objectives

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

The objective is to populate the ReferencePart 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.

[/display/ER/System+Interface+-+Reference+Specification+for+Maestro](#)

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.
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 ReferencePart table, with the load initiated either manually or through a scheduled system task.
6	The Data Tables which store information in Maestro

Assumptions

- Data will only come from Global Integration Suite into the Global Data Source, set up in Maestro.

Dependencies

- (SFTP) SFTP credentials needs to be set up, along with the file transfer mechanism.
- Integration suites should provide data in the format described by the Data Sources and Mapping section of this document.

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
1	Value	Value	String	Y	ExtractField	Default	Unique identifier of the material group record. Acts as the primary key.
2	MaterialGroupId	SYE::MaterialGroup.Id	String	N	ExtractField	Default	Internal ERP material group identifier associated with the record.
3	SupplyChainValue	SYE::SupplyChainValue.Value	Ref String	N	ExtractField	Default	Supply chain classification value used for segmentation and reporting.
4	ProductHierarchy1	Solutions::ProductHierarchy1.Value	Ref String	N	ExtractField	Default	Product hierarchy level 1 classification used for aggregation and planning analysis.

File Formats

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

Data Model ReferencePart 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 ReferencePart custom fields:

Field name	Description	Data type	Key
MaterialGroupId	Internal ERP material group identifier associated with the record.	String	N
SupplyChainValue	Supply chain classification value used for segmentation and reporting.	String	N

Processing Logic

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

Delta or Full Load Requirements

The preference is to do a partial 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 ReferencePart table data have to be either loaded manually before loading the ReferencePart table or at the same time as the ReferencePart table is loaded or set to be created automatically in data model or in DSM.

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

Table	SyWay configuration
ProductHierarchy1/2/3/4	Loaded prior or with this table
MaterialGroup	Loaded prior or with this table
SupplyChainValue	Loaded prior or with this table

Volumetrics

Current APS Volume of ReferencePart records is 83862.

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 ReferencePart.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" data-bbox="451 275 789 363"> <tr> <td data-bbox="451 275 789 321">SYE::SupplyChainValue.Value</td> </tr> <tr> <td data-bbox="451 321 789 363">Solutions::ProductHierarchy1.Value</td> </tr> </table>	SYE::SupplyChainValue.Value	Solutions::ProductHierarchy1.Value
SYE::SupplyChainValue.Value				
Solutions::ProductHierarchy1.Value				
4	Data file contains duplicates	The ReferencePart.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. 6)	Apr 02, 2026 14:50	KAVLEKAR-ext, Nihaal	
v. 5	Mar 31, 2026 12:51	KAVLEKAR-ext, Nihaal	Updated the Delta or Full load Requirement section
v. 4	Mar 19, 2026 14:32	KAVLEKAR-ext, Nihaal	
v. 3	Mar 12, 2026 11:12	KAVLEKAR-ext, Nihaal	
v. 2	Feb 19, 2026 00:19	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 24, 2026	Actor	Type	Activity	Version
Approved	 NARAHARI-ext, Bhargavi	State	changed state to Approved at 6:26 pm	v6
Lead Approval	 NARAHARI-ext, Bhargavi	State	gave <i>POD Lead Review</i> approval at 6:26 pm	
Apr 07, 2026				
	 JAIN-ext, Dhiraj	State	changed expiry date to '14 Apr, 2026 09:47 am' at 9:47 am	
		State	changed state to Lead Approval at 9:47 am	v6
Tech Review	 JAIN-ext, Dhiraj	State	gave <i>Tech Review</i> approval at 9:47 am	
From Mar 19, 2026 to Apr 02, 2026				
	 KAVLEKAR-ext, Nihaal	Edit	updated the page at 2:32 pm	