

ERP-1495 System Interface - BOMAlternate.tab interface to Maestro

Status	Approved
Owner	BROWN-ext, Kevin
Stakeholders	NARAHARI-ext, Bhargavi GARG-ext, Praful RAO-ext, Lakshmana
Jira Request ID	 ERP-1213 - Jira project doesn't exist or you don't have permission to view it.
Jira Development ID	 ERP-1495 - 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-1490 - 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

BOMAlternate defines alternative component structures for the same assembly. It allows different sets of components or versions of a BOM to be used for the same finished item, depending on conditions such as availability, location, production method, or planning requirements.

Scope and Objectives

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

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

Process Flow Diagram

 draw.io 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 BOMAlternate 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

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
1	Value	Value	String	Y	ExtractField	Default	Unique identifier for the BOM Alternate value. This field represents the primary key and is used to uniquely identify each alternate BOM.
2	Description	Description	String	N	ExtractField	Default	Descriptive text providing additional context or meaning for the BOM Alternate value.

File Formats

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

Data Model BOMAlternate 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 BOMAlternate custom fields:

There are no custom BOMAlternate fields.

Processing Logic

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

Delta or Full Load Requirements

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

BOMAlternate has no referenced tables.

Volumetrics

Current APS Volume of BOMAlternate records is approximately 170 including auto-created records. Because APS makes up approximately 60% of Syway projected records, an expected estimate for Syway is therefore 280

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 duplicates	The BOMAlternate.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. 9)	Apr 02, 2026 14:20	KAVLEKAR-ext, Nihaal	Updated the Delta or Full load Requirement section
v. 8	Mar 19, 2026 14:21	KAVLEKAR-ext, Nihaal	Updated the Assumptions section
v. 7	Mar 12, 2026 09:34	KAVLEKAR-ext, Nihaal	
v. 6	Mar 03, 2026 18:22	MOHAMOUD-ext, Ahmed	
v. 5	Mar 03, 2026 17:51	MOHAMOUD-ext, Ahmed	
v. 4	Feb 26, 2026 20:11	GARG-ext, Praful	
v. 3	Feb 05, 2026 03:25	MOHAMOUD-ext, Ahmed	
v. 2	Feb 03, 2026 18:09	MOHAMOUD-ext, Ahmed	
v. 1	Feb 03, 2026 18:07	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 6:27 pm	v9
Lead Approval	 NARAHARI-ext, Bhargavi	State	gave <i>POD Lead Review</i> approval at 6:27 pm	
Apr 20, 2026				
	 JAIN-ext, Dhiraj	State	changed expiry date to '27 Apr, 2026 12:24 pm' at 12:24 pm	
		State	changed state to Lead Approval at 12:24 pm	v9
Tech Review of Updates	 JAIN-ext, Dhiraj	State	gave <i>Minor change</i> approval at 12:24 pm	
Apr 07, 2026				
	 KAVLEKAR-ext, Nihaal	State	changed state to Tech Review of Updates at 10:00 am	v9