

LSO Sonata SDK

The **LSO Sonata SDK** is the complete set of deliverables developed by the MEF membership in order to

1. Enable market adoption of LSO Sonata APIs in the current release of the LSO API Framework.
2. Support development of additional features for the upcoming release of the LSO Sonata SDK.

The latest release of LSO Sonata SDK is in the LSO API Release '**Grace**' and is available on GitHub (see *Latest Release* section for details).

Any MEF member can participate in the development of each new release of the LSO Sonata SDK:

- Contact the LSO Developer Community Manager ([LSO Sonata SDK](#)) either via GitHub or by [email](#) to let him know of your interest and to ask questions

Status

PUBLIC

LSO Developer Community

Manager

[Micha czyski](#)

Contact: community_manager@mef.net

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LSO Sonata SDK @ GitHub

Core (public):

<https://github.com/MEF-GIT/MEF-LSO-Sonata-SDK>

Extensions (MEF Members only):

<https://github.com/MEF-GIT/MEF-LSO-Sonata-SDK-extended>



If you are a MEF Member, update your wiki profile with your GitHub account name. Access to the LSO Sonata SDK Extensions repository is periodically updated with provided GitHub accounts. Additionally contact the LSO Developer Community Manager to request the immediate access.

Core Contributors

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Are you a core contributor to this LSO SDK but not mentioned here? Please let the LSO SDK Community Manager know and we will add you!

Latest Release

MEF-LSO-Sonata-SDK - GraceRelease

Download Link

Download the entire repository by clicking [here](#)

Introduction

This repository contains the MEF LSO Sonata SDK. It includes API definitions for the following functional areas:

- Product Catalog
- Serviceability
 - Address Validation
 - Site Retrieval
 - Product Offering Qualification Management
- Product Offering Availability and Pricing Discovery
- Product Quote
- Product Order
- Product Inventory
- Trouble Ticket
 - Appointment
 - Work Order

It also provides Product Schemas for:

- Access E-Line
- Subscriber Carrier Ethernet (EPL, EPLAN, EPTREE, EVPL, EVPLAN, EVPTREE)
- Internet Access

High-level release notes

No new APIs were introduced.

There are the following document maturity changes:

- Documents published as MEF Standards:
 - MEF 123 - LSO Cantata and LSO Sonata Product Order Management API - Developer Guide
 - MEF 124 - LSO Cantata and LSO Sonata Trouble Ticket and Incident Management API - Developer Guide
 - MEF 137 - LSO Cantata and LSO Sonata Appointment Management API - Developer Guide
 - MEF 134 - Billing and Invoice Business Requirements and Use Cases
 - MEF 106 - LSO Sonata Access E-Line Product Schemas and Developer Guide
- Following documents have their Letter Ballots open and will be likely shortly published as MEF standards:
 - MEF W125.0.1 - Subscriber Ethernet Schemas and Product Schema Guide - Amendment (examples)
 - MEF W139 - Internet Access Product Schemas and Developer Guide
 - MEF W141 - LSO Cantata and LSO Sonata Billing Management API - Developer Guide
- Updated documents:
 - MEF W127 - LSO Cantata and LSO Sonata Product Catalog - Business Requirements and Use Cases
 - MEF W142 - LSO Cantata and LSO Sonata Product Catalog API & Developer Guide
 - MEF W110 - Product Offering Availability and Pricing Discovery - Business Requirements and Use Cases
 - MEF W160 - LSO Cantata and LSO Sonata Product Offering Availability and Pricing Discovery API - Developer Guide
 - MEF W128.1 - LSO API Security Profile
- New documents:
 - MEF 55.1.1 Amendment to MEF 55.1: Reference Architecture and Framework - Terminology

The [LSO Marketplace](#) offers the possibility to blend the desired APIs with chosen Products. Thus the APIs blended with all products that were available in generated/staticBinding are no longer provided.

NOTE: Please note the Readme files in particular productApi directories to see detailed release notes per API.

Maturity Level

The API files contained in this SDK are evolving and subject to change. They are based on documents that are either ratified standards or draft standards that have not yet completed the review cycles and approvals necessary to achieve the status as a MEF standard. MEF is making these publicly available at this time to invite wider industry review.

The maturity per functionality presents as follows:

(*) is used to mark item that changes their maturity comparing to previous release.

- Product Catalog:
 - Business Requirements:
 - *MEF W127 - **Draft Standard R2**
 - Developer Guide/API:
 - *MEF W142 - **work in progress - ready for CfC#2**
- Address Validation, Site Query:
 - Business Requirements:
 - MEF 79 - **Published Standard**
 - MEF 79.0.2 - **Published Standard**
 - Developer Guide/API:
 - MEF 121 - Address Management - **Published Standard**
 - MEF 122 - Site Management - **Published Standard**
- Product Offering Qualification:
 - Business Requirements:
 - MEF 79 - **Published Standard**
 - MEF 79.0.1 - **Published Standard**
 - Developer Guide/API:
 - MEF 87 - **Published Standard**
- Quote:
 - Business Requirements:
 - MEF 80 - **Published Standard**
 - Developer Guide/API:
 - MEF 115: - **Published Standard**
- Product Offering Availability and Pricing Discovery:
 - Business Requirements:
 - MEF *W110 - **Draft Standard R2**
 - Developer Guide/API:
 - MEF *W160: - **work in progress - ready for CfC#2**
- Order:
 - Business Requirements:
 - MEF 57.2 - **Published Standard**
 - Developer Guide/API:
 - MEF 123 - **Published Standard**
- Inventory:
 - Business Requirements:
 - MEF 81, MEF 81.0.1 - **Published Standard**
 - Developer Guide/API:
 - MEF 116 - **Published Standard**
- Trouble Ticket:
 - Business Requirements:
 - MEF 113 - **Published Standard**
 - Developer Guide/API:
 - MEF 124 - Trouble Ticket - **Published Standard**
 - MEF 137 - Appointment - **Published Standard**
- Billing:
 - Business Requirements:
 - MEF 134 - **Published Standard**
 - Developer Guide/API:
 - MEF 141 - **Published Standard**
- Product Specifications:
 - MEF 106 - Access E-Line - **Published Standard**
 - MEF 125 - Subscriber Ethernet (EPL, EPLAN, EPTREE, EVPL, EVPLAN, EVPTREE) - **Published Standard**
 - *MEF 125.0.1 - Amendment to Subscriber Ethernet - **Published Standard**
 - *MEF W139 - Basic and Advanced Internet Access - **Letter Ballot**
- Security:
 - MEF 128 - **Published Standard**
 - *MEF W128.1 - **work in progress - Letter Ballot ready**

For high level information about the release compatibility and roadmap please visit: [LSO Marketplace](#)

For details on the maturity map and the roadmap for future releases please refer to [LSO Sonata SDK Home Page](#) on the MEF WIKI.

Contents

This SDK contains the following items:

- COPYRIGHT - Copyright 2022 MEF Forum
- LICENSE - Contains a copy of the Apache 2.0 license
- README - This file
- productApi - Definitions of the APIs - yaml files with schemas
- documentation - All related standards and Developer Guides
 - productApi - API related documentation - API Developer Guides
 - productSchema - Product related documentation - Product schema guides
 - supportingStandards - The rest of the documents and standards.
- ProductSchema - Product Specification schemas
- generated
 - staticBinding - No longer provided - please visit [LSO Marketplace](#) to use self-blending possibility.
 - security - A not normative version of the standard APIs including the security profiles as required by MEF 128.1. Provided for evaluation.

Issues, Questions, and Feedback

Issues should be reported with the use of GitHub issues. Questions and feedback should be asked either at [Sonata SDK Discussions](#) or directly to community_manager@mef.net.

NOTE: All artifacts included in this repository have line numbers. When referring to specific content in any of these artifacts, please quote the line numbers to which you are referring.

LSO Sonata SDK Releases

BR&UC - Business Requirements & Use Cases

Underlined item indicates a release deliverable that is a delta from the previous SDK release.

Published standard	Draft standard (or at least 1 CfC resolved)	Work in progress
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LSO Sonata SDK Grace (Production)

Git Tag: [grace](#)

Date: 20th December 2023

Function	BR&UC	API and Developer Guide
Address Validation	MEF 79 MEF 79.0.2	MEF 121
Site Query	MEF 79	MEF 122
Product Offering Qualification (POQ)	MEF 79 MEF 79.0.1	MEF 87
Quoting	MEF 80	MEF 115
Product Inventory	MEF 81 MEF 81.0.1	MEF 116
Product Order	MEF 57.2	MEF 123
Trouble Ticketing	MEF 113	MEF 124 Trouble Ticket MEF 137 Appointment
Product Catalog	<u>MEF W127 Draft Standard (R2)</u>	<u>MEF W142 (CfC#2 Ready)</u>
Billing	MEF 134	MEF 141
Product Offering Availability and Pricing Discovery	<u>MEF W110 Draft Standard (R2)</u>	<u>MEF W160 (CfC#2 Ready)</u>
Test Requirements	MEF W92.1 Draft Standard (R3)	
Security	MEF 128 MEF W128.1 CfC#2	
Product Schemas	Schema Guide	
Access E-Line	MEF 106	
Subscriber Ethernet	<u>MEF 125.0.1 (LB)</u>	
Internet Access	<u>MEF 139 (LB)</u>	

Release Grace Deliverables

Deliverable	Maturity
MEF W141 Billing API + Dev Guide	Published Standard
MEF W125.0.1 - Subscriber Ethernet Schemas and Product Schema Guide - Amendment (examples)	LB
MEF W139 Internet Access Product	LB
MEF W127 Product Catalog	Draft Standard (R2)
MEF W110 Product Offering Availability and Pricing Discovery	Draft Standard (R2)
MEF W142 Product Catalog API + Dev Guide	CfC#2 Ready
MEF W160 Product Offering Availability and Pricing Discovery API + Dev Guide	CfC#2 Ready

LSO Sonata SDK Haley (Planned: June 2024)

Function	BR&UC	API and Developer Guide
Address Validation	MEF 150 Draft Standard (R1)	MEF 121
Site Query	MEF 150 Draft Standard (R1)	MEF 122
Product Offering Qualification (POQ)	MEF 79.1 Draft Standard (R1)	MEF 87
Quoting	MEF 80	MEF 115
Product Inventory	MEF 81 MEF 81.0.1	MEF 116
Product Order	MEF 57.2	MEF 123
Trouble Ticketing	MEF 113	MEF 124 Trouble Ticket MEF 137 Appointment
Product Catalog	MEF 127	MEF W142 (CfC#2)
Billing	MEF 134	MEF 141
Product Offering Availability and Pricing Discovery	MEF W110 Draft Standard (R4)	MEF W160 (CfC#3 Ready)
Test Requirements	MEF W92.1 Draft Standard (R3)	
Security	MEF 128.1	
Product Schemas	Schema Guide	
Access E-Line	MEF 106	
Subscriber Ethernet	MEF 125.0.1	
Internet Access	MEF 139	

Release Haley Deliverables

Deliverable	Maturity
MEF W127 Product Catalog	Standard
MEF 110 Product Offering Availability and Pricing Discovery	Draft Standard (R4)
MEF W142 Product Catalog API + Dev Guide	CfC#2
MEF W79.1 POQ	Draft Standard (R1)
MEF W150 Address, Site	Draft Standard (R1)
MEF W160 Product Offering Availability and Pricing Discovery API + Dev Guide	CfC#3 Ready

LSO Sonata SDK Irene (Planned: December 2024)

Function	BR&UC	API and Developer Guide
Address Validation	<u>MEF W150 (LB)</u>	MEF 121 <u>MEF W121.1 (CFC#1 Ready)</u>
Site Query	<u>MEF W150 (LB)</u>	MEF 122 <u>MEF W122.1 (CFC#1 Ready)</u>
Product Offering Qualification (POQ)	<u>MEF W79.1 (LB)</u>	MEF 87 <u>MEF W87.1 (CFC#1 Ready)</u>
Quoting	MEF 80	MEF 115 <u>MEF W115.1 (CFC#1 Ready)</u>
Product Inventory	MEF 81 MEF 81.0.1	MEF 116 <u>MEF W116.1 (CFC#1 Ready)</u>
Product Order	MEF 57.2	MEF 123 <u>MEF W123.1 (CFC#1 Ready)</u>
Trouble Ticketing	MEF 113	MEF 124 Trouble Ticket <u>MEF W124.1 (CFC#1 Ready)</u> MEF 137 Appointment <u>MEF W137.1 (CFC#1 Ready)</u>
Product Catalog	MEF 127	<u>MEF W142 (LB)</u>
Billing	MEF 134	MEF W141 <u>MEF W141.1 (CFC#1 Ready)</u>
Product Offering Availability and Pricing Discovery	MEF 110	<u>MEF W160 (LB)</u>
Test Requirements	MEF W92.1 Draft Standard (R3)	
Security	MEF 128.1	
Product Schemas	Schema Guide	
Access E-Line	MEF 106	
Subscriber Ethernet	MEF 125.0.1	
Internet Access	MEF 139	

Release Irene Deliverables

Deliverable	Maturity
MEF W79.1 POQ	LB
MEF W150 Address, Site	LB
MEF W142 Product Catalog API + Dev Guide	LB
MEF W160 Product Offering Availability and Pricing Discovery API + Dev Guide	LB
MEF W87.1 POQ Dev Guide + API	CfC#1 Ready
MEF W115.1 Quote Dev Guide+API	CfC#1 Ready
MEF W116.1 Inventory DevGuide+API	CfC#1 Ready
MEF W121.1 Address Dev Guide + API	CfC#1 Ready
MEF W122.1 Site Dev Guide + API	CfC#1 Ready
MEF W123.1 Product Order Dev Guide + API	CfC#1 Ready
MEF W124.1 Trouble Ticket Dev Guide + API	CfC#1 Ready
MEF W137.1 Appointment Dev Guide + API	CfC#1 Ready
MEF W141.1 Billing Dev Guide + API	CfC#1 Ready

LSO Sonata SDK Janis (Planned: June 2025)

Function	BR&UC	API and Developer Guide
Address Validation	MEF 150	MEF W121.1 (LB)
Site Query	MEF 150	MEF W122.1 (LB)
Product Offering Qualification (POQ)	MEF 79.1	MEF W87.1 (LB)
Quoting	MEF 80	MEF W115.1 (LB)
Product Inventory	MEF 81 MEF 81.0.1	MEF W116.1 (LB)
Product Order	MEF 57.2	MEF W123.1 (LB)
Trouble Ticketing	MEF 113	MEF W124.1 (LB) MEF W137.1 (LB)
Product Catalog	MEF 127	MEF W142 (LB)
Billing	MEF 134	MEF W141.1 (LB)
Product Offering Availability and Pricing Discovery	MEF 110	MEF W160 (LB)
Test Requirements	MEF W92.1 Draft Standard (R3)	
Security	MEF 128.1	
Product Schemas	Schema Guide	
Access E-Line	MEF 106	
Subscriber Ethernet	MEF 125.0.1	
Internet Access	MEF 139	

Release Janis Deliverables

Deliverable	Maturity
MEF W79.1 POQ	LB
MEF W150 Address, Site	LB
MEF W142 Product Catalog API + Dev Guide	LB
MEF W87.1 POQ Dev Guide + API	LB
MEF W115.1 Quote Dev Guide+API	LB
MEF W116.1 Inventory DevGuide+API	LB
MEF W121.1 Address Dev Guide + API	LB
MEF W122.1 Site Dev Guide + API	LB
MEF W123.1 Product Order Dev Guide + API	LB
MEF W124.1 Trouble Ticket Dev Guide + API	LB
MEF W137.1 Appointment Dev Guide + API	LB
MEF W141.1 Billing Dev Guide + API	LB

Historical

LSO Sonata SDK Fergie

Git Tag: [fergie](#)

Date: 23th June 2023

Function	BR&UC	API and Developer Guide
Address Validation	MEF 79 MEF 79.0.2	MEF 121
Site Query	MEF 79	MEF 122
Product Offering Qualification (POQ)	MEF 79 MEF 79.0.1	MEF 87
Quoting	MEF 80	MEF 115
Product Inventory	MEF 81 MEF 81.0.1	MEF 116
Product Order	MEF 57.2	MEF 123
Trouble Ticketing	MEF 113	MEF 124 Trouble Ticket MEF 137 Appointment
Product Catalog	<u>MEF W127 Draft Standard (R1)</u>	<u>MEF W142 (CfC#1 Ready)</u>
Billing	MEF 134	<u>MEF W141 (LB)</u>
Product Offering Availability and Pricing Discovery	<u>MEF W110 Draft Standard (R1)</u>	<u>MEF W160 (CfC#1 Ready)</u>
Test Requirements	MEF W92.1 Draft Standard (R3)	
Security	<u>MEF 128.1 CfC#2</u>	
Product Schemas	Schema Guide	
Access E-Line	MEF 106	
Subscriber Ethernet	MEF 125 <u>MEF W125.0.1 (CfC#2)</u>	
Internet Access	<u>MEF W139 (CfC#3 Ready)</u>	

Release Fergie Deliverables

Deliverable	Maturity
MEF W141 Billing API + Dev Guide	LB
MEF W125.0.1 - Subscriber Ethernet Schemas and Product Schema Guide - Amendment (examples)	CfC#2
MEF W110 Product Offering Availability and Pricing Discovery	Draft Standard (R1)
MEF W127 Product Catalog	Draft Standard (R1)
MEF W139 Internet Access Product	CfC#3 Ready
MEF W128.1 LSO API Security Amendment	CfC#2
MEF W142 Product Catalog API + Dev Guide	CfC#1 Ready
MEF W160 Product Offering Availability and Pricing Discovery API + Dev Guide	CfC#1 Ready

LSO Sonata SDK Ella

Git Tag: [ella](#)

Date: 4th January 2023

Function	BR&UC	LSO Sonata API	
		Developer Guide	MEF branded TMF envelope API
Address Validation	MEF 79 MEF 79.0.2	MEF 121	GeographicAddressManagement v7.0.1
Site Query	MEF 79	MEF 122	GeographicSiteManagement v7.0.1
Product Offering Qualification (POQ)	MEF 79 MEF 79.0.1	MEF 87	ProductOfferingQualificationManagement v7.0.1 ProductOfferingQualificationNotification v7.0.1
Quoting	MEF 80	MEF 115	QuoteManagement v8.0.1 QuoteNotification v8.0.1
Product Inventory	MEF 81 MEF 81.0.1	MEF 116	ProductInventoryManagement v7.0.2
Product Order	MEF 57.2	MEF 123 (LB)	ProductOrderManagement v10.0.0 ProductOrderNotification v10.0.0
Trouble Ticketing	MEF 113	MEF W124 Trouble Ticket (LB) MEF W137 Appointment (LB)	troubleTicketManagement v4.0.0 troubleTicketNotification v4.0.0 appointmentManagement v2.0.0 appointmentNotification v2.0.0 workorderManagement v2.0.0 workorderNotification v2.0.0
Product Catalog			
Billing	MEF 134 (LB)	MEF W141 (CfC#1 Ready)	
Test Requirements	MEF W92.1 Draft Standard (R2)		
Security	MEF 128		
Product Schemas	Schema Guide		
Access E-Line	MEF 106 (LB)		
Subscriber Ethernet	MEF 125 (LB) MEF W125.0.1 (CfC#1)		
Internet Access	MEF W139 (CfC#2)		

Release Ella Deliverables

Deliverable	Maturity
MEF 57.2 Order BR&UC	Standard
MEF W123 Order DevGuide+API	LB
MEF W113 Trouble Ticketing BR&UC	Standard
MEF W124 Sonata API & Developer Guide - Trouble Ticketing	LB
MEF W134 Billing	LB
MEF W141 Billing API + Dev Guide	CfC#1 Ready
MEF W139 Internet Access Product	CfC#2 Ready
MEF W137 Appointment API + Dev	LB
MEF W106 Access E-Line Product Schema Guide	LB
MEF W125 - Subscriber Ethernet Schemas and Product Schema Guide	LB
MEF W125.0.1 - Subscriber Ethernet Schemas and Product Schema Guide - Amendment (examples)	CfC#1 Ready

Supporting artifacts:

- [Example Dynamic Binding Implementation](#)
- [LSO Payload Handbook](#)
- [SonataBlendingTool](#)

LSO Sonata SDK Dolly

Git Tag: [dolly](#)

Date: 8th June 2022

Function	BR&UC	LSO Sonata API		Product specification		Blended envelope + payload (OAS 3.0)	Tooling
		Developer Guide	MEF branded TMF envelope API	Requirements	JSON Schema		
Address Validation	MEF 79 MEF 79.0.2	MEF 121	GeographicAddressManagement (7.0.1)	N/A	N/A		
Site Query	MEF 79	MEF 122	GeographicSiteManagement (7.0.1)	N/A	N/A		
Product Offering Qualification (POQ)	MEF 79 MEF 79.0.1	MEF 87	ProductOfferingQualificationManagement (7.0.1) ProductOfferingQualificationNotification (7.0.1)	MEF W106 (CfC#4) MEF W125 (CfC#2) MEF W139 (CfC#1 Ready)	Access E-Line Subscriber Ethernet Internet Access	✔	SonataBlendingTool
Quoting	MEF 80	MEF 115	QuoteManagement (8.0.1) QuoteNotification (8.0.1)	MEF W106 (CfC#4) MEF W125 (CfC#2) MEF W139 (CfC#1 Ready)	Access E-Line Subscriber Ethernet Internet Access	✔	SonataBlendingTool
Product Inventory	MEF 81 MEF 81.0.1	MEF 116	ProductInventoryManagement (7.0.2)	MEF W106 (CfC#4) MEF W125 (CfC#2) MEF W139 (CfC#1 Ready)	Access E-Line Subscriber Ethernet Internet Access	✔	SonataBlendingTool
Product Order	MEF W57.2 Draft Standard (R4)	MEF W123 (CfC#3)	ProductOrderManagement (9.0.0-RC) ProductOrderNotification (9.0.0-RC)	MEF W106 (CfC#4) MEF W125 (CfC#2) MEF W139 (CfC#1 Ready)	Access E-Line Subscriber Ethernet Internet Access	✔	SonataBlendingTool
Trouble Ticketing	MEF 113 Draft Standard (R3)	MEF W124 Trouble Ticket (CfC#3) MEF W137 Appointment (CfC#1 Ready)	troubleTicketManagement (3.0.0-RC) troubleTicketNotification (3.0.0-RC) appointmentManagement (1.0.0-RC) appointmentNotification (1.0.0-RC) workorderManagement (1.0.0-RC) workorderNotification (1.0.0-RC)	N/A	N/A		
Billing	MEF W134 Draft Standard (R1) ?						
Test Requirements	MEF W92.1 Draft Standard (R2)						
Security	MEF W128 Draft Standard (R2)						

Release Dolly Deliverables

Deliverable	Maturity
MEF W57.2 Order BR&UC	Draft Standard (R4)
MEF W134 Billing BR&UC	Draft Standard (R1)
MEF W113 Trouble Ticketing BR&UC	Draft Standard (R3)
MEF W139 Internet Access Product Schema Guide	CfC#1 (Ready)
MEF 123 Order DevGuide+API	CfC#3
MEF W106 Access E-Line Product Schema Guide	CfC#4
MEF W125 - Subscriber Ethernet Schemas and Product Schema Guide	CfC#2
MEF W124 Sonata API & Developer Guide - Trouble Ticketing	CfC#3
MEF W137 Appointment API + Developer Guide	CfC#1 (Ready)
MEF W128 API Security Profile	Draft Standard (R2)

Supporting artifacts:

- Example Dynamic Binding Implementation
- [LSO Payload Handbook](#)

LSO Sonata SDK Celine (January 14th, 2022)

Git Tag: [celine](#)

Date: 14th January 2022

Function	BR&UC	LSO Sonata API		Product specification		Blended envelope + payload (OAS 3.0)	Tooling
		Developer Guide	MEF branded TMF envelope API	Requirements	JSON Schema		
Address Validation	MEF 79 MEF 79.0.2	MEF 121	GeographicAddressManagement v7.0.1	N/A	N/A		
Site Query	MEF 79	MEF 122	GeographicSiteManagement v7.0.1	N/A	N/A		
Product Offering Qualification (POQ)	MEF 79 MEF 79.0.1	MEF 87	ProductOfferingQualificationManagement v7.0.1 ProductOfferingQualificationNotification v7.0.1	MEF 106 (CfC#3) MEF 125 (CfC#1)	Access E-Line Subscriber Ethernet	✓	SonataBlendingTool
Quoting	MEF 80	MEF 115	QuoteManagement v8.0.0 QuoteNotification v8.0.0	MEF 106 (CfC#3) MEF 125 (CfC#1)	Access E-Line Subscriber Ethernet	✓	SonataBlendingTool
Product Inventory	MEF 81 MEF 81.0.1	MEF W116	ProductInventoryManagement v7.0.1	MEF 106 (CfC#3) MEF 125 (CfC#1)	Access E-Line Subscriber Ethernet	✓	SonataBlendingTool
Product Order	MEF W57.2 Draft Standard (R3)	MEF W123 (CfC#2)	ProductOrderManagement v8.0.0-RC ProductOrderNotification v8.0.0-RC	MEF 106 (CfC#3) MEF 125 (CfC#1)	Access E-Line Subscriber Ethernet	✓	SonataBlendingTool
Trouble Ticketing	MEF 113 Draft Standard (R2)	MEF W124 (CfC#2)	troubleTicketManagement v2.0.0-RC troubleTicketNotification v2.0.0-RC	N/A	N/A		
Billing							
Test Requirements	MEF W92.1 Draft Standard (R2)						

Release Celine Deliverables

Deliverable	Maturity
MEF W57.2 Order BR&UC	Draft Standard (R3)
MEF 87 POQ Dev Guide + API	LB
MEF 115 Quote Dev Guide+API	LB
MEF W116 Inventory DevGuide+API	LB
MEF 121 Address Dev Guide + API	LB
MEF 122 Site Dev Guide + API	LB
MEF 123 Order DevGuide+API	CfC#2
MEF W106 Access E-Line	CfC#2 - all attributes optional for all APIs
MEF W125 - Subscriber Ethernet Schemas and Product Schema Guide	CfC#1 - all attributes optional for all APIs
MEF W113 Trouble Ticketing	Draft Standard (R2)
MEF W124 Sonata API & Developer Guide - Trouble Ticketing	CfC#2
MEF W92.1: LSO Sonata Test Requirements	Draft Standard (R2)

Supporting documentation:

- [Example Dynamic Binding Implementation](#)
- [LSO Payload Handbook CfC#1](#)
- [MEF W128 - Draft Release 1 LSO API Security Profile – Implementer's Guide](#)

LSO Sonata SDK Billie

Git Tag: [billie](#)

Date: 3rd June 2021

Function	BR&UC	LSO Sonata API		Product specification		Blended envelope + payload (OAS 3.0)	Tooling
		Developer Guide	MEF branded TMF envelope API	Requirements	JSON Schema		
Address Validation	MEF 79 MEF 79.0.2 (Draft Standard R2)	MEF 121 (CfC#1 resolved)	geographicAddressManagement (7.0.0-RC)	N/A	N/A		
Site Query	MEF 79	MEF 122 (CfC#1 resolved)	geographicSiteManagement (7.0.0-RC)	N/A	N/A		
Product Offering Qualification (POQ)	MEF 79 MEF 79.0.1	MEF 87 (CfC#3 resolved)	productOfferingQualificationManagement (7.0.0-RC) productOfferingQualificationNotification (7.0.0-RC)	MEF 106 (CfC#2 resolved) MEF W125 (working draft)	Access E-Line Subscriber Ethernet	✓	SonataBlendingTool
Quoting	MEF 80 (Draft Standard R6)	MEF W115 (CfC#1 resolved)	quoteManagement (7.0.0-RC) quoteNotification (7.0.0-RC)	MEF 106 (CfC#2 resolved) MEF W125 (working draft)	Access E-Line Subscriber Ethernet	✓	
Product Inventory	MEF 81 MEF 81.0.1	MEF W116 (CfC#1 working draft)	productInventoryManagement (7.0.0-RC)	MEF 106 (CfC#2 resolved) MEF W125 (working draft)	Access E-Line Subscriber Ethernet	✓	
Product Order	MEF W57.2 (Draft Standard R2)	MEF W123 (CfC#1 working draft)	productOrderManagement (7.0.0-RC) productOrderNotification (7.0.0-RC)	MEF 106 (CfC#2 resolved) MEF W125 (working draft)	Access E-Line Subscriber Ethernet	✓	
Trouble Ticketing	MEF W113 (Draft Standard R1)	MEF W124 (working-draft, CfC#1 ready)	troubleTicketManagement (1.0.0-RC) troubleTicketNotification (1.0.0-RC)	N/A	N/A		
Billing							
Test Requirements	MEF W92.1 (Draft Standard R1)						

Release Billie Deliverables

Bolded Deliverables are part of the release's theme: "Ordering"

Deliverable	Maturity	Comment
MEF W57.2 Order BR&UC	Draft Standard (R2)	
MEF W116 Inventory DevGuide+API	Working Draft (CfC#1 ready)	
MEF 123 Order DevGuide+API	Working Draft (CfC#1 ready)	
MEF W106 Access E-Line	CfC#2 resolved	
MEF W125 - Subscriber Ethernet Schemas and Product Schema Guide	Working Draft	EPL, EVPL, EP-LAN, EVP-LAN, EP-TREE, EVP-TREE Subscriber UNI
MEF 79.0.2 79 Address amendment	Draft Standard (R2), (LB pending)	
MEF 80 Quote BR&UC	Draft Standard (R6), (LB pending)	
MEF 115 Quote Dev Guide+API	CfC#1 resolved, (CfC#2 ready)	lots of changes in MEF 80
MEF 87 POQ Dev Guide + API	CfC#3 resolved, (CfC#4 ready)	
MEF 121 Address Dev Guide + API	Working Draft (CfC#1 ready)	
MEF 122 Site Dev Guide + API	Working Draft (CfC#1 ready)	
MEF W113 Trouble Ticketing BR&UC	Draft Standard (R1)	
MEF W124 Trouble Ticketing Dev Guide + API	Working Draft (CfC#1 ready)	
MEF W92.1: LSO Sonata Test Requirements	Draft Standard (R1)	

LSO Sonata SDK Aretha (December 2020)

Git Tag: [aretha](#)

Date: 22nd December 2020

Function	BR&UC	LSO Sonata API		Product specification		Blended envelope + payload (OAS 3.0)	Tooling
		Developer Guide	MEF branded TMF envelope API	Requirements	JSON Schema		
Address Validation	MEF 79 MEF 79.0.2 (Draft Standard R1)	MEF 121 (working-draft, CfC#1 ready)	GeographicAddressManagement - 6.0.0-RC	N/A	N/A		
Site Query	MEF 79	MEF 122 (working-draft, CfC#1 ready)	GeographicSiteManagement - 6.0.0-RC	N/A	N/A		
Product Offering Qualification (POQ)	MEF 79 MEF 79.0.1	MEF 87 (working-draft, CfC#3 ready)	ProductOfferingQualificationManagement - 6.0.0-RC ProductOfferingQualificationNotification - 6.0.0-RC	MEF W106 (CfC#1 working-draft)	Access E-Line EPL	✓	SonataBlending Tool
Quoting	MEF 80 (Draft Standard R5)	MEF W115 (working-draft, CfC#2 ready)	QuoteManagement - 6.0.0-RC QuoteNotification - 6.0.0-RC	MEF W106 (CfC#1 working-draft)	Access E-Line EPL	✓	
Product Inventory	MEF 81 MEF 81.0.1		ProductInventoryManagement - 6.0.0-RC	MEF W106 (CfC#1 working-draft)	Access E-Line EPL	✓	
Product Order	MEF W57.2 (Draft Standard R2)		ProductOrderManagement - 6.0.0-RC ProductOrderNotification - 6.0.0-RC	MEF W106 (CfC#1 working-draft)	Access E-Line EPL	✓	
Trouble Ticketing							
Billing							
Test Requirements	MEF W92.1 (working-draft)						
Menu-driven POQ and Quote							

Release Aretha Deliverables

Bolded Deliverables are part of the release's theme "Pre-order"

Deliverable	Maturity	Leader	Comment
MEF 79.0.1 79 POQ amendment	Published Standard	Mike Bencheck	
MEF 79.0.2 79 Address amendment	Draft Standard R1	Mike Bencheck	
MEF 80 Quote BR&UC	Draft Standard R5	Mike Bencheck	
MEF W115 Quote DevGuide+API	Working Draft (70% CfC#1 reviewed, ready for CfC#2)	Micha czyski	
MEF W87 POQ DevGuide+API	Working Draft (CfC#2 reviewed, ready for CfC#3)	Bartosz Michalik	
MEF W106 Access E-Line	Working Draft (CfC#1 reviewed, ready for CfC#2)	Larry Samberg	
MEF 121 Address Dev Guide + API	Working Draft (incl. 79.0.2) (ready for CfC#1)	Micha czyski	
MEF 122 Site Dev Guide + API	Working Draft (ready for CfC#1)	Micha czyski	
Order API	Working Draft updated to 57.2 Draft Standard (R2) (basic scope)	Micha czyski	Basic scope = Create, Cancel, Get, List of Product Order
MEF W57.2 Order BR&UC	Draft Standard R2 (basic scope)	Mike Bencheck	Basic scope = Create, Cancel, Get, List of Product Order The Amend, Charge etc. will be part of Billie release.
EPL Product Schema	Working draft	Larry Samberg	Just product specification, without the documentation
MEF W92.1: LSO Sonata Test Requirements	Working draft	Mike Bencheck	

LSO Sonata SDK Release Candidate 5 (hotfix 1)

Git Tag RC5.1

Date: 16th September 2020

SDK Repository: <https://github.com/MEF-GIT/MEF-LSO-Sonata-SDK/releases/tag/rc5.1>

Function	BR&UC	LSO Sonata API		Product specification		Blended envelope + payload (OAS 3.0)	Postman scripts	Tooling
		Developer Guide	MEF branded TMF envelope API	Requirements	JSON Schema			
Address Validation	MEF 79 MEF W79.0.1 (LB)		geographicAddressManagement.api.yaml v5.0.0-RC2	N/A	N/A	N/A		
Site Query	MEF 79 MEF W79.0.1 (LB)		geographicSiteManagement.api.yaml v5.0.0-RC	N/A	N/A	N/A		
Product Offering Qualification (POQ)	MEF 79 MEF W79.0.1 (LB)	MEF W87 (CfC#1 working-draft)	productOfferingQualificationManagement.api.yaml v5.0.0-RC2 productOfferingQualificationNotification.api.yaml v5.0.0-RC2	MEF W106 (CfC#1 working-draft)	Access E-Line	✓	✓	SonataBindingTool
Quoting	MEF W80 Draft (R4)		quoteManagement.api.yaml v5.0.0-RC2 quoteNotification.api.yaml v5.0.0-RC2	MEF W106 (CfC#1 working-draft)	Access E-Line	✓		
Product Inventory	MEF 81 MEF 81.0.1		productInventoryManagement.api.yaml v5.0.0-RC	MEF W106 (CfC#1 working-draft)	Access E-Line	✓		
Product Order	MEF 57.1		productOrderManagement.api.yaml v5.0.0-RC2 productOrderNotification.api.yaml v5.0.0-RC2	MEF W106 (CfC#1 working-draft)	Access E-Line	✓		
Trouble Ticketing								
Billing								

Release Candidate 5.1 Deliverables

Deliverable	Description	Leader	Status	Comment	Last Update
geographicAddressManagement.api.yaml v5.0.0-RC2 productOfferingQualificationManagement.api.yaml v5.0.0-RC2 productOfferingQualificationNotification.api.yaml v5.0.0-RC2 productOrderManagement.api.yaml v5.0.0-RC2 productOrderNotification.api.yaml v5.0.0-RC2	bugfix and consistency fixes	LSO Sonata SDK	✓ Done.		15 Sep 2020
quoteManagement.api.yaml v5.0.0-RC2 quoteNotification.api.yaml v5.0.0-RC2	bugfix and consistency fixes update to latest version of MEF 80	LSO Sonata SDK	✓ Done		15 Sep 2020

LSO Sonata SDK Release Candidate 5

Git tag: RC5

Date: 31st July 2020

SDK Repository: <https://github.com/MEF-GIT/MEF-LSO-Sonata-SDK/releases/tag/rc5>

Function	BR&UC	LSO Sonata API		Product specification		Blended envelope + payload (OAS 3.0)	Postman scripts	Tooling
		Developer Guide	MEF branded TMF envelope API	Requirements	JSON Schema			
Address Validation	MEF 79 MEF W79.0.1		geographicAddressManagement.api.yaml v5.0.0-RC	N/A	N/A	N/A		
Site Query	MEF 79 MEF W79.0.1		geographicSiteManagement.api.yaml v5.0.0-RC	N/A	N/A	N/A		
Product Offering Qualification (POQ)	MEF 79 MEF W79.0.1	MEF W87 (CfC#1 working-draft)	productOfferingQualificationManagement.api.yaml v5.0.0-RC productOfferingQualificationNotification.api.yaml v5.0.0-RC	MEF W106 (CfC#1 working-draft)	Access E-Line	✓	✓	SonataBlendingTool
Quoting	MEF W80 Draft (R3)		quoteManagement.api.yaml v5.0.0-RC quoteNotification.api.yaml v5.0.0-RC	MEF W106 (CfC#1 working-draft)	Access E-Line	✓		
Product Inventory	MEF 81 MEF 81.0.1		productInventoryManagement.api.yaml v5.0.0-RC	MEF W106 (CfC#1 working-draft)	Access E-Line	✓		
Product Order	MEF 57.1		productOrderManagement.api.yaml v5.0.0-RC productOrderNotification.api.yaml v5.0.0-RC	MEF W106 (CfC#1 working-draft)	Access E-Line	✓		
Trouble Ticketing								
Billing								

Release Candidate 5 Deliverables

Deliverable	Description	Leader	Status	Comment	Last Update
MEF 79	Draft #3 => Standard	Mike Bencheck	✓ Done.		05 Aug 2020
MEF W79.0.1	New, Draft (R1)	Mike Bencheck	✓ RfD #1 issued		05 Aug 2020
MEF W80	Draft (R2) => Draft (R7)	Mike Bencheck	✓ Draft (R7)		05 Aug 2020
MEF 81	Draft (R3) => Standard	Mike Bencheck	✓ Done.		05 Aug 2020
MEF 81.0.1	New, Standard	Mike Bencheck	✓ Done.		05 Aug 2020
MEF W87 (Developer Guide + API Specs)	New, Working-draft	Bartosz Michalik	✓ CfC #1 Resolved		05 Aug 2020
MEF W106 Access E-Line - Product specification	New, Started CfC#1	Larry Samberg	✓ CfC#1 started	Requirements and schemas	05 Aug 2020
Site, Quote, Inventory, Order API Swagger Specs	Update to introduce: - bugfixing - new envelope-payload pattern - TMF compliance (usage of TMF Toolset to generate the schemas)	Ludovic Robert	✓ Done		05 Aug 2020
SonataBlendingTool	New	Bartosz Michalik	✓ On track		05 Aug 2020

LSO Sonata SDK Release 4

Git tag: R4

Date: Nov 2019

SDK Repository: <https://github.com/MEF-GIT/MEF-LSO-Sonata-SDK/releases/tag/r4>

Function	BR&UC	LSO Sonata API		Product specs		Postman scripts	Tooling	Example code
		Developer Guide	MEF branded TMF envelope API	Spec	JSON			
Address Validation	MEF 79 Draft (R3)		GeographicAddressManagement - v3.0.0	N/A	N/A			
Site Query	MEF 79 Draft (R3)		GeographicSiteManagement - v3.0.0	N/A	N/A			
Product Offering Qualification (POQ)	MEF 79 Draft (R3)		ProductOfferingQualificationManagement - v3.0.1 ProductOfferingQualificationNotification - v3.0.0					
Quoting	MEF 80 Draft (R2)		QuoteManagement - v2.0.0 QuoteNotification - v1.0.0					
Product Inventory	MEF 81 Draft (R3)		ProductInventoryManagement - v3.0.0					
Product Order	MEF 57.1		ProductOrderManagement - v3.0.0 ProductOrderNotification - v3.0.0		Access E-Line UNI			
Trouble Ticketing								
Billing								

LSO Sonata SDK Release 3

Git tag: R3

Date: Jun 2019

SDK Repository: <https://github.com/MEF-GIT/MEF-LSO-Sonata-SDK/releases/tag/r3>

Function	BR&UC	Developer Guide		Product specs		Postman scripts	Tooling	Example code
		Spec	Swagger specs	Spec	JSON			
Address Validation	✓ MEF 79 Draft (R2)		✓ GeographicAddressManagement - v2.0.0	N/A	N/A			
Site Query	✓ MEF 79 Draft (R2)		✓ GeographicSiteManagement - v2.0.0	N/A	N/A			
Product Offering Qualification (POQ)	✓ MEF 79 Draft (R2)		✓ ProductOfferingQualificationManagement - v2.0.0 ✓ ProductOfferingQualificationNotification - v1.0.0					
Quoting	✓ MEF 80 Draft (R2)		✓ QuoteManagement - v2.0.0 ✓ QuoteNotification - v1.0.0					
Product Inventory	✓ MEF 81 Draft (R2)		✓ ProductInventoryManagement - v2.0.0					
Product Order	✓ MEF 57.1		✓ ProductOrderManagement - v2.0.0 ✓ ProductOrderNotification - v1.0.0		✓ Access E-Line ✓ UNI			
Trouble Ticketing								
Billing								

Reference Implementations

1. Example implementation of MEF LSO Sonata APIs on Buyer side provided by Amdocs. This example code is part of the solution between a Tier1 North American operator, Amdocs and a UK provider that was put into production in April 2019.

<https://github.com/MEF-GIT/Example-LSO-Sonata-Buyer-Implementation> (MEF Members only)



This example LSO Sonata implementation does not provide an executable or runnable project and it is based on the older APIs version.

Engagement Opportunities

1. Development and use of the MEF 3.0 Developer Workshop
2. Requirements for future releases of LSO Sonata
3. Information on how they integrate LSO Sonata into OSS/BSS systems, and information on how to manage versions of the APIs
4. Scoring of consumability of each release
5. Inclusion of LSO Sonata as a requirement in RFIs to partners
6. Active marketing of LSO Sonata releases
7. Assessment of testing/certification solutions around LSO Sonata