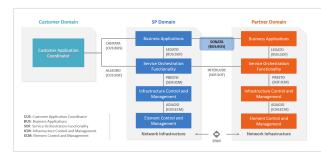
# **LSO Sonata**

**LSO Sonata** (BUS:BUS) belongs to the family of LSO Interface Reference Points (IRP) as defined in MEF 55.1. It defines the management reference point supporting the management and operations interactions (e.g., serviceability, ordering, billing, trouble ticketing, etc.) between two network providers (e.g., Service Provider and Partner Domain). In other words, LSO Sonata supports non-control cross domain interactions between the Service Provider's Business Applications and the Partner's Business Applications.

LSO Sonata connects between the BSS functions of the Service Provider domain and the Partner domain respectively and connects 'East-West' in parallel to LSO Interlude.



# Status

### Related and Further Reading

LSO Sonata SDK

MEF 55 - LSO Reference Architecture

### Example(s)

### Interactions (MEF 55.1)

- Service Provider browses the Partner's product catalog (e.g. wholesale catalog) for Product
  Offerings that are available for the Service Provider to select. This may include some
  geographical and service information to support availability queries of a Product Offering in a
  specific geographical area.
- Service Provider develops (based on Product Offerings), places, tracks, and changes Product Orders with the Partner.
- · Service Provider requests modification of Product Instances.
- Service Provider receives Product Instance performance and fault information provided by the Partner.
- Service Provider receives information from the Partner about the scheduled maintenance that may impact their Product Instances.
- Service Provider places and tracks trouble reports.
- · Service Provider exchanges usage and billing information.

### LSO Sonata APIs

MEF is standardizing LSO Sonata APIs as part of a comprehensive effort to standardize multiple sets of LSO APIs enabling service automation across providers and over multiple network technology domains. In the context of LSO, API describes the Management Interface Reference Point along with a data model, the protocol that defines operations on the data and the encoding format used to encode data according to the data model. LSO Sonata APIs relate to the interface reference point within the LSO Reference Architecture that supports business-to-business interactions between service providers. The full suite of planned LSO Sonata APIs deals with the following business functionalities.

### Address Validation

Allows the Buyer to retrieve address information from the Seller - including exact formats - for addresses known to the Seller. It supports the following use cases:

- The Buyer sends to the Seller address information known to the Buyer
- The Buyer requests from the Seller the full details of a single address based on an address identifier

# **Site Query**

Allows the Buyer to retrieve Service Site information including exact formats for Service Sites known to the Seller. It supports the following use cases:

- The Buyer requests that the Seller provides a list of Service Sites known to the Seller based on a set of Service Site/Address filter criteria
- The Buyer requests the full details for a single Service Site based on a Service Site identifier

# **Product Offering Qualification (POQ)**

Allows the Buyer to determine whether it is feasible for the Seller to deliver a particular Product with a given configuration to a particular geographic location. It supports the following use cases:

- The Buyer requests to determine whether the Seller can feasibly deliver a particular Product (or Products), to a specific set of geographic locations (if applicable)
- The Buyer requests a list of POQs from the Seller based on a set of POQ filter criteria
- The Buyer requests the full details of a single Product Offering Qualification based on a POQ identifier
- · The Buyer registers for POQ Notifications from the Seller
- The Seller sends POQ Notifications to the Buyer

### Quoting

Supports the inter-carrier Product Quote process over the Sonata interface. It supports the following use cases:

- The Buyer requests a Product Quote from the Seller
- The Buyer requests a list of Product Quotes from the Seller based on Product Quote filter criteria
- The Buyer requests information related to a single Product Quote based on a Quote Identifier
- The Buyer requests to Cancel/Reject a Product Quote
- The Buyer registers for Quote Notifications from the Seller
- The Seller sends Quote Notifications to the Buyer

### **Product Inventory**

Supports the inter-carrier Product Inventory retrieval process over the Sonata interface. It supports the following use cases:

- The Buyer requests a list of Products from the Seller based on filter criteria
- The Buyer requests the details associated with a single Product based on a Product Identifier

### **Product Ordering**

Supports the inter-carrier Product Ordering process over the Sonata interface. It supports the following use cases:

- The Buyer orders a new Product or Service Component(s)
- The Buyer or Seller requests a modification/change to an existing active Service or Service Component(s)
- The Buyer or Seller requests to terminate an existing active Service(s) or Service Component (s)
- The Buyer requests a list of Orders that match the requested filter criteria
- The Buyer requests the details associated with a specific Order specified by the Order ID
- The Buyer registers for Order Notifications
- · The Seller sends Order Notifications to the Buyer

# **Trouble Ticketing**

Allows the Service Provider to create and manage trouble tickets with Partner's system, over the Sonata interface, related to ordered Products. It supports the following operations:

- · Create a new trouble ticket
- Retrieve an existing trouble ticket(s)
- Partial modification of an open trouble ticket
- Close an open trouble ticket
- Cancel an open trouble ticket
- Trouble ticket related notifications

# Billing

Allows the Service Provider to exchange usage and billing information over the Sonata interface.