



Implementation Guidelines

Message Type: XML

DSV Booking Web Service – Sales Order Booking



Owner: EBIS

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Table of Contents

[Summary of Changes 6](#_Toc415061295)

Sales Order [Booking Web Service: Version Availability 7](#_Toc415061296)

[Known Limitations in this Release 7](#_Toc415061297)

[1 Introduction 8](#_Toc415061298)

[1.1 Overview 8](#_Toc415061299)

[1.2 Audience 8](#_Toc415061300)

[1.3 Scope 8](#_Toc415061301)

[1.4 Prerequisites 9](#_Toc415061302)

[2 Sales Order Booking: Process 10](#_Toc415061303)

[2.1 Sales Order Booking 10](#_Toc415061304)

[3 Technical Specifications 11](#_Toc415061305)

[3.1 Communication Protocol 11](#_Toc415061306)

[3.2 Authentication 11](#_Toc415061307)

[3.2.1 Partner Application Registration with Cisco over APIx 11](#_Toc415061308)

[3.3 Endpoint URLs 13](#_Toc415061309)

[4 Message Guideline 14](#_Toc415061310)

[4.1 Sample Error Message 14](#_Toc415061311)

[4.2 Guideline Annotations 14](#_Toc415061312)

[4.3 Service Header Part – Message Guideline for SOAP 15](#_Toc415061313)

[4.4 Mapping of Web Services 16](#_Toc415061314)

[5 Sales Order Booking Web Service 17](#_Toc415061315)

[5.1 Sales Order Booking 17](#_Toc415061316)

[5.1.1 Sales Order Booking Request: Cardinality Structure 17](#_Toc415061317)

[5.1.2 Sales Order Booking Request – Sample XML 23](#_Toc415061318)

[5.1.3 Sales Order Booking Response – Cardinality Structure 26](#_Toc415061319)

[5.1.4 Sales Order Booking Response– Sample XML 26](#_Toc415061320)

[6 WSDL 27](#_Toc415061321)

[7 OAGi XSD 28](#_Toc415061322)

[8 Samples 29](#_Toc415061323)

[9 Error Messages 30](#_Toc415061324)

[Appendix A: Links and References 32](#_Toc415061325)

[Appendix B: Glossary of Terms and Abbreviations 33](#_Toc415061326)

Tables

[Table 1: Change Log 6](#_Toc415061336)

[Table 2: Production Endpoint URLs 13](#_Toc415061337)

[Table 3: Cardinality Values and Color Codes 14](#_Toc415061338)

[Table 4: Mapping of Cisco’s Web Services to OAGi Standard BOD Version 10.0 16](#_Toc415061339)

[Table 5: Cardinality Structure of Sales Order Booking Request 17](#_Toc415061340)

[**Table 6: SO Booking WSDL Supported Services** 27](#_Toc415061341)

[**Table 7: SO Booking WSDL Supported Services Samples** 29](#_Toc415061342)

[**Table 8: System Errors** 31](#_Toc415061343)

[Table 9: Glossary of Terms and Abbreviations 33](#_Toc415061344)

Figures

[Figure 1: Web Services Flow: Communication Protocol 11](#_Toc415061557)

[Figure 2: WS Flow Diagram: Authentication 12](#_Toc415061558)

**Revision History**

| Revision Number | Revision  Date | Description | Reason for Change | Revised By |
| --- | --- | --- | --- | --- |
| 1 | 03/25/2015 | Initial Next Gen Implementation Guide for Sales Order Booking POS | Release 1.0 | Purna Sharma |
| 2. | 04/07/2015 | Request XML mapping changes to include OAGI V10.1 | Minor mappings change | Rajanigandha Patil |
| 3 | 04/10/2015 | Request XML updated | Updated the Cardinality for CISCO | Rajanigandha Patil |
| 4 | 04/17/2015 | Request XML changes | Changed the Xpath for Quantity  Updated the sample Request XML | Rajanigandha Patil |
| 5 | 04/20/2015 | Request XML changes | Source Profile ID changed to Source XML ID | Rajanigandha Patil |
| 7 | 04/29/2015 | Sample Request and Responmse | Added Sample Request and Response XMLs at Section 5.1.2 and 5.1.4 | Rajanigandha Patil |
| 8 | 05/20/2015 | Added System generated Sample Request and Response | Updated the section 4.1, 4.2,Table 7 | Rajanigandha Patil |
| 9 | 06/04/2015 | Changed the Cardinality of Request to maintian the order of the Tags. Also, the limitation | Updated Section 5.1.1 | Rajanigandha Patil |
| 10 | 06/10/2015 | Updated IG as per the comments from PS team | Updated the   * The sequence of elements in address and have it same in both IG & Sample XML * Error message section, remove file size check message | Rajanigandha Patil |
| 11 | 06/12/2015 | Updated the Appendix and Links section |  | Rajanigandha Patil |
| 12 | 07/16/2015 | Updated the XSD and Samples |  | Rajanigandha Patil |
| 13 | 08/05/2015 | Updated the Known Limitatiion section | As per the latest update a request can have max 800 lines | Rajanigandha Patil |
| 14 | 08/05/2015 | Request Root tag | Update the Root tag should be mandatory. | Rajanigandha Patil |
| 15 | 11/18/2015 | Updated the XSD | As per the latest changes made to inlcude some additional Country codes in XSD | Rajanigandha Patil |
| 16 | 2/19/2016 | Request XML changes | As per the latest request from Partner updated the request XML to have the DART(promo code) and Deal ID at Line level and also updated the samples. | Rajanigandha Patil |
| 17 | 3/2/2016 | Cardinality structure changed to Mandatory and Optional | AS per the request from Partner updated the IG to inlcude Mandatory and Optional Column for each Tag in Request XML  Also, updated the Sample request and Response | Rajanigandha Patil |
| 18 | 5/5/2016 | Request XML | Updated the Field **Reported Net price** to **Individual Net Price** | Rajanigandha Patil |
| 19 | 3/14/2017 | Request XML | Attached Request Sample updated to include ebxml info | Shikha Dutt |

Preface

B2B Sales Order Booking Web Service will enable Disti to submit DSV Booking message as an XML Request to Cisco when an End User places an order. This will ensure the turnaround time for Sales Credits and Compensation is reduced.

Summary of Changes

Given below is a summary of the change history of the Sales Order Booking Web Service.

Table 1: Change Log

| **Description of Change** | **Location in the IG** | **Release** |
| --- | --- | --- |
| **IG Version: 1.6** | | |
| New SO Booking WS | 2.1 | June MR |
| SO Booking WS XSD changed | 7.0 | Nov CDR |
| SO Booking Request Changes DART/Deal ID Header to Line level | Table 5 | APR CDR |

Sales Order Booking Web Service: Version Availability

The current solution version is B2B-1.0

Known Limitations in this Release

Each SO Booking XML Request cannot be more than 800 Lines. Any Request having more than expected lines will be rejected with soap fault response.

# Introduction

Cisco has prepared this document for the implementation of SO Booking Web Service. The service allows partners (Distis) to submit the details of a Sales Order Booking. The functionalities and the data exchange mechanism to interact and integrate with Cisco and to improve our sales crediting cycle.

This document also describes various technical and functional aspects of the web service, such as connectivity and message specifications.

## Overview

The interactions between the partner systems and Cisco are done by a request XML and its status in a SOAP Response. 

DSV will ensure that the turnaround time for Sales Crediting will be reduced. When End User places an order, a DSV Booking will be submitted by the Disti to Cisco. This will be used to calculate Crediting information

## Audience

The intended audience for this document is business analysts, IT engineers, and technical architects who are involved in the integration project. Other stakeholders who wish to understand business and/or technical aspects of integration may also use the document as a reference.

## Scope

This document describes the specifications, guidelines, attribute definitions, sample request and response XMLs, dependencies, and assumptions of the SalesOrderBooking Web Service.

## Prerequisites

It is assumed that the reader has some familiarity with Cisco’s APIX platform through either formal or informal training and / or demonstration.

The credentials to access APIX and Cisco’s Web Service infrastructure must have been previously established. Please contact your Partner Solutions representative if they are not established

# Sales Order Booking: Process

When a Sales Order Booking is submitted to Cisco via a request message from the partner, it is verified for validity (See ‘[Message Guideline section](#message_guideline)). If an error is found in the code, a response rejecting the message will be returned (see **‘Error Messages’** section).

To view a high level flow of the Web Services flow as it pertains to request and response see the [Technical S1pecifications section](#technical_specs). For examples of the request and response messages, see the [Message Guideline section](#message_guideline).

## Sales Order Booking

SalesOrderBooking Web Service lets a Disti submit the details of a Sales Order to Cisco.

If successful, the SO details are submitted to Cisco WIPS system. If the request is not successful, the partner must correct the error and resubmit the request.

The process for SalesOrderBooking Request is as follows:

1. The partner system generates a request XML using OAGIS NotifySalesOrder v10.1 BOD in their system.
2. The partner system invokes the Cisco SalesOrderBooking Web Service with the request XML.
3. Cisco receives the XML from the partner and performs authentication and validation of the input request.
4. Cisco submits the SO details to WIPS upon success of authentication and validation (see ‘Error Messages’ section).
5. If the input request is processed successfully, a response is sent to the partner system. If there is any error in the request, an error message is sent to the partner system. In response to an error message, the partner should correct and then resubmit the request, per [Step 1](#step1). A sample Error Message is presented in the [Message Guideline section](#message_guideline).

(**Note:** An error message stops the process).

# Technical Specifications

This section contains the technical specifications for the Sales Order Booking Web Service.

## Communication Protocol

Cisco supports the SO Booking Web Service through a web services application programming interface (API). The booking document is sent over an HTTPS Simple Object Access Protocol (SOAP) call.

This is a stateless document-literal service that supports SOAP 1.2 specifications and is implemented using SD 2.0. The communication method is a synchronous request and response where the request originates from the partner system.

By using HTTP and XML as the means for information exchange, SOAP allows a program running in one kind of operating system to communicate with a program in the same or another kind of operating system.

A high level view of the WS flow follows:



Figure 1: Web Services Flow: Communication Protocol

**Note:** Cisco does not use any ports other than the standard HTTPS port of 443.

## Authentication

To access and interface with Cisco, partners need:

* A valid Cisco user ID (CCO ID)
* Registered application with Cisco’s API console

The sections that follow describe the registration and authentication process.

### Partner Application Registration with Cisco over APIx

1. To interface with Cisco, the partner needs to register their applications with Cisco’s API console at <https://apiconsole.cisco.com>
2. The user needs to sign in to the API console using their CCO ID credential. Also attached:



1. After successfully logging in to the API console, the user should fill in the application to register the application.
   1. A detailed registration process document is available once the user successfully logs in to the API console. A sample “Hello API” to test the integration with Cisco is also discussed.
2. In order to subscribe to SO Booking WS, partner needs to request access via Cisco PS Team. Once access is granted, partner should be able to subscribe using “My API” link in the APIx console.
3. After the application registration is completed the console window displays an “Application Registered” message.
4. Once the registration is complete, the partner application needs to obtain an access token via OAuth v2.0 Grants, and make requests to the destination API(s) by using the access token on an API request call.

A graphical view of the WS flow for authentication follows:

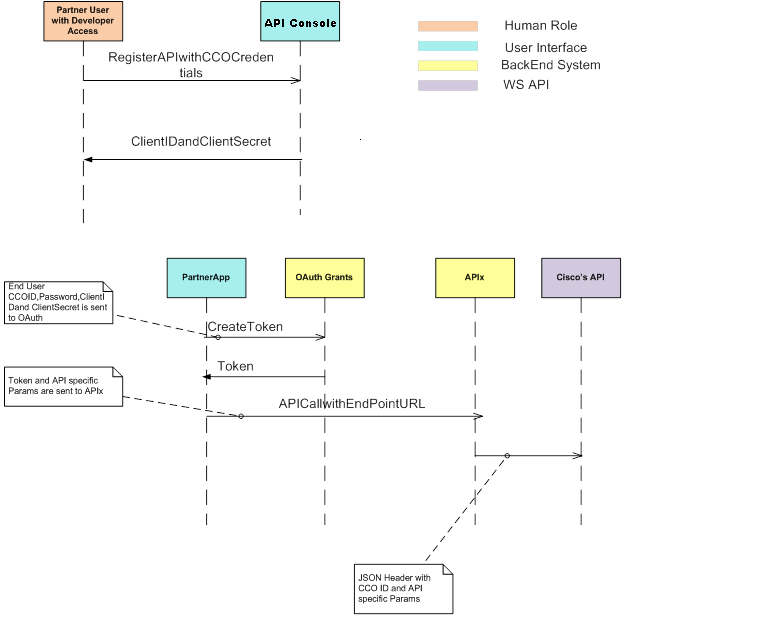


Figure 2: WS Flow Diagram: Authentication

## Endpoint URLs

The partners are provided a test environment to check their integration with Cisco before onboarding to the production environment.

Endpoint URLs are the origin or destination of a session.

The production endpoint URLs for the Sales Order Booking Web Service follow.

Table 2: Production Endpoint URLs

|  |  |
| --- | --- |
| Services | Production |
| SalesOrderBooking | https://api.cisco.com/commerce/POS/v2/DSVBookingSubmission |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**Note:**

* For testing in POE or UAT System (pre-production), contact Cisco representatives
* The host URLs can be accessed directly. No special connectivity such as VPN is required.

# Message Guideline

The request and response messages that partners send to and receive from Cisco describe all of the data elements and the overall XML document structure of a process. Note that the web service returns only a SOAP response. There is no XML response message.

If the request fails, an error message is returned. Error messages must be resolved before the resubmitting. Possible errors are shown in the [Error Message section](#error_messages).

The error message is always in the format of an SOAP fault. In case an error occurs while processing the received SOAP message, the SOAP fault element is returned inside the body element from a web service.

## Sample Error Message

In the sample Error Message that follows, the partner is advised of various triggers for the error. The error message is returned inside the body element of the response message:

## 

## Guideline Annotations

The guideline annotations that follow apply when creating a request or interpreting a response. Cardinality values specify if an SOAP header request or response is required or optional, and specify the frequency at which the value must occur.

Color coding advises a partner if the code is used, if it is message content, or if the code has changed from a previous version of the Implementation Guidelines.

Table 3: Cardinality Values and Color Codes

|  |  |
| --- | --- |
| Cardinality Value | Semantics |
| 1 | Mandatory, only one instance |
| 1..n | Mandatory, one or more instances |
| 0..1 | Optional, only one instance |
| 0..n | Optional, zero or more instances |
| **Color Code** | **Significance** |
| Grey Shaded | Not used |
| Yellow | Message Content |
| Green | Changes from previous version of the Implentation Guidelines |

## Service Header Part – Message Guideline for SOAP

Web Services are implemented using SOAP and integrated to WSX (Web Service - externalization) with Applicability Statement 4 (AS4) profile specification. The request and response is transported via a SOAP envelope that follows a basic structure of header and body.

Payload (content) is inside the SOAP-ENV Body. The payload contains all of the essential code that is required in the request or response.

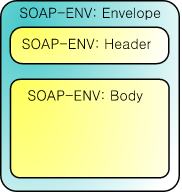


Figure 1: SOAP Envelope

Partners are expected to build and send the request as per the SOAP header specification that follows. The response will also include the SOAP header. To view a sample SOAP envelope, see the Sample SOAP Header Structure and Specification: For Request

Table 4: SOAP Header Structure and Specification: For Request

| **SOAP Header - Request** | **Cardinality** | **Comments** |
| --- | --- | --- |
| soapenv:Envelope | 1 |  |
| soapenv:Header | 1 |  |
| |--eb:Messaging | 1 |  |
| ||--eb:UserMessage | 1 |  |
| |||--eb:MessageInfo | 1 | Identifies message; relates to other message identifiers |
| ||||--eb:Timestamp | 1 | Format : YYYY-MM-DDT HH:MM:SS  Example:2011-05-13T16:13:17 |
| ||||--eb:MessageId | 1 | Unique identifier for each message; must be part of request with given format.  Format: *urn:uuid:randamnumber@FROMURI*  Example: urn:uuid:9A498BE9BA513915861265417909199 |
| |||--eb:PartyInfo | 1 | Identifies message; relates to Party information to identify sender and receiver |
| ||||--eb:From | 1 | Information of originating party |
| |||||--eb:PartyId | 1..n | Minimum occurrence is one; can occur more than once. Must identify same organization in each instance. Cisco uses value in FROMURI portion of MessageId.  Format: **<client’s app name>.<company name>.com** |
| |||||--eb:Role | 1 | Identifies authorized role of party sending (when present as a child of From element) or receiving (when present as a child of To element).  Example: http://example.org/roles/Buyer |
| ||||--eb:To | 1 | Information of receiving party |
| |||||--eb:PartyId | 1 | Format: **<Service Name>.*cisco.com*** |
| |||||--eb:Role | 1 | Example: http://example.org/roles/Seller |

**Envelope**

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:ns="http://www.openapplications.org/oagis/10">

<soapenv: Header xmlns:wsa="http://www.w3.org/2005/08/addressing">

<mesha:Messaging xmlns:mesha="http://ciscoB2BService.com/xsd"

xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope"

mesha:schemaLocation="http://www.w3.org/2001/XMLSchema-instance

http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/core/ebms-header-3\_0-200704.xsd"

Soapenv:mustUnderstand="true">

<eb:UserMessage xmlns:eb="http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/ns/core/200704/">

<eb:MessageInfo>

<eb:Timestamp>2014-03-30T16:13:17</eb:Timestamp>

<eb:MessageId>urn:uuid:sampleN@**dsvsync.ciscoitv.com**</eb:MessageId>

</eb:MessageInfo>

<eb:PartyInfo>

**Messaging Information**

<eb:From>

<eb:PartyId**>dsvsync.ciscoitv.com**</eb:PartyId>

<eb:Role>http://example.org/roles/Buyer</eb:Role>

</eb:From>

<eb:To>

<eb:PartyId>**dsvserver.cisco.com.cisco.com**</eb:PartyId>

**Payload Information**

<eb:Role>http://example.org/roles/Seller</eb:Role>

</eb:To>

</eb:PartyInfo>

<eb:CollaborationInfo />

<eb:MessageProperties />

<eb:PayloadInfo>

<eb:PartInfo href="cid:part@example.com">

<eb:Schema location="http://localhost/oagis.xsd" version="2.0" />

<eb:PartProperties>

<eb:Property name="Description"> To improve the quality of the message, the partner can send a meaningful message</eb:Property>

<eb:Property name="MimeType">application/xml</eb:Property>

</eb:PartProperties>

</eb:PartInfo>

</eb:PayloadInfo>

</eb:UserMessage>

</mesha:Messaging>  
</soapenv:Header>

## Mapping of Web Services

Cisco maps it web services to the Open Applications Group Integration (OAGi) standards for Business Object Documents (BODs).

The OAGi creates and maintains the Open Application Group Integration Specification (OAGIS) which consists of this architecture, standardized messages, and example scenarios that are used as a basis for most integration. By selecting a scenario that most closely matches integration’s needs, the messages or Business Object Documents (BODs) are identified that will accomplish the desired business integration or processes.

Table 4: Mapping of Cisco’s Web Services to OAGi Standard BOD Version 10.0

|  |  |  |
| --- | --- | --- |
| **Web Service** | **Request BOD** | **Response BOD** |
| SalesOrderBooking | NotifySalesOrder | NA |

# Sales Order Booking Web Service

## Sales Order Booking

The Disti system can submit an SO Booking Request to Cisco by calling the SalesOrderBooking Web Service through an XML request and then getting the details back in a SOAP response.

Definitions of the request XML, descriptions of the attributes, and samples for the same are described in the subsections that follow.

### Sales Order Booking Request: Cardinality Structure

The table that follows explains the cardinality structure of a Sales Order Booking request. As with the SOAP header specifications, cardinality values are assigned to each element. The values may be mandatory or optional.

Table 5: Cardinality Structure of Sales Order Booking Request

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Cardinality** | | **Element** | **Guidelines** | **Notes/Examples** |
| **Mandatory/Optional** | **Occurrence of Tag/** **Cardinality Value** |  |  |  |
| Mandatory | 1 | Root Tag | NotifySalesOrder/[@releaseID=""@versionID="" @systemEnvironmentCode="" @languageCode=""] | releaseID="2014" |
|  |
| versionID="1.0" |
|  |
| systemEnvironmentCode="Test/Production" |
|  |
| languageCode="en-US" |
| Mandatory | 1 | NotifySalesOrder/ApplicationArea/CreationDateTime | @dateTimeStamp | Format: CCYY-MM-DD |
|  |
| Example: 2012-07-01 |
|  |
|  |
| Mandatory | 1 | NotifySalesOrder /ApplicationArea/BODID | Unique id for Booking message |  |
|  | Example:232233232TEST123 |
| To be used as file name for internal processing |  |
|  | Datatype: String (200) |
| @schemeVersionID =”1.0" |  |
|  |  |
| @schemeAgencyName =”Cisco" |  |
|  |  |
|  |  |
| **Mandatory** | **1** | **NotifySalesOrder /ApplicationArea/Sender** | **Credentials- Sender** |  | |  |
| Mandatory | 1 | NotifySalesOrder/ApplicationArea/Sender/LogicalID | Business Identifier for the reporting party, that is, source XML ID | Source XML ID as listed in Cisco |
| Datatype: String (200 chars) |
|  |
| Optional | 0..1 | NotifySalesOrder /ApplicationArea/Sender/ID | Company Name | Example: INGRAM MICRO |
| Datatype: String (200 chars) |
|  |
| Optional | 0..1 | NotifySalesOrder /ApplicationArea/Sender/ComponentID | Solution version | Version of Cisco solution |
|  |
| Datatype: string (60 chars) |
| **Optional** | **0..1** | **NotifySalesOrder /ApplicationArea/Receiver** | **Credentials-Receiver** |  | |  |
| Optional | 0..1 | NotifySalesOrder /ApplicationArea/Receiver/LogicalID | Business Identifier | Cisco’s DUNS number |
| Optional | 0..1 | NotifySalesOrder /ApplicationArea/Receiver/ID | Company | Example: Cisco |
| Optional | 0..1 | NotifySalesOrder /ApplicationArea/Extension/Code/ | @typeCode=”Booking” | Function Name |
| Optional | 0..1 | NotifySalesOrder /ApplicationArea/Extension/Text | @typeCode=”Email Address” | Datatype:String (60 chars)  **Ex:** [**emailidgoeshere@partner.com**](mailto:emailidgoeshere@partner.com)**.** |
| **Mandatory** | **1** | **NotifySalesOrder/DataArea** |  |  |
| Mandatory | 1 | NotifySalesOrder/DataArea/Notify | @recordSetCountNumber | recordSetCountNumber - Datatype: Number |
| @recordsetTotalNumber | recordsetTotalNumber - Datatype: Number |
| @RecordsReferenceID | RecordsReferenceID: Datatype: String (200 chars) |
|  |  |
|  | **ReferenceID** can be same as **'BODID'** |
| **Mandatory** | **1** | **NotifySalesOrder /DataArea/SalesOrder/** | | |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader | Tag |  |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/ID | Distributor Sales Order Number | Datatype: string (60 chars) |
| @typeCode=”SalesOrderNumber” |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/DocumentDateTime | Distributor to Reseller Sales Order Date | Format: CCYY-MM-DD |
|  |
| Example: 2004-04-12 |
|  |
| **B2B will convert into DD-MON-YYYY format.** |
| **Mandatory** | **1** | **DataArea/SalesOrder/SalesOrderHeader/Party/** | Name & Address for Buyer/Reseller |  |
| @role=”BuyerOrReseller” |
| Mandatory | 1 | ID | Buyer/Reseller Partner Identification | Datatype: string (200 chars) |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/Party/Name | Name | Datatype: string (250 chars) |
| Mandatory | 1..2 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/Party/Location/Address/AddressLine | @sequence='1' | @sequence=' 1' for Address line 1 |
| @sequence='2' | '@sequence='2' for Address Line 2 |
|  |  |
|  | Atleast 1 Address is required. |
|  | Datatype: string (240 chars) |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/Party/Location/Address/CityName | City | Datatype: string (60 chars) |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/Party/Location/Address/CountrySubDivisionCode | State/Region/Province | Datatype: string (60 chars) |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/Party/Location/Address/CountryCode | Country | Country string(2 chars) |
| Optional | 0..1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/Party/Location/Address/PostalCode | Postal Code | Datatype: string (60 chars) |
| **Mandatory** | **1** | **DataArea/SalesOrder/SalesOrderHeader/CustomerParty/** | Name & Address for End Customer |  |
| @role=”EndUser” |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/CustomerParty /Name | Name | Datatype: string (250 chars) |
| Mandatory | 1..2 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/Party/Location/Address/AddressLine | @sequence='1' | @sequence=' 1' for Address line 1 |
| @sequence='2' | '@sequence='2' for Address Line 2 |
|  |  |
|  | Atleast 1 Address is required. |
|  | Datatype: string (240 chars) |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/CustomerParty/Location/Address/CityName | City | Datatype: string (60 chars) |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/CustomerParty/Location/Address/CountrySubDivisionCode | State/Region/Province | Datatype: string (60 chars) |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/CustomerParty/Location/Address/CountryCode | Country |  |
| Datatype: string (2 chars) |
| Optional | 0..1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/CustomerParty/Location/Address/PostalCode | Postal Code | Datatype: string (60 chars) |
| **Mandatory** | **1** | **NotifySalesOrder/ DataArea/SalesOrder/SalesOrderHeader/ShipToParty/** | **Ship-to name and address** |  |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/ShipToParty/Name | Name | Datatype: string (250 chars) |
| Mandatory | 1..2 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/Party/Location/Address/AddressLine | @sequence='1' | @sequence=' 1' for Address line 1 |
| @sequence='2' | '@sequence='2' for Address Line 2 |
|  |  |
|  | Atleast 1 Address is required. |
|  | Datatype: string (240 chars) |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/ShipToParty/Location/Address/CityName | City | Datatype: string (60 chars) |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/ShipToParty/Location/Address/CountrySubDivisionCode | State/Region/Province | Datatype: string (60 chars) |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/ShipToParty/Location/Address/CountryCode | Country |  |
| Datatype: string (2 chars) |
| Optional | 0…1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/ShipToParty/Location/Address/PostalCode | Postal Code | Datatype: string (60 chars) |
|
|
|
|
|
|
|
|
|
|
| **Optional** | **0..1** | **NotifySalesOrder/ DataArea/SalesOrder/SalesOrderHeader/BillToParty/** | **Bill-to name and address** |  |
| Optional | 0..1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/BillToParty /Name | Name | Datatype: string (250 chars) |
| Mandatory | 1..2 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/Party/Location/Address/AddressLine | @sequence='1' | @sequence=' 1' for Address line 1 |
| @sequence='2' | '@sequence='2' for Address Line 2 |
|  |  |
|  | Atleast 1 Address is required. |
|  | Datatype: string (240 chars) |
| Optional | 0..1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/BillToParty/Location/Address/CityName | City | Datatype: string (60 chars) |
| Optional | 0..1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/BillToParty/Location/Address/CountrySubDivisionCode | State/Region/Province | Datatype: string (60 chars) |
| Optional | 0..1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/BillToParty/Location/Address/CountryCode | Country | Country in which the Address is in. A possible list of values is as specified in ISO 3166-2. |
| Optional | 0…1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/BillToParty/Location/Address/PostalCode | Postal Code | Required for USA & Canada. |
| Datatype: string (60 chars) |
| Mandatory | 1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/DropShipmentAllowedIndicator | Indicates whether the order factory dropped shipped or fulfilled from stock | Permitted Boolean values: True or False |
|  |
| Datatype: String (60) |
| Mandatory | 1 | DataArea/SalesOrder/SalesOrderHeader/RequestedShipDateTime | Customer Requested Ship Date | Format: CCYY-MM-DDThh:mm:ss.sssZ |
|  |
| Time zone is alway Universal Time (UTC). |
|  |
| Example: 2004-04-12T13:20:00Z |
|  |
|  |
| B2B will convert into DD-MON-YYYY format. |
|  |
|  |
|  |
| Optional | 0..1 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/PurchaseOrderReference/ID | @typeCode=”PurchaseOrderNumber” | Reseller to Distributor PO Number |
| **DataType: String ( 60 chars)** |
| Optional | 0..2 | NotifySalesOrder /DataArea/SalesOrder/SalesOrderHeader/Extension/Text | @typecode= "ServiceQuoteNumber" | 1. Service Quote Number |
| '@typecode="WebOrderID" | 2. Web Order ID |
|  | **DataType: String ( 60 chars)** |
| **Optional** | **0…200** | **Sales Order Line Items** | | |
| Optional | 0..200 | DataArea/SalesOrder/SalesOrderLine/ | Tag |  |
| Mandatory | 1 | DataArea/SalesOrder/SalesOrderLine/LineNumberID | SO Line Number (Order Line Item Number) | Datatype: string (max. 60 chars.) |
| Optional | 0..2 | DataArea/SalesOrder/SalesOrderLine/DocumentReference |  | Tag |
| Mandatory | 1 | DataArea/SalesOrder/SalesOrderLine/DocumentReference/ID | @typeCode= "PromotionAuthorizationNumber" @typeCode= "DealID" | 1. Promotion Authorization Number or DART Number  DataType: String ( 50 chars)  2. Deal ID DataType: String ( 50 chars) |
|
|
| Mandatory | 1 | DataArea/SalesOrder/SalesOrderLine/Status/Code | NEW/CHANGE/CANCEL | Datatype: Enumerated (NEW/CHANGE/CANCEL) |
| Mandatory | 1 | DataArea/SalesOrder/SalesOrderLine/Item/ID | Cisco Standard Part Number | Datetype: string (max. 200 chars) |
| Mandatory | 1 | DataArea/SalesOrder/SalesOrderLine/Quantity | Product Quantity | Datatype: Number(Integer) |
| '@unitcode='Each' |
| Mandatory | 1 | DataArea/SalesOrder/SalesOrderLine/UnitPrice/UnitAmount | Unit Price | Required Attribute: typeCode=<currency code> |
|  |
|  |
| Datatype: Number |
|  |
|  |
|  |
| Mandatory | 1 | DataArea/SalesOrder/SalesOrderLine/TotalAmount | **Individual Net Price** | Required Attribute: typeCode=<currency code> |
| This price is Unit price (WPL) less all rebates |  |
|  | Datatype: Number |

### Sales Order Booking Request – Sample XML



### Sales Order Booking Response – Cardinality Structure

There is no XML response. Web Service returns only SOAP response.

<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">

<soapenv:Header>

<eb:Messaging xsi:schemaLocation="http://www.w3.org/2001/XMLSchema-instance http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/core/ebms-header-3\_0-200704.xsd" soapenv:mustUnderstand="true" xmlns:eb="http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/ns/core/200704/" xmlns:soapenv="http://www.w3.org/2003/05/soap-envelope" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">

<eb:UserMessage>

<eb:MessageInfo>

<eb:Timestamp>2015-05-20T12:17:38Z</eb:Timestamp>

<eb:MessageId>urn:uuid:8CD5138BED16ED7EC71432124302945@dsvserver.cisco.com</eb:MessageId>

<eb:RefToMessageId>urn:uuid:DSV\_inline\_20May\_05\_TEst\_1REq\_1214@dsvsync.demo.com</eb:RefToMessageId>

</eb:MessageInfo>

<eb:PartyInfo>

<eb:From>

<eb:PartyId>dsvserver.cisco.com</eb:PartyId>

<eb:Role>http://example.org/roles/Buyer</eb:Role>

</eb:From>

<eb:To>

<eb:PartyId>dsvsync.demo.com</eb:PartyId>

<eb:Role>http://example.org/roles/Seller</eb:Role>

</eb:To>

</eb:PartyInfo>

<eb:CollaborationInfo>

<eb:Service type="Service">dsvserver.cisco.com</eb:Service>

<eb:Action>Response</eb:Action> <eb:ConversationId>urn:uuid:DSV\_inline\_20May\_05\_TEst\_1REq\_1214@dsvsync.demo.com</eb:ConversationId> </eb:CollaborationInfo>

</eb:UserMessage>

</eb:Messaging>

<mesha:MeshaDoneBlock xmlns:mesha="http://cisco.com">

<mesha:MeshaDone>true</mesha:MeshaDone>

</mesha:MeshaDoneBlock>

</soapenv:Header>

<soapenv:Body>

<NotifySalesOrderAcknowledgement>

<status>**SUCCESS**</status>

</NotifySalesOrderAcknowledgement>

</soapenv:Body>

</soapenv:Envelope>

### Sales Order Booking Response– Sample XML

# WSDL

The embedded file that follows contains the DevKit for the Web Services Description Language (WSDL) file:

****

WSDLis an XM-based language used to describe the functionality offered by a web service. A WSDL description of a web service (also known as a WSDL file) provides a machine-readable description of how the service can be called, expected parameters, and the data structures it returns.

This WSDL supports the following services:

**Table 6: SO Booking WSDL Supported Services**

|  |  |
| --- | --- |
| Services | Production |
| SalesOrderBooking | https://api.cisco.com/commerce/POS/v2/DSVBookingSubmission |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

# OAGi XSD

The embedded file that follows contains the XML schema for OAGi NotifySalesOrder v10.1 BOD:



# Samples

The embedded file that follows contains samples of Sales Order Booking WSDL service.

**Table 5: SO Booking WSDL Supported Services Samples**

|  |  |
| --- | --- |
| Services | Sample Request & Response |
| SalesOrderBooking | Added |
|  |  |
|  |  |
|  |  |





# Error Messages

The web service can return the following errors:

* XML schema error when validation for mandatory fields, data type, data length and permitted values fails

Example:

<soapenv:fault>

<soapenv:faultcode>soapfaultCode-handleDSVBooking</soapenv:faultcode>

<soapenv:faultstring>ERROR</soapenv:faultstring>

<soapenv:faultfactor>soapfaultFactor-handleDSVBooking</soapenv:faultfactor>

<soapenv:detail>

<soapenv:detailmessage>Schema Validation failed on xml ,please check the request xml.->

At line 19 and.2.3: column 66:cvc-complex-type Element 'DataArea' cannot have character [children], because the type's content type is element-only.

At line 19 and column 66:cvc-complex-type.2.4.b: The content of element 'DataArea' is not complete. One of '{"http://www.openapplications.org/oagis/10":Notify}' is expected.

At line 20 and column 21:cvc-complex-type.2.4.d: Invalid content was found starting with element 'SalesOrder'. No child element is expected at this point.</soapenv:detailmessage>

</soapenv:detail>

</soapenv:fault>

* If request XML contians more than 800 lines APIx will return an appropriate error message such as

<soapenv:fault>

<soapenv:faultcode>soapfaultCode-handleDSVBooking</soapenv:faultcode>

<soapenv:faultstring>ERROR</soapenv:faultstring>

<soapenv:faultfactor>soapfaultFactor-handleDSVBooking</soapenv:faultfactor>

<soapenv:detail>

<soapenv:detailmessage>Schema Validation failed on xml ,please check the request xml.->At line 14091 and column 25:cvc-complex-type.2.4.d: Invalid content was found starting with element 'SalesOrderLine'. No child element is expected at this point.</soapenv:detailmessage>

</soapenv:detail>

</soapenv:fault>

* Accepted or failed status will be returned in SOAP Header

Table 6: System Errors

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl Number** | **Failure Scenario** | **Error Type** | **Error Code, if any** | **Brief Error message** |
| 1 | Error at the JVM and GW does not get any response from the application JVM | SOAP fault at GW | soap:Server | An error occurred in the destination service. |
| 2 | Request fails schema validation at WSG | SOAP fault at GW | soap:Client | The message was found to be invalid. |
| 3 | Timeout in case unable to reach GW or no response from the GW | Timeout |  |  |
| 4 | Unauthorized access or wrong credentials | SOAP fault at GW | soap:Client | Forbidden. You are not allowed to access that resource. |
| 5 | System failure at B2BDSV layer | Application level failure | <ns2:Status>Error</ns2:Status> | A technical error has occurred. Please try after some time. |
|  |  |  |  |  |

1. Links and References

* ebXML message standard - <http://docs.oasis-open.org/ebxml-msg/ebms/v3.0/core/ebms-header-3_0-200704.xsd>
* OAGIs - [www.oagi.org](http://www.oagi.org)
* Cisco OAGi BOD – [api](http://www.oagi.org) location for Cisco BOD
* ISO Country Code - <http://www.iso.org/iso/country_codes/iso_3166_code_lists/country_names_and_code_elements.htm>
* IP addresses for Oauth:

cloudsso.cisco.com – If virtual, use this for both Production and POE access:

* + - cloudsso1.cisco.com - 72.163.4.74
    - cloudsso2.cisco.com - 173.37.144.211
* api.cisco.com - 72.163.8.72: Use this for production access only for API Consumption (such as Quote API)
* api-test.cisco.com - 72.163.8.247: Use this for POE access only for API Consumption (such as Quote API)

1. Glossary of Terms and Abbreviations

Table 7: Glossary of Terms and Abbreviations

| Term/Acronym | Definition |
| --- | --- |
| ACK | Cisco abbreviation used for Acknowledgement |
| AS | Advanced Services |
| AS4 | Applicability Statement 4 - Conformance Profile of the ebMS 3.0 specification which represents an open standard for the secure and payload-agnostic exchange of B2B documents using web services |
| AS-F | Advanced Services Fixed |
| ATO | Assemble to Order |
| BE GEO ID | Business Entity Geography ID |
| BE ID | Business Entity ID |
| BID | Billing Address Identifier |
| Blanket PO | Blanket PO is a purchasing term that describes when a buyer uses the same Purchase Order Number for ordering product from one vendor. New lines are added to the same PO when new products are needed. |
| BOD | Business Object Document: Standard message formats used by the OAGI messaging standard |
| BOM | Bill of Materials | |
| CCO User ID | Cisco Connection Online User ID (Cisco.com) |
| CCW | Cisco Commerce Workspace |
| ConfigSet | A reference for ConfigurationSet created in Cisco with one or more Configurations |
| CSPP | Cisco Services Partner Program |
| CSR | Customer Service Representative |
| CTMP | Cisco Trade-In Migration Program |
| cXML | Commerce XML |
| Deal ID | Deal ID is used to tie an acquired discount (above and beyond a contractual discount) to a Sales Deal. Invalid Deal ID or missing Deal ID does not reject an order. |
| DPAS | Defense Priorities and Allocation System: DPAS was created by a federal law so that the President of the United States has authorization to:   * Require that contracts or orders relating to certain approved defense or energy programs be accepted and performed on a preferential basis over all other contracts and orders * Allocate materials and facilities in a manner that will promote approved programs |
| DPDM | Direct Partner Discount Model – (New term substituting the earlier GTM: Go to Market) |
| DSV | Distribution Sales Visibility |
| DUNS | Dunn & Bradstreet Universal Numbering System |
| DVAR | Direct Value Added Reseller |
| eBMS | eBusiness XML Messaging Service |
| EPIC | External Partner Integration Cloud |
| GTIN | Global Trading Item Name |
| ICT | Integrated Configuration Tool |
| MLC | Multi Line Configuration tool |
| MOVE | MOVE was an internal Cisco project intended to simplify Logistics shipping preferences. Because they require specific simplified carrier and service level data, Cisco must accept those values instead of what they normally provide. The program is designed as an opt-in or opt-out program, where the customer can have Cisco select the carrier and service level or self-select those values. |
| Non-SS | Non Shared Support | |
| OAGI | Open Applications Group Integration at [http://www.oagi.org](http://www.oagi.org/) |
| OCI | Open Catalog Interface |
| OEM | Original Equipment Manufacturer | |
| PAK | Product Activation Key |
| PIP | Partner Interface Process: Standard message formats used by the RosettaNet messaging standard |
| PO | Purchase Order |
| Price ListID | Identifier of Cisco's price list |
| ProductId | Identifier of hardware or software products and service items offered by Cisco |
| QuickQuote | Quote created with user's contractual discount. These quotes usually get approved automatically after submission. |
| QuoteID | Identifier of the quote created in Cisco |
| RN | RosettaNet at [http://www.rosettanet.org](http://www.rosettanet.org/) |
| ROW | Rest of the world |
| SKU | Stock Keeping Unit | |
| SNH | Serial Number Hierarchy |
| SO | Sales Order |
| SOAP | Simple Object Access Protocol is a protocol specification for exchanging structured information in the implementation of web services | |
| SRCT | Shipment Routing Configuration Tool: This tool allows partners to specify shipping and delivery options such as preferred carriers, freight terms, and service levels. It replaces the MOVE program. | |
| SWIFT | Software Infrastructure and Fulfillment Technology |
| TAA | Trade Agreement Act |
| TAB | Try and Buy | |
| T&C | Term and Content |
| TEP | Trade Exception Process |
| Theatre | APAC, EMEA, and the US are termed as Business Theatres. |
| UDDI | Universal Description, Discovery, and Integration |
| UNSPSC | United Nations Standard Products and Services Code |
| UCS | Unified Computing Service |
| UCSS | Unified Communications Software Subscription |
| WIPS | Worldwide Inventory and Point of Sale |
| WS | Web Service |
| Zulu time format | yyyyMMdd'T'hhmmss.SSS'Z' time format suffixed by a “Z” |