Ordering System API Summary

Ordering System Overview

The ordering system is intended to serve as the focal point order information in the greater e-commerce and physical store ecosystem for both internal and external audiences. The ordering system is responsible for ensuring order security, transformation, splitting, and routing orders to the appropriate downstream system, and unifying order status information exposed by downstream systems.

Goals

- Offer an approachable RESTful interface that allows callers to cleanly and explicitly express their intent without knowledge of other systems or protocols
- Provide a neutral order representation that allows callers to remain ignorant of other systems involved in order-related operations
- Represent order information as pure data to callers, allowing callers to retain control over the localization and display of that information

References

Reference	Owner(s)	Link
Project Home	[RESONSIBLE PEOPLE]	
Ordering System Terminology	[RESPONSIBLE PEOPLE]	Ubiquitous Language: Ordering System

Endpoints

Short Name	Verb	URI	What is it?
<u>View an Order</u>	GET	/partners/{partner}/orders/{order}	Allows the caller to view information about a specific order
Submit an Order	POST	/partners/{partner}/orders	Allows the caller to submit a new order
<u>View Orders (Batch)</u>	GET	/partners/{partner}/orders	Allows the caller to view information about one or more orders
Notify of Order Status Change	POST	/partners/{partner}/orders/{order}/status-changes	Allows the caller to provide notification of an order status change

Order Endpoints

HTTP Verb	URI	What is it?	Auth Required?	Available As
GET	/partners/{partner}/orders/{order}	Allows the caller to view information about a specific order	Yes	application/json

URI Parameters

Name	Notes	ABNF (What is 'ABNF'?)
partner	The partner that owns the order	partner = 1*15(ALPHA / DIGIT / "-" / "_" / ".")
order	The identifier of the order whose record is being requested	order = 1*50(ALPHA / DIGIT / "-" / "_" / ".")
	The identifier should not end in a period, see: URI Normalization Issues	

Query String Parameters

Name	Notes	ABNF
view	Optional - This parameter indicates the projected shape that the order information should take in the response.	<pre>view = "status" /</pre>
	Default: "status-summary"	

Response Codes

Condition	HTTP Code	Comments
No errors, the order information was returned	200 (Ok)	Golden path
The "view" parameter was not present	200 (Ok)	Golden path
		The order status summary view is assumed
Specified {partner} is malformed	400 (Bad Request)	In this context, "malformed" indicates that there are unpermitted characters or length violations
Specified {order} is malformed	400 (Bad Request)	In this context, "malformed" indicates that there are unpermitted characters or length violations
The "view" parameter contained an unknown value	400 (Bad Request)	
Missing or expired client certificate	401 (Unauthorized)	
Client certificate trust chain cannot be validated or is untrusted $% \left(1\right) =\left(1\right) \left(1\right) $	403 (Forbidden)	
Client certificate is not authorized for this endpoint	403 (Forbidden)	
Specified {partner} is unknown	404 (Not Found)	
Specified {order} does not exist	404 (Not Found)	
Internal server error	500 (Internal Server Error)	
Specified {order} ends in one or more periods	Undefined Behavior	Callers are urged not to do this. See: <u>URI Normalization Issues</u>

Authentication & Authorization

A client certificate is required.

Client Certificate Scenarios:

- The client certificate must be valid and chain to a trusted root.
- The following client certificates are authorized for this endpoint:
 - Internal Order Processor Certificate

Response Caching

Caching should be configurable for this API.

When disabled (or set to zero), the API should respond with: "Cache-Control: no-store, no-cache". When enabled, the API should respond with: "Cache-Control: max-age=XXXX, private" where XXX is the cache period in seconds.

Request Headers

	Notes	ABNF
ORD-CorrelationId		ORD-CorrelationId = 1*50(ALPHA / DIGIT / "-" / "." / "_")
	together related activities for this request; it will be sent for any calls to external services	
	and resources that were triggered by this request as well.	

If	f not provided, a unique value will be generated for the request.	

Request Body

None

Response Headers

Name	Notes	ABNF
ORD-CorrelationId	The identifier for the request intended to tie together related activities for this request; it will be sent for any calls to external services and resources that were triggered by this request as well.	ORD-CorrelationId = 1*50(ALPHA / DIGIT / "-" / "." / "_")

Response Body

For a 200 series response code, the response body contains the requested view of order data. The available views are:

- Order Status View
- Order Status Summary View

For a 400 series response code, other than 401, 403, and 404, the response body contains context around the failure to allow callers to present the proper messaging.

See: Error List

View Orders (Batch)

HTTP Verb	URI	What is it?	Auth Required?	Available As
GET	/partners/{partner}/orders	Allows the caller to view information about one or more orders	Yes	application/json

URI Parameters

Name	Notes	ABNF (What is 'ABNF'?)
partner	The partner that owns the order	partner = 1*15(ALPHA / DIGIT / "-" / "_" / ".")

Query String Parameters

Name	Notes	ABNF
view	Optional - This parameter indicates the projected shape that the order information should take in the response.	<pre>view = "status-summary"</pre>
	Default: "status-summary"	
orders	Required - Only the orders with the specified identifiers are included in the response. The value must be a comma separated list of partner order ids.	orders = order / *(order "," orders) order = 1*25(ALPHA / DIGIT / "-" / " " / ".")
	Filtering has the following behaviors: • All matching orders are returned • Any individual order identifiers set to the empty string are ignored • Any order that was requested but was not found is omitted from the response	Order = 1 External y Diolity
	The API is designed to support up to 250 order identifiers are once, requesting more is unsupported.	

Response Codes

Condition	HTTP Code	Comments
No errors, the order information was returned	200 (Ok)	Golden path
The "view" parameter was not present	200 (Ok)	Golden path
		The order status summary view is assumed
No orders match the requested order identifiers for the specified {partner}.	200 (OK)	The response body will have an empty list of orders
One or more of the requested order identifiers was not matched to an order for the specified {partner}.	200 (OK)	The response body will contain only those orders that were located
Specified {partner} is malformed	400 (Bad Request)	In this context, "malformed" indicates that there are unpermitted characters or length violations
The "orders" parameter contains one or more order identifiers that exceed 25 characters or contain inappropriate characters	400 (Bad Request)	All requested order identifiers must be well-formed for a response to be generated
The "orders" parameter contains only commas or whitespace	400 (Bad Request)	
The "orders" parameter contains more than 250 order identifiers	400 (Bad Request)	
The "view" parameter contained an unknown value	400 (Bad Request)	
Missing or expired client certificate	401 (Unauthorized)	
Client certificate trust chain cannot be validated or is untrusted	403 (Forbidden)	
Client certificate is not authorized for this endpoint	403 (Forbidden)	
Specified {partner} is unknown	404 (Not Found)	
Internal server error	500 (Internal Server Error)	

Authentication & Authorization

A client certificate is required.

Client Certificate Scenarios:

- The client certificate must be valid and chain to a trusted root.
- The following client certificates are authorized for this endpoint:
 - Internal Order Processor Certificate

Response Caching

Caching should be configurable for this API.

When disabled (or set to zero), the API should respond with: "Cache-Control: no-store, no-cache".

When enabled, the API should respond with: "Cache-Control: max-age=XXXX, private" where XXX is the cache period in seconds.

Request Headers

Notes	ABNF
Optional - If a value is provided with the request, it will be used as a key intended to tie together related activities for this request; it will be sent for any calls to external services and resources that were triggered by this request as well. If not provided, a unique value will be generated for the request.	ORD-CorrelationId = 1*50(ALPHA / DIGIT / "-" / "." / "_")

Request Body

None

Response Headers

Name	Notes	ABNF
	The identifier for the request intended to tie together related activities for this request; it will be sent for any calls to external services and resources that were triggered by this request as well.	ORD-CorrelationId = 1*50(ALPHA / DIGIT / "-" / "." / "_")

Response Body

For a 200 series response code, the response body contains the set of results projected into the requested view of order data. The available views are:

• Order Status Summary View

Туре	Field Name	Description	Default
Dictionary <string, reference="" uri=""></string,>	Links	A set of related resource links.	One "self" link, that identifies this resource (including the query string, if necessary).
		See: <u>URI Reference</u> , <u>Related Resource Links</u>	
List <requested view=""></requested>	Orders	The set of status information for each order, in the format of the view that was requested	An empty set

For a 400 series response code, other than 401, 403, and 404, the response body contains context around the failure to allow callers to present the proper messaging.

See: Error List

Create Order

HTTP Verb	URI	What is it?	Auth Required?	Available As
POST	/partners/{partner}/orders	Allows the caller to submit a new order	Yes	application/json

URI Parameters

Name	Notes	ABNF (What is 'ABNF'?)
partner	The partner that owns the order	partner = 1*15(ALPHA / DIGIT / "-" / "_" / ".")

Query String Parameters

None

Response Codes

Condition	HTTP Code	Comments
No errors were triggered, the order was accepted for further processing	202 (Accepted)	Golden path
An order was already submitted for this partner using the same order and transaction identifiers	202 (Accepted)	
Specified {partner} is malformed	400 (Bad Request)	In this context, "malformed" indicates that there are unpermitted characters or length violations
Request body is empty or missing	400 (Bad Request)	
At least one field in the request body fails validation	400 (Bad Request)	See the request contract below for validation requirements
Missing or expired client certificate	401 (Unauthorized)	
Client certificate trust chain cannot be validated or is untrusted	403 (Forbidden)	
Client certificate is not authorized for this endpoint	403 (Forbidden)	
Specified {partner} does not match the partner in the request body	403 (Forbidden)	
Specified {partner} is unknown	404 (Not Found)	
An attempt is being made to create an order, but the order identifier was used for a different request which has a different transaction identifier than the one submitted with this request	409 (Conflict)	If the order and transaction identifiers match the previous request, then this scenario does not apply; the request will be considered equivalent to the previous submission
Internal server error	500 (Internal Server Error)	
The service is unable to process the request	503 (Service Unavailable)	Callers should respect the Retry-After header when retrying

Authentication & Authorization

A client certificate is required.

Client Certificate Scenarios:

- The client certificate must be valid and chain to a trusted root.
- The following client certificates are authorized for this endpoint:
 - Internal Order Processor Certificate
 - Internal Website Certificate

 - Internal Admin Certificate[TRUSTED PARTNER] Certificate

Response Caching

Caching should disabled for this API.

Request Headers

	Notes	ABNF
ORD-CorrelationId	Optional - If a value is provided with the request, it will be used as a key intended to tie together related activities for this request; it will be sent for any calls to external services and resources that were triggered by this request as well.	ORD-CorrelationId = 1*50(ALPHA / DIGIT / "-" / "." / "_")
	If not provided, a unique value will be generated for the request.	

Request Body

Partner Order

Туре	Field Name	Description	Default	Validation
string	TransactionId	A value generated by partners to identify this transaction. When a request is retried, the Transaction Id should remain the same across all attempts.	null	May not be null. Must have between 1 and 250 characters
		Note: Tracking Ids are not case sensitive. Recommendation: a random GUID.		
Order Identity	Identity	The set of metadata that uniquely identifies an order	null	May not be null.
Customer	Customer	The business representative or individual placing an order	null	May not be null.
Order Shipping Information	Shipping	The set of shipping information applicable to the order level	null	May not be null.
Order Instructions	Instructions	The set of instructions for order processing and fulfilment	null	May not be null.
Partner Order Metadata	PartnerMetadata	The set of metadata about the order that partners would like tracked	null	
List <recipient></recipient>	Recipients	The set of recipients for the order	An empty set	May not be null. Must have between 1 and 500 recipients
List <line item=""></line>	LineItems	The set of items being ordered	An empty set	May not be null. Must have between 1 and 250 items

Order Identity

Туре	Field Name	Description	Default	Validation
string	PartnerCode	A short code that uniquely identifies a partner	null	May not be null or empty May not be more than 15 characters
string	PartnerSubCode	A short code that further identifies a partner	null	May not be more than 15 characters
string	PartnerRegion	A short code that identifies the partner's region	null	May not be more than 10 characters
string	PartnerOrderId	The identifier that should be used to uniquely identify an order	null	May not be null or empty May not be longer than 50 characters Must be unique for the Partner Code

Customer

Туре	Field Name	Description	Default	Validation
string	Code	A short code that identifies a customer	null	May not be null or empty May not be more than 15 characters
string	EmergencyPhone	The phone number to use for contacting the customer in the case of an emergency	null	May be null but not empty Must contain only numeric characters Must be between 5 and 15 characters
string	LanguageCode	The IETF language code that corresponds to the customer's preferred contact language. See: RFC 5646, RFC 4647	null	May not be null or empty Must be between 2 and 10 characters
Address	Address	The mailing address of the customer	null	

Order Shipping Information

Туре	Field Name	Description	Default	Validation
Address	ReturnAddress	The return address to use for the order	null	
enum	ShipWhen	The instruction on when the order should be shipped.	OnlyWhenOrderIsComplete	
		Valid members: • OnlyWhenOrderIsComplete • AsItemsBecomeAvailable		

Order Instructions

Туре	Field Name	Description	Default	Validation
List <sequenced data=""></sequenced>	SpecialInstructions	The set of special instructions for processing and fulfilment of the order.	An empty set	May have no more than 50 instructions
List <sequenced data=""></sequenced>	PackSlipInformation	The set of ordered data used to influence the packing slip format and contents.	An empty set	May have no more than 25 items
enum	Priority	The priority of the order. Valid members: Normal Elevated Critical FirstPaid FirstOrder TestOnly	Normal	
string	PriorityExplanation	An explanation for the prioritization of the order	null	May have no more than 500 characters
string	SuggestedSite	A suggestion for the site that should be routed to for processing	null	May have no more than 250 characters

Sequenced Data

Туре	Field Name	Description	Default	Validation
uint16	SequenceNumber	The number that uniquely identifies the sequence in which the text should appear in a set.	0	Must be in the range of 0 - 249
string	Data	The data that is being sequenced	null	May not be more than 500 characters

Partner Order Metadata

Туре	Field Name	Description	Default	Validation
nullable <datetime></datetime>	OrderDateUtc	The order date specified by the partner, expressed in UTC time see: <u>ISO 8601</u>	null	May be null Must be earlier than Now()
List <sequenced data=""></sequenced>	CustomerReferenceData	The set of ordered data used for order tracking and other customer-specific purposes.	An empty set	May have no more than 3 items

Recipient

Туре	Field Name	Description	Default	Validation
string	Id	The identifier of the recipient, as specified by the partner	null	May not be null or empty May have no more than 50 characters
string	LanguageCode	The IETF language code that corresponds to the recipient's preferred contact language. see: RFC 5646, RFC 4647	null	May not be null or empty Must be between 2 and 10 characters
Recipient Shipping Information	Shipping	The shipping information specific to the recipient	null	May not be null
List <ordered details="" item=""></ordered>	OrderedItems	Details about the set of items that the recipient ordered	An empty set	May not be null Must have between 1 and 99 items

Recipient Shipping Information

Туре	Field Name	Description	Default	Validation
Address	Address	The address that the order should be shipped to	null	May not be null
enum	SignatureRequirement	The requirement specified for a signature on delivery. Valid members: None Required Indirect Direct Adult	None	
enum	DeliveryExpectation	The expectation for delivery, with respect to the expected delivery date. Valid members: OnOrBeforeDate OnDate OnExactDateTime	OnOrBeforeDate	
string	DeliveryExpectedBy	When delivery of the ordered items is expected.	null	May be null May not have more than 25 characters
nullable <datetime></datetime>	ExpectedShipDateUtc	The date/time that shipment of the ordered items is expected, expressed in UTC time see: ISO 8601	null	May be null Must be Now() or greater
enum	IncoTerms	The International Commerce Terms for the order. Valid members: • DeliveryDutyPaid • DeliveryDutyUnpaid see: International Chamber of Commerce Gude to Incoterms	DeliveryDutyPaid	
string	RequestedProviderCode	The code for the requested shipping provider that is desired	null	May be null or empty Must have no more than 25 characters
string	RequestedServiceLevelCode	The code for the shipping service level that is desired	null	May be null or empty Must have no more than 25 characters
string	RatingAccountCode	The code for shipping rating account of the customer	null	May be null or empty Must have no more than 25 characters
bool	RequestSaturdayDelivery	A flag indicating whether Saturday delivery should be requested	false	

Ordered Item Details

Туре	Field Name	Description	Default	Validation
string	LineItemId	The identifier of the line item being ordered	null	May not be null or empty Must have no more than 50 characters
uint32	Quantity	The quantity of the line item being ordered	1	Must be between 1 and 1,000,000

Line Item

Туре	Field Name	Description	Default	Validation
string	LineItemId	The identifier of the line item, as specified by the partner	null	May not be null or empty
				Must have no more than 50 characters

string	ProductCode	The code of the product, as specified by the partner	null	May be null or empty Must have no more than 25 characters
string	Resourceld	The identifier of the resource of the line item, as specified by the partner	null	May be null or empty Must have no more than 1024 characters
string	Description	A human-readable description of the line item, for informational purposes	null	May be null or empty Must have no more than 250 characters
string	ServiceLevelAgreement	A code corresponding to a pre-negotiated agreement for the production and shipping of the item	null	May not be null or empty Must have no more than 25 characters
Price Information	DeclaredValue	The declared value of the line item, as specified by the partner	null	Must not be null
uint16	CountInSet	The count of items in the set represented by this line item	1	Must be between 1 and 999
Price Information	UnitPrice	The expected unit price of the line item,	null	Must not be null
string	Item	The freeform payload that describes the item being ordered. This may take the form of an expected structured item format understood by downstream systems.	null	Must not be null Must be able to encode as a JSON string Must have a total size less than 2kb

Price Information

Туре	Field Name	Description	Default	Validation
decimal	Amount	The value of the price	0.0	
string	CurrencyCode	A code that describes the unit of currency represented by the price value	null	May not be null or empty Must have no more than 10 characters

Address

Туре	Field Name	Description	Default	Validation
string	FirstName	The first name of the addressee	null	May be null or empty May not be more than 50 characters
string	LastName	The last name of the addressee	null	May be null or empty Must be between 2 and 150 characters
string	Company	The name of the company associated with the address	null	May be null or empty Must be between 2 and 150 characters
string	CareOf	The "care of" addressee	null	May be null or empty Must be between 2 and 150 characters
string	Line1	The first line of the street address	null	May not be null or empty Must be between 2 and 150 characters
string	Line2	The second line of the street address	null	May be null or empty Must have less than 150 characters
string	Line3	The third line of the street address	null	May be null or empty Must have less than 150 characters
string	Line4	The fourth line of the street address	null	May be null or empty Must have less than 150 characters
string	City	The city of the addressee	null	May not be null or empty Must be between 2 and 150 characters
string	StateOrProvince	The state or province of the addressee	null	May not be null or empty Must be between 2 and 150 characters
string	CountryCode	The code of the country of the addressee	null	May not be null or empty Must be between 2 and 15 characters
string	PostalCode	The postal code of the address	null	May not be null or empty Must be between 2 and 15 characters
string	Email	The email address to use for contacting the addressee	null	Must be null or a valid email address May not be longer than 250 characters
string	Phone	The phone number to use for contacting the addressee	null	May not be null or empty Must be between 5 and 15 characters
enum	AddressType	The type of address. Valid members: • Unknown • Residence • Business	Unknown	May not be "Unknown"
nullable <enum></enum>	Region	The region in which the address is located. Valid members: • Americas • EMEA • APAC	null	

Response Headers

Name	Notes	ABNF
Retry-After	In a case of an HTTP 202 (Accepted) response, this value indicates the number of seconds after which callers are expected to be able to query an associated endpoint and view the result of the creation.	Retry-After = 1*5DIGIT
	For other responses, if callers are expected to retry the request, as is the often the case when an HTTP 503 (Service Unavailable) is encountered during the request, the value of	

	the header will reflect the number of seconds after which callers are advised to retry.	
	In the HTTP 503 scenario, this value should match the value of the Retry-After header returned by the dependent service which triggered the unavailable response. If the dependent service did not specify a Retry-Header, it should not be specified in the response.	
ORD-Correlat	ionId The identifier for the request intended to tie together related activities for this request; it will be sent for any calls to external services and resources that were triggered by this request as well.	ORD-CorrelationId = 1*50(ALPHA / DIGIT / "-" / "." / "_")

Response Body

For a 200 series response code, the response body contains the requested view of order data.

Туре	Field Name	Description	Default
Dictionary <string, reference="" uri=""></string,>	Links	A set of related resource links. The following links may be present:	One "self" link, that identifies this resource (including the query string, if necessary).
		 A "self" link specifying the url that identifies the resource 	
		 A "status" link specifying the url that can be used to query the status of the order 	
		 A "status-details" link specifying the url that can be used to query the status details of the order. 	
		see: <u>URI Reference</u> , <u>Related Resource Links</u>	

```
Example (JSON)
     "links" :
    self":
         {
"uri"
                                    : "https://api.orders.com/partners/PartnerName/orders/ABC1234", : "GET",
               "method"
               "authentication" : [ "ClientCertificate" ]
         },
"status":
         {
"uri"
                                    : "https://api.orders.com/partnersPartnerName/orders/ABC1234?
"method" : "GET",
"authentication" : [ "ClientCertificate" ]
          },
"status-details":
view=status",
"method"
               "uri"
                                    : "<a href="https://api.orders.com/partners/PartnerName/orders/ABC1234?">https://api.orders.com/partners/PartnerName/orders/ABC1234?</a>
               "method" : "GET",
"authentication" : [ "ClientCertificate" ]
          }
     ]
```

For a 400 series response code, other than 401, 403, and 404, the response body contains context around the failure to allow callers to present the proper messaging.

See: Error List

Notification Endpoints

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Notify of Order Status Change

HTTP Verb	URI	What is it?	Auth Required?	Available As
POST	/partners/{partner}/orders/{order}/status-changes	Allows the caller to provide notification of an order status change	Yes	application/json

URI Parameters

Name	Notes	ABNF (What is 'ABNF'?)
partner	The partner that owns the order	partner = 1*15(ALPHA / DIGIT / "-" / "_" / ".")
order	The identifier of the order to which the status change was applied	order = 1*50(ALPHA / DIGIT / "-" / "_" / ".")
	The identifier should not end in a period, see: <u>URI Normalization Issues</u>	

Query String Parameters

None

Response Codes

Condition	HTTP Code	Comments
No errors were triggered, the change was accepted for further processing	202 (Accepted)	Golden path
Specified {partner} is malformed	400 (Bad Request)	In this context, "malformed" indicates that there are unpermitted characters or length violations
Request body is empty or missing	400 (Bad Request)	
At least one field in the request body fails validation	400 (Bad Request)	See the request contract below for validation requirements
Missing or expired client certificate	401 (Unauthorized)	
Client certificate trust chain cannot be validated or is untrusted	403 (Forbidden)	
Client certificate is not authorized for this endpoint	403 (Forbidden)	
Specified {partner} does not match the partner in the request body	403 (Forbidden)	
Specified {partner} is unknown	404 (Not Found)	
Specified {order} does not exist	404 (Not Found)	
Internal server error	500 (Internal Server Error)	
The service is unable to process the request	503 (Service Unavailable)	Callers should respect the Retry-After header when retrying

Authentication & Authorization

A client certificate is required.

Client Certificate Scenarios:

- The client certificate must be valid and chain to a trusted root.
- The following client certificates are authorized for this endpoint:

 - Order Production System CertificatePartner Communication System Certificate

Response Caching

Caching should disabled for this API.

Request Headers

	Notes	ABNF
ORD-CorrelationId	Optional - If a value is provided with the request, it will be used as a key intended to tie together related activities for this request; it will be sent for any calls to external services and resources that were triggered by this request as well.	ORD-CorrelationId = 1*50(ALPHA / DIGIT / "-" / "." / "_")
	If not provided, a unique value will be generated for the request.	

Request Body

Order Status Change

Туре	Field Name	Description	Default	Validation
string	LineItemId	The identifier of the line item being ordered	null	Must have no more than 50 characters

				May not be null or empty when ChangeScope is "RecipientOrderedItem" Must be null when ChangeScope is "Order"
string	RecipientId	The identifier of the recipient, as specified by the partner	null	Must have no more than 50 characters May not be null or empty when ChangeScope is "RecipientOrderedItem" Must be null when ChangeScope is "Order"
enum	Status	The current status of the order or recipient ordered item that triggered the notification. Valid members: New Submitted Production Shipped Tendered Canceled	New	
enum	ChangeScope	The scope of what was changed to trigger the notification, and what the status should be applied to. Valid members: • Unknown • Order • RecipientOrderedItem	Unknown	May not be "Unknown"

Response Headers

Name	Notes	ABNF
Retry-After	In a case of an HTTP 202 (Accepted) response, this value indicates the number of seconds after which callers are expected to be able to query an associated endpoint and view the result of the creation.	Retry-After = 1*5DIGIT
	For other responses, if callers are expected to retry the request, as is the often the case when an HTTP 503 (Service Unavailable) is encountered during the request, the value of the header will reflect the number of seconds after which callers are advised to retry.	
	In the HTTP 503 scenario, this value should match the value of the Retry-After header returned by the dependent service which triggered the unavailable response. If the dependent service did not specify a Retry-Header, it should not be specified in the response.	
ORD-CorrelationId	The identifier for the request intended to tie together related activities for this request; it will be sent for any calls to external services and resources that were triggered by this request as well.	ORD-CorrelationId = 1*50(ALPHA / DIGIT / "-" / "." / "_")

Response Body

For a 200 series response code, the response body contains the requested view of order data.

Туре	Field Name	Description	Default
Dictionary <string, reference="" uri=""></string,>	Links	A set of related resource links. The following links may be present: • A "status" link specifying the url that can be used to query order status details	One "status" link specifying the url that can be used to query order status details
		see: URI Reference, Related Resource Links	

For a 400 series response code, other than 401, 403, and 404, the response body contains context around the failure to allow callers to present the proper messaging.

See: Error List

Data Contracts

Order Status View

Status View

Туре	Field Name	Description	Default
Dictionary <string, reference="" uri=""></string,>	Links	A set of related resource links.	One "self" link, that identifies this resource (including the query string, if necessary).
		See: <u>URI Reference</u> , <u>Related Resource Links</u>	
Order Identity	Identiy	The set of metadata that uniquely identifies an order	null
enum	Status	The aggregate status of the order, based on the status of the ordered items per recipient. Valid members: New Submitted Production Shipped Tendered Canceled	New
List <recipient status=""></recipient>	Recipients	The status for each of the recipients associated with the order	An empty set

Order Identity

Туре	Field Name	Description	Default
string	PartnerCode	A short code that uniquely identifies a partner	null
string	PartnerSubCode	A short code that further identifies a partner	null
string	PartnerRegion	A short code that identifies the partner's region	null
string	PartnerOrderId	The identifier that should be used to uniquely identify an order	null

Recipient Status

Туре	Field Name	Description	Default
string	Id	The identity of the recipient, as specified by the partner at the time of order creation	null
enum	Status	The aggregate status of the recipient's portion of the order, based on the status of the ordered items. Valid members: New Submitted Production Shipped Canceled	New
Address	Address	The address that the order was shipped to	null
nullable <decimal></decimal>	DeliveryCharge	The amount that the recipient was charged for delivery	null
List <ordered item="" status=""></ordered>	OrderedItems	The status for each of the items ordered for the recipient	An empty set
List <package></package>	Packages	The packages that were shipped for the recipient's items	An empty set

Ordered Item Status

Туре	Field Name	Description	Default
string	LineItemId	The identifier of the line item the status is associated with	null
enum	Status	The aggregate status of the recipient's portion of the order, based on the status of the ordered items. Valid members: New Submitted Production Shipped Canceled	New
string	StatusDetail	An optional reason for the status that was assigned	null
uint	Quantity	The number of items that were ordered of this line item	0

Address

Туре	Field Name	Description	Default
string	FirstName	The first name of the addressee	null
string	LastName	The last name of the addressee	null
string	Company	The name of the company associated with the address	null
string	CareOf	The "care of" addressee	null

string	Line1	The first line of the street address	null
string	Line2	The second line of the street address	null
string	Line3	The third line of the street address	null
string	Line4	The fourth line of the street address	null
string	City	The city of the addressee	null
string	StateOrProvince	The state or province of the addressee	null
string	CountryCode	The code of the country of the addressee	null
string	PostalCode	The postal code of the address	null
string	Email	The email address to use for contacting the addressee	null
string	Phone	The phone number to use for contacting the addressee	null
enum	AddressType	The type of address.	Unknown
		Valid members: • Unknown • Residence • Business	
nullable <enum></enum>	Region	The region in which the address is located.	null
		Valid members: • Americas • EMEA • APAC	

Package

Туре	Field Name	Description	Default
string	Id	The identifier of the package	null
string	TrackingNumber	The tracking number provided by the delivery carrier	null
string	ShippingProvider	The code for the carrier that was used for shipping the package. Examples: FedEx, UPS, USPS, DHL	null
string	ShippingMethod	The code for the generalized carrier service level that was used for shipping the package. Examples: 2Day, Economy, Ground, PriorityMail	null
nullable <datetime></datetime>	ShippedDateUtc	The date/time that the order was shipped, expressed in UTC time. see: ISO 8601	null
string	ExpectedDeliveryDate	The date/time that the carrier specified for when the package is expected to be delivered, as provided by the carrier. No guarantees are made about the represented time zone, but for most carriers, it corresponds to the recipient's local time.	null
List <packaged item=""></packaged>	Contents	The items included in this package	An empty set
nullable <decimal></decimal>	ShippingCost	Cost of the package for delivery	0.0
ВохТуре	Box	The type of box used to ship	null
Origin	Origin	The facility where the package is shipped from	null
Weight	Weight	The weight of the package	null
Volume	Volume	The volume of the package	null
enum	ShippingPaidBy	The entity that paid for the shipping Valid members: • Unknown • BillTo	Unknown

Packaged Item

Туре	Field Name	Description	Default
string	LineItemId	The identifier of the line item that was packaged	null
int	QuantityInPackage	The number of items that were in the package	0
string	PartnerProductCode	The code of the product, as specified by the partner	null

ВохТуре

Туре	Field Name	Description	Default
string	Name	The name of the box type	null
string	Id	The identifier of the box	null

Origin

Туре	Field Name	Description	Default
string	Name	The name of the facility of origin	null
string	Code	The facility standard code	null

Weight

Туре	Field Name	Description	Default
float	Amount	The amount of weight	0.0
enum	UnitOfMeasure	The unit used for measurement	Unknown
		Valid members: • Unknown • Pounds • Kilograms	

Volume

Туре	Field Name	Description	Default
float	Amount	Them amount of volume	0.0
enum	UnitOfMeasure	The unit used for measurement	Unknown
		Valid members: • Unknown • Inches • Centimeters	

ShippingCode

Туре	Field Name	Description	Default
string	Provider	The code used to identify the provider	null
string	Method	The code used to identify the shipping method	null

```
Example (JSON)
      "links" :
      [
            "self" :
            {
view=status",
"method"
                                           : "https://api.orders.com/partners/Name/orders/ABC1234?
                 "method" : "GET",
"authentication" : [ "ClientCertificate" ]
           }
     ],
"identity" :
      {
           "partnerCode" : "OMGU",
"partnerSubCode" : "0055",
"partnerRegion" : "AMR",
"partnerOrderId" : "00-12434-867-5309"
     },
"status" : "Submitted",
"recipients" :
                  "id"
                                           : "01",
: "Production",
                  "status"
                  "deliveryCharge" : null,
"address" :
                                                  : "Abe",
: "Froman",
: "Sausage King",
                        "firstName"
                        "lastName"
"company"
"careOf"
                                                  : null,
: "517 S State Street",
                        "line1"
                        "line2"
"line3"
"line4"
                                                   : null,
                                                  : null,
                                                   : null,
                                                  : "Chicago",
: "IL",
: "US",
: "60605",
                        "city"
                        "stateOrProvince"
                        "countryCode"
                        "postalCode"
"email"
                                                  : "abe@sausagekingofchicago.com",
: "312-913-1373",
                        "phone"
                        "addressType"
                                                  : "Business",
                        "region"
                                                   : "APAC"
                  },
"orderedItems" :
                              "lineItemId" : "01",
"status" : "Cancelled",
"statusDetail" : "Bad asset",
                              "quantity"
                                                   : 1
                                                   : "02",
: "Production",
                              "lineItemId"
                              "status"
```

```
"statusDetail : null,
                          "quantity"
                                           : 4
                   }
               "packages" : []
        },
{
              "id"
                                      : "frankie",
              "status"
                                      : "Shipped",
              "deliveryCharge" : 42.95,
"address" :
                    "firstName"
                                             : "Frank",
                                            . rrank",
: "O'Person",
: "",
                    "lastName"
                    "company"
                                             : null,
: "434 Kirkland Way",
                    "careOf"
                   "line1"
"line2"
"line3"
                                             : null,
                                             : null,
                    "line4"
                                             : null,
                    "city"
                                                "Kirkland",
                                            : "WA",
: "US",
: "98033",
: "frank@omgno.com",
                    "stateOrProvince"
                    "countryCode"
"postalCode"
                    "email"
"phone"
                                             : "312-913-1373",
                                             : "Business",
: "APAC"
                    "addressType"
                    "region"
              },
"orderedItems" :
                   {
                                             : "03",
: "Shipped",
                         "lineItemId"
"status"
                         "statusDetail" : null,
                          "quantity"
                   }
              ],
"packages" :
                   {
                          "id"
                                                                 : "01",
                         "trackingNumber"
"shippingProvider"
"shippingMethod"
"shippedDateUtc"
                                                                : "OU812",
: "FedEx",
: "Ground",
                                                                : "2016-08-17T13:17:27Z",
: "2016-08-21T20:00:00",
                          "expectedDeliveryDate"
                          "contents":
                         [
                               {
                                    "lineItemId" : "03",
"quantityInPackage" : 3
                              }
                         ]
                   },
{
                                                                : "02",
: "90210",
: "USPS",
: "PriorityMail",
: "2016-08-17713:17:27Z",
                         "id"
                         "trackingNumber"
"shippingProvider"
"shippingMethod"
"shippedDateUtc"
                          "expectedDeliveryDate"
                                                                : "2016-08-21T20:00:00"
                          "contents":
                         [
                                    "lineItemId"
                                                             : "03",
                                     "quantityInPackage" : 3
]
```

Order Status Summary View

		Description	Default
Dictionary <string, reference="" uri=""></string,>	Links	A set of related resource links. See: URI Reference, Related Resource Links	One "self" link, that identifies this resource (including the query string, if necessary).
Order Identity	Identiy	The set of metadata that uniquely identifies an order	null
enum	Status	The aggregate status of the order, based on the status of the ordered items per recipient. Valid members: • New • Submitted • Production • Shipped • Tendered • Canceled	New

Order Identity

Туре	Field Name	Description	Default
string	PartnerCode	A short code that uniquely identifies a partner	null
string	PartnerSubCode	A short code that further identifies a partner	null
string	PartnerRegion	A short code that identifies the partner's region	null
string	PartnerOrderId	The identifier that should be used to uniquely identify an order	null

Error List

Error List

Туре	Field Name	Description	Default
List <error information=""></error>	Errors	The error scenarios that the caller encountered	An empty set

Error Information

Туре	Field Name	Description	Default
enum	Code	A code that describes the error scenario Valid members: • Unknown, • PartnerIdentifierMalformed • OrderIdentifierMalformed • ValueIsRequired • LengthIsInvalid • InvalidCharacters • InvalidValue • UnknownValue • NumberIsOutOfRange • Exception • DuplicateOrder • OrderSubmissionFailed • OrderStatusCheckFailed • OrderedIttemUnavailable	Unknown
string	MemberPath	 UnroutedOrderedItem The path of the member that was found to be in error. For complex objects, this should be the entire property tree. For example: "order.Identity.PartnerCode" 	ш
string	Description	A short, non-localized, human readable string intended to clarify the problem. This text is intended to help debug calls and should not be considered user-facing.	п

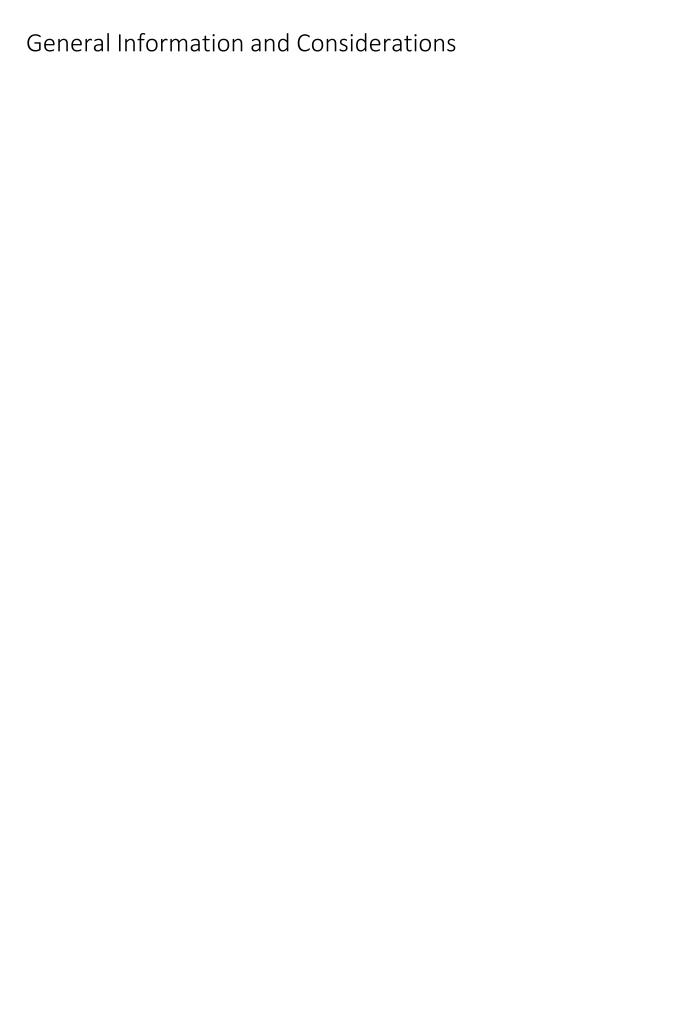
```
Example (JSON)
```

URI Reference

Monday, May 9, 2016 4:52 PM

Туре	Field Name	Description	Default
string	Uri	The fully qualified URI to be used for addressing the resource	
enum	Method	The HTTP method to use for interacting with the resource. Valid members:	GET
List <enum></enum>	Authentication	The type of authentication supported by the resource. Valid members: • Anonymous • ClientCertificate	Anonymous

```
Example (JSON)
{
```



Related Resource Links

Summary

The ordering system API endpoints conform to the concept of <u>HATEOAS</u>, where the permissible operations for an entity are exposed to callers as a set of "Links" field in each response. This provides the following benefits:

- Callers can discover the permissible actions that can be performed on an entity within the context of its current state without having to have deep knowledge of the ordering system API.
- Callers can be directed to the canonical URL for each resource in the response. For example, if a resource was included in a batch response, clients can know the canonical URL where it can be further inspected or modified.
- Developers can debug an API when it's data is shared out of context. Looking at a response, one can know "where it came from".

Each uniquely identifiable (hence addressable) resource should include the following data field:

Туре	Field Name	Description	Default
Dictionary <string, reference="" uri=""></string,>	Links	A set of related resource links.	One "self" link, that identifies this resource (including the query string, if necessary).
		See: <u>URI Reference</u> , <u>Related Resource Links</u>	

This field contains a list of links that are related to the associated resource. All resources are expected to include at le ast one link, with relationship = "self" indicating that it's the canonical URL for this resource.

Although ordering system API employs a common extended set of relationships, as outlined for each endpoint, the IANA has a list of formal relationships that may serve as a good guide for better understanding the concept: http://www.iana.org/assignments/link-relations/link-relations.khtml

More Information

- RFC 5988
- http://en.wikipedia.org/wiki/Link_relation

URI Normalization Issues

Summary

When an attribute name ending in a period is used in the URI path, .NET URI normalization will cause undesirable behavior. For this reason, this scenario is not supported by the ordering system API. Because normalization is a responsibility of the underlying framework, the service is unable to detect this scenario reliably so callers may not receive an error code in all situations. When the service is able to detect that a URI ends with a period, the request will be rejected with HTTP 400 (Bad Request).

Details

When parsing URIs, .NET applies a set of normalization rules before the ordering system code processes the URL. These normalization rules affect any attribute used in the path and which ends in a period.

Examples:

Requested URI	After .NET Parsing	Effect
GET /partners/name/orders/abc12.	GET /partners/name/orders/abc12	The request for order "abc12." becomes a request for "abc12"
GET /partners/name/orders/.	GET /partners/name/orders	The request for order "." becomes a request to get all orders for the partner
GET /partners/name/orders/	GET /partners/name	The request for order "" becomes a request to get partner details

There is no modification to attribute names used in query strings - therefore the service will return HTTP 400 (Bad Request) whenever the value of a the query string parameter contains a trailing period. This represents a 'best effort' to disallow this use.

References

- http://tools.ietf.org/html/rfc3986#section-6/3:42]
- https://docs.microsoft.com/en-us/dotnet/api/system.uri