

mobile**cube**

Order Management Services API

Mobile Cube is a framework that provides an API to be used by third-party applications (especially mobile apps) to connect to an ATG-based commerce application.

For a more detailed overview, see the document Introduction to Mobile Cube.

This document outlines the Order Account Management functionality supported by the framework.

This document covers Mobile Cube Release 1.0 for ATG 9.4 .

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Legal

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1 Get Order Details

1.1 Get Order Details

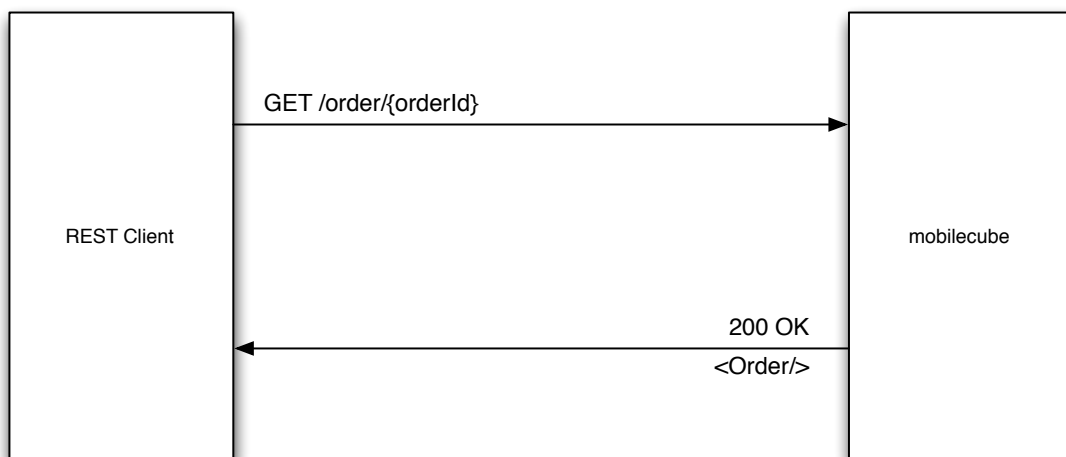
This covers the act of retrieving Order details from the system, identified by Order Id, so that they can be displayed to the customer.

The Mobile Cube ReST API represents retrieving order details as a request for an Order¹ resource identified by its unique ID. This is accomplished by sending a GET request to the `/order/{orderId}` URI, with no request parameters or request body.

1.1.1 Successful Order Retrieval

If the request is successful, Mobile Cube will respond with a `200 (OK)` HTTP Response, and the response will include the Order resource in the response body.

Successful View Order



1.1.2 Unauthorised Access

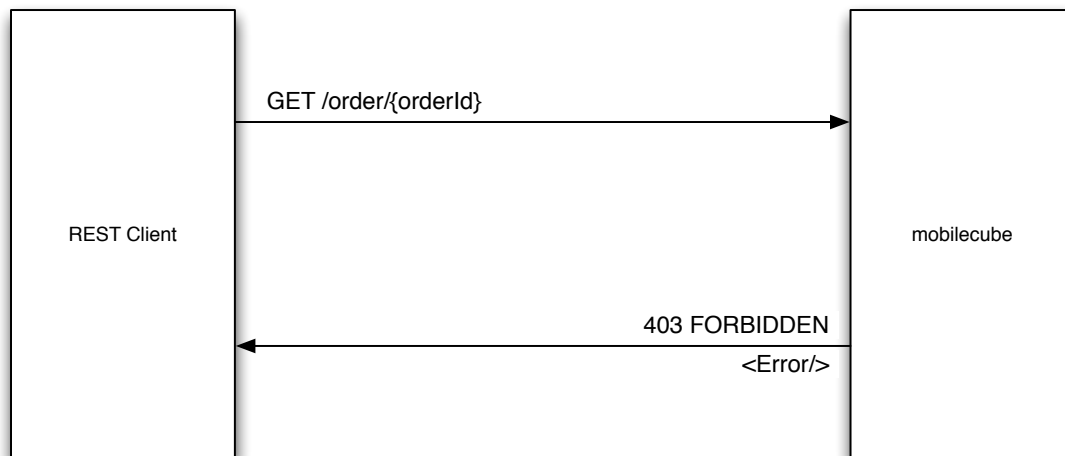
The Mobile Cube framework mandates that orders must be retrieved only in the context of an authenticated session. If an attempt is made to retrieve an order outside of an authenticated session, Mobile Cube will respond with a `403 (Forbidden)` HTTP response.

Similarly, if an attempt is made to access an order to which the authenticated customer does not have access, Mobile Cube will respond with a `403 (Forbidden)` HTTP response.

In both cases, the response will include an Error resource in the body with further details explaining why the request is considered invalid.

¹ See the Data Transfer Formats Appendix for details on the structure of the Order resource

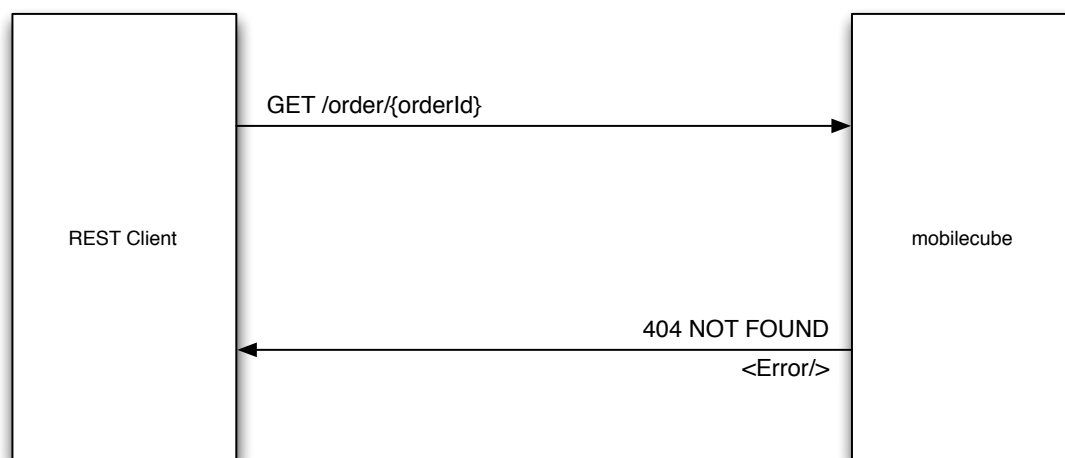
Unauthorised Order Request



1.1.3 Unknown Order

If a request is made for an order with an Order Id that is not valid or does not exist, Mobile Cube will respond with a 404 (Not Found) HTTP response, and will include an Error resource in the body.

Unknown Order Flow



2 Placing Orders

2.1 Placing an Instant Order

This covers the act of placing an Instant Order. An Instant Order is an order placed for a single item using the default saved shipping address, the default shipping method and the default saved payment type.

The Mobile Cube framework requires the end user to be registered, and to have specified defaults for the shipping address, shipping method, and payment method prior to placing an Instant Order.

The Mobile Cube ReST API represents order placement as the creation of a new Order² resource. This is accomplished by sending a POST request to the `/order/new` URI with an Order Request³ resource as the body of the request.

An Instant Order is an order for a single item, delivered to the default Address via the default Shipping Method and paid for by the default Payment Method configured on the customer's profile.

By omitting to specify a shipping address, shipping method and payment type in the Order Request, it indicates that customer's default address should be used as the order's shipping address, the customer's default shipping method should be used as the order's shipping method and the customer's default payment type should be used as the order's payment type.

2.1.1 Successful Order Placement

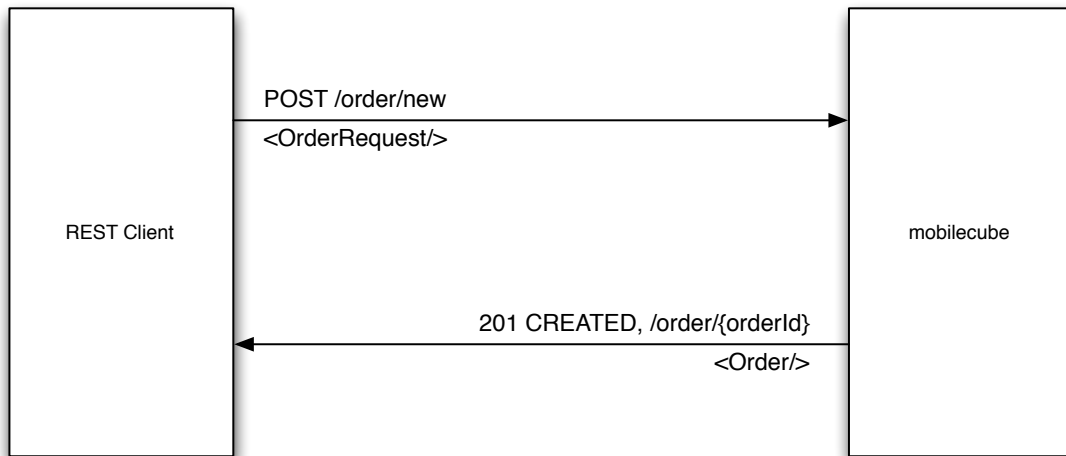
If the order request is valid, Mobile Cube will place the new order, and will return a 201 (Created) HTTP response with the newly created Order resource as the body of the response.

Although the Order resource is returned in the response, the requested URI (`/order/new`) is not the canonical location of this resource. The actual location of the resource will be of the form `/order/{orderId}`. This is reflected in the `Content-Location` response header specifying the canonical URI for the newly created Order resource.

² See the Data Transfer Formats Appendix for details on the structure of the Order resource

³ See the Data Transfer Formats Appendix for details on structure of the Order Request resource.

Successful Instant Order

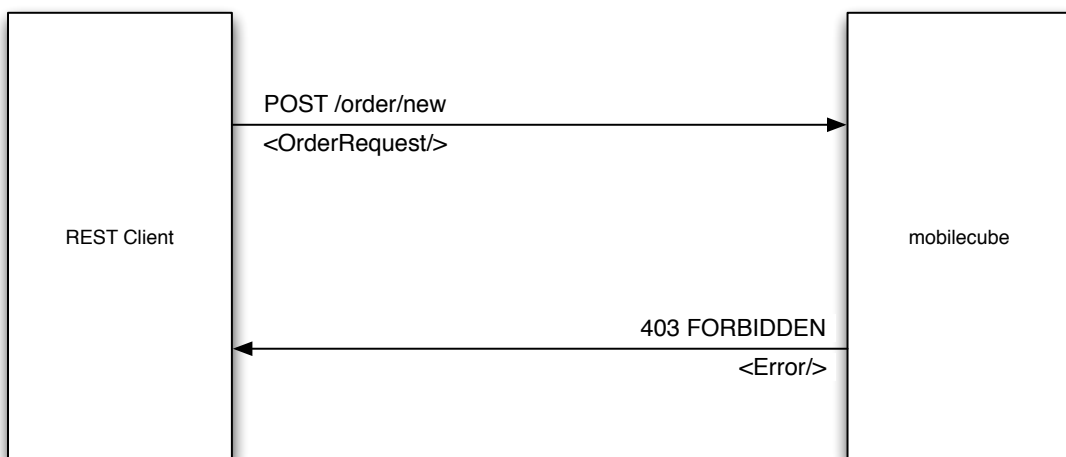


There are a number possible error conditions handled by Mobile Cube Instant Order.

2.1.2 Unauthorised Access

Orders placed through the Mobile Cube framework must be placed within the context of an authenticated session. If an attempt is made to place an order outside of an authenticated session, Mobile Cube will respond with a 403 (Forbidden) HTTP response, and will include an Error resource in the body with further details explaining why the request is considered invalid.

Unauthorised Order Request



2.1.3 Invalid Order Request

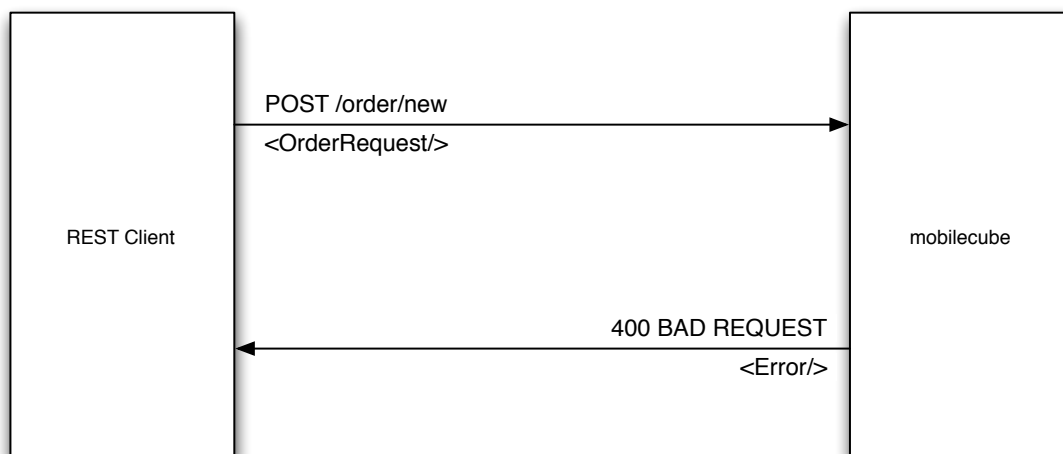
An Instant Order Request can be considered invalid either because mandatory fields have not been specified, or the values that have been specified violate some business rules in the system. In such cases, Mobile Cube will respond with a 400 (Bad Request) HTTP response.

This can particularly happen in any of the following conditions

1. If the Instant Order is being requested for a Product (Product or SKU) that does not exist
2. If the Instant Order is being requested for a Product (Product or SKU) that is not available to order, and cannot be backordered.
3. If the Instant Order is being requested for a customer that does not have a default Address
4. If the Instant Order is being requested for a customer that does not have a default Shipping Method
5. If the Instant Order is being requested for a customer that does not have a default Payment Type defined.
6. If Payment for the Order cannot be authorised

The response will include an Error resource in the body with further details explaining why the request is considered invalid.

Invalid Order Request Flow



3 Data Transfer Formats

3.1 Order Request

Order Request		
Property Name	Property Type	Validation
Line Items	List of Line Item	Mandatory Field, Must Contain At Least One Line Item

3.2 Order

Order Summary		
Property Name	Property Type	Validation
Order ID	String	Mandatory Field
Order Status	String	Mandatory Field
Number of Items	Quantity Type (Positive Integer)	Mandatory Field. Must match total number of items on order (quantity on each line item)
Order Date	Date	Mandatory Field. Must be a valid date
Item Subtotal	Payment Amount	Mandatory
Discount Subtotal	Payment Amount	Mandatory
Shipping Subtotal	Payment Amount	Mandatory
Tax Subtotal	Payment Amount	Mandatory
Order Subtotal	Payment Amount	Mandatory

Order		
Property Name	Property Type	Validation
Order ID	String	Mandatory Field
Order Status	String	Mandatory Field
Number of Items	Quantity Type (Positive Integer)	Mandatory Field. Must match total number of items on order (quantity on each line item)
Order Date	Date	Mandatory Field. Must be a valid date
Customer	Customer Summary	Mandatory Field. Currently Mobile Cube only supports order activity in the context of a registered customer
Line Items	List of Line Item	Mandatory Field. An Order Must Have At Least One Line Item
Payment Methods	List of Payment Method	Optional Field. An order may or may not have a payment method, however one must be present if the order total is non-zero
Shipments	List of Shipment	

Payment Method		
Property Name	Property Type	Validation
Credit Card	Credit Card Summary	Mandatory. Currently Mobile Cube only supports Credit Card payments
Payment Amount	Payment Amount	Mandatory
Payment Status	String	Mandatory

Shipment		
Property Name	Property Type	Validation
Shipment ID	String	Mandatory
Shipment Status	String	Mandatory
Shipping Address	Address	Mandatory
Shipping Method	String	Mandatory
Line Items	List of Line Item References	Mandatory. Must have at least one Line Item Reference

Line Item		
Property Name	Property Type	Validation
Product ID	String	Identifier for the Product to be ordered. Mandatory Field, Must Be a Valid Product ID
SKU ID	String	Identifier for the SKU to be ordered. Mandatory Field, Must Be a Valid SKU ID
Quantity	Positive Integer	Quantity To Be Ordered. Mandatory Field. Defaults to 1

Credit Card Summary		
Property Name	Property Type	Validation
Credit Card ID	String	Mandatory
Credit Card Number	String	Mandatory

Payment Amount		
Property Name	Property Type	Validation
Currency Code	String	Mandatory. Must be a valid ISO 4217 (three-character) currency code
Amount	Decimal	Mandatory