

# Worldpay Technical Guide

*Version 19.1.1-SM*

**worldpay**  
**from FIS**



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## 1. SUMMARY

### 1 Summary

This document provides a technical overview and implementation details for each Worldpay service integrated within the SFCC platform. The Worldpay cartridges (int\_worldpay, int\_worldpay\_sfra, int\_worldpay\_csc, and int\_worldpay\_core) extends the functionality of reference eCommerce Storefront, enabling synchronous and asynchronous access to Worldpay payment transaction services listed below.

- Payment Methods:
  - 1) Sofort
  - 2) iDeal
  - 3) Alipay
  - 4) Mistercash
  - 5) Paypal
  - 6) China Union Pay
  - 7) Giropay
  - 8) Poli
  - 9) Konbini
  - 10) Przelewy24
  - 11) Sepa DD
  - 12) Klarna
  - 13) 3D/Non 3D Credit Cards (XML Direct with client side encryption and tokenization features)
  - 14) 3D/Non 3D Credit Cards (XML Redirect with tokenization and hosted payment pages light box/iframe feature)

***Added as a part of SFRA:***

  - 15) WeChat Pay
  - 16) MOTO
  - 17) Google Pay
  - 18) Apple Pay
- Order Notification Job
- Order Enquiry Job
- Order Cancel Or Refund Job for mac Issue identified orders
- Order CleanUp Batch Job
- DeleteCard Job (Deleting cards that are saved with void tokens)
- APM Look Up Service
- Multiple Merchant ID support
- Statement Narrative support
- Brazil Integration

## 2. Change Log

### 2 Change log

Release Version	Date	Description
release-19.1.1	July 7,2020	Certified Release
release-19.1.0	Dec 11, 2019	Certified Release
19.2.0	August 31, 2019	<ul style="list-style-type: none"> <li>• Best Practices</li> <li>• Automation Test Suite</li> <li>• US Domestic Acquiring (Prime Routing)</li> <li>• Tokenization (My Account-Add Card/Delete Card)</li> <li>• Stored Credential Improved Flow</li> <li>• 3ds2</li> <li>• Security Fixes</li> <li>• CodeCept JS</li> <li>• Previous Releases Feedbacks</li> </ul>
19.1.0	April 3, 2019	<ul style="list-style-type: none"> <li>• Google Pay</li> <li>• Stored Credentials</li> <li>• Release 18.3.0 Feedback</li> </ul>
18.3.0	Feb 20, 2019	<ul style="list-style-type: none"> <li>• WeChat implementation</li> <li>• Alternative payment method</li> <li>• Merchant token</li> <li>• MOTO payment method</li> </ul>
18.2.0	Jul 16, 2018	<ul style="list-style-type: none"> <li>• Complete SFRA implementation</li> </ul>

WorldPay Integration

### 3. COMPONENT OVERVIEW

#### 3 Functional Overview

##### Payment Methods

All the supported Payment Methods are broadly categorized into XML DIRECT and XML REDIRECT Model based upon the manner in which they are integrated.

##### XML Direct Request

Merchants who collect and store their shoppers' payment details on their platform can use the XML Direct model as an effective payment-processing gateway. With this model, the merchant collects both order and payment details and then communicates the relevant payment details on a per order basis with Worldpay, for processing. The XML Direct model only allows for using a select number of online payment methods, where no consumer interaction is involved. Given the cost involved in establishing appropriate security measures, this model only applies for merchants with established high transaction volumes. Find below that list of supported Payment Methods that are XML DIRECT based.

- 1) Sofort
- 2) iDEAL
- 3) Alipay
- 4) Mistercash
- 5) Paypal
- 6) GiroPay
- 7) Poli
- 8) Konbini
- 9) Przelewy24
- 10) SEPA DD
- 11) Credit Card- Direct (3D/Non 3D)
- 12) Klarna

***Added as a part of SFRA:***

- 13) WeChat Pay
- 14) MOTO
- 15) Google Pay
- 16) Apple Pay

### 1.1.1.2 XML Redirect Request

Merchants can also redirect the users to Worldpay Hosted page to collect payment details. It allows for real-time processing of payments and ensures a maximum number of up-to-date payment methods. The Hosted Payment Page service is secure, provides Worldpay with the required information to perform an active fraud risk assessment and, is the fastest way to get up and running with online payments. Find below the list of supported Payment Methods that are XML REDIRECT based

- 1) China Union Pay
- 2) Credit Card – Redirect (3D/Non 3D)
- 3) Klarna-Hosted Payment Pages

### 3.1.1 Capture Service

Capturing a payment can be done with tracking ID and without tracking ID for partial payment and full payment. A tracking ID is the shipment ID identifier that merchant should use to track the delivery of your order.

#### *Capture Service with Tracking ID Request*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService merchantCode="YOUR_MERCHANT_CODE"
  version="1.4"> <modify>
  <orderModification orderCode="jsxml0000000000">
    <capture>
      <amount value="10000" currencyCode="GBP" exponent="2"
debitCreditIndicator="credit" />
      <shipping>
        <shippingInfo trackingId="AAA0000000" />
        <shippingInfo trackingId="BBB0000000" />
        <shippingInfo trackingId="XXX0000000" />
      </shipping>
    </capture>
  </orderModification>
</modify>
</paymentService>
```

#### *Capture Service with Tracking ID Response*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="SAPIENTNITROECOM"> <reply>
  <ok>
    <captureReceived orderCode="T00028020000">
      <amount value="10000" currencyCode="GBP" exponent="2"
debitCreditIndicator="credit" />
    </captureReceived>
  </ok>
</reply>
</paymentService>
```

***Capture Service without Tracking ID Request***

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService merchantCode="YOUR_MERCHANT_CODE"
  version="1.4"> <modify>
  <orderModification orderCode="jsxml0000000000">
    <capture>
      <amount value="10000" currencyCode="GBP" exponent="2"
debitCreditIndicator="credit" />
      <shipping>
        <shippingInfo trackingId="" />
      </shipping>
    </capture>
  </orderModification>
</modify>
</paymentService>
```

***Capture Service without Tracking ID Response***

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="SAPIENTNITROECOM"> <reply>
  <ok>
    <captureReceived orderCode="T00028020000">
      <amount value="10000" currencyCode="GBP" exponent="2"
debitCreditIndicator="credit" />
    </captureReceived>
  </ok>
</reply>
</paymentService>
```

**3.2 LIMITATIONS, CONSTRAINTS**

This section details the limitations, constraints, and the best practice for merchants planning to integrate the Worldpay cartridge with SFCC Storefront.

- 1) At this moment, it is not possible to detect against session timeouts while the customer is entering payment details in the Worldpay forms. If there is a delay longer than the session timeout, basket contents are lost and order is placed and kept in Created state.
- 2) As the placement of the street number in addresses varies between different countries, the integration does not provide a parsing mechanism for the street number part as this would be very application-specific. To avoid future errors, the parsing of street numbers must be taken care of during the integration installation. If this step is ignored, the customer will have to supply the street number at the Worldpay payment page.



- 3) The cartridge supports both LookUp service and Multiple MID support service. However, only one of them should be enabled at a time.
- 4) At the moment, the cartridge supports only one generic message that is displayed on the Billing Page in case of a Failure response from APM's or Credit Card redirect method. This is mainly because we do not have any identifier or error code that is returned.
- 5) The web service Timeout that has been set in service profile is common across all the web service calls that we make to Worldpay be it Look up call, APM Order XML call, Authorization call etc.
- 6) Thank You page is displayed for both Successful and Pending Open Scenario; Merchant shall take care to display a message to the user on the Thank You page with a suitable disclaimer that demarcates both the scenarios.
- 7) SFCC has a default behavior to show an error message on Place Order page in case of a previously failed transaction. This can be removed by commenting/removing the code from summary.isml.

```
<div class="error-  
form">${Resource.msg(pdikt.PlaceOrderError.code,'checkout',null)}</div  
>
```

- 8) The Maximum and Minimum supported amount per APM should be configured at the SFCC level in the Payment Method configuration section
- 9) Merchants shall ensure that Overnight Shipping and One Day shipping methods should not be displayed for Delayed APMs or for the ones that have KIOS payments
- 10) Merchant Shall take care of implementing the validations on the additional field that will be supported at the Merchant's site (Example: Swift Code/Bank Code in-case of GiroPay), while implementing Credit Card Direct the merchant should ensure that the Credit Card Form is reset in case of any error.
- 11) Cartridge shall be responsible to update the order status and export status only on receipt of following notifications/enquiry AUTHORISED, CAPTURED. Rest all other notification/enquiry status are read by the Job and Transaction history flag is updated with the notification/enquiry status value no further action is taken by the cartridge
- 12) Merchants shall take care of implementing credit card fields refresh functionality in case of user changes the card Type after filling the card information for previous selection to have better shopper experience
- 13) At the moment, it is not possible to run client side encryption for saved credit card where card number displayed as masked even client side encryption feature is turned on in merchant Worldpay account and enabled corresponding setting in Merchant site custom preference.
- 14) Merchant must ensure customer sequence number not exceeding 64 characters length and may contain alphanumeric or underscore.
- 15) Tokenization would be applicable for registered user only provided tokenization feature is turned on in merchant Worldpay account and enabled corresponding setting in Merchant site custom preference.
- 16) At this moment, it is not possible to validate mac secret identifier into response [failure /pending] URL's for all Redirect APMs and Redirect Credit Card orders.

- 17) Notification feature is restricted to only allow IP address provided by Worldpay, and corresponding setting to be configured in Merchant site custom preference.
- 18) Merchants shall take care of implementing Order Settlement and refunds.
- 19) Merchant shall take care of enable/disable site preference for user to provide CVV on billing page as security measure in tokenization service for saved cards. Also, need to enable CVV check service from Worldpay to work properly.
- 20) Merchant must ensure SFCC Service Framework configurations are setup and configured as per the contract with Worldpay on service availability.
- 21) Merchant shall take care for CVV field validation as enable/disable, CVV in BM configurations will only hide/show CVV field on billing page and no CVV validation is performed on Worldpay.
- 22) Jobs Templates can be modified as per merchant needs. These Jobs templates are prepared for reference.
- 23) The images are available in static folder for the cards. They can further be modified if required.
- 24) In case of iframe and lightbox for Airplus, Denkort and Laser card, Payment Method is displayed with message "Please contact worldpay"
- 25) Credit Card Payment method must be enabled because of some code restrictions based on the Code.
- 26) For Credit Redirect, credit card must be available in the system.
- 27) Gifts certificates are out of scopes.
- 28) There are two LINT issues in the code related to @ character.

## 4. IMPLEMENTATION GUIDE

### 4 Implementation guide

This section describes the controller structure and name of files in Worldpay cartridges.

#### CARTRIDGE STRUCTURE

Controllers:

Controllers are present in the “int\_worldpay” cartridge.

CONTROLLER NAME	DESCRIPTI ON
Worldpay	Main controller that acts as the external interface.
WorldpayHelper	Helper controller that supports and performs additional tasks required to complete
CheckoutServices	Controller that supports and executes the Checkout process.
COPlaceOrder	Controller that supports and executes the Checkout process.

- package.json – initialize hook or service

Scripts:

#### **int\_worldpay\_core**

- common/CreateRequestHelper.js
- common/PaymentInstrumentUtils.js
- common/Utils.js
- common/WorldpayConstants.js
- common/worldPayHelper.js
- init/httpServiceInit.js
- jobs/InitiateCancelOrderJob.js
- jobs/OrderCleanUpJob.js
- jobs/OrderInquiriesUpdateJob.js
- jobs/OrderNotificationUpdatesJob.js
- jobs/WorldpayJobs.js
- lib/LibCreateRequest.js
- object/ResponseData.js
- object/WorldpayPreferences.js
- order/UpdateOrderStatus.js
- order/UpdateTransactionStatus.js
- pipelets/CheckWorldpayOrder.js
- pipelets/GenerateErrorMessageForJob.js
- pipelets/GetCreatedOrderDetails.js
- pipelets/GetPaymentCardToken.js
- pipelets/InitiateCancelOrder.js
- pipelets/ReadNotifyCustomObject.js
- pipelets/RemoveNotifyCustomObject.js
- pipelets/SaveCustomerCreditCard.js
- pipelets/SendWorldpayOrderInquiriesRequest.js
- pipelets/WriteToNotifyLog.js
- service/ServiceFacade.js
- hooks.json

#### **int\_worldpay\_sfra**

- hooks/payment/processor/worldpay.js
- hooks.json

Templates:

#### **int\_worldpay\_core**

- default/allstatusjson.isml
- default/emailtemplateforjob.isml
- default/errorjson.isml

- default/http\_500.isml
- default/lateststatusjson.isml
- default/notifyResponsejson.isml
- default/worldpayredirect.isml

#### **int\_worldpay\_sfra**

- default/account/payment/editAddPayment.isml
- default/checkout/billing/paymentOptions/billingUserContent.isml
- default/checkout/billing/paymentOptions/creditCardContent.isml
- default/checkout/billing/paymentOptions/creditCardTab.isml
- default/checkout/billing/paymentOptions/elvContent.isml
- default/checkout/billing/paymentOptions/giropayContent.isml
- default/checkout/billing/paymentOptions/idealContent.isml
- default/checkout/billing/paymentOptions/paymentOptionsContent.isml
- default/checkout/billing/paymentOptions/paymentOptionsSummary.isml
- default/checkout/billing/paymentOptions/paymentOptionsTabs.isml
- default/checkout/billing/paymentOptions/redirectContent.isml
- default/checkout/billing/paymentOptions/redirectSummary.isml
- default/checkout/billing/paymentOptions/redirectTab.isml
- default/checkout/billing/creditCardForm.isml
- default/checkout/billing/paymentOptions.isml
- default/checkout/confirmation/confirmationEmail.isml
- default/checkout/checkout.isml
- default/checkout/worldpaysummary.isml

Properties:

#### **int\_worldpay\_core**

- resources/creditCard.properties
- resources/forms.properties
- resources/worldpayerror.properties
- resources/worldpay.properties

## **4.2 EXTERNAL INTERFACES**

---

Current version of cartridge support integration with APM's [as per the list shared in above Sections], however below URL can be referred to know more about the other possible APM'

Supported by Worldpay.

<http://support.worldpay.com/support/kb/gg/alternativepayments/content/apmguid.htm>

#### 4.2.1 CHINA UNION PAY

China Union Pay (also known as Union Pay or CUP) is a payment method where shoppers with Union Pay cards can make online e-commerce payments. Union Pay issue Union Pay cards in China.

Property	Description/Value
Payment Type	Debit / Credit Card payment
Countries	China
Accepted Currencies	AED, BND, BHD, CNY, GBP, EUR, USD, AUD, CAD, CHF, GEL, HKD, IDR, INR, JPY, KRW, KZT, LAK, MOP, MYR, OMR, NPR, NZD, PHP, PKR, RUB, SGD, THB, TRY, TWD, UAH, VND.
Mode	REDIRECT

##### *Request Attribute Mapping*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="SAPIENTNITROECOM">
  <submit>
    <order orderCode="Example_UnionPay_Order_Code">
      <description>Test order</description>
      <amount value="100" currencyCode="CNY" exponent="2" />
      <orderContent><![CDATA[ ]]></orderContent>
      <paymentMethodMask>
        <include code="ALL" />
      </paymentMethodMask>
      <shopper>
        <shopperEmailAddress>shopper@worldpay.com</shopperEmailAddress>
      </shopper>
      <statementNarrative>Merchants Statement Narrative</statementNarrative> </order>
    </submit>
  </paymentService>
```

##### *Response Attribute Mapping*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="SAPIENTNITROECOM">
  <reply>
    <orderStatus orderCode="Example_UnionPay_Order_Code">
      <reference id="3015836999">https://secure-test.worldpay.com/jsp/shopper/SelectPaymentMethod.jsp?OrderKey=SAPIENTNITROECOM%5EExample_UnionPay_Order_Code</reference>
    </orderStatus>
  </reply>
</paymentService>
```

#### 4.2.2 SOFORT

SOFORT Banking (SOFORT Überweisung) is a real-time bank transfer payment method that

shoppers based in Austria, Belgium, France, Germany and Switzerland can use to transfer funds directly to merchants from their bank accounts.

Property	Description/Value
Payment Type	Debit / Credit Card payment
Countries	Austria, Belgium , Germany and Switzerland
Acceptance Currencies	EUR (Austria, Belgium, Germany) CHF (Switzerland)
Mode	DIRECT

### *Request Attribute Mapping*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService merchantCode="SAPIENTNITROECOM" version="1.4">
  <submit>
    <order orderCode="Example_SOFORT_Banking_Order_Code_0">
      <description>Description here</description>
      <amount currencyCode="EUR" value="100" exponent="2" />
      <orderContent><![CDATA[      ]]></orderContent>
      <paymentDetails>
        <SOFORT-SSL shopperCountryCode="DE">
          <successURL>http://www.worldpay.com/?successURL</successURL>
          <cancelURL>http://www.worldpay.com/?cancelURL</cancelURL>
          <pendingURL>http://www.worldpay.com/?pendingURL</pendingURL>
        </SOFORT-SSL>
      </paymentDetails>
      <shopper>
        <shopperEmailAddress>shopper@worldpay.com</shopperEmailAddress>
      </shopper>
      <statementNarrative>SN12345</statementNarrative>
    </order>
  </submit>
</paymentService>
```

### *Response Attribute Mapping*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="SAPIENTNITROECOM">
  <reply>
    <orderStatus orderCode="Example_SOFORT_Banking_Order_Code_0">
      <reference id="3015838844">https://secure-
test.worldpay.com/jsp/test/shopper/APMSTSimulator.jsp?customerRef=3013339841&pay
mentMethod=SOFORT</reference>
    </orderStatus>
  </reply>
</paymentService>
```

## 4.2.3 ALIPAY

Alipay is a popular payment method that shoppers based in China use to make payments online.

payment:

- eWallet
- Debit card
- Credit Card
- Bank Transfer
- Payment URL

Property	Description/Value
Payment Type	eWallet
Countries	China
Acceptance Currencies	CNY, GBP, EUR, USD, AUD, CAD, HKD, SGD.
Mode	DIRECT

#### *Request Attribute Mapping*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService merchantCode="SAPIENTNITROECOM"
  version="1.4"> <submit>
  <order orderCode="Example_Alipay_Order_Code_0">
    <description>Description here</description>
    <amount currencyCode="CNY" value="1000" exponent="2" />
    <orderContent><![CDATA[      ]]></orderContent>
    <paymentDetails>
      <ALIPAY-SSL shopperCountryCode="CN">
        <successURL>http://www.worldpay.com/?successURL</successURL>
        <cancelURL>http://www.worldpay.com/?cancelURL</cancelURL>
        <pendingURL>http://www.worldpay.com/?pendingURL</pendingURL>
      </ALIPAY-SSL>
    </paymentDetails>
    <shopper>
      <shopperEmailAddress>shopper@worldpay.com</shopperEmailAddress>
    </shopper>
    <statementNarrative>MERCHANT STATEMENT
    NARRATIVE</statementNarrative> </order>
  </submit>
</paymentService>
```

#### *Response Attribute Mapping*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="SAPIENTNITROECOM"> <reply>
  <orderStatus orderCode="Example_Alipay_Order_Code_0">
    <reference id="3015839286">https://secure-
test.worldpay.com/jsp/test/shopper/APMSTSimulator.jsp?customerRef=3013340267&pay
mentMethod=ALIPAY</reference>
  </orderStatus>
</reply>
</paymentService>
```

MISTER

CASH

Mister Cash/Ban contact is a debit card service available in Belgium. Shoppers can use this service to make real-time card payments for products and services.



<b>Property</b>	<b>Description/Value</b>
<b>Payment Type</b>	Debit Card payment
<b>Countries</b>	Belgium
<b>Acceptance Currencies</b>	EUR
<b>Mode</b>	DIRECT

***Request Attribute Mapping***

```

<?xml version='1.0'?>
<paymentService merchantCode="SAPIENTNITROECOM"
  version="1.4"> <submit>
  <order orderCode="ORDERCODE_Mister_Cash">
    <description>Description here</description>
    <amount currencyCode="EUR" value="100" exponent="2" />
    <orderContent>Order Content Here</orderContent>
    <paymentDetails>
      <MISTERCASH-SSL shopperCountryCode="BE">
        <successURL>http://www.worldpay.com/successURL</successURL>
        <cancelURL>http://www.worldpay.com/cancelURL</cancelURL>
        <pendingURL>http://www.worldpay.com/pendingURL</pendingURL>
      </MISTERCASH-SSL>
    </paymentDetails>
    <shopper>
      <shopperEmailAddress>shopper@worldpay.com</shopperEmailAddress>
    </shopper>
    <shippingAddress>
      <address>
        <firstName>Pierre</firstName>
        <lastName>Bloggs</lastName>
        <address1>Shopperstreet</address1>
        <postalCode>1234</postalCode>
        <city>Shoppercity</city>
        <countryCode>BE</countryCode>
      </address>
    </shippingAddress>
  </order>
</submit>
</paymentService>

```

***Response Attribute Mapping***

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="SAPIENTNITROECOM">
  <reply>
    <orderStatus orderCode="ORDERCODE_Mister_Cash">
      <reference id="3015902737">https://secure-
test.worldpay.com/jsp/test/shopper/APMSTSimulator.jsp?customerRef=3013397287&pay
mentMethod=MISTERCASH</reference>
    </orderStatus>
  </reply>
</paymentService>

```

**4.2.4 PAYPAL**

PayPal is an American international e-commerce business allowing payments and money transfers to be made through the Internet. Online money transfers serve as electronic alternatives to paying with traditional paper methods, such as cheques and money orders.

Property	Description/Value
Payment Type	Debit Card payment

<b>Countries</b>	Belgium,All
<b>Acceptance Currencies</b>	GBP,USD and EUR
<b>Mode</b>	DIRECT

### ***Request Attribute Mapping***

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.2" merchantCode="SAPIENTNITROECOM">
  <submit>
    <order orderCode="TG20071016-002">
      <description>IT Products</description>
      <amount value="8933" currencyCode="EUR" exponent="2" />
      <orderContent>The order content</orderContent>
      <paymentDetails>
        <PAYPAL-EXPRESS>
          <successURL>https://www.merchant.com/paymentProcessor.html?order=TG20 071016-
002&amp;status=success</successURL>
          <failureURL>https://www.merchant.com/paymentProcessor.html?order=TG20071016-
002&amp;status=failure</failureURL>
          <cancelURL>https://www.merchant.com/shoppingCart.html?order=TG2007101 6-
002</cancelURL>
        </PAYPAL-EXPRESS>
      </paymentDetails>
    </order>
  </submit>
</paymentService>

```

**Response Attribute Mapping**

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="SAPIENTNITROECOM">
  <reply>
    <orderStatus orderCode="TG20071016-002">
      <reference id="3015903693">https://secure-
test.worldpay.com/jsp/simulators/shopper/PayPal_dummy_redirect.jsp?returnURL=https%3A%2F%2Fsecure-
test.worldpay.com%2Fshopper%2Fpaypal%2FdirectPayment.html%3Ftoken%3DTOKEN1412764
560062&amp;cancelURL=https%3A%2F%2Fwww.merchant.com%2FshoppingCart.html%3Forder
%3DTG20071016-
002&amp;subject=DUMMY&amp;merchant=SAPIENTNITROECOM&amp;order=TG20071016-
002&amp;amount=89.33&amp;currency=EUR&amp;description=IT Products</reference>
    </orderStatus>
  </reply>
</paymentService>
```

**4.2.5 iDEAL**

iDEAL is a method of payment that enables consumer to pay online through their own bank. In addition to web shops, other online organizations that are not part of the e-commerce market also offer iDEAL.

Bank Names	Bank ID's
ING	ING
ABN	ABN_AMRO
ASN	ASN
Rabobank	RABOBANK
SNS	SNS
SNS Regio	SNS_REGIO
Triodos	TRIODOS
Van Lanschot	VAN_LANSCHOT
Knab	KNAB

Property	Description/Value
Countries	Netherlands

<b>Acceptance Currencies</b>	EUR
<b>Mode</b>	DIRECT

#### *Request Attribute Mapping*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="SAPIENTNITROECOM"> <submit>
  <order orderCode="TG20090909-123">
    <description>IT Products</description>
    <amount value="2002" currencyCode="EUR" exponent="2" />
    <orderContent>The order content</orderContent>
    <paymentDetails>
      <IDEAL-SSL shopperBankCode="ING">
        <successURL>https://www.merchant.com/success?order=1249480932689</successURL>
        <failureURL>https://www.merchant.com/failure?order=1249480932689</failureURL>
        <cancelURL>https://www.merchant.com/cancel?order=1249480932689</cancelURL>
      </IDEAL-SSL>
    </paymentDetails>
  </order>
</submit>
</paymentService>
```

#### *Response Attribute Mapping*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="SAPIENTNITROECOM"> <reply>
  <orderStatus orderCode="TG20090909-123">
    <reference id="3015960397">https://secure-test.worldpay.com/wcc/simulator?op=IDEAL-AuthInit&trxId=126208818731246</reference>
  </orderStatus>
</reply>
</paymentService>
```

#### 4.2.6 GiroPay

This is a popular German bank transfer payment method that shoppers can use to login to their bank account to make an online payment. GiroPay payments are authorized immediately after the shopper submits their payment request. Shopper needs to enter the Bank Code value on payment page and Bank details will be sent in as a part of DIRECT XML request as **bank Code** node.

Property	Description/Value
<b>Payment Type</b>	Real Time Bank Transfer
<b>Countries</b>	Germany
<b>Acceptance Currencies</b>	EUR
<b>Mode</b>	DIRECT
<b>Payment Method Mask</b>	GIROPAY-SSL

***Request Attribute Mapping***

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="MERCHANTCODE">
  <submit>
    <order orderCode="GiropayTestOrder">
      <description>test order</description>
      <amount value="100" currencyCode="EUR" exponent="2" />
      <orderContent><![CDATA[]]></orderContent>
      <paymentDetails>
        <GIROPAY-SSL>
          <successURL>http://www.worldpay.com/?success</successURL>
          <failureURL>http:// www.worldpay.com/?failure</failureURL>
          <cancelURL>http:// www.worldpay.com/?cancel</cancelURL>
          <bankCode>12345678</bankCode>
        </GIROPAY-SSL>
        <session shopperIPAddress="127.0.0.1" id="ssn97414780"
      /> </paymentDetails>
      <shopper>
        <shopperEmailAddress>shopper@worldpay.com</shopperEmailAddress>
        <browser>
          <acceptHeader>text/html</acceptHeader>
          <userAgentHeader>Mozilla/5.0 ...</userAgentHeader>
        </browser>
      </shopper>
    </order>
  </submit>
</paymentService>

```

***Response Attribute Mapping***

```

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE paymentService PUBLIC "-//Worldpay//DTD Worldpay PaymentService v1//EN"
"http://dtd.worldpay.com/paymentService_v1.dtd">
<paymentService version="1.4" merchantCode="SAPIENTNITROECOMMERCEV1">

  <reply>

    <orderStatus orderCode="00004805">

      <reference id="3019678016">https://secure-
test.worldpay.com/jsp/test/shopper/APMSTSimulator.jsp?customerRef=3016933093&amp;pay
mentMethod=GIROPAY/reference>

    </orderStatus>

  </reply>

</paymentService>

```

**4.2.7 Konbini**

Digital Garage offers a number of payment methods that shoppers in Japan use to shop online. These include:

- Offline cash payment at a convenience store (known as Konbini). The penetration of convenience stores is very high in Japan, so this offers shoppers a very convenient way of making payments.

- Offline electronic payment at an ATM or internet banking (known as *Pay-Easy*).
- Online electronic payment by internet banking.

Since most payment options are off-line, merchants should expect the system to create a payment with `SHOPPER_REDIRECTED` status where it can remain for a number of days whilst the shopper makes their payment.

If the shopper pays immediately, the payment is in `SHOPPER_REDIRECTED` status for a short period of time and then moves to `AUTHORISED`.

Property	Description Value
Payment Type	Post-Pay Voucher/Internet banking/ATM Payment
Countries	Japan
Acceptance Currencies	JPY
Supported Languages	JP

The following table provides more detail of the available payment options:

Options	Notes	Authorization
<b>Digital Garage (Konbini)</b>	<p>The shopper places their order. At the end of the shopper journey the shopper views a unique payment reference, along with instructions on how to complete the payment.</p> <p>The shopper makes a note of the unique payment reference and visits their local convenience store.</p> <p>At the convenience store the shopper inputs their unique payment reference and phone number into a kiosk. The terminal prints a payment slip which the shopper takes to the store till and pays in cash.</p> <p>A number of major convenience stores participate in the Konbini scheme, including 7Eleven, Lawson, FamilyMart, Circle K Sunkus and Seicomart. Not all stores are automatically available to all merchants (please speak to your Worldpay support contact for more information).</p>	Delayed
<b>ATM Payment</b>	<p>The shopper places their order. At the end of the shopper journey the shopper is shown a unique payment reference, along with instructions on how to complete the payment. The shopper can either:</p> <p>Pay at an ATM which is part of the Pay-Easy payment scheme</p> <p>Pay at an ATM of another institution</p>	Delayed
<b>Internet Banking</b>	<p>The shopper places their order. At the end of the shopper journey the shopper is shown a unique payment reference, along with instructions on how to complete the payment. The shopper can either:</p> <p>Pay at a bank which is part of the Pay-Easy payment scheme</p> <p>Pay at a bank of another institution</p> <p>The shopper then logs into their internet banking application to complete the payment.</p>	Delayed



***Request Attribute Mapping***

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService merchantCode="SAPIENTNITROECOMMERCEV1" version="1.4">
  <submit>
    <order orderCode="ORDERCODE">
      <description>Description here</description>
      <amount currencyCode="JPY" value="100" exponent="0" />
      <orderContent><![CDATA[          ]]></orderContent>
      <paymentDetails>
        <KONBINI-SSL shopperCountryCode="JP">
          <successURL>http://www.worldpay.com/?successURL</successURL>
          <cancelURL>http://www.worldpay.com/?cancelURL</cancelURL>
          <pendingURL>http://www.worldpay.com/?pendingURL</pendingURL>
        </KONBINI-SSL>
      </paymentDetails>
      <shopper>
        <shopperEmailAddress>shopper@worldpay.com</shopperEmailAddress>
      </shopper>
      <shippingAddress>
        <address>
          <firstName>Doe</firstName>
          <lastName>John</lastName>
          <address1>Main Street 3453</address1>
          <postalCode>74564</postalCode>
          <city>Tokyo</city>
          <countryCode>JP</countryCode>
          <telephoneNumber>08012534568</telephoneNumber>
        </address>
      </shippingAddress>
    </order>
  </submit>
</paymentService>

```

***Response Attribute Mapping***

```

<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE paymentService PUBLIC "-//Worldpay//DTD Worldpay PaymentService v1//EN"
"http://dtd.worldpay.com/paymentService_v1.dtd">
<paymentService version="1.4" merchantCode="SAPIENTNITROECOMMERCEV1">

  <reply>

    <orderStatus orderCode="ORDERCODE">

      <reference id="3020978183">https://secure-
test.worldpay.com/jsp/test/shopper/APMSTSimulator.jsp?customerRef=3018125177&amp;payment
Method=KONBINI</reference>

    </orderStatus>

  </reply>

</paymentService>

```

#### 4.2.8 Poli

POLi is real-time bank transfer payment method that shoppers can use to make real-time payments directly from their online bank account.

To make a payment by using this method:

- On the payment page, the shopper selects the Poli payment method. The shopper is redirected to the Poli website.
- The shopper selects the bank from which the payment must be made. The shopper is redirected to the website of the bank.
- The shopper logs on to the bank and makes the payment.

#### *Payment method properties*

The properties for this payment method are described in the following table.

Property	Description/Value
Payment Type	Real-time bank transfer
Countries	Australia and New Zealand
Default Language	En
Supported Languages	En
Acceptance Currency and Preferred Currency	<ul style="list-style-type: none"><li>• <b>Australia:</b> AUD</li><li>• <b>New Zealand:</b> NZD</li></ul>

**Request Attribute Mapping****Australia**

```
<?xml version='1.0'?>
<paymentService merchantCode="SAPIENTNITROECOMMERCEV1" version="1.4">
  <submit>
    <order orderCode="Example_Poli_order">
      <description>Description here</description>
      <amount currencyCode="AUD" value="100" exponent="2" />
      <orderContent>Order Content Here</orderContent>
      <paymentDetails>
        <POLI-SSL shopperCountryCode="AU">
          <successURL>http://www.worldpay.com/successURL</successURL>
          <cancelURL>http://www.worldpay.com/cancelURL</cancelURL>
          <pendingURL>http://www.worldpay.com/pendingURL</pendingURL>
        </POLI-SSL>
      </paymentDetails>
      <shopper>
        <shopperEmailAddress>shopper@worldpay.com</shopperEmailAddress>
      </shopper>
    </order>
  </submit>
</paymentService>
```

**New Zealand**

```
<?xml version='1.0'?>
<paymentService merchantCode="SAPIENTNITROECOMMERCEV1"
version="1.4"> <submit>
  <order orderCode="Example_PoliNZ_order">
    <description>Description here</description>
    <amount currencyCode="NZD" value="100" exponent="2"
/> <orderContent>Order Content Here</orderContent>
    <paymentDetails>
      <POLINZ-SSL shopperCountryCode="NZ">
        <successURL>http://www.worldpay.com/successURL</successURL>
        <cancelURL>http://www.worldpay.com/cancelURL</cancelURL>
        <pendingURL>http://www.worldpay.com/pendingURL</pendingURL>
      </POLINZ-SSL>
    </paymentDetails>
    <shopper>
      <shopperEmailAddress>shopper@worldpay.com</shopperEmailAddress>
    </shopper>
  </order>
</submit>
</paymentService>
```

**Response Attribute Mapping****Australia**

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
merchantCode="SAPIENTNITROECOMMERCEV1"> <reply>
```

```

<orderStatus orderCode="Example_Poli_order">
  <reference id="3020978372">https://secure-
test.worldpay.com/jsp/test/shopper/APMSTSimulator.jsp?customerRef=3018125342&payment
Method=POLI</reference>
</orderStatus>
</reply>
</paymentService>

```

### ***New Zealand***

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="SAPIENTNITROECOMMERCEV1">
  <reply>
    <orderStatus orderCode="Example_PoliNZ_order">
      <reference id="3020978547">https://secure-
test.worldpay.com/jsp/test/shopper/APMSTSimulator.jsp?customerRef=3018125494&payment
Method=POLINZ</reference>
    </orderStatus>
  </reply>
</paymentService>

```

## **4.2.9 SEPA-DD**

SEPA-DD is an alternative payment method service, which provides option to make payment using IBAN or Bank account number. SEPA-DD provides normal as well recurring payment options.

### ***Request Attribute Mapping***

#### ***ONE-OFF Order***

```

<?xml version="1.0"?>
<paymentService merchantCode="SAPIENTNITROECOM" version="1.4">
  <submit>
    <order orderCode="00008304">
      <description>Merchant Order Number : 00008304</description>
      <amount currencyCode="USD" exponent="2" value="11024" />
      <orderContent>Product Name Platinum V Neck Suit Dress price USD 99.00Your payment will be handled by
Worldpay Payments Services.</orderContent>
      <paymentDetails>
        <SEPA_DIRECT_DEBIT-SSL>
          <bankAccount-SEPA>
            <iban>DE93100000000012345678</iban>
            <accountHolderName>M.Mustermann</accountHolderName>
          </bankAccount-SEPA>
        </SEPA_DIRECT_DEBIT-SSL>
      </paymentDetails>
      <shopper>
        <shopperEmailAddress>Mustermann@example.de</shopperEmailAddress>
        <session id="00008304" shopperIPAddress="14.140.116.135" />
      </shopper>
      <billingAddress>
        <address>
          <firstName>Musterman</firstName>
          <lastName>M</lastName>
          <address1>23</address1>
          <postalCode>94109</postalCode>
          <city>Berlin</city>
          <state>CA</state>
          <countryCode>DE</countryCode>
        </address>
      </billingAddress>
    </order>
  </submit>
</paymentService>

```

```

        <telephoneNumber>12121212</telephoneNumber>
      </address>
    </billingAddress>
    <mandate>
      <mandateType>ONE-OFF</mandateType>
      <mandateId>M-100038056-201832512945355</mandateId>
    </mandate>
  </order>
</submit>
</paymentService>

```

### RECURRING ORDER

```

<?xml version="1.0"?>
<paymentService merchantCode="SAPIENTNITROECOM"
  version="1.4"> <submit>
  <order orderCode="00008305">
    <description>Merchant Order Number : 00008305</description>
    <amount currencyCode="USD" exponent="2" value="14384" />
    <orderContent>Product Name Platinum V Neck Suit Dress price USD 99.00Your payment will be handled by Worldpay
    Payments Services.</orderContent>
    <paymentDetails>
      <SEPA_DIRECT_DEBIT-SSL>
        <bankAccount-SEPA>
          <iban>DE93100000000012345678</iban>
          <accountHolderName>M.Mustermann</accountHolderName>
        </bankAccount-SEPA>
      </SEPA_DIRECT_DEBIT-SSL>
    </paymentDetails>
    <shopper>
      <shopperEmailAddress>Mustermann@example.de</shopperEmailAddress>
      <session id="00008305" shopperIPAddress="14.140.116.135" />
    </shopper>
    <billingAddress>
      <address>
        <firstName>Musterman</firstName>
        <lastName>M</lastName>
        <address1>23</address1>
        <postalCode>94109</postalCode>
        <city>Berlin</city>
        <state>CA</state>
        <countryCode>DE</countryCode>
        <telephoneNumber>12121212</telephoneNumber>
      </address>
    </billingAddress>
    <mandate>
      <mandateType>RECURRING</mandateType>
      <mandateId>M-100038056-201832512180546</mandateId>
    </mandate>
  </order>
</submit>
</paymentService>

```

#### 4.2.10 Przelewy24

Przelewy24 is a real-time bank transfer, offline or pre-payment payment method that shoppers based in Poland can use to transfer funds directly to merchants from their bank accounts.

#### *Payment method properties*

Property	Description/Value
Payment Type	Real-time bank transfer, offline bank transfer, pre-payment
Countries	Poland
Acceptance Currencies	PLN
Settlement to Worldpay Currency	PLN
Chargebacks (Yes/No)	Yes
Supported Languages	PL (Polish), DE (German), ES (Spanish), IT (Italian) There is also an option to switch to EN (English) on the Przelewy24 payment Page.
Direct Model (Yes/No)	Yes

### ***Request Attribute Mapping***

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService merchantCode="SAPIENTNITROECOMMERCEV1" version="1.4">
  <submit>
    <order orderCode="Example_Przelewy24_Order_Code">
      <description>Description here</description>
      <amount currencyCode="PLN" value="100" exponent="2" />
      <orderContent><![CDATA[      ]]></orderContent>
      <paymentDetails>
        <PRZELEWY-SSL shopperCountryCode="PL">
          <successURL>http://www.worldpay.com/?successURL</successURL>
          <cancelURL>http://www.worldpay.com/?cancelURL</cancelURL>
          <pendingURL>http://www.worldpay.com/?pendingURL</pendingURL>
        </PRZELEWY-SSL>
      </paymentDetails>
      <shopper>
        <shopperEmailAddress>shopper@worldpay.com</shopperEmailAddress>
      </shopper>
    </order>
  </submit>
</paymentService>
```

### ***Response Attribute Mapping***

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="SAPIENTNITROECOMMERCEV1"> <reply>
  <orderStatus orderCode="Example_Przelewy24_Order_Code">
    <reference id="3020980234">https://secure-
test.worldpay.com/jsp/test/shopper/APMSTSimulator.jsp?customerRef=3018127000&amp;payment
Method=PRZELEWY</reference>
  </orderStatus>
</reply>
</paymentService>
```



#### 4.2.11 KLARNA

Klarna is a 'buy now, pay later' deferred payment method that gives shoppers the chance to view and use product before they pay for it. Klarna provide three payments methods to the shopper, Pay later, Slice it and Pay now, each with further options to give maximum flexibility.

Property	Description/Value
Payment Type	Invoice, Account, Planned Payments, Pay in X months
Countries	Invoice: Austria, Finland, Germany, Netherlands, Norway, Sweden, United Kingdom Account: Finland, Germany, Norway, Sweden Planned Payments: Finland, Germany, Norway, Sweden Pay in X Month: Finland, Germany, Norway, Sweden
Acceptance Currencies	EUR,GBP,NOK,SEK
Mode	DIRECT and HPP
Payment Method Mask	KLARNA-SSL

#### *Request Attribute Mapping Direct*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="$$MERCHANT_CODE$$"> <submit>
  <order orderCode="$$ORDER_CODE$$">
    <description>jsredirect test order</description>
    <amount value="20000" currencyCode="GBP" exponent="2"
  /> <orderContent><![CDATA[]]></orderContent>
    <paymentDetails>
      <KLARNA-SSL>
        <purchaseCountry>gb</purchaseCountry>
        <shopperLocale>en-gb</shopperLocale>
        <merchantUrls>
          <checkoutURL>http://www.companyname.co.uk</checkoutURL>
          <confirmationURL>http://www.success.com</confirmationURL>
        </merchantUrls>
      </KLARNA-SSL>
    </paymentDetails>
  </shopper>
```



```
<shopperEmailAddress>sp@worldpay.com</shopperEmailAddress>
</shopper>
<orderLines>
  <orderTaxAmount>4000</orderTaxAmount>
  <termsURL>http://www.terms.co.uk?test</termsURL>
  <lineItem>
    <physical />
    <reference>1</reference>
    <name>Bananas</name>
    <quantity>10</quantity>
    <quantityUnit>bag</quantityUnit>
    <unitPrice>1000</unitPrice>
    <taxRate>2500</taxRate>
    <totalAmount>10000</totalAmount>
    <totalTaxAmount>2000</totalTaxAmount>
    <totalDiscountAmount>0</totalDiscountAmount>
  </lineItem>
  <lineItem>
    <physical />
    <reference>2</reference>
    <name>Oranges</name>
    <quantity>1</quantity>
    <quantityUnit>bag</quantityUnit>
    <unitPrice>10000</unitPrice>
    <taxRate>2500</taxRate>
    <totalAmount>10000</totalAmount>
    <totalTaxAmount>2000</totalTaxAmount>
    <totalDiscountAmount>0</totalDiscountAmount>
  </lineItem>
</orderLines>
</order>
</submit>
</paymentService>
```

**Response Attribute Mapping Direct**

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE paymentService PUBLIC "-//WorldPay//DTD WorldPay PaymentService v1//EN"
"http://secure.worldpay.com/dtd/paymentService_v1.dtd">
<paymentService version="1.4"
merchantCode="YOUR_MERCHANT_CODE"> <reply>
<orderStatus orderCode="jsxml3857727180">
<payment>
<paymentMethod>KLARNA-SSL</paymentMethod>
<amount value="20000" currencyCode="EUR" exponent="2"
debitCreditIndicator="credit"/> <lastEvent>SHOPPER_REDIRECTED</lastEvent>
</payment>
<reference id="be76920a-0fc3-5299-996f-af7476253837">
<![CDATA[PGRpdiBpZD0ia2xhcm5hLWN0ZWNRb3V0LWNvbnRhaW5lciIgc3R5bGU9Im92ZXJmbG93LXg6IG
hpZGRlbijsiPgogICAgPHNjcmlwdCB0eXBIPSJ0ZXh0L2phdmFzY3JpcHQiPgogICAgLyogPCFbQ0RBVEFbICovCiAgI
CAgICAgKGZlbnN0aW9uKHcsayxpLGQsbixjLGwscCI7CiAgICAgICAgICAgIHdba109d1trXXx8ZnVuY3Rpb24oKXs
od1trXS5x>
```

**Request Attribute Mapping Hosted Payment Pages**

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="$$MERCHANT_CODE$$">
  <submit>
    <order orderCode="$$ORDER_CODE$$" installationId="$$INSTALLATION_ID$$">
      <description>jsredirect test order</description>
      <amount value="20000" currencyCode="GBP" exponent="2" />
      <orderContent><![CDATA[]]></orderContent>
      <paymentMethodMask>
        <include code="ALL" />
      </paymentMethodMask>
      <shopper>
        <shopperEmailAddress>sp@worldpay.com</shopperEmailAddress>
      </shopper>
      <shippingAddress>
        <address>
          <firstName>John</firstName>
          <lastName>Doe</lastName>
          <address1>Units 270 - 289</address1>
          <address2>The Science Park</address2>
          <address3>Milton Road</address3>
          <postalCode>CB4 0WE</postalCode>
          <city>Cambridge</city>
          <state>Cambridgeshire</state>
          <countryCode>GB</countryCode>
          <telephoneNumber>01223 123456</telephoneNumber>
        </address>
      </shippingAddress>
      <orderLines>
        <orderTaxAmount>4000</orderTaxAmount>
        <termsURL>http://www.terms.co.uk?test</termsURL>
        <lineItem>
```

```

    <physical />
    <reference>1</reference>
    <name>Bananas</name>
    <quantity>10</quantity>
    <quantityUnit>bag</quantityUnit>
    <unitPrice>1000</unitPrice>
    <taxRate>2500</taxRate>
    <totalAmount>10000</totalAmount>
    <totalTaxAmount>2000</totalTaxAmount>
    <totalDiscountAmount>0</totalDiscountAmount>
  </lineItem>
  <lineItem>
    <physical />
    <reference>2</reference>
    <name>Oranges</name>
    <quantity>1</quantity>
    <quantityUnit>bag</quantityUnit>
    <unitPrice>10000</unitPrice>
    <taxRate>2500</taxRate>
    <totalAmount>10000</totalAmount>
    <totalTaxAmount>2000</totalTaxAmount>
    <totalDiscountAmount>0</totalDiscountAmount>
  </lineItem>
</orderLines>
</order>
</submit>
</paymentService>

```

### ***Response Attribute Mapping Mapping Hosted Payment Pages***

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE paymentService PUBLIC "-//WorldPay//DTD WorldPay
PaymentService v1//EN""http://dtd.worldpay.com/paymentService_v1.dtd">
<paymentService version="1.4"
merchantCode="YOUR_MERCHANT_CODE"> <reply>
<orderStatus orderCode="jsxml340676070">
<reference id="6052026061">
https://payments.worldpay.com/app/hpp/integration/wpg/corporate?OrderKey=YOUR_MERCHANT_CODE
%5Ejsxml340676070&amp;Ticket=00148933873090202KHvnMUxIT69nb3TvO-85Vg&amp;source=sc5
</reference>
</orderStatus>
</reply>
</paymentService>

```



#### 4.2.12 MOTO

MOTO is the mobile or telephone order, where the customer service agent placing the order for customer. In order to use moto payment your customer service center agent should have the 'Login\_on\_behalf', 'Login\_Agent permission'.

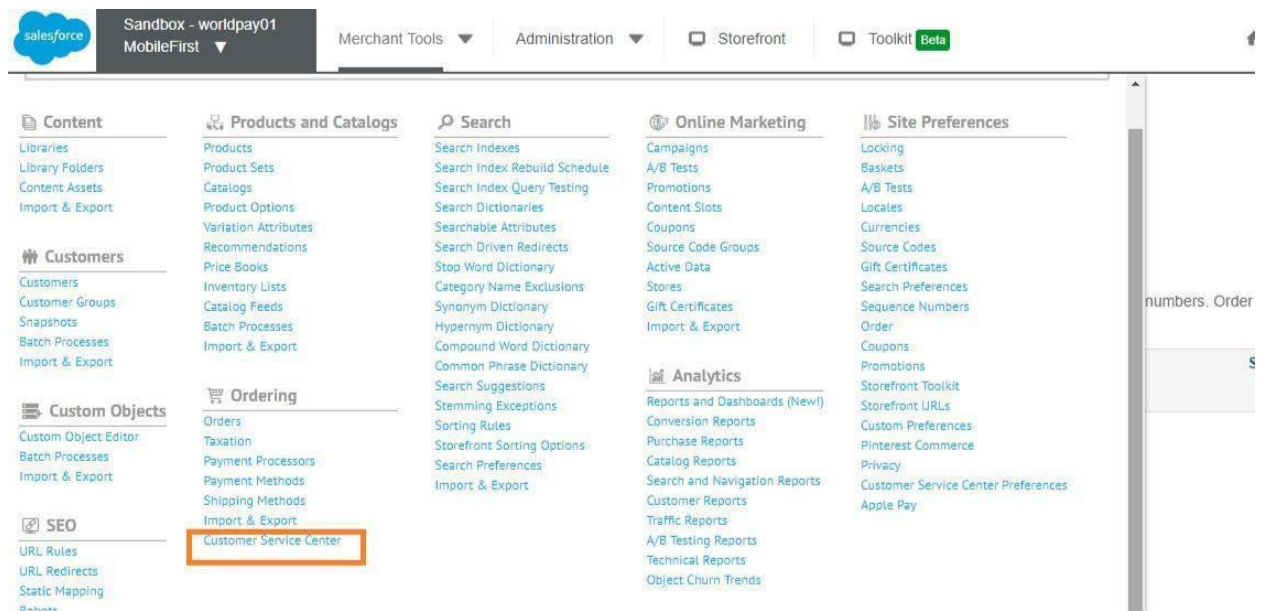
- i) Navigate to Administration > Organization > Roles and permission
- ii) Click the roles
- iii) Click functional permission
- iv) Select the site
- v) Give 'Login\_on\_behalf', 'Login\_Agent permission'.

Moto payment can be handled in two ways

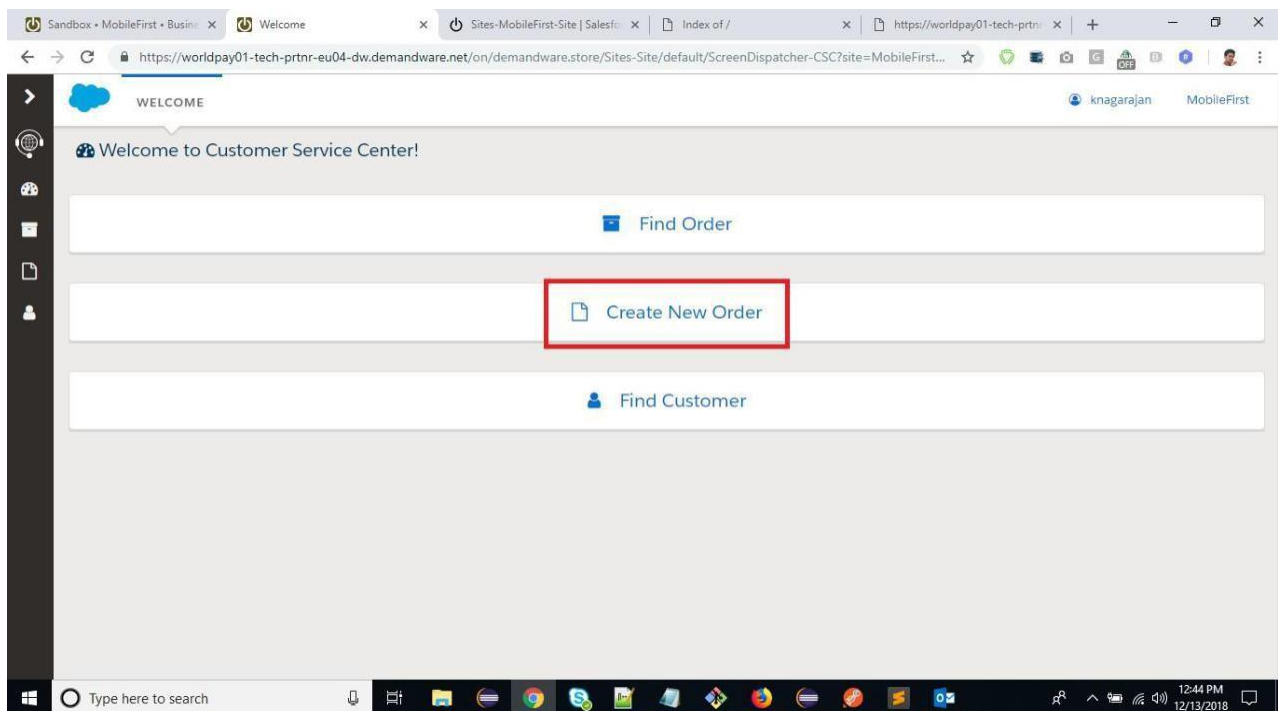
1). Customer service agent placing the order for the customer from business manager itself. In order to use this update the following settings in your business manager, just to disable the amount to be paid field in the credit card payment section.

- a) Navigate Administration > Site development > Customer service center settings
- b) Open Order payment Instrument in customizable area
- c) Update the existing condition "condition" : "data.payment\_method\_id===  
'CREDIT\_CARD'" Search for "condition" : "data.country !== 'FR'",  
After that add  
"meta" { "disabled" :  
    true  
    }  
d) Since the customer service center customization works with OCAPI settings, make  
sure your site have the access to 'POST /orders/{order\_no}/payment\_instruments' in  
(Administration > Site Development > Open commerce settings).
- e) Please Refer the attached Workflow.

## Screen 1

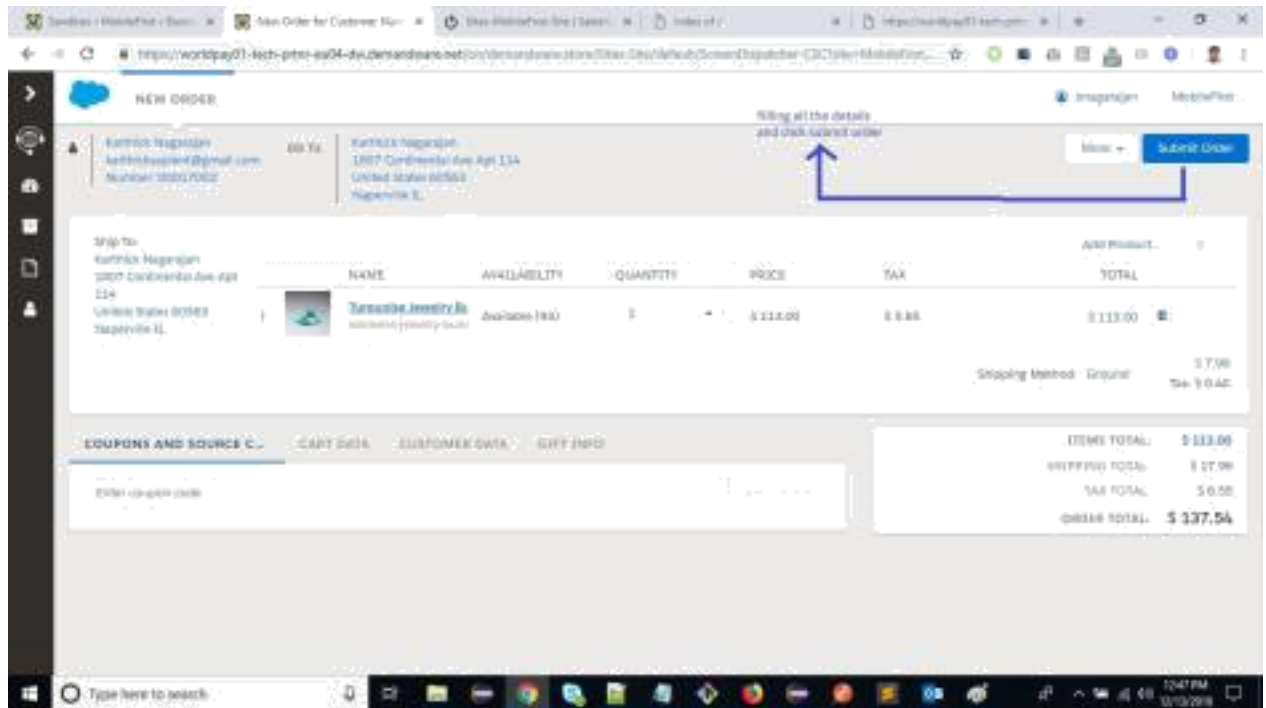


## Screen 2



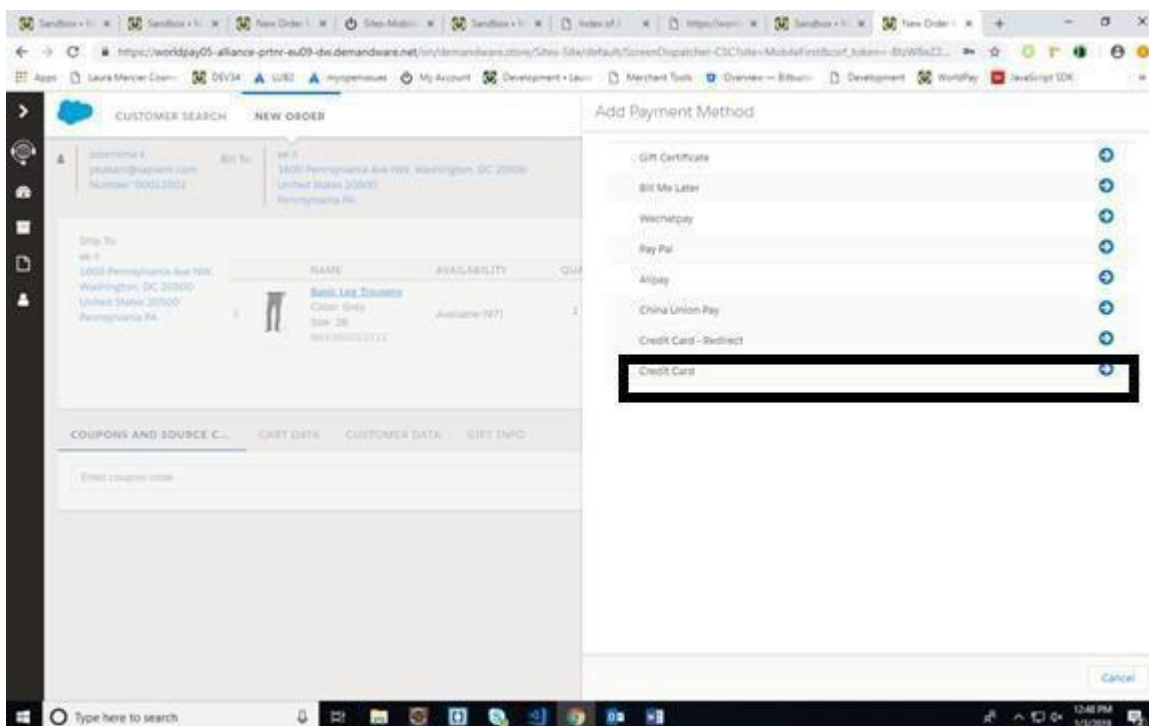
## Screen 3

- Fill all the details of the customer and click submit order button



Screen 4

- Worldpay moto payment method listed in payment methods section



Screen 5

Filling all the credit card details of the customer and click save

The screenshot shows the 'NEW ORDER' page in the WorldPay interface. On the left, under 'CUSTOMER SEARCH', a customer named 'poomima k' is selected. The 'Ship To' address is 1600 Pennsylvania Ave NW, Washington, DC 20500, United States 20500, Pennsylvania PA. A table lists items for sale, including 'Basic Leg Trousers' in grey, size 28, available in quantity 97. On the right, the 'Add Credit Card' section displays a summary of totals: ITEMS TOTAL: \$ 195.00, SHIPPING TOTAL: \$ 7.99, TAX TOTAL: \$ 10.15, and ORDER TOTAL: \$ 213.14. Below this, there are input fields for the credit card details: Amount (213.14), Credit Card Holder, Credit Card Type (Visa), Credit Card Number, Credit Card Expiration Month and Year, and CVC. At the bottom right, there are 'Cancel' and 'Save' buttons.

## Screen 6

- Order placed successfully for the customer



**Success** Order has been placed.

**Order No:** 01105021  
**Creation Date:** 1/3/2019 12:52 pm  
**Source Code:**

**Order Status:** NEW  
**Confirmation Status:** NOTCONFIRMED  
**Export Status:** NOTEXPORTED  
**Shipping Status:** NOTSHIPPED  
**Payment Status:** NOTPAID  
**Is A Gift:** 0

**Payment Method:** CREDIT\_CARD JCB \$ 213.14  
[Details... \(1\)](#)

**SHIPMENT 1**

Ship To:  
 ee ll  
 1600 Pennsylvania Ave NW,  
 Washington, DC 20500  
 United States 20500  
 Pennsylvania PA

NAME	AVAILABILITY	QUANTITY	PRICE	TAX	TOTAL
<b>Basic Leg Trousers</b> Color: Grey Size: 28 883360352312	Available (96)	1	\$ 195.00	\$ 9.75	\$ 195.00

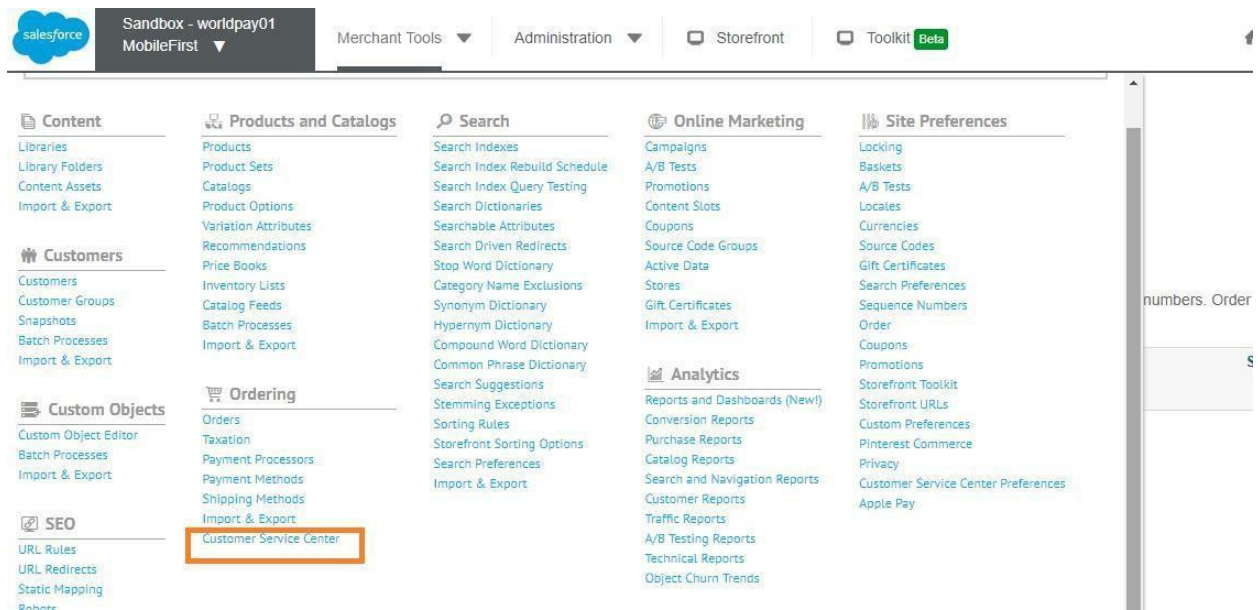
Shipping Method: Ground  
 Tax: \$ 0.40

**ITEMS TOTAL: \$ 195.00**  
**SHIPPING TOTAL: \$ 7.99**  
**TAX TOTAL: \$ 10.15**  
**ORDER TOTAL: \$ 213.14**

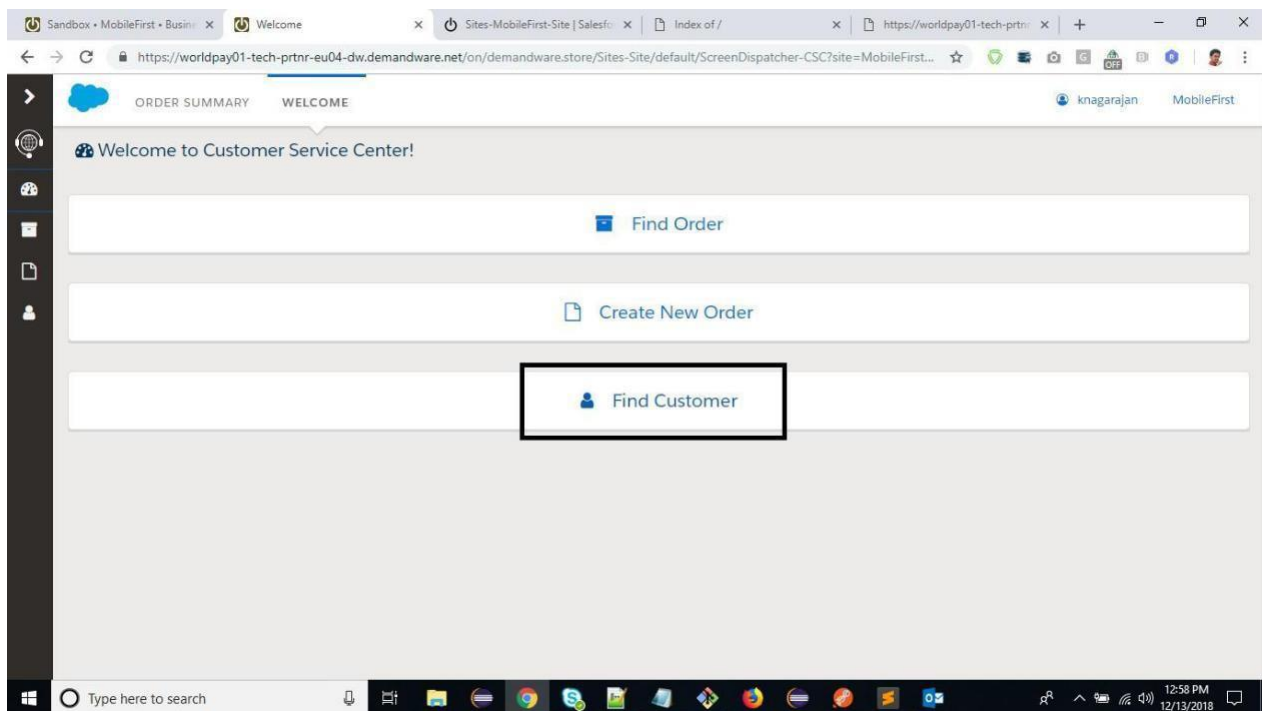
2). Customer service agent placing the order for the customer from storefront. Refer the attached workflow.

In order to enable storefront button in customer center, update your storefront hostname and storefront path in (Merchant tools > site preferences > custom preferences)

## Screen 1

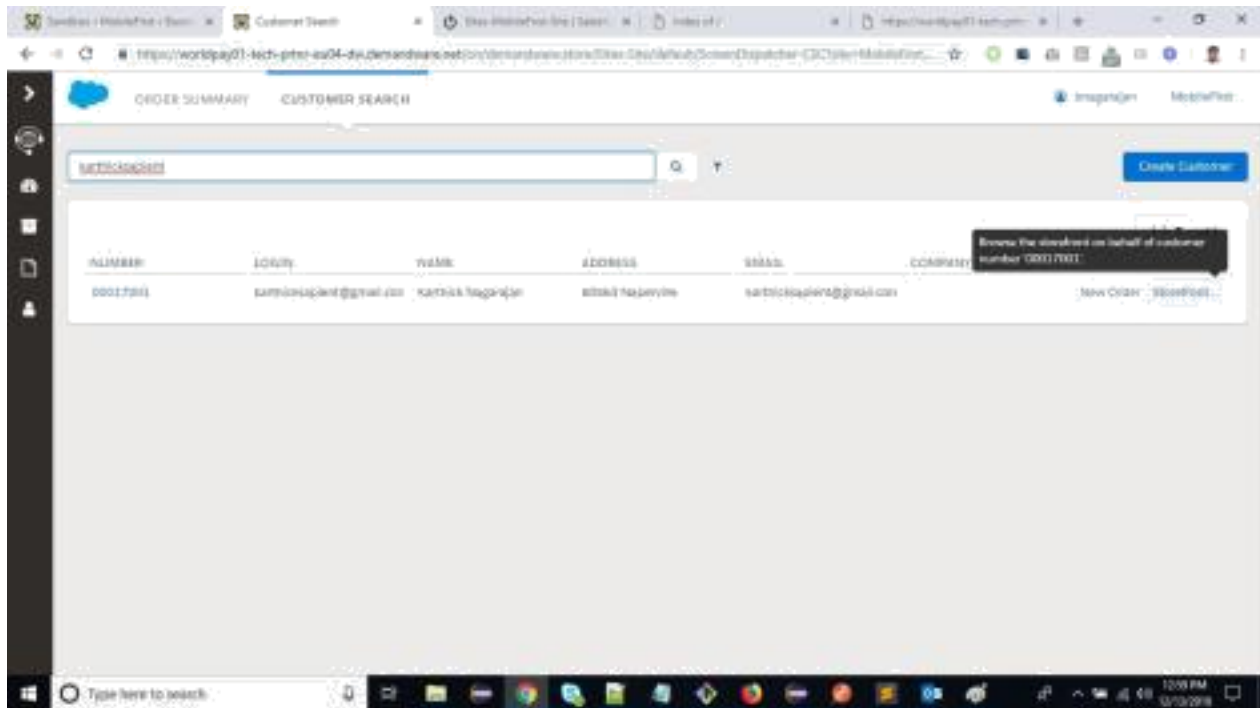


## Screen 2



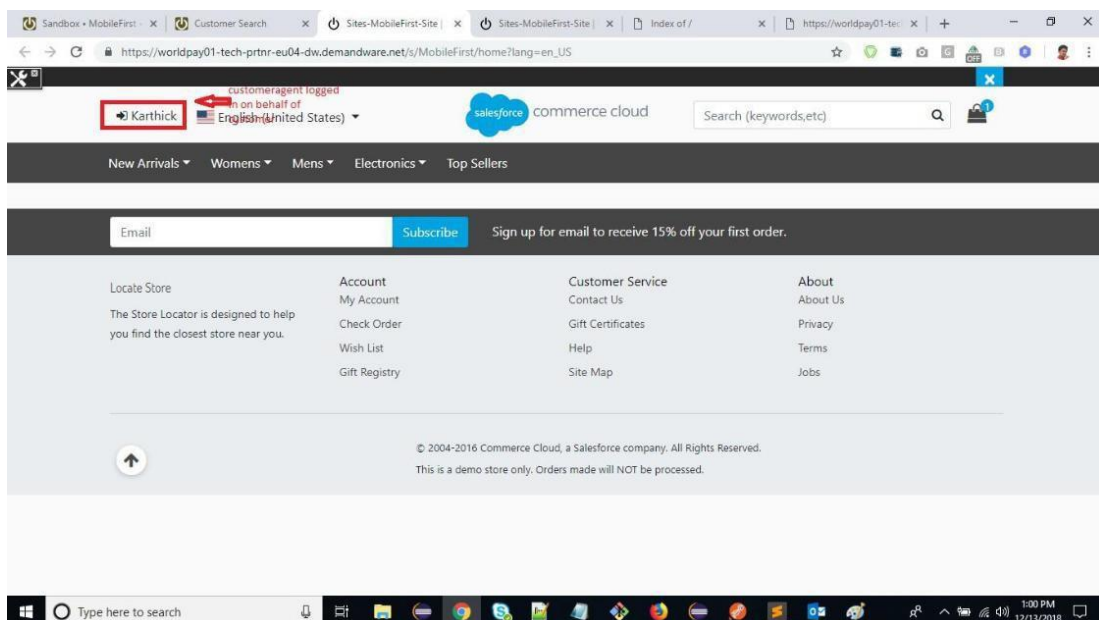
## Screen 3

- Search the customer and click storefront



Screen 4

- Customer agent logged in on behalf of customer; here in the storefront checkout page they cannot see the moto as separate payment method. They can normally use credit card payment methods the request will go as moto order



Request and Response will be same as the credit card payment method, only the additional part in the xml is '<dynamicInteractionType type="MOTO"/>'

### Request

```
<?xml version="1.0"?>
<paymentService merchantCode="SAPIENTNITROECOM"
  version="1.4"> <submit>
  <order orderCode="T00048284">
    <description>Merchant Order Number :
    T00048284</description> <amount currencyCode="USD"
    exponent="2" value="3149" /> <orderContent></orderContent>
  <paymentDetails>
    <ECMC-SSL>
      <cardNumber>5555555555554444</cardNumber>
      <expiryDate>
        <date month="4" year="2021" />
      </expiryDate>
      <cardHolderName>KARTHICK NAGARAJ</cardHolderName>
      <cardAddress>
        <address>
          <firstName>Karthick</firstName>
          <lastName>Nagarajan</lastName>
          <address1>1807 Continental Ave Apt 114</address1>
          <address2 />
          <postalCode>60563</postalCode>
          <city>Naperville</city>
          <state>IL</state>
          <countryCode>US</countryCode>
          <telephoneNumber>123456789</telephoneNumber>
        </address>
      </cardAddress>
    </ECMC-SSL>
    <session id="T00048284" shopperIPAddress="125.16.91.5" />
  </paymentDetails>
  <shopper>
    <shopperEmailAddress>karthicksapient@gmail.com</shopperEmailAddress>
    <browser>
      <acceptHeader>*/*</acceptHeader>
      <userAgentHeader>Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like
      Gecko) Chrome/70.0.3538.110 Safari/537.36</userAgentHeader>
    </browser>
  </shopper>
  <shippingAddress>
    <address>
      <firstName>Karthick</firstName>
      <lastName>Nagarajan</lastName>
      <address1>1807 Continental Ave Apt 114</address1>
      <address2 />
      <postalCode>60563</postalCode>
      <city>Naperville</city>
      <state>IL</state>
      <countryCode>US</countryCode>
      <telephoneNumber>2343422234</telephoneNumber>
    </address>
  </shippingAddress>
  <dynamicInteractionType type="MOTO" />
</order>
```

```
</submit>
</paymentService>
```

## Response

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="SAPIENTNITROECOM"> <reply>
  <orderStatus orderCode="T00048284">
    <payment>
      <paymentMethod>ECMC-SSL</paymentMethod>
      <paymentMethodDetail>
        <card number="5555*****4444" hash="0x65bb11198e83d0f98592df932a1bd5a979fc7c25"
          type="creditcard"> <expiryDate>
            <date month="04" year="2021" />
          </expiryDate>
        </card>
      </paymentMethodDetail>
      <amount value="3149" currencyCode="USD" exponent="2" debitCreditIndicator="credit" />
      <lastEvent>AUTHORISED</lastEvent>
      <AuthorisationId id="237758" />
      <CVCResultCode description="B" />
      <AVSResultCode description="E" />
      <cardHolderName><![CDATA[KARTHICK NAGARAJ]]></cardHolderName>
      <issuerCountryCode>N/A</issuerCountryCode>
      <balance accountType="IN_PROCESS_AUTHORISED">
        <amount value="3149" currencyCode="USD" exponent="2" debitCreditIndicator="credit"
        /> </balance>
      <riskScore value="-5" />
    </payment>
  </orderStatus>
</reply>
</paymentService>
```

### 4.2.13 WECHATPAY

WeChat Pay is a eWallet payment method, incorporated into the WeChat app. It is one of the most popular payment methods in China; with over 600 million active users, WeChat Pay is available to shoppers who hold a Chinese domestic bank account. When adding a bank card

(Credit or debit) to their WeChat wallet, shoppers must also provide their Chinese ID (resident identity card), name and phone number. These details are verified in real-time with their bank and must match exactly for successful verification. Without successful verification, shoppers will not be able to use WeChat Pay for online purchases.

WeChat Pay is available in 10 currencies but shoppers will always have their wallet debited in CNY. WeChat Pay will perform any currency conversion immediately and show the CNY amount throughout the shopper journey. The exchange rate is obtained from their partner settlement banks (China Construction Bank or China CITIC Bank) at 10am each day (02:00 UTC), which is shown to the shopper on the payment success page.

Shoppers can link multiple bankcards to their wallet. They can opt to fund their payment from their wallet, provided they have a sufficient balance, or directly from their linked cards at time of payment.

- eWallet

Property	Description/Value
Payment Type	eWallet
Countries	China
Acceptance Currencies	CNY
Mode	DIRECT

#### *Request Attribute Mapping*

```
<?xml version="1.0"?>
<paymentService merchantCode="SAPIENTNITROECOM"
  version="1.4"> <submit>
  <order installationId="1029012" orderCode="01154011">
    <description>Merchant Order Number :
    01154011</description> <amount currencyCode="USD"
    exponent="2" value="7349" /> <orderContent></orderContent>
    <paymentDetails>
      <WECHATPAY-SSL />
    </paymentDetails>
    <shopper>
      <shopperEmailAddress>admin@gmail.com</shopperEmailAddress>
      <browser deviceType="0" />
    </shopper>
  </order>
</submit>
</paymentService>
```


**Response Attribute Mapping**

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="SAPIENTNITROECOM"> <reply>
  <orderStatus orderCode="01154011">
    <payment>
      <paymentMethod>WECHATPAY- SSL</paymentMethod>
      <amount value="7349" currencyCode="USD" exponent="2" debitCreditIndicator="credit"
      /> <lastEvent>SENT_FOR_AUTHORISATION</lastEvent> <riskScore value="- 1" />

    </payment>
    <qrCode><![CDATA[!VBORw0KGgoAAAANSUgAAAQAAAAEAAQAAAAAB0CZX
LAAABVUIEQVR42u2YMa6DMaYgJRG6cgSOkqORo/UoOQJjBoTr3w6tHgU9qVssZ2ia8i21jf0B8T+L
AggggAAckE9dy8CVKDFvehzcAfr9uez04EILb4/3j74A+efzEldWSlk3RMUrwCyAnHwD+1gnybpfwK
oaeZ6B35V958DRowAgDrdNrG+gLbkylDQCcDWSOgdorFrVRK2qv9LtAsCVkvI+okfJVPfudghgopKIg
8RBt3fWPQHajUcknW5a+tUTprkB9CJA+BekzoHiDBqUNUyeIikuOXE/oCxSa+mW2p8PY8kF8CgGp
hJWzHBlsqXJnkAttaj4PZqEyhud8DhCrh5LSougWaDH39Y50vp7Rw4nrtRzilirHDg7BGzi4C2K5Fmr+q
/0+gLs2cUG62UcXAdmvqzue61JnQNW1dBASK9l3R/QepTZktrEye19APFaPoAAAagjZ+AFYnmzdD
a9DAAAAAASUVORK5CYII=]]></qrCode>
  </orderStatus>
</reply>
</paymentService>

```

Ground ( 7-10 Business Days ) .....	\$5.99
<b>Billing Address:</b>	
s s	
sss	
sss, AK 12345	
admin@gmail.com	
7878778787	
<b>Payment:</b>	
Payment By Wechatpay	
Amount \$73.49	
	
<ul style="list-style-type: none"> <li>• Please complete your payment using the above QR code for successful order completion</li> <li>• Do not Press Back, Refresh or Close button in browser</li> <li>• Please note, order may get failed if payment is not completed successfully using the QR code</li> </ul>	

NOTE: The order is automatically authorized after 15 seconds in the test environment.

For the Production environment, user needs to scan the QR code at their end from the WeChat payment app to complete the order authorization. You can refer the screenshot attached above.

#### 4.2.14 Google Pay with 3DS2

Update the site preferences named Google Pay Merchant ID, Google Merchant Name, Gateway Merchant ID, Gateway Merchant Name, Google Pay 3DS Flex Magic Value For Test Environment, Google Pay Environment, for Google Pay integration.

For a Test environment, the Google Pay environment is TEST, and the merchant ID is supplied by Worldpay for both the instances (TEST & PRODUCTION) it is visible within the MAI once one has been assigned from the routing within your account.

For a Test environment, enter the **Google Pay 3ds Flex Magic Value For Test Environment** site preference value (for example, 3DS\_V2\_CHALLENGE\_IDENTIFIED ) to test the functionality of Google Pay SCA (Google pay + 3DS2). A full list of these can be found [here](#), select the integration type you are using..

**Note:** Production testing has not been done for Google Pay 3DS2. The features have been fully tested in a test environment. Google Pay (3DS1 is not supported directly, it will only trigger as a fallback from 3DS2). Remember that you must enable 3DS2 if you want to be PSD2 compliant. If you experience challenges in production, please contact your Relationship Manager or Worldpay support.

Here is an example of the payload within <PAYWITHGOOGLE-SSL>:

```
<PAYWITHGOOGLE-SSL>
  <protocolVersion>ECv1</protocolVersion>

  <signature>MEUCIDY6Gh4va1sYeSc6BebYUi8GgfSYNp3x3yf3PTnt9o+eAiEA0RrpjmEU+Ar9KRnissz/fSVTFX8VFxk
  NhjXqECXVS10=</signature>
  <signedMessage>
  {
    "encryptedMessage":
    "nP6goho6/NHuyMSbcucEUdcJwRN6CwwWGQL3vBgf3SAS2swafVpoxZ4ahneOnazx5CER2Hsk18ImZDPBN1iuZN1
    K3F9+G1e7rnmMyU89M51CSRSTF6DRvr5E+7cQ0C5RJwM9hNDHV4keY4bY6d8i+YGwUgLefPoRhGBIY23QS5shn
    77z1EoFUuJ93DHMgbYA+jQ7aJ/PA/cDABZ5ILJn7SFxUttGUb3n2Ii9z7Je1/KQWs9nC6k7guR7TkJ/GBmeKQ3qG17V
    AqwHCMCiykpCQQT+wz3YOuc1ixgo4knzrFIkoOIC1ZZ5YPdPRF3kVQKJt1FQDEEO7XXDvOHCUh/un1/WBZz9z6j
    F6B0dSzW9dbVvwVQqZDOfdK8lkgsmyZCOgZHw4SEWV8k82IiWsWMOBvleRSWUhhBcK6hTgIsnsyTgwZmCHPDb
    m8k4/hXaSaFfLZpArDzZgZg==",
    "ephemeralPublicKey":
    "BHxQdU667i9qthaacDFuRhSVCgKLFmF0P3Tp5yTSFpAnB7x1ILOubxM3CtBw6P4LqXL22B0opuSN8ZQ/+4norHY="
  },
  "tag": "BvPG7TnpPgkZg6ZBd6rwTZ1XZuAYAnlxZWriLK9BWcc="
  }
</signedMessage>
</PAYWITHGOOGLE-SSL>
```



The order Request can be found inline. The Response is standard xml response.

**Request:**

```

<?xml version="1.0"?><!DOCTYPE paymentService PUBLIC "-//Worldpay/DTD Worldpay PaymentService v1//EN"
"http://dtd.worldpay.com/paymentService_v1.dtd"><paymentService merchantCode="YOUR_MERCHANT_CODE"
version="1.4">
  <submit>
    <order orderCode="YOUR_ORDER_CODE">
      <description>Merchant Order Number : GOOGLE_PAY_TEST_ORDER </description>
      <amount currencyCode="USD" exponent="2" value="8608"/>
      <orderContent>&lt;center&gt;&lt;table border="1"&gt;&lt;tr&gt;&lt;th&gt;Product ID&lt;/th&gt;&lt;th&gt;Product
Name&lt;/th&gt;&lt;th&gt;Quantity&lt;/th&gt;&lt;th&gt;Price&lt;/th&gt;&lt;tr&gt;&lt;td&gt;701642843344M&lt;/td
&gt;&lt;td&gt;Flat Front Classic Pant&lt;/td&gt;&lt;td&gt;1&lt;/td&gt;&lt;td&gt;USD
75.99&lt;/td&gt;&lt;tr&gt;&lt;td colspan="4"&gt;Your payment will be handled by Worldpay Payments
Services&lt;br/&gt;This name may appear on your bank
statement&lt;br/&gt;http://www.worldpay.com&lt;/td&gt;&lt;/tr&gt;&lt;/table&gt;&lt;/center&gt;</orderContent>
      <paymentDetails>
        <PAYWITHGOOGLE-SSL>
          <protocolVersion>ECv1</protocolVersion>
        </PAYWITHGOOGLE-SSL>
      </paymentDetails>
    </order>
    <signature>MEUCIDY6Gh4va1sYeSc6BebYU8GgfSYNp3x3yf3PTnt9o+eAiEA0RrpjmEU+Ar9KRnissz/fSVTFX8VFxkNhjXq
ECXVS10=</signature>
    <signedMessage>
      {
        "encryptedMessage":
        "nP6goho6/NHuyMSbcucEUdcJwRN6CwwWGQL3vBgf3SAS2swafVpoxZ4ahneOnazx5CER2Hsk18ImZDPBN1iuZN1K3F9+
G1e7rnmMyU89M5ICSRSTF6DRvr5E+7cQ0C5RJwM9hNDHV4keY4bY6d8i+YGwUgLeFpRhGBIY23QS5shn77z1EoFUuJ9
3DHMgbYA+jQ7aJ/PA/cDABZ5ILJn7SFxUttkGUb3n2lii9z7Je1/KQWs9nC6k7guR7TkJ/GBmeKQ3qG1VAqwHMCiykpCQ
QT+wz3YOuc1ixgo4knzrFIKoOIC1ZZ5YPdPRF3kVQKJt1FQDEEO7XXDvOHCUh/un1/WBZz9z6jF6B0dSzW9dbVvwVQqZ
DOfdK8lkgsmYZCOgZHw4SEWV8k82liWsWMOBvleRSWUhhBcK6hTgIsnsyTgwZmCHPDbm8k4/hXaSaFfLZpArDzZgZg==
",
        "ephemeralPublicKey":
        "BHxQdU667i9qthaacDFuRhSVCGKLfMf0P3Tp5yTSFpAnB7x1ILOUbxM3CtBw6P4LqXL22B0opuSN8ZQ/+4norHY=",
        "tag": "BvPG7TnpPgkZg6ZBd6rwTZ1XZuAYAnlxZWriLK9BWcc="
      }
    </signedMessage>
    <PAYWITHGOOGLE-SSL>
      <session id="WPGAPPLEPAYREL00001203" shopperIPAddress="157.46.109.165"/>
    </PAYWITHGOOGLE-SSL>
    <paymentDetails>
      <shopper>
        <shopperEmailAddress>*****</shopperEmailAddress>
        <browser>
          <acceptHeader>*/</acceptHeader>
          <userAgentHeader>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/605.1.15 (KHTML, like Gecko)
Version/14.1 Safari/605.1.15</userAgentHeader>
        </browser>
        <session id="YOUR_SESSION_ID" shopperIPAddress="157.46.109.165"/>
      </shopper>
      <riskData>
        <authenticationRiskData authenticationMethod="localAccount">
          <authenticationTimestamp>
            <date dayOfMonth="2" hour="6" minute="6" month="6" second="14" year="2021"/>
          </authenticationTimestamp>
        </authenticationRiskData>
        <shopperAccountRiskData>
          <shopperAccountCreationDate>
            <date dayOfMonth="12" month="5" year="2021"/>
          </shopperAccountCreationDate>
          <shopperAccountModificationDate>
            <date dayOfMonth="2" month="6" year="2021"/>
          </shopperAccountModificationDate>
        </shopperAccountRiskData>
        <transactionRiskData>
          <transactionRiskDataGiftCardAmount>
            <amount currencyCode="EUR" exponent="2" value="1"/>
          </transactionRiskDataGiftCardAmount>
        </transactionRiskData>
      </riskData>
      <additional3DSData challengePreference="challengeMandated" challengeWindowSize="fullPage" dfReferenceId="null"/>
    </paymentDetails>
  </submit>

```

## Business Manager Configuration

To enable the Google Pay payment method, In Business Manager

1. Go to Merchant Tools/Ordering/Payment Methods.
2. Select PAYWITHGOOGLE-SSL and enable.

[Merchant Tools](#) > [Ordering](#) > [Payment Methods](#)

### Payment Methods

Payment Methods			
Payment methods are managed here. To create a new payment method, click the New button. To remove a payment method click the remove icon in the payment method row. The default payment methods can't be removed, and their IDs can't be changed. When you select the CREDIT_CARD payment method, credit/debit cards can be reordered through drag-and-drop.			
<a href="#">New</a> <a href="#">Sort Order</a> <a href="#">Credit/Debit Cards</a> <a href="#">Import/Export</a>		Language: <span>Default</span>	
ID	Name	Enabled	Sort Order
New Payment Method - 1/25/19 5:49:28 am			
New Payment Method - 3/16/20 7:20:41 am			
PAYPAL-EXPRESS	Pay Pal	Yes	15
PAYWITHGOOGLE-SSL	Google Pay	Yes	35
POLI-SSL	Poli	Yes	32
POLINZ-SSL	Poli	Yes	33
PRZELEWY-SSL	Przelewy24	Yes	30
QIWI-SSL	QIWI	Yes	21
SEPA_DIRECT_DEBIT-SSL	SEPA	Yes	36
SOFORT-SSL	Sofort	Yes	19
SOFORT_CH-SSL	Sofort	Yes	16

3. Go to Merchant Tools > Site Preferences > Custom Site Preference Groups > Worldpay.

Screenshot for test environment is given below.

Google Pay Environment	TEST (TEST)	TEST	<a href="#">Edit Across Sites</a>
(googlePayEnvironment)			
Google Merchant ID	32e04907d379490	googlePayMerchantID	<a href="#">Edit Across Sites</a>
(googlePayMerchantID)			
(String)			
Google Merchant Name		worldpay	<a href="#">Edit Across Sites</a>
(googleMerchantName)			
(String)			
Gateway Merchant Id	32e04907d379490	gatewayMerchantId	<a href="#">Edit Across Sites</a>
(gatewayMerchantId)			
(String)			
Gateway Merchant Name		worldpay	<a href="#">Edit Across Sites</a>
(gatewayMerchantName)			
(String)			
Google Pay 3ds Flex Magic Value For Test Environment	3DS_V2_CHALLENGE_IDENTIFIED		<a href="#">Edit Across Sites</a>
(googlePayTest3DSMagicValue)			
(String)			

© 2021 salesforce.com, inc. All Rights Reserved. RefArch Time Zone: Coordinated Universal Time|Instance Time Zone: Eastern Daylight Time|Version: 21.6 Last Updated: May 25, 2021 (Compatibility Mode)

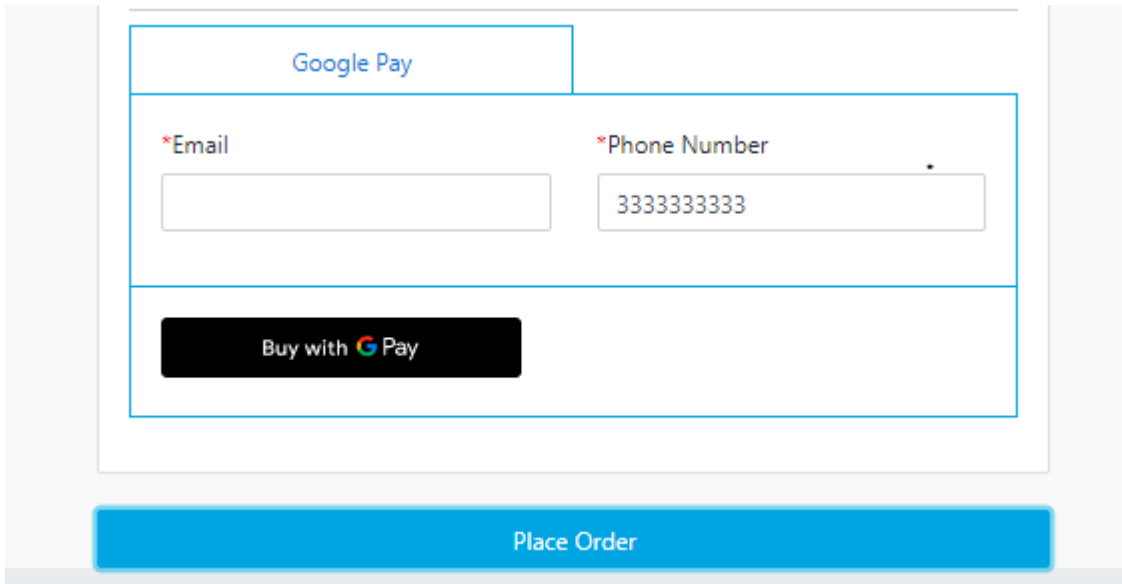
Site Preference	Description	Default Values
<b>Google Pay Environment</b>	Google Pay is supported in the Worldpay Sandbox. Please use the TEST parameter for any test transactions and the PRODUCTION parameter for production transactions.	Merchant Specific (Default value : TEST)
<b>Google Pay Merchant ID</b>	The merchant ID is specific to the environment we are using for transactions. This will be provided by worldpay.	Merchant Specific
<b>Google Merchant Name</b>	The merchant name registered with Google.	Merchant Specific. The merchant name registered with Google Account
<b>Gateway Merchant Id</b>	The merchant ID as shared by Worldpay.	Merchant Specific. (Default value: <b>32e04907d379490</b> )
<b>Gateway Merchant Name</b>	The merchant name as shared by Worldpay (payment provider).	Default value: <b>worldpay</b>
<b>Google Pay 3ds Flex Magic Value For Test Environment</b>	The 3DS magic value for testing the functionality of Google Pay SCA (Google pay + 3DS2) in a lower environment.	You set this preference. e.g. <b>3DS_V1_CHALLENGE_IDENTIFIED</b>

**NOTE:** ‘Google Pay 3ds Flex Magic Value For Test Environment’ is the field for providing the 3DS magic value. Use this value to test the functionality of Google Pay SCA (Google pay + 3DS2) in a lower environment. An example value is **3DS\_V2\_CHALLENGE\_IDENTIFIED**

### The shopper's experience

Here is a typical successful shopper journey

1. Payment Method – Choose Google Pay as the payment method and submit the payment.



Google Pay

\*Email

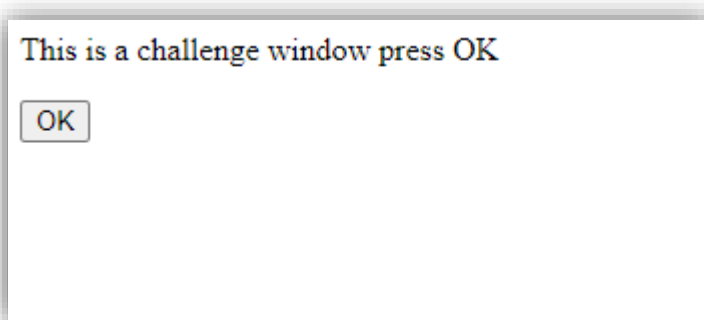
\*Phone Number

3333333333

Buy with Google Pay

Place Order

2. Review the order and place the order
3. If the challenge page appears, do the challenge. The screen shot from the test environment is given below. In production the challenge page varies widely based on the issuing banks provider



#### Worldpay developer portal documentation

- <https://developer.worldpay.com/docs/wpg/mobilewallets/googlepay>
- <https://developer.worldpay.com/docs/wpg/mobilewallets/googlepay#sca-and-psd2-compliance>

### 4.2.21 Stored Credentials

A stored credential is Visa or MasterCard information (such as a card number) stored by a merchant or its agent, a Payment Facilitator (PF) or a Staged Digital Wallet Operator (SDWO) to process future transactions.

Where to include the stored Credentials element:

To indicate that you are storing payment details, include `<storedCredentials>` with the usage value of "FIRST" in your authorization request:

```
<storedCredentials usage="FIRST"/>
</paymentDetails>
```

Store the transaction Identifier from the response

In the response, you get a `<transactionIdentifier>` (a child of `<schemeResponse>`), as shown below. This must be stored and (where applicable) supplied with subsequent use of these card details.

**Note:** The `<transactionIdentifier>` may contain up to 56 characters, and may include spaces, even at the beginning or end. Preserve all of these characters.

```
<schemeResponse>
  <transactionIdentifier>1234567890</transactionIdentifier>
</schemeResponse>
```

Note: There are two ways to use stored credentials, depending on whether the cardholder or merchant initiates a transaction.

#### CARDHOLDER initiates:

If the cardholder initiates a transaction with their stored details, you must include `<storedCredentials>` with the usage value of "USED":

```
<storedCredentials usage="USED">
</storedCredentials>
</paymentDetails>
```

**MERCHANT initiates:**

If the merchant initiates a transaction with the stored details (such as with a recurring payment), you must include:

- 1) <storedCredentials> with:
  - a) the usage value of "USED", and
  - b) the appropriate merchantInitiatedReason
- 2) <schemeTransactionIdentifier>, which is the <transactionIdentifier> from either:

Note: The Merchant initiated reasons can be INSTALMENT, RECURRING, UNSCHEDULED

To change the type of reason we have to change it from the code base in the following files:

- a) The types are mentioned in the properties file, named worldpay.properties

```
1. worldpay.storedcred.mi.INS
   TALMENT= INSTALMENT
   worldpay.storedcred.mi.REC
   URRING= RECURRING
   worldpay.storedcred.mi.UNS
   CHEDULED =
   UNSCHEDULED
```

- b) To change its type we have to change in file named

LibCreateRequest.js Find this code:

- a. 

```
if (this.userId != null) {
    // session.isUserAuthenticated()
}
```
- b. 

```
// createStoredCredential()
i. storedCredentials = new XML("<storedCredentials usage='USED'
    merchantInitiatedReason='
    Resource.msg('worldpay.storedcred.mi.UNSCHEDULED', 'worldpay',
    null) // <storedCredentials> is in resource.properties
"
```



*In this part of code change inside Resource.msg.*

- *For e.g., for installment + Resource.msg('worldpay.storedcred.mi. INSTALMENT', 'worldpay', null) And so on,*

- a) The "FIRST" response message
- b) The previous "USED" response message

```
<storedCredentials usage="USED" merchantInitiatedReason="UNSCHEDULED">  
<schemeTransactionIdentifier>1234567890</schemeTransactionIdentifier> <!-- <transactionIdentifier> response from FIRST or USED  
request-->  
  
</storedCredentials>  
</paymentDetails>
```



**REQUEST:**

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="YOUR_MERCHANT_CODE"> <submit>
  <order orderCode="YOUR_ORDER_CODE">
    <description>YOUR DESCRIPTION</description>
    <amount currencyCode="GBP" exponent="2" value="5000" />
    <paymentDetails>
      <CARD-SSL>
        <cardNumber>444433332221111</cardNumber>
        <expiryDate>
          <date month="01" year="2020" />
        </expiryDate>
        <cardHolderName>A Shopper</cardHolderName>
        <cardAddress>
          <address>
            <address1>47A</address1>
            <address2>Queensbridge Road</address2>
            <address3>Suburbia</address3>
            <postalCode>CB94BQ</postalCode>
            <city>Cambridge</city>
            <state>Cambridgeshire</state>
            <countryCode>GB</countryCode>
          </address>
        </cardAddress>
      </CARD-SSL>
      <storedCredentials usage="FIRST" />
      <!--Indicates that you are storing credentials-->
      <session shopperIPAddress="123.123.123.123" id="0215ui8ib1" />
    </paymentDetails>
    <shopper>
      <shopperEmailAddress>ashopper@myprovider.com</shopperEmailAddress>
      <browser>
        <acceptHeader>text/html</acceptHeader>
        <userAgentHeader>Mozilla/5.0 ...</userAgentHeader>
      </browser>
    </shopper>
  </order>
</submit>
</paymentService>

```

**RESPONSE:**

The response includes the <schemeResponse> parameter, within which you get the <transactionIdentifier>. Where required, use the value returned in <transactionIdentifier> as the <schemeTransactionIdentifier> in your request to use credentials:

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="ExampleCode1"> <reply>
  <orderStatus orderCode="ExampleOrder1">
    <payment>
      <paymentMethod>VISA-SSL</paymentMethod>
      <amount value="5000" currencyCode="GBP" exponent="2" debitCreditIndicator="credit" />
      <lastEvent>AUTHORISED</lastEvent>
      <AuthorisationId id="666" />
      <balance accountType="IN_PROCESS_AUTHORISED">
        <amount value="5000" currencyCode="GBP" exponent="2" debitCreditIndicator="credit" />
      </balance>
    </payment>
  </orderStatus>
</paymentService>

```

```

</balance>
<cardNumber>4444*****1111</cardNumber>
<riskScore value="0" />
<schemeResponse>
  <transactionIdentifier>20005060720116005061</transactionIdentifier>
  <!--Store this for later use-->
</schemeResponse>
</payment>
</orderStatus>
</reply>
</paymentService>

```

**'USED' Request:**

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="YOUR_MERCHANT_CODE"> <submit>
  <order orderCode="YOUR_ORDER_CODE">
    <description>YOUR DESCRIPTION</description>
    <amount currencyCode="GBP" exponent="2" value="5000" />
    <paymentDetails>
      <CARD-SSL>
        <cardNumber>4444333322221111</cardNumber>
        <expiryDate>
          <date month="01" year="2020" />
        </expiryDate>
        <cardHolderName>A Shopper</cardHolderName>
        <cardAddress>
          <address>
            <address1>47A</address1>
            <address2>Queensbridge Road</address2>
            <address3>Suburbia</address3>
            <postalCode>CB94BQ</postalCode>
            <city>Cambridge</city>
            <state>Cambridgeshire</state>
            <countryCode>GB</countryCode>
          </address>
        </cardAddress>
      </CARD-SSL>
      <storedCredentials usage="USED" merchantInitiatedReason="UNSCHEDULED">
        <schemeTransactionIdentifier>20005060720116005061</schemeTransactionIdentifier> <!--
        - Only include this if it's a merchant-initiated transaction-->
      </storedCredentials>
      <session shopperIPAddress="123.123.123.123" id="0215ui8ib1" />
    </paymentDetails>
    <shopper>
      <shopperEmailAddress>ashopper@myprovider.com</shopperEmailAddress>
      <browser>
        <acceptHeader>text/html</acceptHeader>
        <userAgentHeader>Mozilla/5.0 ...</userAgentHeader>
      </browser>
    </shopper>
  </order>
</submit>
</paymentService>

```

**Response to 'used' request:**

In transactions, you receive another <transactionIdentifier>. We are using the first time received transaction Identifier value.

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="MYMERCHANT">
  <reply>
    <orderStatus orderCode="ExampleOrder1">
      <!--The orderCode you supplied in the order-->
      <payment>
        <paymentMethod>VISA-SSL</paymentMethod>
        <amount value="5000" currencyCode="GBP" exponent="2" debitCreditIndicator="credit" />
        <lastEvent>AUTHORISED</lastEvent>
        <AuthorisationId id="666" />
        <balance accountType="IN_PROCESS_AUTHORISED">
          <amount value="5000" currencyCode="GBP" exponent="2" debitCreditIndicator="credit" />
        </balance>
        <cardNumber>4444*****1111</cardNumber>
        <riskScore value="0" />
        <schemeResponse>
          <transactionIdentifier>94443862893748229682</transactionIdentifier>
        </schemeResponse>
      </payment>
    </orderStatus>
  </reply>
</paymentService>
```

#### 4.2.22 TOKENIZATION

Tokenization is the replacement of sensitive credit card data with a unique identifier (the token) that cannot be mathematically reversed.

- ☐ Choose [shopper](#) tokens if you **only** intend to use tokens for your eCommerce channel
- ☐ Choose [merchant](#) tokens if you intend to share tokens between your eCommerce and your Point of Sale (POS) channels (using Worldpay Total as your Omni-channel solution)

##### **SHOPPER TOKEN:**

Create a shopper token with a payment request.

**<createToken>** is the instruction to create a token for the card used. **<createToken>** must contain **<authenticatedShopperID>** - a reference that uniquely identifies each shopper so that you can associate their payment tokens with them.

**Request :**

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="MYMERCHANT">
  <submit>
    <order orderCode="T0211010">
      <description>20 red roses from the MyMerchant
      webshop.</description> <amount currencyCode="GBP" exponent="2"
      value="5000" /> <paymentDetails>
        <VISA-SSL>
          <cardNumber>4444443333322221111</cardNumber>
          <expiryDate>
            <date month="01" year="2020" />
          </expiryDate>
          <cardHolderName>J. Shopper</cardHolderName>
          <cvc>123</cvc>
          <cardAddress>
            <address>
              <address1>47A</address1>
              <address2>Queensbridge Road</address2>
              <address3>Suburbia</address3>
              <postalCode>CB94BQ</postalCode>
              <city>Cambridge</city>
              <state>Cambridgeshire</state>
              <countryCode>GB</countryCode>
              <telephoneNumber>0122312345</telephoneNumber>
            </address>
          </cardAddress>
        </VISA-SSL>
        <session shopperIPAddress="123.123.123.123" id="0215ui8ib1"
      /> </paymentDetails>
      <shopper>
        <shopperEmailAddress>jshopper@myprovider.int</shopperEmailAddress>
        <authenticatedShopperID>UniqueshopperID</authenticatedShopperID> <!--
        -Mandatory for shopper tokens, don't send for merchant tokens-->
        <browser>
          <acceptHeader>text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8 </acceptHeader>
          <userAgentHeader>Mozilla/5.0 (Windows; U; Windows NT 5.1;en-GB; rv:1.9.1.5) Gecko/20091102 Firefox/3.5.5
          (.NET CLR 3.5.30729)</userAgentHeader>
        </browser>
      </shopper>
      <createToken tokenScope="shopper">
        <tokenEventReference>TOK7854321</tokenEventReference>
        <tokenReason>ClothesDepartment</tokenReason>
      </createToken>
    </order>
  </submit>
</paymentService>

```

**Response:**

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="MYMERCHANT">
  <reply>
    <orderStatus orderCode="T0211010">
      <payment>
        <paymentMethod>VISA-SSL</paymentMethod>
        <amount value="5000" currencyCode="GBP" exponent="2" debitCreditIndicator="credit" />
      </payment>
    </orderStatus>
  </reply>
</paymentService>

```

```

<lastEvent>AUTHORISED</lastEvent>
<CVCResultCode description="UNKNOWN" />
<AVSResultCode description="UNKNOWN" />
<balance accountType="IN_PROCESS_AUTHORISED">
  <amount value="5000" currencyCode="GBP" exponent="2" debitCreditIndicator="credit" />
</balance>
<cardNumber>4444*****1111</cardNumber>
<riskScore value="4" />
</payment>
<token>
  <authenticatedShopperID>UniqueshopperID</authenticatedShopperID>
  <tokenEventReference>TOK7854321</tokenEventReference>
  <!--The event reference from your current submission-->
  <tokenReason>ClothesDepartment</tokenReason>
  <tokenDetails tokenEvent="NEW">
    <paymentTokenID>9902019934757792074</paymentTokenID>
    <paymentTokenExpiry>
      <date dayOfMonth="3" month="03" year="2019" />
    </paymentTokenExpiry>
    <tokenEventReference>TOK7854321</tokenEventReference>
    <!--The event reference from the initial token creation-->
    <tokenReason>ClothesDepartment</tokenReason>
  </tokenDetails>
  <paymentInstrument>
    <cardDetails>
      <expiryDate>
        <date month="03" year="2019" />
      </expiryDate>
      <cardHolderName>J.Shopper</cardHolderName>
      <cardAddress>
        <address>
          <lastName>Shopper</lastName>
          <address1>47A</address1>
          <address2>Queensbridge Road</address2>
          <address3>Suburbia</address3>
          <state>Cambridge</state>
          <countryCode>GB</countryCode>
          <telephoneNumber>0122312345</telephoneNumber>
        </address>
      </cardAddress>
      <derived>
        <cardBrand>VISA</cardBrand>
        <cardSubBrand>VISA_CREDIT</cardSubBrand>
        <issuerCountryCode>N/A</issuerCountryCode>
        <obfuscatedPAN>4444*****1111</obfuscatedPAN>
      </derived>
    </cardDetails>
  </paymentInstrument>
</token>
</orderStatus>
</reply>
</paymentService>

```

## ZERO Order value Authorization Request

```
<?xml version="1.0"?>
<paymentService merchantCode="SAPIENTNITROECOM"
  version="1.4"> <submit>
  <order orderCode="1557396491905">
    <description>Merchant Order Number :
    1557396491905</description> <amount currencyCode="USD"
    exponent="2" value="0" /> <paymentDetails>
      <ECMC-SSL>
        <cardNumber>5555555555554444</cardNumber>
        <expiryDate>
          <date month="4" year="2022" />
        </expiryDate>
        <cardHolderName>Master</cardHolderName>
      </ECMC-SSL>
      <storedCredentials usage="FIRST" />
    </paymentDetails>
    <shopper>
      <authenticatedShopperID>00009001</authenticatedShopperID>
      <browser>
        <acceptHeader />
        <userAgentHeader />
      </browser>
    </shopper>
    <createToken tokenScope="shopper">
      <tokenEventReference>1557396491905</tokenEventReference>
      <tokenReason>1557396491905</tokenReason>
    </createToken>
  </order>
</submit>
</paymentService>
```

## ZERO Order Response:

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="SAPIENTNITROECOM">
  <reply>
    <orderStatus orderCode="1557396491905">
      <payment>
        <paymentMethod>ECMC-SSL</paymentMethod>
        <paymentMethodDetail>
          <card number="5555*****4444" hash="0x65bb11198e83d0f98592df932a1bd5a979fc7c25" type="creditcard">
            <expiryDate>
              <date month="04" year="2022" />
            </expiryDate>
          </card>
        </paymentMethodDetail>
        <amount value="0" currencyCode="USD" exponent="2" debitCreditIndicator="credit" />
        <lastEvent>AUTHORISED</lastEvent>
        <AuthorisationId id="640020" />
        <CVCResultCode description="B" />
        <AVSResultCode description="H" />
        <cardHolderName><![CDATA[Master]]></cardHolderName>
        <issuerCountryCode>N/A</issuerCountryCode>
        <riskScore value="0" />
        <schemeResponse>
          <transactionIdentifier>000000000000020005060720116005060</transactionIdentifier>
        </schemeResponse>
      </payment>
```

```

<token>
  <authenticatedShopperID>00009001</authenticatedShopperID>
  <tokenEventReference>1557396491905</tokenEventReference>
  <tokenReason>1557396491905</tokenReason>
  <tokenDetails tokenEvent="NEW">
    <paymentTokenID>K5Z6F7E3B6F6L8R</paymentTokenID>
    <paymentTokenExpiry>
      <date dayOfMonth="16" month="05" year="2019" hour="10" minute="08" second="12" />
    </paymentTokenExpiry>
    <tokenEventReference>1557396491905</tokenEventReference>
    <tokenReason>1557396491905</tokenReason>
  </tokenDetails>
  <paymentInstrument>
    <cardDetails>
      <expiryDate>
        <date month="04" year="2022" />
      </expiryDate>
      <cardHolderName><![CDATA[Master]]></cardHolderName>
      <derived>
        <cardBrand>ECMC</cardBrand>
        <cardSubBrand>ECMC_CREDIT</cardSubBrand>
        <issuerCountryCode>N/A</issuerCountryCode>
        <obfuscatedPAN>5555*****4444</obfuscatedPAN>
      </derived>
    </cardDetails>
  </paymentInstrument>
</token>
</orderStatus>
</reply>
</paymentService>

```

## MERCHANT TOKEN:

### *Create a merchant token with a payment request*

<createToken> is the instruction to create a token for the card used. <createToken> must contain tokenScope="merchant" - an attribute of <createToken> which states that the token will be a merchant token.

**The response to a Hosted order with a create token request is exactly the same as a standard Hosted response**

### Request:

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4" merchantCode="MYMERCHANT">
  <submit>
    <order orderCode="TS211010">
      <description>20 red roses from the MyMerchant
store.</description> <amount value="5000" currencyCode="GBP"
exponent="2" /> <paymentDetails>
        <VISA-SSL>
          <cardNumber>4444333322221111</cardNumber>
          <expiryDate>
            <date month="06" year="2019" />
          </expiryDate>
          <cardHolderName>J. Shopper</cardHolderName>
          <cvc>123</cvc>

```

```

    </VISA-SSL>
  </paymentDetails>
  <createToken tokenScope="merchant"> <!--mandatory for merchant
    tokens-->
    <tokenEventReference>TOK7854321</tokenEventReference>
    <tokenReason>ClothesDepartment</tokenReason>
  </createToken>
</order>
</submit>
</paymentService>

```

## Response :

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="MYMERCHANT"> <reply>
  <orderStatus orderCode="TS211010">
    <payment>
      <paymentMethod>VISA-SSL</paymentMethod>
      <amount value="5000" currencyCode="GBP" exponent="2" debitCreditIndicator="credit" />
      <lastEvent>AUTHORISED</lastEvent>
      <CVCResultCode description="UNKNOWN" />
      <AVSResultCode description="UNKNOWN" />
      <balance accountType="IN_PROCESS_AUTHORISED">
        <amount value="5000" currencyCode="GBP" exponent="2" debitCreditIndicator="credit" />
      </balance>
      <cardNumber>4444*****1111</cardNumber>
      <riskScore value="4" />
    </payment>
    <token>
      <tokenEventReference>TOK7854321</tokenEventReference>
      <!--The event reference from your current submission-->
      <tokenReason>ClothesDepartment</tokenReason>
      <tokenDetails tokenEvent="NEW">
        <paymentTokenID>9902019934757792074</paymentTokenID>
        <paymentTokenExpiry>
          <date dayOfMonth="3" month="03" year="2019" />
        </paymentTokenExpiry>
        <tokenEventReference>TOK7854321</tokenEventReference>
        <!--The event reference from the initial token creation-->
        <tokenReason>ClothesDepartment</tokenReason>
      </tokenDetails>
    </token>
  </orderStatus>
</reply>
</paymentService>

```



### 4.2.23 3DS2

3D Secure 2 allows businesses and their payment provider to send more data elements on each transaction to the cardholder's bank. Worldpay have a relationship with Cardinal Commerce whereby your website integrates to Cardinal Commerce's 3DS2 authentication service for Device Data Collection and challenge flows. Worldpay manages the rest of the process.

#### Device Data Collection

- Create a JSON Web Token (JWT) on your server that is passed to the browser. When the shopper has entered a card number, start the Device Data Collection (DDC).
- Include a hidden DDC iframe, with the DDC JWT and the shopper's card number, on your page.
- Post the form to Cardinal Commerce's DDC endpoint.
- You receive a notification (on the shopper's browser) that DDC is complete. DDC returns a JavaScript message event, containing a SessionId.

#### Initial Payment Request

- Use the SessionId and submit as dfReferenceId in your XML payment request.
- An authentication request is submitted to Cardinal Commerce to determine if a challenge is required. The possible outcomes are:
  - Frictionless Flow - An authorization is attempted (Proceed to Step 2 in Second Payment Request).
  - Challenge Required - Proceed to 3DS2 Challenge

#### 3DS2 Challenge

- Extract the data from the challenge response.
- Create a challenge JWT on your server that is passed to the browser. Include a returnUrl and the specified values returned in the XML challenge response.
- Include a challenge iframe, with the challenge JWT and the optional merchant data (MD), on your page.
- Automatically submit this form to the Cardinal Commerce endpoint.
- The shopper completes the challenge in the iframe and is redirected to the returnUrl.

## Second Payment Request

- Submit a second XML request, including the session id and machine cookie.
- If authentication is successful, Worldpay attempts authorization.

### Initial XML Payment Request

Create the XML authorization request. Add the following two elements to your XML

- additional3DSData (Mandatory)
- riskData (Recommended to increase chances of a frictionless flow)

```
<?xml version="1.0"?><!DOCTYPE paymentService PUBLIC "-//Worldpay/DTD Worldpay PaymentService
v1//EN" "http://dtd.worldpay.com/paymentService_v1.dtd"><paymentService merchantCode="
YOUR_MERCHANT_CODE" version="1.4">
  <submit>
    <order orderCode="YOUR_ORDER_CODE">
      <description>Merchant Order Number : YOUR DESCRIPTION </description>
      <amount currencyCode="USD" exponent="2" value="8608"/>
      <orderContent>&lt;center&gt;&lt;table border="1"&gt;&lt;tr&gt;&lt;th&gt;Product
ID&lt;/th&gt;&lt;th&gt;Product
Name&lt;/th&gt;&lt;th&gt;Quantity&lt;/th&gt;&lt;th&gt;Price&lt;/th&gt;&lt;tr&gt;&lt;tr&gt;&lt;td&gt;7016428433
44M&lt;/td&gt;&lt;td&gt;Flat Front Classic Pant&lt;/td&gt;&lt;td&gt;1&lt;/td&gt;&lt;td&gt;USD
75.99&lt;/td&gt;&lt;tr&gt;&lt;tr&gt;&lt;td colspan="4"&gt;Your payment will be handled by Worldpay Payments
Services&lt;br/&gt;This name may appear on your bank
statement&lt;br/&gt;http://www.worldpay.com&lt;/td&gt;&lt;/tr&gt;&lt;/table&gt;&lt;/center&gt;</orderContent>
      <paymentDetails action="SALE">
        <AMEX-SSL>
          <cardNumber>*****</cardNumber>
          <expiryDate>
            <date month="3" year="2025"/>
          </expiryDate>
          <cardHolderName>3DS_V2_CHALLENGE_IDENTIFIED</cardHolderName>
          <cvc>***</cvc>
          <cardAddress>
            <address>
              <firstName>fname</firstName>
              <lastName>lname</lastName>
              <address1>park st</address1>
              <address2/>
              <postalCode>98277</postalCode>
              <city>Tucson</city>
              <state>CA</state>
              <countryCode>US</countryCode>
              <telephoneNumber>9879879879</telephoneNumber>
            </address>
          </cardAddress>
        </AMEX-SSL>
        <session id=" YOUR_SESSION_ID" shopperIPAddress="192.166.11.22"/>
      </paymentDetails>
    </order>
  </submit>
</paymentService>
```

```

<shopper>
  <shopperEmailAddress>*****</shopperEmailAddress>
  <authenticatedShopperID>00000002</authenticatedShopperID>
  <browser>
    <acceptHeader>*/*</acceptHeader>
    <userAgentHeader>Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.212
Safari/537.36</userAgentHeader>
  </browser>
</shopper>
<shippingAddress>
  <address>
    <firstName>fname</firstName>
    <lastName>lname</lastName>
    <address1>park st</address1>
    <address2/>
    <postalCode>98277</postalCode>
    <city>Tucson</city>
    <state>AZ</state>
    <countryCode>US</countryCode>
    <telephoneNumber>9879879879</telephoneNumber>
  </address>
</shippingAddress>
<primeRoutingRequest>
  <routingPreference>signatureOnly</routingPreference>
  <preferredNetworks>
    <networkName>CU24</networkName>
  </preferredNetworks>
</primeRoutingRequest>

```

```

<riskData>
  <authenticationRiskData authenticationMethod="localAccount">
    <authenticationTimestamp>
      <date dayOfMonth="2" hour="5" minute="5" month="6" second="3" year="2021"/>
    </authenticationTimestamp>
  </authenticationRiskData>
  <shopperAccountRiskData>
    <shopperAccountCreationDate>
      <date dayOfMonth="12" month="5" year="2021"/>
    </shopperAccountCreationDate>
    <shopperAccountModificationDate>
      <date dayOfMonth="2" month="6" year="2021"/>
    </shopperAccountModificationDate>
  </shopperAccountRiskData>
  <transactionRiskData>
    <transactionRiskDataGiftCardAmount>
      <amount currencyCode="EUR" exponent="2" value="1"/>
    </transactionRiskDataGiftCardAmount>
  </transactionRiskData>
</riskData>
<additional3DSData challengePreference="challengeMandated"
challengeWindowSize="fullPage" dfReferenceId="ff257475-a97d-4506-95f7-facf5d32cabf"/>
</order>
</submit>
</paymentService>

```

We pass the information to Cardinal Commerce, who matches the DDC to the payment request using the dfReferenceId value. This information is sent to the issuer who will then establish whether the payment requires additional authentication (i.e. a challenge) or not. The response to your authorization request will be either a normal authorization response, which ends the payment flow, or a 3DS challenge response.

### 3DS Challenge

If the issuer decides that the payment requires additional authentication, they signal to Worldpay that a challenge is required. You will receive a response from us to redirect the shopper to a challenge page. The 3DS related information is inside the threeDSChallengeDetails element.

#### Example response with payload:

```
<?xml version="1.0" encoding="UTF-8"?> <!DOCTYPE paymentService PUBLIC "-//WorldPay//DTD
WorldPay PaymentService v1//EN" "http://dtd.worldpay.com/paymentService_v1.dtd">
<paymentService version="1.4" merchantCode="YOUR_MERCHANT_CODE">
  <reply>
    <orderStatus orderCode="YOUR_ORDER_CODE">
      <challengeRequired>
        <threeDSChallengeDetails>
          <threeDSVersion>2.1.0</threeDSVersion>
          <transactionId3DS>10A2krsh4qWZ5VXmRqbp</transactionId3DS>
          <acsURL><![CDATA[https://worldpay.com]]></acsURL>
          <payload>eyJhY3NUcmFuc0lEIjoInjVlYjE2NzEtZTEyYi00MjYxLWE1ZjktMzc2ZWZWMzOTkOW
YwIiwiaWY2hhbGxlbmdlV2luZG93U2l6ZSI6IjUiLCJtZXNzYWdlVHlwZSI6IkdNSZXEiLCJtZXNzY
WdlVmVyc2lvbiI6IjIuMS4wIiwidGhyZWVhZlNlcnZlclRyYW5zSUQiOiIiYXVhZjMxZi0yOWFh
LTQ4OWItYTdiYS0yNTllNmJmZAlMDQifQ==</payload>
        </threeDSChallengeDetails>
      </challengeRequired>
    </orderStatus>
  </reply>
</paymentService>
```

**Redirect to 3DS2 Challenge**

As the redirect to challenge will be another Cardinal Commerce page, you must create a challenge JWT on your server that is passed to the browser.

**Request Challenge Page**

Create an iframe with an automatic form post to <https://secure-test.worldpay.com/shopper/3ds/challenge.html> (Test Environment), and to <https://secure.worldpay.com/shopper/3ds/challenge.html> (Production environment)

**Second XML Payment Request**

Use this request for the returnUrl to trigger the second XML Payment Request

```
<paymentService merchantCode="YOUR_MERCHANT_CODE" version="1.4">
  <submit>
    <order orderCode="YOUR_ORDER_CODE">
      <info3DSecure>
        <completedAuthentication/>
      </info3DSecure>
      <session id="YOUR_SESSION_ID"/>
    </order>
  </submit>
</paymentService>
```

**Authorization Response**

This is received because either the first authorization request was authenticated without a challenge (frictionless flow), or a challenge has been completed by the shopper.

The XML response from Worldpay confirms the result for the authorization.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE paymentService PUBLIC "-//WorldPay/DTD WorldPay PaymentService v1/EN"
"http://dtd.worldpay.com/paymentService_v1.dtd">
<paymentService version="1.4" merchantCode="YOUR_MERCHANT_CODE">
  <reply>
    <orderStatus orderCode="YOUR_ORDER_CODE">
      <payment>
        <paymentMethod>AMEX-SSL</paymentMethod>
        <paymentMethodDetail>
          <card type="creditcard" />
        </paymentMethodDetail>
        <amount value="8608" currencyCode="USD" exponent="2" debitCreditIndicator="credit" />
        <lastEvent>AUTHORISED</lastEvent>
        <AuthorisationId id="902905" />
        <CVCResultCode description="C" />
        <AVSResultCode description="E" />
        <ThreeDSecureResult description="Cardholder authenticated" />
        <cardHolderName><![CDATA[3DS_V2_CHALLENGE_IDENTIFIED]]></cardHolderName>
        <issuerCountryCode>N/A</issuerCountryCode>
        <balance accountType="IN_PROCESS_CAPTURED">
          <amount value="8608" currencyCode="USD" exponent="2" debitCreditIndicator="credit" />
        </balance>
        <primeRoutingResponse>
          <networkUsed>CU24</networkUsed>
        </primeRoutingResponse>
      </payment>
    </orderStatus>
  </reply>
</paymentService>
```

## 4.2.24 US DOMESTIC (Prime Routing)

### PRIME ROUTING:

#### Prerequisites:

To use this service you must meet the following prerequisites:

- The service must be enabled on your account
- You must use the Direct XML API
- You must process transactions as sales

With the sales request, worldpay will automatically capture the funds from the shopper once the request has been authorized. For example, if you are a company that offers a digital product, be it a game or a video that is immediately downloaded once the customer has paid for it, you will want to know straight away that the customer has been charged for the item. There are two options for submitting Sale payments:

- You send a Sale API request
- Sale is set as the default on your US account

### Sale request

The only difference between a sales and a standard Direct XML request is that you need to include the action attribute set to SALE within the <paymentDetails> element. Here is an example authorization request:

**BM CONFIGURATION:** *Go to the business manager > Merchant Tools > Site Preferences > Custom Preferences > Worldpay > Enable Sales request (yes)*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="YOUR_MERCHANT_CODE"> <submit>
  <order orderCode="YOUR_ORDER_CODE">
    <description>YOUR DESCRIPTION</description>
    <amount value="2000" currencyCode="EUR" exponent="2" />
    <orderContent><![CDATA[]]></orderContent>
    <paymentDetails action="SALE">
      <CARD-SSL>
        <cardNumber>444433332221111</cardNumber>
        <expiryDate>
          <date month="01" year="2020" />
        </expiryDate>
        <cardHolderName>J. Shopper</cardHolderName>
        <cardAddress>
          <address>
            <address1>900 Chelmsford Street</address1>
            <postalCode>01851</postalCode>
            <city>Lowell</city>
            <state>MA</state>
            <countryCode>US</countryCode>
          </address>
        </cardAddress>
      </CARD-SSL>
      <session shopperIPAddress="123.123.123.123" id="0215ui8ib1" />
    </paymentDetails>
  </order>
  <shopper>
    <shopperEmailAddress>shopper email address</shopperEmailAddress>
    <browser>
      <acceptHeader>text/html</acceptHeader>
    </browser>
  </shopper>
</submit>
</paymentService>
```

```

<userAgentHeader>Mozilla/5.0 ...</userAgentHeader>
</browser>
</shopper>
</order>
</submit>
</paymentService>

```

### Sale response

The response is the same as a standard Direct XML response with a <lastEvent> of AUTHORISED. This will be followed shortly by a ‘CAPTURED’ notification (if enabled).

Note: In secure-test, the <lastEvent> is ‘CAPTURED’.

## Void

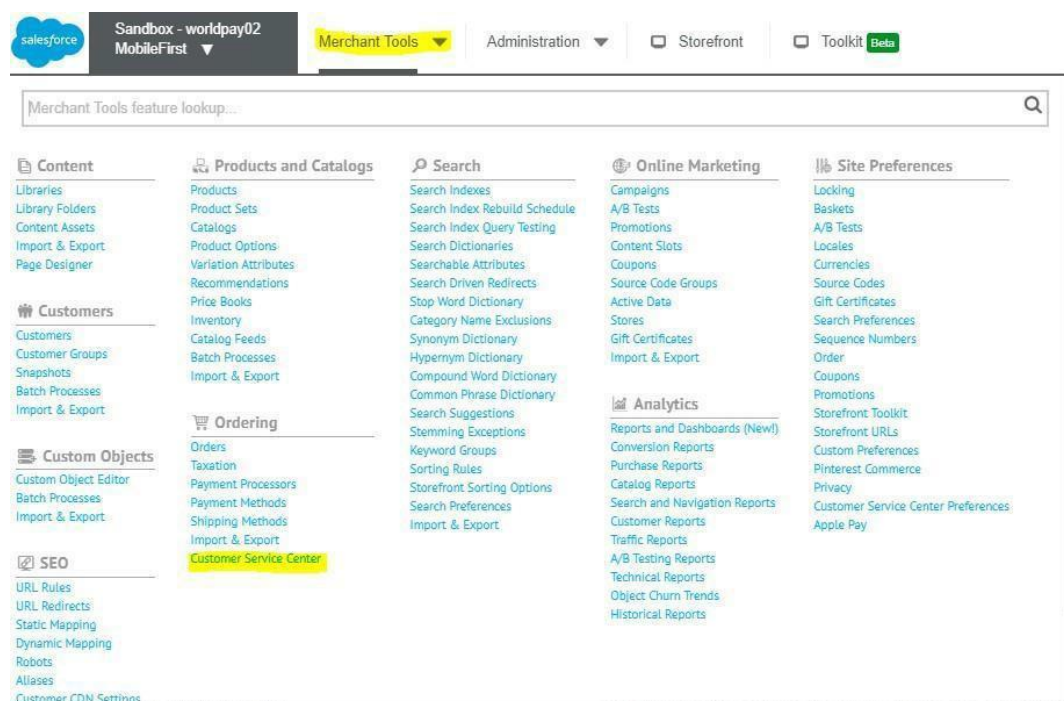
In some cases, you may wish to void a sale request. This is done with an order modification. This must be done within the same US business day as the sale request, else it will fail. If it does fail, you will need to submit a refund request.

### How to void sale from the Business manager:

**Note:** The configuration and setup is explained in the installation guide for

SFRA.

Go to **Merchant Tools > Ordering > Customer Service Center**





**Find the order to void:**

WELCOME nis0 RefArch

Welcome to Customer Service Center!

[Find Order](#)

[Create New Order](#)

[Find Customer](#)

**Click on the order.** The next window will have the order details (Snippet inline). Click on more option to see void sale feature.

ORDER SEARCH **ORDER SUMMARY** nis0 RefArch

Order No.: 00091104  
Creation Date: 9/3/2019 1:51 pm  
Source Code:


Order Status: NEW  
Status: NEW  
Confirmation Status: CONFIRMED  
Export Status: NOTEXPORTED  
Shipping Status: NOTSHIPPED  
Payment Status: NOTPAID  
Is A Gift: ☐


Billing Address:  
John Doe  
17 Pulaski St  
Soddy Daisy  
United States 36007  
Alabama AL  
john.doe@doe.com

Payment Method: CREDIT\_CARD Visa \$ 143.84  
Details... (1) [Void sale](#)

SHIPMENT 1

Ship To:  
John Doe  
17 Pulaski St  
Soddy Daisy  
United States 36007  
Alabama AL

NAME	AVAILABILITY	QUANTITY	PRICE	TAX	TOTAL
 Pleated Dress With Front Sash. Color: Admiral Navy Size: 10 7016AA397357M	Not Available	1	\$ 129.00	\$ 6.45	\$ 129.00

Shipping Method:  Ground  
Tax: \$ 0.40

[Add Note](#)

ITEMS TOTAL: \$ 129.00  
SHIPPING TOTAL: \$ 7.99  
TAX TOTAL: \$ 6.85  
ORDER TOTAL: \$ 143.84

**Click On void sale button**


ORDER SEARCH **ORDER SUMMARY** Void Sale

Order No.: 00091104  
Creation Date: 9/3/2019 1:51 pm  
Source Code:

Order Status: NEW  
Status: NEW  
Confirmation Status: CONFIRMED  
Export Status: NOTEXPORTED  
Shipping Status: NOTSHIPPED  
Payment Status: NOTPAID  
Is A Gift: ☐

SHIPMENT 1

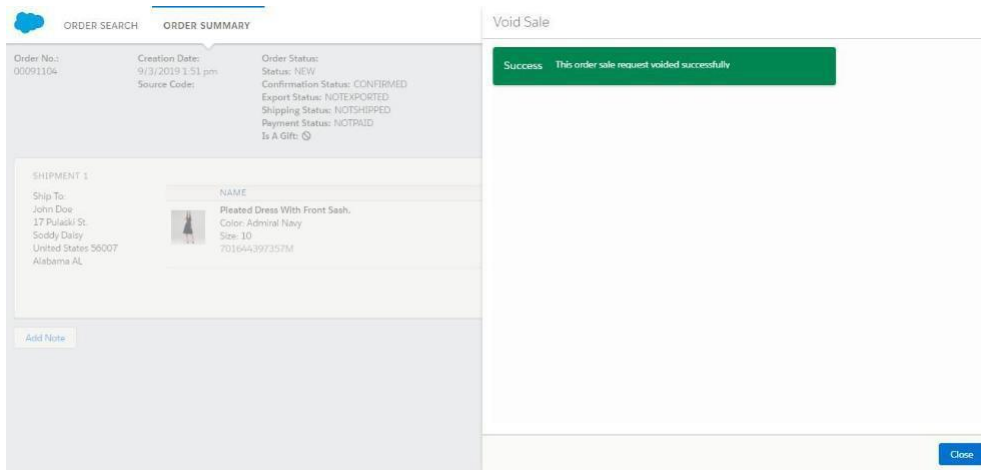
Ship To:  
John Doe  
17 Pulaski St  
Soddy Daisy  
United States 36007  
Alabama AL

NAME
 Pleated Dress With Front Sash. Color: Admiral Navy Size: 10 7016AA397357M

[Add Note](#)

[Void Sale](#)

[Close](#)

**Order is voided successfully****Void request**

*To submit a void modification, include `<voidSale/>` in your modification request.*

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="YOUR_MERCHANT_CODE"> <modify>
  <orderModification orderCode="YOUR_ORDER_CODE">
    <voidSale />
  </orderModification>
</modify>
</paymentService>
```

**Void response**

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="YOUR_MERCHANT_CODE"> <reply>
  <ok>
    <voidReceived ordercode="YOUR_ORDER_CODE" />
  </ok>
</reply>
</paymentService>
```

**Void notification**

Once the void request has been processed a notification will sent.

```
<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="YOUR_MERCHANT_CODE"> <notify>
  <orderStatusEvent orderCode="YOUR_ORDER_CODE">
```

```
<payment>
  <paymentMethod>ECMC-SSL</paymentMethod>
  <amount value="1000" currencyCode="EUR" exponent="2" debitCreditIndicator="credit"
  /> <lastEvent>VOIDED</lastEvent>
</payment>
<journal journalType="VOIDED">
  <bookingDate>
    <date dayOfMonth="01" month="01" year="2020" />
  </bookingDate>
  <accountTx accountType="IN_PROCESS_CAPTURED" batchId="1">
    <amount value="1000" currencyCode="EUR" exponent="2" debitCreditIndicator="debit"
    /> </accountTx>
  </journal>
</orderStatusEvent>
</notify>
</paymentService>
```

## Advanced Prime Routing

Advanced Prime Routing allows you to:

- Receive the debit network used to process the payment
- Specify your preferred debit networks
- Specify your routing preference

### Routing preference

You can optionally provide a routing preference to specify how a particular transaction should be routed:

- pinlessDebitOnly - Route the transaction only through the PINless Debit networks
- signatureOnly - Route the transaction only through the signature networks
- regular - Use standard routing

### Debit networks

The following table shows the debit network names used with preferred debit network and Receive debit network along with the supported transaction types.

Network	Recurring	eCommerce
Accel	✓	✓
AFFN	✓	✓
CU24	✓	✗
Jeanie	✓	✗
NYCE	✓	✓
Pulse	✓	✓
Shazam	✓	✓
Star SouthEast	✓	✓
Star West	✓	✓
Star NorthEast	✓	✓

### Errors

All errors related to Prime Routing are reported under error code 10.

Error code	Description
10	Merchant is not enabled for prime routing
10	Invalid network Name: value supplied
10	Invalid routing Preference: value supplied
10	preferred Networks can have up to 12 networkName elements

#### 4.2.25 Apple Pay

### Example XML request

```
<paymentService merchantCode="SAPIENTNITROECOMMERCEV1"
version="1.4"> <submit>
  <order orderCode="ZZKV00000020044" shopperLanguageCode="en">
    <description>ApplePay Order : ZZKV00000020044</description>
    <amount currencyCode="USD" exponent="2" value="5983"/>
    <orderContent>ZZKV00000020044</orderContent> <paymentDetails>

    <APPLEPAY-SSL>
      <header>

<ephemeralPublicKey>MFkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQGAEI8bGzUp//0YVwATWr8PrRbCVleUzV49r5ZlIdM0d0
MTmaBNwCRnVXuUNAH7Y1hjX7QeS2BJsNi4aAMZ6DUfDcw===</ephemeralPublicKey>
      <publicKeyHash>Fan1MNQEytVzD0IDB6IKsaq6flNRACEwVdysCnLg02Y=</publicKeyHash>
      <transactionId>fd31f74576c5c31b82d0ca46d43c04663be8da02d59121f8b346a3b4d14fa8e8</transactionId>
    </header>


<signature>MIAGCSqGSIB3DQEHAqCAMIAQAQExDzANBgglghkgBZQMEAgEFADCABgkqhkiG9w0BBwEAAKCAMIID5jc
CA4ugAwIBAgIIaGD2mdnMpw8wCgYIKoZIzj0EAwIweJEUmCWGA1UEAwwIQXBwbGUgQXBwbGljYXRpb24gSW50ZWdy
YXRpb24gQQ0EgLSBHMcEmMCQGA1UECwwdQXBwbGUgQ2VydgGlmawWnhdGlvbiBBdXRob3JpdHxkEzARBgNVBAoMCKF
wcGxIEluYy4xCzAJBgNVBAYTAIVTMb4XDTE2MDYwMzE4MTY0MFoXTDTIxMDYwMjE4MTY0MFowYjEoMCYGA1UE
AwwfZWNjLXNtcC1icm9rZXItc2lnbGVzQzQtU0FOREJPWDEUMBIGA1UECwwLaU9TIFN5c3RlbXMxEzARBgNVBAoMCKF
wcGxIEluYy4xCzAJBgNVBAYTAIVTMfkwEwYHKoZIzj0CAQYIKoZIzj0DAQcDQGAEgjD9q8Oe914gLFDZm0US5jqfQHdb
LPgsc1LUmeY+M9OvegaJajChkwz3c6OKpbC9q+hkwNFxOh6RCbOIRsSlAOCAhEwgGINMEUGCCSGAQUBwEBBDKwNZA1
BggrBgEFBQCwAYYpaHR0cDovL29jc3AuYXBwbGUuY29tL29jc3AwNC1hcHBsZWFPY2EzMdIwHQYDVVR0OBByEFAIkM
Aua7u1GMZekplonpkJxghxFMAwGA1UdEWEB/wQCMAAwHwYDVR0jBBgwFoAUUIJJxE+T5O8ns5T2KGw/orv9LkswwgEdBg
NVHSAEEggEUMIIBEDCCAQwGCSqGSIB3Y2QFATCB/jCBwwYIKwYBBQUHAgIwgbYMgbNSZWxpYW5jZSBvb2B0aGlzIG
NlcuRpZmljYXRlIGJ5IGFueSBwYXJ0eSBhc3N1bWVzIGFjY2VwdGFuY2Ugb2YgdGhlIHRob2Zw4gYXBwbGljYWJsZSBzdGFu
ZGFyZCB0ZXJtcyBhbmQgY29uZGI0aW9ucyBvZiBi1c2UsIGNlcuRpZmljYXRlIHhvbiBjeSBhbmQgY2VydGlmawWnhdGlvbiBwc
mFjdGlyZSBzdGF0ZW1lbnRzLjA2BggrBgEFBQCcARYqaHR0cDovL29jc3dy5hcHBsZS5jb20vY2VydGlmawWnhdGVhdXRob3Jpd
HkvMDQGA1UdHwQtMCswKaAnoCWGI2h0dHA6Ly9jcmwuYXBwbGUuY29tL2FwcGxlYWljYTMuY3J5MA4GA1UdDWEB/
wQEAwIHgDAPBgkqhkiG92NkBh0EAgUAMAoGCCqGSM49BAMCA0kAMEYCIQDAHGOUi+X2T44R6GVpN7m2nEcr6T6sM
jOhZ5NuSo1egwIhAL1a+/hp88DKJ0sv3eT3FxWcs71xmbLKD/QJ3mWagrJNMIC7jCCAnWgAwIBAgIISW0vvzyQ2pcwCgYIK
oZIzj0EAwIwZzEbMBkGA1UEAwwSQXBwbGUgUm9vdCBDQSAtIEczMSYwJAyDVQQLDB1BCHBsZSBDZXJ0aWZpY2F0a
W9uIEF1dGhvcml0eTETMBEGA1UECgwKQXBwbGUgSW5jLjELMAkGA1UEBhMCVVmwHhcNMTQwNTA2MjM0NjMwW
hcNMjkWNTA2MjM0NjMwWjB6MS4wLAYDVQQDDCVBCHBsZSBBCHBSaWNhdGlvbiBjbnRIZ3JhdGlvbiBDQSAtIEczMSY
wJAyDVQQLDB1BCHBsZSBDZXJ0aWZpY2F0aW9uIEF1dGhvcml0eTETMBEGA1UECgwKQXBwbGUgSW5jLjELMAkGA1
UEBhMCVVmwWTATBgqcqhkiOPQIBBgqhkjOPQMBAwNAATwFxEgEGddkhduAXiWBb3bogKLv3nuuTeCN/EuT4TNW1W
ZbNa4i0Jd2DSJOe7oi/XYXzojLdrmtCL7I6CMe/1RFo4H3MIH0MEYGCCSGAQUBwEBBDOWODA2BggrBgEFBQCwAYYqaH
R0cDovL29jc3AuYXBwbGUuY29tL29jc3AwNC1hcHBsZXJvb3RjYXZzMB0GA1UdDgQWBBQj8knET5Pk7yfmxPYObD+iu/0u
SzAPBgNVHRMBAf8EBTADAQH/Mb8GA1UdIwQYMBAAFLuw3qFYM4iapIqZ3r6966/ayySrMDcGA1UdHwQwMC4wLKAQ
oCiGImh0dHA6Ly9jcmwuYXBwbGUuY29tL2FwcGxlcm9vdGNhZzMuY3J5MA4GA1UdDWEB/wQEAwIBBjAQBgoqhkiG92Nk
BgIOBAIFADAKBgqhkjOPQQDAgNnADBKAjA6z3KDURaZsYb7NcNWymK/9Bft2Q91TaKOvvGcgV5Ct4n4mPebWZ+Y1UE
Nj53pwv4CMDIt1UQhsKMfd2xd8zg7kGf9F3wsIW2WT8ZyaYISb1T4en0bmcubCYkhYQaZDwmSHQAAMYIBjtCCAYkCAQ
EwgYYweJEUmCWGA1UEAwwIQXBwbGUgQXBwbGljYXRpb24gSW50ZWdyYXRpb24gQQ0EgLSBHMcEmMCQGA1UECwwd
QXBwbGUgQ2VydgGlmawWnhdGlvbiBBdXRob3JpdHxkEzARBgNVBAoMCKFwcGxIEluYy4xCzAJBgNVBAYTAIVTAghoYP
aZ2cynDzANBgglghkgBZQMEAgEFAKCBITAyBgkqhkiG9w0BCQMxCwYJKoZIhvcNAQcBMBwGCsqsGSIB3DQEJBTEPFw0y
MDA2MDQwODE5NDRaMCoGCSqsGSIB3DQENDEdMBswDQYJYIZIAWUDBAIBBQChCgYIKoZIzj0EAwIwLwYJKoZIhvc
NAQkEMSIEIM4EtWz+yaWmv3C1oiHKUHsi25HBFedbybi6NVhVicgvMAoGCCqGSM49BAMCBEGwRglhAjXjSzaXc7IazZkc
Y3OGrlwaiYbmP5kkuls2/1lhZV2MAiEA7sKXWUk+g1WqC/hgtV7BBtLdTYNpBTG9BvRG8vCgEfKAAAAAAAAA=
```

```

<data>IJxhMYnNof4pjVhgweXSuiflwyq9SR7QbrSRE1iHSax0mnSyRGI1/K7ZUAN0pZmGET8g+UGvg8kavbZw+aByOQ5/284jv
YoEj0E5hJy13+FyeNjKOC1wE5sWfTbTbUdHse+sNrdCAcosrdupGQrV+aBDGCLAtcd2rqepbp98u8bZVKB2jJBwHgzbegWV1y
dGgaflevHEKwE7AU8IrjW8/PHvGtss9YscWV9am3HMOxgeB0EodyG7nj6l0b0Yt8P4eA2DlQnJMOZ6K2vQrOIk1HIUjEtLEbMq
YV7xCm/h9kl2d5/1sKR/Kkwq5z8GaN1EMYXbpcVwni14pcJAiiV0WRR4Zv86vR4tWsWSpHz5cIryd5/ZUHD6cwODkefSWY
Suzy+Fk6rlIG0vpO054rxcqNqr5puLF88fyw3VAuCIEs=</data>
  </APPLEPAY-SSL>
</paymentDetails>
<shopper>
  <shopperEmailAddress>appuserapple12@gmail.com</shopperEmailAddress>
</shopper>
</order>
</submit>
</paymentService>

```

## Example XML Response

```

<?xml version="1.0" encoding="UTF-8"?>
<paymentService version="1.4"
  merchantCode="SAPIENTNITROECOMMERCEV1"> <reply>
  <orderStatus orderCode="ZZKV00000020044">
    <payment>
      <paymentMethod>VISA_CREDIT-SSL</paymentMethod>
      <paymentMethodDetail>
        <card number="4761*****2123" type="creditcard">
          <expiryDate>
            <date month="12" year="2023" />
          </expiryDate>
        </card>
      </paymentMethodDetail>
      <amount value="5983" currencyCode="USD" exponent="2" debitCreditIndicator="credit" />
      <lastEvent>AUTHORISED</lastEvent>
      <AuthorisationId id="987292" />
      <CVCResultCode description="NOT SUPPLIED BY SHOPPER" />
      <AVSResultCode description="NOT SUPPLIED BY SHOPPER" />
      <AAVAddressResultCode description="UNKNOWN" />
      <AAVPostcodeResultCode description="UNKNOWN" />
      <AAVCardholderNameResultCode description="UNKNOWN" />
      <AAVTelephoneResultCode description="UNKNOWN" />
      <AAVEmailResultCode description="UNKNOWN" />
      <issuerCountryCode>GB</issuerCountryCode>
      <balance accountType="IN_PROCESS_AUTHORIZED">
        <amount value="5983" currencyCode="USD" exponent="2" debitCreditIndicator="credit"
        /> </balance>
        <riskScore value="0" />
      </payment>
    </orderStatus>
  </reply>
</paymentService>

```

## 5. PRODUCTION SETUP

### 5 Production Service Setup

---

Steps for setting up the production service in business manager

1. In business manager navigate to “Administration > Operations > Services”
2. Click on “Credentials” Tab
3. Create new credentials by providing the merchant code, production URL, username and password
4. Now, navigate to “Merchant Tools > Site Preferences > Custom Preferences”
5. Inside “Worldpay” group “Merchant Code for Worldpay” as created in step 3. Also modify the other desired preferences on need basis
  - a) Worldpay Client Side Encryption Public Key
  - b) Worldpay MAC Secret Code
  - c) Worldpay Merchant Number
  - d) Worldpay Installation Id
6. In case if for separate merchant to be used at APM level, then service detail modification to be done in “Merchant Tools > Ordering > Payment Methods”

## 6. OPERATIONS, MAINTENANCE

### 6 Operations and Maintenance

#### 6.1.1 Order Level Attributes

Some additional attributes are defined and stored in Order object. These are the custom attributes and will be sent as a part of Order XML, so that Order Management System can use the same for further processing.

Sr. No.	Additional Custom Fields	Attribute Id	Description
1	Refusal/Decline Code	declineCode	This field capture the value of declined code from Worldpay response.
2	Risk Score	riskScore	This field capture the string sends by for Risk management or Risk Guardian.
3	Authorization ID	authID	This field captures the value of Authorization ID for Authorized Request.



4	Masked Card Number	cardNumer	This field captures the masked card number from Worldpay response.
5	CVC Result Code	cvcResultCode	This field capture CVV status code from response
6	AVS Result Code	avsResultCode	This field capture AVS status code from response
7	Transaction Status	transactionStatus	This field maintains the history of Order status. This is Array, so whenever order status will be changed transaction status will be updated by order notification.
8	AAV Postcode Result Code	aaVPostcodeResultCode	This field will be populate from Authorization response of AMEX card
9	AAV Address Result Code	aaVAddressResultCode	This field will be populate from Authorization response of AMEX card
10	Issuer Response	issuerResponse	Response from Issuer After 3D verification
11	AAV Email Result Code	aaVEmailResultCode	Email Result Code
12	AAV Telephone Result Code	aaVTelephoneResultCode	Telephone Result Code
13	SEPA Mandate ID	mandateID	Mandate ID created for SEPA transaction
14	Worldpay Last Event	WorldpayLastEvent	Last Event occurred on order at Worldpay

15	Worldpay MAC Missing	worldpayMACMissingVal	True when Mac error received in redirect Credit Card or APM response URL
16	AAV Cardholder Name Result Code	aaVCardholderNameResultCode	Card Holder Name Result Code

### 6.1.2 Order Payment Instrument Attributes

Apart from capturing the Order Attributes, we also capture some Order Payment Instrument attributes. These are specific to the Payment Method and are captured in <payment> tag.

Sr. No.	Additional Custom Fields	Attribute Id
1	Bank	bank
2	Installments	installments  Note: Please contact Worldpay for further information on the max number of installments.
3	CPF	cpf
4	BankCode	bankCode
5	Worldpay Merchant ID	Merchant Hex Code whose order is placed
6	Worldpay Token Requested	Token requested value where selected for cards

### 6.1.3 Order Notification Custom Object

The attributes for custom Object '**OrderNotifyUpdates**' are defined in the below table. A new custom Object is created each time a notification is received with all these attributes and the custom object will be retained until the time it is deleted by the Notification job.

Sr. No.	Additional Custom Fields	Attribute Id
1	Order No	orderNo
2	Xml String	xmlString
3	Custom Object ID	ID

4	Time Stamp	timeStamp
---	------------	-----------

## 6.1 AVAILABILITY

---

<EXPECTED AVAILABILITY / UPTIME OF ANY EXTERNAL SERVICE, INTERFACES>

<FALLBACK SOLUTION, BEHAVIOR IF EXTERNAL SERVICES ARE NOT AVAILABLE, IMPACT ON CUSTOMER STOREFRONT>

<ANY EXISTING UTILITIES THAT HELP TO DETECT AVAILABILITY/ UPTIME OF EXTERNAL SERVICE, E.G. WEBSERVICE CALL, GOMEZ PING>

<ESTIMATED PERFORMANCE METRICS FOR PEAK BUSINESS HOURS IF AVAILABLE>

<NOTIFICATION PROCESS IF EXTERNAL SERVICES, INTERFACES ARE NOT RESPONDING, E.G. HOTLINE / SUPPORT PHONE NUMBER>

## 6.2 SUPPORT

---

Worldpay to add content here

Name	Email	Support Type
Lochan Sim	Lochan.Sim@worldpay.com	Primary
Rhuta Patel	Rhuta.Patel@worldpay.com	Secondary
Jonathan Berry	jonathan.berry@worldpay.com	Secondary

## 7. USER GUIDE

### 7 User Guide

#### 7.1 ROLES, RESPONSIBILITIES

Typically, the backend developer does most of the integration works. We expect that the person doing this integration is familiar with the web service, xml processing and has hands on experience with the SFCC platform

#### 7.2 BUSINESS MANAGER

NA [As changes required for storefront has been already covered under setup section]

#### 7.3 STOREFRONT FUNCTIONALITY

NA [As changes required for storefront has been already covered under setup section]

## 1. KNOWN ISSUES

- Worldpay Notify URL and Worldpay notifyupdate URL are exposed as public; there is no security check available like MAC security check. As there is, no such data sent from Worldpay to validate. To provide some level of security we have applied IP level validated to the URL. Merchants must ensure that they have applied proper security on these URL's.

**2. RELEASE HISTORY**

Release Version	Date	Description
release-19.1.1	July 7,2020	Certified Release
release-19.1.0	Dec 11, 2019	Certified Release
19.2.0	August 31, 2019	<ul style="list-style-type: none"><li>• Best Practices</li><li>• Automation Test Suite</li><li>• US Domestic Acquiring (Prime Routing)</li><li>• Tokenization (My Account-Add Card/Delete Card)</li><li>• Stored Credential Improved Flow</li><li>• 3ds2</li><li>• Security Fixes</li><li>• CodeCept JS</li><li>• Previous Releases Feedbacks</li></ul>
19.1.0	April 3, 2019	<ul style="list-style-type: none"><li>• Google Pay</li><li>• Stored Credentials</li><li>• Release 18.3.0 Feedback</li></ul>
18.3.0	Feb 20, 2019	<ul style="list-style-type: none"><li>• WeChat implementation</li><li>• Alternative payment method</li><li>• Merchant token</li><li>• MOTO payment method</li></ul>
18.2.0	Jul 16, 2018	<ul style="list-style-type: none"><li>• Complete SFRA implementation</li></ul>

## **Appendices**

## APPENDIX A: APM/Card mapping keys

Supported Cards Mapping table:

Card Name	Key Value	Test card number
Airplus	AIRPLUS-SSL	122000000000003
American Express	AMEX-SSL	34343434343434
Dankort	DANKORT-SSL	5019717010103742
Diners	DINERS-SSL	36700102000000
Discover card	DISCOVER-SSL	6011000400000000
JCB	JCB-SSL	3528000700000000
Laser	LASER-SSL	630495060000000000 630490017740292441
Maestro	MAESTRO-SSL	6759649826438453, 6799990100000000019
MasterCard	ECMC-SSL	5555555555554444, 5454545454545454
Visa	VISA-SSL	4444333322221111, 49118300000000



Supported Payment Method Mapping table:

<b>Payment Method Name</b>	<b>Key Value</b>
Konbini	KONBINI-SSL
Poli	POLI-SSL
Przelewy24	PRZELEWY-SSL
SEPA-DD	ELV-SSL
Alipay	ALIPAY-SSL
Credit Card – Direct	CREDIT_CARD
Credit Card – Redirect	Worldpay
China Union Pay	CHINAUNIONPAY-SSL
Giropay	GIROPAY-SSL
IDEAL	IDEAL-SSL
Mistercash	MISTERCASH-SSL
Paypal	PAYPAL-EXPRESS
Sofort	SOFORT-SSL

## APPENDIX B: IDEAL Bank List

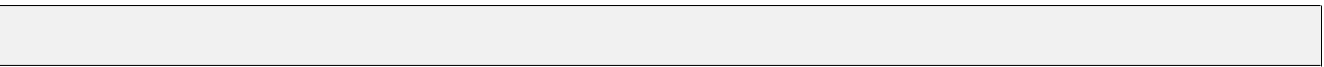
Bank Name	Bank Code
ABN	ABN_AMRO
ASN	ASN
ING	ING
Knab	KNAB
Rabobank	RABOBANK
SNS	SNS
SNS Regio	SNS_REGIO
Triodos	TRIODOS
Van Lanschot	VAN_LANSCHOT

## APPENDIX C: Error Codes and Error Messages for Transaction Notification

Master Error Code	Error Message
111	XML Parse error has occurred
112	XML Corrupted, Could not find Order No.
113	XML in Custom Object Corrupted
114	Error occurred while deleting Custom Object
115	Error occurred while reading status history from Order Object
116	Error occurred while Updating Order Object
117	Error occurred while reading Custom Object
118	No Transaction History Available
119	Last status Not available as No Transaction History is Available
120	Wrong Order Number

## APPENDIX D: Order Notification and SFCC Order status mapping

Order Notifications Received From Worldpay	Changes in Order object in Business Manager
<b>AUTHORISED</b>	Order Status: NEW Payment Status: no change Export Status: READY FOR EXPORT Confirmation Status : CONFIRMED
<b>CANCELLED</b>	Order Status: FAILED/CANCELLED Payment Status: NOT PAID Export Status: NOT EXPORTED Confirmation Status : NOT CONFIRMED
<b>CAPTURED</b>	Order Status: COMPLETED Payment Status: PAID Export Status: no change Confirmation Status : no change
<b>SENT_FOR_REFUND</b>	Order Status: no change Payment Status: no change Export Status: no change Confirmation Status : no change
<b>REFUSED</b>	Order Status: FAILED Payment Status: NOT PAID Export Status: NOT EXPORTED Confirmation Status : NOT CONFIRMED
<b>SETTLED</b>	Order Status: no change Payment Status: no change Export Status: no change Confirmation Status : no change
<b>INFORMATION_REQUESTED</b>	Order Status: no change Payment Status: no change Export Status: no change Confirmation Status : no change
<b>CHARGED_BACK</b>	Order Status: no change Payment Status: no change Export Status: no change Confirmation Status : no change
<b>EXPIRED</b>	Order Status: FAILED Payment Status: NOT PAID Export Status: NOT EXPORTED Confirmation Status : NOT CONFIRMED



Master Error Code	Error Message
worldpay.error.code1	Internal error has occurred, please choose a different Payment Method or try again later.
worldpay.error.code2	Parse error has occurred, please choose a different Payment Method or try again later.
worldpay.error.code3	Invalid amount error, please choose a different Payment Method or try again later.
worldpay.error.code4	Security error, please choose a different Payment Method or try Again later.
worldpay.error.code5	Invalid request, please choose a different Payment Method or try again later.
worldpay.error.code6	Please choose a different Payment Method or try again later.
worldpay.error.code7	Payment details in the order element are incorrect, please choose a different Payment Method or try again later.
worldpay.error.code8	Submission error , please choose a different Payment Method or Try again later.
worldpay.error.generalerror	Please choose a different Payment Method or try again later.
worldpay.error.cancelerror	Your transaction has been cancelled.

## APPENDIX F: Enabling and disabling worldpay integration

1. Go to Merchant tools > Ordering > Payment Methods
2. Disable all the worldpay specific payment methods
3. Also cross check one by one for the type of processor, the payment method is using (To check it, click on any of the payment method let us say, CREDIT\_CARD, and see the Payment Processor). If it is worldpay, change it to some other-desired processor (e.g. For CREDIT\_CARD, BASIC\_CREDIT).
4. Enable the payment methods we want to use with the type of processor.
5. To enable it again change the processor type to worldpay.
6. Go to Merchant Tools> Site Preferences > custom Preferences > worldpay and disable 'Enable Apm look up service'.

## APPENDIX G: FAILURE & ERROR

Whenever we are receiving any error or failure that may be because of the service failure, or service down, or because of the request response errors, we are alerting errors in the front end with proper errors that will stop the transaction flow.

### Scenario examples:

Service Response = null {Service does not exist}

Service Response = error {Service exists but the response contains error}

Service Response = error code {Service exists but the response contains

error} **what we are showing on frontend:**

*worldpay.error.code0 = this payment service is temporarily unavailable, please choose a different Payment Method or contact shop administrator.*

***Whenever we are receiving errorcode0 from worldpay, we are mapping it with this message and showing in the front end. All the errors are configured in the properties file (worldpayerror.properties)***