

Worldpay SFRA Integration

Version 19.1.1

worldpay
from FIS



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1. SUMMARY

This document provides technical overview and implementation details for each Worldpay service integrated within SFCC platform with SFRA. The Worldpay cartridges (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) Qiwi
 - 4) Alipay
 - 5) Mistercash
 - 6) Yandex
 - 7) Boleto
 - 8) Paypal
 - 9) China Union Pay
 - 10) Enets
 - 11) Giropay
 - 12) Poli
 - 13) Poli NZ
 - 14) Konbini
 - 15) Przelewy24
 - 16) CashU
 - 17) Sepa DD
 - 18) Klarna
 - 19) 3D/Non 3D Credit Cards (XML Direct with client side encryption and tokenization features)
 - 20) 3D/Non 3D Credit Cards (XML Redirect with tokenization and hosted payment pages lightbox/iframe feature)
 - 21) WeChat Pay
 - 22) MOTO
 - 23) Google Pay
 - 24) Apple Pay
- Order Notification Job
- Order Enquiry Job
- Order Cancel Or Refund Job for mac issue identified orders
- Order Cleanup Batch Job
- APM Look Up Service
- Multiple Merchant ID support
- Statement Narrative support
- Brazil Integration

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

3. IMPLEMENTATION GUIDE

3.1 INSTALLATION

3.1.1 Adding the Cartridges in Salesforce Commerce Cloud Studio

Inside cartridges directory in **int_worldpay_sfra** folder, open package.json and ensure the base path mentioned is correctly resolved (please provide the correct path to app_storefront_base), open the command prompt and run ‘npm install’ (assuming node.js (8.9.4 and above) is installed). Run the “npm run compile:js” followed by “npm run compile:scss”. Create the dw.json file(


```
{  
    "hostname": "your-sandbox-hostname.demandware.net",  
    "username": "yourlogin",  
    "password": "yourpwd",  
    "code-version": "version_to_upload_to"  
}
```

) at the location. Upload the code to the environment using the command ‘npm run uploadCartridge’. Please go to the **int_worldpay_sfra:int_worldpay_core:int_worldpay_csc** cartridge and upload the code by configuring the various parameters in the sample dw.json.

3.1.2 IP Address

Please provide outgoing IP of your client in order to white list your IP otherwise some of the attempts to make payment will be marked as fraud.

3.1.3 Activating the Cartridges in Business Manager

Before the Worldpay, functionality can become available to Reference Architecture, the cartridges needs to be added to the cartridge path of the Site in question. In order to do this, follow the following instructions:

1. Log into Business Manager
2. Navigate to Administration > Sites > Manage Sites.
3. Click on the site name and on the next page go to the Settings tab.
4. In the textbox cartridges add
int_worldpay_sfra:int_worldpay_core:int_worldpay_csc:app_storefront_base
5. Click Apply.
6. To activate the cartridge for the Sandbox instances repeat steps 4 and 5 after selecting the appropriate instance from the Instance Type dropdown menu.
7. Repeat steps 3 to 6 for each site that is to use Worldpay.
8. To run the Job in worldpay cartridge, Navigate to Administration > Sites > Manage Sites.
9. Go to “Manage the Business Manager site”
10. In the textbox Cartridges add to the start:
int_worldpay_sfra:int_worldpay_core:int_worldpay_csc:app_storefront_base.

Administration > Sites > Manage Sites > RefArch - Settings

General **Settings** Cache Site Status Page Meta Tag Rules

RefArch - Settings

Click Apply to save the details. Click Reset to revert to the last saved state.

Instance Type:

Deprecated. The preferred way of configuring HTTP and HTTPS hostnames is by using new features of the site aliases configuration ("SEO > Aliases Configuration"). The HTTP/HTTPS hostname by aliases configuration and are intended only to support an older configuration style.

HTTP Hostname:

HTTPS Hostname:

Instance Type: All

Cartridges:

Effective Cartridge Path:

3.2

CONFIGURATION

This chapter will guide the user to configure the cartridge in Business Manager.

3.2.1 Importing Meta Data with a single Site Import

All import files are in the import folder (metadata) within cartridge installation pack. To import all necessary Worldpay settings,

- Open the metadata folder from the repository structure > open jobs.xml > change the references of RefArch to your site id (in this case worldpayDemo)
- Open the metadata folder from the repository structure > open jobs.xml > change the references of RefArch to your site id (in this case worldpayDemo)
- Ensure content assets in the import has appropriate library Id of the site where XML to be imported
- For this, In the business manger
 - Go to Merchant Tools > Content > Libraries
 - Check the library ID assignment to your site (here for RefArch the library assignment is RefArchSharedLibrary)

Libraries

The list below contains all libraries defined by your organization, along with some statistical information about the library content.
 - Libraries of the type "Private" are owned by a site, can only be used by that site, and can't be deleted.
 - Libraries of the type "Shared" are owned by the organization, can be shared by multiple sites, and can be deleted by the user.
 The administration of content libraries, including the ability to create new ones, is located [here](#).

ID	Type	Site Assignments	Folders	Content Assets	Status
Library_MobileFirst	Private	MobileFirst	1	0	Online
Library_MobileFirstGlobal	Private		1	0	Online
Library_RefArch	Private		1	0	Online
Library_RefArchGlobal	Private		1	0	Online
Library_SiteGenesis	Private		1	0	Online
Library_SiteGenesisGlobal	Private		1	0	Online
MobileFirstSharedLibrary	Shared	MobileFirstGlobal	28	109	Online
RefArchSharedLibrary	Shared	RefArchGlobal	28	175	Online
SiteGenesisSharedLibrary	Shared	SiteGenesisGlobal	28	104	Online

Open the metadata folder from the repository structure > open libraries > change the folder name according to the library id to which your site is assigned (Here in the BM we saw that for RefArch, assigned Library is RefArchSharedLibrary) > open library.xml and change the reference of RefArchSharedLibrary, if needed (according to your site assignment)

- ZIP the metadata folder from the repository structure,
- Log in to the Business Manager and navigate to Administration > Site Development > Site Import & Export, and upload the zipped folder (Zipped Metadata Folder) using the upload button and, finally go back and use the import button to import the file.
- After a successful import, the entire configuration requirements needed for worldpay is available to you is according to your Worldpay account data.
- Also, verify the Order level attributes in BM (Site -> Ordering -> Order) open any order and navigate to the Attributes tab. It should be as below

On this page you can edit the attributes of the order. Fields with a red asterisk (*) are mandatory. Click Apply to save changes. Click Reset to revert your changes.

transaction Status:	<input type="text"/>	Add Another Value
custom		
Authorization ID:	<input type="text"/>	
Refusal/Decline Code:	<input type="text"/>	
AVS Result Code:	<input type="text"/>	
CVC Result Code:	<input type="text"/>	
Risk Score:	<input type="text"/>	
Masked Card Number:	<input type="text"/>	
AAV Postcode Result Code:	<input type="text"/>	
AAV Address Result Code:	<input type="text"/>	
Issuer Response:	<input type="text"/>	
AAV Email Result Code:	<input type="text"/>	
AAV Cardholder Name Result Code:	<input type="text"/>	
AAV Telephone Result Code:	<input type="text"/>	
SEPA Mandate ID:	<input type="text"/>	
Worldpay Last Event:	VOIDED	
Worldpay MAC Missing:	<input type="checkbox"/>	
US Domestic Order:	<input checked="" type="checkbox"/>	

Custom Preferences Screenshot

1-50 of 51 < 1 >			
Name	Value	Default Value	
WorldpayEnableTokenization	<input type="text" value="Yes"/>	No	Edit Across Sites
Enable Client Side Encryption	<input type="text" value="Yes"/>	Yes	Edit Across Sites
Worldpay Disable CVV	<input type="text" value="No"/>	No	Edit Across Sites
Worldpay Client Side Encryption Public Key	<input type="text" value="1#10001#9054b62f59775755d937226ac89d2fc8e3040b674e939cb03840892f27e3c7..."/>	1#10001#9054b62f59775755d937226ac89d2f...	Edit Across Sites
Merchant Code for Worldpay*	<input type="text" value="SAPIENTNITROECOM"/>		Edit Across Sites
Worldpay MAC Secret Code*	<input type="text" value="*****"/>		Edit Across Sites
Worldpay Payment Method Mask Excludes	<input type="text"/> Add		Edit Across Sites
Exponent for currency*	<input type="text" value="2"/>	2	Edit Across Sites
Worldpay Redirect Success URL	<input type="text" value="COPlaceOrder-Submit"/>	COPlaceOrder-Submit	Edit Across Sites
Worldpay Redirect Failure URL	<input type="text" value="COPlaceOrder-Submit"/>	COPlaceOrder-Submit	Edit Across Sites
Worldpay Redirect Pending URL	<input type="text" value="COPlaceOrder-Submit"/>	COPlaceOrder-Submit	Edit Across Sites
Worldpay Redirect Cancel URL	<input type="text" value="COPlaceOrder-Submit"/>	COPlaceOrder-Submit	Edit Across Sites
Worldpay TermURL	<input type="text" value="Worldpay-HandleAuthenticationResponse"/>	Worldpay-HandleAuthenticationResponse	Edit Across Sites
Worldpay IDEAL Bank List	<input type="text" value="None"/> ING (ING) ABN AMRO (ABN_AMRO) ASN (ASN) Rabobank (RABOBANK) SNS (SNS) Edit Across Sites		
EnableAPMLookUpService	<input type="text" value="Yes"/>		Edit Across Sites
EnableJobMailerService	<input type="text" value="No"/>		Edit Across Sites
NotifyJobMailCC	<input type="text"/>		Edit Across Sites
NotifyJobMailFrom	<input type="text"/>		Edit Across Sites
NotifyJobMailTo	<input type="text"/>		Edit Across Sites
Worldpay Configurable HPP APM	<input type="text"/> CHINAUNIONPAY-SSL Worldpay		Edit Across Sites
Add the APM's that require configurable hosted payment pages.			

Worldpay Address Details Read Only	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	Edit Across Sites	
Worldpay Hide Address Details	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	Edit Across Sites	
Worldpay Payment Method Mask Includes	<input type="button" value="Add"/>		Edit Across Sites	
Worldpay Order Inquiry Lag Time:	1.0	15.0	Edit Across Sites	
Worldpay Merchant Number	100038056		Edit Across Sites	
Worldpay Notification IP Addresses End*	195360000		Edit Across Sites	
Worldpay Notification IP Addresses Start*	195359000		Edit Across Sites	
Worldpay SEPA Mandate Type	<input type="checkbox"/> One-Off (ONE-OFF)		<input type="checkbox"/> One-Off	Edit Across Sites
Worldpay Installation Id	1,029,012		Edit Across Sites	
Worldpay Validate IP Address	<input type="checkbox"/> No		<input type="checkbox"/> No	Edit Across Sites
CaptureServiceTrackingID	<input type="checkbox"/> Yes		<input type="checkbox"/> No	Edit Across Sites
Token Type*	<input type="checkbox"/> Shopper (Shopper)		<input type="checkbox"/> Shopper	Edit Across Sites
Choose for the type of token (Shopper and Merchant)				
Enable Stored Credentials*	<input type="checkbox"/> Yes		<input type="checkbox"/> No	Edit Across Sites
Google Pay Environment	<input type="checkbox"/> TEST (TEST)		<input type="checkbox"/> TEST	Edit Across Sites
Google Pay Merchant ID	32e04907d379490		Edit Across Sites	
Hide Apm For Moto Order	<input type="checkbox"/> Yes		<input type="checkbox"/> Yes	Edit Across Sites
3ds Type	<input type="checkbox"/> two3d (two3d)		<input type="checkbox"/> one3d	Edit Across Sites
Controller	app_storefront_controllers		Edit Across Sites	
Core Name	app_storefront_core		Edit Across Sites	
Enable Sales request	<input type="checkbox"/> Yes		<input type="checkbox"/> No	Edit Across Sites
debit Networks	<input type="checkbox"/> None <input type="checkbox"/> Accel (Accel) <input type="checkbox"/> AFFN (AFFN) <input type="checkbox"/> CU24 (CU24) <input type="checkbox"/> Jeanie (Jeanie) <input type="checkbox"/> NYCE (NYCE) <input type="checkbox"/> Pulse (Pulse) <input type="checkbox"/> Shazam (Shazam) <input type="checkbox"/> Star SouthEast (Star SouthEast) <input type="checkbox"/> Star West (Star West)		Edit Across Sites	
Routing Preference	<input type="checkbox"/> signatureOnly (signatureOnly)		Edit Across Sites	
Challenge Preference	<input type="checkbox"/> challengeMandated (challengeMandated)		<input type="checkbox"/> noPreference	Edit Across Sites
challengeWindowSize	<input type="checkbox"/> fullPage (fullPage)		390x400	Edit Across Sites
riskData	<input type="checkbox"/> Yes		Edit Across Sites	
JWTIssuer	Sbd9e0e4444dce153428c940		Sbd9e0e4444dce153428c940	Edit Across Sites
OrganisationalUnitId	Sbd9b55e4444761ac0af1c80		Sbd9b55e4444761ac0af1c80	Edit Across Sites
Authentication Method	<input type="checkbox"/> localAccount (localAccount)		Edit Across Sites	
Test or Production URL	<input type="checkbox"/> (https://secure-test.worldpay.com/shopper/3ds/ddc.html)		<input type="checkbox"/> https://secure-test.worldpay.com/shoppe...	Edit Across Sites

Fig: 2.2

3.2.2 Managing Worldpay Custom Site Preferences

In Business Manager, navigate to the *Site > Merchant Tools > Site Preferences > Custom Preferences*. A custom site preference group with the ID Worldpay is available. Please select it and edit the attributes according to your Worldpay account data and the data shown in figure

2.2. In addition to the ones supplied by Worldpay fill out the following properties with the values listed against them:

- *Worldpay Redirect SuccessURL: COPlaceOrder-Submit*
- *Worldpay Redirect PendingURL: COPlaceOrder-Submit*
- *Worldpay Redirect FailureURL: COPlaceOrder-Submit*
- *Worldpay Redirect CancelURL: COPlaceOrder-Submit*
- *Worldpay TermURL: Worldpay-HandleAuthenticationResponse*

** The fields highlighted in blue in the below table are mandatory fields

Site Preference	Description	Default Values
Merchant Code for Worldpay	This field represents the specific Merchant code value.	Merchant Specific - Provided by Worldpay
Worldpay MAC Secret Code	The field represents the MAC secret code that configurable in Worldpay Merchant Interface.	Merchant Specific
Worldpay Payment Method Mask Includes	This field represents all the Cards and APM's supported and will be shown on Hosted Payment Page.	Merchant Specific - Add the Cards /APMs supported on Hosted Payment Pages. (Refer to Appendix A for values)
Worldpay Payment Method Mask Excludes	This field represents all the Cards and APM's that are needs to be excluded and will not be shown on Hosted Payment Page.	Merchant Specific
Exponent for currency	This field represents the decimal places supported in the Order Amount.	Merchant Specific (Default Value : 2)
Worldpay Redirect Success URL	This field represents the Success URL, that the user will be redirected to incase of a successful transaction in APM's or Credit Card Redirect.	Default Value : COPlaceOrder-Submit
Worldpay Redirect Failure URL	This field represents the Failure URL, that the user will be redirected to incase of a Failure transaction in APM's or Credit Card Redirect.	Default Value : COPlaceOrder-Submit
Worldpay Redirect Pending URL	This field represents the Pending URL, that the user will be redirected to incase of a Pending or Pending-Open transaction in APM's or Credit Card Redirect.	Default Value : COPlaceOrder-Submit

Worldpay Redirect Cancel URL	This field represents the Cancel URL, that the user will be redirected to incase of a cancelled transaction in APM's or Credit Card Redirect.	Default Value : COPlaceOrder-Submit
Worldpay TermURL	This field represents the Term URL on which the user will be redirected in case of 3D secure.	Worldpay-HandleAuthenticationResponse
Worldpay iDEAL Bank List	This field represents the Bank's supported for iDEAL APM. The merchant can select the Banks that needs to be displayed on the Merchant Site.	Merchant Specific - Select the ones to be supported.
Worldpay Installation Id	This field represents the installation ID provided by Worldpay, it will determine the look and feel of the Hosted Payment Pages.	Merchant Specific - Provided by Worldpay
Worldpay Address Details Read Only	This field is set to true if address details needs to be made read only	Merchant Specific (Default Value : true)
Worldpay Hide Address Details	This field is set to true to hide address details on V3 Payment pages	Merchant Specific (Default Value : true)
EnableAPMLookUpService	This field can be used to Turn On/Off the Look Up service, based upon the Merchant requirement.	Merchant Specific
EnableJobMailerService	This field can be used to Turn On/Off the Email Service. The Emails are triggered in-case the cartridge logic fails to handle the Order notification/Enquiry and update its status in Order transaction field.	Merchant Specific
NotifyJobMailCC	This field represents the Email address of the people to be kept in CC.	Merchant Specific: Multiple Emails can be added separated by semicolon.
NotifyJobMailFrom	This field represents the Email address of the people to be in From.	Merchant Specific: Multiple Emails can be added separated by semicolon.
NotifyJobMailTo	This field represents the Email address of the people to be in To.	Merchant Specific: Multiple Emails can be added separated by semicolon.
WorldpayEnableTokenization	This field is set to true if merchant wants to enable tokenization	Merchant Specific(Default value : false)
Worldpay Disable CVV	This field is set to true if merchant want to disable CVV check for Saved Card with token and new card. We are suppressing the cvv field in the request of the order placed with saved card having token and new card.	Merchant Specific(Default value : false)
Enable Client Side Encryption	This field is set to true if merchant wants to enable Client Side Encryption	Merchant Specific(Default value : false)
Worldpay Client Side Encryption Public Key	This field represents the public key provided by Worldpay, used to calculate mac value of an order	Merchant Specific

Worldpay Order Inquiry Lag Time	This field represents the maximum time(in minutes) for which orders to be look-up in Worldpay for Order Enquiry or order cancel/refund Job	Merchant Specific(Default value : 15)
Worldpay Configurable HPP APM	This field represents the APM's for which the site supports configurable Hosted Payment Pages (Look & Feel configuration).	Merchant Specific - Add the APM's that support configurable Hosted Payment Pages. Ensure that the Worldpay InstallationID set if some value is added to this Preference.
Enable Card Selection	This field represents the Merchants choice to enable /disable Card selection on the Site.	Merchant Specific: Enable /Disable Card selection on the Site.
Worldpay Merchant Number	This field represents a Merchant specific number provided by Worldpay; this is sent as a part of request for SEPA.	Merchant Specific - Provided by Worldpay
Worldpay SEPA Mandate Type	This field represents the Mandate type to be sent in the SEPA request. (Default value ONE-OFF)	Merchant Specific – This represents the mandate type to be set for SEPA request. The merchant can choose to set it either as ONE-OFF or RECURRING.
Worldpay Notification IP Addresses End	This field represents the Worldpay IP Address range which send notification, last IP Address in range	Merchant Specific - Provided by Worldpay
Worldpay Notification IP Addresses Start	This field represents the Worldpay IP Address range which send notification, first IP Address in range	Merchant Specific - Provided by Worldpay
Token Type	This field represents the type of token that merchant wants to send when there is token request.	Default value : Shopper
Enable Stored Credentials	This field is set to true to comply with scheme mandates for storing (and subsequently using) card payment credentials for cardholder and merchant-initiated transactions.	Default value : No
Controller	Name of the controller cartridge	Merchant Specific

Core Name	Name of the core cartridge	Merchant Specific
Worldpay validate IP Address	This field is set to true if merchant want to validate IP address	Merchant Specific(Default value : false)
CaptureServiceTrackingID	This field is set to true if merchant want to Validates the order id and token upon match it will proceed for capture service initiation with tracking ID	Merchant Specific(Default value : false)
3ds Type	This is type of 3ds version you want to chose	Default value : one3d (3ds1)
Hide Apm For Moto Orde	This toggle facilitates the admin to hide/unhide the available payment methods in the CSC area. Since this is particular to the MOTO orders, only credit card is applicable.	Default value : Yes
Google Pay Environment	Google Pay is supported in the Worldpay Sandbox. Please use the TEST parameter for any test transactions and the PRODUCTION parameter for production transactions.	Mechant Specific (Default value : TEST)
Google Pay Merchant ID	The merchant ID is specific to the environment we are using for transactions. This will be provided by worldpay.	Merchant Specific
Enable Sales request	This toggle enables prime routing.	Merchant Specific (Default value : No)
debit Networks	This toggle lets the merchant chose the debit network to be used to process the transaction	Merchant Specific
Routing Preference	This field specifies the Routing Preference	Merchant Specific

Challenge Preference	<p>Possible Values:</p> <ul style="list-style-type: none"> • noPreference - You have no preference whether a challenge should be performed. This is the default. • noChallengeRequested - You prefer that no challenge should be performed. • challengeRequested - You prefer that a challenge should be performed. • challengeMandated - There are local or regional mandates that mean that a challenge must be performed. <p>Note: The interpretation of this field will vary from issuer to issuer, so Worldpay cannot guarantee any particular behavior on their part as a result of you setting this field.</p>	Merchant Specific
challengeWindowSize	With this field, the issuer should use to display the challenge.	Merchant Specific
riskData	This filed lets you Provide additional information in the <riskData> element to increase the chances that the shopper won't be challenged, for 3ds2 Orders.	Merchant Specific
JWTIssuer	This fileld is an identifier of who is issuing the JWT. Use "5bd9e0e4444dce153428c940" in test. Worldpay will provide values for live.	Merchant Specific
OrganisationalUnitId	This filed is the identity associated with your Account. Use "5bd9b55e4444761ac0af1c80" in test. Worldpay will provide the values for live.	Merchant Specific
Authentication Method	Mechanism used by the shopper to authenticate with you.	Merchant Specific
Test or Production URL	This is the URL where ddc form is submitted	Merchant Specific (Default value :)
Test or Production URL Challenge	This is the URL where ddc form is submitted	Merchant Specific

3.2.3 Manage Worldpay Payment Processor

In Business Manager Select the required Site from the dropdown and Navigate to *Merchant Tools > Ordering > Payment Processors*.

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

Payment Processors

The list shows all payment processors currently defined for this site. Click **New** to create a custom payment processor. Use the check boxes and then click **Delete** to delete payment processors.

Select All	Processor ID	Description
<input type="checkbox"/>	BASIC_CREDIT	Internal credit card handling with simple card number check only.
<input type="checkbox"/>	BASIC_GIFT_CERTIFICATE	Internal gift certificate handling.
<input type="checkbox"/>	CYBERSOURCE_BML	'Bill Me Later' online authorization through Cybersource (test and production systems).
<input type="checkbox"/>	CYBERSOURCE_CREDIT	Cybersource online credit card authorization (test and production systems).
<input type="checkbox"/>	PAYPAL_CREDIT	Paypal online credit card authorization (test and production systems).
<input type="checkbox"/>	PAYPAL_EXPRESS	Paypal Express Checkout (test and production systems).
<input type="checkbox"/>	VERISIGN_CREDIT	Verisign online credit card authorization (test and production systems).
<input type="checkbox"/>	Worldpay	Worldpay Payment Processor

Showing 1 - 8 of 8 items

Fig: 2.3

3.2.4 Manage Worldpay Payment Methods

In the integration package, a payment method definition is provided in the file that you have already imported

1. Navigate to Merchant Tools > Ordering > Payment Methods.
2. Enable the Payment Method under Ordering > Payment Methods section that needs to be activated. Repeat these steps for all the Payment Methods that are required to be supported on the site. (Refer to Fig: 2.4)

Set below custom attributes of Payment method as provided by merchant: (Refer to Fig: 2.5)

Custom Attribute	Description
Merchant Code	This field represents the hex code provided by merchant
User Name	This field represents the username provided by merchant
Type	Select the Payment Method Type to DIRECT/REDIRECT as per the one that needs to be supported on the merchant site. (Refer to Fig: 2.5)
Password	This field represents the password provided by merchant
Days after which Order expires	Configure the number of days after which the Order should be cleaned up
SEPA mandate number	This will be part of mandate type for SEPA.
HPP Custom Options JSON	This would only be populated in case of payment method as "Credit Card Redirect" where merchant defines JSON, which determines the type as iframe/lightbox in which Hosted Payment Page appears on Merchant site. Default Value is blank represent Worldpay redirection page appears

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 be removed, and their IDs cannot be changed. When you select the CREDIT_CARD payment method, credit/debit cards can be reordered through drag and drop.			
ID	Name	Enabled	Sort Order
BML	Bill Me Later	No	5
BOLETO-SSL	Boleto	Yes	9
CHINAUNIONPAY-SSL	China Union Pay	Yes	13
CREDIT_CARD	Credit Card	Yes	4
ENETS-SSL	eNets	No	14
GIFT_CERTIFICATE	Gift Certificate	No	3
GIROPAY-SSL	Giro Pay	Yes	18
IDEAL-SSL	IDEAL	Yes	7

Fig: 2.4

Custom

Merchant Code:	SAPIENTNITROECOMMERCEV1
User Name:	MHAF6P5ABWKKIMAKLYXM
Type:*	DIRECT (Direct)
Password:	*****
Days after which Order expires:	<input type="text"/> (Number)
ELV Mandate Number:	100178190

Fig: 2.5

Once the payment methods are added and enabled successfully, update credit or debit card details as provided by merchant under Payment method-> Credit/Debit Cards section. Enable the credit/debit card under **Credit/Debit Cards Section** that needs to be activated. Ensure custom attribute named “Worldpay Card Type” is populated for all active cards with corresponding Worldpay type like for VISA it is “VISA-SSL”. Repeat these steps for all the cards that need to be supported on the site. (Refer to Fig: 2.6)

Set below card details of Payment method as provided by merchant. All these fields are optional (Refer to Fig: 2.6)

Card Attribute	Description
Security Code Length	This field represents maximum length of security code for card type
Card Number Verification	This field represents maximum length of CVV for card type
Card Number Length	This field represents maximum length of card number(range between 13-16) for card type
Checksum Verification	This field is set to True if merchant wants to verify the card details
Worldpay Card Type	This field represents the card type in Worldpay like for VISA it is “VISA-SSL”

Manage Credit/Debit Cards

Type	Name	Enabled
Visa	Visa	Yes
Amex	American Express	Yes
Master	Master Card	No
Discover	Discover	Yes
MasterCard	MasterCard	Yes

Visa Details

€ to

¥ to

\$ to

Security Code Length:

Card Number Verification:
Example: 622126-622925 (Range) or 5018,5020,5038 (Individual values)

Card Number Length:
Example: 16-19 (Range) or 16,18,21 (Individual values)

Checksum Verification:

WorldPay

World Pay Card Type:

Fig: 2.6

3.2.5 Managing Job

In the integration package, a job definition is provided in the **import zip** file (jobs.xml).

1. Make sure to associate the jobs to respective merchant site.

Administration / Operations /

Job Schedules 

Search by IDs... 

<input type="checkbox"/>	ID ▾	Status	Last Run	Execution Scope
<input type="checkbox"/>	InitiateCancelOrderJobs		4/23/2018 7:03 am	MobileFirst
<input type="checkbox"/>	OrderCleanUpJob	-		MobileFirst
<input type="checkbox"/>	OrderInquiriesUpdateJob		4/23/2018 5:54 am	MobileFirst
<input type="checkbox"/>	OrderNotificationUpdatesJob	-		MobileFirst

2. Make sure to enable the jobs to be active, apply the configurations setting of scheduling into General and Sites sections one by one while managing/manipulating.

3.2.6 Order Notifications

The int_worldpay_core cartridge provides a service to update all the SFCC Order status according to status changes of individual payments in Worldpay. (PUSH mechanism)

Worldpay-Notify is the secure route function exposed to Worldpay to receive Order Notifications i.e. a HTTPS message whenever a payment status changed at Worldpay. Following URL (<https://mechantsandbox/Worldpay-Notify>) has been exposed to Worldpay to send the notifications. SFCC will send an HTTP 200 [OK] response to Worldpay to acknowledge the receipt of notification. Corresponding to each Order Notification received a custom object is created with the Order Number and Order Notification XML captured. A SFCC Job is then run (manually or scheduled), to process those custom objects and update the Orders corresponding to each Order Notification.

If the Worldpay system does not receive an [OK] in reply to an HTTPS order notification, it waits for approximately an hour to deliver the notification again. Then it will resend the order notification approximately every five minutes for a week until it is acknowledged. Worldpay places order notifications in a queue and the first notification in the queue will be resent until it is acknowledged. If acknowledged, or if after a week still no [OK] is returned, the retry mechanism stops sending the message and proceeds with the next order notification from the queue.

This URL (<https://mechantsandbox/Worldpay-Notify>) needs to be updated in Worldpay Admin console by the merchant to receive the Order Notifications. The order notifications are captured from Worldpay Payment Service when a payment reaches one of the following statuses:

- AUTHORISED
- CANCELLED
- CAPTURED
- EXPIRED
- SENT_FOR_REFUND
- REFUSED
- SETTLED
- INFORMATION_REQUESTED
- CHARGED_BACK
- POST AUTH CANCELLED

3.2.7 Order Notification job

The OrderNotificationUpdatesJob is a batch job which can be run manually or scheduled at a specific interval of time -i.e., 2 mins, 5 mins. Each time the job runs, it will pick all the custom objects created because of the prior received Order Notifications, sorted by the creation time. The job read the custom objects one by one, will update the statuses in Business Manager (Order Status/Payment Status/Confirmation Status) depending on the notification status in xml string and update the token details in order/customer card and finally remove the custom object post processing from SFCC.

Refer below Step configuration section in job to execute script and their functions

This screenshot shows the 'OrderNotificationUpdatesJob' configuration page. The top navigation bar includes 'Administration / Operations / Job Schedules / OrderNotificationUpdatesJob'. Below the title, there are tabs: General (selected), Schedule and History, Resources, Step Configurator, Notification, and Failure Handling. The 'General' tab shows the ID as 'OrderNotificationUpdatesJob' and a description: 'Batch job for reading Custom Objects of Order Notifications and updating Order Statuses'. Under 'Priority', the 'Normal' option is selected. The 'Step Configurator' tab is visible on the right.

This screenshot shows the 'Select and configure step' dialog for the 'Step Configurator' tab. It displays the configuration for an 'ExecuteScriptModule'. The 'ID*' field is set to 'OrderNotificationUpdatesJob'. The 'Description' field contains the same text as the general configuration: 'Batch job for reading Custom Objects of Order Notifications and updating Order Statuses'. The 'ExecuteScriptModule.Module' field is set to 'artridge/scripts/jobs/OrderNotificationUpdatesJob.js'. Other parameters shown include 'ExecuteScriptModule.FunctionName' (set to 'orderNotificationUpdateJob'), 'ExecuteScriptModule.Transactional' (unchecked), and 'ExecuteScriptModule.TimeoutInSeconds' (set to 0). Buttons for 'Back' and 'Assign' are at the bottom right.

Fields	Fields data
ID	OrderNotificationUpdatesJob
Description	Batch job for reading Custom Objects of Order Notifications and updating Order Statuses
ExecuteScriptModule.Module	int_worldpay_core/cartridge/scripts/jobs/OrderNotificationUpdatesJob.js
ExecuteScriptModule.FunctionName	orderNotificationUpdateJob
ExecuteScriptModule.Transactional	Enabled

3.2.7.1 Error Handling for Order Notification Job

Please refer to [Appendix C](#) for error codes and error messages for Order Notifications

3.2.7.2 Transaction payment status handling for Order Notification Job

Please refer to Appendix D for mapping of different status on receipt of different order notification from WP into BM.

3.2.8 Notification update Service

The Cartridge provides feature to expose the history of the Payment Transaction change (Order Notifications) for a particular Order in SFCC business manager. A JSON object is returned by the notifications updates service. This service is provided in 2 flavors, depending upon the need to fetch the entire status history or just the latest status. If order no or status history is not found an error JSON is returned.

Worldpay-GetNotificationUpdates is the route exposed to get the History of Notifications received by particular Order.

This service takes 2 parameters as Http Parameters,

- (i) orderNo
- (ii) allupdates

If ‘allupdates’ is true, all notifications received for the order will be returned as JSON response.

If ‘allupdates’ is false, only the latest notifications received for the order will be returned as JSON response.

All values for ‘allupdates’ i.e. true, TRUE, True will be considered as true, any value other than these will be considered as false.

Example for the JSON response when ‘allupdates’ = true is as below:

RESPONSE:

```
{"statusList":  
  [ {"status":"AUTHORISED:Mon Nov 10 2014 08:11:24 GMT-0000 (GMT)"},  
   {"status":"CANCELLED:Mon Nov 11 2014 08:11:24 GMT-0000 (GMT)"}  
  ]}
```

Example for the JSON response when 'allupdates' = false is as below:

RESPONSE:

```
{"latestStatus":  
  [{"Status":"AUTHORISED:Mon Nov 10 2014 08:11:24 GMT-0000 (GMT)"}]  
}
```

3.2.9 Order Inquiry job

The OrderInquiryUpdatesJob is a batch job which can be run manually or scheduled at a specific interval of time -i.e., 2 mins, 5 mins. Each time the job runs, it will pick all the orders with status as CREATED/ NEW/OPEN and payment status as NOT PAID and order placed at least 15 mins back (configurable custom preference in business manager) by the creation time. The job iterates the orders and make order inquiry service call, will update the statuses in Business Manager (Order Status/Payment Status/Confirmation Status) depending on the response status in xml response of order enquiry and update the token details in order/customer card

The screenshot shows the 'OrderInquiriesUpdateJob' configuration page under 'Job Schedules'. The 'General' tab is selected. The 'ID*' field contains 'OrderInquiriesUpdateJob'. The 'Description' field contains the text: 'Batch job for fetching order inquiries of WorldPay Orders with payment status= not paid and order status CREATED, NEW OR OPEN and updating Order Statuses and token details in order and customer card'. The 'Priority' section shows 'Normal' is selected.

Refer below Step configuration section in job to execute script and their functions

The screenshot shows the 'Job Steps' tab for the 'OrderInquiriesUpdateJob'. It lists a single step: 'ExecuteScriptModule'. The configuration for this step includes the module ID 'OrderInquiriesUpdateJob', a description of the job, and various parameters for the ExecuteScriptModule. The 'Job Parameters' section includes 'Scope: MobileFirst' and the step name 'OrderInquiriesUpdateJob'. The 'Job Parameters' for the ExecuteScriptModule include 'int_worldpay_core/cartridge/scripts/jobs/OrderInquiryUpdatesUpdate', 'orderInquiriesUpdate', 'ExecuteScriptModule.Transactional' checked, and 'ExecuteScriptModule.TimeoutInSeconds' set to 0. There is also an option 'Always execute on restart'.

Table for Reference:

Fields	Fields data
ID	OrderInquiriesUpdateJob
Description	Batch job for fetching order inquiries of Worldpay Orders with payment status= not paid and order status CREATED, NEW OR OPEN and updating Order Statuses and token details in order and customer saved payment instruments
ExecuteScriptModule.Module	int_worldpay_core/cartridge/scripts/jobs/OrderInquiriesUpdateJob.js
ExecuteScriptModule.FunctionName	orderInquiriesUpdate
ExecuteScriptModule.Transactional	Enabled

3.2.10 Job Failure Mailer Service

The cartridge also provides a feature to send Emails to the registered Emails in case of failure of any Order Notification update. On receipt of any Order Notification, a custom object is created in SFCC with the Order Number and the Order Notification XML, if for any reason the XML captured is incorrect or some error occurs while the execution of the job an email is triggered.

To enable job mailer service to notify BM admin for any failure happens while processing the Order Notification Batch Job, the site preference **EnableJobMailerService** needs to be select **Yes** from the dropdown. Also, the below site preferences needs to be set

EnableJobMailerService	<input checked="" type="checkbox"/> Yes
NotifyJobMailCC	admin@worldpay.com
NotifyJobMailFrom	admin@worldpay.com
NotifyJobMailTo	admin@worldpay.com

3.2.11 APM Lookup Service

To enable APM look up service, the site preference **EnableAPMLookUpService** needs to be selected Yes from dropdown.

EnableAPMLookUpService when enabled	<ol style="list-style-type: none"> 1. This service works for merchant code configured in site preference, which return APMs which are enabled for respective merchant code. 2. All active Payments methods which have different merchant code configured in payment method section will be displayed 3. All active payment methods other than Worldpay processor will be displayed
EnableAPMLookUpService when disabled	<ol style="list-style-type: none"> 1. Loookup service will not be executed 2. All active payment methods will be displayed

[Note: If merchant supports multiple merchant Ids through payment methods, in that case, APM Look service may not work so, it should not be enabled in site preference.]

3.2.12 Multiple Merchant ID Support

Worldpay cartridge also supports a mechanism to provide separate Merchant ID's at APM level. This is primarily required for Merchants that need to configure different Merchant ID for financial purpose or if a specific APM is of a different version (to support both V1 and V3 APMS on a single Merchant Site).

This is achieved, by setting a different MID and its details (Username & password) in the Payment Methods section in Business Manager. If merchant ID, username and password present at payment method level then would get preference compare to merchant ID in site preference, username and password from service credentials. If they are not configured at payment method level then merchant ID (in site preference), username and password provided in service credential will be used in request.

Payment Method Merchant ID Support Settings

Custom

Merchant Code:	merchantcode actual
User Name:	username actual
Type:*	DIRECT (Direct) <input type="button" value="▼"/>
Password:	***** Confirm: <input type="text"/>

Service Credential Settings when service merchant settings to be picked up

[Administration](#) > [Operations](#) > [Services](#) > [Service Credentials](#)

Fields with a red asterisk (*) are mandatory. Click **Apply** to save the details. Click **Reset** to revert to the last saved state.

These credentials are used by 1 service.

Name:*	Merchant ID
URL:	Payment Service URL
User:	User Name
Password:	Password

3.2.13 Brazil Integration

The Worldpay cartridge provides support to Credit Cards and supported APM's (BOLETO) in Brazil. The implementation ensures that all the additional information (Example: CPF/CNPJ and Installment Number) that are required by the payment service provider in Brazil are also captured.

3.2.14 Order CleanUp Batch Job

The Worldpay cartridge provides support to a batch job that will mark all the orders with status as **CREATED** and aged by a defined time interval. The time interval field is Business Manager configurable and configurable at Payment Method level. A Batch Job configured in Business Manager shall run (as per the set schedule) and check the orders with order status **CREATED** which are old to a defined interval and will mark those orders in **FAILED** status in demandware system. This ensures that all the inventory transactions and coupon redemptions associated with the Order are rolled back. Job can be Enabled/Disabled or from Business Manager itself. Email will be sent to BM configured recipients once the job run with Job run status.

Administration / Operations / Job Schedules

OrderCleanUpJob

General Schedule and History Resources Step Configurator Notification Failure Handling

ID* OrderCleanUpJob

Description Batch job for deleting and cleaning all the Orders in CREATED state. The orders to be deleted are identified based upon the number of days !

Priority

Normal High

Refer below Step configuration section in order to execute script and their functions

Administration / Operations / Jobs / OrderCleanUpJob

General Schedule and History Resources Job Steps Failure Handling Notification

Job Parameters 0

Scope: MobileFirst OrderCleanUpJob

Select and Configure Step

ExecuteScriptModule

ID* OrderCleanUpJob

Description Description Batch job for deleting and cleaning all the Orders in CREATED state. The orders to be deleted are identified based upon the number of days specified at the order level.

ExecuteScriptModule.Module* int_worldpay_core/cartridge/scripts/jobs/OrderClear

ExecuteScriptModule.FunctionName orderCleanUp

ExecuteScriptModule.Transactional

ExecuteScriptModule.TimeoutInSeconds

Always execute on restart

Back Assign

Table for Reference:

Attributes Fields	Attributes
ID	OrderCleanUpJob
Description	Description Batch job for deleting and cleaning all the Orders in CREATED state. The orders to be deleted are identified based upon the number of days specified at the order level.
ExecuteScriptModule.Module	int_worldpay_core/cartridge/scripts/jobs/OrderCleanUpJob.js
ExecuteScriptModule.FunctionName	orderCleanUp
ExecuteScriptModule.Transactional	Enabled

Note: Please ensure before running batch job every payment method in site has attribute “Days after which order expires” value configured.

Business Manager Configuration field:

The screenshot shows a configuration form with the following fields:

- Merchant Code: [Input Field]
- User Name: [Input Field]
- Type: DIRECT (Direct) [Dropdown]
- Password: [Input Field]
- Confirm: [Input Field]
- Days after which Order expires: 5 (Number) [Input Field]

The "Days after which Order expires" input field is highlighted with a red rectangular border.

3.2.15 Initiate Cancel Order Job

The Worldpay cartridge provides support to a batch job that cancels or refunds FAILED orders with the attribute Worldpay MAC Missing. The time interval for selecting orders defined in the custom preference Worldpay Order Inquiry Lag Time. A Batch Job configured in Business Manager shall run (as per the set schedule) and check orders with order status FAILED, with Worldpay MAC Missing which are old to a defined interval of time and will send a request to Worldpay System to either cancel or refund. Job can be Enable/Disable from Business Manager itself. Email will be sent to BM configured recipients after job run with Job run status.

InitiateCancelOrderJobs

General Schedule and History Resources Step Configurator Notification Failure Handling

ID*

InitiateCancelOrderJobs

Description

Initiate a Call to worldpay to cancel an order.

Priority

 Normal High

Refer below Step configuration section in order to execute script and their functions

Administration / Operations / Jobs /

InitiateCancelOrderJobs

General Schedule and History Resources Job Steps Failure Handling Notification

Job Parameters 0

Scope: 2 Cities Assigned

InitiateCancelOrderJobs

Select and Configure Step

ExecuteScriptModule 

ID*
InitiateCancelOrderJobs

Description
Initiate a Call to worldpay to cancel an order.

ExecuteScriptModule.Module*
int_worldpay_core/cartridge/scripts/jobs/InitiateCan

ExecuteScriptModule.FunctionName
InitiateCancelOrder

ExecuteScriptModule.Transactional

ExecuteScriptModule.TimeoutInSeconds

Always execute on restart

[Back](#) [Assign](#)

Table for Reference:

Fields	Fields data
ID	InitiateCancelOrderJobs
Description	Initiate a Call to worldpay to cancel an order.
ExecuteScriptModule.Module	int_worldpay_core/cartridge/scripts/jobs/InitiateCancelOrderJob.js
ExecuteScriptModule.FunctionName	initiateCancelOrder
ExecuteScriptModule.Transactional	Enabled

3.2.16 Managing Content Asset

All import files are available in the site import folder (metadata) within the cartridge installation pack.

Note: Ensure content assets in the import has appropriate library Id of the site where XML to be imported

1. Navigate to Merchant Tools > Content > Content Asset.
2. Ensure that Content Assets with IDs “worldpayhelper” and “worldpay-elv-consent” are added.

3.2.17 Managing Service

Go to Services > Service Profile > Worldpay Profile with the values listed against them:

Worldpay Profile	Description
Name	Default “worldpayprofile”. Merchant can give any name as per need
Timeout (ms)	Default 30000 Timeout value in milli sec as per Merchant contract with Worldpay for webservice timeout
Circuit Breaker	Circuit break settings when connection not established for long time
Rate limits	Rate Limits after which service resumed back once circuit breaks

Ensure that the following properties under Worldpay credentials with the values listed against them:

All the above service credentials are used by one Worldpay service only. (Refer Fig. 2.9)

Worldpay Credentials	Description
Name	Merchant Hex Code provided by Worldpay
URL	This field represents the Web service URL that is invoked while calling Worldpay service.
User	This field represents the User Name provided specifically to the above mentioned Merchant Code.
Password	This field represents the Password provided specifically to the above mentioned Merchant Code.

Name:	Merchant Hex Code
URL:	Payment URL
User:	fUser
Password:	*****

Fig 2.9

3.2.18 IDEAL APM Integration

Bank configurations in Business Manager:

All the supported Bank List values are preconfigured. However, Modify/Delete the list if required. Follow the below steps to add additional banks:

1. Log into Business Manager
2. Navigate to Administration > Site Development > System Object Definition > SitePreferences
3. Open the tab Attribute Definition and find “WorldpayIdealBankList”
4. Ensure that the required Bank ID and Bank Name in the Value and Display Value correspondingly. (For more details refer Appendix B)

Search Attribute Value Definitions			
Value or Display Value:	Find	Default	Sorting
<input type="checkbox"/> Select All	Value	Display Value	
<input type="checkbox"/>	ING	ING	
<input type="checkbox"/>	ABN_AMRO	ABN AMRO	
<input type="checkbox"/>	ASN	ASN	
<input type="checkbox"/>	RABOBANK	Rabobank	
<input type="checkbox"/>	SNS	SNS	
<input type="checkbox"/>	SNS_REGIO	SNS Regio	
<input type="checkbox"/>	TRIODOS	Triodos	
<input type="checkbox"/>	VAN_LANSCHOT	Van Lanschot	
<input type="checkbox"/>	KNAB	Knab	
<input type="checkbox"/>	Test	Test	
New Value:			
<input type="button" value="Apply"/> <input type="button" value="Reset"/> <input type="button" value="Delete"/>			

Fig: 2.6

Select the specific banks using the below steps:

1. Log into Business Manager
2. From the top bar, select the required site for which configurations are to be done.
3. Navigate to Merchant Tools > Site Preferences > Custom Preferences > Worldpay
4. Select the banks to be supported. (Multiple banks can be selected from the drop down)

The screenshot shows a configuration interface for WorldPay. At the top, there is a header "WorldPay-HandleAuthenticationResponse". Below it, a section titled "WorldPay iDEAL Bank List" contains a dropdown menu. The menu has "None" at the top, followed by a list of banks: ING (ING), ABN AMRO (ABN_AMRO), ASN (ASN), Rabobank (RABOBANK), SNS (SNS), SNS Regio (SNS_REGIO), Triodos (TRIODOS), Van Lanschot (VAN_LANSCHOT), and Knab (KNAB). The dropdown is currently set to "None". Below this section is another field labeled "EnableAPMLookUpService" with a dropdown menu containing "Yes".

Fig: 2.7

Note: Please ensure list of bank should be updated; please contact Worldpay to get the latest list of Bank.

3.2.19 Multiple Merchant ID Support Integration

After importing metadata provided with Worldpay cartridge, additional fields (merchant ID, username, and password) will be created in payment methods in BM.

1. Log into Business Manager
2. From the top bar select the required site for which configurations are to be done
3. Navigate to Merchant Tools > Ordering > Payment Methods.
4. Input the required details for the below field:
 - Merchant ID
 - Username
 - Password

The screenshot shows a configuration interface for payment methods. The title bar says "Custom". There are four input fields: "Merchant Code:" with a text input field, "User Name:" with a text input field, "Type:" with a dropdown menu currently set to "DIRECT (Direct)", and "Password:" with a text input field and a "Confirm:" text input field next to it.

3.2.20 Look and Feel Customization for Worldpay Redirect Pages

Configurations that needs to be done in Business Manager to support look and feel customization:

1. Log into Business Manager
2. From the top bar select the required site for which configurations are to be done.
3. Navigate to Preferences > Custom Preferences > Worldpay
4. Input the required details for the below field:

Worldpay Configurable HPP APM

Worldpay Installation Id

Worldpay Address Details Read Only

Worldpay Hide Address Details

** Ensure that the Payment Method ID (refer to APPENDIX A – KEY column), which needs to be supported for customizable is added to the **Worldpay Configurable HPP APM** SitePreferences.

** Please contact the Worldpay contact person for values of the above details.

The screenshot shows a configuration page with the following sections:

- Worldpay Configurable HPP APM:** A list of payment methods: WorldPay (selected), CHINAUNIONPAY-SSL, ENETS-SSL. An "Add" button is at the top right.
- Add the APM's that require configurable hosted payment pages.**
- Worldpay Address Details Read Only:** A dropdown menu set to "Yes". A note says: "Set this value to true if address details needs to be made read only".
- Worldpay Hide Address Details:** A dropdown menu set to "Yes". A note says: "Set this value to hide address details on V3 Payment pages".
- Worldpay Installation Id:** A text input field containing "1,029,012".

Fig 2.9

3.2.21 Hosted Payment Pages iframe or light box for Worldpay Redirect Payment Method

Configurations that needs to be done in Business Manager to support look and feel customization:

1. Log into Business Manager
2. Navigate to Merchant Tools > Ordering > Payment Methods
3. Select “Credit Card Redirect” payment method and add the following data under worldpay HPP CustomOptions JSON attribute.
4. Write JSON specifically type as iframe or lightbox. Click on Apply to enable the Iframe/Light box on HPP. Example:

```
{  
    "type": "iframe"  
}  
  
OR  
  
{  
    "type": "lightbox",  
    "lightboxMaskOpacity": 50,  
    "lightboxMaskColor": "#000000",  
    "debug": false  
}
```

For Lightbox JSON settings below two attributes can be specified with merchant specific values.

- lightboxMaskOpacity
- lightboxMaskColor

The screenshot shows the Business Manager interface for configuring the WorldPay Redirect payment method. The top navigation bar includes 'WorldPay' and 'Credit Card - Redirect'. Below this, the payment method is identified as 'YANDEXMONEY-SSL' and 'Yandex'. The configuration section is titled 'WorldPay Details'. It contains fields for 'User Name' (empty), 'Type:' set to 'REDIRECT (Redirect)', 'Password' (empty), 'Confirm' (empty), 'Days after which Order expires' (empty), 'SEPA Mandate Number' (empty), 'Worldpay Statement Narrative' (empty), and 'HPP CustomOptions JSON' containing the JSON code shown above. A link 'HTML Editor' is visible at the bottom of the JSON input field.

WorldPay

Credit Card - Redirect

YANDEXMONEY-SSL

Yandex

WorldPay Details

User Name:

Type:

Password: Confirm:

Days after which Order expires: (Number)

SEPA Mandate Number:

Worldpay Statement Narrative:

HPP CustomOptions JSON:

```
{  
    "type": "iframe",  
    "lightboxMaskOpacity": 50,  
    "lightboxMaskColor": "#000000",  
    "debug": false  
}
```

[HTML Editor](#)

3.2.22 Country Currency Mapping

Country	Currency
United States	US Dollars
UNITED KINGDOM	Pound Sterling
GERMANY	Euro
SINGAPORE	Singapore Dollar
JAPAN	Japanese Yen
SWEDEN	Yuan Renminbi
CHINA	Euro
FRANCE	Euro
RUSSIAN FEDERATION	Russian Ruble
BELGIUM	Euro
ITALY	Euro
CANADA	Canadian Dollar
AUSTRALIA	Australian Dollar

3.2.23 Country Currency and Locale Mapping for Klarna

purchase_country	purchase_currency	locale	extra locale
AT	Euro	de-at	en-at
FI	Euro	fi-fi	en-fi , sv-fi
DE	Euro	de-de	en-de
NL	Euro	nl-nl	en-nl
NO	NOK	nb-no	en-no
SE	SEK	sv-se	en-se
GB	GBP	gb-gb	en-sb

Ensure the appropriate locale, currencies and countries setting are available in business manager

3.2.24 Managing the Customer Service Center (int_worldpay_csc)

- Go to **Administration > Organization > Roles > Administrator - Customer Service Center Permissions**
- Select context for your site and apply

The screenshot shows a 'Customer Service Center Module' page with a 'Service Center Permissions' section. A 'Select Context' dialog box is open, listing contexts like SiteGenesis, SiteGenesisGlobal, MobileFirstGlobal, MobileFirst, and RefArch. The 'RefArch' context is selected. The 'Apply' button is visible in the dialog.

- Select void sale and Update (This is for voiding sale for Prime Routing orders)

Customer Service Center Module		Module Description
<input checked="" type="checkbox"/>	Order	
<input checked="" type="checkbox"/>	Void sale	

3.2.25 Setting up Apple Pay

Business Manager Configuration:

Step 1: Enabling Applepay Payment Method

- Go to Merchant Tools > Ordering > Payment Methods
- Enable the Payment Method with the ID as *DW_APPLE_PAY*
- Select the Payment Processor as *Worldpay*
- Under custom section, select the type as *DIRECT*
- Finally it should look like below

DW_APPLE_PAY Details

Payment Processor:	Worldpay <Worldpay>
Countries:	All
Currencies:	All
Customer Groups:	All
Min/Max Payment Ranges:	Min/Max Payment Ranges

Custom

Merchant Code:	
User Name:	
Type:*	DIRECT (Direct)
Password:	
Confirm:	
Days after which Order expires:	(Number)
CEDNA Mandate Numbers:	

S

Step 2: Configuring the Applepay Preferences

- Go to Merchant Tools > Site Preferences > Apple Pay
- Fill in the form as shown below.

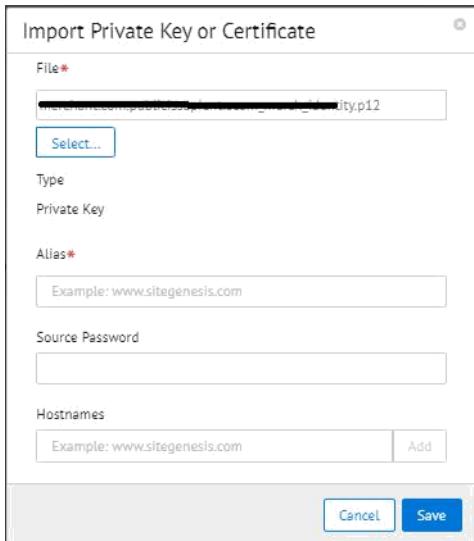
Preference Name	Configuration
Apple Pay Enabled?	Select this to enable Apple Pay
Apple Merchant ID	Enter your Apple merchant ID
Apple Merchant Name	Enter your Apple merchant name
Country Code	Enter the country code based on Worldpay account
Merchant Capabilities	Choose them based on Worldpay account
Supported Networks	Choose them based on Worldpay account
Required Shipping Address Fields	Choose them based on Worldpay account
Required Billing Address Fields	Choose them based on Worldpay account
Inject Apple Pay Button on Mini Cart?	Choose this to display Apple Pay button in Mini Cart
Inject Apple Pay Button on Cart Page?	Choose this to display Apple Pay button in Cart
Redirect Pages to HTTPS?	Redirect Pages to HTTPS
Use Commerce Cloud Apple Pay Payment API?	Not required. Leave this unchecked
Payment Provider URL	Not required. Leave this unchecked
Payment Provider Merchant ID	Not required. Leave this unchecked
API Version	Set to v1
Use Basic Authorization	This must be enabled.
Payment Provider User	Not required. Leave this unchecked
Payment Provider Password	Not required. Leave this unchecked
Use JWS?	This must be enabled.
JWS Private Key Alias	Match the name of Alias imported in Private Keys

Click on Register Sandbox/Production to register the domain accordingly.

- Click on Register Sandbox for lower environment.
- Click on Register Production for Production environment.

Step 3: Configuring the Private Key

- Go to Administration > Operations > Private Keys and Certificates
- Select the file (.p12) from which was received from Worldpay
- Give the alias name as "applepayworldpay" for example. It can be anything.
- Note that the alias name should match with JWT Private Key Alias in Apple Pay Preferences form
- Provide the Source Password which should have received along with p12
- Leave Hostname as blank.
- Click on Import and fill the form as below.



4. PRODUCTION SETUP

4.1.1 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 Method.”

5. OPERATIONS, MAINTENANCE

5.1.1 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.

S. 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

5.1.2 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 it is deleted by the Notification job.

S. No.	Additional Custom Fields	Attribute Id
1	Order No	orderNo
2	Xml String	xmlString
3	Custom Object ID	ID
4	Time Stamp	timeStamp

5.1.3 Order Payment Instrument Attributes

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

6. USER GUIDE

6.1.1 Production Service Setup

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

APPENDIX A: APM/Card Mapping Keys

Supported Cards Mapping table:

Card Name	Key Value	Test card number
Airplus	AIRPLUS-SSL	1220000000000003
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, 4911830000000

Supported Payment Method Mapping table:

Payment Method Name	Key Value
Konbini	KONBINI-SSL
Poli	POLI-SSL
Poli NZ	POLINZ-SSL
Przelewy24	PRZELEWY-SSL
SEPA-DD	ELV-SSL
Alipay	ALIPAY-SSL



Boleto	BOLETO-SSL
CashU	CASHU-SSL
Credit Card – Direct	CREDIT_CARD
Credit Card – Redirect	Worldpay
China Union Pay	CHINAUNIONPAY-SSL
ENETS	ENETS-SSL
Giropay	GIROPAY-SSL
IDEAL	IDEAL-SSL
Mistercash	MISTERCASH-SSL
Paypal	PAYPAL-EXPRESS
Sofort	SOFORT-SSL
Qiwi	QIWI-SSL
Yandex	YANDEXMONEY-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
AUTHORISED	Order Status: NEW Payment Status: no change Export Status: READY FOR EXPORT Confirmation Status : CONFIRMED
CANCELLED	Order Status: FAILED/CANCELLED Payment Status: NOT PAID Export Status: NOT EXPORTED Confirmation Status : NOT CONFIRMED
CAPTURED	Order Status: COMPLETED Payment Status: PAID Export Status: no change Confirmation Status : no change
SENT_FOR_REFUND	Order Status: no change Payment Status: no change Export Status: no change Confirmation Status : no change
REFUSED	Order Status: FAILED Payment Status: NOT PAID Export Status: NOT EXPORTED Confirmation Status : NOT CONFIRMED
SETTLED	Order Status: no change Payment Status: no change Export Status: no change Confirmation Status : no change
INFORMATION_REQUESTED	Order Status: no change Payment Status: no change Export Status: no change Confirmation Status : no change
CHARGED_BACK	Order Status: no change Payment Status: no change Export Status: no change Confirmation Status : no change
EXPIRED	Order Status: FAILED Payment Status: NOT PAID Export Status: NOT EXPORTED Confirmation Status : NOT CONFIRMED

APPENDIX E: Error Codes and Error Message

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

- Go to Merchant tools > Ordering > Payment Methods
- Disable all the worldpay specific payment methods
- 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).
- Enable the payment methods we want to use with the type of processor.
- To enable it again change the processor type to worldpay.

Go to Merchant Tools > Site Preferences > custom Preferences > worldpay and disable 'Enable APM look up service'.

APPENDIX G: CHECKLIST

This Section will help you ensure that all the Business Manager required configurations for worldpay are in Place and you are able to proceed with the transactions.

1) Cartridge Path is set properly

Go to Administration > Sites > Manage Sites > your site - Settings

[Administration > Sites > Manage Sites > RefArch - Settings](#)

General **Settings** Cache Site Status Page Meta Tag Rules

RefArch - Settings

Click Apply to save the details. Click Reset to revert to the last saved state.

Instance Type:	Sandbox/Development ▾
Deprecated. The preferred way of configuring HTTP and HTTPS hostnames is by using new features of the site aliases configuration ("SEO > Aliases Configuration"). The HTTP/HTTP	
HTTP Hostname:	<input type="text"/>
HTTPS Hostname:	<input type="text"/>
Instance Type:	All
Cartridges:	<code>int_worldpay_sfra:int_worldpay_core:int_worldpay_csc:app_storefront_base</code>
Effective Cartridge Path:	<code>int_worldpay_sfra</code> <code>int_worldpay_core</code> <code>int_worldpay_csc</code> <code>app storefront base</code>

Go to Administration > Sites > Manage Sites > Business Manager – Settings
Check if your worldpay cartridges are added there

[Administration > Sites > Manage Sites > Business Manager - Settings](#)

Settings Cache Hostnames

Business Manager - Settings

Click Apply to save the details. Click Reset to revert to the last saved state.

Instance Type:	Sandbox/Development ▾
Deprecated: Up to two instance specific hostname aliases for Business Manager can be configured here.	
HTTP Hostname:	<input type="text"/>
HTTPS Hostname:	<input type="text"/>
Instance Type:	All
Cartridges:	<code>int_worldpay_sfra:int_worldpay_core:int_worldpay_csc:app_storefront_base</code>

2) Payment Processor with id Worldpay is available

Go to **Merchant Tools > Ordering > Payment Processors**

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

Payment Processors

The list shows all payment processors currently defined for this site. Click New to create a custom payment processor. Use the checkboxes and then click Delete to delete payment processors. Note that standard

Select All	Processor ID	Description
<input type="checkbox"/>	BASIC_CREDIT	Internal credit card handling with simple card number check only.
<input type="checkbox"/>	BASIC_GIFT_CERTIFICATE	Internal gift certificate handling.
<input type="checkbox"/>	CYBERSOURCE_BML	'Bill Me Later' online authorization through Cybersource (test and production systems).
<input type="checkbox"/>	CYBERSOURCE_CREDIT	Cybersource online credit card authorization (test and production systems).
<input type="checkbox"/>	PAYPAL_CREDIT	Paypal online credit card authorization (test and production systems).
<input type="checkbox"/>	PAYPAL_EXPRESS	Paypal Express Checkout (test and production systems).
<input type="checkbox"/>	VERISIGN_CREDIT	Verisign online credit card authorization (test and production systems).
<input checked="" type="checkbox"/>	Worldpay	Worldpay Payment Processor

3) Payment methods are enabled and have worldpay as their processors set

- Go to **Merchant Tools > Ordering > Payment Methods**, and check for the availability of payment methods
- Open the Payment method and check if processor is worldpay or not.

Min	Max
¥ 1	¥ 3000
€ 0.01	€ 380
¥ [empty]	¥ [empty]

4) Go to Administration > Operations > Services and check if Service is available or not

Administration > Operations > Services				
	Services	Profiles	Credentials	
Services				
Select All	Name	Type	Profile	Credentials
<input type="checkbox"/>	int_worldpay_http.worldpay.payment.post	HTTP	worldpayprofile	SAPIENTNITROECOM
				Live
		New		Delete

5) Navigate to

- Merchant Tools > Content > Content Asset.
- Ensure that Content Assets with IDs “worldpayhelper” and “worldpay-elv-consent” are added.

6) Navigate to Merchant Tools > Site Preferences > Custom Preferences

Check for worldpay group availability.

If it's there, open the group to see for all the custom preferences

7) Go to Administration > Operations > Custom Log Settings, and cross check if worldpay debug is on or not



On this page you can configure the writing of custom code log messages. System log messages aren't configurable.

Custom Log Filters

Active	Log Category	Log Level	
	Enter a log category...	WARN	Add
	root	DEBUG	
<input checked="" type="checkbox"/>	root	DEBUG	
<input checked="" type="checkbox"/>	worldpay	DEBUG	

