Aurus LINK Cartridge Integration[[1]](#footnote-1)

*Version 19.1.0[[2]](#footnote-2)*

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# Summary

This cartridge contains the necessary code and metadata to integrate Aurus Pay iFrame into the SFCC Platform. More specifically, this cartridge supports the Storefront Reference Architecture (SFRA) architecture. The latest supported version is release 4.3.0.

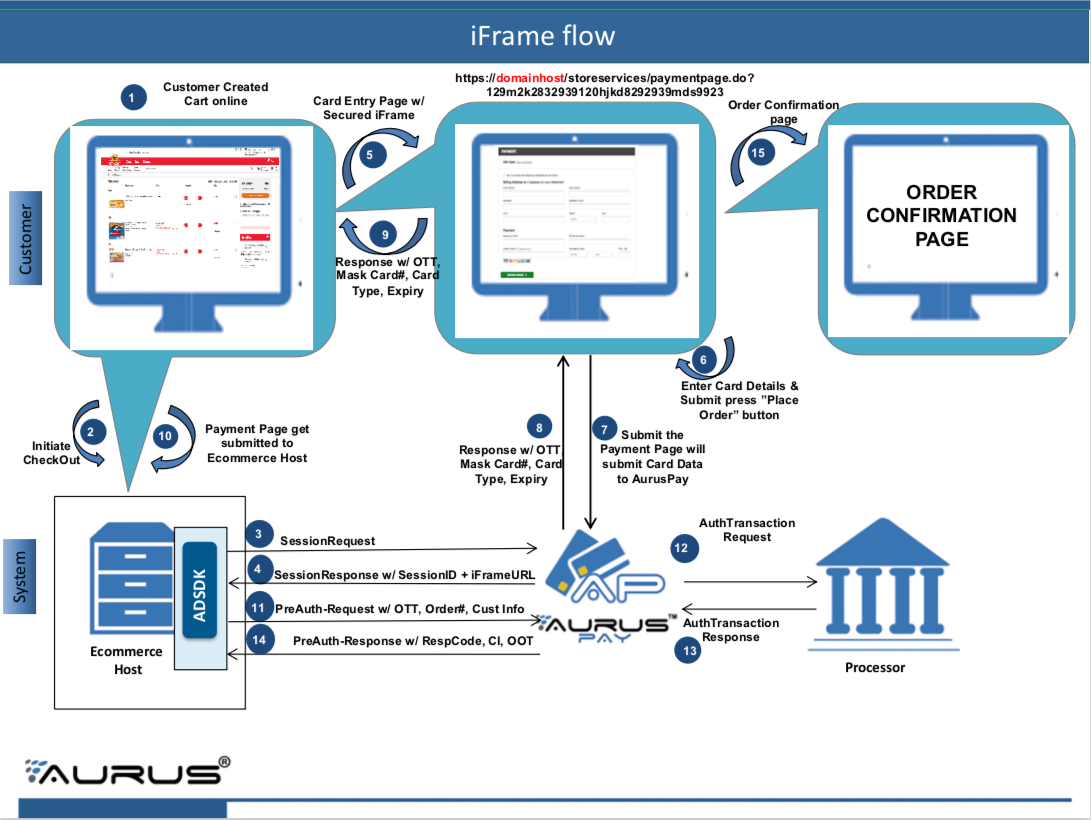
This document provides instructions for adding the credit card payment type to a Salesforce B2C Commerce implementation. These instructions are provided as a starting point for implementation. Additional configuration and development are usually necessary to meet the individual requirements and business needs of each client. For clients with multiple storefronts, this document assumes that the new credit card payment type will be added on a per-storefront basis.

The integration process encompasses the installation and deployment of a modular cartridge, namely *int\_aurus\_sfra* into the vanilla SFRA base application. No modification of storefront code is required, as this cartridge sits on top of the app\_storefront\_base cartridge.

# **Component Overview**

## Functional Overview

The functional overview of the component can be described by the following image



Aurus iFrame Flow Steps

1. Customer creates a cart on SFCC storefront
2. Customer initiates checkout process and enters shipping and billing information along with email and phone number
3. After submitting the shipping form, a session request is sent to Aurus Pay
4. The Aurus session response contains the session id and iFrame URL,
5. iFrame is then rendered within payment form
6. Customer enters card data into secure iFrame and submits order
7. iFrame sends card data to Aurus Pay, iFrame eventListener waits for response and triggers responseHandler() function on the client side
8. AurusPay response includes One Time Token (OTT), masked card number, card type (specific Aurus string), and card expiry (i.e. 0220)
9. responseHandler() client side function handles Aurus pay response
10. Client side application submits billing, shipping, products, and card data to SFCC via ajax, payment confirmation page loads and customer clicks place order
11. Server creates order and initiates pre-auth web service call to Aurus Pay with OTT, order number, and order information
12. Aurus executes auth-transaction request
13. SFCC server receives auth-transaction response
14. SFCC server pre-auth response includes Response Code, Response Text, Card Identifier (CI), and One Order Token (OOT)
15. Server places order, attaches OOT to payment transaction, and loads order confirmation page

## Use Cases

This payment processor handles the following payment methods

Note: Based on provided test cards, more payment methods may be supported.

1. Credit Card
   1. Visa
   2. Master Card
   3. Diners
   4. Discover
   5. China Pay
   6. JCB

## Limitations, Constraints

Multi-ship orders (orders with more than one shipping address) may not be supported by payment processor as pre-auth call only takes one shipping address.

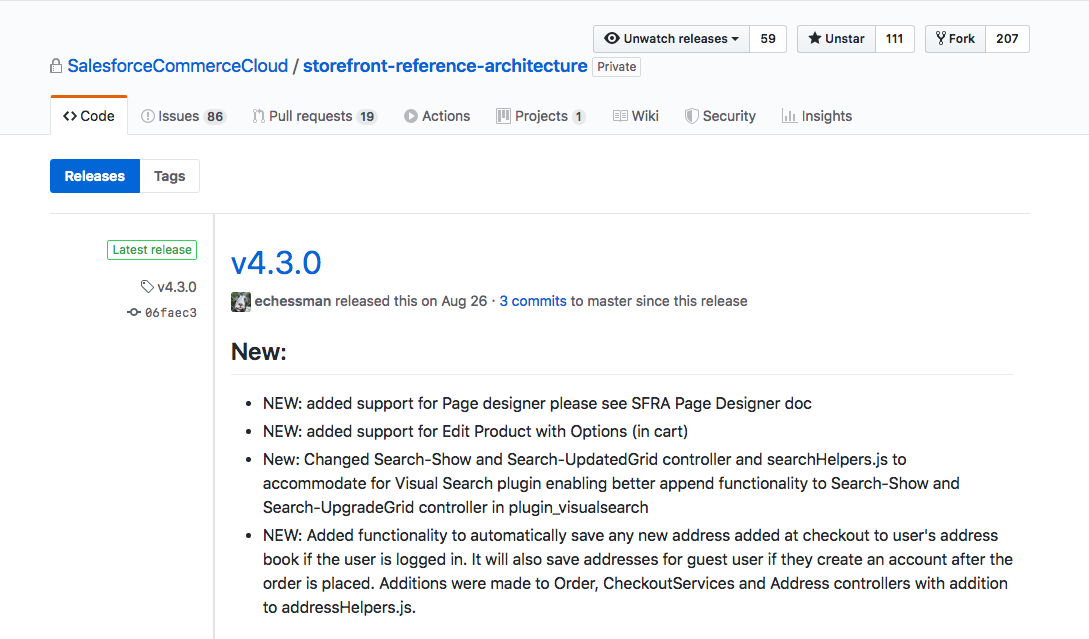
## Compatibility

Available since Commerce Cloud 19.10

The latest supported SFRA version is release 4.3.0

Please see the following link for available release versions.

<https://github.com/SalesforceCommerceCloud/storefront-reference-architecture/releases>

**

Note: A registered GitHub account with Salesforce Commerce Cloud is required, as this is a private repository.

## Privacy, Payment

For registered customers, credit card data can be saved to the customer wallet, and it can used for future purchases.

The customer profile data is accessed, and payment information is stored only if the customer is a registered user, logs into the storefront, saves card payment data during the checkout flow, and places an order.

Only a portion of a customers’ normal payment instrument is saved within the customer wallet in the customer’s profile. The following data is stored in the user’s wallet.

* Card Identifier (CI)
* Last 4 digits of credit card
* Card Expiry Date (i.e. 0220)
* Card Type (i.e. Visa, MasterCard, Discover)
* Masked Credit card number (i.e. \*\*\*\*\*\*\*\*\*\*\*\*1111)

# Implementation Guide

## Setup of Business Manager

Business Manager Installation Instructions

Clone master branch from GitHub repositories to local machine

Aurus link cartridge repository address: <https://github.com/jrgparamo/link_aurus>

SFRA repository address: <https://github.com/SalesforceCommerceCloud/storefront-reference-architecture>

File folder structure example

Create a new code version within the Business Manager

Copy and rename dw\_CONFIGURE.json to dw.json into both repository roots, edit dw.json with appropriate instance information and code version

{

"hostname": "your-sandbox-hostname.demandware.net",

"username": "yourlogin",

"password": "yourpwd",

"code-version": "version\_to\_upload\_to"

}

In each repository, install dependencies, via command line “*npm install*”

In each repo root, build client side static folders, via command line “*npm run build*”

Upload cartridges using VSCode, Eclipse, or from the repositories’ root via command line “*npm run uploadCartridge*”

In the business manager, configure the cartridge path

Go to [Administration](https://dev38-na01-pfsweb.demandware.net/on/demandware.store/Sites-Site/default/ViewApplication-ExpandMenuGroup?MenuGroupID=AdministrationMenu&OverviewPage=SiteNavigationBar-ShowAdministrationOverview&csrf_token=1ZH2dwZWsoAhSCHwauspR-GsUtcKnM9InABMQfvpC-T3yDGejqvuqaER2ve6JyqCpAQiVZqJ2b6VyT1VPxoz3nwcOZX2NQg0DZQdiISfV5r3mgCbsQP0YDKs_tDRatxPMsjNBl2drMhidbzx8AUG63uRUVuPo7ObjdLr7wRHyWU-qe8PaXQ=) >  [Sites](https://dev38-na01-pfsweb.demandware.net/on/demandware.store/Sites-Site/default/SiteNavigationBar-ShowMenuitemOverview?CurrentMenuItemId=sites&csrf_token=1ZH2dwZWsoAhSCHwauspR-GsUtcKnM9InABMQfvpC-T3yDGejqvuqaER2ve6JyqCpAQiVZqJ2b6VyT1VPxoz3nwcOZX2NQg0DZQdiISfV5r3mgCbsQP0YDKs_tDRatxPMsjNBl2drMhidbzx8AUG63uRUVuPo7ObjdLr7wRHyWU-qe8PaXQ=) >  [Manage Sites](https://dev38-na01-pfsweb.demandware.net/on/demandware.store/Sites-Site/default/ViewChannelList-ListAll?CurrentMenuItemId=sites&csrf_token=1ZH2dwZWsoAhSCHwauspR-GsUtcKnM9InABMQfvpC-T3yDGejqvuqaER2ve6JyqCpAQiVZqJ2b6VyT1VPxoz3nwcOZX2NQg0DZQdiISfV5r3mgCbsQP0YDKs_tDRatxPMsjNBl2drMhidbzx8AUG63uRUVuPo7ObjdLr7wRHyWU-qe8PaXQ=) > YourSiteID - Settings

In Cartridges: Add int\_aurus\_sfra to cartridge path:

Example: *int\_aurus\_sfra:app\_storefront\_base*

Rebuild search indexes and invalidate site cache

Importing Metadata

1. Importing Services, System Object Types, Payment Methods, and Payment Processors
   1. Via File Explorer or command line change directories to **aurus/link\_aurus/metadata/site\_import/sites**
   2. Rename **yourSIteId** folder to the ID of your site in the Business Manager
   3. Zip the **site\_import** folder
   4. In the BM, go to go to **Administration** > **Site Development** > **Site Import & Export** and import the zipped file.

After the import, attributes are added to:

* **Administration** > **Site Development** > **System Object Types** > **Site Preferences** > **Attribute Definitions**
* **Administration** > **Site Development** > **System Object Types** > **Payment Transaction** > **Attribute Definitions**

Also, the following services are added to **Administration > Operations > Services**

* **aurusPay.https.getSession**
* **aurusPay.https.preAuth**

## Configuration

Site Preference Configuration

1. In the Business Manager, go to **Merchant Tools > Site Preferences > Custom Preferences > Aurus Pay Site Configuration Settings**
2. Add values to the following preferences (Note: These values are mandatory and must be provided by Aurus)
   1. CorpId
   2. DomainId
   3. MerchantIdentifier
   4. StoreId
   5. TemplateId
   6. TerminalId
   7. URLType

Services Configuration

1. In the Business Manager, go to **Administration > Operations > Services**
2. Configure **aurusPay.https.getSession.cred**, add URL
3. Configure **aurusPay.https.preAuth.cred**, add URL
4. Configure **aurusPay.https.profile,** default connection timeout is 10,000 (ms)

Setup Payment Methods

**Credit Cards**

After the metadata import, Aurus has been added as the payment processor for credit cards.

* 1. In the Business Manager, go to **Merchant tools** > **Ordering** > **Payment Methods**.
  2. In the **ID** column, click **CREDIT\_CARD**, and check that the **Payment Processor** is set to **AURUS\_CREDIT**
  3. Click the **Credit/Debit Cards** button. This opens up a pop-up window for managing credit and debit card types.
  4. Make any necessary changes here, based on storefront requirements, enable or disable cards
  5. Change the **Type** value if necessary, these values are based on the Aurus Sessionid response, when requesting an iFrame

## Custom Code

No custom code is necessary

## External Interfaces

WEB SERVICE CALLS

1. **Guest Checkout Session API Call Request & Response:**
   1. Purpose: Gets Session ID and iFrame source URL
   2. Format: JSON
   3. ADSDK Webservice URL: <https://uatds42.auruspay.com/aurus-adsdk-web-service/auruspay/adsdk/sessionId>

***Request:***

*{*

*"SessionRequest": {*

***"DomainId": "1",***

***"CorpID": "18404",***

*"CardNumber”: "",*

***"StoreId": "51001",***

***"MerchantIdentifier": "100000063799",***

*"CardType": "",*

*"CardExpiryDate": "",*

***"TerminalId": "84157827",***

***"TemplateId": "1",***

*"KI": "",*

***"URLType": "1"***

*}*

*}*

***Response:***

{

"SessionResponse": {

"ResponseCode": "00000",

"StoreId": "51001",

"RequestId": "679ee7be-73a5-4b72-8314-8107df68560d",

"MerchantIdentifier": "100000063799",

"SessionValidity": "30",

"TerminalId": "84157827",

"ResponseText": "APPROVAL",

"IFrameUrl": "https://uat48.auruspay.com/storeservices/ecom/getiframe?a=",

"SessionId": "200000000000000000000007475818"

}

}

1. **Existing Customer Checkout Session API Call Request & Response:**
   1. Purpose: Gets Session ID and iFrame source URL for users with saved cards
   2. Format: JSON
   3. ADSDK Webservice URL: <https://uatds42.auruspay.com/aurus-adsdk-web-service/auruspay/adsdk/sessionId>

***Request:***

*{*

*"SessionRequest": {*

***"CardNumber": "XXXXXXXXXXXX5859",***

***"CorpID": "18404",***

***"StoreId": "51001",***

***"MerchantIdentifier": "100000063799",***

***"TerminalId": "84157827",***

***"CardIdentifier": "2000000000006789",***

*"SubTransType": "",*

*"SubCardType": "",*

*"TokenType": "",*

***"DomainId": "1",***

***"CardType": "JBC",***

***"CardExpiryDate": "0225",***

***"TemplateId": "2",***

*"KI": "",*

***"URLType": "1"***

*}*

*}*

***Response:***

{

    "SessionResponse": {

        "ResponseCode": "00000",

        "StoreId": "51001",

        "RequestId": "10638f4d-515d-4e40-b933-3892ceb22f09",

        "MerchantIdentifier": "100000063799",

        "SessionValidity": "30",

        "TerminalId": "84157827",

        "ResponseText": "APPROVAL",

**"IFrameUrl":** "https://uat48.auruspay.com/storeservices/ecom/getiframe?a=",

        "SessionId": "200000000000000000000007921126"

    }

}

1. **Pre-Auth API Call**
   1. Purpose: Initiates transaction using tokens
   2. Format: JSON

Request Format Example

{

"TransRequest": {

"ApprovalCode": "",

"AurusPayTicketNum": "000000000000000000",

"PostAuthCount": "00",

"CorpID": "18404",

"ShippingAddress": {

"ShippingState": "CA",

"ShippingAddressLine2": "",

"ShippingZip": "95112",

"ShippingLastName": "Patil",

"ShippingAddressLine1": "1350 North First Street",

"ShippingMiddleName": "",

"ShippingMobileNumber": "408-736-5946",

"ShippingEmailId": "",

"ShippingCountry": "US",

"ShippingFirstName": "Rushikesh",

"ShippingCity": "San Jose"

},

"ReferenceNumber": "",

"ThirdPartyURL": "",

"TransactionDate": "10092019",

"ProcessorToken": "",

"TransactionTime": "025226",

"PONumber": "",

"SettlementInfo": {

"MerchantTransactionCode": "",

"SalesCheckNumber": "",

"CreditPlan": "",

"TransactionDescription": "",

"PromotionCode": "",

"InCircleAmount": ""

},

"PostAuthSequenceNo": "00",

"OrigTransactionIdentifier": "",

"LanguageIndicator": "00",

"CardExpiryDate": "",

"OrigAurusPayTicketNum": "",

"CurrencyCode": "840",

"ECOMMInfo": {

"StoreId": "51001",

"OneTimeToken": "20000000000000000000000014728723",

"MerchantIdentifier": "100000063799",

"TerminalId": "84157827",

"CardIdentifier": "",

"OneOrderToken": ""

},

"ClerkID": "",

"SubTransType": "0",

"WalletIdentifier": " ",

"PODate": "",

"TransactionType": "04",

"KI": "",

"CardType": "",

"BillingAddress": {

"BillingZip": "02110",

"BillingEmailId": "rushikeshp@aurusinc.com",

"BillingMobileNumber": "408-736-5946",

"BillingLastName": "Patil",

"BillingAddressLine1": "Aurus Inc, 33 Arch Street, Suite",

"BillingAddressLine2": "",

"BillingMiddleName": "",

"BillingState": "MA",

"BillingCountry": "US",

"BillingFirstName": "Rushikesh",

"BillingCity": "Boston"

},

"TransAmountDetails": {

"Discount": "0.00",

"TaxAmount": "0.00",

"ProductTotalAmount": "00.00",

"TransactionTotal": "413.20"

},

"Level3ProductsData": {

"Level3Products": {

"Level3Product": [

{

"L3DepartmentID": "did",

"L3TarriffAmount": "1.10",

"L3ProductDiscount": "",

"L3ProductDescription": "Preauth",

"L3ProductUnitPrice": "100.00",

"L3ProductTaxRate": "",

"L3ProductQuantity": "2",

"L3ClassID": "cid",

"L3ProductName": "Product 1",

"L3GiftWrapAmount": "1.10",

"L3ProductTotalAmount": "206.60",

"L3OrderRefNumber": "",

"L3ProductSeqNo": "",

"L3ProductCode": "Product Code",

"L3MonogramAmount": "1.10",

"L3ProductTax": "1.10",

"L3UnitOfMeasure": "",

"L3OtherAmount": "1.10",

"L3FreightAmount": "1.10"

},

{

"L3DepartmentID": "did",

"L3TarriffAmount": "1.10",

"L3ProductDiscount": "",

"L3ProductDescription": "Preauth",

"L3ProductUnitPrice": "100.00",

"L3ProductTaxRate": "",

"L3ProductQuantity": "2",

"L3ClassID": "cid",

"L3ProductName": "Product 1",

"L3GiftWrapAmount": "1.10",

"L3ProductTotalAmount": "206.60",

"L3OrderRefNumber": "",

"L3ProductSeqNo": "",

"L3ProductCode": "Product Code",

"L3MonogramAmount": "1.10",

"L3ProductTax": "1.10",

"L3UnitOfMeasure": "",

"L3OtherAmount": "1.10",

"L3FreightAmount": "1.10"

}

]

},

"Level3ProductCount": "2"

},

"InvoiceNumber": "24thjan190010"

}

}

Response Format Example

{

"TransResponse": {

"POSID": "",

"APPID": "",

"TransDetailsData": {

"TransDetailData": {

"CardNumber": "XXXXXXXXXXXX6316",

"CardIdentifier": "2000000000002629",

"ProcessorToken": "",

"ProcessorMerchantId": "",

"LanguageIndicator": "",

"EBTCashBalance": "",

"DonationAmount": "",

"DCCDetails": {

"DCCMarginRatePercent": "",

"DCCAlphaCurrencyCode": "",

"DCCExchangeRate": "",

"DCCValidHours": "",

"DCCCurrencyCode": "",

"DCCMinorUnits": "",

"DCCCommissionPercent": "",

"DCCCurrencyName": "",

"DCCExchRateSrcName": "",

"DCCOffered": "",

"DCCResponseCode": "",

"DCCExchRateSrcTime": "",

"DCCFgnAmount": ""

},

"CardExpiryDate": "1228",

"ProcessorTokenRespCode": "",

"TransactionTypeCode": "",

"CardEntryMode": "K",

"SessionId": "",

"ReceiptToken": "4101060111066316",

"TransactionToken": "20000000000003269216",

"BatchNumber": "282001",

"CheckClearingStatus": "",

"StateIdentifier": "",

"ReferenceNumber": "",

"ProcessorTokenRespText": "",

"FraudScoreInfo": {

"Email": "",

"RequestId": "",

"PostalCode": "",

"ServiceIdentifier": "",

"Decision": "",

"EcomToken": "",

"Score": "",

"RequestToken": "",

"ReqTypeIndicator": "",

"PhoneNumber": "",

"StreetAddr": "",

"FirstAndLastName": "",

"ProcessorDecision": ""

},

"OrderId": "",

"SignatureReceiptFlag": "",

"ECOMMInfo": {

"OneTimeToken": "",

"StoreId": "51001",

"MerchantIdentifier": "100000063799",

"OneOrderToken": "20000000000003269216",

"CVVResult": "Match",

"TerminalId": "84157827"

},

"BenefitExpiryDate": "",

"BenefitBeginningDate": "",

"PaypageUrl": "",

"ProcessorResponseCode": "00",

"FleetPromptsData": {

"DriverIDNumber": "",

"LicenseNumber": "",

"VehicleIDNumber": "",

"CustomerData": "",

"UserID": "",

"DeptNumber": "",

"PurchaseRestrictionsCode": "",

"Odometer": "",

"JobNumber": "",

"EmployeeIDNumber": "",

"VehicleNumber": "",

"JobID": ""

},

"EMVData": "",

"AdditionalTags": {

"Tags": {

"Tag": [

{

"Value": {

"DeclineIndicator": "",

"AuthCode": "",

"MsgCode": "",

"PromptField": "",

"WEBMsgCode": "",

"CvvCode": "",

"CreditAuthCode": "",

"ReasonCode": "",

"AvsCode": "",

"MaxAtt": "",

"CancelAmount": "",

"Desc": "",

"srv": "",

"CMOSMsgCode": "",

"CancelFlag": "",

"CancelCode": ""

},

"Key": "CustomMsgCodes"

},

{

"Value": "",

"Key": "InvoiceNumber"

},

{

"Value": "",

"Key": "ProcessorTransactionID"

},

{

"Value": "",

"Key": "ProcessorPayerId"

}

]

}

},

"ResponseText": "APPROVAL",

"WalletIdentifier": "",

"AurusProcessorId": "12",

"TotalApprovedAmount": "413.20",

"ClerkID": "",

"IssuerNumber": "",

"EMVDataInTLVFormat": "",

"TransactionType": "04",

"EBTCashAvailableBalance": "",

"EBTType": "282001",

"DeviceId": "",

"AuruspayTransactionId": "191192821034726916",

"KSNBlock": "",

"TransactionSequenceNumber": "000001",

"BillingAddress": {

"BillingCity": "",

"BillingZip": "",

"BillingProvince": "",

"BillingAddressLine1": "",

"BillingAddressLine2": "",

"BillingAddressLine3": "",

"BillingCountry": "",

"BillingEmailId": "",

"BillingMobileNumber": "",

"BillingFirstName": "",

"BillingLastName": "",

"BillingOtherNumber": "",

"BillingState": "",

"BillingMiddleName": ""

},

"CashbackAmount": "",

"TransactionIdentifier": "191192821034726916",

"CardType": "VIC",

"PartialApprovedFlag": "0",

"SplitType": "",

"SourceTransactionId": "",

"FallbackIndicator": "",

"CustomerName": "Rushikesh Patil",

"InterOperableToken": "",

"SplitPaymentNum": "",

"KI": "",

"TransactionDate": "10092019",

"ResponseCode": "00000",

"BalanceAmount": "0.00",

"ReferralNUM": "410106XXXXXX6316",

"EMVDetailsData": {},

"Level3Capable": "",

"PINBlock": "",

"SubCardType": "",

"ApprovalCode": "TAS308",

"EBTFoodAvailableBalance": "",

"TransactionAmount": "413.20",

"TransactionTime": "025227",

"AuthAVSResult": "N",

"ProcessorResponseText": "APPROVAL",

"RequestedTipAmount": ""

}

},

"AurusPayTicketNum": "119282103472701737"

}

}

## Firewall Requirements

A request to whitelist the POD IP Address was necessary to get all Aurus Pay web service calls working. Contact your Aurus representative to get this request fulfilled.

# Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test Card Data** | | | | |
| **Card Type** | **Card No** | **Expiry** | **CVV/PIN** | **Credit Limit** |
| Visa | 4101063000126316 | 12/28 | 999 | No limit |
| MasterCard | 5411119164096208 | 12/20 | 998 | $0 to $150 per order |
| Diners | 36185973325993 | 12/28 | 996 | No limit |
| Discover | 6510000000000331 | 12/28 | 996 | No limit |
| China Pay | 6221261111112650 | 12/28 | 996 | No limit |
| JCB | 3530142019945859 | 12/20 | 999 | No limit |

# Operations, Maintenance

## Data Storage

No data is stored, other than the card information stored within a registered customers wallet, detailed in the [Privacy, Payment](#_Privacy,_Payment) section.

## 

# Known Issues

* *Currently the cartridge has a copy of a custom jQuery plugin that handles the state changes within the checkout page. Although SFRA supports overriding client-side methods, this plugin was copied and renamed for better support and compatibility.*

# Release History

*<PLEASE USE THE FOLLOWING NAMING SCHEMA: THE FIRST NUMBER IS THE YEAR, THE SECOND NUMBER REFERS TO THE RELEASED VERSION OF THAT YEAR (FIRST NUMBER), A CHANGE TO THE 3RD DIGIT PROVIDES BUG FIXES WITHOUT INTRODUCING NEW FEATURES.>*

|  |  |  |
| --- | --- | --- |
| **Version** | **Date** | **Changes** |
| 19.1.0 | 2019-09-30 | Initial release |
|  |  |  |
|  |  |  |
|  |  |  |

1. e.g. <int\_aurus> [↑](#footnote-ref-1)
2. e.g. <19.1.0> [↑](#footnote-ref-2)