



Mobile Gateway

Integration Guide Version 1.0
27/04/2016

Table of Contents

Introduction	1
Service End Points	2
Making a payment	2
How it works	2
Registering the payment request	3
Payment Service RegisterW2PMobileRequest data	3
Payment Service result	4
Payment Service result parameters on success	4
Payment Service result parameters on failure	5
Payment Service errors	5
Sending customer to the payment screen	5
Getting payment results	6
How it works	6
Getting payment results from the Result URL	7
Transaction result parameters explained	7
Flo2Cash Hosted Mobile Payment Page Error Pages	8
Result	8
Querystring Parameters	8

Introduction

Flo2cash Mobile Gateway is designed for Mobile Application vendors /merchants who wish to develop applications with payment capability. The Flo2Cash Mobile Gateway allows your mobile applications to accept credit card payment in Flo2Cash’s secure hosted environment. The Flo2Cash Mobile Gateway is fully PCI DSS certified and takes away the processing, transmission and storage of credit card data from your mobile applications without compromising any functionalities and features.

This integration guide explains how to integrate with Flo2Cash Mobile Gateway, specifically generating a payment request and retrieving payment results and error handling from within your mobile apps.

This Gateway has 2 parts:

- **Flo2Cash Payment Service** - this is a secure REST service allowing your mobile App to perform relevant service calls to register a payment request.

- **Flo2Cash Hosted Mobile Payment Page** - this is a secure hosted payment page optimised for mobile Apps that will be displayed for collecting your customers' card details and processing the payment.

Service End Points

The Flo2Cash Payment Service's end point is accessible at the below URL:

Production:

[https://secure.flo2cash.co.nz/payment-service/payment-service/rest/\[MethodName\]](https://secure.flo2cash.co.nz/payment-service/payment-service/rest/[MethodName])

Demo:

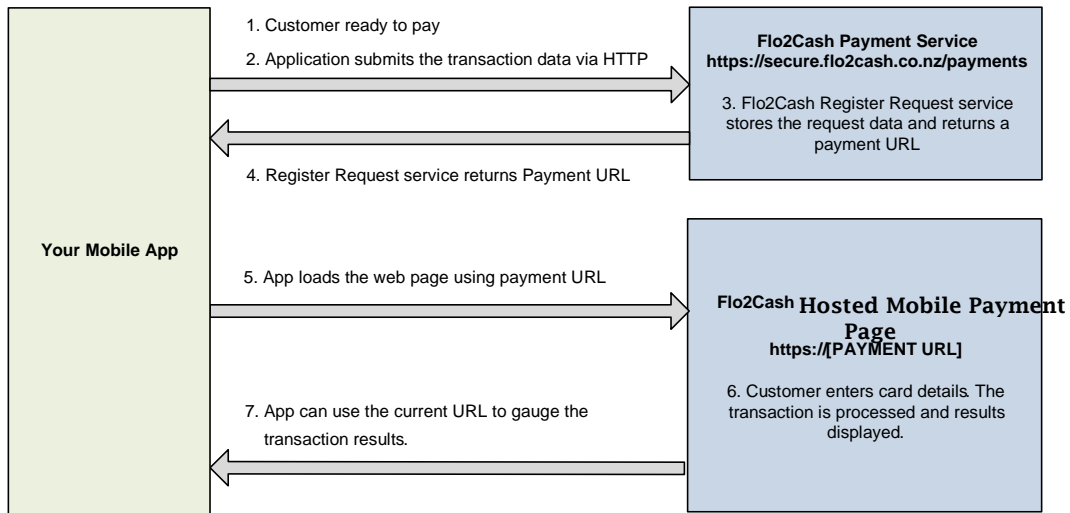
[https://demo.flo2cash.co.nz/payment-service/payment-service/rest/\[MethodName\]](https://demo.flo2cash.co.nz/payment-service/payment-service/rest/[MethodName])

Making a payment

How it works

Making a payment via Flo2Cash Mobile Gateway from your mobile App is simple. The steps and diagram below highlights the customer experience and relevant components that you need to interact with to make a card payment from within your mobile App.

1. In your mobile application, the customer is ready to pay and clicks on the pay button.
2. Your mobile application will send the transaction data via HTTP over SSL to the Flo2Cash Payment Service to register the payment request.
3. The Flo2Cash Payment Service will receive, validate and process the payment request from your mobile application.
4. Once validated, the Flo2Cash Payment Service will return a "payment URL", specifically generated for your payment request.
5. Your mobile application will use this generated "payment URL" and display it in a "browser object" so to the customer, the experience is consistent and it seems as if the payment screen is part of your mobile application. The payment screen will have your previously loaded payment parameters as specified in the payment request prepopulated.
6. The customer will enter the credit card details on the Flo2Cash Hosted Mobile Payment Page. The credit card transaction is processed in real time by Flo2Cash and payment results are presented to the customer on the Flo2Cash Hosted Mobile Payment Page.
7. The payment results can be retrieved by your mobile application from the URL.



Registering the payment request

The Flo2Cash Payment Service is a REST service that allows your mobile App to register a payment request, which in turn will generate a unique URL which, the application can use to load the Flo2Cash Hosted Mobile Payment Page.

Method name: RegisterW2PMobileRequest

Once the request is received the input will be validated and if correct an Access URL will be returned for accessing the secure payment page. If an error occurs, it will be indicated in the returned URL by error code and description. This request should be sent as a POST web request. All data should be provided in the body of the request formatted as a Query string.

Payment Service RegisterW2PMobileRequest data

These are the Query strings parameters to be used when calling this method.

Name	Description	Required	Data Type	Max Length
username	Your Flo2Cash Client ID	Y	String	50
password	Your Flo2Cash Payment Web Service Password	Y	String	50
account_id	Your Flo2Cash Account ID	Y	Integer	
amount	Amount of the payment. 12.54 for twelve dollars and fifty four cents	Y	Decimal	
merch_txn_ref	Unique transaction identifier set by you. We recommend you always use something unique such as your unique order ID or Session ID so you can identify the transaction when an error occurs.	Y	String	50
reference	Merchant defined reference string to be stored with the transaction	N	String	50
particular	Merchant defined particular string to be stored with the transaction	N	String	50
display_customer_email	Whether the email textbox should be displayed on the payment page. The default is true.	N	Integer	1

device_id	Unique ID of the mobile device sending the request. If you aren't able to obtain the device ID of the mobile device, we recommend that you use a logical ID that would differentiate the user from other users of your App, such as a user ID.	Y	String	50
latitude	Global position – latitude	N	String	50
longitude	Global position – longitude	N	String	50

Example:

POST to:

<https://secure.flo2cash.co.nz/paymentservice/paymentservice/rest/RegisterW2PMobileRequest>

Data:

account_id=620000username=myname&password=myspassword&amount=10.25&merch_txn_ref=99434743-ebf5-4cc8-8a0cd0e531a3d0e2&reference=Ref 001&particular=Part 001& display_customer_email=0&device_id=35161900223077-1& latitude=&longitude=&

Please note data passed to the service as a URI's Query String so if a parameter contains URL punctuation characters it must be URL-Encoded Example for particular=Part&001 and reference=Ref?001:

POST to:

<https://secure.flo2cash.co.nz/paymentservice/paymentservice/rest/RegisterW2PMobileRequest>

Request Data:

account_id=620021&amount=1&merch_txn_ref=04c628746d8c4e1183ceae2543cd6e45&reference=Ref%3f001&particular=Part%26001&display_customer_email=&device_id=35161900223077-1& latitude=40&longitude=90

Payment Service result

Result	Description
URL on Success	https://< web2paybaseurl >?cmd=_xmobile&request=<requestdata>
URL on Failure	https://<errorurl>?error_code=<code>&error_description=<description>

The default failure base URL is "http://flo2cash.mob/error"

Payment Service result parameters on success

Name	Description	Data Type
cmd	_xmobile	String
request	Encrypted request data	String

The Payment URL returned will be wrapped in an XML element called "string". You will need to extract the Payment URL out and XML Decode the URL before you pass it to your "browser object".

Example: <string

xmlns="http://schemas.microsoft.com/2003/10/Serialization/">https://secure.flo2cash.co.nz/web2pay/default.aspx?cmd=_x mobile&request=[encrypted requested data goes here]</string>

Payment Service result parameters on failure

Name	Description	Data Type
error_code	Error code	String
error_description	Error description	String
merch_txn_ref	Unique transaction identifier set by the merchant.	String

Payment Service errors

Error code	Error description
-1	Unspecified Error - Contact Flo2Cash
3000	Authentication error. Username and/or Password are incorrect
3001	Authentication error. Service restricted or unavailable
5000	Payment Flo2Cash Account ID is invalid
5003	Payment Amount must be positive
5004	Email Address must be a valid email
5020	Invalid or empty Merchant Transaction Reference
5021	Invalid or empty device ID
5022	Reference is not valid
5023	Particular is not valid
5024	Notification URL is not valid
5025	Customer Mobile Number is not valid
5026	Invalid Device Description
5029	Invalid Latitude
5030	Invalid Longitude
5031	Invalid Customer Data1
5032	Invalid Customer Data2
5033	Invalid Customer Data3
5034	Invalid Customer Data4
5035	Invalid Customer Data5
5100	Invalid or empty Web2Pay URL

Example: http://flo2cash.mob/error?error_code=5000&error_description=Payment Flo2Cash Account ID is invalid&merch_txn_ref=1e8b5200-cce5-4d35-bbab-5498caaf7b6a

Sending customer to the payment screen

Once an access URL has been generated from the Payment Service (see above), the Flo2Cash Hosted Mobile Payment Page can be invoked by simply loading the URL into a browser. You will use this generated “payment URL” and display it in a “browser object” to the mobile user within your App to achieve the best user experience. This will load up a credit card details input page which will be styled according to the device description provided in the original request with payment parameter prepopulated. The user will enter their card details into the provided form and click on the payment button. After validation of the credit card details the transaction will be processed in real time and the user will be displayed a result page. The result page will include all the transaction results details on the query string so the mobile device can access these. The mobile user also

has the option to enter their email address to dynamically receive an electronic receipt from Flo2Cash as part of the payment experience.

For the best user experience, JavaScript should be enabled on the mobile's "browser object".



Getting payment results

How it works

Payment results from a completed payment can be retrieved from the payment result URL. The payment, once completed will present its processing results in a result page to the mobile user. The URL of this page will carry the payment results in the form of an XML string with parameters of the payments results that can be extracted by your App.



Getting payment results from the Result URL

Result	Description
URL	https://< web2paybaseurl>/MobileDisplayResult.aspx?<txnDetails>
txnDetails format and example	<pre><?xml+version="1.0"+encoding="utf-16"?> <TransactionDetails xmlns:xsi=http://www.w3.org/2001/XMLSchema-instance xmlns:xsd="http://www.w3.org/2001/XMLSchema"> <txn_id>P120400004170628</txn_id> <receipt_no>5000000361</receipt_no> <txn_status>2</txn_status> <account_id>10025</account_id> <reference>Ref?001</reference> <particular>particular field</particular> <card_type>5</card_type> <card_holder_name>test</card_holder_name> <card_number>498765*****8769</card_number> <amount>1</amount> <transaction_date>2012-04-11T11:13:01</transaction_date></pre>
	<pre><blocked_reason /> <merch_txn_ref>deacb74c-c438-44b7-93be-4de54a15b99f</merch_txn_ref> <device_id>35161900223077-1</device_id> <device_description> </device_description> <latitude>-36.00</latitude> <longitude>173.00</longitude> <auth_id>307696</auth_id> <card_expiry>0513</card_expiry> <cust_email></cust_email> </TransactionDetails></pre>

Transaction result parameters explained

Name	Description	Data Type
txn_id	Unique transaction identifier set by the merchant. We recommend using this ID as the unique transaction ID.	String
receipt_no	Unique transaction receipt number generated by Flo2Cash	String
txn_status	0 = Unknown – Transaction result cannot be confirmed i.e. lost connection with the payment switch 1 = Processing – An old status left in for legacy integrations (Ignore) 2 = Successful – Transaction processed successfully and monies were taken from the card 3 = Failed – Transaction has failed to process 4 = Blocked – Transaction was blocked from taking place due to merchant specific rules 11 = Declined – Transaction was processed but declined	Integer
account_id	The Flo2Cash account ID against which, this transaction was processed.	Integer
reference	Merchant defined reference string to be stored with the transaction	String
particular	Merchant defined particular string to be stored with the transaction	String
card_type	The credit card type used for this transaction: 1 = American Express 3 = Diners Club 4 = MasterCard 5 = Visa Card	Integer
card_holder_name	Cardholder name entered by the customer	String
card_number	The masked card number of this transaction.	String

amount	i.e. 12.54 for twelve dollars and fifty-four cents	Decimal
transaction_date	Timestamp of when this transaction was processed.	Datetime
blocked_reason	If the transaction was not processed and blocked by the gateway, this shows the reason for being blocked.	String
merch_txn_ref	Unique transaction identifier set by you when registering the payment request.	String
device_id	Unique ID of the device sending the request. This is passed through from the Payment Request.	String
device_description	Obsolete.	String
latitude	Global position – latitude if captured on the Mobile at the time of the transaction.	String
longitude	Global position – longitude if captured on the Mobile at the time of the transaction.	String
auth_id	The Authorisation ID returned by the card network for the transaction.	String
card_expiry	Card expiry of the card used - MMY.	String
cust_email	This is obsolete.	String

Flo2Cash Hosted Mobile Payment Page Error Pages

Result

Result	Description
URL	https://< web2paybaseurl>/MobileSessionExpired.aspx?<querystring>
URL	https://< web2paybaseurl>/MobileError.aspx?<querystring>
URL	https://< web2paybaseurl>/MobileErrorInvalidData.aspx?<querystring>

Querystring Parameters

Name	Description	Data Type
error_description	Detailed description of the error encountered	String
merch_txn_ref	Unique transaction reference set by the you when registering the payment request.	String