freedomPAY

Payment Gateway Integration
Technical Specification

Table of Contents

1.	PAYMENT GATEWAY		3
	1.1	Accessing Payment Gateway	3
	1.2	MERCHANT TOKEN OBJECT	3
	1.3	ENCRYPTING MERCHANT TOKEN OBJECT	4
	1.4	FINALISING PURCHASE	4

1. PAYMENT GATEWAY

1.1 Accessing Payment Gateway

To access the Payment Gateway, route to one of the following URLS:

UAT:

https://freedom-pay-uat.finpower.com.au/portal/purchase?merchantId=&merchantToken=

PRODUCTION (TBC):

https://freedom-pay.finpower.com.au/portal/purchase?merchantId=&merchantToken=

It is the retailer's discretion as to how the Payment Gateway will be opened from their website i.e. an iframe, or child window.

The URL parameters merchantId and merchantToken are required when routing to the Payment Gateway. Each merchant will be provided with a unique Merchant Id; defined by finPOWER, to provide as a URL parameter. Providing an incorrect Merchant Id, Merchant Token, or not including both URL parameters will result in the purchase failing.

1.2 MERCHANT TOKEN OBJECT

The Merchant Token Object will be made up of an Amount, a Merchant Reference, and a Merchant Name. This object will be <u>encrypted</u> and passed through to the Payment Gateway as URL parameter.

```
{
    "Amount": 250.00,
    "MerchantReference": "ABC123",
    "MerchantName": "finPOWER"
}
```

Amount:

The purchase amount of the transaction.

MerchantReference:

The merchant's internal reference for the transaction. This will be displayed on the customers' portal against the purchase.

MerchantName:

The merchant's name. This will be displayed on the customers' portal against the purchase.

1.3 ENCRYPTING MERCHANT TOKEN OBJECT

Each merchant will be provided with a unique public key used for encryption, formatted as an XML string.

To ensure the Merchant Token can be decrypted, the following encryption steps must be adhered to:

- 1. Convert the Merchant Token Object into a JSON string, encoded to UTF-8 bytes.
- 2. Encrypt the JSON string with the RSA algorithm using PKCS#1 v1.5 padding.
- 3. Convert the encrypted JSON string to a base64 string.
- 4. Encode the base64 string to a URI safe format (ASCII).

1.4 Finalising Purchase

Once a purchase has been made, the Payment Gateway will POST the result as a JSON message back to the parent window:

```
{
    "outcome": "success" / "failure",
    "accountId": "L10000" / ""
}
```

Outcome - "success":

The payment was accepted, and the window can be closed.

Outcome - "failure":

The payment failed, and the window can be closed.

AccountId:

If purchase was successful, the unique Account Id stored within finPOWER as reference to the purchase, otherwise blank.

It is the parent window's responsibility to close/hide the Payment Gateway. The Payment Gateway will continue to POST the JSON message every 10 seconds until closed/hidden.