



Merchant Warrior - API Documentation

Version 1.1
Date: 2017-12-19

Table of Contents

Table of Contents	2
Introduction	6
Direct API	7
processCard	7
Request-Parameters	7
API Method	7
Authentication Parameters	7
General Transaction Parameters	8
3DS Parameters	8
Customer Parameters	8
Payment Parameters	9
Custom Parameters	10
Verification Hash	10
processAuth	10
Request-Parameters	10
API Method	10
Authentication Parameters	11
General Transaction Parameters	11
3DS Parameters	11
Customer Parameters	11
Payment Parameters	12
Custom Parameters	13
Verification Hash	13
processCapture	13
Request-Parameters	13
API Method	13
Authentication Parameters	14
General Transaction Parameters	14
Capture Parameters	14
Verification Hash	14
processBatch	14
Request-Parameters	15
API Method	15
Authentication Parameters	15
General Batch Parameters	15
Batch File Parameters	15
Verification Hash	16
retrieveBatch	16
Request-Parameters	16
API Method	16
Authentication Parameters	16
General Batch Parameters	16
Verification Hash	16
refundCard	17
Request-Parameters	17
API Method	17
Authentication Parameters	17
General Transaction Parameters	17
Refund Parameters	17
Verification Hash	18
queryCard	18
Request-Parameters	18
API Method	18
Authentication Parameters	18
Query Parameters	18
Verification Hash	18
processDDebit	19
Request-Parameters	19
API Method	19
Authentication Parameters	19
General Transaction Parameters	19
Customer Parameters	20
Payment Parameters	21
Custom Parameters	21
Verification Hash	22
queryDD	22
Request-Parameters	22
API Method	22

Authentication Parameters	22
Query Parameters	22
Verification Hash	23
queryBIN	23
Request-Parameters	23
API Method	23
Authentication Parameters	23
Query Parameters	23
Verification Hash	24
getSettlement	24
Request-Parameters	24
API Method	24
Authentication Parameters	24
Query Parameters	24
Verification Hash	25
MWPAY.Link	26
Generate PayLink	26
Request-Parameters	26
Authentication Parameters	26
General Transaction Parameters	26
Customer Parameters	27
Redirect and Notification Parameters	28
Custom Parameters	28
Verification Hash	28
Token Payments	29
addCard	30
Request-Parameters	30
API Method	30
Authentication Parameters	30
Cardholder Data	30
Global Vault Parameters	30
removeCard	31
Request-Parameters	31
API Method	31
Authentication Parameters	31
Cardholder Data	31
Global Vault Parameters	31
cardInfo	32
Request-Parameters	32
API Method	32
Authentication Parameters	32
Cardholder Data	32
changeExpiry	33
Request-Parameters	33
API Method	33
Authentication Parameters	33
Cardholder Data	33
checkCardChange	33
Request-Parameters	33
API Method	33
Authentication Parameters	34
Global Vault Parameters	34
checkEmail	34
Request-Parameters	34
API Method	34
Authentication Parameters	34
Global Vault Parameters	34
checkContact	35
Request-Parameters	35
API Method	35
Authentication Parameters	35
Global Vault Parameters	35
retrieveCard	35
Request-Parameters	36
API Method	36
Authentication Parameters	36
Global Vault Parameters	36
updateContact	36
Request-Parameters	36
API Method	36

Authentication Parameters	36
Global Vault Parameters	36
processCard	37
Request-Parameters	37
API Method	37
Authentication Parameters	37
General Transaction Parameters	37
Customer Parameters	38
Payment Parameters	39
Custom Parameters	40
Verification Hash	40
processAuth	40
Method Endpoint	41
Request-Parameters	41
API Method	41
Authentication Parameters	41
General Transaction Parameters	41
Customer Parameters	42
Payment Parameters	42
Custom Parameters	43
Verification Hash	43
Hosted Payments	44
processCard	44
Request-Parameters	44
API Method	44
Authentication Parameters	44
General Transaction Parameters	45
Customer Parameters	45
Redirect and Notification Parameters	45
Custom Parameters	46
Verification Hash	46
processDDebitAuth	46
Request-Parameters	46
API Method	46
Authentication Parameters	47
Customer Parameters	47
Payment Account Details	47
Verification Hash	48
Redirect and Notification Parameters	48
Customization Parameters	48
Transparent Redirect	50
getAccessToken	50
Request-Parameters	50
API Method	50
Authentication Parameters	50
Verification Hash Parameters	51
processCard	51
Request-Parameters	51
API Method	51
Authentication Parameters	51
General Transaction Parameters	51
Redirect and Notification Parameters	52
Customer Parameters	52
Payment Parameters	53
Global Vault Parameters	54
Custom Parameters	54
Verification Hash	54
processAuth	55
Request-Parameters	55
API Method	55
Authentication Parameters	55
General Transaction Parameters	55
Redirect and Notification Parameters	56
Customer Parameters	56
Payment Parameters	57
Global Vault Parameters	58
Custom Parameters	58
Verification Hash	58
addCard	59
Request-Parameters	59
Authentication Parameters	59

Cardholder Data	59
Global Vault Parameters	59
Redirect and Notification Parameters	60
Custom Parameters	60
Verification Hash	60
Transparent iFrame	62
getAccessToken	63
Request-Parameters	63
API Method	63
Authentication Parameters	63
Verification Hash Parameters	63
processCard	63
Request-Parameters	63
API Method	63
Authentication Parameters	64
General Transaction Parameters	64
Redirect and Notification Parameters	64
Customer Parameters	65
Payment Parameters	66
Custom Parameters	66
Verification Hash	67
Customization Parameters	67
processAuth	67
Request-Parameters	67
API Method	67
Authentication Parameters	67
General Transaction Parameters	68
Redirect and Notification Parameters	68
Customer Parameters	68
Payment Parameters	69
Custom Parameters	69
Verification Hash	70
Customization Parameters	70
addCard	70
Request-Parameters	70
Authentication Parameters	70
Global Vault Parameters	70
Payment Parameters	71
Redirect and Notification Parameters	71
Custom Parameters	71
Customization Parameters	71
Verification Hash	72
Handling a Postmessage	73
Hash Generation	74
Transaction Type Hash	74
Query Type Hash	74
Custom Fields Verification Hash	74
Batch File Hash	74
Batch URL Hash	75
Batch Response Hash	75
Web URL Hash	75
302 Redirect and Post Notification Verification Hash	75
BIN Hash	75
Settlement Hash	76
Test Credit Cards	77
302 Redirect	79
Response Codes	82
Transaction responseCode	82
Token responseCode	82
Transaction responseMessage	83
Developer FAQ	85

Introduction

Merchant Warrior (MW) is an Australian based payment provider that offers a range of online payment solutions to Merchants worldwide.

MW is a Tier 1 PCI DSS certified provider. This qualification is obtained annually, after an independent audit carried out by a certified QSA and QPSAC.

This information has been provided to assist with the integration and implementation of services to the MW platform.

Production API Endpoint

```
https://api.merchantwarrior.com/post/
```

Sandbox API Endpoint

```
https://base.merchantwarrior.com/post/
```

i Replace snippets below with your merchantUUID, apiKey and correct hash.

Direct API

The following sub-sections will outline the various API methods present in the **Merchant Warrior Direct API**.

Introduction

The Direct API provides you with a single integration point for processing to your Acquirer(s).

You will need to obtain a Merchant UUID, API Key and API passphrase in order to connect to the Direct API. These details will be issued to you when you create your MW account.

Request Format

API requests are submitted to the Direct API service using **POST**, and must be performed over **HTTPS**.

i It is important to note that as of **PCI DSS v3.2** it is recommended to submit requests using a secure version of **TLS** (currently v1.1 or higher). As of the 30th of June 2018 the MW platform will no longer accept requests via **SSL** and/or **TLS v1.0**.

Available Methods

The Direct API service consists of the following methods:

- **processCard**: Performs a purchase transaction on a customer's credit card
- **processAuth**: Performs a pre-authorization on a customer's credit card
- **processCapture**: Performs a capture request
- **processBatch**: Submits a batch file for processing
- **retrieveBatch**: Retrieves the batch status or processed batch file result
- **refundCard**: Performs a refund request
- **queryCard**: Queries previous credit card transactions
- **processDDdebit**: Performs a direct debit transaction on a customer's bank account
- **queryDD**: Queries previous direct debit transactions
- **queryBIN**: Queries a Bank Identification Number (BIN)
- **getSettlement**: Returns a list of settled transactions
- **checkEnrollment**: Check if a card is participating 3DS scheme and initiate a 3DS authentication.
- **checkPAREs**: Check the result of a 3DS authentication.

processCard

The processCard method is the method used to perform a purchase request.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>processCard</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 123456789abcd
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 1a3b5c

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. Example: 10.00
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: AUD
transactionProduct	Required	A product (or sale) id or description. We recommend using an order/product id. This field's primary purpose is to help the transaction be identifiable for reporting and accounting purposes. Example: ABC4321 Valid length: Up to 255 characters. Some Acquirers limit this field to 40 characters.
transactionReferenceID	Not Required	This is a merchant's unique reference ID for a transaction sent to Merchant Warrior. The main purpose of this ID is to verify the transaction via the queryCard method in the event a valid response is not received. Example: A257240023321 Valid length: Up to 40 characters

3DS Parameters

Parameter	Required	Description
threeDSToken	Not Required	This parameter is used to indicate if a transaction has been authenticated. Its value is returned by checkPAREs method.

Customer Parameters

Parameter	Required	Description
customerName	Required	This field can only contain alphanumeric characters, as well as the full stop, comma, apostrophe, ampersand, space and hyphen characters. Example: <i>Mr. Example Person</i> Valid length: Between 2 and 255 characters
customerCountry	Required	Two letter ISO 3166-1 alpha-2 country code. Example: <i>AU</i> Valid length: 2 characters
customerState	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Queensland</i> Valid length: Up to 75 characters
customerCity	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Brisbane</i> Valid length: Up to 75 characters
customerAddress	Required	Freeform field. Example: <i>123 Test Street</i> Valid length: Up to 255 characters
customerPostCode	Required	This can also accommodate ZIP/Post codes for international transactions. Example: <i>4000</i> Valid length: Between 4 and 10 characters
customerPhone	Not Required	Anything other than +,-, space and 0-9 will be stripped. Example: <i>0401234567</i> or <i>61731234567</i> Valid length: Up to 25 characters
customerEmail	Not Required	Must be valid if present. Sending this optional parameter is highly recommended. Example: <i>person@example.com</i> Valid length: Up to 255 characters
customerIP	Not Required	Any valid IPv4 or IPv6 address is accepted. Sending this optional parameter is highly recommended. Example: <i>123.456.789.012</i> or <i>2001:0db8:85a3:0000:0000:8a2e:0370:7334</i> Valid length: Up to 39 characters
storeID	Not Required	The value of this field is the merchant's store name. Please note that you need to contact Merchant Warrior to enable the storeID feature before you can use this parameter. Example: <i>Test store name</i>

Payment Parameters

Parameter	Required	Description
paymentCardNumber	Required	Only certain card numbers are deemed valid in the test environment. See Test Data for more information. Do not send separators with the card number (e.g. 1234-5678... or 1234 5678). Example: 5123456789012346 or 4557012345678902 Valid length: Between 13 and 16 digits
paymentCardExpiry	Required	This must be MMY format. The month must be zero padded if it is less than 10. Example: 0513 Valid length: 4 digits
paymentCardName	Required	This must contain at the very least a space and no less than two characters. Only alphanumeric characters, hyphens, spaces and full stops are allowed. Example: Mr. Example Person or MR E PERSON or Example Person Valid length: Between 3 and 255 characters
paymentCardCSC	Not Required	This is also known as the CVN or CVV/2. This is required by some Acquirers if the transaction is initiated by the customer. Please contact Merchant Warrior for more information. Example: 123 Valid length: Between 3 and 4 characters

Custom Parameters

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: e9ddc296b76b3398934bfc06239073df Valid length: 32 characters

processAuth

The processAuth method is used to perform a pre-authorization request.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>processAuth</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. Example: <i>10.00</i>
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: <i>AUD</i>
transactionProduct	Required	A product (or sale) id or description. We recommend using an order/product id. This field's primary purpose is to help the transaction be identifiable for reporting and accounting purposes. Example: <i>ABC4321</i> Valid length: Up to 255 characters. Some Acquirers limit this field to 40 characters.
transactionReferenceID	Not Required	This is a merchant's unique reference ID for a transaction sent to Merchant Warrior. The main purpose of this ID is to verify the transaction via the queryCard method in the event a valid response is not received. Example: <i>A257240023321</i> Valid length: Up to 40 characters

3DS Parameters

Parameter	Required	Description
threeDSToken	Not Required	This parameter is used to indicate if a transaction has been authenticated. Its value is returned by checkPAREs method.

Customer Parameters

Parameter	Required	Description
customerName	Required	This field can only contain alphanumeric characters, as well as the full stop, comma, apostrophe, ampersand, space and hyphen characters. Example: <i>Mr. Example Person</i> Valid length: Between 2 and 255 characters
customerCountry	Required	Two letter ISO 3166-1 alpha-2 country code. Example: <i>AU</i> Valid length: 2 characters
customerState	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Queensland</i> Valid length: Up to 75 characters
customerCity	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Brisbane</i> Valid length: Up to 75 characters
customerAddress	Required	Freeform field. Example: <i>123 Test Street</i> Valid length: Up to 255 characters
customerPostCode	Required	This can also accommodate ZIP/Post codes for international transactions. Example: <i>4000</i> Valid length: Between 4 and 10 characters
customerPhone	Not Required	Anything other than +,-, space and 0-9 will be stripped. Example: <i>0401234567</i> or <i>61731234567</i> Valid length: Up to 25 characters
customerEmail	Not Required	Sending this optional parameter is highly recommended. Example: <i>person@example.com</i> Valid length: Up to 255 characters
customerIP	Not Required	Any valid IPv4 or IPv6 address is accepted. Sending this optional parameter is highly recommended. Example: <i>123.456.789.012</i> or <i>2001:0db8:85a3:0000:0000:8a2e:0370:7334</i> Valid length: Up to 39 characters
storeID	Not Required	The value of this field is the merchant's store name. Please note that you need to contact Merchant Warrior to enable the storeID feature before you can use this parameter. Example: <i>Test store name</i>

Payment Parameters

Parameter	Required	Description
paymentCardNumber	Required	Only certain card numbers are deemed valid in the test environment. See Test Data for more information. Do not send separators with the card number (e.g. 1234-5678... or 1234 5678). Example: 5123456789012346 or 4557012345678902 Valid length: Between 13 and 16 digits
paymentCardExpiry	Required	This must be MMY format. The month must be zero padded if it is less than 10. Example: 0513 Valid length: 4 digits
paymentCardName	Required	This must contain at the very least a space and no less than two characters. Only alphanumeric characters, hyphens, spaces and full stops are allowed. Example: Mr. Example Person or MR E PERSON or Example Person Valid length: Between 3 and 255 characters
paymentCardCSC	Not Required	This is also known as the CVN or CVV/2. This is required by some Acquirers if the transaction is initiated by the customer. Please contact Merchant Warrior for more information. Example: 123 Valid length: Between 3 and 4 characters

Custom Parameters

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: e9ddc296b76b3398934bfc06239073df Valid length: 32 characters

processCapture

The processCapture method is used to perform a capture request.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>processCapture</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	This amount must be the exact amount submitted with the initial transaction. This is used in the verification hash, and is not the amount that will be refunded. Example: <i>10.00</i>
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: <i>AUD</i>

Capture Parameters

Parameter	Required	Description
transactionID	Required	The <code><transactionID></code> is provided to you by Merchant Warrior after an initial pre-authorization (<code>processAuth</code>) transaction. Example: <i>1-a1c340c8-7c30-11de-8888-000c29753ad4</i>
transactionReferenceID	Not Required	This is a merchant's unique reference ID for a transaction sent to Merchant Warrior. The main purpose of this ID is to verify the transaction via the <code>queryCard</code> method in the event a valid response is not received. Example: <i>A257240023321</i> Valid length: Up to 40 characters
captureAmount	Required	The amount is in the same format as <code>transactionAmount</code> . It cannot be less than 0.01 or more than the initial transaction amount. Example: <i>10.00</i>

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: <i>e9ddc296b76b3398934bfc06239073df</i> Valid length: 32 characters

The processBatch method enables merchants to securely automate the processing of batch files containing credit card, token transaction data or bank accounts. This method accepts and processes compressed .csv files directly via the Direct API and should be implemented when automating a large number of transactions is a requirement.

The processBatch method will process a batch file and automatically issue a notification via POST to the merchant's application when the batch file has completed processing. The batch response file (containing the results to all transactions processed via the original batch file) can be sent (and compressed) with the POST notification if requested by the merchant.

Sample process and response batch files can be found at the [Sample Files](#) section.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>processBatch</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

General Batch Parameters

Parameter	Required	Description
batchNotifyURL	Required	Asynchronous POST notifications will be sent to this URL. Example: <i>https://www.example.com/notify.php</i>
batchResponseFileAttach	Not Required	The value is a boolean to denote whether a response file should be attached with the asynchronous POST notifications. Example: <i>1</i>
batchResponseFileCompress	Not Required	The value is a boolean to denote whether the response file should be compressed (.zip). Example: <i>1</i>

Batch File Parameters

Parameter	Required	Description
batchFile	Required	The batch file must be in CSV format (.csv) and compressed (.zip). Example: <i>Batch.zip</i>
fileHash	Required	The hash of the batch file. See Batch File Hash for information on how to construct the hash correctly. Example: <i>e9ddc296b76b3398934bfc06239073df</i> Valid length: 32 characters

Verification Hash

Parameter	Required	Description
urlHash	Required	The hash of the batchNotifyURL. See Batch URL Hash for information on how to construct the hash correctly. Example: <i>511999e54b9ad51ce4c28d7f0550ac81</i> Valid length: 32 characters

retrieveBatch

The retrieveBatch method is the method used to retrieve the results of a batch file that has been processed via the processBatch method (see above). This method returns a .csv or .zip (depending on whether the merchant requested a compressed response file) file containing the results of all transactions submitted in the original batch file.

Sample process and response batch files can be found at the [Sample Files](#) section

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>retrieveBatch</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

General Batch Parameters

Parameter	Required	Description
batchUUID	Required	The value of this parameter is assigned to you by Merchant Warrior for every processBatch request. Example: <i>14dc3311444adc</i>

Verification Hash

Parameter	Required	Description
hash	Required	The hash of the batchUUID. See Batch Response Hash for information on how to construct the hash correctly. Example: <i>e9ddc296b76b3398934bfc06239073df</i> Valid length: 32 characters

refundCard

The refundCard method is used to perform a refund of an existing purchase or capture transaction.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>refundCard</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	This amount must be the exact amount submitted with the initial transaction. This is used in the verification hash, and is not the amount that will be refunded. Example: <i>10.00</i>
transactionCurrency	Required	The currency must match the one submitted with the initial transaction. This is used in the verification hash. Example: <i>AUD</i>
storeID	Not Required	The value of this field is the merchant's store name. Please note that you need to contact Merchant Warrior to enable the storeID feature before you can use this parameter. Example: <i>Test store name</i>

Refund Parameters

Parameter	Required	Description
transactionID	Required	The <code><transactionID></code> returned for the initial transaction. Example: <i>1-a1c340c8-7c30-11de-8888-000c29753ad4</i>
transactionReferenceID	Not Required	This is a merchant's unique reference ID for a transaction sent to Merchant Warrior. The main purpose of this ID is to verify the transaction via the queryCard method in the event a valid response is not received. Example: <i>A257240023321</i> Valid length: Up to 40 characters
refundAmount	Required	The amount is in the same format as transactionAmount. It cannot be less than 0.01 or more than the initial transaction amount. Example: <i>10.00</i>

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: <i>e9ddc296b76b3398934bfc06239073df</i> Valid length: 32 characters

queryCard

The queryCard method is used to perform a query of an existing transaction. If you lose the original response, never receive a response, or if you wish to verify a response, you can use this method.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>queryCard</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

Query Parameters

Parameter	Required	Description
transactionID*	Required/ Not Required	The <code><transactionID></code> returned for the initial transaction. Example: <i>1-a1c340c8-7c30-11de-8888-000c29753ad4</i>
transactionReferenceID*	Required/ Not Required	The <code><transactionReferenceID></code> sent for the initial transaction. This is a merchant's reference ID for a transaction request sent to Merchant Warrior. Example: <i>A257240023321</i>
extended	Not Required	Returns additional information stored with the transaction. This must be in boolean format. Example: <i>1</i>

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Query Type Hash for information on how to construct the hash correctly. Example: <i>e9ddc296b76b3398934bfc06239073df</i> Valid length: 32 characters

i Only one of the fields transactionID or transactionReferenceID are required for a queryCard API call. If transactionID is set then transactionReferenceID is not required. If transactionReferenceID is set then transactionID is not required.

processDDebit

The processDDebit method is used to perform a [direct debit](#) request to debit funds from an Australian or New Zealand bank account.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>processDDebit</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. Example: 10.00
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: AUD
transactionProduct	Required	A product (or sale) id or description. We recommend using an order/product id. This field's primary purpose is to help the transaction be identifiable for reporting and accounting purposes. Example: ABC4321 Valid length: Up to 255 characters
transactionReferenceID	Not Required	This is a merchant's unique reference ID for a transaction sent to Merchant Warrior. The main purpose of this ID is to verify the transaction via the queryCard method in the event a valid response is not received. Example: A257240023321 Valid length: Up to 40 characters

Customer Parameters

Parameter	Required	Description
customerName	Required	This field can only contain alphanumeric characters, as well as the full stop, comma, aposrophe, ampersand, space and hyphen characters. Example: <i>Mr. Example Person</i> Valid length: Between 2 and 255 characters
customerCountry	Required	Two letter ISO 3166-1 alpha-2 country code. Example: <i>AU</i> Valid length: 2 characters
customerState	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Queensland</i> Valid length: Up to 75 characters
customerCity	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Brisbane</i> Valid length: Up to 75 characters
customerAddress	Required	Freeform field. Example: <i>123 Test Street</i> Valid length: Up to 255 characters
customerPostCode	Required	This can also accomodate ZIP/Post codes for international transactions. Example: <i>4000</i> Valid length: Between 4 and 10 characters
customerPhone	Not Required	Anything other than +,-, space and 0-9 will be stripped. Example: <i>0401234567</i> or <i>61731234567</i> Valid length: Up to 25 characters
customerEmail	Not Required	Sending this optional parameter is highly recommended. Example: <i>person@example.com</i> Valid length: Up to 255 characters
customerIP	Not Required	Any valid IPv4 or IPv6 address is accepted. Sending this optional parameter is highly recommended. Example: <i>123.456.789.012</i> or <i>2001:0db8:85a3:0000:0000:8a2e:0370:7334</i> Valid length: Up to 39 characters
storeID	Not Required	The value of this field is the merchant's store name. Please note that you need to contact Merchant Warrior to enable the storeID feature before you can use this parameter. Example: <i>Test store name</i>

Payment Parameters

Parameter	Required	Description
paymentAccountBSB	Required	This field must contain 6 digits. Example: <i>011123</i> Valid length: 6 digits
paymentAccountNumber	Required	This must be a valid account number. Example: <i>123456789</i> Valid length: 4-10 digits
paymentAccountName	Required	This must contain at the very least a space and no less than two characters. Only alphanumeric characters, hyphens, spaces and full stops are allowed. Example: <i>Mr. Example Person</i> or <i>MR E PERSON</i> or <i>Example Person</i> Valid length: Between 3 and 32 characters

Custom Parameters

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <custom1> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <custom2> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <custom3> in the XML response. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: <i>e9ddc296b76b3398934bfc06239073df</i> Valid length: 32 characters

queryDD

The queryDD method is the method used to perform a query of an existing direct debit transaction. If you wish to verify the status of a transaction or lost the original response or never receive a response, you can use this method. This method will query the internal MW records and return the available stored data for the transaction.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>queryDD</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

Query Parameters

Parameter	Required	Description
transactionID*	Required/ Not Required	The <transactionID> returned for the initial transaction. Example: 1-a1c340c8-7c30-11de-8888-000c29753ad4
transactionReferenceID*	Required/ Not Required	The <transactionReferenceID> sent for the initial transaction. This is a merchant's reference ID for a transaction request sent to Merchant Warrior. Example: A257240023321
extended	Not Required	Returns additional information stored with the transaction. This must be in boolean format. Example: 1

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Query Type Hash for information on how to construct the hash correctly. Example: e9ddc296b76b3398934bfc06239073df Valid length: 32 characters

i Only one of the fields transactionID or transactionReferenceID are required for a queryCard API call. If transactionID is set then transactionReferenceID is not required. If transactionReferenceID is set then transactionID is not required.

queryBIN

The queryBIN method is used to determine the banking information (Bank Name, Card Type, Card Country etc) related to a credit/debit card's Bank Identification Number (BIN).

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: queryBIN

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 123456789abcd
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 1a3b5c

Query Parameters

Parameter	Required	Description
bin	Required	The six digit BIN of the credit/debit card. Example: 512346

Verification Hash

Parameter	Required	Description
binHash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See BIN Hash for information on how to construct the hash correctly. Example: e9ddc296b76b3398934bfc06239073df Valid length: 32 characters

i The sandbox environment will always return testing BIN information. Accurate BIN information is available in the production environment.

getSettlement

The getSettlement method will return a compressedZip archive that contains a CSV file with a list of transactions that have settled between the dates specified in the request.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: getSettlement

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 123456789abcd
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 1a3b5c

Query Parameters

Parameter	Required	Description
settlementFrom	Required	The settlement start range date. This parameter cannot be greater than the <i>settlementTo</i> parameter. Example: 2017-05-01
settlementTo	Required	The settlement end range date. The parameter cannot be a future date. The maximum value for this parameter is today's date. Example: 2017-05-02

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Settlement Type Hash for information on how to construct the hash correctly. Example: <i>f7a04ace7b0c5bf8f24a49bfc73d3805</i> Valid length: 32 characters

i The dates specified in *settlementFrom* and *settlementTo* are inclusive and the maximum range that can be queried is 7 days. For example, from 2017-05-01 to 2017-05-07 will return all transactions settled for 7 days from the 1st until the 7th.

MWPAY.Link

The following sub-sections will outline information in relation to the **Merchant Warrior PAY.Link service**.

Introduction

The Merchant Warrior MWPAY.Link service enables you to generate a unique payment link that when accessed will allow your customer to complete a payment via a secure [Hosted Payment Page](#).

Each MWPAY.Link that is generated will have a unique code attached to it. You can also link your own internal Reference ID to a unique code in order to reconcile transactions that take place via a unique payment link. The MWPAY.Link service can also notify your systems in real-time after a customer has completed a payment.

MWPAY.Link URLs are useful for scenarios such as sending bills via email and/or SMS, e-invoices, donations etc.

You will need to obtain a Merchant UUID, API Key and API passphrase in order to use this feature. These details will be issued to you when you create your MW account.

Request Format

API requests are submitted to this service using [POST](#), and must be performed over [HTTPS](#).

i It is important to note that as of [PCI DSS v3.2](#) it is recommended to submit requests using a secure version of [TLS](#) (currently v1.1 or higher). As of the 30th of June 2018 the MW platform will no longer accept requests via [SSL](#) and/or [TLS v1.0](#).

Generate PayLink

The request parameters below detail how to generate a unique payment link. Each payment link will have a uniqueCode associated with it.

Request-Parameters

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. Example: 10.00
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: AUD
transactionProduct	Required	A product (or sale) id or description. We recommend using an order/product id. This field's primary purpose is to help the transaction be identifiable for reporting and accounting purposes. Example: ABC4321 Valid length: Up to 255 characters. Some Acquirers limit this field to 40 characters.
linkReferenceID	Not Required	This is a merchant's unique reference ID that can be used to match a uniqueCode with a merchant's internal reference ID. Example: A257240023321 Valid length: Up to 40 characters
expiry	Not Required	The expiration of the unique payment link. This paramater should be formatted as a DateTime (yyyy-mm-dd hh:mm:ss). By default the unique payment link will expire after 7 days. Example: 2017-05-01 17:45:12

Customer Parameters

Parameter	Required	Description
customerName	Not Required	This field can only contain alphanumeric characters, as well as the full stop, comma, apostrophe, ampersand, space and hyphen characters. Example: Mr. Example Person Valid length: Between 2 and 255 characters
customerCountry	Not Required	Two letter ISO 3166-1 alpha-2 country code. Example: AU Valid length: 2 characters
customerState	Not Required	Freeform field, keep consistent for your records and reporting. Example: Queensland Valid length: Up to 75 characters
customerCity	Not Required	Freeform field, keep consistent for your records and reporting. Example: Brisbane Valid length: Up to 75 characters
customerAddress	Not Required	Freeform field. Example: 123 Test Street Valid length: Up to 255 characters
customerPostCode	Not Required	This can also accomodate ZIP/Post codes for international transactions. Example: 4000 Valid length: Between 4 and 10 characters
customerPhone	Not Required	Anything other than +,-, space and 0-9 will be stripped. Example: 0401234567 or 61731234567 Valid length: Up to 25 characters
customerEmail	Not Required	Must be valid if present. Sending this optional parameter is highly recommended. Example: person@example.com Valid length: Up to 255 characters

Redirect and Notification Parameters

Parameter	Required	Description
returnURL*	Required	The customer will be redirected to this URL upon completion of the transaction. This parameter can also be hardcoded via the merchant administration interface. Example: https://www.example.com/return.php
notifyURL*	Required	Asynchronous POST notifications will be sent to this URL. This parameter can also be hardcoded via the merchant administration interface. Example: https://www.example.com/notify.php
urlHash*	Required	The urlHash field is a combination of your API Passphrase, and specific parameters sent in the transaction. It must be specified if you specify either returnURL or notifyURL. See Web URL Hash for information on how to construct the hash correctly. Example: <code>511999e54b9ad51ce4c28d7f0550ac81</code> Valid Length: 32 characters

i The Redirect and Notification Parameters above, are only required in your API request if you have not specifically set the MWPAY.Link Return URL and Notify URL settings in the merchant administration interface. If you plan on having different returnURL's and notifyURL's for different links then we recommend leaving the MWPAY.Link Return URL and Notify URL empty in the merchant administration interface, and setting them here via your API request.

Custom Parameters

Parameter	Required	Description
custom1	Not Required	Freeform field. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: <code>e9ddc296b76b3398934bfc06239073df</code> Valid length: 32 characters

Production API Endpoint

```
https://api.merchantwarrior.com/token/
```

Sandbox API Endpoint

```
https://base.merchantwarrior.com/token/
```

Token Payments

The following sub-sections will outline the various API methods present in the **Merchant Warrior Token Payments** service.

Introduction

Token Payments allows merchants to perform subsequent transactions for a customer without the customer sending their cardholder data to the MW platform more than once. Implementing this feature can reduce PCI DSS scope significantly as merchants are not required to store customer cardholder (PAN) data.

Global Vault

The Merchant Warrior Global Vault stores tokens in a globally accessible Vault. This feature enables merchants to gain access to customer tokens without requiring the customer (if they have registered cards in the Global Vault) to enter their credit card details into the merchant's website. The Merchant Warrior Global Vault links a customer's email address and cell number to their credit card(s).

A merchant can request access to a customer's token(s) by providing their email address to the Merchant Warrior Global Vault service. The customer's token(s) are only provided to the merchant after the customer grants access to the merchant by completing a 2FA step via email or SMS technologies.

Key Management

As the Token Payments solution enables merchants to store encryption keys the following key management principles must be taken into consideration:

- Strong encryption keys should be generated (pseudo-random data of high entropy)
- Encryption keys must only be transmitted via a Secure Socket Layer (SSL) encrypted tunnel
- Encryption keys must be stored securely, only accessible by necessary staff and applications
- Staff with access to encryption keys should acknowledge (in writing or electronically) that they understand and accept their key-custodian responsibilities

Further information regarding key management procedures is made available by NIST -

http://csrc.nist.gov/groups/ST/key_mgmt/

Request Format

API requests are submitted to the Token Payments service using **POST**, and must be performed over **HTTPS**.

! It is important to note that as of **PCI DSS v3.2** it is recommended to submit requests using a secure version of **TLS** (currently v1.1 or higher). As of the 30th of June 2018 the MW platform will no longer accept requests via **SSL** and/or **TLS v1.0**.

Available Methods

The Token Payments service consists of the following methods:

- **addCard**: Adds a card to the Local or Global Vault
- **removeCard**: Removes a card from the Local or Global Vault
- **cardInfo**: Returns information on the stored card (name, expiry, etc)
- **changeExpiry**: Changes the expiry date on an existing card stored in the Local or Global Vault
- **checkCardChange**: Checks the Global Vault for any changes that may have occurred for a registered email in the Global Vault (eg. addition of a new card or removal of an old card)
- **checkEmail**: Checks the email registered in the Global Vault and requests a verification code to be sent to the

customer either to retrieve or remove card(s)

- **checkContact**: Checks the mobile contact registered for an email in the Global Vault and requests a verification code to be sent to the customer for updateContact method
- **retrieveCard**: Retrieves card(s) registered to an email from the Global Vault
- **updateContact**: Updates customer's mobile contact in the Global Vault
- **processCard**: Performs a purchase request using a token added via the addCard method
- **processAuth**: Performs a pre-authorization request using a token added via the addCard method

addCard

The addCard method is used to add a new card to the MW Vault.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>addCard</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

Cardholder Data

Parameter	Required	Description
cardName	Required	This must contain at the very least a space and no less than two characters. Only alphanumeric characters, hyphens, spaces and full stops are allowed. Example: <i>Mr. Example Person</i> or <i>MR E PERSON</i> or <i>Example Person</i> Valid length: Between 3 and 255 characters
cardNumber	Required	Example: <i>5123456789012346</i> or <i>4557012345678902</i> Valid length: Between 13 and 16 digits
cardExpiryMonth	Required	This must be MM format. The month must be zero padded if it is less than 10. Example: <i>05</i> Valid length: 2 digits
cardExpiryYear	Required	This must be YY format. Example: <i>13</i> Valid length: 2 digits

Global Vault Parameters

Parameter	Required	Description
cardGlobal*	Required/ Not Required	This must be in a boolean format. Example: 1
cardEmail*	Required/ Not Required	This must be in a valid email format. Example: john@merchantwarrior.com
cardContact*	Required/ Not Required	This must be in a valid Australian or International mobile number format. Example: 0486292992 or +614920202820

i The Global Vault Parameters (cardGlobal, cardEmail, cardContact) are required when adding a customer card to the Global Vault. If the customer card is **not** being added to the Global Vault the Global Vault Parameters (cardGlobal, cardEmail, cardContact) are not required.

removeCard

The removeCard method is the method used to remove a card from the MWV once it has been added.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: removeCard

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 123456789abcd
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 1a3b5c

Cardholder Data

Parameter	Required	Description
cardID	Required	A unique alphanumeric string returned by addCard , used to identify a specific card. Example: NUFM56937091
cardKey	Not Required	A string used as an encryption/decryption key. This should only be used if you do NOT want Merchant Warrior handling your key storage. This should be unique on a per-card basis. It's used to encrypt the card when we store it. Every time we receive a process card request, the correct cardkey must also be provided - which is known only to you. Example: a84Jl2cA12ziZ3Fx Valid length: 16 characters

Global Vault Parameters

Parameter	Required	Description
cardGlobal*	Required/ Not Required	This must be in a boolean format. Example: 1
cardEmail*	Required/ Not Required	This must be in a valid email format. Example: john@merchantwarrior.com
code*	Required/ Not Required	The value of this parameter is sent by Merchant Warrior directly to the customer either via Email or SMS. Example: 1a3b5c Valid Length: 6 characters

i The Global Vault Parameters (cardGlobal, cardEmail, code) are required when removing a customer card from the Global Vault. If the customer card is **not** being removed from the Global Vault the Global Vault Parameters (cardGlobal, cardEmail, code) are not required.

cardInfo

The cardInfo method is used to perform a query of an existing card. This method will return the information added via addCard with the credit card number (PAN) truncated.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: cardInfo

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 123456789abcd
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 1a3b5c

Cardholder Data

Parameter	Required	Description
cardID	Required	A unique alphanumeric string returned by addCard, used to identify a specific card. Example: NUFM56937091
cardKey	Not Required	A string used as an encryption/decryption key. This should only be used if you do NOT want Merchant Warrior handling your key storage. This should be unique on a per-card basis. It's used to encrypt the card when we store it. Every time we receive a process card request, the correct cardkey must also be provided – which is known only by you. Example: a84Jl2cA12ziZ3Fx Valid length: 16 characters

changeExpiry

The changeExpiry method is used to modify a card's expiry after it has been added to the MW Vault.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>changeExpiry</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

Cardholder Data

Parameter	Required	Description
cardID	Required	A unique alphanumeric string returned by addCard, used to identify a specific card. Example: <i>NUFM56937091</i>
cardKey	Not Required	A string used as an encryption/decryption key. This should only be used if you do NOT want Merchant Warrior handling your key storage. This should be unique on a per-card basis. It's used to encrypt the card when we store it. Every time we receive a process card request, the correct cardkey must also be provided - which is known only by you. Example: <i>a84Jl2cA12ziZ3Fx</i> Valid length: 16 characters
cardExpiryMonth	Required	This must be MM format. The month must be zero padded if it is less than 10. Example: <i>05</i> Valid length: 2 digits
cardExpiryYear	Required	This must be YY format. Example: <i>13</i> Valid length: 2 digits

checkCardChange

The checkCardChange method is used to detect if there have been any changes to a customer's details in the Global Vault and can act as an indicator as to whether the [checkEmail method](#) should be called.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>checkCardChange</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

Global Vault Parameters

Parameter	Required	Description
cardEmail	Required	This must be in a valid email format. Example: <i>john@merchantwarrior.com</i>
cardID	Required	This must be in alphanumeric format and should list all the cardID(s) that you have on file for the customer's email address. If multiple cardIDs are present they must be comma separated. All spaces should be removed from this field prior to submission. Example: <i>NUFM56937091, ABCD65321983</i>

checkEmail

The checkEmail method is used for requesting a one-time verification code for the retrieval or removal of card(s) in the MW Global Vault.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>checkEmail</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

Global Vault Parameters

Parameter	Required	Description
cardEmail	Required	This must be in a valid email format. Example: <i>john@merchantwarrior.com</i>
authMode	Required	This must be in integer format. Use 1 - Email Verification and 2 - SMS Verification. Example: <i>1</i>
checkMode	Required	This must be in integer format. Use 1 - retrieveCard method and 2 - removeCardmethod. Example: <i>1</i>
cardID	Required/ Not Required	This must be in alphanumeric format. This field is only supplied when checkMode is set to 2 - removeCard. Example: <i>NUFM56937091</i>

checkContact

The checkContact method is used for requesting a one-time verification code to update a customer's mobile contact in the MW Global Vault via the [updateContact](#) method.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>checkContact</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

Global Vault Parameters

Parameter	Required	Description
cardEmail	Required	This must be in a valid email format. Example: <i>john@merchantwarrior.com</i>
cardContact	Required	This must be in a valid Australian or International mobile number format. The contact supplied must match the contact in the Global Vault. Example: <i>0486292992</i> or <i>+614920202820</i>

retrieveCard

The retrieveCard method is used to retrieve card(s) registered to an email address in the MW Global Vault.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>retrieveCard</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

Global Vault Parameters

Parameter	Required	Description
cardEmail	Required	This must be in a valid email format. Example: <i>john@merchantwarrior.com</i>
code	Required	The value of this parameter is sent by Merchant Warrior directly to the customer either via email or SMS. Example: <i>1a3b5c</i> Valid Length: 6 characters

updateContact

The updateContact method is used to update customer's mobile contact in the MW Global Vault.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>updateContact</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

Global Vault Parameters

Parameter	Required	Description
cardEmail	Required	This must be in a valid email format. Example: <i>john@merchantwarrior.com</i>
cardContact	Required	This must be in a valid Australian or International mobile number format. The contact supplied must match the contact in the Global Vault. Example: <i>0486292992</i> or <i>+614920202820</i>
code	Required	The value of this parameter is sent by Merchant Warrior directly to the customer either via email or SMS. Example: <i>1a3b5c</i> Valid Length: 6 characters

processCard

The processCard method is used to perform a purchase transaction using a Token ID that exists in the MW Vault.

Request-Parameters

These parameters are practically identical to the [Direct API processCard](#) method. The major point of difference is that the card data fields are removed, and in their place the cardID, cardKey & cardKeyReplace parameters have been added.

When this method is run, the value of cardKeyReplace will overwrite cardKey **-unless** a validation error occurs. In short, if the responseCode ≥ 0 , overwrite cardKey in your database with the value you send for cardKeyReplace. Transactions that do not pass pre-validation (responseCode < 0) will **not** have their cardKey updated.

i It is important to note that supplying a cardID and cardKey are only required if you plan on handling key storage for your credit card information. If no cardID or cardKey are supplied Merchant Warrior will handle the key storage for you.

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>processCard</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. Example: 10.00
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: AUD
transactionProduct	Required	A product (or sale) id or description. We recommend using an order/product id. This field's primary purpose is to help the transaction be identifiable for reporting and accounting purposes. Example: ABC4321 Valid length: Up to 255 characters. Some Acquirers limit this field to 40 characters.
transactionReferenceID	Not Required	This is a merchant's unique reference ID for a transaction sent to Merchant Warrior. The main purpose of this ID is to verify the transaction via the queryCard method in the event a valid response is not received. Example: A257240023321 Valid length: Up to 40 characters

Customer Parameters

Parameter	Required	Description
customerName	Required	This field can only contain alphanumeric characters, as well as the full stop, comma, aposrophe, ampersand, space and hyphen characters. Example: <i>Mr. Example Person</i> Valid length: Between 2 and 255 characters
customerCountry	Required	Two letter ISO 3166-1 alpha-2 country code. Example: <i>AU</i> Valid length: 2 characters
customerState	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Queensland</i> Valid length: Up to 75 characters
customerCity	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Brisbane</i> Valid length: Up to 75 characters
customerAddress	Required	Freeform field. Example: <i>123 Test Street</i> Valid length: Up to 255 characters
customerPostCode	Required	This can also accomodate ZIP/Post codes for international transactions. Example: <i>4000</i> Valid length: Between 4 and 10 characters
customerPhone	Not Required	Anything other than +,-, space and 0-9 will be stripped. Example: <i>0401234567</i> or <i>61731234567</i> Valid length: Up to 25 characters
customerEmail	Not Required	Sending this optional parameter is highly recommended. Example: <i>person@example.com</i> Valid length: Up to 255 characters
customerIP	Not Required	Any valid IPv4 or IPv6 address is accepted. Sending this optional parameter is highly recommended. Example: <i>123.456.789.012</i> or <i>2001:0db8:85a3:0000:0000:8a2e:0370:7334</i> Valid length: Up to 39 characters
storeID	Not Required	The value of this field is the merchant's store name. Please note that you need to contact Merchant Warrior to enable the storeID feature before you can use this parameter. Example: <i>Test store name</i>

Payment Parameters

Parameter	Required	Description
cardID	Required	A unique alphanumeric string returned by addCard , used to identify a specific card. Example: <i>NUFM56937091</i>
cardKey	Not Required	A string used as an encryption/decryption key. This should only be used if you do NOT want Merchant Warrior handling your key storage. This should be unique on a per-card basis. It's used to encrypt the card when we store it. Every time we receive a process card request, the correct cardkey must also be provided – which is known only by you. Example: <i>a84Jl2cA12ziZ3Fx</i> Valid Length: 16 characters
cardKeyReplace	Not Required	This will replace cardKey for subsequent requests for the cardID if the transaction is run successfully (meaning accepted by Merchant Warrior, not necessarily approved by the bank). This cannot be the same as the last 10 cardKey's used for the cardID, and it has to follow the same guidelines as cardkey (16 character alphanumeric string, etc). See the explanation under " Request Parameter " for more information. Example: <i>mbnGHOq86sXTjQgd</i> Valid Length: 16 characters
paymentCardCSC	Not Required	This is also known as the CVN or CVV/2. This is required by some Acquirers if the transaction is initiated by the customer. Please contact Merchant Warrior for more information. Example: <i>123</i> Valid length: Between 3 and 4 characters

Custom Parameters

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: <i>e9ddc296b76b3398934bfc06239073df</i> Valid length: 32 characters

processAuth

The processAuth method is the method used to perform [pre-authorization](#) transaction using an existing card (for capture request, refer to the standard [processCapture API method](#)). This method proxies the request through to the standard MWE API, and returns the response directly – including any validation or provider errors. That means that all the validation logic is the same with both functions, although this of course also validates cardID, cardKey & cardKeyReplace.

Method Endpoint

This method's endpoint is: <https://<environment>.merchantwarrior.com/token/processAuth>

Request-Parameters

These parameters are practically identical to the [Direct API processAuth](#) method. The major point of difference is that the card data fields are removed, and in their place the cardID, cardKey & cardKeyReplace parameters have been added.

When this method is run, the value of cardKeyReplace will overwrite cardKey **unless** a validation error occurs. In short, if the responseCode ≥ 0 , overwrite cardKey in your database with the value you send for cardKeyReplace. Transactions that do not pass pre-validation (responseCode < 0) will **not** have their cardKey updated.

i It is important to note that supplying a cardID and cardKey are only required if you plan on handling key storage for your credit card information. If no cardID or cardKey are supplied Merchant Warrior will handle the key storage for you.

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>processAuth</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. Example: <i>10.00</i>
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: <i>AUD</i>
transactionProduct	Required	A product (or sale) id or description. We recommend using an order/product id. This field's primary purpose is to help the transaction be identifiable for reporting and accounting purposes. Example: <i>ABC4321</i> Valid length: Up to 255 characters. Some Acquirers limit this field to 40 characters.
transactionReferenceID	Not Required	This is a merchant's unique reference ID for a transaction sent to Merchant Warrior. The main purpose of this ID is to verify the transaction via the queryCard method in the event a valid response is not received. Example: <i>A257240023321</i> Valid length: Up to 40 characters

Customer Parameters

Parameter	Required	Description
customerName	Required	This field can only contain alphanumeric characters, as well as the full stop, comma, aposrophe, ampersand, space and hyphen characters. Example: <i>Mr. Example Person</i> Valid length: Between 2 and 255 characters
customerCountry	Required	Two letter ISO 3166-1 alpha-2 country code. Example: <i>AU</i> Valid length: 2 characters
customerState	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Queensland</i> Valid length: Up to 75 characters
customerCity	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Brisbane</i> Valid length: Up to 75 characters
customerAddress	Required	Freeform field. Example: <i>123 Test Street</i> Valid length: Up to 255 characters
customerPostCode	Required	This can also accomodate ZIP/Post codes for international transactions. Example: <i>4000</i> Valid length: Between 4 and 10 characters
customerPhone	Not Required	Anything other than +,-, space and 0-9 will be stripped. Example: <i>0401234567</i> or <i>61731234567</i> Valid length: Up to 25 characters
customerEmail	Not Required	Sending this optional parameter is highly recommended. Example: <i>person@example.com</i> Valid length: Up to 255 characters
customerIP	Not Required	Any valid IPv4 or IPv6 address is accepted. Sending this optional parameter is highly recommended. Example: <i>123.456.789.012</i> or <i>2001:0db8:85a3:0000:0000:8a2e:0370:7334</i> Valid length: Up to 39 characters
storeID	Not Required	The value of this field is the merchant's store name. Please note that you need to contact Merchant Warrior to enable the storeID feature before you can use this parameter. Example: <i>Test store name</i>

Payment Parameters

Parameter	Required	Description
cardID	Required	A unique alphanumeric string returned by addCard , used to identify a specific card. Example: <i>NUFM56937091</i>
cardKey	Not Required	A string used as an encryption/decryption key. This should only be used if you do NOT want Merchant Warrior handling your key storage. This should be unique on a per-card basis. It's used to encrypt the card when we store it. Every time we receive a process card request, the correct cardkey must also be provided – which is known only by you. Example: <i>a84Jl2cA12ziZ3Fx</i> Valid Length: 16 characters
cardKeyReplace	Not Required	This will replace cardKey for subsequent requests for the cardID if the transaction is run successfully (meaning accepted by Merchant Warrior, not necessarily approved by the bank). This cannot be the same as the last 10 cardKey's used for the cardID, and it has to follow the same guidelines as cardkey (16 character alphanumeric string, etc). See the explanation under " Request Parameter " for more information. Example: <i>mbnGHOq86sXTjQgd</i> Valid Length: 16 characters
paymentCardCSC	Not Required	This is also known as the CVN or CVV/2. This is required by some Acquirers if the transaction is initiated by the customer. Please contact Merchant Warrior for more information. Example: <i>123</i> Valid length: Between 3 and 4 characters

Custom Parameters

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: <i>e9ddc296b76b3398934bfc06239073df</i> Valid length: 32 characters

Production API Endpoint

```
https://secure.merchantwarrior.com/
```

Sandbox API Endpoint

```
https://securetest.merchantwarrior.com/
```

Hosted Payments

The following sub-sections will outline the various API methods present in the **Merchant Warrior Hosted Payments** service.

Introduction

The MW Hosted Payments solution allows merchants to process credit card transactions online via a secure hosted payment page.

Merchants who do not wish to store, process or transmit credit card **PAN** in order to reduce their **PCI DSS** scope will be able to achieve this with this service.

Request Format

API requests are submitted to the Hosted Payments service using **POST**, and must be performed over **HTTPS**.

i It is important to note that as of **PCI DSS v3.2** it is recommended to submit requests using a secure version of **TLS** (currently v1.1 or higher). As of the 30th of June 2018 the MW platform will no longer accept requests via SSL and/or TLS v1.0.

Response Format

The Hosted Payments service will return responses in **XML** format to a specified notifyURL via an Asynchronous **HTTP POST**. Response parameters are also returned in the GET string of the specified returnURL via a **302 redirect**.

Available Methods

The Hosted Payments service consists of the following methods:

- **processCard**: Performs a purchase transaction on a customer's credit card
- **processDDdebitAuth**: Initiates an electronic (paperless) direct debit authorization

processCard

The processCard method is the method used to perform a purchase request.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Currently, the only valid value for this parameter is 'processCard'. Example: <i>processCard</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. Example: 10.00
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: AUD
transactionProduct	Required	A product (or sale) id or description. We recommend using an order/product id. This field's primary purpose is to help the transaction be identifiable for reporting and accounting purposes. Example: ABC4321 Valid length: Up to 255 characters. Some Acquirers limit this field to 40 characters.

Customer Parameters

Parameter	Required	Description
customerName	Not Required	This field can only contain alphanumeric characters, as well as the full stop and hyphen character. Example: Mr. Example Person Valid length: Between 2 and 255 characters
customerCountry	Not Required	Two letter ISO 3166-1 alpha-2 country code. Example: AU Valid length: 2 characters
customerState	Not Required	Freeform field, keep consistent for your records and reporting. Example: Queensland Valid length: Up to 75 characters
customerCity	Not Required	Freeform field, keep consistent for your records and reporting. Example: Brisbane Valid length: Up to 75 characters
customerAddress	Not Required	Freeform field. Example: 123 Test Street Valid length: Up to 255 characters
customerPostCode	Required	This can also accomodate ZIP/Post codes for international transactions. Example: 4000 Valid length: Between 4 and 10 characters
customerPhone	Not Required	Anything other than +,-, space and 0-9 will be stripped. Example: 0401234567 or 61731234567 Valid length: Up to 25 characters
customerEmail	Not Required	Must be valid if present. Sending this optional parameter is highly recommended. Example: person@example.com Valid length: Up to 255 characters

Redirect and Notification Parameters

Parameter	Required	Description
returnURL	Required	The customer will be redirected to this URL upon completion of the transaction. Example: https://www.example.com/return.php
notifyURL	Required	Asynchronous POST notifications will be sent to this URL. Example: https://www.example.com/notify.php
urlHash	Required	The urlHash field is a combination of your API Passphrase, and specific parameters sent in the transaction. See Web URL Hash for information on how to construct the hash correctly. Example: <code>511999e54b9ad51ce4c28d7f0550ac81</code> Valid Length: 32 characters
hashSalt	Required	Used to salt the return hash used in the 302 Redirect to redirectURL upon the completion of a transaction. Example: <code>3x4mpl3s4lt!</code>
logoURL	Not Required	The URL to an image that will appear in the header of the hosted payment page. Image must be of PNG format and max dimensions of 90x90 pixels and a file size limit of 1500 kilobytes. If no logoURL is supplied a default basket image is used. Example: https://www.example.com/logo.png
hostedID	Not Required	The ID of the customized hosted payment page. This can be implemented if multiple hosted payment pages with different logos and banners is a requirement. Example: <code>1</code>

Custom Parameters

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: <code>e9ddc296b76b3398934bfc06239073df</code> Valid length: 32 characters

processDDebitAuth

The processDDebitAuth method is used to initiate an electronic (paperless) direct debit authorization form

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>processDDebitAuth</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>

Customer Parameters

Parameter	Required	Description
customerName	Required	This field can only contain alphanumeric characters, as well as the full stop, comma, apostrophe, ampersand, space and hyphen characters. Example: <i>Mr. Example Person</i> Valid length: Between 2 and 255 characters
customerCountry	Required	Two letter ISO 3166-1 alpha-2 country code. Example: <i>AU</i> Valid length: 2 characters
customerState	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Queensland</i> Valid length: Up to 75 characters
customerCity	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Brisbane</i> Valid length: Up to 75 characters
customerAddress	Required	Freeform field. Example: <i>123 Test Street</i> Valid length: Up to 255 characters
customerPostCode	Required	This can also accommodate ZIP/Post codes for international transactions. Example: <i>4000</i> Valid length: Between 4 and 10 characters
customerPhone	Required	Anything other than +, -, space and 0-9 will be stripped. Example: <i>0401234567</i> or <i>61731234567</i> Valid length: Up to 25 characters
customerEmail	Required	Sending this optional parameter is highly recommended. Example: <i>person@example.com</i> Valid length: Up to 255 characters

Payment Account Details

Parameter	Required	Description
paymentAccountBSB	Required	BSB of the account to be debited. Example: 123123
paymentAccountName	Required	The name on the account to be debited. Example: Bob Jones
paymentAccountNumber	Required	Account number of the account to be debited. Example: 234523451
transactionAmount	Not Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. This field is not required if you are submitting a direct debit authorization that has a variable amount. Example: 10.00
transactionCurrency	Required	One of the following: AUD or NZD. Example: AUD

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. (Field is only required if transactionAmount and transactionCurrency have been set for a DDA) Example: e9ddc296b76b3398934bfc06239073df Valid length: 32 characters

Redirect and Notification Parameters

Parameter	Required	Description
returnURL	Required	The customer will be redirected to this URL upon completion of the transaction. Example: https://www.example.com/return.php
notifyURL	Required	Asynchronous POST notifications will be sent to this URL. Example: https://www.example.com/notify.php
urlHash	Required	The urlHash field is a combination of your API Passphrase, and specific parameters sent in the transaction. See Web URL Hash for information on how to construct the hash correctly. Example: Queensland Valid Length: Up to 32 characters
hashSalt	Required	Used to salt the return hash used in the 302 Redirect to redirectURL upon the completion of a transaction. Example: 3x4mpl3s4It!

Customization Parameters

Parameter	Required	Description
logoURL	Not Required	The URL to an image that will appear in the header of the hosted payment page. Image must be of PNG format and max dimensions of 90x90 pixels and a file size limit of 1500 kilobytes. If no logoURL is supplied a default Direct Debit icon is displayed. Example: <i>https://www.example.com/logo.png</i>
hostedID	Not Required	Digits only. The ID of the customized hosted payment page. This can be implemented if multiple hosted DDA pages with different logos and banners are a requirement. Example: <i>1</i>
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Production API Endpoint

```
https://api.merchantwarrior.com/transfer/
```

Sandbox API Endpoint

```
https://base.merchantwarrior.com/transfer/
```

Transparent Redirect

The following sub-sections will outline the various API methods present in the **Merchant Warrior Transparent Redirect**.

Introduction

The Transparent Redirect (also referred to as a Direct POST) service allows merchants to host and customize a secure hosted payment page themselves, whilst assisting in reducing the scope of PCI DSS compliance.

Merchants who do not wish to store, process or transmit credit card (PAN) will be able to achieve this with this service.

Request Format

API requests are submitted to the Transparent Redirect service using **POST**, and must be performed over **HTTPS**.

i It is important to note that as of PCI DSS v3.2 it is recommended to submit requests using a secure version of TLS (currently v1.1 or higher). As of the 30th of June 2018 the MW platform will no longer accept requests via SSL and/or TLS v1.0.

Response Format

The Transparent Redirect service will return responses in XML format to a specified notifyURL via an Asynchronous HTTP POST. Response parameters are also returned in the GET string of the specified returnURL via a 302 redirect.

Available Methods

The Transparent Redirect service consists of the following methods:

- **getAccessToken**: Generates a one time access token for submission with transactions
- **processCard**: Performs a purchase transaction on a customer's credit card
- **processAuth**: Performs a pre-authorization on a customer's credit card
- **addCard**: Adds a card to the Local or Global Vault

getAccessToken

The getAccessToken method generates a one time access token that acts as an additional security measure to identify that the request originates from a valid merchant and that the request has not been tampered with during transmission.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>getAccessToken</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 123456789abcd
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 1a3b5c

Verification Hash Parameters

Parameter	Required	Description
hash*	Required/ Not Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. This parameter is not required if you are generating an Access Token for use with the Transparent Redirect addCard method. Example: e9ddc296b76b3398934bfc06239073df Valid Length: 32 characters
urlHash	Required	The urlHash field is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Web URL Hash for information on how to construct the hash correctly. Example: Queensland Valid Length: Up to 32 characters

i The hash parameter is currently only required for the following methods: [processCard](#) and [processAuth](#). The [addCard](#) method does NOT require the hash parameter to be set.

processCard

The processCard method is the method used to perform a purchase request.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: processCard

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 123456789abcd
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: 1a3b5c
accessToken	Required	The value returned by the getAccessToken method. Example: 578de10d9a

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. Example: 10.00
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: AUD
transactionProduct	Required	A product (or sale) id or description. We recommend using an order/product id. This field's primary purpose is to help the transaction be identifiable for reporting and accounting purposes. Example: ABC4321 Valid length: Up to 255 characters. Some Acquirers limit this field to 40 characters.
transactionReferenceID	Not Required	This is a merchant's unique reference ID for a transaction sent to Merchant Warrior. The main purpose of this ID is to verify the transaction via the queryCard method in the event a valid response is not received. Example: A257240023321 Valid length: Up to 40 characters

Redirect and Notification Parameters

Parameter	Required	Description
returnURL	Required	The customer will be redirected to this URL upon completion of the transaction. Example: https://www.example.com/return.php
notifyURL	Required	Asynchronous POST notifications will be sent to this URL. It is important that this URL does not contain any white space characters. Example: https://www.example.com/notify.php
urlHash	Required	The urlHash field is a combination of your API Passphrase, and specific parameters sent in the transaction. See Web URL Hash for information on how to construct the hash correctly. Example: Queensland Valid Length: Up to 32 characters
hashSalt	Required	Used to salt the return hash used in the 302 Redirect to redirectURL upon the completion of a transaction. Example: 3x4mpl3s4lt!

Customer Parameters

Parameter	Required	Description
customerName	Required	This field can only contain alphanumeric characters, as well as the full stop and hyphen characters. Example: <i>Mr. Example Person</i> Valid length: Between 2 and 255 characters
customerCountry	Required	Two letter ISO 3166-1 alpha-2 country code. Example: <i>AU</i> Valid length: 2 characters
customerState	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Queensland</i> Valid length: Up to 75 characters
customerCity	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Brisbane</i> Valid length: Up to 75 characters
customerAddress	Required	Freeform field. Example: <i>123 Test Street</i> Valid length: Up to 255 characters
customerPostCode	Required	This can also accommodate ZIP/Post codes for international transactions. Example: <i>4000</i> Valid length: Between 4 and 10 characters
customerPhone	Not Required	Anything other than +,-, space and 0-9 will be stripped. Example: <i>0401234567</i> or <i>61731234567</i> Valid length: Up to 25 characters
customerEmail	Not Required	Sending this optional parameter is highly recommended. Example: <i>person@example.com</i> Valid length: Up to 255 characters
customerIP	Not Required	Any valid IPv4 or IPv6 address is accepted. Sending this optional parameter is highly recommended. Example: <i>123.456.789.012</i> or <i>2001:0db8:85a3:0000:0000:8a2e:0370:7334</i> Valid length: Up to 39 characters
storeID	Not Required	The value of this field is the merchant's store name. Please note that you need to contact Merchant Warrior to enable the storeID feature before you can use this parameter. Example: <i>Test store name</i>

Payment Parameters

Parameter	Required	Description
paymentCardNumber	Required	Only certain card numbers are deemed valid in the test environment. See Test Data for more information. Do not send separators with the card number (e.g. 1234-5678... or 1234 5678). Example: 5123456789012346 or 4557012345678902 Valid length: Between 13 and 16 digits
paymentCardExpiry	Required	This must be MMY format. The month must be zero padded if it is less than 10. Example: 0513 Valid length: 4 digits
paymentCardName	Required	This must contain at the very least a space and no less than two characters. Only alphanumeric characters, hyphens, spaces and full stops are allowed. Example: Mr. Example Person or MR E PERSON or Example Person Valid length: Between 3 and 255 characters
paymentCardCSC	Not Required	This is also known as the CVN or CVV/2. This is required by some Acquirers if the transaction is initiated by the customer. Please contact Merchant Warrior for more information. Example: 123 Valid length: Between 3 and 4 characters
addCard	Not Required	This value is a boolean to denote whether the paymentCardNumber should automatically be added to the Merchant Warrior Vault after processing the transaction. Example: 1 Valid Length: 1 digit

Global Vault Parameters

Parameter	Required	Description
cardGlobal	Not Required	This must be in a boolean format. Example: 1
cardEmail	Not Required	This must be in a valid email format. Example: john@merchantwarrior.com
cardContact	Not Required	This must be in a valid Australian or International mobile number format. Example: 0486292992 or +614920202820

Custom Parameters

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: <i>e9ddc296b76b3398934bfc06239073df</i> Valid length: 32 characters

processAuth

The processAuth method is used to perform a [pre-authorization](#) request.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>processAuth</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>
accessToken	Required	The value returned by the getAccessToken method. Example: <i>578de10d9a</i>

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. Example: 10.00
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: AUD
transactionProduct	Required	A product (or sale) id or description. We recommend using an order/product id. This field's primary purpose is to help the transaction be identifiable for reporting and accounting purposes. Example: ABC4321 Valid length: Up to 255 characters. Some Acquirers limit this field to 40 characters.
transactionReferenceID	Not Required	This is a merchant's unique reference ID for a transaction sent to Merchant Warrior. The main purpose of this ID is to verify the transaction via the queryCard method in the event a valid response is not received. Example: A257240023321 Valid length: Up to 40 characters

Redirect and Notification Parameters

Parameter	Required	Description
returnURL	Required	The customer will be redirected to this URL upon completion of the transaction. Example: https://www.example.com/return.php
notifyURL	Required	Asynchronous POST notifications will be sent to this URL. It is important that this URL does not contain any white space characters. Example: https://www.example.com/notify.php
urlHash	Required	The urlHash field is a combination of your API Passphrase, and specific parameters sent in the transaction. See Web URL Hash for information on how to construct the hash correctly. Example: Queensland Valid Length: Up to 32 characters
hashSalt	Required	Used to salt the return hash used in the 302 Redirect to redirectURL upon the completion of a transaction. Example: 3x4mpI3s4It!

Customer Parameters

Parameter	Required	Description
customerName	Required	This field can only contain alphanumeric characters, as well as the full stop and hyphen characters. Example: <i>Mr. Example Person</i> Valid length: Between 2 and 255 characters
customerCountry	Required	Two letter ISO 3166-1 alpha-2 country code. Example: <i>AU</i> Valid length: 2 characters
customerState	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Queensland</i> Valid length: Up to 75 characters
customerCity	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Brisbane</i> Valid length: Up to 75 characters
customerAddress	Required	Freeform field. Example: <i>123 Test Street</i> Valid length: Up to 255 characters
customerPostCode	Required	This can also accommodate ZIP/Post codes for international transactions. Example: <i>4000</i> Valid length: Between 4 and 10 characters
customerPhone	Not Required	Anything other than +,-, space and 0-9 will be stripped. Example: <i>0401234567</i> or <i>61731234567</i> Valid length: Up to 25 characters
customerEmail	Not Required	Sending this optional parameter is highly recommended. Example: <i>person@example.com</i> Valid length: Up to 255 characters
customerIP	Not Required	Any valid IPv4 or IPv6 address is accepted. Sending this optional parameter is highly recommended. Example: <i>123.456.789.012</i> or <i>2001:0db8:85a3:0000:0000:8a2e:0370:7334</i> Valid length: Up to 39 characters
storeID	Not Required	The value of this field is the merchant's store name. Please note that you need to contact Merchant Warrior to enable the storeID feature before you can use this parameter. Example: <i>Test store name</i>

Payment Parameters

Parameter	Required	Description
paymentCardNumber	Required	Only certain card numbers are deemed valid in the test environment. See Test Data for more information. Do not send separators with the card number (e.g. 1234-5678... or 1234 5678). Example: 5123456789012346 or 4557012345678902 Valid length: Between 13 and 16 digits
paymentCardExpiry	Required	This must be MMY format. The month must be zero padded if it is less than 10. Example: 0513 Valid length: 4 digits
paymentCardName	Required	This must contain at the very least a space and no less than two characters. Only alphanumeric characters, hyphens, spaces and full stops are allowed. Example: Mr. Example Person or MR E PERSON or Example Person Valid length: Between 3 and 255 characters
paymentCardCSC	Not Required	This is also known as the CVN or CVV/2. This is required by some Acquirers if the transaction is initiated by the customer. Please contact Merchant Warrior for more information. Example: 123 Valid length: Between 3 and 4 characters
addCard	Not Required	This value is a boolean to denote whether the paymentCardNumber should automatically be added to the Merchant Warrior Vault after processing the transaction. Example: 1 Valid Length: 1 digit

Global Vault Parameters

Parameter	Required	Description
cardGlobal	Not Required	This must be in a boolean format. Example: 1
cardEmail	Not Required	This must be in a valid email format. Example: john@merchantwarrior.com
cardContact	Not Required	This must be in a valid Australian or International mobile number format. Example: 0486292992 or +614920202820

Custom Parameters

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: <i>e9ddc296b76b3398934bfc06239073df</i> Valid length: 32 characters

addCard

The addCard method is used to add a new card to the MW Vault.

i After the initial addCard via the Transparent Redirect service, all future Token Payments operations such as removal of card data, update of expiry etc. should be handled via the [Direct API](#) service.

Request-Parameters

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>
accessToken	Required	The value returned by the getAccessToken method. Example: <i>578de10d9a</i>

Cardholder Data

Parameter	Required	Description
paymentCardName	Required	This must contain at the very least a space and no less than two characters. Only alphanumeric characters, hyphens, spaces and full stops are allowed. Example: <i>Mr. Example Person</i> or <i>MR E PERSON</i> or <i>Example Person</i> Valid length: Between 3 and 255 characters
paymentCardNumber	Required	Only certain card numbers are deemed valid in the test environment. See Test Data for more information. Do not send separators with the card number (e.g. 1234-5678... or 1234 5678). Example: <i>5123456789012346</i> or <i>4557012345678902</i> Valid length: Between 13 and 16 digits
paymentCardExpiry	Required	This must be MMY format. The month must be zero padded if it is less than 10. Example: <i>0513</i> Valid length: 4 digits

Global Vault Parameters

Parameter	Required	Description
cardGlobal	Not Required	This must be in a boolean format. Example: 1
cardEmail	Not Required	This must be in a valid email format. Example: john@merchantwarrior.com
cardContact	Not Required	This must be in a valid Australian or International mobile number format. Example: 0486292992 or +614920202820

Redirect and Notification Parameters

Parameter	Required	Description
returnURL	Required	The customer will be redirected to this URL upon completion of the transaction. Example: https://www.example.com/return.php
notifyURL	Required	Asynchronous POST notifications will be sent to this URL. It is important that this URL does not contain any white space characters. Example: https://www.example.com/notify.php

Custom Parameters

i We do not store these custom fields for addCard requests

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
urlHash	Required	The urlHash field is a combination of your API Passphrase, and specific parameters sent in the transaction. See Web URL Hash for information on how to construct the hash correctly. Example: Queensland Valid Length: Up to 32 characters
hashSalt	Required	Used to salt the return hash used in the 302 Redirect to redirectURL upon the completion of a transaction. Example: 3x4mpl3s4lt!

i getAccessToken requests must be sent to the following API endpoints:

Production API Endpoint

<https://api.merchantwarrior.com/iframe/>

Sandbox API Endpoint

```
https://base.merchantwarrior.com/iframe/
```

i iFrame generation requests must be sent to the following API endpoints:

Production API Endpoint

```
https://secure.merchantwarrior.com/iframe/
```

Sandbox API Endpoint

```
https://securetest.merchantwarrior.com/iframe/
```

Transparent iFrame

The following sub-sections will outline the various API methods present in the **Merchant Warrior Transparent iFrame** service.

Introduction

The MW Transparent iFrame service allows merchants to embed an MW iFrame in their website and/or application. The MW iFrame can process transactions and/or store credit card information in the MW Vault.

Merchants who do not wish to store, process or transmit credit card **PAN** in order to reduce their **PCI DSS** scope will be able to achieve this with this service.

Custom iFrame(s)

The Transparent iFrame can be fully customized to maintain the look and feel of the website and/or application(s) that it is embedded in. In order to do this the relevant (addCard, processCard or processAuth) HTML skeleton form will need to be downloaded (from [here](#)) and themed accordingly.

The HTML skeleton form can be customized to handle frontend validation and styling. After the HTML skeleton form has been customized appropriately, all assets (css, images and javascript) should be compressed and emailed to our technical team (infoservices@merchantwarrior.com) for review.

If the customized Transparent iFrame is approved by our technical team it will be made accessible on the Merchant Warrior platform and will be available by submitting the 'style' and 'custom' parameters in the appropriate transaction request (addCard, processCard or processAuth).

Request Format

API requests are submitted to the Transparent iFrame service using **POST**, and must be performed over **HTTPS**.

! It is important to note that as of **PCI DSS v3.2** it is recommended to submit requests using a secure version of **TLS** (currently v1.1 or higher). As of the 30th of June 2018 the MW platform will no longer accept requests via **SSL** and/or **TLS v1.0**.

In order for an iFrame to be generated successfully, a request must be sent from a website or application that has its form target set as the target of the iFrame.

A simple implementation of the Transparent iFrame is made possible by creating a standard HTML form and submitting the form via javascript, AJAX or any other technology in use by the website and/or application(s).

Response Format

The Transparent iFrame service will return responses in **XML** format to a specified notifyURL via an **Asynchronous HTTP POST**. Response parameters are also returned in the GET string of the specified returnURL via **a302 redirect**.

Available Methods

The Transparent iFrame service consists of the following methods:

- **getAccessToken**: Generates a one time access token for submission with transactions
- **processCard**: Performs a purchase transaction on a customer's credit card
- **processAuth**: Performs a **pre-authorization** on a customer's credit card
- **addCard**: Adds a card to the Local or Global Vault

getAccessToken

The `getAccessToken` method generates a one time access token that acts as an additional security measure to identify that the request originates from a valid merchant and that the request has not been tampered with during transmission.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <code>getAccessToken</code>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <code>123456789abcd</code>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <code>1a3b5c</code>

Verification Hash Parameters

Parameter	Required	Description
hash*	Required/ Not Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. This parameter is not required if you are generating an Access Token for use with the Transparent Redirect addCard method. Example: <code>e9ddc296b76b3398934bfc06239073df</code> Valid Length: 32 characters
urlHash	Required	The urlHash field is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Web URL Hash for information on how to construct the hash correctly. Example: <code>Queensland</code> Valid Length: Up to 32 characters

i The hash parameter is currently only required for the following methods: [processCard](#) and [processAuth](#). The [addCard](#) method does NOT require the hash parameter to be set.

processCard

The `processCard` method is the method used to perform a purchase request.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <i>processCard</i>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>123456789abcd</i>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <i>1a3b5c</i>
accessToken	Required	The value returned by the getAccessToken method. Example: <i>578de10d9a</i>

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. Example: <i>10.00</i>
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: <i>AUD</i>
transactionProduct	Required	A product (or sale) id or description. We recommend using an order/product id. This field's primary purpose is to help the transaction be identifiable for reporting and accounting purposes. Example: <i>ABC4321</i> Valid length: Up to 255 characters. Some Acquirers limit this field to 40 characters.
transactionReferenceID	Not Required	This is a merchant's unique reference ID for a transaction sent to Merchant Warrior. The main purpose of this ID is to verify the transaction via the queryCard method in the event a valid response is not received. Example: <i>A257240023321</i> Valid length: Up to 40 characters

Redirect and Notification Parameters

Parameter	Required	Description
returnURL	Required	The customer will be redirected to this URL upon completion of the transaction. Example: https://www.example.com/return.php
returnTarget	Not Required	One of the following: <code>_self</code> , <code>_top</code> , <code>_parent</code> . This defines the target of the returnURL. Defaults to <code>_top</code> if not set. If it is set to <code>_none</code> , no redirect will occur (although this is not advised) Example: <code>_top</code>
notifyURL	Required	The asynchronous POST notifications will be sent to this URL. It is important that this URL does not contain any white space characters. Example: https://www.example.com/notify.php
postmessageURL	Not Required	The domain of the parent for the purpose of sending a postmessage from the iFrame to the parent after completing the transaction. To respond or interpret this message you will need to add a listener to the parent, as shown in Handling a postmessage . Example: https://www.example.com/
urlHash	Required	The urlHash field is a combination of your API Passphrase, and specific parameters sent in the transaction. See Web URL Hash for information on how to construct the hash correctly. Example: <i>Queensland</i> Valid Length: Up to 32 characters
hashSalt	Required	Used to salt the return hash used in the 302 Redirect to redirectURL upon the completion of a transaction. Example: <i>3x4mp!3s4lt!</i>

Customer Parameters

Parameter	Required	Description
customerName	Required	This field can only contain alphanumeric characters, as well as the full stop, comma, apostrophe, ampersand, space and hyphen characters. Example: <i>Mr. Example Person</i> Valid length: Between 2 and 255 characters
customerCountry	Required	Two letter ISO 3166-1 alpha-2 country code. Example: <i>AU</i> Valid length: 2 characters
customerState	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Queensland</i> Valid length: Up to 75 characters
customerCity	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Brisbane</i> Valid length: Up to 75 characters
customerAddress	Required	Freeform field. Example: <i>123 Test Street</i> Valid length: Up to 255 characters
customerPostCode	Required	This can also accommodate ZIP/Post codes for international transactions. Example: <i>4000</i> Valid length: Between 4 and 10 characters
customerPhone	Not Required	Anything other than +,-, space and 0-9 will be stripped. Example: <i>0401234567</i> or <i>61731234567</i> Valid length: Up to 25 characters
customerEmail	Not Required	Sending this optional parameter is highly recommended. Example: <i>person@example.com</i> Valid length: Up to 255 characters
customerIP	Not Required	Any valid IPv4 or IPv6 address is accepted. Sending this optional parameter is highly recommended. Example: <i>123.456.789.012</i> or <i>2001:0db8:85a3:0000:0000:8a2e:0370:7334</i> Valid length: Up to 39 characters

Payment Parameters

Parameter	Required	Description
addCard	Not Required	This value is a boolean to denote whether the paymentCardNumber should automatically be added to the Merchant Warrior Vault after processing the transaction. Example: <i>1</i> Valid Length: 1 digit
cardTypes	Not required	This field is a comma delimited list of card types that will be accepted. If not set all card types will be accepted (visa,mastercard,amex,diners,discover,jcb). Example: <i>Visa, Mastercard</i>

Custom Parameters

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: <code>e9ddc296b76b3398934bfc06239073df</code> Valid length: 32 characters

Customization Parameters

Parameter	Required	Description
style	Not Required	Possible values are <i>default</i> or <i>custom</i> . If not set the default styling is used. Example: <i>custom</i>
iframeID	Not Required	This field is only applicable for customers with multiple custom iFrames. This field will not function correctly without the style parameter being set to <i>custom</i> . Example: <code>1</code>

processAuth

The processAuth method is used to perform a pre-authorization request.

Request-Parameters

API Method

Parameter	Required	Description
method	Required	This field is case sensitive. Example: <code>processAuth</code>

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <code>123456789abcd</code>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <code>1a3b5c</code>
accessToken	Required	The value returned by the getAccessToken method. Example: <code>578de10d9a</code>

General Transaction Parameters

Parameter	Required	Description
transactionAmount	Required	The amount must be formatted to have two decimal places. Any amounts without two decimal places or amounts less than one cent will be rejected. Example: 10.00
transactionCurrency	Required	One of the following: AUD, CAD, EUR, GBP, JPY, NZD, SGD, USD. This is provider dependant. Please check with MW before attempting to process transactions in any currency other than AUD. This field is case insensitive. Example: AUD
transactionProduct	Required	A product (or sale) id or description. We recommend using an order/product id. This field's primary purpose is to help the transaction be identifiable for reporting and accounting purposes. Example: ABC4321 Valid length: Up to 255 characters. Some Acquirers limit this field to 40 characters.
transactionReferenceID	Not Required	This is a merchant's unique reference ID for a transaction sent to Merchant Warrior. The main purpose of this ID is to verify the transaction via the queryCard method in the event a valid response is not received. Example: A257240023321 Valid length: Up to 40 characters

Redirect and Notification Parameters

Parameter	Required	Description
returnURL	Required	The customer will be redirected to this URL upon completion of the transaction. Example: https://www.example.com/return.php
returnTarget	Not Required	One of the following: <code>_self</code> , <code>_top</code> , <code>_parent</code> . This defines the target of the returnURL. Defaults to <code>_top</code> if not set. If it is set to <code>_none</code> , no redirect will occur (although this is not advised) Example: <code>_top</code>
notifyURL	Required	The asynchronous POST notifications will be sent to this URL. It is important that this URL does not contain any white space characters. Example: https://www.example.com/notify.php
postmessageURL	Not Required	The domain of the parent for the purpose of sending a postmessage from the iFrame to the parent after completing the transaction. To respond or interpret this message you will need to add a listener to the parent, as shown in Handling a postmessage . Example: https://www.example.com/
urlHash	Required	The urlHash field is a combination of your API Passphrase, and specific parameters sent in the transaction. See Web URL Hash for information on how to construct the hash correctly. Example: Queensland Valid Length: Up to 32 characters
hashSalt	Required	Used to salt the return hash used in the 302 Redirect to redirectURL upon the completion of a transaction. Example: 3x4mpl3s4lt!

Customer Parameters

Parameter	Required	Description
customerName	Required	This field can only contain alphanumeric characters, as well as the full stop, comma, apostrophe, ampersand, space and hyphen characters. Example: <i>Mr. Example Person</i> Valid length: Between 2 and 255 characters
customerCountry	Required	Two letter ISO 3166-1 alpha-2 country code. Example: <i>AU</i> Valid length: 2 characters
customerState	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Queensland</i> Valid length: Up to 75 characters
customerCity	Required	Freeform field, keep consistent for your records and reporting. Example: <i>Brisbane</i> Valid length: Up to 75 characters
customerAddress	Required	Freeform field. Example: <i>123 Test Street</i> Valid length: Up to 255 characters
customerPostCode	Required	This can also accommodate ZIP/Post codes for international transactions. Example: <i>4000</i> Valid length: Between 4 and 10 characters
customerPhone	Not Required	Anything other than +,-, space and 0-9 will be stripped. Example: <i>0401234567</i> or <i>61731234567</i> Valid length: Up to 25 characters
customerEmail	Not Required	Sending this optional parameter is highly recommended. Example: <i>person@example.com</i> Valid length: Up to 255 characters
customerIP	Not Required	Any valid IPv4 or IPv6 address is accepted. Sending this optional parameter is highly recommended. Example: <i>123.456.789.012</i> or <i>2001:0db8:85a3:0000:0000:8a2e:0370:7334</i> Valid length: Up to 39 characters

Payment Parameters

Parameter	Required	Description
addCard	Not Required	This value is a boolean to denote whether the paymentCardNumber should automatically be added to the Merchant Warrior Vault after processing the transaction. Example: <i>1</i> Valid Length: 1 digit
cardTypes	Not required	This field is a comma delimited list of card types that will be accepted. If not set all card types will be accepted (visa,mastercard,amex,diners,discover,jcb). Example: <i>Visa, Mastercard</i>

Custom Parameters

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Verification Hash

Parameter	Required	Description
hash	Required	The verification hash is a combination of the MD5 of your API Passphrase, and specific parameters sent in the transaction. See Transaction Type Hash for information on how to construct the hash correctly. Example: <code>e9ddc296b76b3398934bfc06239073df</code> Valid length: 32 characters

Customization Parameters

Parameter	Required	Description
style	Not Required	Possible values are <i>default</i> or <i>custom</i> . If not set the default styling is used. Example: <code>custom</code>
iframeID	Not Required	This field is only applicable for customers with multiple custom iFrames. This field will not function correctly without the style parameter being set to <i>custom</i> . Example: <code>1</code>

addCard

The addCard method is used to add a new card to the MW Vault.

i After the initial addCard via the Transparent iFrame service, all future Token Payments operations such as removal of card data, update of expiry etc. should be handled via the [Direct API](#) service.

Request-Parameters

Authentication Parameters

Parameter	Required	Description
merchantUUID	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <code>123456789abcd</code>
apiKey	Required	The value of this parameter is provided to you by Merchant Warrior. Example: <code>1a3b5c</code>
accessToken	Required	The value returned by the getAccessToken method. Example: <code>578de10d9a</code>

Global Vault Parameters

Parameter	Required	Description
cardGlobal	Not Required	This must be in a boolean format. Example: 1
cardEmail	Not Required	This must be in a valid email format. Example: john@merchantwarrior.com
cardContact	Not Required	This must be in a valid Australian or International mobile number format. Example: 0486292992 or +614920202820

Payment Parameters

Parameter	Required	Description
cardTypes	Required	This field is a comma delimited list of card types that will be accepted. If not set all card types will be accepted (visa,mastercard,amex,diners,discover,jcb). Example: visa, mastercard

Redirect and Notification Parameters

Parameter	Required	Description
returnURL	Required	The customer will be redirected to this URL upon completion of the transaction. Example: https://www.example.com/return.php
returnTarget	Not Required	One of the following: <code>_self</code> , <code>_top</code> , <code>_parent</code> . This defines the target of the returnURL. Defaults to <code>_top</code> if not set. If it is set to <code>_none</code> , no redirect will occur (although this isn't advised) Example: <code>_top</code>
notifyURL	Required	Asynchronous POST notifications will be sent to this URL. Example: https://www.example.com/notify.php
postmessageURL	Not Required	The domain of the parent for the purpose of sending a postmessage from the iFrame to the parent after completing the transaction. To respond or interpret this message you will need to add a listener to the parent, as shown in Handling a postmessage . Example: https://www.example.com/

Custom Parameters

! We do not store these custom fields for addCard requests

Parameter	Required	Description
custom1	Not Required	Freeform field. Returned as <code><custom1></code> in the XML response. Valid length: Up to 500 characters
custom2	Not Required	Freeform field. Returned as <code><custom2></code> in the XML response. Valid length: Up to 500 characters
custom3	Not Required	Freeform field. Returned as <code><custom3></code> in the XML response. Valid length: Up to 500 characters

Customization Parameters

Parameter	Required	Description
style	Not Required	Possible values are <i>default</i> or <i>custom</i> . If not set the default styling is used. Example: <i>custom</i>
iframeID	Not Required	This field is only applicable for customers with multiple custom iFrames. This field will not function correctly without the style parameter being set to <i>custom</i> . Example: <i>1</i>

Verification Hash

Parameter	Required	Description
urlHash	Required	The urlHash field is a combination of your API Passphrase, and specific parameters sent in the transaction. See Web URL Hash for information on how to construct the hash correctly. Example: <i>Queensland</i> Valid Length: Up to 32 characters
hashSalt	Required	Used to salt the return hash used in the 302 Redirect to redirectURL upon the completion of a transaction. Example: <i>3x4mpl3s4lt!</i>

Handling a Postmessage

If you prefer your application to not redirect after the Transparent iFrame completes a transaction, you have the option of making use of `postMessage` functionality. This functionality will enable the iframe to send the response it receives to its parent.

```
// Create IE + others compatible event handler
var eventMethod = window.addEventListener ? "addEventListener" : "attachEvent";
var eventer = window[eventMethod];
var messageEvent = eventMethod == "attachEvent" ? "onmessage" : "message";

// Listen to message from child window
eventer(messageEvent,function(e) {
    console.log('parent received message!: ',e.data);
},false);
```

i In the above example, replace `console.log` with code that is appropriate for your solution, and optionally make use of the `get` string which is returned as `e.data`.

Hash Generation

Overview

Verification hashes are used to prove to MW that the request(s) being sent have been generated by you, and not a malicious third party who may have discovered your merchantUUID and apiKey. Even if a malicious third party was to discover the request data you have sent, they would not be able to create requests without knowing your API Passphrase. Your API Passphrase can be modified in the MW administration interface.

Transaction Type Hash

To generate a transaction type hash, concatenate the following fields:

md5(apiPassphrase) + merchantUUID + transactionAmount + transactionCurrency

Once concatenated, convert everything to lowercase, and then md5 the string:

Step 1 (concatenate):

md5(passphrase)**123456789abcd**10.00 **AUD**

Step 2 (convert to lower):

md5(passphrase)**123456789abcd**10.00 **aud**

Step 3 (md5):

d941117d8774b12e218650542af6af56

Query Type Hash

To generate a query type hash, concatenate the following fields:

*md5(apiPassphrase) + merchantUUID + transactionID **OR** transactionReferenceID*

Once concatenated, convert everything to lowercase, and then md5 the string, as above.

Custom Fields Verification Hash

To generate the custom fields hash, concatenate, convert to lowercase & md5 the following fields:

md5(apiPassphrase) + custom1 + custom2 + custom3

Be sure to decode the custom* fields first - e.g. 'Custom+Field+1' becomes "Custom Field 1".

Batch File Hash

To generate a batch file hash, simply generate the md5 checksum of the batch file:

md5(batchFile)

As an example the md5 checksum of Batch.zip (containing your .csv) may be d41d8cd98f00b204e9800998ecf8427e

Batch URL Hash

To generate a batch URL hash, concatenate the following fields:

md5(apiPassphrase) + merchantUUID + batchNotifyURL

Once concatenated, convert everything to lowercase, and then md5 the string, as above.

Batch Response Hash

To generate a batch Response hash, concatenate the following fields:

md5(apiPassphrase) + merchantUUID + batchUUID

Once concatenated, convert everything to lowercase, and then md5 the string, as above.

Web URL Hash

To generate a Web URL hash, concatenate the following fields:

md5(apiPassphrase) + merchantUUID + returnUrl + notifyURL

Once concatenated, convert everything to lowercase, and then md5 the string, as above.

302 Redirect and Post Notification Verification Hash Transactions

To generate a verification hash used for the 302 Redirect and POST notification, concatenate the following fields:

md5(apiPassphrase) + hashSalt + merchantUUID + status + transactionID OR cardID

 cardID is used for verifying an addCard response

The status and transactionID (or cardID) fields are both contained in the Redirect URL. Once concatenated, convert everything to lowercase, and then md5 the string, as above.

Direct Debit Authorizations

To generate a verification hash used for the 302 Redirect and POST notification, concatenate the following fields:

md5(apiPassphrase) + merchantUUID + hashSalt + fingerprint

BIN Hash

To generate a BIN hash, concatenate the following fields:

md5(apiPassphrase) + merchantUUID + bin

Once concatenated, convert everything to lowercase, and then md5 the string, as above.

Settlement Hash

To generate a Settlement hash, concatenate the following fields:

md5(apiPassphrase) + merchantUUID + settlementFrom + settlementTo

Once concatenated, convert everything to lowercase, and then md5 the string, as above.

Test Credit Cards

i Prior to using the test credit card numbers below, ensure that you are aware of the test provider you have been setup with. If you submit incorrect test card numbers to your test provider, your transactions will be rejected.

The test cards below are the only valid card numbers that can be used for testing with **CBA, ANZ, NAB, Bendigo & BankWest**

Card Number	Expiry Date	CVN	Card Type
5123456789012346	05/21	123	MasterCard
4987654321098769	05/21	123	Visa
345678901234564	05/21	1234	Amex
30123456789019	05/21	123	Diners Club

Using the following amounts will return the appropriate response. This particular test provider will change the response you receive based on the cent value supplied with the request.

Amount	Description
XXX.00	Transaction approved
XXX.01	Transaction declined - contact issuing bank
XXX.05	Transaction declined - contact issuing bank
XXX.10	Transaction could not be processed
XXX.51	Insufficient credit
XXX.54	Card has expired
XXX.68	No reply from Processing Host
Anything Else	Transaction could not be processed

To test the new Mastercard 2 BIN series numbers, the following test card details can be used.

Card Type	PAN (Card Number)
MasterCard	2223000000000007

Use the following expiry dates will return the appropriate responses.

Response Code	Name	Expiry Date
0	Transaction approved	05/17
4	Transaction could not be processed	04/23
3	Time Out - contact issuing bank	08/24
2	Transaction declined - contact issuing bank	05/18

The test cards below are only valid card numbers that can be used for testing with **Westpac, St. George & Bank of**

Melbourne .

Card Number	Expiry Date	CVN	Description
4564710000000004	02/19	847	Visa Approved
5163200000000008	08/20	070	MC Approved
4564710000000012	02/05	963	Visa Expired
4564710000000020	05/20	234	Visa Low Funds (\$10 credit limit)
5163200000000016	12/19	728	MC Stolen
4564720000000037	09/19	030	Visa Invalid CVV2
3760000000000006	06/20	2349	Amex
3434000000000016	01/19	9023	Amex Restricted
3643000000000007	06/22	348	Diners
3643000000000015	08/21	988	Diners Stolen
All Others	N/A	N/A	All unknown cards are rejected

302 Redirect

As an Asynchronous HTTP POST is not always reliable, an immediate response is also sent via a 302 redirect of the customer's browser to the specified returnUrl.

Transactions

Responses are sent in the GET string of the returnUrl specified

The table below details the possible fields returned to the returnUrl and their descriptions in regards to a transaction.

Field	Description
status	A textual representation of the transaction result. This can be: approved, declined, error, preauth. Example: declined
reference	If status is 'error', this will not be present. Otherwise, this contains a transactionID that can be used to query the transaction via an API call with the queryCard method Example: 1336-20be3569-b600-11e6-b9c3-005056b209e0
hash	A hash used to verify the status & transactionID, using the hashSalt Example: b55552ff426d7e3d4885465d27ea0062
code	If status is 'error', this will contain an MW error code. This can be: -1, -2, -3, -4. See Transaction responseCode Example: -1
message	If status is 'error', this will contain a textual representation of the error code. Example: 008%3AInvalid+merchantUUID+%2F+apiKey+combination
custom1	The value of the parameter, URL Encoded. Will be blank if not provided. Example: custom1
custom2	The value of the parameter, URL Encoded. Will be blank if not provided. Example: custom2
custom3	The value of the parameter, URL Encoded. Will be blank if not provided. Example: custom3

Tokenization

Responses are sent in the GET string of the returnUrl specified

The table below details the possible fields returned to the returnUrl and their description in regards to a tokenized transaction (addCard).

Field	Description
status	A textual representation of the transaction result. This can be: success, failed, error. Example: success
responseMessage	If status is 'error', this will not be present. Otherwise, this contains a message associated with the status (success or failed) of the response. Example: Operation%20successful
message	If status is 'error', this will contain a textual representation of the error code. See Transaction responseMessage Example: 008%3AInvalid+merchantUUID+%2F+apiKey+combination
hash	A hash used to verify the status & cardID, using the hashSalt Example: 11b6a860e5bdf0bd91a503b42346ee1d
cardID	A unique alphanumeric string returned by addCard, used to identify a specific card Example: MJKT20850598
cardKey	A string used as an encryption/decryption key. This should only be used if you do NOT want Merchant Warrior handling your key storage. This should be unique on a per-card basis. It's used to encrypt the card when we store it. Every time we receive a process card request, the correct cardkey must also be provided - which is known only by you. Example: qUKDIbq8idy5qsSf
ivrCardID	A unique alphanumeric string returned by addCard, used to identify a specific card used for IVR integration Example: 10230271
custom1	The value of the parameter. Will be blank if not provided. Example: custom1
custom2	The value of the parameter. Will be blank if not provided. Example: custom2
custom3	The value of the parameter. Will be blank if not provided. Example: custom3
customHash	A hash used to verify the custom parameters Example: 65b172551b7d3a0706c0ce5330c98470

Direct Debit Authorizations

 Responses are sent via [POST](#) to the returnURL specified

Upon the completion of a successful DDA submission the client is redirected to the merchant's website after 5 seconds or by clicking a link to return to the merchant's website. The client's browser is redirected to the returnURL specified by the merchant and the response data is sent via [POST](#) to the merchant's returnURL.

The table below details the possible fields returned to the returnURL and their descriptions in regards to a DDA submission.

Field	Description
responseCode	The response code associated with the DDA submission
responseMessage	A textual representation of the DDA submission
hash	A hash used to verify the status & transactionID (or cardID), using hashSalt. Refer to 302 Redirect and POST Notification Verification Hash
customerEmail	Email address associated with DDA submission
paymentAccountBSB	Account BSB associated with DDA submission
paymentAccountNumber	Account Number associated with DDA submission
custom1	The value of the parameter. Will be blank if not provided.
custom2	The value of the parameter. Will be blank if not provided.
custom3	The value of the parameter. Will be blank if not provided.
customHash	A hash used to verify the custom parameters
fingerprint	Unique fingerprint generated for each DDA submission

Response Codes

There are three possible types of responseCode:

<responsecode>	Meaning
< 0	MW validation error
= 0	Transaction/Operation was successful
> 0	Transaction was declined by the provider

If the responseCode is ≥ 0 , the responseMessage field will either contain a preset error or, if applicable, the direct error response given by the provider or MW Vault.

Transaction responseCode

In the table below, the “Status” column shows that the only time money will have left the customer’s account is when a responseCode of 0 is returned. The “Fees” column shows which transaction types have fees applied to them. No fees are ever applied to declines that are caused by provider timeouts, provider errors (except valid declines), or MW declines (due to invalid data, etc).

Status	Code	Description	Fees
Failed	-4	Internal MW error (contact MW support)	No
Failed	-3	One of the required fields was not submitted	No
Failed	-2	One of the submitted fields was invalid	No
Failed	-1	Invalid authentication credentials supplied	No
Success	0	Transaction Approved	Yes
Failed	1	Transaction could not be processed (server error)	No
Failed	2	Transaction declined – contact issuing bank	Yes
Failed	3	No reply from processing host (timeout)	No
Failed	4	Card has expired	Yes
Failed	5	Insufficient Funds	Yes
Failed	6	Error communicating with bank	No
Failed	7	Bank rejected request	Yes
Failed	8	Bank declined transaction – type not supported	Yes
Failed	9	Bank declined transaction – do not contact bank	Yes
-	10	Transaction pending	No

Token responseCode

In the table below, the “Status” column shows that the only time that an operation can complete on a customer’s token id is when a responseCode of 0 is returned.

Status	Code	Description
Failed	-4	Internal MW error (contact MW support)
Failed	-3	One of the required fields was not submitted
Failed	-2	One of the submitted fields was invalid
Success	0	Operation Successful
Failed	1	Requested card has been removed
Failed	2	Requested card has expired

Transaction responseMessage

All MW validation errors will contain a three-digit code prefix at the beginning of the responseMessage. This code will allow you to determine what specifically caused the MWE validation error to be returned, and allow you to deal with it accordingly.

responseCode	Code Prefix	Description
-3	001	Required field missing
-2	002	Invalid amount
-2	003	Invalid currency
-2	004	Invalid email
-2	005	Invalid name
-2	006	Invalid expiry
-2	007	Invalid card number
-1	008	Invalid auth details
-1	009	Invalid merchantUUID
-1	010	Invalid passphrase
-2	011	Invalid transactionID
-2	012	Invalid transaction
-2	013	Currency mismatch
-2	014	Invalid refund amount
-2	015	Refund exceeds transaction amount
-2	016	Transaction already reversed
-2	017	Invalid verification hash
-2	018	Invalid rebillID
-2	019	Invalid rebill (rebill inactive)

responseCode	Code Prefix	Description
-2	020	Invalid date
-2	021	Invalid date period
-2	022	Invalid interval
-2	023	Invalid capture amount
-2	024	Capture exceeds transaction amount
-2	025	Invalid batchUUID
-2	026	Field contains PAN
-2	027	Reference ID is not unique
-2	028	Invalid integratorUUID
-2	029	Permission error
-2	030	Token error
-2	031	Invalid BSB
-2	032	Invalid Account Number
-2	033	Invalid CSC
2	034	Transaction exceeds limit

Developer FAQ

If you wish to download Merchant Warrior logos, the sample files for integration of various services provided by Merchant Warrior or the code for integration modules please visit <https://dox.merchantwarrior.com/>