

Transaction Reporting API

Reporting queries are initiated via an HTTPS POST query to a Paystation Reporting URL, with the response sent directly back as either an XML formatted response (default) or a JSON formatted response which includes the transaction details.

The reporting system is (by default) IP limited, and access will need to be enabled on your account by Paystation. Alternatively, you can verify your access using HMAC authentication (a shared secret must be set up against your account by Paystation and used during the hashing). Details on our implementation of HMAC authentication are contained in a separate document.

The following is an example URL and POST variables, which will begin a transaction reporting lookup and return an XML result:

```
https://payments.paystation.co.nz/reporting/?
pstn_pi=600000
&pstn_gi=CARDPAY
&from_date=2014-01-01
&to_date=2014-01-02
```

After a request is sent Paystation will respond with an XML (default) formatted string. An example of the XML returned (this example shows 2 transactions returned in the results) is given below:

```
<PaystationReporting>
<LookupStatus>
<LookupCode>00</LookupCode>
<LookupMessage>Successful</LookupMessage>
<RemoteHostAddress>210.4.210.2</RemoteHostAddress>
</LookupStatus>
<transaction_count>2</transaction_count>
<transactions>
<transaction>
<paystationId>607010</paystationId>
<gatewayId>MOTOAPP</gatewayId>
<transactionId>0003217138-01</transactionId>
<time>2014-01-01 14:24:47</time>
<transactionType>purchase</transactionType>
<amount>100</amount>
<currency>NZD</currency>
<merchantReference>Test</merchantReference>
<merchantSession>pa_chris_RDM3u1376274286</merchantSession>
<transactionMode>T</transactionMode>
<batchNumber>0101</batchNumber>
<receiptNumber>3217138</receiptNumber>
<authorizeId/>
<cardType>MC</cardType>
<maskedCardNumber>555555XXXXXX444</maskedCardNumber>
<totalSuccessfulRefunds>100</totalSuccessfulRefunds>
<totalSuccessfulCaptures>0</totalSuccessfulCaptures>
<futurePaymentToken/>
```

```

<errorCode>0</errorCode>
<errorMessage>Transaction successful</errorMessage>
</transaction>
<transaction>
<paystationId>607010</paystationId>
<gatewayId>MOTOAPP</gatewayId>
<transactionId>0003217140-01</transactionId>
<time>2014-01-02 15:22:00</time>
<transactionType>purchase</transactionType>
<amount>100</amount>
<currency>NZD</currency>
<merchantReference>Test</merchantReference>
<merchantSession>pa_chris_RDM3ul376274287</merchantSession>
<transactionMode>P</transactionMode>
<batchNumber>0102</batchNumber>
<receiptNumber>3217139</receiptNumber>
<authorizeId/>
<cardType>MC</cardType>
<maskedCardNumber>555555XXXXXX444</maskedCardNumber>
<totalSuccessfulRefunds>0</totalSuccessfulRefunds>
<totalSuccessfulCaptures>0</totalSuccessfulCaptures>
<futurePaymentToken/>
<errorCode>0</errorCode>
<errorMessage>Transaction successful</errorMessage>
</transaction>
</transactions>
</PaystationReporting>

```

POST variables

<https://payments.paystation.co.nz/reporting/?>

Parameter Name	Parameter Description	Options	Example	Length	Extra Details
pstn_pi [REQUIRED]	Paystation ID		606632	6	
pstn_gi [REQUIRED]	Gateway ID		MOTOAPP	255	
pstn_cu [optional]	Currency		NZD	3	
currency_list [optional]	Currency List		NZD,USD ,AUD etc	3	
from_date [optional]	From Date		2013-03-20	10	YYYY-MM-DD
from_time [optional]	From Time		16:00:00	8	HH:MM:SS - defaults to 00:00:00

Parameter Name	Parameter Description	Options	Example	Length	Extra Details
to_date <i>[optional]</i>	To Date		2013-03-20	10	YYYY-MM-DD - defaults to now
to_time <i>[optional]</i>	To Time		16:20:00	8	HH:MM:SS - defaults to now
settlement_date <i>[optional]</i>	Interpret date ranges to be settlement dates rather than transaction times	Y,N	Y	1	defaults to N (meaning exact match is performed)
merchant_session <i>[optional]</i>	Merchant Session			64	
merchant_session_partial_match <i>[optional]</i>	Do a partial match on merchant session passed in with merchant_session (defaults to exact)	Y,N	Y	1	defaults to N (meaning exact match is performed)
transaction_id <i>[optional]</i>	Transaction ID		0020658567-01	13	
transaction_id_partial_match <i>[optional]</i>	Do a partial match on Transaction ID passed in with transaction_id (defaults to exact)	Y,N	Y	1	defaults to N (meaning exact match is performed)
merchant_reference <i>[optional]</i>	Merchant Reference			64	
merchant_reference_partial_match <i>[optional]</i>	Do a partial match on Merchant Reference passed in with merchant_reference (defaults to exact)	Y,N	Y	1	
amount <i>[optional]</i>	Amount			integer	denominated in currency units

Parameter Name	Parameter Description	Options	Example	Length	Extra Details
amount_type <i>[optional]</i>	Amount comparison type to be used when amount is passed in	LESS, GREATER, EXACT		7	defaults to EXACT
card_start <i>[optional]</i>	First 6 numbers of Credit Card (must be used in conjunction with card_end)			6	
card_end <i>[optional]</i>	Last 3 numbers of Credit Card (must be used in conjunction with card_start)			2	
token <i>[optional]</i>	Card Token			64	
transaction_mode <i>[optional]</i>	Transaction Mode	T,P		1	T=Test, P=Production
transaction_type <i>[optional]</i>	Transaction Type	purchase, refund, authorisation, capture, token		20	
refund_format <i>[optional]</i>	Refund format - return amount as positive or negative	positive, negative		8	defaults to positive
returned_result_code <i>[optional]</i>	Paystation Error Code - can include actual error code to match, or an error 'type'	[actual error code], failed, successful, incomplete	0	10	

Parameter Name	Parameter Description	Options	Example	Length	Extra Details
<code>payme_order_id</code> <i>[optional]</i>	PayMe Order ID - references an order URL that has been generated and returns transactions attached to that order			integer	
<code>pstn_rf</code> <i>[optional]</i>	Return format	XML,JSON		4	defaults to XML
<code>limit</code> <i>[optional]</i>	How many records to return		10	integer	defaults to all the records
<code>limit_sort</code> <i>[optional]</i>	Which way to sort records when using limit parameter	ASC,DESC		4	defaults to DESC (ie the last [limit] records to have been entered in database)
<code>start_record</code> <i>[optional]</i>	record number to start returning results from when using limit parameter			integer	must be used in conjunction with limit.
<code>include_total</code> <i>[optional]</i>	Whether to include a return parameter called <code>total_transaction_count</code> (used when using limit to determine the total number of transactions regardless of limits)	Y,N	Y	1	This WILL make the query slower
<code>total_only</code> <i>[optional]</i>	Don't provide transaction results, only provide a count.	Y,N	Y	1	

Parameter Name	Parameter Description	Options	Example	Length	Extra Details
short_tags <i>[optional]</i>	Return results using short tags to save space (useful for mobile deployment)	Y,N	Y	1	

Response Fields

The response is sent in the form of an XML packet. It starts with a `LookupStatus` indicating whether your request was successfully received/processed, and then includes (optionally) the `transaction_count` element and the `transactions` array that includes one or more `transaction` arrays. You will be able to extract the response values using the standard tools available within your development environment.

Individual Transaction Array variables

Variable	Description
<code>paystationId</code>	Merchant Paystation ID
<code>gatewayId</code>	Merchant Gateway ID
<code>transactionId</code>	Unique transaction ID given by Paystation
<code>time</code>	Time of transaction initiation in our system, YYYY-MM-DD HH:NN:SS
<code>transactionType</code>	'purchase', 'refund', 'authorisation', 'capture', 'token', 'reversal', 'schedule' - There may be more types added in the future
<code>amount</code>	Amount of transaction in base currency units
<code>currency</code>	NZD,USD,AUD,KRW,JPY etc (ISO 4217)
<code>merchantReference</code>	Merchant reference field passed to us in transaction initiation
<code>merchantSession</code>	Merchant session field passed to us in transaction initiation
<code>transactionMode</code>	P (Production), T (Testing)
<code>batchNumber</code>	A label assigned to a transaction by the bank indicating which batch of transactions the transaction will be settled into the merchants account with. This can be in several formats depending on bank, but usually indicates the date of the settlement batch eg, '0812' (MMDD), or 20130812 (YYYYMMDD),
<code>receiptNumber</code>	A number returned by the bank or our systems depending on processing type. This should be unique per merchant facility
<code>authorizeId</code>	A string returned by the bank depending on processing type. Is used internally for subsequent refunds/captures on appropriate transactions
<code>cardType</code>	MC (Mastercard), VC (Visa), AE (American Express), DC (Diners Club), QC (Q Card), FC (Farmers Card), PAGO (Pago), DD (Direct Debit), PO (Poli), ED (ASB PayHere and eDebit), MP (MasterPass) - There may be more types added in future.
<code>maskedCardNumber</code>	Card number masked according to account settings, usually displaying first 6 and last 3 digits
<code>totalSuccessfulRefunds</code>	The amount (if any) of this transaction that has been subsequently refunded in base currency units
<code>totalSuccessfulCaptures</code>	The amount (if any) of this transaction that has been subsequently captured in base currency units. This field would only be relevant to transactions with a <code>transactionType</code> of 'authorisation'
<code>futurePaymentToken</code>	The token that was created/used (if any) during this transaction
<code>errorCode</code>	The status of this transaction – see separate document or website for lists of error codes
<code>errorMessage</code>	The status of this transaction – A description of the <code>errorCode</code> above

Lookup Failures

The XML response for a failed look-up could be as follows.

Reporting error codes in this system are as follows.

No results

```
<LookupStatus>  
<LookupCode>01</LookupCode>  
<LookupMessage>Matching transaction not found</LookupMessage>  
<RemoteHostAddress>210.4.210.2</RemoteHostAddress>  
</LookupStatus>
```

HMAC failed

```
<LookupStatus>  
<LookupCode>02</LookupCode>  
<LookupMessage>HMAC Validation failed for account  
[$paystation_id]</LookupMessage>  
<RemoteHostAddress>210.4.210.2</RemoteHostAddress>  
</LookupStatus>
```

IP address not in allowed list for account (when not using HMAC)

```
<LookupStatus>  
<LookupCode>03</LookupCode>  
<LookupMessage>Access denied for account  
[$paystation_id]</LookupMessage>  
<RemoteHostAddress>210.4.210.2</RemoteHostAddress>  
</LookupStatus>
```

Exception in lookup system

```
<LookupStatus>  
<LookupCode>04</LookupCode>  
<LookupMessage>Internal lookup error</LookupMessage>  
<RemoteHostAddress>210.4.210.2</RemoteHostAddress>  
</LookupStatus>
```