

# Alias Gateway

Integration Guide v.3.1.3



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# 1 Introduction

The Alias Gateway is an interface that allows merchants to post transactions to the ePDQ platform by using a payment page they build themselves.

A 2-step process is involved:

Firstly, the merchant sends the card data to our system, where it is securely stored (including the CVC, but for a limited time only)

Secondly, the merchant submits the actual order, without needing to submit the card data.

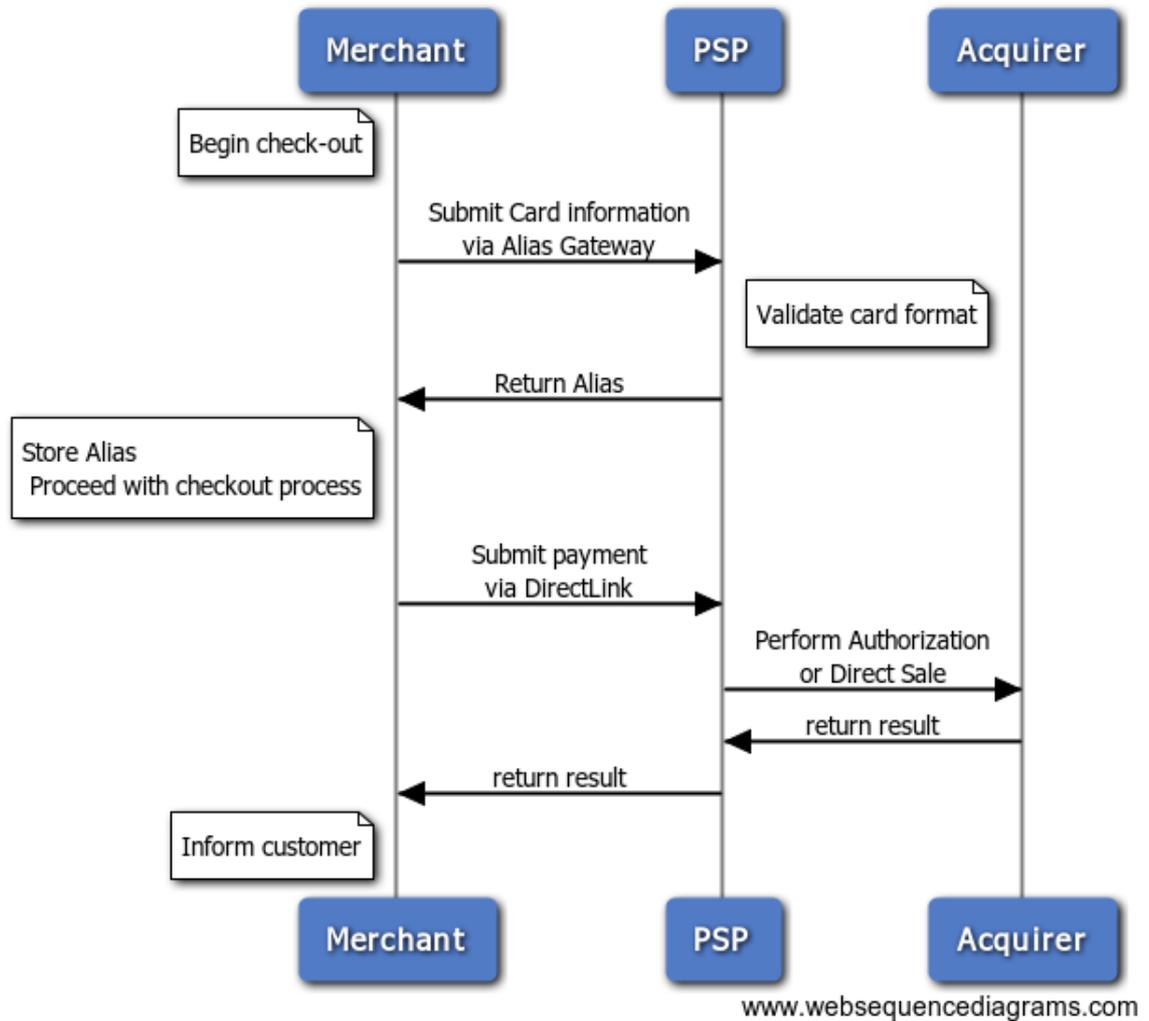
## Advantages

- The merchant has full control over the look & feel of the payment page, including the check-out sequence;
- ePDQ is completely invisible in the payment process;
- Seamless integration for various checkout scenarios including one-page-checkout;
- Merchants can offer upselling and cross-selling on the final checkout page;
- All credit card brands (VISA, MasterCard, American Express, Diners etc.) are supported, as well as Maestro and Bancontact MisterCash, Direct Debits and PostFinance Card.

*Some of the features covered in this document may not be available in your chosen ePDQ subscription. If you are unsure, please access our website to see what is included with your subscription type: <http://www.barclaycard.co.uk/business/accepting-payments/epdq-ecomm/>*

*If you wish to take advantage of any of these extra features please contact ePDQ Support on [epdq.support@barclaycard.co.uk](mailto:epdq.support@barclaycard.co.uk).*

## 2 Implementation scenario



**("Submit Card information via Alias Gateway" is not applicable for PostFinance Card)**

**REMARK**

- No operation is performed on the card in the first step. Our system simply performs a basic format validation, but cannot guarantee that the card is still valid, or has sufficient funds to proceed.
- Optionally for credit cards and always for payment methods like Maestro and Bancontact MisterCash, with 3-D Secure an additional flow is applied (cf. DirectLink 3-D guide).

## 3 Step 1: Alias Gateway

To use the Alias Gateway, the merchant must construct a webpage containing a form that does NOT send data to his own website, but directly to the ePDQ Alias gateway page instead. In this way, the card details never pass through the merchant's web servers.

The URLs for the Alias Gateway are:

[https://mdepayments.epdq.co.uk/ncol/test/alias\\_gateway.asp](https://mdepayments.epdq.co.uk/ncol/test/alias_gateway.asp) for Test

[https://payments.epdq.co.uk/ncol/prod/alias\\_gateway.asp](https://payments.epdq.co.uk/ncol/prod/alias_gateway.asp) for Production

### REMARK

It is extremely risky for a merchant to send credit card information to his own website, both from a security as well as a legal perspective!

It must be ensured that the data are always only sent to the ePDQ platform.

### 3.1 Input Fields

The form should contain the following parameters:

Name	Mandatory for Credit Cards	Mandatory For Direct Debits	Mandatory For PostFinance Card	Max Length	Description
PSPID	Y	Y	Y	30	Merchant's identification
BRAND	N	Y	Y	25	Card brand
CN	Y	Y	n/a	50	Card holder's name
CARDNO	Y	Y	n/a	35	Card/account number
CVC	Y	n/a	n/a	6	Card Verification Code
ED	Y*	n/a	n/a	4	Expiry date (MMYY)
ECOM_CARDINFO_EXPDATE_MONTH	Y*	n/a	n/a	2	Expiry month
ECOM_CARDINFO_EXPDATE_YEAR	Y*	n/a	n/a	4	Expiry year
ACCEPTURL	Y	Y	Y	255	URL for redirection in the event of success
EXCEPTIONURL	Y	Y	Y	255	URL for redirection in the event of error
PARAMPLUS	N	N	N	1000	Additional parameters to be sent by the merchant
SHASIGN	Y	Y	Y	128	SHA hash calculation (security feature)
ORDERID	Y	Y	Y	40	Order identification
ALIAS	N	N	N	50	Customer alias
LANGUAGE	N	N	Y	5	Language of the

Name	Mandatory for Credit Cards	Mandatory For Direct Debits	Mandatory For PostFinance Card	Max Length	Description
					cardholder (e.g. de_CH, en_US, etc.)
ALIASPERSISTEDATERUSE	N	N	N	1 (N / Y)	<p>Indicate whether you want to store an alias temporarily or indefinitely.</p> <p>The possible values are:</p> <ul style="list-style-type: none"> <li>• "N": the alias will be deleted after 2 hours</li> <li>• "Y": the alias will be stored indefinitely, for future use</li> </ul> <p>This parameter should only be used in combination with Alias Manager.</p>

*\* The merchant can choose whether to send the expiry date in a single field (ED) or in two fields; both formats are supported. If both are submitted, the "ED" field will prevail.*

*More information about these fields can be found in your ePDQ account. Just log in and go to: Support > Integration & user manuals > Technical guides > Parameter Cookbook.*

#### Note

If any of the mandatory input fields, e.g. ED (expiry date), contain no or invalid data, no alias will be returned.

#### Note on character encoding

The Alias Gateway will use the character encoding specified in the merchant's technical information in the "Global Security Parameters" tab. You can enforce the usage of UTF-8 by calling the *Alias\_gateway\_utf8.asp* page.

The character encoding is preserved in all subsequent redirections and responses.

### 3.1.1 Direct Debits

If you use the Alias Gateway and Direct Debits (DE, NL and/or AT):

- The account number (regular or IBAN) has to be sent with the CARDNO field.
- When relevant, the BIC (bank code) must be sent with the same parameter: BIC
- The BRAND input field must contain either 'Direct Debits NL', 'Direct Debits DE' or 'Direct Debits AT'.
- The expiry date and CVC fields should be left empty.

### 3.1.2 PostFinance Card

When using PostFinance Card, note that the process is slightly different, as the cardholder will be prompted to authenticate himself when the alias is created.

- The LANGUAGE field is mandatory
- The minimum AMOUNT value is 0.5 CHF

### 3.1.3 SHA signature for input

To check the integrity of the data, we require all requests to be accompanied by an SHA signature, in the same way as for e-commerce transactions. Please refer to the e-Commerce documentation for more information about SHA signatures and how to generate them.

Our system will use the SHA algorithm as defined in the *Global security parameters* of the merchant's Technical information page.

#### IMPORTANT

- As the merchant does not have the card number (CARDNO), cardholder name (CN), CVC and expiry date (ED) at his disposal – which is the underlying reason for the Alias Gateway – these parameters should of course NOT be included in the SHA.
- The merchant can choose whether or not to submit the parameter BRAND in the form. If the BRAND is submitted, it has to be included in the SHA calculation.

#### Example

##### Parameters (in alphabetical order)

ACCEPTURL: <https://www.myshop.com/ok.html>

EXCEPTIONURL: <https://www.myshop.com/nok.html>

PSPID: test1

##### Secret passphrase (as defined in Technical information)

*Mysecretsig1875!?*

##### String to hash

ACCEPTURL=<https://www.myshop.com/ok.html>Mysecretsig1875!?EXCEPTIONURL=<https://www.myshop.com/nok.html>Mysecretsig1875!?PSPID=test1Mysecretsig1875!?

##### Resulting SHA signature (SHA-1)

0F3455990D4859E20FD2B9F7B326304549DE6069

## 3.2 Pass-through fields

In addition to the input data, the merchant may also submit supplementary fields; these will not be stored in our system, but will be appended to the redirection URLs so that the merchant can re-use them in his order process. These fields are known as "Pass-Through Fields".

Note:

- These fields should NOT be included in the SHA signature.
- These fields are not supported in combination with PostFinance Card; we recommend to use PARAMPLUS instead (cf. [Input fields](#))

## 3.3 Output Fields

Our system will append several parameters to the Return URL (accept or exception) in order to provide the merchant with feedback on the operation. These parameters are:

Name	Relevant for credit cards	Relevant for Direct Debits DE	Relevant for PostFinance Card	Max Length	Description
ORDERID	Y	Y	Y	40	The unique identifier of the order. This must be sent in the event of a retry, so we can

Name	Relevant for credit cards	Relevant for Direct Debits DE	Relevant for PostFinance Card	Max Length	Description
					match them with the aliases (card/CVC) <i>The ORDERID is generated automatically and is numeric.</i>
STATUS	Y	Y	Y	1	Result of the alias creation. 0=OK, 1=NOK, 2=Alias updated
ALIAS	Y	Y	Y	50	Generated alias. According to the 32 digit GUID format. Example: 34F5302C-85D7-4F35-BDF5-103CCEC2FB61
BIC	N	Y	N	11	The Bank Identifier Code, for Direct Debits transactions. A value is returned only if initially submitted, i.e. not derived from the IBAN
BRAND	Y	Y	Y	25	Brand of the payment method
CN	Y	Y	Y	50	Card/Account holder name
CARDNO	Y	Y	Y	35	Card/Account number (regular or IBAN), with Xs to replace sensitive information. N.B. In the event of an error, the card/account will also be masked.
CVC	Y	n/a	n/a	6	Card Verification Code, with Xs to replace sensitive data
ED	Y	n/a	Y	4	Expiry date, e.g. 0216 (for February 2016)
NCERROR	Y	Y	Y	50	Error code
NCERRORCN	Y	Y	Y	50	Error code for CN
NCERRORCARDNO	Y	Y	Y	50	Error code for CARDNO
NCERRORCVC	Y	n/a	n/a	50	Error code for CVC
NCERRORED	Y	n/a	Y	50	Error code for ED
SHASIGN	Y	Y	Y	128	SHA signature for output
(More)	Y	Y	Y	/	Pass-through fields + the fields contained in PARAMPLUS

*More information about these fields can be found in your ePDQ account. Just log in and go to: Support > Integration & user manuals > Technical guides > Parameter Cookbook.*

### 3.3.1 SHA signature for output

Our system will return an SHA-OUT signature, in the same way as for e-Commerce transactions, for the following parameters:

ALIAS  
 BIC  
 BRAND  
 CARDNO  
 CN  
 CVC  
 ED  
 NCERROR  
 NCERRORCARDNO  
 NCERRORCN  
 NCERRORCVC  
 NCERRORED  
 ORDERID  
 STATUS

Please refer to the e-Commerce documentation for more details about SHA.

## 3.4 Re-submission

When resubmitting data (e.g. because the first attempt was unsuccessful), the cardholder does not have to re-enter previously validated details. For example, if the card number is OK, then the browser will submit the "X-ed" card number, and our system will match it with the one stored for the previous request.

To achieve this, the merchant must submit the ORDERID with every request. The same ORDERID is sent back every time. If a new ORDERID is used, the error code 5555554 will be returned.

### 3.4.1 Error messages

The following error messages may be returned by the Alias Gateway:

#### NCERROR

5555554	Incorrect ORDERID (within 2 hours after each submission)
5555555	General error
50001184	SHA_IN mismatch
50001186	*Operation not allowed (when the merchant sends an ORDERID for which an alias already exists)
50001187	*Operation not allowed (when the merchant sends an alias that already exists)
50001300	Wrong brand specified (Direct Debits)
50001301	Wrong bank account format (Direct Debits)

#### NCERRORCN

60001057	Name is missing
50001174	Name is too long

#### NCERRORCARDNO

30141001	Invalid card number
50001069	Brand and card number do not match

50001176 Card number is too long  
50001177 Card number contains non-numeric info  
50001178 Card number too short/empty

NCERRORCVC

50001090 CVC missing or too short  
50001179 CVC too long  
50001180 CVC contains non-numeric information

NCERRORED

50001181 Expiry date contains non-numeric information  
50001182 Invalid expiry month  
50001183 Expiry date must be in the future  
31061001 Expiry date empty or wrong format

## 4 Step 2: DirectLink

Using the Alias generated with the Alias Gateway, you may then submit a DirectLink transaction using our standard DirectLink implementation. Please refer to the DirectLink documentation for implementation instructions.

This mechanism is also compatible with DirectLink 3D, as documented in DirectLink with 3-D Secure supplement.

For more information about Alias usage, see the Alias Manager documentation.

## 5 Appendix: Alias update using the Alias Gateway

The Alias gateway can also be used to update existing aliases, using the same input fields as for the alias creation.

### Note

If the merchant wants to simply update the cardholder name, it is not sufficient to only supply the new name and the existing alias. The X-ed card number must also be sent in the CARDNO field. The CVC is not necessary.

In the response, the STATUS output field will inform the merchant of the alias update (status 2).

### Result of the alias creation:

- 0 OK
- 1 Not OK
- 2 Alias Updated

*For more information about Alias usage, please see our Alias Manager option guide.*