



PathwayLINK Card Utility Services API Guide

PathwayLINK Card Utilities API Guide

Version 1.0

Released October 2, 2013 Copyright © 2011-2013, BridgePay Network Solutions, Inc. All rights reserved.

The information contained herein is the confidential and proprietary property of BridgePay Network Solutions, Inc. and may not be used, distributed, modified, disclosed, or reproduced without express written permission.

Table of Contents

Chapter 1. Introduction	4
1.1. Integration Options.....	4
1.2. Testing.....	4
Chapter 2. Web Service Functionality	5
2.1. GetCardType	5
2.1.1. Examples	6
2.1.1.1. MasterCard	6
2.1.1.2. Visa.....	6
2.2. IsCommercialCard	6
2.2.1. Examples	7
2.2.1.1. Non-Commercial Card.....	7
2.2.1.2. Commercial Card.....	7
2.3. ValidCardLength.....	7
2.3.1. Examples	7
2.3.1.1. Invalid Card Length	8
2.3.1.2. Valid Card Length	8
2.4. ValidExpDate	8
2.4.1. Examples	8
2.4.1.1. Invalid Expiration Date.....	9
2.4.1.2. Valid Expiration Date	9
2.5. ValidMod10.....	9
2.5.1. Examples	9
2.5.1.1. Failed Checksum	10
2.5.1.2. Passed Checksum.....	10
2.6. ValidCard.....	10
2.6.1. ValidCard Result Values	11
2.6.2. Examples	11
2.6.2.1. Invalid Result.....	11
2.6.2.2. Valid Result	11
2.7. GetNetworkID	12
2.7.1. Example.....	12
2.7.1.1. Interlink Card.....	12

Changes and Modifications

The table below lists changes made to the PathwayLINK Card Utilities API Guide:

Chapter 1. Introduction

1.1. Integration Options

This document assists Point-of-Sale (POS) developers to integrate directly with BridgePay's PathwayLINK Payment Gateway using the following integration methods:

- .NET Web services
- HTTPS POST
- SOAP

1.2. Testing

A test or live merchant account with BridgePay is necessary to successfully process transactions. To acquire a test account, contact the BridgePay Developer Support Department at developersupport@bridgepaynetwork.com or fill out the test account request form at <http://www.bridgepaynetwork.com/testAccount.php>.

Chapter 2. Web Service Functionality

For development and staging purposes, BridgePay provides integrators with an .asmx page that contains online documentation and a testing form for each operation.

During integration, it may be helpful to process sample transactions using the test forms to get a feel for how the various operations work or to troubleshoot integration problems.

During development and staging, use the following URL:

<https://gatewaystage.itstgate.com/SmartPayments/validate.asmx>

Once certified, process all live transactions against the following URL:

<https://gateway.itstgate.com/SmartPayments/validate.asmx>

PathwayLINK supports the following card utility operations:

- **GetCardType** – Returns the name of the card issuer.
- **IsCommercialCard** – Returns whether or not the card is a known commercial card.
- **ValidCardLength** – Validates the length of the card number.
- **ValidExpDate** – Validates the card's expiration date.
- **ValidMod10** – Validates card by performing a mod 10 checksum on the card number.
- **ValidCard** – Validates the card by validating the length of the card number, validating the expiration date, and performing a mod 10 checksum.
- **GetNetworkID** – Returns a card's network ID.

i Card utility services integrate with the PathwayLINK Transaction Processing services. Please refer to the PathwayLINK Transaction Processing Developer API Guide for more information on using the transaction processing Web service operations.

2.1. GetCardType

This Web service operation returns the name of the card issuer (e.g., Visa) using the BIN range of the card number. The URL to access this operation is:

<https://gateway.itstgate.com/SmartPayments/validate.asmx?op=GetCardType>

The following table contains parameter descriptions.

Parameter	Description
CardNumber	Required. The card number.

2.1.1. Examples

The following examples show the function of this Web service operation.

2.1.1.1. MasterCard

The following example processes a **GetCardType** request that returns the issuer associated with the BIN of the given card number.

Parameter	Value
CardNumber	5454545454545454

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<string xmlns="http://localhost/SmartPayments/">MASTERCARD</string>
```

2.1.1.2. Visa

The following example processes a **GetCardType** request that returns the issuer associated with the BIN of the given card number.

Parameter	Value
CardNumber	4011225522552255

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<string xmlns="http://localhost/SmartPayments/">VISA</string>
```

2.2. IsCommercialCard

This Web service operation process determines whether or not the card number entered is for a known commercial card. The URL to access this operation is:

<https://gateway.itstgate.com/SmartPayments/validate.asmx?op=IsCommercialCard>

- ↗ Due to factors including ever-changing card BIN ranges, this method may not be able to determine all commercial or purchase cards. Design your application with this in mind.

The following table contains parameter descriptions.

Parameter	Description
CardNumber	Required. The card number.

2.2.1. Examples

The following examples show the function of this Web service operation.

2.2.1.1. Non-Commercial Card

The following example processes an **IsCommercialCard** request that determines the entered card number is a non-commercial card.

Parameter	Value
CardNumber	5454545454545454

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<boolean xmlns="https://gateway.itstgate.com/SmartPayments/">false</boolean>
```

2.2.1.2. Commercial Card

The following example processes an **IsCommercialCard** request that shows the entered card number is a commercial card.

Parameter	Value
CardNumber	4055011111111111

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<boolean xmlns="https://gateway.itstgate.com/SmartPayments/">true</boolean>
```

2.3. ValidCardLength

This Web service operation validates a card number's length based on card type. The URL to access this operation is:

<https://gateway.itstgate.com/SmartPayments/validate.asmx?op=ValidCardLength>

The following table contains parameter descriptions.

Parameter	Description
CardNumber	Required. The card number.

2.3.1. Examples

The following examples show the function of this Web service operation.

2.3.1.1. Invalid Card Length

The following example processes a **ValidCardLength** request that shows this card number has an invalid length.

Parameter	Value
CardNumber	54545454545454

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<boolean xmlns="https://gateway.itstgate.com/SmartPayments/">false</boolean>
```

2.3.1.2. Valid Card Length

The following example processes a **ValidCardLength** request that shows this card number has a valid length.

Parameter	Value
CardNumber	4126196901499

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<boolean xmlns="https://gateway.itstgate.com/SmartPayments/">true</boolean>
```

2.4. ValidExpDate

This Web service operation validates the expiration date of a card. The URL to access this operation is:

<https://gateway.itstgate.com/SmartPayments/validate.asmx?op=ValidExpDate>

The following table contains parameter descriptions.

Parameter	Description
ExpDate	Required. Card's expiration date in MMYY format.

2.4.1. Examples

The following examples show the function of this Web service operation.

2.4.1.1. Invalid Expiration Date

The following example processes a **ValidExpDate** request that shows the entered expiration date is invalid.

Parameter	Value
ExpDate	1205

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<boolean xmlns="https://gateway.itstgate.com/SmartPayments/">false</boolean>
```

2.4.1.2. Valid Expiration Date

The following example processes a **ValidExpDate** request that shows the entered expiration date is valid.

Parameter	Value
ExpDate	1216

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<boolean xmlns="https://gateway.itstgate.com/SmartPayments/">true</boolean>
```

2.5. ValidMod10

This Web service operation validates a card by performing a mod 10 checksum on the card number. The URL to access this operation is:

<https://gateway.itstgate.com/SmartPayments/validate.asmx?op=ValidMod10>

The following table contains parameter descriptions.

Parameter	Value
CardNumber	Required. The card number.

2.5.1. Examples

The following examples show the function of this Web service operation.

2.5.1.1. Failed Checksum

The following example processes a **ValidMod10** request for a card number that fails the mod 10 checksum.

Parameter	Value
CardNumber	54545454545454

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<boolean xmlns="https://gateway.itstgate.com/SmartPayments/">false</boolean>
```

2.5.1.2. Passed Checksum

The following example processes a **ValidMod10** request for a card number that passes the mod 10 checksum.

Parameter	Value
CardNumber	4126196901499

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<boolean xmlns="https://gateway.itstgate.com/SmartPayments/">true</boolean>
```

2.6. ValidCard

This Web service operation validates a card by:

- Validating the card number length (based on card type).
- Validating the card expiration date.
- Performing a mod 10 checksum.

The URL to access this operation is:

<https://gateway.itstgate.com/SmartPayments/validate.asmx?op=ValidCard>

The following table contains parameter descriptions.

Parameter	Value
CardNumber	Required. The card number.
ExpDate	Required. Card's expiration date in MMYY format.

The ValidCard request returns the validation result as a numeric value. For a list of these values and their descriptions, please see the [ValidCard Result Values](#) table.

2.6.1. ValidCard Result Values

The following table contains descriptions of the possible responses a ValidCard request may return.

Value	Description
0	Good.
1001	No card number.
1002	No expiration date.
1003	Invalid card type.
1004	Invalid card length.
1005	Invalid mod 10 check.
1006	Invalid expiration date.

2.6.2. Examples

The following examples show the function of this Web service operation.

2.6.2.1. Invalid Result

The following example processes a **ValidCard** request that fails the mod 10 checksum.

Parameter	Value
CardNumber	54545454545454
ExpDate	0516

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<int xmlns="https://gateway.itstgate.com/SmartPayments/">1005</int>
```

2.6.2.2. Valid Result

The following example processes a **ValidCard** request that passes all validation tests.

Parameter	Value
CardNumber	4126196901499
ExpDate	0516

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<int xmlns="https://gateway.itstgate.com/SmartPayments/">0</int>
```

2.7. GetNetworkID

This Web service operation returns the network ID using the BIN range in the card number.
The URL to access this operation is:

<https://gateway.itstgate.com/SmartPayments/validate.asmx?op=GetNetworkID>

The following table contains parameter descriptions.

Parameter	Value
UserName	Required. Username assigned in the payment server.
Password	Required. Password for the username assigned in the payment server.
CardNumber	Required. The card number.

2.7.1. Example

The following example shows the function of this Web service operation.

2.7.1.1. Interlink Card

The following example processes a **GetNetworkID** request.

Parameter	Value
UserName	test
Password	123
CardNumber	6043990501000200

Response

```
<?xml version="1.0" encoding="utf-8" ?>
<Response xmlns:xsd="http://www.w3.org/2001/XMLSchema"
           xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
           xmlns="https://gateway.itstgate.comSmartPayments/">
    <Result>0</Result>
    <RespMSG>Interlink</RespMSG>
    <Message>Y</Message>
    <Message1>NetworkID=ILK,NetworkAuthorizerNum=48</Message1>
    <Message2>OfflineSupported=True</Message2>
    <AuthCode>ILK</AuthCode>
    <HostCode>48</HostCode>
</Response>
```