



PayLeap API Guide

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Document Control

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1. Introduction

Congratulations on the selection of the PayLeap Payment Gateway, the most advanced solution in the industry for processing credit cards, debit cards, EBT cards, gift cards, and electronic check services. The PayLeap Payment Gateway provides you with a fast, easy, reliable way to process IP-based transactions.

This guide prepares you with the detailed information that you will need to develop, configure, and test your payment processing solution.

Within this guide, you will find details for the following PayLeap APIs:

- [Transaction API](#)
- [Merchant Services API](#)
- [Reporting API](#)

2. PayLeap Transaction API

The PayLeap Transaction API allows you to submit payment transactions to your processor over the internet using PayLeap's payment gateway. The PayLeap Transaction API supports the following transaction types:

- [Credit Card](#)
- [Check](#)
- [Debit Card](#)
- [PIN Debit/ATM Card](#)
- [Pinless ATM Card](#)
- [EBT](#)
- [Gift Card](#)

Additionally, the PayLeap Transaction API card validation service allows you to verify card number, length, and expiration date.

2.1. How to Access

The PayLeap Transaction API supports the following types of transaction requests:

- REST
- SOAP

Messages must be sent using URL-encoded, HTTP GET messages.

2.1.1. URL

The testing URL is:

<https://uat.payleap.com/TransactServices.svc>

The production URL is:

<https://secure1.payleap.com/TransactServices.svc>

2.1.2. WSDL

The WSDL file for testing is:

<https://uat.payleap.com/TransactServices.svc?wsdl>

The WSDL file for production is:

<https://secure1.payleap.com/TransactServices.svc?WSDL>

2.1.3. Setting up Your API Login Credentials

In order to communicate with the API, your account must allow API access and you must maintain a separate API login ID and transaction key.

To locate your API login and set up for your API transaction key, follow these steps:

1. Log in to the PayLeap web interface using your user name and password.

Test URL:

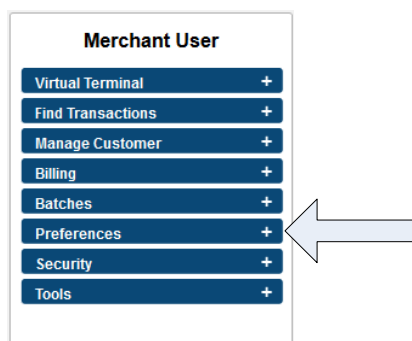
<https://uat.payleap.com/>

Production URL:

<https://secure1.payleap.com/>

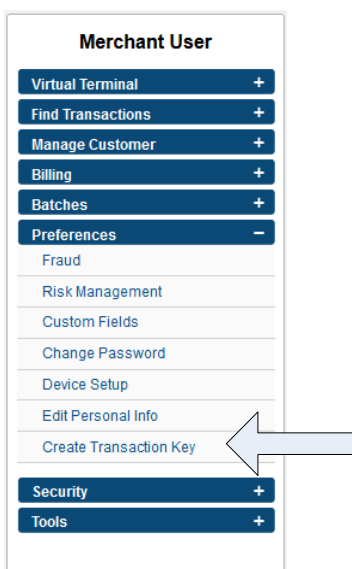
2. Click on **Preferences** in the main menu (refer to Figure 1).

FIGURE 1. CLICK PREFERENCES



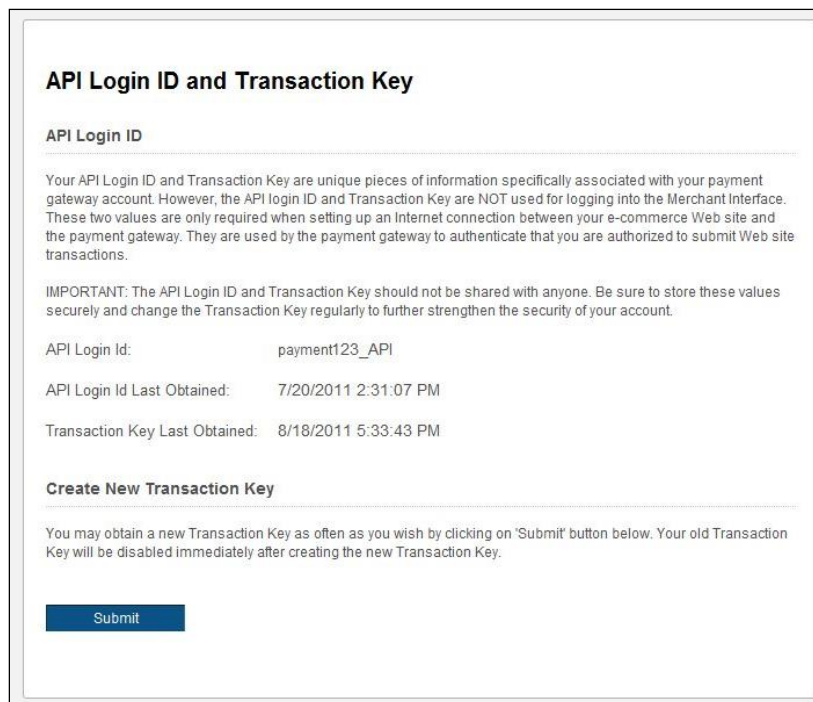
2. Click on **Create Transaction Key** in the expanded **Preferences** menu (refer to Figure 2).

FIGURE 2. CLICK CREATE TRANSACTION KEY



3. The **API Login ID and Transaction Key** window appears (refer to Figure 3). Use the API Login ID value for the `UserName` parameter for API transaction requests.

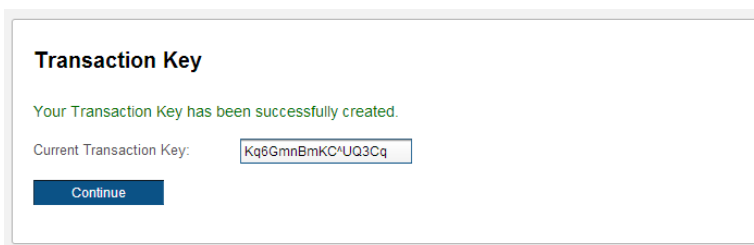
FIGURE 3. API LOGIN ID AND TRANSACTION KEY WINDOW



4. Within the **Create New Transaction Key** section, select the **Submit** button.

- A message including your newly created Transaction Key will be displayed (refer to Figure 4). Use the API Transaction Key value for the Password parameter for API transaction requests.

FIGURE 4. NEW TRANSACTION KEY MESSAGE



It is important to keep in mind that the API Login ID and API Transaction Key should not be shared with anyone. Be sure to store these values securely.

You can generate a new API transaction key at any time; however, you must update any application using the previous API transaction key to use the new key.

2.2. Test Data

You can request a test account on our testing server. To request this account, please send your email request to our technical support staff. Please include the following information with your test account request: company name, your name, phone number, email address associated with the test account, and which payment processor you would like to test. An email response will be sent with valid test information. Refer to Table 1 for a complete list of test parameters by payment type.

TABLE 1. TEST ACCOUNT PARAMETERS

Payment Type	Test Parameters
Credit Card	The test site accepts any valid, mod 10 credit card number. The test site does not validate AVS or CVV data and return passing values for any data submitted
Check	The test site accepts any valid account, routing, and MICR data
Debit Card	The test site accepts any card number of at least 16 digits. The test site does perform any encryption functions, so you can submit any value for the Pin and KeySerialNum values
EBT	The test site accepts any 16-19 digit card number. The test site does perform any encryption functions, so you can submit any value for the Pin and KeySerialNum values
Gift Card	The test site accepts any card number for gift card

2.3. ProcessCreditCard

To send a credit card transaction, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/ProcessCreditCard>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/ProcessCreditCard>

The following sections describe the parameters required for each type of credit card transaction.

2.3.1. Sale

Use the Sale value for the TransType parameter to perform a credit card sale transaction. A credit card sale transaction authorizes a payment of a specified amount and captures that transaction in the current batch for settlement.

2.3.1.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Sale
CardNum	Required	The credit card number used for the transaction
ExpDate	Required	The expiration date of the credit card used for the transaction in MMY format
MagData	Required for Swipe only	For swiped transactions, the complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=140410100000059300000?'
PNRef	Required	Field required; Value not required
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format. The amount includes any tax or tip amounts specified in ExtData
NameOnCard	Optional	The cardholder's name as printed on the card
InvNum	Optional	The invoice number used by the merchant to identify the transaction
CVNum	Optional	The 3-4 digit card verification number
Zip	Optional	The cardholder's billing ZIP code; used for AVS
Street	Optional	The cardholder's billing street address; used for AVS
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.3.1.2. ExtData

XML Tag	Description
TipAmt	Tip amount in DDDD.CC format
TaxAmt	Tax amount in DDDD.CC format
TimeOut	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F
CustomerID	Customer identification number; this value takes precedence over Invoice/BillTo/CustomerID
PONum	Purchase order number for the transaction; this value takes precedence over Invoice/PONum
CVPresence	Indicates whether a CVV2 or CID has been sent along with the request; valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Contains invoice and billing information
BillTo	Contains cardholder billing information
CustomerID	Customer identification number; this value is superseded by the top level CustomerID
Name	Cardholder's billing name
Address	Contains cardholder address
Street	Cardholder billing street address
City	Cardholder billing city
State	Cardholder billing state
Zip	Cardholder billing ZIP/postal code
Country	Cardholder billing country
Email	Cardholder billing email address
Phone	Cardholder billing phone number
Fax	Cardholder billing fax number
PONum	Purchase order number for the transaction; this value is superseded by the top level PONum

2.3.1.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCVResult	Returns the card verification result if a value is submitted in the CVNum field (see CVV Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.3.1.4. Example

2.3.1.4.1. Sample Credit Card Sale Request

```
https://uat.payleap.com/transactservices.svc/ProcessCreditCard?
UserName=user123_API&Password=Nn2jCtsOuxVlcELE&TransType=Sale&C
ardNum=4111111111111111&ExpDate=1212&MagData=&NameOnCard=JohnDo
e&Amount=1&InvNum=&PNRef=&Zip=98375&Street=&CVNum=&ExtData=
```

2.3.1.4.2. Sample Credit Card Sale Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>22082011092400</AuthCode>
<GetAVSResult>N</GetAVSResult>
<GetCVResult>S</GetCVResult>
<GetCommercialCard>>false</GetCommercialCard>
<HostCode>9526de58-407e-42e2-a564-761465e29df7</HostCode>
<Message>APPROVAL</Message>
<PNRef>12484</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.3.2. Adjustment

Use the Adjustment value for the TransType parameter to perform a credit card tip adjustment transaction. A credit card tip adjustment transaction re-authorizes a payment in the current batch to add a tip amount. An adjustment can only be completed following a successful [Sale](#) transaction.

2.3.2.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Adjustment
CardNum		Not used for this transaction type
ExpDate		Not used for this transaction type
MagData		Not used for this transaction type
PNRef	Required	The PNRef number assigned by PayLeap for the transaction and returned in the Sale response
Amount	Required	Tip amount in DDDD.CC format
NameOnCard	Optional	The cardholder's name as printed on the card
InvNum		Not used for this transaction type
CVNum		Not used for this transaction type
Zip		Not used for this transaction type
Street		Not used for this transaction type
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.3.2.2. ExtData

XML Tag	Description
TimeOut	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F

2.3.2.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)

Response Value	Description
GetCVResult	Returns the card verification result if a value is submitted in the CVNum field (see CVV Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.3.2.4. Example

2.3.2.4.1. Sample Credit Card Adjustment Request

```
https://uat.payleap.com/transactservices.svc/ProcessCreditCard?
UserName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Adjust
ment&CardNum=&ExpDate=&MagData=&NameOnCard=&Amount=1&InvNum=&PN
Ref=13976&Zip=&Street=&CVNum=&ExtData=
```

2.3.2.4.2. Sample Credit Card Adjustment Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>06092011121918</AuthCode>
<GetAVSResult>N</GetAVSResult>
<GetCVResult>S</GetCVResult>
<GetCommercialCard>>false</GetCommercialCard>
<HostCode>73166df1-1fd7-4db0-a196-0e414c8d5865</HostCode>
<Message>APPROVAL</Message>
<PNRef>13976</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.3.3. Auth

Use the Auth value for the TransType parameter to perform a credit card authorization transaction. A credit card authorization transaction authorizes a payment of a specified amount without capturing that transaction in the current batch. To capture the transaction in the batch for later settlement, use a [Force](#) transaction.

2.3.3.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key

Parameter	Required	Description
TransType	Required	Auth
CardNum	Required	The credit card number used for the transaction
ExpDate	Required	The expiration date of the debit card used for the transaction in MMY format
MagData	Required for Swipe only	For swiped transactions, the complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B41111111111111111111111111111111^BO/JAMES B^140410100000059300000?'; 41111111111111111111111111111111=140410100000059300000?'
PNRef		Not used for this transaction type
Amount	Required	The dollar amount of the transaction in DDDDDDDDD.CC format. The amount includes any tax or tip amounts specified in ExtData
NameOnCard	Optional	The cardholder's name as printed on the card
InvNum	Optional	The invoice number used by the merchant to identify the transaction
CVNum	Optional	The 3-4 digit card verification number
Zip	Optional	The cardholder's billing ZIP code; used for AVS
Street	Optional	The cardholder's billing street address; used for AVS
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.3.3.2. ExtData

XML Tag	Description
TipAmt	Tip amount in DDDD.CC format
TaxAmt	Tax amount in DDDD.CC format
TimeOut	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F
CustomerID	Customer identification number; this value takes precedence over Invoice/BillTo/CustomerID
PONum	Purchase order number for the transaction; this value takes precedence over Invoice/PONum

XML Tag	Description
CVPresence	Indicates whether a CVV2 or CID has been sent along with the request; valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Contains invoice and billing information
BillTo	Contains cardholder billing information
CustomerId	Customer identification number; this value is superseded by the top level CustomerID
Name	Cardholder's billing name
Address	Contains cardholder address
Street	Cardholder billing street address
City	Cardholder billing city
State	Cardholder billing state
Zip	Cardholder billing ZIP/postal code
Country	Cardholder billing country
Email	Cardholder billing email address
Phone	Cardholder billing phone number
Fax	Cardholder billing fax number
PONum	Purchase order number for the transaction; this value is superseded by the top level PONum`

2.3.3.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction. If Amount in Request was non-zero, absence of an AuthCode indicates transaction failure. If Amount in Request was zero, presence or absence of an AuthCode is processor-defined and should not be used as a reliable indicator of success or failure.
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCVResult	Returns the card verification result if a value is submitted in the CVNum field (see CVV Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.3.3.4. Example

2.3.3.4.1. Sample Credit Card Auth Request

```
https://uat.payleap.com/transactservices.svc/ProcessCreditCard?U
serName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Auth&Car
dNum=4111111111111111&ExpDate=1215&MagData=&NameOnCard=John%20Do
e&Amount=1.50&InvNum=&PNRef=&Zip=30309&Street=123%20Fake%20St&CV
Num=123&ExtData=
```

2.3.3.4.2. Sample Credit Card Auth Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>06092011031507</AuthCode>
<GetAVSResult>N</GetAVSResult>
<GetCVResult>S</GetCVResult>
<GetCommercialCard>>false</GetCommercialCard>
<HostCode>b65228fa-2772-4bdc-99fc-5163dbec985e</HostCode>
<Message>APPROVAL</Message>
<PNRef>13980</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```


2.3.4. Return

Use the Return value for the TransType parameter to perform a credit card return transaction. A credit card return transaction credits a specified amount to the cardholder and captures that transaction in the current batch for settlement. A Return can only be completed following a successful [Sale](#) transaction.

2.3.4.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Return
CardNum	Optional	The credit card number used for the transaction
ExpDate	Optional	The expiration date of the debit card used for the transaction in MMY format
MagData	Required for Swipe only	For swiped transactions, the complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=140410100000059300000?'
PNRef	Required	The PNRef number assigned by PayLeap for the transaction and returned in the Sale response
Amount	Required	The dollar amount of the refund in DDDDDDDDDD.CC format; this value must be less than or equal to the original sale transaction
NameOnCard	Optional	The cardholder's name as printed on the card
InvNum	Optional	The invoice number used by the merchant to identify the transaction
CVNum	Optional	The 3-4 digit card verification number
Zip	Optional	The cardholder's billing ZIP code; used for AVS
Street	Optional	The cardholder's billing street address; used for AVS
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.3.4.2. ExtData

XML Tag	Description
TimeOut	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F

2.3.4.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCVResult	Returns the card verification result if a value is submitted in the CVNum field (see CVV Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.3.4.4. Example

2.3.4.4.1. Sample Credit Card Return Request

```
https://uat.payleap.com/transactservices.svc/ProcessCreditCard?
UserName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Return
&CardNum=4111111111111111&ExpDate=1215&MagData=&NameOnCard=&Amo
unt=4&InvNum=&PNRef=14000&Zip=&Street=&CVNum=&ExtData=
```

2.3.4.4.2. Sample Credit Card Return Response

```

<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>06092011052302</AuthCode>
<GetAVSResult>N</GetAVSResult>
<GetCVResult>S</GetCVResult>
<GetCommercialCard>>false</GetCommercialCard>
<HostCode>43a81b03-1069-42e1-8d09-c725e9b73a99</HostCode>
<Message>APPROVAL</Message>
<PNRef>14001</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
  
```

2.3.5. Void

Use the Void value for the TransType parameter to perform a credit card void transaction. A credit card void transaction removes a sale transaction from the existing batch so that the cardholder will not be charged. To refund a customer for a transaction from a previous batch, use a [Return](#) transaction.

2.3.5.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Void
PNRef	Required	The PNRef number assigned by PayLeap for the transaction and returned in the Sale response
CardNum		Not used for this transaction type
ExpDate		Not used for this transaction type
MagData		Not used for this transaction type
Amount		Not used for this transaction type
NameOnCard		Not used for this transaction type
InvNum		Not used for this transaction type
CVNum		Not used for this transaction type
Zip		Not used for this transaction type
Street		Not used for this transaction type
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.3.5.2. ExtData

XML Tag	Description
TimeOut	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F

2.3.5.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCVResult	Returns the card verification result if a value is submitted in the CVNum field (see CVV Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.3.5.4. Example

2.3.5.4.1. Sample Credit Card Void Request

```
https://uat.payleap.com/transactservices.svc/ProcessCreditCard?
UserName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Return
&CardNum=4111111111111111&ExpDate=1215&MagData=&NameOnCard=&Amo
unt=4&InvNum=&PNRef=14000&Zip=&Street=&CVNum=&ExtData=
```

2.3.5.4.2. Sample Credit Card Void Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>06092011052302</AuthCode>
<GetAVSResult>N</GetAVSResult>
<GetCVResult>S</GetCVResult>
<GetCommercialCard>>false</GetCommercialCard>
<HostCode>43a81b03-1069-42e1-8d09-c725e9b73a99</HostCode>
<Message>APPROVAL</Message>
<PNRef>14001</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.3.6. Force

Use the Force value for the TransType parameter to perform a credit card force transaction. A credit card force transaction captures a previous [Auth](#) transaction in the current batch for settlement. A force transaction can be entered [using the PNRef number](#) from a previous Auth transaction using the PayLeap Transaction API or [using an AuthCode](#) obtained directly from the processor.

2.3.6.1. Force Transaction Using PNRef

To capture the original authorization transaction in the bath, send a force transaction using the PNRef value returned in the [Auth](#) transaction.

2.3.6.1.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Force
PNRef	Required	The PNRef number assigned by PayLeap for the transaction and returned in the Sale response
CardNum	Optional	The credit card number used for the transaction; not required when submitting a PNRef number
ExpDate	Optional	The expiration date of the credit card used for the transaction in MMY format; not required when submitting a PNRef number
MagData	Optional (for swiped)	For swiped transactions, the complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B4111111111111111^BO/JAMES B^140410100000059300000?; 4111111111111111=14041010000059300000?'; not required when submitting a PNRef number

Parameter	Required	Description
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format; this value must be less than or equal to the original authorization
NameOnCard	Optional	The cardholder's name as printed on the card
InvNum	Optional	The invoice number used by the merchant to identify the transaction
CVNum	Optional	The 3-4 digit card verification number
Zip	Optional	The cardholder's billing ZIP/postal code; used for AVS
Street	Optional	The cardholder's billing state; used for AVS
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.3.6.1.2. ExtData

XML Tag	Description
AuthCode	The authorization code returned in the AuthCode field of the original sale response (optional if PNRef is included in request)
TipAmt	Tip amount in DDDD.CC format
TaxAmt	Tax amount in DDDD.CC format
TimeOut	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F
CustomerID	Customer identification number; this value takes precedence over Invoice/BillTo/CustomerID
PONum	Purchase order number for the transaction; this value takes precedence over Invoice/PONum
CVPresence	Indicates whether a CVV2 or CID has been sent along with the request; valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Contains invoice and billing information
BillTo	Contains cardholder billing information

XML Tag	Description
CustomerId	Customer identification number; this value is superseded by the top level CustomerID
Name	Cardholder's billing name
Address	Contains cardholder address
Street	Cardholder billing street address
City	Cardholder billing city
State	Cardholder billing state
Zip	Cardholder billing ZIP/postal code
Country	Cardholder billing country
Email	Cardholder billing email address
Phone	Cardholder billing phone number
Fax	Cardholder billing fax number
PONum	Purchase order number for the transaction; this value is superseded by the top level PONum

2.3.6.1.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCVResult	Returns the card verification result if a value is submitted in the CVNum field (see CVV Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

Parameter	Required	Description
		4111111111111111=14041010000059300000?'; not required when submitting a PRef number
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format; this value must be less than or equal to the original authorization
NameOnCard	Optional	The cardholder's name as printed on the card
InvNum	Optional	The invoice number used by the merchant to identify the transaction
CVNum	Optional	The 3-4 digit card verification number
Zip	Optional	The cardholder's billing ZIP/postal code; used for AVS
Street	Optional	The cardholder's billing state; used for AVS
ExtData	Required	An XML string containing additional data for the transaction; in this type of Force, an AuthCode is required in the ExtData. See ExtData for more information.

2.3.6.2.2. ExtData

XML Tag	Description
AuthCode	The authorization code returned in the AuthCode field of the original sale response
TipAmt	Tip amount in DDDD.CC format
TaxAmt	Tax amount in DDDD.CC format
TimeOut	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F
CustomerID	Customer identification number; this value takes precedence over Invoice/BillTo/CustomerID
PONum	Purchase order number for the transaction; this value takes precedence over Invoice/PONum
CVPresence	Indicates whether a CVV2 or CID has been sent along with the request; valid values are: None NotSubmitted Submitted Illegible NotPresent

XML Tag	Description
Invoice	Contains invoice and billing information
BillTo	Contains cardholder billing information
CustomerId	Customer identification number; this value is superseded by the top level CustomerID
Name	Cardholder's billing name
Address	Contains cardholder address
Street	Cardholder billing street address
City	Cardholder billing city
State	Cardholder billing state
Zip	Cardholder billing ZIP/postal code
Country	Cardholder billing country
Email	Cardholder billing email address
Phone	Cardholder billing phone number
Fax	Cardholder billing fax number
PONum	Purchase order number for the transaction; this value is superseded by the top level PONum

2.3.6.2.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCVResult	Returns the card verification result if a value is submitted in the CVNum field (see CVV Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.3.6.2.4. Example

2.3.6.2.4.1. Sample Force Authorization Request

The following is an example of a force authorization request using <AuthCode>.

```
https://uat.payleap.com/transactservices.svc/ProcessCreditCard?Use
rName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Force&CardNu
m=4111111111111111&ExpDate=1215&MagData=&NameOnCard=James%20Bo&Amo
unt=2.99&InvNum=&PNRef=&Zip=&Street=&CVNum=&ExtData=%3CAuthCode%3E
08092011104039%3C%2FAuthCode%3E
```

2.3.6.2.4.2. Sample Force Authorization Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>08092011104039</AuthCode>
<GetAVSResult>N</GetAVSResult>
<GetCVResult>S</GetCVResult>
<GetCommercialCard>>false</GetCommercialCard>
<HostCode>8d05fd32-belf-48eb-9ef0-5c1bea8e7e1b</HostCode>
<Message>APPROVAL</Message>
<PNRef>14072</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.3.7. Capture

Use the Capture value for the TransType parameter to perform a credit card capture transaction. A credit card capture transaction captures a previous [Auth](#) transaction in the current batch for settlement using the transaction's PNRef number.

2.3.7.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Void
PNRef	Required	The PNRef number assigned by PayLeap for the transaction and returned in the Sale response
CardNum	Optional	The credit card number for the transaction
ExpDate	Optional	The expiration date of the credit card used for the transaction in MMY format.

Parameter	Required	Description
MagData	Optional (swipe only)	For swiped transactions, the complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=140410100000059300000?'
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format. The amount includes any tax or tip amounts specified in ExtData
NameOnCard	Optional	The cardholder's name as printed on the card
InvNum	Optional	The invoice number used by the merchant to identify the transaction
CVNum	Optional	The 3-4 digit card verification number
Zip	Optional	The cardholder's billing ZIP code; used for AVS
Street	Optional	The cardholder's billing street address; used for AVS
ExtData	Required	An XML string containing additional data for the transaction; see ExtData for more information.

2.3.7.2. ExtData

XML Tag	Description
AuthCode	The authorization code returned in the AuthCode field of the original sale response (optional if PNRref is included in request)
TipAmt	Tip amount in DDDD.CC format
TaxAmt	Tax amount in DDDD.CC format
TimeOut	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F
CustomerID	Customer identification number; this value takes precedence over Invoice/BillTo/CustomerID
PONum	Purchase order number for the transaction; this value takes precedence over Invoice/PONum

XML Tag	Description
CVPresence	Indicates whether a CVV2 or CID has been sent along with the request; valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Contains invoice and billing information
BillTo	Contains cardholder billing information
CustomerId	Customer identification number; this value is superseded by the top level CustomerID
Name	Cardholder's billing name
Address	Contains cardholder address
Street	Cardholder billing street address
City	Cardholder billing city
State	Cardholder billing state
Zip	Cardholder billing ZIP/postal code
Country	Cardholder billing country
Email	Cardholder billing email address
Phone	Cardholder billing phone number
Fax	Cardholder billing fax number
PONum	Purchase order number for the transaction; this value is superseded by the top level PONum

2.3.7.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCVResult	Returns the card verification result if a value is submitted in the CVNum field (see CVV Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error

Response Value	Description
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.3.7.4. Example

2.3.7.4.1. Sample Credit Card Capture Request

```
https://uat.payleap.com/transactservices.svc/ProcessCreditCard?
UserName=shoap123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Captu
re&CardNum=4111111111111111&ExpDate=&MagData=&NameOnCard=&Amoun
t=1.19&InvNum=&PNRef=15511&Zip=&Street=&CVNum=&ExtData=
```

2.3.7.4.2. Sample Credit Card Capture Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>30092011115925</AuthCode>
<GetAVSResult>N</GetAVSResult>
<GetCVResult>S</GetCVResult>
<GetCommercialCard>>false</GetCommercialCard>
<HostCode>c8eef4cb-2d77-4a7a-8665-f1791a83fd1e</HostCode>
<Message>APPROVAL</Message>
<PNRef>15512</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.4. ProcessCheck

To send a credit card transaction, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/ProcessCheck>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/ProcessCheck>

The following sections describe the parameters required for each type of check transaction.

2.4.2. Sale

Use the Sale value for the TransType parameter to perform a check sale transaction. A check sale transaction initiates an ACH payment of a specified amount from the customer's bank account to the merchant.

2.4.2.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Sale
CheckNum	Required	The check number printed on the check
TransitNum	Required	The routing number printed on the check
AccountNum	Required	The account number printed on the check
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
MICR	Conditional based on SecCode	The raw MICR data from the check in the following format: [TransitNum]T[AccountNum]O[CheckNum] Required only for the following SecCode values specified in ExtData: POP, BOC, ARC, C21
NameOnCheck	Required	The customer's name as printed on the check
DL	Optional	The customer's driver's license number; usage varies by check processor
SS	Optional	The customer's social security number; usage varies by check processor
DOB	Optional	The customer's date of birth in MM/DD/YYYY format; usage varies by check processor
StateCode	Optional	The customer's two-digit driver's license state or province code; usage varies by check processor
CheckType	Optional	The type of bank account from which the check draws; valid values are: Personal Corporate Government
ExtData	Required	An XML string containing additional data for the transaction; see ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.4.2.2. ExtData

XML Tag	Required	Description
SecCode	Required	Standard Entry Class (SEC) code describing the type of check transaction; valid values are: <ul style="list-style-type: none"> POP Point of purchase BOC Back office conversion ARC Account receivable entry CCD Corporate credit or debit PPD Prearranged payment and deposits TEL Telephone-initiated entry WEB Web-initiated entry C21 Check 21
Scanner	Conditional based on SecCode	The check scanner used to scan the check; valid values are: <ul style="list-style-type: none"> EXCELLA STX MICR SCANNER (not allowed for SecCode values BOC, ARC, or C21) Required only for the following SecCode values: POP, BOC, ARC, C21
FrontImage	Conditional based on SecCode	Image data for the front of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
FrontImageSize	Conditional based on SecCode	Image size for the front of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
BackImage	Conditional based on SecCode	Image data for the back of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
BackImageSize	Conditional based on SecCode	Image size for the back of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F

XML Tag	Required	Description
Force	Optional	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F
CustomerID	Optional	Customer identification number
Email	Optional	The customer's billing email address
InvNum	Optional	The invoice number used by the merchant to identify the transaction
AccountType	Optional	Indicates the type of bank account; valid values are: Checking Savings
CityOfAccount	Optional	Customer's residential address city
BillToStreet	Optional	Customer's billing street address
BillToCity	Optional	Customer's billing city
BillToState	Optional	Customer's billing state
BillToPostalCode	Optional	Customer's billing ZIP/Postal code
BillToCountry	Optional	Customer's billing three-digit country code

2.4.2.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	Always False for this transaction type
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Message1	Message describing the transaction error in event of failure

2.4.2.4. Example

2.4.2.4.1. Sample Check Sale Request

```
https://uat.payleap.com/transactservices.svc/ProcessCheck?UserName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Sale&CheckNum=1234&TransitNum=262084356&AccountNum=1234567890&Amount=1.00&MICR=&NameOnCheck=John%20Doe&DL=&SS=&DOB=&StateCode=WA&CheckType=Personal&PNRef=&MagData=&ExtData=%3CSecCode%3EWEB%3C/SecCode%3E
```

2.4.2.4.2. Sample Check Sale Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>123ASD</AuthCode>
<ExtData>>false</ExtData>
<GetAVSResult>S</GetAVSResult>
<HostCode>c63bac73-f8b9-492a-a751-43fb8eea0cf9</HostCode>
<Message>APPROVAL</Message>
<PNRef>14771</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.4.3. Auth

Use the Auth value for the TransType parameter to perform a check authorization transaction. A check authorization transaction verifies that the specified amount is available from the customer's bank account.

2.4.3.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Auth
CheckNum	Required	The check number printed on the check
TransitNum	Required	The routing number printed on the check
AccountNum	Required	The account number printed on the check
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
MICR	Conditional based on SecCode	The raw MICR data from the check in the following format: <i>[TransitNum]T[AccountNum]O[CheckNum]</i> Required only for the following SecCode values specified in ExtData: POP, BOC, ARC, C21

Parameter	Required	Description
NameOnCheck	Required	The customer's name as printed on the check
DL	Optional	The customer's driver's license number; usage varies by check processor
SS	Optional	The customer's social security number; usage varies by check processor
DOB	Optional	The customer's date of birth in MM/DD/YYYY format; usage varies by check processor
StateCode	Optional	The customer's two-digit driver's license state or province code; usage varies by check processor
CheckType	Optional	The type of bank account from which the check draws; valid values are: Personal Corporate Government
ExtData	Required	An XML string containing additional data for the transaction; see ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.4.3.2. ExtData

XML Tag	Required	Description
SecCode	Required	Standard Entry Class (SEC) code describing the type of check transaction; valid values are: POP Point of purchase BOC Back office conversion ARC Account receivable entry CCD Corporate credit or debit PPD Prearranged payment and deposits TEL Telephone-initiated entry WEB Web-initiated entry C21 Check 21
Scanner	Conditional based on SecCode	The check scanner used to scan the check; valid values are: EXCELLA STX MICR SCANNER (not allowed for SecCode values BOC, ARC, or C21) Required only for the following SecCode values: POP, BOC, ARC, C21

XML Tag	Required	Description
FrontImage	Conditional based on SecCode	Image data for the front of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
FrontImageSize	Conditional based on SecCode	Image size for the front of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
BackImage	Conditional based on SecCode	Image data for the back of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
BackImageSize	Conditional based on SecCode	Image size for the back of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Optional	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F
CustomerID	Optional	Customer identification number
Email	Optional	The customer's billing email address
InvNum	Optional	The invoice number used by the merchant to identify the transaction
AccountType	Optional	Indicates the type of bank account; valid values are: Checking Savings
CityOfAccount	Optional	Customer's residential address city
BillToStreet	Optional	Customer's billing street address
BillToCity	Optional	Customer's billing city
BillToState	Optional	Customer's billing state
BillToPostalCode	Optional	Customer's billing ZIP/Postal code
BillToCountry	Optional	Customer's billing three-digit country code

2.4.4. Return

Use the Return value for the TransType parameter to perform a check return transaction. A check return transaction refunds a previous [sale](#) transaction by initiating an ACH payment of a specified amount from the merchant’s bank account back to the customer.

2.4.4.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Return
CheckNum	Required	The check number printed on the check
TransitNum	Required	The routing number printed on the check
AccountNum	Required	The account number printed on the check
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
MICR	Conditional based on SecCode	The raw MICR data from the check in the following format: <i>[TransitNum]T[AccountNum]O[CheckNum]</i> Required only for the following SecCode values specified in ExtData: POP, BOC, ARC, C21
NameOnCheck	Required	The customer’s name as printed on the check
DL	Optional	The customer’s driver’s license number; usage varies by check processor
SS	Optional	The customer’s social security number; usage varies by check processor
DOB	Optional	The customer’s date of birth in MM/DD/YYYY format; usage varies by check processor
StateCode	Optional	The customer’s two-digit driver’s license state or province code; usage varies by check processor
CheckType	Optional	The type of bank account from which the check draws; valid values are: Personal Corporate Government
ExtData	Required	An XML string containing additional data for the transaction; see ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.4.4.2. ExtData

XML Tag	Required	Description
SecCode	Required	Standard Entry Class (SEC) code describing the type of check transaction; valid values are: <ul style="list-style-type: none"> POP Point of purchase BOC Back office conversion ARC Account receivable entry CCD Corporate credit or debit PPD Prearranged payment and deposits TEL Telephone-initiated entry WEB Web-initiated entry C21 Check 21
Scanner	Conditional based on SecCode	The check scanner used to scan the check; valid values are: <ul style="list-style-type: none"> EXCELLA STX MICR SCANNER (not allowed for SecCode values BOC, ARC, or C21) Required only for the following SecCode values: POP, BOC, ARC, C21
FrontImage	Conditional based on SecCode	Image data for the front of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
FrontImageSize	Conditional based on SecCode	Image size for the front of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
BackImage	Conditional based on SecCode	Image data for the back of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
BackImageSize	Conditional based on SecCode	Image size for the back of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
PNRef	Required	The PNRef number of the original sale transaction being refunded
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out

XML Tag	Required	Description
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Optional	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F
CustomerID	Optional	Customer identification number
Email	Optional	The customer's billing email address
InvNum	Optional	The invoice number used by the merchant to identify the transaction
AccountType	Optional	Indicates the type of bank account; valid values are: Checking Savings
CityOfAccount	Optional	Customer's residential address city
BillToStreet	Optional	Customer's billing street address
BillToCity	Optional	Customer's billing city
BillToState	Optional	Customer's billing state
BillToPostalCode	Optional	Customer's billing ZIP/Postal code
BillToCountry	Optional	Customer's billing three-digit country code

2.4.4.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	Always False for this transaction type
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Message1	Message describing the transaction error in event of failure

2.4.4.4. Example

2.4.4.4.1. Sample Check Return Request

```
https://uat.payleap.com/transactservices.svc/ProcessCheck?UserName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Return&CheckNum=234&TransitNum=262084356&AccountNum=1234567890&Amount=1.24&MICR=&NameOnCheck=James%20Bo&DL=&SS=&DOB=&StateCode=&CheckType=&ExtData=%3CSecCode%3EWEB%3C%2FSecCode%3E%3CPNRef%3E15187%3C%2FPNRef%3E%20
```

2.4.4.4.2. Sample Check Return Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
  <AuthCode>123ASD</AuthCode>
  <ExtData>>false</ExtData>
  <GetAVSResult>S</GetAVSResult>
  <HostCode>b19a1574-e341-4287-998b-551ab181c682</HostCode>
  <Message>APPROVAL</Message>
  <PNRef>15188</PNRef>
  <RespMSG>Approved</RespMSG>
  <Result>0</Result>
</Response>
```

2.4.5. Void

Use the Void value for the TransType parameter to perform a check void transaction. A check void transaction cancels a previous [sale](#) transaction before the ACH payment takes place. You must perform a check void transaction before the original sales transaction is settled. Otherwise, you must perform a check [return](#).

2.4.5.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Void
CheckNum		Not used for this transaction type
TransitNum		Not used for this transaction type
AccountNum		Not used for this transaction type
Amount		Not used for this transaction type
MICR	Conditional based on SecCode	The raw MICR data from the check in the following format: <i>[TransitNum]T[AccountNum]O[CheckNum]</i> Required only for the following SecCode values specified in ExtData: POP, BOC, ARC, C21

Parameter	Required	Description
NameOnCheck		Not used for this transaction type
DL		Not used for this transaction type
SS		Not used for this transaction type
DOB		Not used for this transaction type
StateCode		Not used for this transaction type
CheckType		Not used for this transaction type
ExtData	Required	An XML string containing additional data for the transaction; see ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.4.5.2. ExtData

XML Tag	Required	Description
SecCode	Required	Standard Entry Class (SEC) code describing the type of check transaction; valid values are: POP Point of purchase BOC Back office conversion ARC Account receivable entry CCD Corporate credit or debit PPD Prearranged payment and deposits TEL Telephone-initiated entry WEB Web-initiated entry C21 Check 21
Scanner	Conditional based on SecCode	The check scanner used to scan the check; valid values are: EXCELLA STX MICR SCANNER (not allowed for SecCode values BOC, ARC, or C21) Required only for the following SecCode values: POP, BOC, ARC, C21
FrontImage	Conditional based on SecCode	Image data for the front of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
FrontImageSize	Conditional based on SecCode	Image size for the front of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner

XML Tag	Required	Description
BackImage	Conditional based on SecCode	Image data for the back of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
BackImageSize	Conditional based on SecCode	Image size for the back of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
PNRef	Required	The PNRef number of the original sale transaction being voided
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Optional	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F
CustomerID	Optional	Customer identification number
Email	Optional	The customer's billing email address
InvNum	Optional	The invoice number used by the merchant to identify the transaction
AccountType	Optional	Indicates the type of bank account; valid values are: Checking Savings
CityOfAccount	Optional	Customer's residential address city
BillToStreet	Optional	Customer's billing street address
BillToCity	Optional	Customer's billing city
BillToState	Optional	Customer's billing state
BillToPostalCode	Optional	Customer's billing ZIP/Postal code
BillToCountry	Optional	Customer's billing three-digit country code

2.4.5.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	Always False for this transaction type
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)

Parameter	Required	Description
CheckNum	Required	The check number printed on the check
TransitNum	Required	The routing number printed on the check
AccountNum	Required	The account number printed on the check
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
NameOnCheck	Required	The customer's name as printed on the check
DL	Optional	The customer's driver's license number; usage varies by check processor
SS	Optional	The customer's social security number; usage varies by check processor
DOB	Optional	The customer's date of birth in MM/DD/YYYY format; usage varies by check processor
StateCode	Optional	The customer's two-digit driver's license state or province code; usage varies by check processor
CheckType	Optional	The type of bank account from which the check draws; valid values are: Personal Corporate Government
ExtData	Required	An XML string containing additional data for the transaction; see ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.4.6.2. ExtData

XML Tag	Required	Description
SecCode	Required	Standard Entry Class (SEC) code describing the type of check transaction; valid values are: CCD Corporate credit or debit PPD Prearranged payment and deposits TEL Telephone-initiated entry WEB Web-initiated entry
CustomerID	Optional	Customer identification number
Email	Optional	The customer's billing email address
InvNum	Optional	The invoice number used by the merchant to identify the transaction

XML Tag	Required	Description
AccountType	Optional	Indicates the type of bank account; valid values are: Checking Savings
CityOfAccount	Optional	Customer's residential address city
BillToStreet	Optional	Customer's billing street address
BillToCity	Optional	Customer's billing city
BillToState	Optional	Customer's billing state
BillToPostalCode	Optional	Customer's billing ZIP/Postal code
BillToCountry	Optional	Customer's billing three-digit country code

2.4.6.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Message1	Message describing the transaction error in event of failure

2.4.6.4. Example

2.4.6.4.1. Sample Check Sale Request

```
https://uat.payleap.com/transactservices.svc/ProcessCheck?UserN
ame=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=credit&Chec
kNum=1234&TransitNum=262084356&AccountNum=1234567890&Amount=1.0
0
```

2.4.6.4.2. Sample Check Sale Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>123ASD</AuthCode>
<ExtData>>false</ExtData>
<GetAVSResult>S</GetAVSResult>
<HostCode>c63bac73-f8b9-492a-a751-43fb8eea0cf9</HostCode>
<Message>APPROVAL</Message>
<PNRef>14771</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.4.7. Force

Use the Force value for the TransType parameter to perform a check force transaction. A check force transaction initiates an ACH payment for a previous check [auth](#) transaction, using the PNRef number returned in the auth transaction.

2.4.7.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Force
CheckNum	Required	The check number printed on the check
TransitNum	Required	The routing number printed on the check
AccountNum	Required	The account number printed on the check
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
MICR	Conditional based on SecCode	The raw MICR data from the check in the following format: [TransitNum]T[AccountNum]O[CheckNum] Required only for the following SecCode values specified in ExtData: POP, BOC, ARC, C21
NameOnCheck	Required	The customer's name as printed on the check

Parameter	Required	Description
DL	Optional	The customer's driver's license number; usage varies by check processor
SS	Optional	The customer's social security number; usage varies by check processor
DOB	Optional	The customer's date of birth in MM/DD/YYYY format; usage varies by check processor
StateCode	Optional	The customer's two-digit driver's license state or province code; usage varies by check processor
CheckType	Optional	The type of bank account from which the check draws; valid values are: Personal Corporate Government
ExtData	Required	An XML string containing additional data for the transaction; see ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.4.7.2. ExtData

XML Tag	Required	Description
SecCode	Required	Standard Entry Class (SEC) code describing the type of check transaction; valid values are: POP Point of purchase BOC Back office conversion ARC Account receivable entry CCD Corporate credit or debit PPD Prearranged payment and deposits TEL Telephone-initiated entry WEB Web-initiated entry C21 Check 21
Scanner	Conditional based on SecCode	The check scanner used to scan the check; valid values are: EXCELLA STX MICR SCANNER (not allowed for SecCode values BOC, ARC, or C21) Required only for the following SecCode values: POP, BOC, ARC, C21

XML Tag	Required	Description
FrontImage	Conditional based on SecCode	Image data for the front of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
FrontImageSize	Conditional based on SecCode	Image size for the front of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
BackImage	Conditional based on SecCode	Image data for the back of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
BackImageSize	Conditional based on SecCode	Image size for the back of the check from the Excella scanner. Required only for the following SecCode values: BOC, ARC, C21, or POP when using EXCELLA STX Scanner
PNRef	Required	The PNRef number of the original sale transaction being voided
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
Force	Optional	Indicates whether to force processing of duplicate transactions (some processors do not support this tag and will still reject duplicates); valid values are T or F
CustomerID	Optional	Customer identification number
Email	Optional	The customer's billing email address
InvNum	Optional	The invoice number used by the merchant to identify the transaction
AccountType	Optional	Indicates the type of bank account; valid values are: Checking Savings
CityOfAccount	Optional	Customer's residential address city
BillToStreet	Optional	Customer's billing street address
BillToCity	Optional	Customer's billing city
BillToState	Optional	Customer's billing state
BillToPostalCode	Optional	Customer's billing ZIP/Postal code
BillToCountry	Optional	Customer's billing three-digit country code

<https://uat.payleap.com/TransactServices.svc/ProcessDebitCard>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/ProcessDebitCard>

The following sections describe the parameters required for each type of debit card transaction.

2.5.2. Sale

Use the Sale value for the TransType parameter to perform a debit card sale transaction. A debit card sale transaction authorizes a payment of a specified amount. The sale amount is deducted from the cardholder's account upon authorization.

2.5.2.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Sale
CardNum	Required	The debit card number used for the transaction
ExpDate	Required	The expiration date of the debit card used for the transaction in MMY format
MagData	Required	For swiped transactions, the complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B4111111111111111^BO/JAMES B^1404101000000593000000?; 4111111111111111=14041010000059300000?'
PNRef	Required	Field required; Value not required
Amount	Required	The dollar amount of the transaction in DDDDDDDDD.CC format. The amount includes any cash back or surcharge amounts and any tax or tip amounts specified in ExtData
Pin	Required	The encrypted PIN block returned by the PIN pad; the transaction will fail if an unencrypted PIN value is used
SurchargeAmt	Optional	The amount that a merchant charges for processing a debit card transaction in DDDD.CC format
NameOnCard	Optional	The cardholder's name as printed on the card
InvNum	Optional	The invoice number used by the merchant to identify the transaction
CashBackAmt	Optional	The amount that a cardholder requests for cash back in DDDD.CC format
RegisterNum		Not used for sale transaction
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.5.2.2. ExtData

XML Tag	Required	Description
TipAmt	Optional	Tip amount in DDDD.CC format
TaxAmt	Optional	Tax amount in DDDD.CC format
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out

XML Tag	Required	Description
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
KeySerialNumber	Required	The key serial number from the PIN pad used for DUKPT PIN encryption
CustomerID	Optional	Customer identification number
PONum	Optional	Purchase order number for the transaction

2.5.2.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	A string containing additional information about the transaction; the data in the ExtData field is returned in the following format: <i>CardType=[type],KeySerialNumber=[key serial number]</i>
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.5.2.4. Example

2.5.2.4.1. Sample Debit Card Sale Request

```
https://uat.payleap.com/transactservices.svc/ProcessDebitCard?Use
rName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Sale&CardNu
m=4111111111111111&ExpDate=1215&MagData=4055011111111111=05121015
432112345678&NameOnCard=&Amount=18.1&InvNum=&PNRef=&Pin=1234&Sure
ChargeAmt=&CashBackAmt=&RegisterNum=&ExtData=%3CKeySerialNumber%3
E4A003102930003BB%3C%2FKeySerialNumber%3E
```

2.5.2.4.2. Sample Debit Card Sale Response

```

<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>09092011051951</AuthCode>
<ExtData>CardType=Debit,KeySerialNumber=4A003102930003BB</ExtData>
<GetAVSResult>S</GetAVSResult>
<GetCommercialCard>>false</GetCommercialCard>
<HostCode>316736b8-e116-4c7c-b41d-2ef0130d434b</HostCode>
<Message>APPROVAL</Message>
<PNRef>14172</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>

```

2.5.3. Return

Use the Return value for the TransType parameter to perform a debit card return transaction. A debit card return transaction refunds a specified amount from a previous [sale](#) transaction to the cardholder's account.

2.5.3.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Return
CardNum	Optional	The debit card number used for the transaction
ExpDate	Optional	The expiration date of the debit card used for the transaction in MMY format
MagData	Optional	For swiped transactions, the complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=140410100000593000000?'
PNRef	Required	The PNRef number of the original sale transaction being refunded
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format; this value must be less than or equal to the amount of the original sale transaction
Pin	Optional	The encrypted PIN block returned by the PIN pad; the transaction will fail if an unencrypted PIN value is used
SurchargeAmt	Optional	The amount that a merchant charges for processing a debit card transaction in DDDD.CC format

Parameter	Required	Description
NameOnCard	Optional	The cardholder's name as printed on the card
InvNum	Optional	The invoice number used by the merchant to identify the transaction
CashBackAmt	Optional	The amount that a cardholder requests for cash back in DDDD.CC format
RegisterNum		Not used for sale transaction
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.5.3.2. ExtData

XML Tag	Required	Description
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
KeySerialNumber	Required	The key serial number from the PIN pad used for DUKPT PIN encryption

2.5.3.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	A string containing additional information about the transaction; the data in the ExtData field is returned in the following format: <i>CardType=[type],KeySerialNumber=[key serial number]</i>
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.5.3.4. Example

2.5.3.4.1. Sample Debit Card Return Request

```
https://uat.payleap.com/transactservices.svc/ProcessDebitCard?Use
rName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Return&Card
Num=1111&ExpDate=1215&MagData=4111111111111111=051210154321123456
78&NameOnCard=&Amount=8.99&InvNum=&PNRef=15189&Pin=1234&SureCharg
eAmt=&CashBackAmt=&RegisterNum=&ExtData=%3CKeySerialNumber%3E4A00
3102930003BB%3C%2FKeySerialNumber%3E
```

2.5.3.4.2. Sample Debit Card Return Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>27092011044125</AuthCode>
<ExtData>CardType=Debit,KeySerialNumber=4A003102930003BB</ExtData>
<GetAVSResult>S</GetAVSResult>
<GetCommercialCard>>false</GetCommercialCard>
<HostCode>bfeddd49-1d02-4921-91c5-075771720f2c</HostCode>
<Message>APPROVAL</Message>
<PNRef>15190</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.6. ProcessDebitOrCreditCard

In order to use ProcessDebitOrCreditCard to accept internet PIN Debit (IPD) transactions, initial integration with the Acculynk PaySecure® application is required.

2.6.2. Internet PIN Debit Overview

The Internet PIN Debit (IPD) transaction experience is very similar to what shoppers currently encounter at the retail point of sale when using debit cards. Merchant terminals prompt debit card shoppers to enter their PIN in the retail point of sale scenario in order to take advantage of the added security and cost benefits of a PIN-verified transaction. Likewise, when a shopper chooses to use a qualifying debit card at a participating merchant's online payment page, PaySecure®'s patented, graphical PIN Pad steers the shopper to enter a PIN. As an additional measure of security, the PIN Pad is scrambled after each number of the PIN is entered.

To help merchants take full advantage of the benefits of PIN verification, PayLeap provides a standard API call that determines internet PIN eligibility of a card. This call should be made for all card types to get the maximum benefit.

2.6.2.1. Single vs. Dual Message Payment Processing

Credit card transactions require messages for both authorization and settlement (“dual message”) to complete the charge. Alternatively, PIN Debit transactions are single message transactions: upon authorization, the shopper’s bank account is debited for the amount of the transaction. Therefore, PIN debit results in what is known as “good funds” transactions.

Another distinction between IPD and credit card transactions is that pinned transactions are processed through Acculynk and the EFT Networks, instead of a credit card acquirer.

2.6.2.2. Qualifying for Internet PIN Debit

There are two scenarios in which PaySecure® PIN debit technology may be applied:

- Conversion of “signature debit” transactions to PaySecure® “pinned” transactions
- PIN only or ATM debit card transactions

Signature debit cards always carry the Visa or MasterCard brand (indicating which network processes their transactions) and may be used online with or without a PIN. PIN only or ATM debit cards do not include a Visa or MasterCard logo, and must always be used in conjunction with a PIN. Acculynk requires that the merchant support both forms of debit processing in order to integrate PaySecure® into their checkout process.

2.6.3. IPD Checkout Implementation

In addition to supporting the proper API calls and handling the responses appropriately (refer to [Process Debit or Credit PayLeap REST API](#)), it is equally critical for the PaySecure® process to blend seamlessly into the existing online checkout experience, since successfully steering shoppers to enter their PIN results in the following benefits:

- Lower Transaction Fees
- A more secure authentication of the Shopper
- Fewer chargebacks

We strongly recommend implementing the best practices discussed in this section, designed to encourage shoppers to enter their PIN as frequently as possible.

2.6.3.1. Determine PIN Eligibility for All Cards

In order to successfully steer shoppers to authenticate their transactions with a PIN, all credit and debit cards should be checked for internet PIN eligibility. Shoppers may not differentiate between a debit card and a credit card as a result of network branding. By checking the IPD eligibility of all cards (regardless of the payment type selected by the shopper), merchants enable a new payment method (PIN Only ATM Cards) and have the potential to convert traditional signature debit transactions into pinned PaySecure® transactions, thereby taking advantage of lower transaction fees, increased security, and fewer chargebacks.

To check eligibility, the merchant page will make a ProcessDebitOrCreditCard ([sale](#)) call for all credit and debit cards to determine whether the transaction may be completed with a PIN.

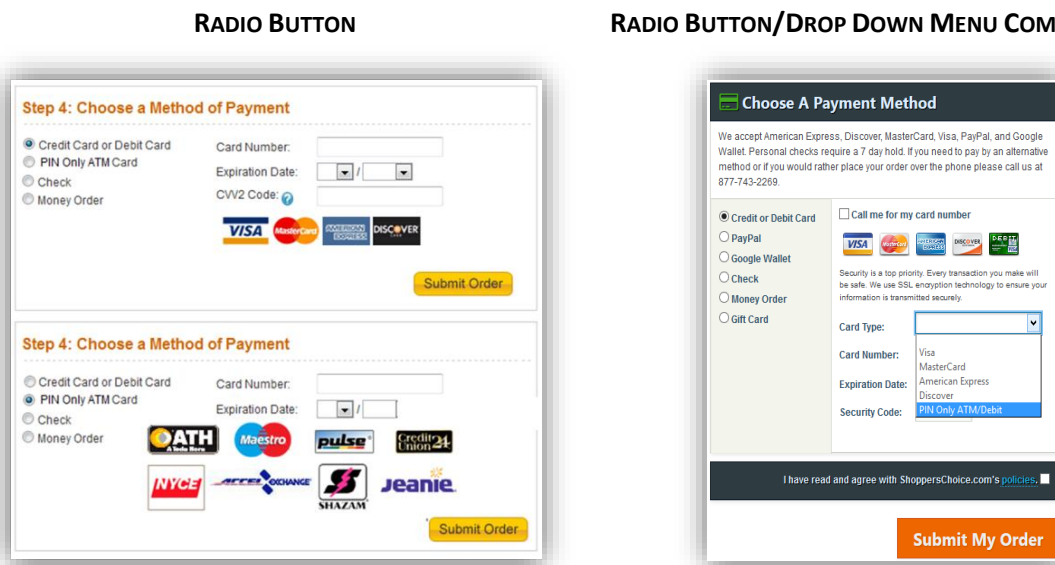
Basic transaction flows are detailed within [Signature Debit Card Conversion](#) and [Accepting PIN Only ATM Cards](#).

2.6.3.2. Payment Selection Screen Best Practices

On the payment selection screen, we suggest providing the option for “PIN Only ATM Card” alongside traditional payment options (Credit Card, Check, Gift Card, etc.). This option can be displayed in a variety of ways (radio button, drop down menu, etc.), depending upon your current pay page design.

See Figure 5 for examples of integrating the PIN Only Debit Card option into the Payment Selection screen.

FIGURE 5. PAYMENT SELECTION SCREEN OPTIONS

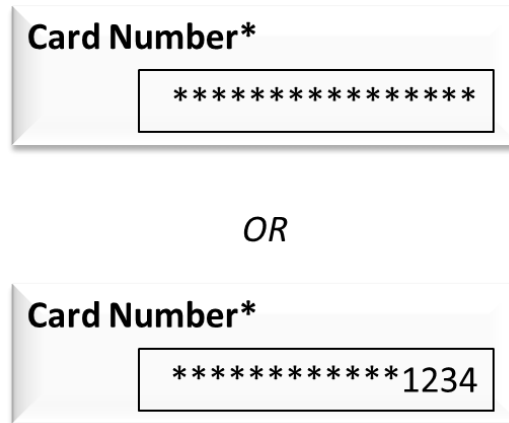


Regardless of which option the shopper selects, it is crucial to check the Internet PIN eligibility for all card numbers.

2.6.3.3. Masking Card Number

Before calling the PIN Pad, the card number must be masked. Refer to Figure 6 for options for masking the card number while the PIN Pad is displayed.

FIGURE 6. CARD MASKING OPTIONS



2.6.3.4. Customizing the PIN Pad

2.6.3.4.1. Merchant Branding

The following elements of the billboard are customizable:

- Background Color
- Merchant Logo
- Merchant Text (optional)

Figure 7 illustrates which billboard components may be branded.

FIGURE 7. MERCHANT BRANDING OPTIONS

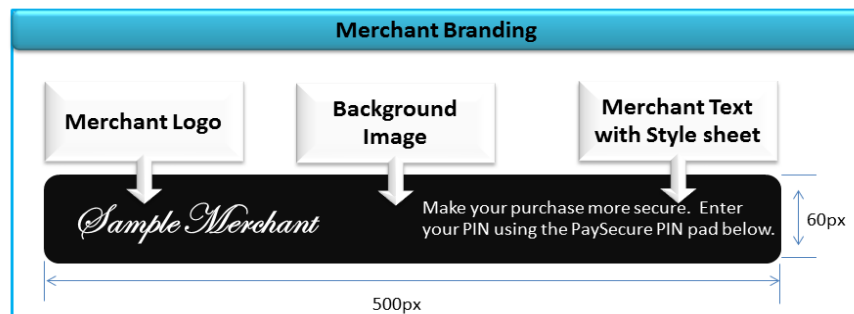


Table 2 details the specifications of components that may be branded on the PIN Pad.

TABLE 2. PIN HEADER ATTRIBUTE SPECIFICATIONS

Attribute	Specifications
Background Color	500 x 60 pixel size; rounded corners are recommended where the edges are transparent (.gif image)
Merchant Logo	250 x 60 pixel size; located in the top-left corner of the PINPad
Merchant Text	Text should be used to introduce and explain the PINPad process. Refer to Figure 7 for default text.

2.6.3.4.2. PIN Pad Cancel Language

The PIN Pad Cancel language may be controlled by the LanguageCode xml tag in the ExtData string sent with the ProcessDebitOrCredit ([sale](#)) call.

The default language, invoked by “EN,” “EN1,” or no (empty) value, states:

PRESS [CANCEL] TO PROCESS AS CREDIT

To display the alternate Cancel language on the PIN Pad, submit a value of “EN2” in the LanguageCode tag. The alternate Cancel language is as follows:

PRESS [CANCEL] TO SELECT A DIFFERENT PAYMENT TYPE

2.6.4. Signature Debit Card Conversion

In addition to PIN Only cards, PaySecure® has the ability to process signature (Visa or MasterCard branded) debit card payments with PIN authentication. When converting signature debit transactions into PaySecure® pinned transactions, merchant benefits include lower transaction fees and fewer chargebacks.

A typical pinned Signature Debit Card transaction scenario is described below.

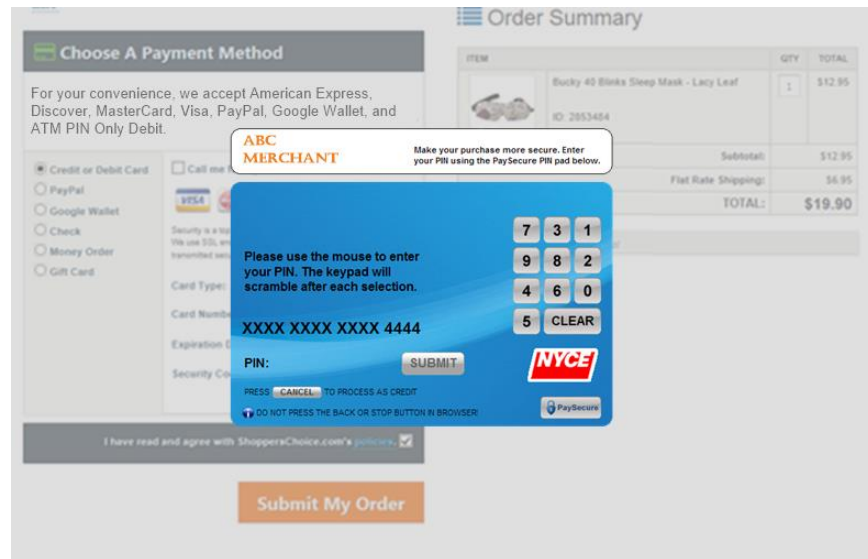
1. Shopper adds selected items to the shopping cart and proceeds to the merchant checkout page.
2. Shopper is presented with payment options.
3. Shopper selects the traditional signature debit payment option, enters card details, and clicks Submit (refer to Figure 8).

FIGURE 8. SHOPPER SELECTS PAYMENT METHOD

4. Regardless of the card type selected by the shopper, the merchant page makes a ProcessDebitOrCredit ([sale](#)) call and PaySecure® determines if card is eligible for IPD processing.
 - If the card is not eligible for pinned PaySecure® processing, the merchant should complete the transaction as a signature debit payment.

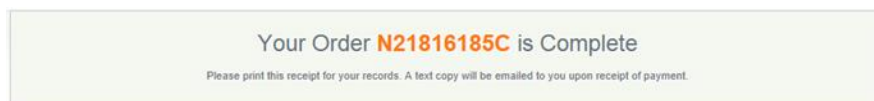
- If the card is eligible for PaySecure® processing, the PIN Pad is presented, and the shopper enters the PIN number associated with the card by using their mouse to select the numbers, one at a time. The PIN Pad will scramble after each selection (refer to Figure 9).

FIGURE 9. PIN PAD IS PRESENTED



- The shopper submits the PIN and the merchant receives a JavaScript message that includes the result of the PIN capture (refer to Table 4).
- The merchant page makes a ProcessDebitOrCreditCard ([salecomplete](#)) call. PaySecure® authorizes the transaction with the card issuer and notifies the merchant of the result code and message.
- If the transaction is successful, the merchant should inform shopper that the order is complete (refer to Figure 10 for a sample) and display a receipt page.

FIGURE 10. ORDER COMPLETE MESSAGE




- If the shopper has submitted an Invalid PIN, the merchant notifies the shopper of PIN failure (refer to Figure 11 for sample verbiage). The original PIN Pad has been closed and cannot be reused. We recommend that the merchant change the “Submit” button to read “Re-enter PIN” / “Retry” / “Try Again.” Once shopper resubmits the payment, a second ProcessDebitOrCredit ([sale](#)) will be made and a new PIN Pad will be displayed. If the second PIN submission is invalid, the shopper should be directed back to the payment page and directed to choose another payment method (refer to Figure 12 for sample verbiage). A third PIN entry attempt will be blocked by PaySecure®.

FIGURE 11. FIRST INVALID PIN MESSAGE

Choose A Payment Method

We were unable to validate the PIN number you entered for card ending in 4444. Please try again.

Credit or Debit Card
 PayPal
 Google Wallet
 Check
 Money Order
 Gift Card

Call me for my card number


Security is a top priority. Every transaction you make will be safe. We use SSL encryption technology to ensure your information is transmitted securely.

Card Type: PIN Only ATM/Debit


Card Number: *****4444

Expiration Date: 12 / 2016

Security Code: 222

I have read and agree with ShoppersChoice.com's policies.

Order Summary

ITEM	QTY	TOTAL
 Bucky 40 Blinks Sleep Mask - Lacy Leaf ID: 2853484	1	\$12.95
Subtotal:		\$12.95
Flat Rate Shipping:		\$6.95
TOTAL:		\$19.90

[Apply Coupon Code - Optional](#)

Re-enter PIN

Best Practice

For second PIN entry after an invalid PIN attempt, we recommend that the merchant change the “Submit” button to one of the below options


- Re-enter PIN
- Retry
- Try Again

FIGURE 12. SECOND INVALID PIN ATTEMPT MESSAGE

Choose A Payment Method

The maximum number of Invalid PIN attempts has been reached for card ending in 4444. Please select another payment method.

Credit or Debit Card
 PayPal
 Google Wallet
 Check
 Money Order
 Gift Card

Call me for my card number


Security is a top priority. Every transaction you make will be safe. We use SSL encryption technology to ensure your information is transmitted securely.

Card Type: PIN Only ATM/Debit


Card Number: *****4444

Expiration Date: 12 / 2016

Security Code: 222

I have read and agree with ShoppersChoice.com's policies.

Order Summary

ITEM	QTY	TOTAL
 Bucky 40 Blinks Sleep Mask - Lacy Leaf ID: 2853484	1	\$12.95
Subtotal:		\$12.95
Flat Rate Shipping:		\$6.95
TOTAL:		\$19.90

[Apply Coupon Code - Optional](#)

Submit My Order

- If the shopper has submitted an invalid PAN (card number), expiration date, and/or security code, the merchant should notify the shopper (refer to Figure 13 for sample verbiage). The original PIN Pad has been closed and cannot be reused. Once the shopper updates and resubmits the payment, the merchant will make a second ProcessDebitOrCredit ([sale](#)) call and a new PIN Pad will be displayed.

FIGURE 13. PAN FAILURE NOTIFICATION

The screenshot displays a payment gateway interface. On the left, a 'Choose A Payment Method' panel shows a red error message: 'We were unable to validate your debit card ending in 4444. Please review to make sure the card number, security code, expiration date, and PIN are correct, and try again.' Below the message are radio buttons for 'Credit or Debit Card' (selected), 'PayPal', 'Google Wallet', 'Check', 'Money Order', and 'Gift Card'. There is also a checkbox for 'Call me for my card number'. Logos for VISA, Mastercard, American Express, Discover, and Green Dot are visible. A security notice states: 'Security is a top priority. Every transaction you make will be safe. We use SSL encryption technology to ensure your information is transmitted securely.' The card details are: Card Type: PIN Only ATM/Debit, Card Number: *****4444, Expiration Date: 12 / 2016, and Security Code: 222. At the bottom of the panel is a checkbox for 'I have read and agree with ShoppersChoice.com's policies, [checked]'. An orange 'Submit My Order' button is located below the panel.

On the right, an 'Order Summary' table is shown:

ITEM	QTY	TOTAL
Bucky 40 Blinks Sleep Mask - Lacy Leaf ID: 2853484	1	\$12.95
Subtotal:		\$12.95
Flat Rate Shipping:		\$6.95
TOTAL:		\$19.90

Below the table is a link: 'Apply Coupon Code - Optional'.

2.6.5. Accepting PIN Only ATM Cards

PIN Only ATM Card elements differ from traditional credit and signature debit cards; merchants should plan to accommodate for the following features during PIN only ATM Card implementation:

- PIN only ATM cards numbers are 13-19 digits
- PIN only cards do not have CVV numbers, so a CVV request should be made optional
- Some PIN only cards have expiration dates in the distant future (e.g. 01/2049); a text box is recommended to capture the expiration year

A typical PIN Only ATM Card transaction scenario is described below.

2. Shopper adds selected items to the shopping cart and proceeds to the merchant checkout page.
3. Shopper is presented with payment options, including PIN Only ATM Card.

4. Shopper selects PIN Only ATM Card option, enters card details, and clicks Submit (refer to Figure 14).

FIGURE 14. SHOPPER SELECTS PIN ONLY ATM CARD

Choose A Payment Method

We accept American Express, Discover, MasterCard, Visa, PayPal, and Google Wallet. Personal checks require a 7 day hold. If you need to pay by an alternative method or if you would rather place your order over the phone please call us at 877-743-2269.

Credit or Debit Card Call me for my card number
 PayPal
 Google Wallet
 Check
 Money Order
 Gift Card

Security is a top priority. Every transaction you make will be safe. We use SSL encryption technology to ensure your information is transmitted securely.

Card Type: **PIN Only ATM/Debit**

Card Number: 555544443332222

Expiration Date: 12 / 2016

Security Code: 222

I have read and agree with ShoppersChoice.com's policies.

Submit My Order

- a. Merchant page makes a ProcessDebitOrCredit ([sale](#)) call and PaySecure® determines if card is eligible for IPD processing.
 - If the card is not eligible for PaySecure® processing, the merchant notifies the shopper, who should be given the opportunity to select another payment type (refer to Figure 15 for example verbiage).

FIGURE 15. PIN ONLY ATM DEBIT CARD NOT ELIGIBLE MESSAGE

Choose A Payment Method

Your debit card issuer does not participate in Internet PIN Debit. Please select another method of payment.

Credit or Debit Card Call me for my card number
 PayPal
 Google Wallet
 Check
 Money Order
 Gift Card

Security is a top priority. Every transaction you make will be safe. We use SSL encryption technology to ensure your information is transmitted securely.

Card Type: **PIN Only ATM/Debit**

Card Number: *****4444

Expiration Date: 12 / 2016

Security Code: 222

I have read and agree with ShoppersChoice.com's policies.

Submit My Order

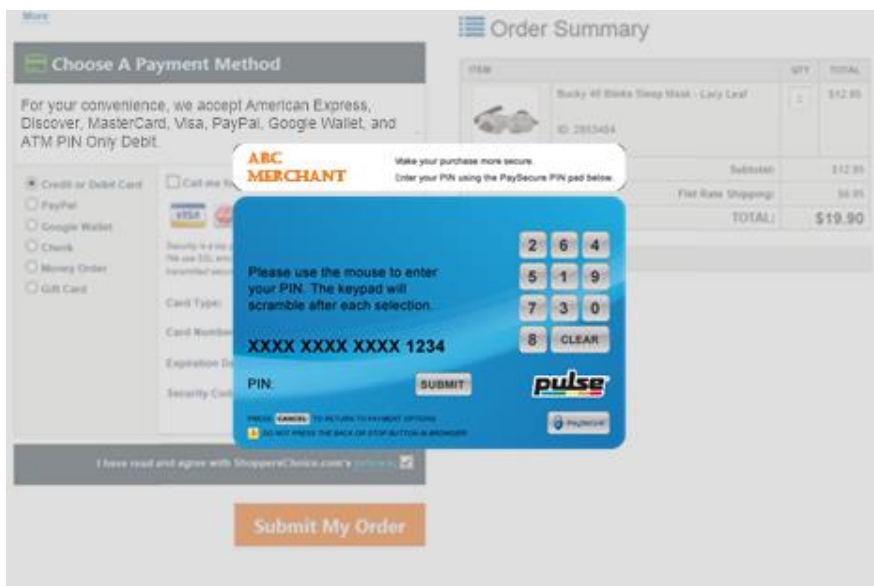
Order Summary

ITEM	QTY	TOTAL
Bucky 40 Blinks Sleep Mask - Lucy Leaf ID: 2853484	1	\$12.95
Subtotal:		\$12.95
Flat Rate Shipping:		\$6.95
TOTAL:		\$19.90

Apply Coupon Code - Optional

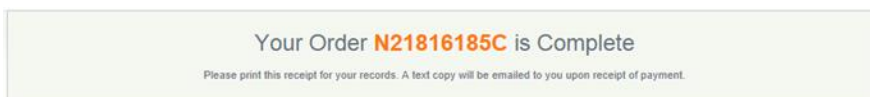
- b. If the card is eligible for PaySecure® processing, the PIN Pad is presented, and the shopper enters the PIN number associated with the card by using their mouse to select the numbers, one at a time. The PIN Pad will scramble after each selection (refer to Figure 16).

FIGURE 16. PIN PAD IS PRESENTED



- c. The shopper submits the PIN and the merchant receives a JavaScript message that includes the result of the PIN capture (refer to Table 4).
- d. The merchant page makes a ProcessDebitOrCreditCard ([salecomplete](#)) call. PaySecure® authorizes the transaction with the card issuer and notifies the merchant of the result code and message.
- If the transaction is successful, the merchant should inform shopper that the order is complete (refer to Figure 17 for a sample) and display a receipt page.

FIGURE 17. ORDER COMPLETE MESSAGE



For other transaction outcome scenarios, refer to [Signature Debit Card Conversion](#).

2.6.6. PaySecure PIN Pad Implementation

The merchant system makes a series of JavaScript calls during each transaction to invoke the PIN Pad (refer to Table 3).

To call the required JavaScript functions, use the following URL.

https://mws.acculynk.net/MWS/Scripts/MerchantScript_v1.3.js

The calls must be completed in the following order:

TABLE 3. JAVASCRIPT PIN PAD FUNCTIONS

Sequence	Function	Description
1	Acculynk.browserCheck();	Determines if the client browser is compatible with the Acculynk PIN Pad. The function returns true (compatible) or false (not compatible)
2	Acculynk.createForm (g, c, m, e)	Prepares the form that will be posted to Acculynk, where: <ul style="list-style-type: none"> • g = guid received from ProcessDebitOrCreditCard() with transtype sale • c = last four digits of card, which is collected by the merchant • m = modulus received from ProcessDebitOrCreditCard() with transtype sale • e = exponent received from ProcessDebitOrCredit with transtype sale
3	Acculynk.PINPadLoad()	Grays out the background of the screen and opens the Acculynk PIN Pad to the consumer for PIN entry
4	Acculynk._modalHide();	Hides the Acculynk PIN Pad and the grayed background

2.6.6.1. JavaScript Return Codes

Refer to Table 4 for the response codes the merchant will receive from the JavaScript PIN Pad functions. These codes will be passed back to the function named “accu_FunctionResponse(strResponse),” (a function written by the merchant) and acted upon by the merchant.

TABLE 4. FUNCTION RESPONSE CODES

Code	Description
ACCU000	PIN was successfully received (PIN is verified on authorize web service call)
ACCU200	Transaction was canceled by the Shopper
ACCU400	Cardholder has been inactive for 2 minutes
ACCU600	Invalid data was posted to the Acculynk PIN Pad
ACCU800	Generic error from Acculynk PIN Pad
ACCU999	PIN Pad was successfully opened

2.6.6.2. Merchant Website Changes

The example below shows the mandatory JavaScript and html elements that need to reside on the merchant page that will open, close, and communicate with the PIN Pad:

```

<script language='javascript'
src='https://mws.acculynk.net/MWS/scripts/MerchantScript_v1.3.js'
type='text/javascript'></script>

<script language="javascript" type="text/javascript">
//reads the response back from Acculynk
function accu_FunctionResponse(strResponse){
alert("this is the response that was received " + strResponse);}
Acculynk Merchant Integration Guide - v3.3.1 (1) (1) - 17 - Confidential
//checks browser compatibility
Acculynk.browserCheck();
//preps the PIN Pad for opening
Acculynk.createForm("77AC...EF34", "9339", "32498CBC7E...ED78D", "010001");
//opens the PIN Pad so consumer can enter their PIN
Acculynk.PINPadLoad();
//closes the PIN Pad
Acculynk._modalHide();
</script>

<center>
<div id="accu_screen" style="display: none;"></div>
<div id="accu_keypad" style="display: none;"></div>
<div id="accu_form" style="display: none;"></div>
<div id="accu_loading" style="display: none;"></div>
</center>

```

Below is an example of the code that needs to be added to the merchant page to display and communicate with the PIN Pad.

JavaScript Code:

```

/* Function to be written by merchant to process response */

function accu_FunctionResponse(strResponse){
  switch (strResponse) {
    case 'ACCU000': //PIN was received so merchant can process the
    authorization
      Acculynk. modalHide();
      break;
    case 'ACCU200': //user pressed 'cancel' button so merchant may process
    as credit
      Acculynk._modalHide();
      break;
    case 'ACCU400': //user was inactive
      Acculynk._modalHide();
      break;
    case 'ACCU600': //invalid data was posted to Acculynk
      Acculynk._modalHide();
      break;
    case 'ACCU800': //general catch all error
      Acculynk._modalHide();
      break;
    case 'ACCU999': //modal popup was opened successfully
      //no action necessary, but open for merchant to
    use
      break;
    default:
      break;
  }
}

```

HTML Code:

```

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html>
<head>
<script language="javascript" src="<Merchant Scripts url>"
type="text/javascript"></script>

</head>
<body>
<!--The code in the „<center>“ tag cannot be within a „<form>“ tag -->
<center>
<div id="accu_screen" style="display: none;"></div>
<div id="accu_keypad" style="display: none;"></div>
<div id="accu_form" style="display: none;"></div>
<div id="accu_loading" style="display: none;"></div>
</center>
<form>
<input type="button" value="Start PIN Pad" onclick="if(Acculynk.browserCheck()){
Acculynk.createForm("ABC", "4123", "ACB", "010001"); Acculynk.PINPadLoad();} " />
</form>
</body>
</html>

```

2.6.1. Back Office Integration

Every merchant may have different back office systems involved when implementing PaySecure®; however, the common systems are Fulfillment and Accounting. In this section we will discuss the considerations with order fulfillment and funding.

2.6.1.1. Order Fulfillment

Fulfillment of Internet PIN Debit authorized transactions differs from standard credit and signature debit card transactions. In a credit card transaction, the authorize process does not deduct funds from the shopper's account. It is not until order is fulfilled (the physical goods are shipped or electronic goods are delivered) that a credit card transaction is settled and the funds are collected by the merchant.

Since funds are removed from the shopper's bank account immediately upon authorization in a PIN debit transaction, the order must be fulfilled within thirty (30) days of the authorization, or the transaction amount must be refunded. This is a standard set by the EFT Networks. The merchant must ensure that a mechanism is in place to either refund the transaction or notify the customer of a delay in the order, should fulfillment take longer than thirty days.

Best Practice

Update your Terms & Conditions to reflect payment, fulfillment and refund policies for PIN Debit transactions. Also update the FAQs on your website to ensure that shoppers have the latest information available about the payment methods you accept.

2.6.2. Check BIN for PIN Debit REST API

The CheckBINForPINDebit API call returns transactions supported for a particular BIN. A pin debit card sale transaction authorizes a payment of a specified amount. The sale amount is deducted from the cardholder's account.

2.6.2.1.1. Request Parameters

Parameter	Required	Description
username	Required	Merchant PayLeap API login ID
password	Required	Merchant PayLeap API transaction key
cardnum	Required	The debit card number used for the transaction

2.6.2.1.2. Response Values

Response Value	Description
Status	Success = authorized Failure = not authorized
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes))
InnerErrorCode	Inner detailed error code returned from the processor
InNetwork	True: The card is in network False: The card is not in network
NetworkId	Primary network identifier
QualifiedInternetPin	True: The card is qualified for internet PIN debit False: The card is not qualified for internet PIN debit
QualifiedKiosk	True: The card is qualified for kiosk-based PIN debit False: The card is not qualified for kiosk-based PIN debit
QualifiedPin	True: The card is pinnable False: The card is not pinnable Not used at this time
QualifiedPinless	True: The card is qualified for PIN-less transactions False: The card is not qualified for PIN-less transactions
QualifiedRecurring	True: The card qualifies for recurring token-based transactions False: The card does not qualify for recurring token-based transactions

2.6.3. Process Debit or Credit PayLeap REST API

The PayLeap REST API provides a simple interface for merchants to communicate with Acculynk via the PayLeap Gateway. The API calls should be made in the following order:

1. ProcessDebitOrCreditCard ([sale](#))

2. ProcessDebitOrCreditCard ([salecomplete](#))
3. ProcessDebitOrCreditCard ([refund](#)) (when applicable)
4. ProcessDebitOrCreditCard ([void](#)) (when applicable)

To send a PIN debit card transaction, send an HTTP GET message to one of the following URLs.

Test URL

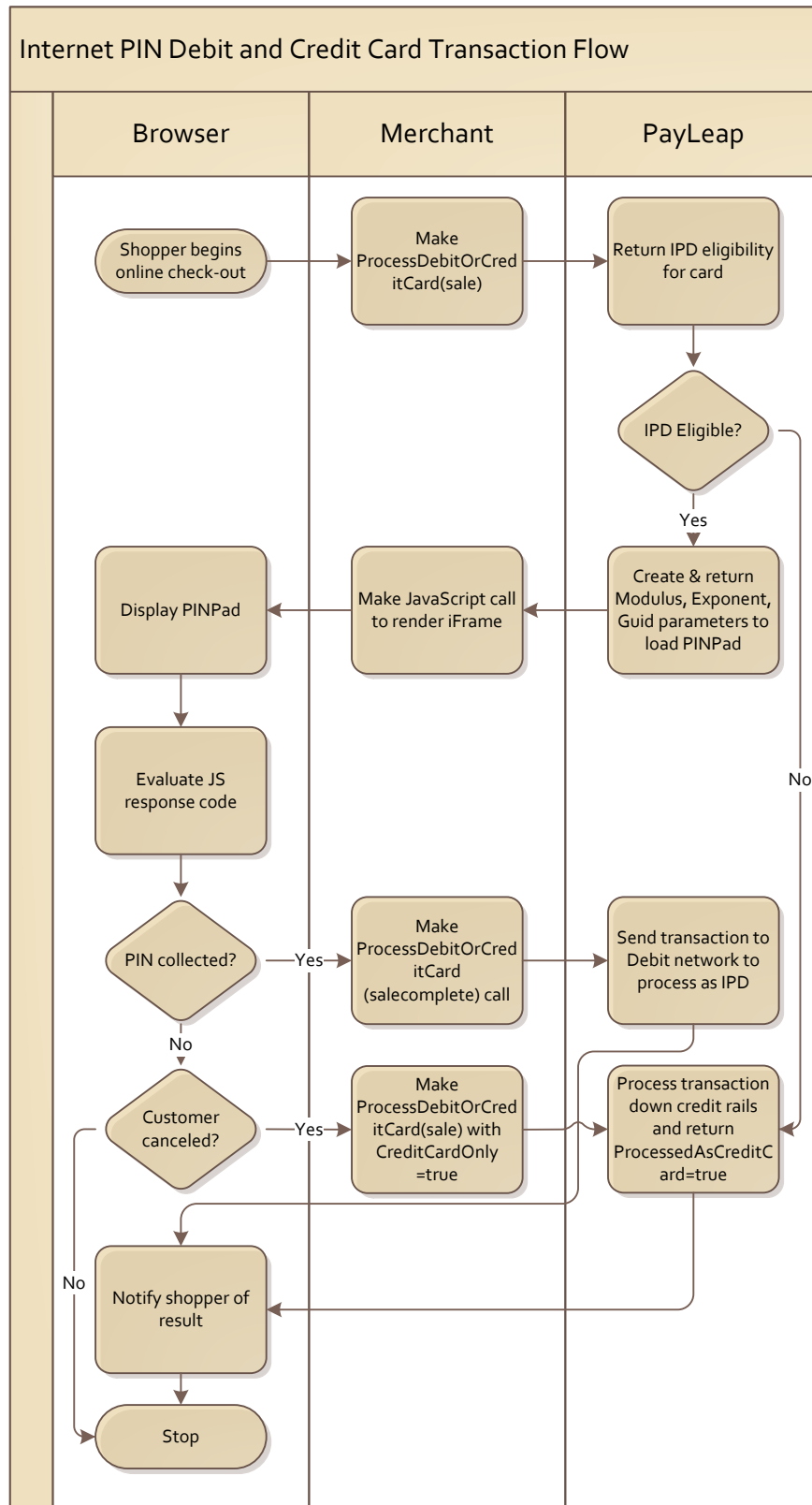
<https://uat.payleap.com/TransactServices.svc/ProcessDebitOrCreditCard>

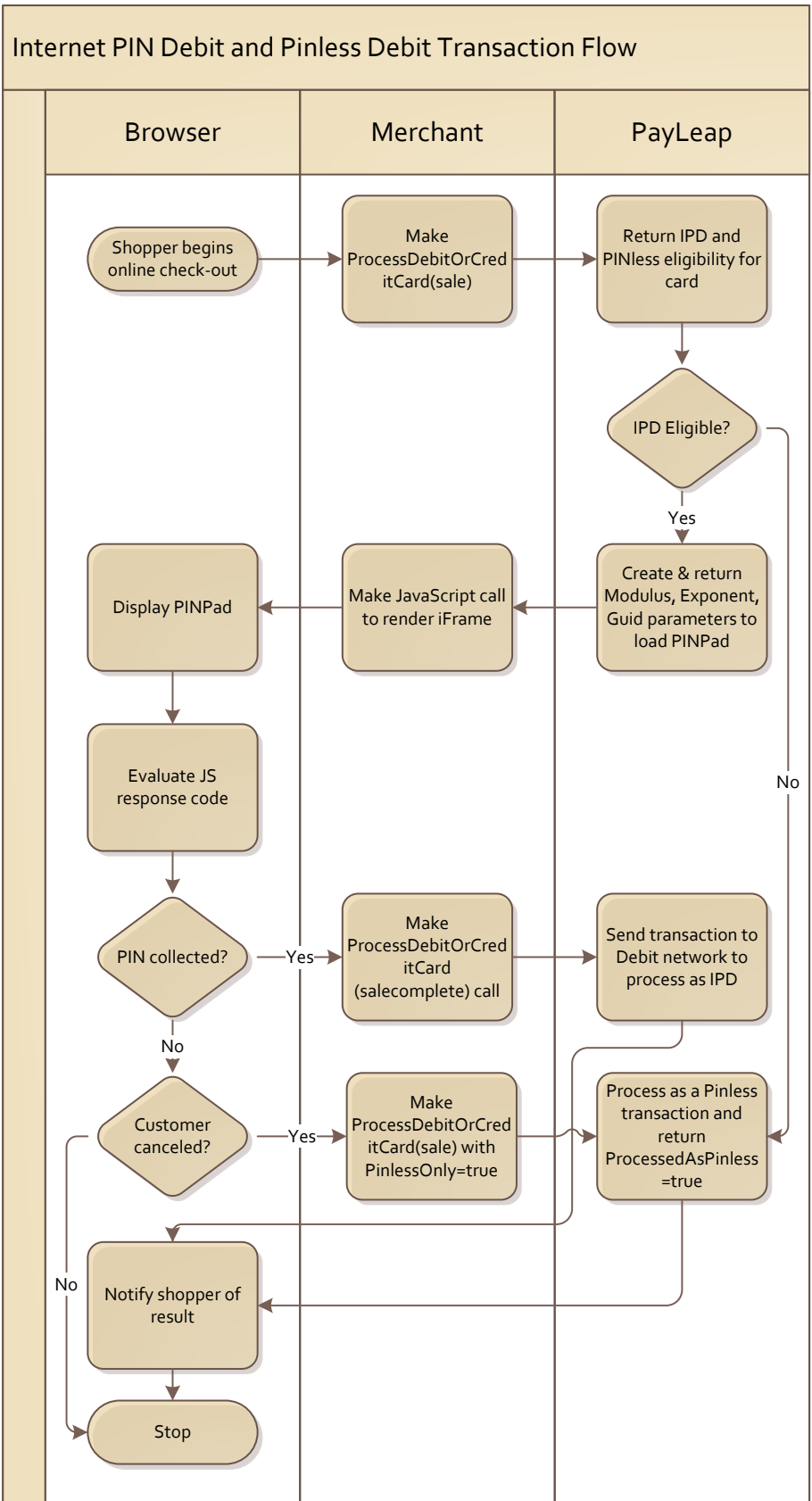
Production URL

<https://secure1.payleap.com/TransactServices.svc/ProcessDebitOrCreditCard>

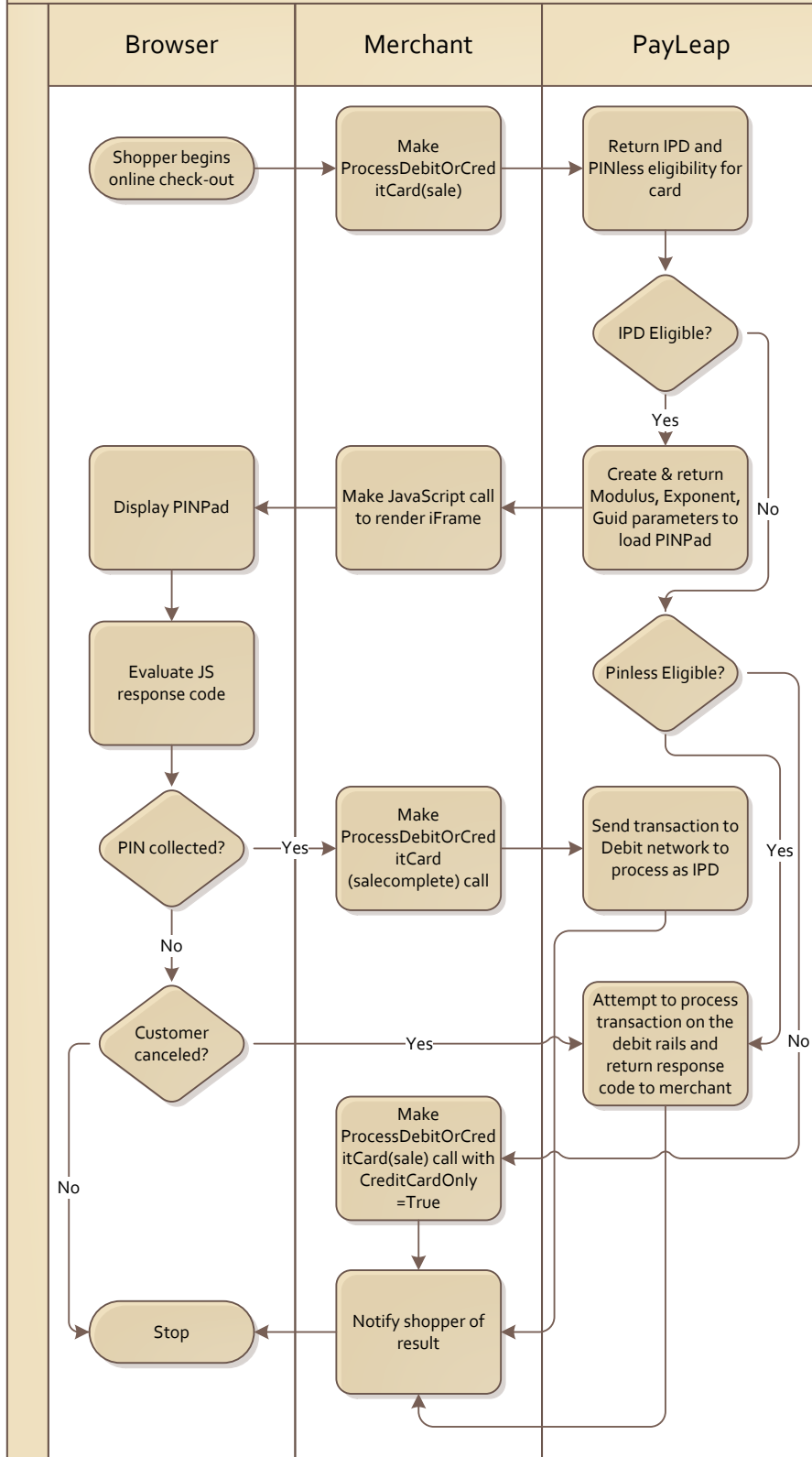
To determine the status of an internet PIN debit transaction, make a [GetPinDebitStatus](#) API call.

2.6.3.1. ProcessDebitOrCreditCard Transaction Flows





Internet PIN Debit, Pinless Debit, and Credit Card Transaction Flow



The following sections describe the parameters required for each type of credit card transaction.

2.6.3.2. Sale

Use the sale value for the transtype parameter to perform a pin debit card sale transaction. A pin debit card sale transaction authorizes a payment of a specified amount. The sale amount is deducted from the cardholder's account.

2.6.3.2.1. Request Parameters

Parameter	Required	Description
username	Required	Merchant PayLeap API login ID
password	Required	Merchant PayLeap API transaction key
transtype	Required	Sale
cardnum	Required	The debit card number used for the transaction
expdate	Required	The expiration date of the debit card used for the transaction in MMY format
cvnum	Optional	The 3-4 digit card verification number
amount	Required	The dollar amount of the transaction in DDDDDDDDD.DD format
nameoncard	Optional	The Shopper's name as printed on the card
magdata	Optional	Field required; Value not required
extdata	Required	Field required; Value not required. For more information, refer to ExtData .

2.6.3.2.2. ExtData

XML Tag	Required	Description
ATMOnly	Optional	Determines if the card is ATMOnly or eligible for signature debit
IPDOnly	Optional	True: Process this transaction only in conjunction with a PIN
PinlessOnly	Optional	True: Process this transaction only on the debit rails without a PIN
CreditCardOnly	Optional	True: Process as a credit card
CertifiedVendorId	Optional	Value passed by shopping cart for reporting
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number
LanguageCode	Optional	EN1 or EN2; value determines PIN Pad CANCEL verbiage; refer to Cancel Verbiage)
CurrencyCode	Optional	Standard ISO currency code in which the amount of the transaction is expressed. If this is omitted (default is USD)
MerchantOverride	Optional	For aggregators looking to override default merchant parameters
CardAcceptorName	Optional	Merchant name

XML Tag	Required	Description
CAAddress	Optional	Merchant Address
CACity	Optional	Merchant City
CAState	Optional	Merchant State
CACountry	Optional	Merchant Country
CACustomerSvcNum	Optional	Merchant Customer Service number
CAMCC	Optional	Merchant MCC

2.6.3.2.3. Response Values

Response Value	Description
pnref	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes))
Status	Success = pinnable Failure = not pinnable
RespMSG	Response message from PayLeap describing the transaction error
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor
GUID	Value is used to create PIN Pad
Modulus	Value is used to create PIN Pad
Exponent	Value is used to create PIN Pad
ProcessedAsCreditCard	True: the request has been processed as a credit card transaction
ProcessedAsPinless	True: the request has been processed as a pinless debit transaction

2.6.3.2.4. Example

2.6.3.2.4.1. Sample Process Debit or Credit Card Sale Request

```
https://uat.payleap.com/TransactServices.svc/processdebitorcreditCard?UserName=user123_API&Password=Wrr29qU!@AqHEHAYB&TransType=Sale&CardNum=1111222233334444&ExpDate=1215&MagData=&NameOnCard=&Amount=18.1&PNRef=&Pin=1234&SureChargeAmt=&CashBackAmt=&RegisterNum=&ExtData=
```

2.6.3.2.4.2. Sample Process Debit or Credit Card Sale Response

```
<?xml version="1.0"?>
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.payleap.com/payments">
  <AuthCode/>
  <Exponent>010001</Exponent>
  <GUID>9cc9a327-a954-105f-9263-0e81dc540740</GUID>
  <InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>
  <Message/>
```

```

<Modulus>CCA2EBD0F5E50CE04C25F04299CE895BADEFDBEAF9482AA5B68031F3
AEB3A4C747A110E08303F2D0E93447C131BCD76174F90B30E56F58204A588D7E8
438D805098B4BC873A2BFBB2608E039956C284553D2E35FB8FA7F0E51C9B4BEB6
CC9BAEFC0A4C384686E6A55EB377C62B459796DAB399EC061CD3B59F9DD357658
4064B</Modulus>
<PNRef>144562</PNRef>
<PinReferenceId>42499be24bf52c6cae661ab6f5198776</PinReferenceId>
<ProcessedAsCreditCard>FALSE</ProcessedAsCreditCard>
<Result>0</Result>
<Status>success</Status>
</Response>
  
```

2.6.3.3. SaleComplete

Use the salecomplete value for the transtype parameter in the second ProcessDebitOrCredit call. This call authorizes a payment of a specified amount, which is deducted from the Shopper's account.

2.6.3.3.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Salecomplete
CardNum	Required	The debit card number used for the transaction
ExpDate	Required	The expiration date of the debit card used for the transaction in MMY format
MagData	Required	Field required; Value not required
PNRef	Required	Field required; Value not required
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format. The amount includes any cash back or surcharge amounts and any tax or tip amounts specified in ExtData
NameOnCard	Optional	The cardholder's name as printed on the card
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.6.3.3.2. ExtData

XML Tag	Required	Description
ATMOnly	Optional	True Determines if the card is ATMOnly or signature debit
IPDOnly	Optional	True: Only process transaction for this card in conjunction with a PIN False: Process as credit card if pinned transaction fails

XML Tag	Required	Description
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent
CurrencyCode	Optional	Standard ISO currency code in which the amount of the transaction is expressed. If this is omitted (default is USD)
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number

2.6.3.3.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success = authorized Failure = not authorized
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor

Response Value	Description
ProcessedAsCreditCard	True: the request has been processed as a credit card transaction
ProcessedAsPinless	True: the request has been processed as a pinless debit transaction

2.6.3.3.4. Example

2.6.3.3.4.1. Sample Process Debit or Credit SaleComplete Request

```
https://uat.payleap.com/TransactServices.svc/processdebitorcredit
Card?UserName=user123_API&Password=Wt29qU!@AqHEHAYB&TransType=Sal
eComplete&CardNum=1111222233334444&ExpDate=1215&MagData=&NameOnCa
rd=&Amount=18.1&InvNum=&PNRef=144562&Pin=1234&SureChargeAmt=&Cash
BackAmt=&RegisterNum=&ExtData=
```

2.6.3.3.4.2. Sample Debit or Credit Card SaleComplete Response

```
<?xml version="1.0"?>
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.payleap.com/payments">
<AuthCode></AuthCode>
<InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>
<Message/>
<PNRef>144562</PNRef>
<ProcessedAsCreditCard>FALSE</ProcessedAsCreditCard>
<Result>0</Result>
<Status>success</Status>
</Response>
```

2.6.3.4. Refund

Use the refund value for the transtype parameter to perform a refund of a PIN debit card transaction. A PIN debit card refund transaction authorizes a refund of a specified amount from a previous transaction back to the shopper.

2.6.3.4.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Refund
PNRef	Required	The PNRef number of the original transaction being refunded
NameOnCard	Optional	The cardholder's name as printed on the card
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format; this value must be less than or equal to the amount of the original transaction
CardNum	Optional	The last four digits of the card number used in the original transaction being refunded

Parameter	Required	Description
ExpDate	Optional	The expiration date of the debit card used for the transaction in MMY format
CVNum	Optional	The 3-4 digit card verification number
MagData	Optional	Field required; Value not required
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.6.3.4.2. ExtData

XML Tag	Required	Description
ATMOnly	Optional	True Determines if the card is ATMOnly or signature debit
IPDOnly	Optional	True: Only process transaction for this card in conjunction with a PIN False: Process as credit card if pinned transaction fails
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number

2.6.3.4.3. Response Values

Response Value	Description
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Request status success or failure
Message	The response message returned by the host
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor
ProcessedAsCreditCard	True/false value to determine if the request has been processed as a PIN debit transaction or a credit card transaction
AuthCode	The authorization code for the transaction; returned empty for transaction failure

2.6.3.4.4. Example

2.6.3.4.4.1. Sample Process Debit or Credit Card Refund Request

```
https://uat.payleap.com/TransactServices.svc/processdebitorcreditCard?UserName=user123_API&Password=W29qU!@AqHEHAYB&TransType=Refund&CardNum=1111222233334444&ExpDate=1215&MagData=&NameOnCard=&Amount=18.1&InvNum=&PNRef=144562&SureChargeAmt=&CashBackAmt=&RegisterNum=&ExtData=
```

2.6.3.4.4.2. Sample Process Debit or Credit Card Refund Response

```
<?xml version="1.0"?>
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.payleap.com/payments">
<AuthCode></AuthCode>
<InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>
<Message/>
<PNRef>144562</PNRef>
<ProcessedAsCreditCard>FALSE</ProcessedAsCreditCard>
<Result>0</Result>
<Status>success</Status>
</Response>
```

2.6.3.5. Void

Use the VOID value for the transtype parameter to perform a void or reversal.

2.6.3.5.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID

Parameter	Required	Description
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Void
PNRef	Required	The PNRef number of the original transaction being refunded
NameOnCard	Optional	The cardholder's name as printed on the card
Amount	Optional	The amount of the original transaction
CardNum	Optional	The last four digits of the card number used in the original transaction being refunded
ExpDate	Optional	The expiration date of the debit card used for the transaction in MMY format
CVNum	Optional	The 3-4 digit card verification number
MagData	Optional	Field required; Value not required
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.6.3.5.2. ExtData

XML Tag	Required	Description
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number

2.6.3.5.3. Response Values

Response Value	Description
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns

Response Value	Description
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Request status success or failure
Message	The response message returned by the host
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor
ProcessedAsCreditCard	True/false value to determine if the request has been processed as a PIN debit transaction or a credit card transaction
AuthCode	The authorization code for the transaction; returned empty for transaction failure

2.6.3.5.4. Example

2.6.3.5.4.1. Sample Process Debit or Credit Card Void Request

```
https://uat.payleap.com/TransactServices.svc/processdebitorcreditCard?U
serName=user123_API&Password=W29qU!@AqHEHAYB&TransType=Void&CardNum=11
11222233334444&ExpDate=1215&MagData=&NameOnCard=&Amount=18.1&InvNum=&PN
Ref=144562&SureChargeAmt=&CashBackAmt=&RegisterNum=&ExtData=
```

2.6.3.5.4.2. Sample Process Debit or Credit Card Void Response

```
<?xml version="1.0"?>
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.payleap.com/payments">
<AuthCode></AuthCode>
<InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>
<Message/>
<PNRef>144563</PNRef>
<ProcessedAsCreditCard>FALSE</ProcessedAsCreditCard>
<Result>0</Result>
<Status>success</Status>
</Response>
```

2.6.3.6. PINLESSCREDIT

Use the PINLESSCREDIT value for the transtype parameter to perform a direct-to-debit transfer payment from a Sender to the Recipient. Use the [CheckBinForPinlessCredit](#) call to determine the PINless credit eligibility of a card.

2.6.3.6.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	PinlessCredit

Parameter	Required	Description
CardNum	Required	The debit card number used for the transaction
ExpDate	Required	The expiration date of the debit card used for the transaction in MMY format
MagData	Optional	Field required; Value not required
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format. The amount includes any cash back or surcharge amounts and any tax or tip amounts specified in ExtData
NameOnCard	Optional	The cardholder's name as printed on the card
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.6.3.6.2. ExtData

XML Tag	Required	Description
ATMOnly	Optional	True Determines if the card is ATMOnly or signature debit
IPDOnly	Optional	True: Only process transaction for this card in conjunction with a PIN False: Process as credit card if pinned transaction fails
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code
Country	Optional	Shopper billing country

XML Tag	Required	Description
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number

2.6.3.6.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success = authorized Failure = not authorized
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor

2.6.3.6.4. Example

2.6.3.6.4.1. Sample Process Debit or Credit PinlessCredit Request

```
https://uat.payleap.com/TransactServices.svc/processdebitorcreditCard?UserName=user123_API&Password=Wrr29qU!@AqHEHAYB&TransType=PinlessCredit&CardNum=1111222233334444&ExpDate=1215&NameOnCard=&Amount=18.1&ExtData=
```

2.6.3.6.4.2. Sample Debit or Credit Card PinlessCredit Response

```
<?xml version="1.0"?>
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.payleap.com/payments">
<AuthCode></AuthCode>
<InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>
<Message/>
<PNRef>144562</PNRef>
<Result>0</Result>
<Status>success</Status>
</Response>
```

2.6.4. Process Debit or Credit With Account Token REST API

2.6.4.1. SALE

Use the sale value for the transtype parameter to perform a pin debit card sale transaction. A pin debit card sale transaction authorizes a payment of a specified amount. The sale amount is deducted from the cardholder's account.

2.6.4.1.1. Request Parameters

Parameter	Required	Description
username	Required	Merchant PayLeap API login ID
password	Required	Merchant PayLeap API transaction key
transtype	Required	Sale
Accounttoken	Required	The debit card number used for the transaction
cvnum	Optional	The 3-4 digit card verification number
amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
extdata	Required	Field required; Value not required. For more information, refer to ExtData .

2.6.4.1.2. ExtData

XML Tag	Required	Description
ATMOnly	Optional	Determines if the card is ATMOnly or eligible for signature debit
IPDOnly	Optional	True: Process this transaction only in conjunction with a PIN
PinlessOnly	Optional	True: Process this transaction only on the debit rails without a PIN
CreditCardOnly	Optional	True: Process as a credit card
CertifiedVendorId	Optional	Value passed by shopping cart for reporting
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number
LanguageCode	Optional	EN1 or EN2; value determines PIN Pad CANCEL verbiage; refer to Cancel Verbiage)
CurrencyCode	Optional	Standard ISO currency code in which the amount of the transaction is expressed. If this is omitted (default is USD)
MerchantOverride	Optional	For aggregators looking to override default merchant parameters
CardAcceptorName	Optional	Merchant name

XML Tag	Required	Description
CAAddress	Optional	Merchant Address
CACity	Optional	Merchant City
CAState	Optional	Merchant State
CACountry	Optional	Merchant Country
CACustomerSvcNum	Optional	Merchant Customer Service number
CAMCC	Optional	Merchant MCC

2.6.4.1.3. Response Values

Response Value	Description
pnref	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes))
Status	Success = pinnable Failure = not pinnable
RespMSG	Response message from PayLeap describing the transaction error
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor
GUID	Value is used to create PIN Pad
Modulus	Value is used to create PIN Pad
Exponent	Value is used to create PIN Pad
ProcessedAsCreditCard	True: the request has been processed as a credit card transaction
ProcessedAsPinless	True: the request has been processed as a pinless debit transaction

2.6.4.1.4. Example

2.6.4.1.4.1. Sample Process Debit or Credit Card Sale Request

```
https://uat.payleap.com/TransactServices.svc/processdebitorcreditCard?UserName=user123_API&Password=Wrr29qU!@AqHEHAYB&TransType=Sale&accounttoken=112334&Amount=18.1&PNRef=&ExtData=
```

2.6.4.1.4.2. Sample Process Debit or Credit Card Sale Response

```
<?xml version="1.0"?>
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.payleap.com/payments">
<AuthCode/>
<Exponent>010001</Exponent>
<GUID>9cc9a327-a954-105f-9263-0e81dc540740</GUID>
<InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>
<Message/>
<Modulus>CCA2EBD0F5E50CE04C25F04299CE895BADEFDBEAF9482AA5B68031F3
AEB3A4C747A110E08303F2D0E93447C131BCD76174F90B30E56F58204A588D7E8
```

```

438D805098B4BC873A2BFBB2608E039956C284553D2E35FB8FA7F0E51C9B4BEB6
CC9BAEFC0A4C384686E6A55EB377C62B459796DAB399EC061CD3B59F9DD357658
4064B</Modulus>
<PNRef>144562</PNRef>
<PinReferenceId>42499be24bf52c6cae661ab6f5198776</PinReferenceId>
<ProcessedAsCreditCard>FALSE</ProcessedAsCreditCard>
<Result>0</Result>
<Status>success</Status>
</Response>

```

2.6.4.2. SaleComplete

Use the salecomplete value for the transtype parameter in the second ProcessDebitOrCredit call. This call authorizes a payment of a specified amount, which is deducted from the Shopper's account.

2.6.4.2.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Salecomplete
Accounttoken	Required	Token to be used in place of card number
PNRef	Required	Field required; Value not required
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format. The amount includes any cash back or surcharge amounts and any tax or tip amounts specified in ExtData
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.6.4.2.2. ExtData

XML Tag	Required	Description
ATMOnly	Optional	True Determines if the card is ATMOnly or signature debit
IPDOnly	Optional	True: Only process transaction for this card in conjunction with a PIN False: Process as credit card if pinned transaction fails
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum

XML Tag	Required	Description
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent
CurrencyCode	Optional	Standard ISO currency code in which the amount of the transaction is expressed. If this is omitted (default is USD)
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number

2.6.4.2.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success = authorized Failure = not authorized
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor
ProcessedAsCreditCard	True: the request has been processed as a credit card transaction
ProcessedAsPinless	True: the request has been processed as a pinless debit transaction

2.6.4.2.4. Example

2.6.4.2.4.1. Sample Process Debit or Credit SaleComplete Request

```
https://uat.payleap.com/TransactServices.svc/processdebitorcredit
Card?UserName=user123_API&Password=Wrr29qU!@AqHEHAYB&TransType=Sal
eComplete&accounttoken=1112244&Amount=18.1&InvNum=&PNRef=144562&E
xtData=
```

2.6.4.2.4.2. Sample Debit or Credit Card SaleComplete Response

```
<?xml version="1.0"?>
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.payleap.com/payments">
<AuthCode></AuthCode>
<InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>
<Message/>
<PNRef>144562</PNRef>
<ProcessedAsCreditCard>FALSE</ProcessedAsCreditCard>
<Result>0</Result>
<Status>success</Status>
</Response>
```

2.6.4.3. PINLESSCREDIT

Use the PINLESSCREDIT value for the transtype parameter to perform a direct-to-debit transfer payment from a Sender to the Recipient. Use the [CheckBinForPinlessCredit](#) call to determine the PINless credit eligibility of a card.

2.6.4.3.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	PinlessCredit
AccountToken	Required	The debit card number used for the transaction
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format. The amount includes any cash back or surcharge amounts and any tax or tip amounts specified in ExtData
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.6.4.3.2. ExtData

XML Tag	Required	Description
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent

2.6.4.3.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success = authorized Failure = not authorized
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor

2.6.4.3.4. Example

2.6.4.3.4.1. Sample Process Debit or Credit With Account Token PinlessCredit Request

```
https://uat.payleap.com/TransactServices.svc/processdebitorcreditCard?UserName=user123_API&Password=Wt29qU!@AqHEHAYB&TransType=PinlessCredit&AccountToken=2222333&Amount=18.1&ExtData=
```

2.6.4.3.4.2. Sample Debit or Credit Card PinlessCredit Response

```
<?xml version="1.0"?>
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.payleap.com/payments">
<AuthCode></AuthCode>
<InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>
<Message/>
<PNRef>144562</PNRef>
<Result>0</Result>
<Status>success</Status>
```

```
</Response>
```

2.6.5. CheckBinForPinlessCredit

To check a card number for PINless Credit eligibility, send an HTTP GET message to one of the following URLs.

Test URL

<https://uat.payleap.com/TransactServices.svc/CheckBinForPinlessCredit>

Production URL

<https://secure1.payleap.com/TransactServices.svc/CheckBinForPinlessCredit>

2.6.5.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
CardNum	Required	The card number to check PINless credit eligibility

2.6.5.2. Response

Response Value	Description
InnerErrorCode	Inner detailed error code returned from the processor
NetworkId	The debit network associated with the card
PinlessCredit	True: Eligible for PINless credit False: Not eligible for PINless credit
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success: call was successful Failure: call failed

2.6.5.3. Example

2.6.5.3.1. Sample Check BIN for PINless Credit Request

```
https://uat.payleap.com/TransactServices.svc/CheckBinForPinlessCredit?UserName=user123_API&Password=W29qU!@AqHEHAYB&CardNum=1111222233334444
```

2.6.5.3.2. Sample Check BIN for PINless Credit Response

```
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.payleap.com/payments"><InnerErrorCode>0</InnerErrorCode><NetworkId>XCEL</NetworkId><PinlessCredit>TRUE</PinlessCredit><Result>0</Result><Status>success</Status></Response>
```

2.7. GetPinDebitStatus

Use the GetPinDebitStatus command to request the status of a [ProcessDebitOrCreditCard](#) pinned transaction.

To send a GetPinDebitStatus request, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/GetPinDebitStatus>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/GetPinDebitStatus>

2.7.2.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
PNRef	Required	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway

2.7.2.2. Response Values

Response Value	Description
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success = authorized Failure = not authorized
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor

Response Value	Description
History	Transaction history with each transaction enclosed in a <transaction> tag. Refer to Error! Reference source not found. for details.

TABLE 5. GETPINDEBITSTATUS HISTORY OUTPUT

Tag	Type (Length)	Purpose
<transaction>		Parent tag; contains history of a single transaction
<tran_id>	AN(32)	Transaction ID
<status>	AN(1-2)	Transaction status code (i.e. AZ): <ul style="list-style-type: none"> • AQ PIN Acquired • AU Authenticated • AZ Authorized • AL Authorized Late • C Complete • DC Declined • FD Fraud Decline • I Initiated • MR Merchant Refund • P Pending • PA Preauthorized • PE Prior to EFT • RF Refunded • RV Reversed • V Voided
<apprcode>	N(0 or 6)	Approval code of the transaction
<recurring>	AN(x-y)	True: Recurring capability is enabled on the debit card False: Debit card requires PIN is captured for each authorization
<datetime>	AN(x-y)	The timestamp of the transaction in GMT (i.e. 11/20/2013 11:23:42)
<amount>	N(1-7)	The transaction amount in base units (i.e. a decimal payment of \$110.25 would be “11025” in base units)

2.8. CreateKey

Use the CreateKey command to request an encryption key and session ID for a [ProcessCard](#) transaction.

To send a CreateKey request, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/CreateKey>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/CreateKey>

2.8.2.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key

2.8.2.2. Response Values

Response Value	Description
SessionID	A system-generated reference id for the transaction session; SessionID is cleared once a SaleComplete transaction is complete
Modulus	RSA Modulus for the transaction to be used to encrypt card and CVV data in subsequent calls for this session
Exponent	RSA Exponent for the transaction to be used to encrypt card and CVV data in subsequent calls for this session

2.9. CreateAccountTokenForEncryptedCard

Use the CreateAccountTokenForEncryptedCard command to request a token for a card that has been encrypted under the encryption key created using CreateKey API and session ID from the same API call.

To send a CreateAccountTokenForEncryptedCard request, use an HTTP GET/POST to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/CreateAccountTokenForEncryptedCard>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/CreateAccountTokenForEncryptedCard>

2.9.2.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
SessionId	Required	SessionId generated using the CreateKey API call
EncryptedCardNum	Required	The card number encrypted using the SessionKey obtained during the CreateKey call
ExpDate	Required	The expiration date of the debit card used for the transaction in MMY format
NameOnCard	Required	Name as it appears on the card

2.9.2.2. Response Values

Response Value	Description
Message	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
AccountToken	Token generated for the card
Last4OfCard	Last 4 digits of the card number
ExpDate	Expiration date for the card
BIN	First 6 digits of the card

2.10. ProcessCard

The ProcessCard command is used by merchants who wish to encrypt card details using the SessionKey obtained during the [CreateKey](#) call prior to sensitive information hitting their servers, and send the encrypted card information to PayLeap for processing.

To send a ProcessCard transaction, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/ProcessCard>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/ProcessCard>

The following sections describe the parameters required for each request when using encrypted card information.

2.10.2. Sale

Use the Sale value for the TransType parameter to pass in encrypted card details to establish a transaction to be processed using either PIN or pinless authentication.

2.10.2.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Sale
SessionID	Required	A system-generated reference id for the transaction session generated during the CreateKey call
EncryptedCardNum	Conditional	The card number used for the transaction encrypted using the SessionKey obtained during the CreateKey call; required unless EncryptedMagData is provided
EncryptedCVV	Optional	The CVV associated with the card used for the transaction encrypted using the SessionKey obtained during the CreateKey call
EncryptedMagData	Optional (swipe only)	For swiped transactions, the magnetic stripe data from the card encrypted using the SessionKey obtained during the CreateKey call
ExpDate	Optional	The expiration date of the debit card used for the transaction in MMY format
ExtData	Required	An XML string containing additional data for the transaction. See ExtData for more information.

2.10.2.2. ExtData

XML Tag	Required	Description
ATMOnly	Optional	Determines if the card is ATMOnly or eligible for signature debit
IPDOnly	Optional	True: Only process transaction for this card in conjunction with a PIN False: Process as credit card if pinned transaction fails
PinlessOnly	Optional	True: Process transaction only as pinless False: Process as credit card if pinless transaction fails
CertifiedVendorId	Optional	Value passed by shopping cart for reporting
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number
LanguageCode	Optional	EN1 or EN2; value determines PIN Pad CANCEL verbiage; refer to Cancel Verbiage)

2.10.2.3. Response Values

Response Value	Description
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
CreditCard	True: The card can only be processed without PIN False: The card can only be processed in conjunction with a PIN
Guid	Values used to invoke the PIN Pad using JavaScript in the user's browser returned when CreditCard=False See PaySecure PIN Pad Implementation for details
Modulus	
Exponent	
TransactionID	Transaction Identifier for PIN-debit eligible transactions returned when CreditCard=False

2.10.3. SaleComplete

Use the SaleComplete value for the TransType parameter to authorize the payment of a specified amount using encrypted card information passed in the ProcessCard ([Sale](#)) call.

2.10.3.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	SaleComplete
PNRef	Required	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
ExtData	Required	An XML string containing additional data for the transaction. See ExtData for more information.

2.10.3.2. Response Values

Response Value	Description
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ProcessedAs	IPD: transaction was processed as internetPINdebit CreditCard: transaction was processed as a signature debit on the credit rails Pinless: processed as a pinless transaction on the debit rails
Token	Card token
Last4OfCard	The last 4 digits of the card number used for the transaction
CardHash	SHA-1 hash of the card number used for the transaction
ExpDate	The expiration date of the card used for the transaction

2.11. ProcessPinlessWithToken

The ProcessPinlessWithToken command is used to process a pinless transaction with the token returned during the ProcessCard ([SaleComplete](#)) call or ProcessCard (CUPVerification) call.

To send a ProcessPinlessWithToken transaction, use an HTTP GET/POST to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/ProcessPinlesswithToken>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/ProcessPinlessWithToken>

The following section describes the parameters required to process a pinless transaction with a token.

2.11.2. Sale

Use the Sale value for the TransType parameter to authorize payment of a specified amount to a card previously tokenized during the ProcessCard ([SaleComplete](#)) call.

2.11.2.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID

Parameter	Required	Description
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Sale
Token	Required	Card Token returned during the ProcessCard (SaleComplete) call or ProcessCard (CUPVerification) call.
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
CVV	Optional	The CVV associated with the card used for the transaction
ExtData	Required	An XML string containing additional data for the transaction. See ExtData for more information.

2.11.2.2. ExtData

XML Tag	Required	Description
ATMOnly	Optional	Determines if the card is ATMOnly or signature debit
IPDOnly	Optional	True: Only process transaction for this card in conjunction with a PIN False: Process as credit card if pinned transaction fails
CUPVerified	Conditional	Should be set to true for all CUP (credit and debit) cards that have been previously verified.
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent
CurrencyCode	Optional	Standard ISO currency code in which the amount of the transaction is expressed. If this is omitted (default is USD)
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address

XML Tag	Required	Description
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number

2.11.2.3. Response Values

Response Value	Description
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
AuthCode	The authorization code for the transaction; returned empty for transaction failure

2.12. ProcessEBTCard

To send an EBT card transaction, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/ProcessEBTCard>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/ProcessEBTCard>

The following sections describe the parameters required for each type of EBT card transaction.

2.12.2. FoodStampSale

Use the FoodStampSale value for the TransType parameter to perform a food stamp sale transaction. A food stamp sale transaction authorizes a payment of a specified amount. The sale amount is deducted from the cardholder's account.

2.12.2.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID

Parameter	Required	Description
Password	Required	Merchant PayLeap API transaction key
TransType	Required	FoodStampSale
CardNum	Required	The EBT card number used for the transaction
ExpDate	Optional	The expiration date of the EBT card used for the transaction in MMY format
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: <pre>MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=14041010000059300000?'</pre>
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format. This amount includes any surcharge.
NameOnCard	Optional	The cardholder's name as printed on the card
InvNum	Optional	The invoice number used by the merchant to identify the transaction
SurchargeAmt	Optional	The amount in DDDD.CC format that a merchant charges for processing a EBT card transaction
CashBackAmt	Optional	Field required; value not required
RegisterNum	Optional	Field required; value not required
ExtData	Required	An XML string containing additional data for the transaction. See ExtData for more information.

2.12.2.2. ExtData

XML Tag	Required	Description
KeySerialNumber	Optional	The key serial number from the PIN Pad used for DUKPT PIN encryption
CustomerID	Optional	Customer identification number
PONum	Optional	Purchase order number for the transaction

2.12.2.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error

Response Value	Description
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
PinReferenceId	The reference number for the transaction from PaySecure

2.12.2.4. Example

2.12.2.4.1. Sample EBT Card Food Stamp Sale Request

```
https://uat.payleap.com/transactservices.svc/ProcessEBTCard?Use
rName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=FoodStamp
Sale&CardNum=4111111111111111&NameOnCard=&Amount=10.13&InvNum=1
&SureChargeAmt=&CashBackAmt=&RegisterNum=&ExtData=
```

2.12.2.4.2. Sample EBT Card Food Stamp Sale Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>FoodStampSaleASD</AuthCode>
<ExtData>CardType=EBT</ExtData>
<GetAVSResult>S</GetAVSResult>
<GetCommercialCard>>false</GetCommercialCard>
<PinReferenceId>01e685daf6784e31bc47fce56b8f967e</PinReferenceId>
<Message>APPROVAL</Message>
<PNRef>14385</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.12.3. FoodStampReturn

Use the FoodStampReturn value for the TransType parameter to perform a food stamp return transaction. A food stamp return transaction authorizes a refund of a specified amount from a previous [FoodStampSale](#) transaction back to the cardholder. The refund amount is returned to the cardholder's account.

2.12.3.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	FoodStampReturn
CardNum	Required	The EBT card number used for the transaction
ExpDate	Optional	The expiration date of the EBT card used for the transaction in MMY format

Parameter	Required	Description
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=1404101000000593000000?'
NameOnCard	Optional	The cardholder's name as printed on the card
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format. This amount includes any surcharge.
InvNum	Optional	The invoice number used by the merchant to identify the transaction
PNRef	Required	The PNRef number of the original FoodStampSale transaction being refunded
SurchargeAmt	Optional	The amount in DDDD.CC format that a merchant charges for processing a EBT card transaction
CashBackAmt	Optional	Field required; value not required
RegisterNum	Optional	Field required; value not required
ExtData	Required	An XML string containing additional data for the transaction. See ExtData for more information.

2.12.3.2. ExtData

XML Tag	Required	Description
PONum	Optional	Purchase Order number for the transaction

2.12.3.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
PinReferenceId	The reference number for the transaction from PaySecure
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.12.3.4. Example

2.12.3.4.1. Sample EBT Card Food Stamp Return Request

```
https://uat.payleap.com/transactservices.svc/ProcessEBTCard?Use
rName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=FoodStamp
Return&CardNum=4111111111111111&ExpDate=1215&MagData=&NameOnCar
d=&Amount=10&InvNum=&PNRef=14447&Pin=1234&SureChargeAmt=&CashBa
ckAmt=&RegisterNum=&ExtData=%3CKeySerialNumber%3E4A003102930003
BB%3C%2FKeySerialNumber%3E
```

2.12.3.4.2. Sample EBT Card Food Stamp Return Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>FoodStampReturnASD</AuthCode>
<PinReferenceId>01e685daf6784e31bc47fce56b8f967e</PinReferenceId>
<Message>APPROVAL</Message>
<PNRef>14478</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.12.4. CashBenefitSale

Use the CashBenefitSale value for the TransType parameter to perform a cash benefit sale transaction. A cash benefit stamp sale transaction authorizes a payment of a specified amount. The sale amount is deducted from the cardholder's account.

2.12.4.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	CashBenefitSale
CardNum	Required	The EBT card number used for the transaction
ExpDate	Required	The expiration date of the EBT card used for the transaction in MMY format
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: <pre>MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=140410100000059300000?'</pre>
NameOnCard	Optional	The cardholder's name as printed on the card
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format. This amount includes any surcharge.
InvNum	Optional	The invoice number used by the merchant to identify the transaction
PNRef	Required	Field required; Value not required
Pin	Required	The encrypted PIN block returned by the PIN pad. The transaction will fail if an unencrypted PIN value is used.
SurchargeAmt	Optional	The amount in DDDD.CC format that a merchant charges for processing a EBT card transaction
CashBackAmt	Required	Field required; value not required. The amount that a cardholder requests for cash back in DDDD.CC format.
RegisterNum	Required	Field required; value not required
ExtData	Required	An XML string containing additional data for the transaction. See ExtData for more information.

2.12.4.2. ExtData

XML Tag	Required	Description
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out

XML Tag	Required	Description
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
KeySerialNumber	Required	The key serial number from the PIN Pad used for DUKPT PIN encryption
CustomerID	Optional	Customer identification number
PONum	Optional	Purchase order number for the transaction

2.12.4.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	A string containing additional information about the transaction. The data in the ExtData field is returned in the format CardType=[type].
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.12.4.4. Example

2.12.4.4.1. Sample EBT Card Cash Benefit Sale Request

```
https://uat.payleap.com/transactservices.svc/ProcessEBTCard?Use
rName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=CashBenef
itSale&CardNum=4111111111111111&ExpDate=1215&MagData=&NameOnCar
d=&Amount=10&InvNum=&PNRef=&Pin=1234&SureChargeAmt=&CashBackAmt
=&RegisterNum=&ExtData=%3CKeySerialNumber%3E4A003102930003BB%3C
%2FKeySerialNumber%3E
```

2.12.4.4.2. Sample EBT Card Cash Benefit Sale Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>CashBenefitSaleASD</AuthCode>
<ExtData>CardType=EBT</ExtData>
<GetAVSResult>S</GetAVSResult>
<GetCommercialCard>>false</GetCommercialCard>
```

```

<HostCode>8ea05c15-2fe3-48f2-8f78-d4b1517a706</HostCode>
<Message>APPROVAL</Message>
<PNRef>14482</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>

```

2.12.5. Inquire

Use the Inquire value for the TransType parameter to perform an EBT balance inquiry. A balance inquiry checks the value remaining on the cardholder's EBT card.

2.12.5.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Inquire
CardNum	Required	The EBT card number used for the transaction
ExpDate	Required	The expiration date of the EBT card used for the transaction in MMY format
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B4111111111111111^BO/JAMES B^140410100000059300000?; 4111111111111111=140410100000059300000?'
NameOnCard	Optional	The cardholder's name as printed on the card
Amount	Required	Field required; set value at "0"
InvNum	Required	Field required; value not required
PNRef	Required	Field required; Value not required
Pin	Required	The encrypted PIN block returned by the PIN pad. The transaction will fail if an unencrypted PIN value is used.
SurchargeAmt	Required	Field required; value not required
CashBackAmt	Required	Field required; value not required
RegisterNum	Required	Field required; value not required
ExtData	Required	An XML string containing additional data for the transaction. See ExtData for more information.

2.12.5.2. ExtData

XML Tag	Required	Description
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out

XML Tag	Required	Description
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
KeySerialNumber	Required	The key serial number from the PIN Pad used for DUKPT PIN encryption

2.12.5.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
Balance	The balance of the EBT card for which the inquiry was made
ExtData	A string containing additional information about the transaction. The data in the ExtData field is returned in the format CardType=[type].
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)

2.12.5.4. Example

2.12.5.4.1. Sample EBT Card Inquire Request

```
https://uat.payleap.com/transactservices.svc/ProcessEBTCard?Use
rName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Inquire&C
ardNum=4111111111111111&ExpDate=1215&MagData=&NameOnCard=&Amoun
t=0&InvNum=&PNRef=&Pin=1234&SureChargeAmt=&CashBackAmt=&Registe
rNum=&ExtData=%3CKeySerialNumber%3E4A003102930003BB%3C%2FKeySer
ialNumber%3E
```

2.12.5.4.2. Sample EBT Card Inquire Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>InquireEBT123ASD</AuthCode>
<Balance>0</Balance>
<ExtData>CardType=EBT</ExtData>
<GetAVSResult/>
<GetCommercialCard>>false</GetCommercialCard>
```

```
<HostCode>61137d15-8bb7-441a-b57a-40ca8d002727</HostCode>  
<Message>APPROVAL</Message>  
<PNRef>15131</PNRef>  
<RespMSG>Approved</RespMSG>  
<Result>0</Result>  
</Response>
```

2.13. ProcessGiftCard

To send a gift card transaction, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/ProcessGiftCard>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/ProcessGiftCard>

The following sections describe the parameters required for each type of gift card transaction.

2.13.2. Redeem

Use the Redeem value for the TransType parameter to perform a gift card redeem transaction. A gift card redeem transaction authorizes a payment of a specified amount. The redemption amount is deducted from the cardholder's account.

2.13.2.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Redeem
CardNum	Required	The gift card number used for the transaction
ExpDate	Required	The expiration date of the gift card used for the transaction in MMY format
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: <pre>MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=140410100000059300000?'</pre>
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format.
InvNum	Optional	The invoice number used by the merchant to identify the transaction
PNRef	Required	Field required; Value not required
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.13.2.2. ExtData

XML Tag	Required	Description
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
CustomerID	Optional	Customer identification number
PONum	Optional	Purchase order number for the transaction

2.13.2.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	A string containing additional information about the transaction. The data in the ExtData field is returned in the format InvNum=[InvoiceNumber].
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Message1	In the event of a failure, this field contains a message describing the transaction error

2.13.2.4. Example

2.13.2.4.1. Sample Gift Card Redeem Request

```
https://uat.payleap.com/transactservices.svc/ProcessGiftCard?UserName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Redeem&CardNum=4111111111111111&ExpDate=1215&MagData=&Amount=1&InvNum=&PNRef=&ExtData=
```

2.13.2.4.2. Sample Gift Card Redeem Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>123ASD</AuthCode>
<ExtData>InvNum = 0</ExtData>
<GetAVSResult>S</GetAVSResult>
<HostCode>825a16d7-3454-4bfc-bcfb-ff5c3b5a3b14</HostCode>
<Message>APPROVAL</Message>
<PNRef>14599</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.13.3. Reload

Use the reload value for the TransType parameter to perform a gift card reload transaction. A gift card reload transaction adds a specified amount of value to the gift card.

2.13.3.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Reload
CardNum	Required	The gift card number used for the transaction
ExpDate	Required	The expiration date of the gift card used for the transaction in MMY format
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: <pre>MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=1404101000000593000000?'</pre>
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format.
InvNum	Optional	The invoice number used by the merchant to identify the transaction
PNRef	Required	Field required; Value not required
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.13.3.2. ExtData

XML Tag	Required	Description
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
CustomerID	Optional	Customer identification number
PONum	Optional	Purchase order number for the transaction

2.13.3.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	A string containing additional information about the transaction. The data in the ExtData field is returned in the format InvNum=[InvoiceNumber].
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Message1	In the event of a failure, this field contains a message describing the transaction error

2.13.3.4. Example

2.13.3.4.1. Sample Gift Card Reload Request

```
https://uat.payleap.com/transactservices.svc/ProcessGiftCard?UserName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Reload&CardNum=4111111111111111&ExpDate=1215&MagData=&Amount=1.01&InvNum=&PNRef=&ExtData=
```

2.13.3.4.2. Sample Gift Card Reload Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>123ASD</AuthCode>
<ExtData>InvNum = 0</ExtData>
<GetAVSResult>S</GetAVSResult>
<HostCode>2ee3bf3e-686a-4d2f-8027-526d2c8fe08a</HostCode>
<Message>APPROVAL</Message>
<PNRef>14603</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.13.4. Refund

Use the Refund value for the TransType parameter to perform a gift card refund transaction. A gift card refund transaction authorizes a refund of a specified amount from a previous Gift Card [Redeem](#) transaction back to the cardholder. The refund amount is returned to the cardholder's account.

2.13.4.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Refund
CardNum	Required	The gift card number used for the transaction
ExpDate	Required	The expiration date of the gift card used for the transaction in MMY format
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: <pre>MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=140410100000059300000?'</pre>
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format.
InvNum	Optional	The invoice number used by the merchant to identify the transaction
PNRef	Required	The PNRef number of the original transaction being refunded
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.13.4.2. ExtData

XML Tag	Required	Description
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
CustomerID	Optional	Customer identification number
PONum	Optional	Purchase order number for the transaction

2.13.4.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	A string containing additional information about the transaction. The data in the ExtData field is returned in the format InvNum=[InvoiceNumber].
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Message1	In the event of a failure, this field contains a message describing the transaction error

2.13.4.4. Example

2.13.4.4.1. Sample Gift Card Refund Request

```
https://uat.payleap.com/transactservices.svc/ProcessGiftCard?UserName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Refund&CardNum=4111111111111111&ExpDate=1215&MagData=&Amount=1&InvNum=&PNRef=15200&ExtData=
```

2.13.4.4.2. Sample Gift Card Refund Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>123ASD</AuthCode>
<ExtData>InvNum = 0</ExtData>
<GetAVSResult>S</GetAVSResult>
<HostCode>b2e143ac-ba88-4fab-b76b-6c9827e887ce</HostCode>
<Message>APPROVAL</Message>
<PNRef>15202</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```


2.13.5. Activate

Use the Activate value for the TransType parameter to perform a gift card activation transaction. A gift card activation transaction activates a gift card for use and optionally adds a specified amount of value to the gift card.

2.13.5.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Activate
CardNum	Required	The gift card number used for the transaction
ExpDate	Required	The expiration date of the gift card used for the transaction in MMY format
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: <pre>MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=140410100000059300000?'</pre>
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format; Use an amount of "0" to activate the card with no initial value.
InvNum	Optional	The invoice number used by the merchant to identify the transaction
PNRef	Required	Field required; Value not required
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.13.5.2. ExtData

XML Tag	Required	Description
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
CustomerID	Optional	Customer identification number
PONum	Optional	Purchase order number for the transaction

2.13.5.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	A string containing additional information about the transaction. The data in the ExtData field is returned in the format InvNum=[InvoiceNumber].
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Message1	In the event of a failure, this field contains a message describing the transaction error

2.13.5.4. Example

2.13.5.4.1. Sample Gift Card Activate Request

```
https://uat.payleap.com/transactservices.svc/ProcessGiftCard?UserName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Activate&CardNum=4111111111111111&ExpDate=1215&MagData=&Amount=0&InvNum=&PNRef=&ExtData=
```

2.13.5.4.2. Sample Gift Card Activate Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>123ASD</AuthCode>
<ExtData>InvNum = 0</ExtData>
<GetAVSResult>S</GetAVSResult>
<HostCode>749df4ea-5492-41bb-9457-fd42375b5d5b</HostCode>
<Message>APPROVAL</Message>
<PNRef>14607</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.13.6. Deactivate

Use the Deactivate value for the TransType parameter to perform a gift card deactivation transaction. A gift card deactivation transaction deactivates a gift card from use.

2.13.6.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Deactivate
CardNum	Required	The gift card number used for the transaction
ExpDate	Required	The expiration date of the gift card used for the transaction in MMY format
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: <pre>MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=1404101000000593000000?'</pre>
Amount	Required	Field required; set value at "0"
InvNum	Optional	The invoice number used by the merchant to identify the transaction
PNRef	Required	Field required; Value not required
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.13.6.2. ExtData

XML Tag	Required	Description
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F

2.13.6.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	A string containing additional information about the transaction. The data in the ExtData field is returned in the format InvNum=[InvoiceNumber].

Response Value	Description
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Message1	In the event of a failure, this field contains a message describing the transaction error

2.13.6.4. Example

2.13.6.4.1. Sample Gift Card Deactivate Request

```
https://uat.payleap.com/transactservices.svc/ProcessGiftCard?UserName=shoap123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Deactivate&CardNum=4111111111111111&ExpDate=1215&MagData=&Amount=1&InvNum=&PNRef=&ExtData=
```

2.13.6.4.2. Sample Gift Card Deactivate Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<Message1>Operation not supported by Processor.</Message1>
<Result>-100</Result>
</Response>
```

2.13.7. Inquire

Use the Inquire value for the TransType parameter to perform a gift card balance inquiry. A gift card balance inquiry checks the value remaining on the cardholder's gift card.

2.13.7.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Inquire
CardNum	Required	The gift card number used for the transaction
ExpDate	Required	The expiration date of the gift card used for the transaction in MMY format

Parameter	Required	Description
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B41111111111111111111111111111111^BO/JAMES B^14041010000000593000000?; 41111111111111111111111111111111=140410100000059300000?'
Amount	Required	Field required; value not required
InvNum	Required	Field required; value not required
PNRef	Required	Field required; Value not required
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.13.7.2. ExtData

XML Tag	Required	Description
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F

2.13.7.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	A string containing additional information about the transaction. The data in the ExtData field is returned in the format InvNum=[InvoiceNumber].
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Message1	In the event of a failure, this field contains a message describing the transaction error

2.13.7.4. Example

2.13.7.4.1. Sample Gift Card Inquire Request

```
https://uat.payleap.com/transactservices.svc/ProcessGiftCard?Us
erName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Inquire&
CardNum=4111111111111111&ExpDate=1215&MagData=&Amount=&InvNum=&
PNRef=&ExtData=
```

2.13.7.4.2. Sample Gift Card Inquire Response

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>InquireGift123ASD</AuthCode>
<ExtData>InvNum = 0</ExtData>
<GetAVSResult/>
<HostCode>ff2e5e20-f3b6-422e-88ef-838db717f175</HostCode>
<Message>APPROVAL</Message>
<PNRef>14610</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
```

2.13.8. Void

Use the Void value for the TransType parameter to perform a gift card void transaction. A gift card void transaction cancels a previous gift card [Redeem](#) transaction so that the customer will not be charged.

2.13.8.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Void
CardNum	Required	The gift card number used for the transaction
ExpDate	Required	The expiration date of the gift card used for the transaction in MMY format
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B4111111111111111^BO/JAMES B^140410100000059300000?'; 4111111111111111=14041010000059300000?'
Amount	Required	Field required; use "0" for value
InvNum	Required	Field required; value not required
PNRef	Required	The PNRef number of the original sale transaction being voided

Parameter	Required	Description
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.

2.13.8.2. ExtData

XML Tag	Required	Description
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F

2.13.8.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	A string containing additional information about the transaction. The data in the ExtData field is returned in the format InvNum=[InvoiceNumber].
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
GetCommercialCard	Indicates if the card used is a commercial card; valid values are true or false
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Message1	In the event of a failure, this field contains a message describing the transaction error

2.13.8.4. Example

2.13.8.4.1. Sample Gift Card Void Request

```
https://uat.payleap.com/transactservices.svc/ProcessGiftCard?UserName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Void&CardNum=4111111111111111&ExpDate=1215&MagData=&Amount=.5&InvNum=&PNRef=15200&ExtData=
```

2.13.8.4.2. Sample Gift Card Void Response

```

<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>123ASD</AuthCode>
<ExtData>InvNum = 0</ExtData>
<GetAVSResult>S</GetAVSResult>
<HostCode>0a34daee-1722-49cc-b951-bf6a84947718</HostCode>
<Message>APPROVAL</Message>
<PNRef>15200</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
  
```

2.13.9. Force

Use the Force value for the TransType parameter to perform a gift card force transaction. A gift card force transaction captures a previous authorization only transaction in the current batch for settlement. A force transaction can be entered using an authorization code obtained directly from the processor.

2.13.9.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Force
CardNum	Required	The gift card number used for the transaction
ExpDate	Required	The expiration date of the gift card used for the transaction in MMY format
MagData	Optional	The complete raw magnetic stripe data from the card wrapped in single quotes. For example: MagData='%B4111111111111111^BO/JAMES B^140410100000059300000?; 4111111111111111=14041010000059300000?'
Amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format
InvNum	Required	Field required; value not required. The invoice number used by the merchant to identify the transaction
PNRef	Required	Field required; value not required
ExtData	Required	An XML string containing additional data for the transaction. See ExtData for more information.

2.13.9.2. ExtData

XML Tag	Required	Description
AuthCode	Required	The authorization code returned in the AuthCode field of the original transaction response
TimeOut	Optional	Indicates the length of time in seconds to wait for a response from the host before timing out
TrainingMode	Optional	Indicates whether to process the transaction in training mode; valid values are T or F
CustomerID	Optional	Customer identification number
PONum	Optional	Purchase order number for the transaction

2.13.9.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
ExtData	A string containing additional information about the transaction. The data in the ExtData field is returned in the format InvNum=[InvoiceNumber].
GetAVSResult	Returns the address verification result code if the merchant is configured for AVS (refer to AVS Response Codes for valid values)
HostCode	The host code returned by the host
Message	The response message returned by the host
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Message1	In the event of a failure, this field contains a message describing the transaction error

2.13.9.4. Example

2.13.9.4.1. Sample Gift Card Void Request

```
https://uat.payleap.com/transactservices.svc/ProcessGiftCard?Us
erName=user123_API&Password=Ew3Kg6cV9MD9Ja@v&TransType=Force&Ca
rdNum=4111111111111111&ExpDate=1215&MagData=&Amount=.5&InvNum=&
PNRef=14645&ExtData=%3CAuthCode%3E123%3C%2FAuthCode%3E
```

2.13.9.4.2. Sample Gift Card Void Response

```

<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>123ASD</AuthCode>
<ExtData>InvNum = 0</ExtData>
<GetAVSResult>S</GetAVSResult>
<HostCode>2d9b55c1-5266-434b-84c0-d4cae50652a0</HostCode>
<Message>APPROVAL</Message>
<PNRef>14658</PNRef>
<RespMSG>Approved</RespMSG>
<Result>0</Result>
</Response>
  
```

2.14. Card Validation Services

The card validation services test whether a card number and expiration date are valid. The following services are available:

- ValidCard
- ValidCardLength
- ValidExpDate
- ValidMod10

2.14.2. ValidCard

The ValidCard service operation performs a validation check on a credit card. It checks the card length based on the card type, performs a mod 10 checksum, and checks the expiration date.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/ValidCard>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/ValidCard>

2.14.2.1. Request Parameters

Parameter	Required	Description
CardNum	Required	The number of the credit card being verified
ExpDate	Required	The expiration date of the card being verified in MMY format

2.14.2.2. Response Values

Response Value	Description
0	Valid card and expiration date
1001	No card number present
1002	No expiration date present
1003	Invalid card type
1004	Invalid card length
1005	Invalid mod 10 check
1006	Invalid expiration date

2.14.2.3. Example

2.14.2.3.1. Sample Card Validation Request

```
https://uat.payleap.com/transactservices.svc/ValidCard?CardNumber=4111111111111111&ExpDate=1215
```

2.14.2.3.2. Sample Card Validation Response

```
<int xmlns="http://schemas.microsoft.com/2003/10/Serialization/">0</int>
```

2.14.3. ValidCardLength

The ValidCardLength service checks the card length based on the card type.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/ValidCardLength>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/ValidCardLength>

2.14.3.1. Request Parameters

Parameter	Required	Description
CardNum	Required	The number of the credit card being verified

2.14.3.2. Response Values

Response Value	Description
True	Valid card length
False	Invalid card length

2.14.3.3. Example

2.14.3.3.1. Sample Card Length Validation Request

```
https://uat.payleap.com/transactservices.svc/ValidCardLength?CardNumber=4111111111111111
```

2.14.3.3.2. Sample Card Length Validation Response

```
<boolean
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
true</boolean>
```

2.14.4. ValidExpDate

The ValidExpDate service checks the expiration date to ensure it is valid.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/ValidExpDate>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/ValidExpDate>

2.14.4.1. Request Parameters

Parameter	Required	Description
ExpDate	Required	The expiration date being verified in MMY format

2.14.4.2. Response Values

Response Value	Description
True	Valid expiration date
False	Invalid expiration date

2.14.4.3. Example

2.14.4.3.1. Sample Expiration Date Validation Request

```
https://uat.payleap.com/transactservices.svc/ValidExpDate?ExpDate=1215
```

2.14.4.3.2. Sample Expiration Date Validation Response

```
<boolean
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
true</boolean>
```

2.14.5. ValidMod10

The ValidMod10 service performs a mod 10 checksum on the card number.

The testing URL is:

<https://uat.payleap.com/TransactServices.svc/ValidMod10>

The production URL is:

<https://secure1.payleap.com/TrasactServices.svc/ValidMod10>

2.14.5.1. Request Parameters

Parameter	Required	Description
CardNum	Required	The number of the card being verified

2.14.5.2. Response Values

Response Value	Description
True	Valid card number
False	Invalid card number

2.14.5.3. Example

2.14.5.3.1. Sample Mod 10 Request

```
https://uat.payleap.com/transactservices.svc/ValidMod10?CardNum
ber=4111111111111111
```

2.14.5.3.2. Sample Mod 10 Check Response

```
<boolean
xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
true</boolean>
```

2.15. Tokenization Service

Tokenization is supported in `transactservices.svc`, `merchantservices.svc`, and through the LeapLock product. When an initial transaction is performed, a secure token can be generated to allow you to bill a customer in the future without requiring sensitive billing information.

The following sections describe the parameters required for tokenization.

2.15.2. Transactservices.svc

2.15.2.1. Token Creation

Within the `ExtData`, the presence of the `<CustomerTokenization>T</CustomerTokenization>` tag indicates a token should be returned in the response.

```
https://uat.payleap.com/transactservices.svc/ProcessCreditCard?
UserName=APIUSERNAME&Password=TRANSACTIONKEY&TransType=Sale&Car
dNum=4111111111111111&ExpDate=1212&MagData=&NameOnCard=John
Doe&Amount=1.00&InvNum=abc123&PNRef=&Zip=98498&Street=&CVNum=&E
xtData=<CustomerTokenization>T</CustomerTokenization>
```

2.15.2.2. Response Containing Token

`<TokenNumber>value</TokenNumber>` is returned in the response to bill a customer.

```
<Response xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
  <AuthCode>11092012045343</AuthCode>
  <GetAVSResult>Y</GetAVSResult>
  <GetCVResult>M</GetCVResult>
  <GetCommercialCard>>false</GetCommercialCard>
  <HostCode>330fb7f4-4c28-487f-a308-a652b23d8a40</HostCode>
  <Message>APPROVAL</Message>
  <PNRef>55761</PNRef>
  <RespMSG>Approved</RespMSG>
  <Result>0</Result>
  <TokenNumber>2186</TokenNumber>
</Response>
```

2.15.3. Merchantservices.svc

The `merchantservices.svc` API must be used to process a transaction with a token.

2.15.3.1. Billing Customer with Token

In `merchantservices.svc`, the token resides in the `CcInfoKey` parameter.

```
<https://uat.payleap.com/MerchantServices.svc/ProcessCreditCard
?Username=APIUSERNAME&Password=TRANSACTIONKEY&Vendor=415&CcInfo
Key=2186&Amount=1.00&InvNum=abc123&ExtData=
```

2.15.3.2. Tokenized Bill Response

```
<RecurringResult xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>11092012051815</AuthCode>
<Message>APPROVAL</Message>
<PNRef>55762</PNRef>
<Result>0</Result>
</RecurringResult>
```

2.15.3.3. Recurring Billing

When using merchantservices.svc for recurring billing, a token is automatically returned in the response field in the CcInfoKey field.

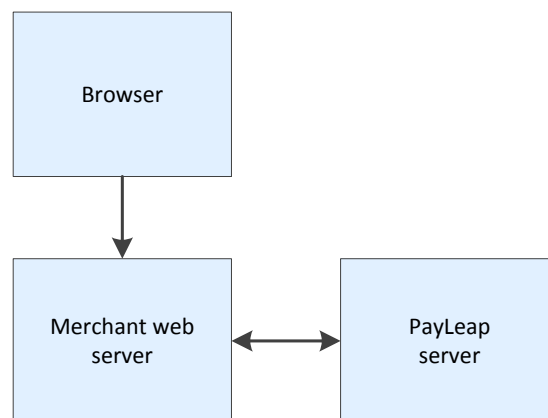
2.16. JavaScript Wrapper API

PayLeap supports and offers SDK libraries to merchants in the following languages:

- PHP
- Ruby
- Python
- Java
- .Net

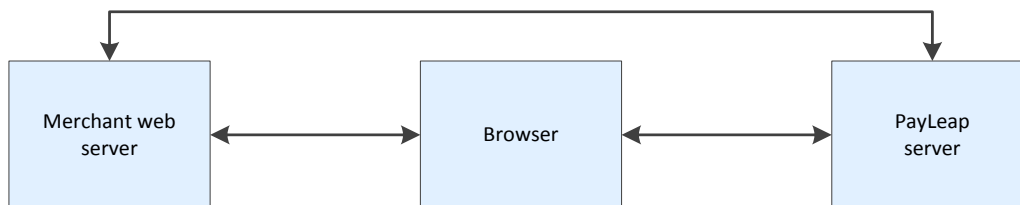
Traditionally, PayLeap API calls are posted from the merchant's servers to the PayLeap servers (refer to Figure 18).

FIGURE 18. TRADITIONAL PAYLEAP API FLOW



In addition, PayLeap has developed a JavaScript wrapper that enables calls to post directly to the PayLeap server from the browser instead of posting from the merchant server (refer to Figure 19).

FIGURE 19. PAYLEAP JAVASCRIPT WRAPPER FLOW



2.16.2. Benefits of JavaScript Wrapper

Payment Card Industry (PCI) standards apply when an organization stores and/or processes sensitive card data. By integrating to PayLeap via the JavaScript wrapper, merchants reduce the scope of their PCI requirements and audits.

An additional card tokenization feature is available to merchants who wish to offer their shoppers the option to save card details for future payments (refer to [Card Tokenization](#)).

2.16.3. JavaScript Reference

To call the required JavaScript functions, use the following URL.

Test https://uat.payleap.com/js/tokenizer_uat_v2.4.js

Production https://secure1.payleap.com/js/tokenizer_v2.4.js

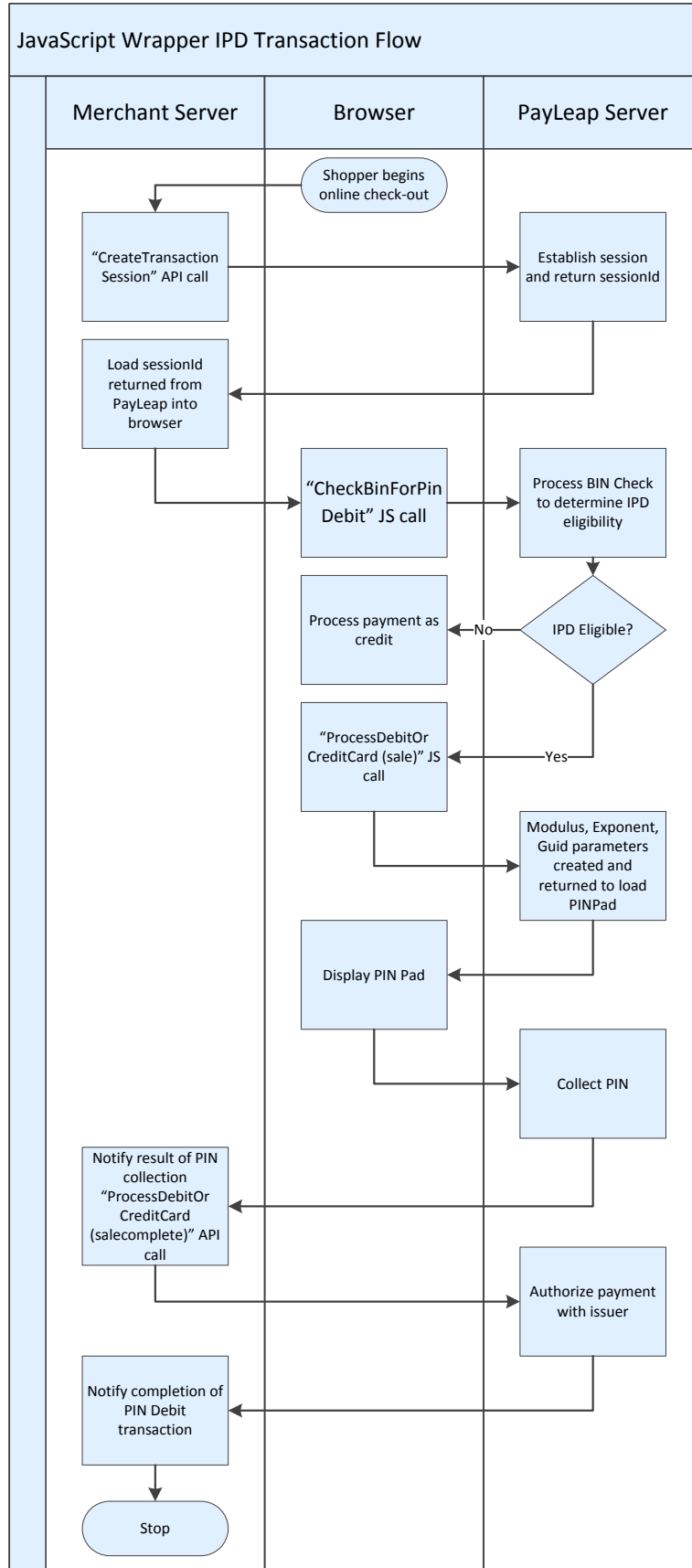
2.16.4. JavaScript Wrapper API Calls

When using the JavaScript Wrapper a series of API calls must take place to establish and complete transactions using PayLeap. Below are descriptions of the different types of transactions that can be completed with the JavaScript wrapper, along with flows to illustrate the calls made between the merchant, the shopper/web browser, and PayLeap.

2.16.4.1. JavaScript Wrapper Flow for IPD Only

Below is a basic JavaScript Wrapper transaction flow for Internet PIN debit only.

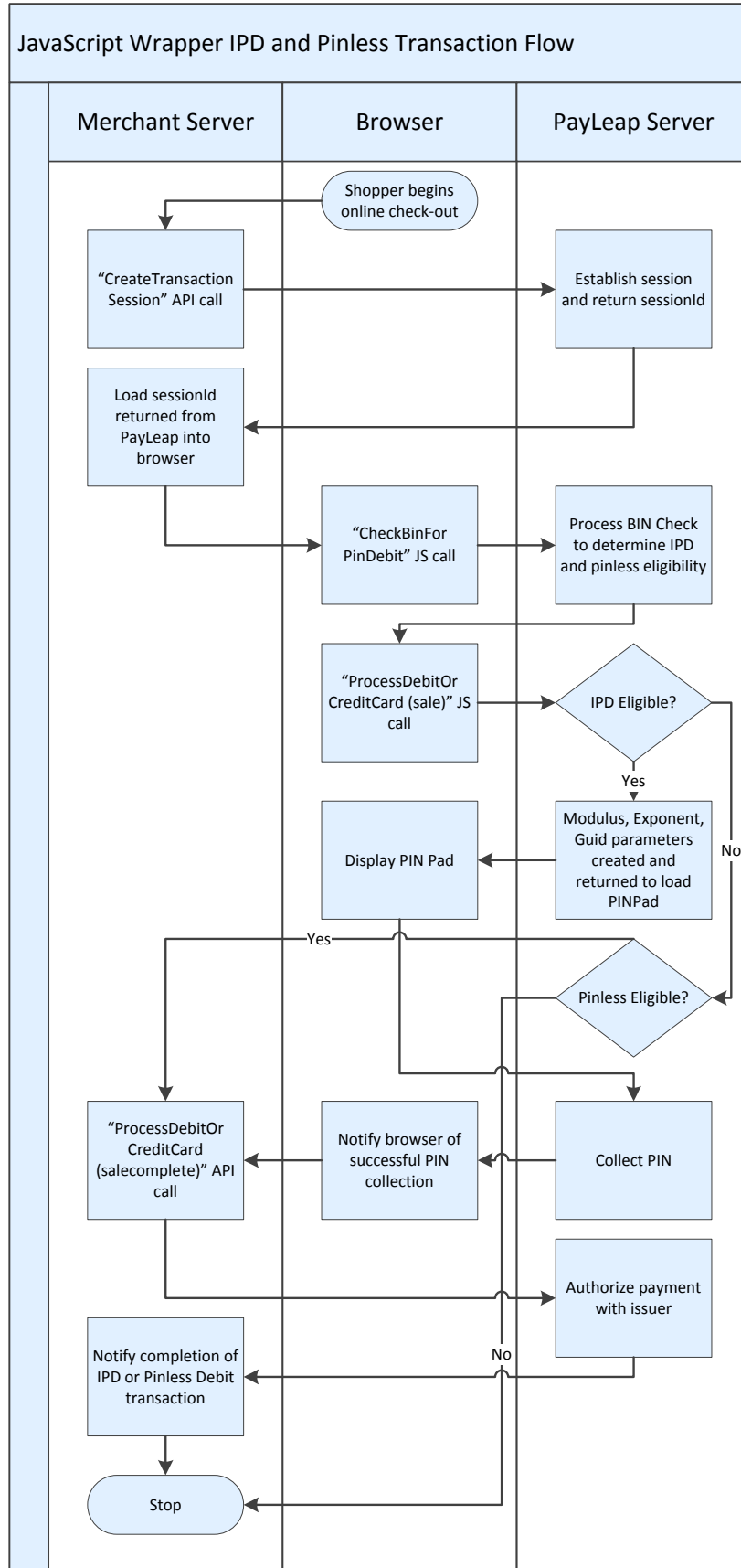
1. Shopper begins online checkout process.
2. The [CreateTransactionSession](#) API call is made from the merchant server.
3. PayLeap authenticates merchant API credentials and returns a session ID, which the merchant loads into the browser to identify the session in future API calls.
4. After card details are captured, the [CheckBinForPinDebit](#) JavaScript call is made and PayLeap determines whether the card is eligible for Internet PIN debit.
5. If the card is IPD eligible, a success message is returned to the browser and the [ProcessDebitOrCreditCard \(sale\)](#) JavaScript call is made.
6. If the [ProcessDebitOrCreditCard \(sale\)](#) call is successful, PayLeap returns values necessary to invoke the PIN Pad in the browser, including
 - a. GUID
 - b. Modulus
 - c. Exponent
 - d. pnref
7. The PIN Pad is displayed and the shopper enters the PIN associated with the card.
8. PayLeap collects the PIN and the merchant is notified using JavaScript once the PIN is successfully captured.
9. The [ProcessDebitOrCreditCard \(salecomplete\)](#) API call is made from the merchant server.
10. PayLeap authorizes the transaction with the card issuer and the approval code is returned in the API response.
11. Results are communicated to the shopper based on the merchant's implementation preferences.



2.16.4.2. JavaScript Wrapper Flow for IPD and Pinless Debit

Below is a basic JavaScript Wrapper transaction flow for IPD and pinless debit.

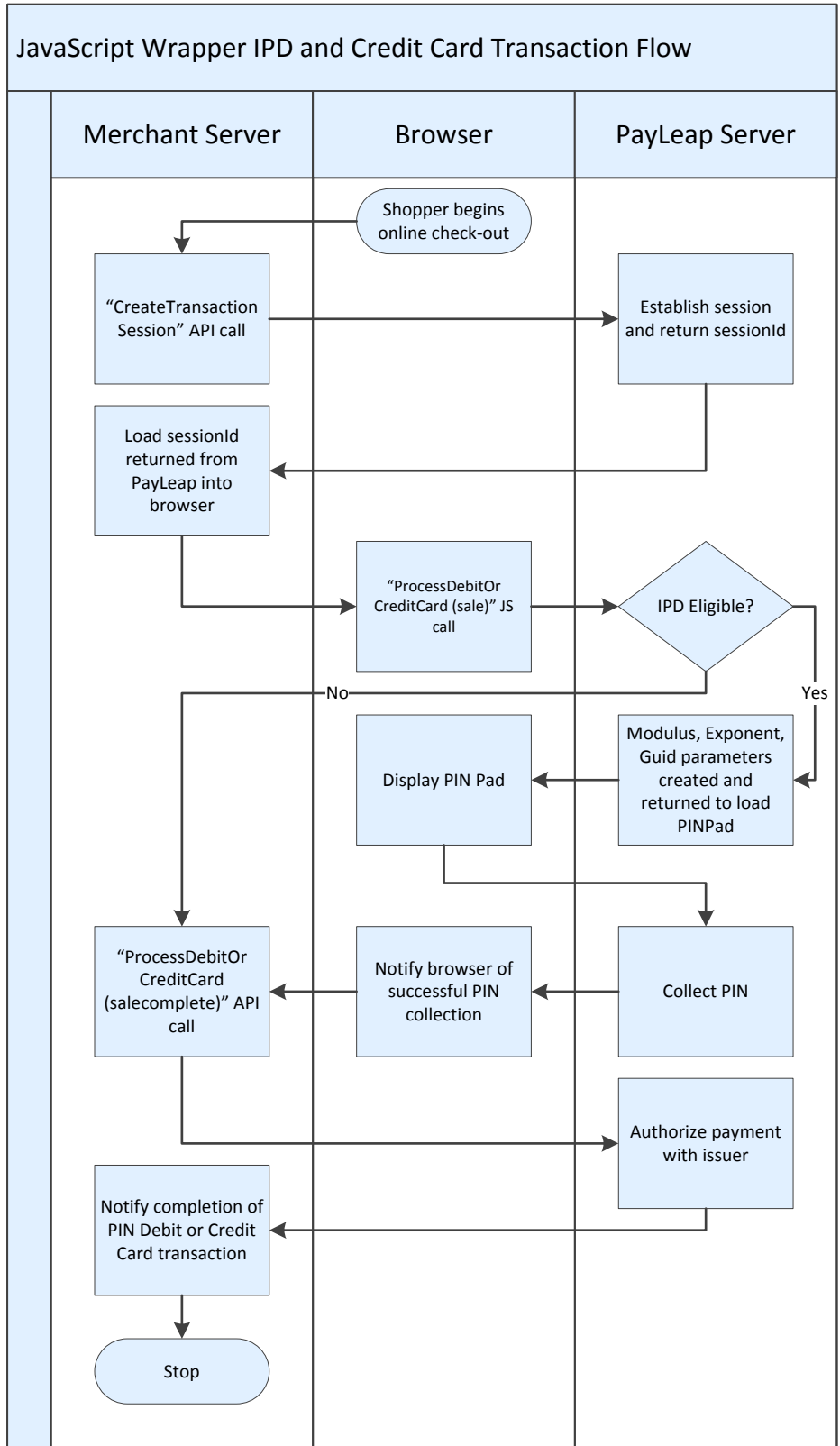
1. Shopper begins online checkout process.
2. The [CreateTransactionSession](#) API call is made from the merchant server.
3. PayLeap authenticates merchant API credentials and returns a session ID, which the merchant loads into the browser to identify the session in future API calls.
4. After card details are captured, the [CheckBinForPinDebit](#) JavaScript call is made and PayLeap determines whether the card is eligible for Internet PIN debit or pinless debit.
5. If the card is eligible for IPD or pinless debit, a success message is returned to the browser and the ProcessDebitOrCreditCard ([sale](#)) JavaScript call is made.
 - a. If the card is IPD eligible,
 - i. PayLeap returns values necessary to invoke the PIN Pad in the browser, including:
 - GUID
 - Modulus
 - Exponent
 - Pnref
 - ii. The PIN Pad is displayed and the shopper enters the PIN associated with the card.
 - iii. PayLeap collects the PIN and the merchant is notified using JavaScript once the PIN is successfully captured.
 - b. If the card is not eligible for IPD processing, but is eligible for pinless processing, the PIN Pad security parameters are not returned, and the PinlessOnly flag is set to true.
6. The ProcessDebitOrCreditCard ([salecomplete](#)) API call is made from the merchant server.
7. PayLeap authorizes the transaction with the card issuer and the approval code is returned in the API response. If the transaction was processed on the debit rails without a PIN, the ProcessedAsPinless flag is set to true.
8. Results are communicated to the shopper based on the merchant's implementation preferences.



2.16.4.3. JavaScript Wrapper Flow for IPD and Credit Card

Below is a basic JavaScript Wrapper transaction flow for IPD and credit card.

1. Shopper begins online checkout process.
2. The [CreateTransactionSession](#) API call is made from the merchant server.
3. PayLeap authenticates merchant API credentials and returns a session ID, which the merchant loads into the browser to identify the session in future API calls.
4. The ProcessDebitOrCreditCard ([sale](#)) JavaScript call is made.
 - a. If the card is IPD eligible,
 - i. PayLeap returns values necessary to invoke the PIN Pad in the browser, including:
 - GUID
 - Modulus
 - Exponent
 - Pnref
 - ii. The PIN Pad is displayed and the shopper enters the PIN associated with the card.
 - iii. PayLeap collects the PIN and the merchant is notified using JavaScript once the PIN is successfully captured.
 - b. If the card is not eligible for IPD processing, the PIN Pad security parameters are not returned, and the CreditCardOnly flag is set to true.
5. The ProcessDebitOrCreditCard ([salecomplete](#)) API call is made from the merchant server.
6. PayLeap authorizes the transaction with the card issuer and the approval code is returned in the API response. If the transaction was processed on the credit card rails, the ProcessedAsCreditCard flag is set to true.
7. Results are communicated to the shopper based on the merchant's implementation preferences.



2.16.4.4. Create Transaction Session Call

The merchant calls CreateTransactionSession to establish a connection between the merchant servers and PayLeap servers whereby a transaction may be completed. Username and Password parameters (defined below) must be sent with the request (for security purposes, we recommend against loading this information into the web browser). The session ID returned by this call must be loaded into the browser for future calls to identify the transaction. The lifespan of a sessionId is 10 requests or 5 minutes, whichever is reached first.

2.16.4.4.1. Request Parameters

Parameter	Required	Description
username	Required	Merchant PayLeap API login ID
password	Required	Merchant PayLeap API transaction key

2.16.4.4.2. Response Values

Parameter	Description
sessionId	A system-generated reference id for the transaction session; lifespan is 10 requests or 5 minutes, whichever is reached first

The CreateTransactionSession call validates the merchant and establishes the connection to PayLeap through which subsequent calls will be made.

The remaining PayLeap calls are made from the web browser in JavaScript and use Ajax.

2.16.4.5. Check BIN for PIN Debit Call

The CheckBinForPinDebit call is used to determine whether the card number is eligible for internet PIN debit or pinless debit transactions. If the card is eligible to complete internet PIN debit transactions, the next call is made.

2.16.4.5.1. Request Parameters

Parameter	Required	Description
sessionId	Required	sessionId returned by the CreateTransactionSession call
Cardnum	Required	Card number

2.16.4.5.2. Response Values

Parameter	Description
Result	0: success Non-zero value: failure (not eligible for IPD or pinless debit processing)
InNetwork	Bin is located within the Acculynk BIN tables
NetworkId	EFT/debit network of the card
QualifiedInternetPin	True: eligible for IPD

Parameter	Description
QualifiedKiosk	Not used
QualifiedPin	Not used
QualifiedPinless	Qualified for pinless debit
QualifiedRecurring	Qualified for recurring billing
Status	Success: Call was successful Failure: Call was unsuccessful

2.16.4.6. Process Debit or Credit Card (sale) Call

The first time ProcessDebitOrCreditCard is called the transtype value must be set to “sale.” The response values are required to display the PIN Pad to the shopper.

2.16.4.6.1. Request Parameters

Parameter	Required	Description
sessionId	Required	sessionId returned by the CreateTransactionSession call
transtype	Required	Sale
cardnum	Required	The debit card number used for the transaction
expdate	Required	The expiration date of the debit card used for the transaction in MMY format
cvnum	Optional	The 3-4 digit card verification number
amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format
nameoncard	Optional	The Shopper’s name as printed on the card
ExtData	Optional	The ExtData parameter takes an XML string. See ExtData for more information

2.16.4.6.2. ExtData

XML Tag	Required	Description
ATMOnly	Optional	Determines if the card is ATMOnly or eligible for signature debit
IPDOnly	Optional	True: Process this transaction only in conjunction with a PIN
PinlessOnly	Optional	True: Process this transaction only on the debit rails without a PIN
CreditCardOnly	Optional	True: Process as a credit card
CertifiedVendorId	Optional	Value passed by shopping cart for reporting
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are:

XML Tag	Required	Description
		None NotSubmitted Submitted Illegible NotPresent
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number
LanguageCode	Optional	EN1 or EN2; value determines PIN Pad CANCEL verbiage

2.16.4.6.3. Response Values

Parameter	Description
Result	0: successful Non-zero value: unsuccessful
GUID	Value is used to create PIN Pad; only if IPD eligible
Modulus	Value is used to create PIN Pad; only if IPD eligible
Exponent	Value is used to create PIN Pad; only if IPD eligible
pnref	A system-generated reference id
PinlessOnly	True: will be processed on the debit rails without a PIN during sale complete API call; only if not eligible for IPD
CreditCardOnly	True: will be processed on the credit rails as a signature debit transaction during sale complete API call; only if not eligible for IPD

2.16.4.7. Process Debit or Credit Card (salecomplete) Call

To finalize the transaction, use the salecomplete value for the transtype parameter in a server-side ProcessDebitOrCredit call. This call authorizes a payment of a specified amount, which is deducted from the Shopper's account.

2.16.4.7.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Salecomplete
CardNum	Optional	The debit card number used for the transaction
ExpDate	Required	The expiration date of the debit card used for the transaction in MMY format
MagData	Required	Field required; Value not required
PNRef	Required	Field required; Value not required
Amount	Required	The dollar amount of the transaction in DDDDDDDDD.CC format. The amount includes any cash back or surcharge amounts and any tax or tip amounts specified in ExtData
NameOnCard	Optional	The cardholder's name as printed on the card
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.16.4.7.2. ExtData

XML Tag	Required	Description
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code

XML Tag	Required	Description
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number

2.16.4.7.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success = authorized Failure = not authorized
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor
ProcessedAsCreditCard	True: transaction was processed as a signature debit on the credit rails
ProcessedAsPinless	True: transaction was processed on the debit rails without a PIN

2.16.4.7.4. Example

2.16.4.7.4.1. Sample Process Debit or Credit SaleComplete Request

```
https://uat.payleap.com/TransactServices.svc/processdebitordcredit
Card?UserName=user123_API&Password=Wrr29qU!@AqHEHAYB&TransType=Sal
eComplete&CardNum=1111222233334444&ExpDate=1215&MagData=&NameOnCa
rd=&Amount=18.1&InvNum=&PNRef=144562&Pin=1234&SureChargeAmt=&Cash
BackAmt=&RegisterNum=&ExtData=
```

2.16.4.7.4.2. Sample Debit or Credit Card SaleComplete Response

```
<?xml version="1.0"?>
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.payleap.com/payments">
<AuthCode></AuthCode>
<InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>
<Message/>
<PNRef>144562</PNRef>
<ProcessedAsCreditCard>FALSE</ProcessedAsCreditCard>
<Result>0</Result>
<Status>success</Status>
```

```
</Response>
```

2.16.4.8. Process Debit or Credit Card (PINLESSCREDIT) Call

A PINless credit can be achieved by calling the ProcessDebitOrCreditCard call with the transtype value set to "PINLESSCREDIT" from JavaScript.

2.16.4.8.1. Request Parameters

Parameter	Required	Description
sessionId	Required	sessionId returned by the CreateTransactionSession call
transtype	Required	PinlessCredit
cardnum	Required	The debit card number used for the transaction
expdate	Required	The expiration date of the debit card used for the transaction in MMY format
cvnum	Optional	The 3-4 digit card verification number
amount	Required	The dollar amount of the transaction in DDDDDDDDDDD.CC format
nameoncard	Optional	The Shopper's name as printed on the card
ExtData	Optional	The ExtData parameter takes an XML string. See ExtData for more information

2.16.4.8.2. ExtData

XML Tag	Required	Description
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum

2.16.4.8.3. Response Values

Parameter	Description
Result	0: successful Non-zero value: unsuccessful
pnref	A system-generated reference id

2.16.4.9. Process Debit or Credit Card (PINLESSCREDITCOMPLETE) Call

To finalize a PINless credit transaction, make a server-side ProcessDebitOrCreditCard call with the transtype value set to “PINLESSCREDITCOMPLETE”.

2.16.4.9.1. Request Parameters

Parameter	Required	Description
Username	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
transtype	Required	PinlessCreditComplete
amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
Pnref	Required	PnRef generated during the Pinlesscredit call
ExtData	Optional	The ExtData parameter takes an XML string. See ExtData for more information

2.16.4.9.2. ExtData

XML Tag	Required	Description
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum

2.16.4.9.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success = authorized Failure = not authorized
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor
ProcessedAsCreditCard	False
PinReferenceId	PaySecure transaction ID

2.16.5. Sample JavaScript Wrapper Code

```

TokenUtility.checkBinForPinDebit({
    cardnum: $(''.card_cardnum').val()
  },
  function (response) {debugger
    if ("0" === response.Result) {
      // '0' means success
      TokenUtility.ProcessDebitOrCreditCard({
        cardnum: $(''.card_cardnum').val(),
        transtype: 'sale',
        expdate: $(''.card_expiry_month').val() +
        $(''.card_expiry_year').val().substring(2),
        amount: $(''.amount').val(),
        cvnum: $(''.card_cvnum').val()
        ExtData: '<LanguageCode>En</LanguageCode>'
      }, function (response) {

        if ("0" === response.Result) {
          var cardNumber = $(''.card_cardnum').val();
          Acculynk.createForm(response.GUID, cardNumber.substr(cardNumber.length
- 4, 4), response.Modulus, response.Exponent);
          Acculynk.PINPadLoad();
          $('#pnref').val(response.PNRef);
          //form.submit();
        }
        else {
          //$(form['submit_button']).removeAttr("disabled");
          $(".message").html(response.InnerErrorMessage);
        }
      });
    }
    else { // failure
      // re-enable the submit button
      //$(form['submit_button']).removeAttr("disabled")
      // show the error
      $(".message").html(response.InnerErrorMessage);
      // we add these names back in so we can revalidate properly
      addFormFieldNames();
    }
  });
});

function accu_FunctionResponse(strResponse) {

  switch (strResponse) {
    case 'ACCU000': //PIN was received so merchant can process the
authorization
      Acculynk._modalHide();
      document.getElementById('payment_form').submit();
      break;
    case 'ACCU200': //user pressed 'cancel' button so merchant may process as credit
    case 'ACCU400': //user was inactive
    case 'ACCU600': //invalid data was posted to Acculynk
    case 'ACCU800': //general catch all error
      Acculynk._modalHide();
      break;
    case 'ACCU999': //modal popup was opened successfully
      //no action necessary, but open for merchant to use
      break;
    default:
      break;
  }
}

```

2.17. JavaScript Wrapper with Tokenization

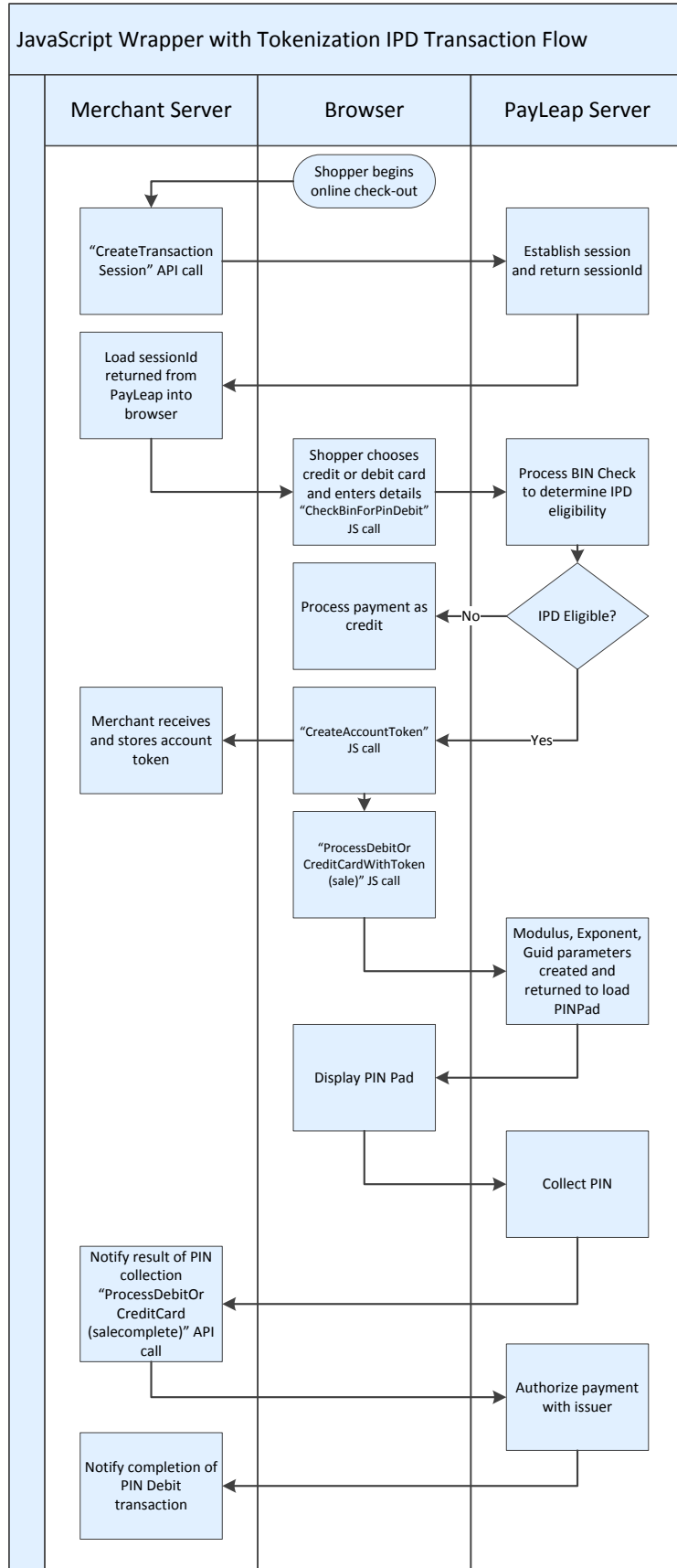
For merchants who want to allow shoppers the option to save their card details for use in future transactions without storing the card information on their own servers, PayLeap also offers card tokenization.

2.17.2. JavaScript Wrapper with Tokenization API Calls

When using the JavaScript Wrapper with tokenization, a series of API calls must take place to establish and complete transactions using PayLeap. Below are descriptions of the different types of transactions that can be completed with the JavaScript Wrapper with Tokenization, along with flows to illustrate the calls made between the merchant, the shopper/web browser, and PayLeap.

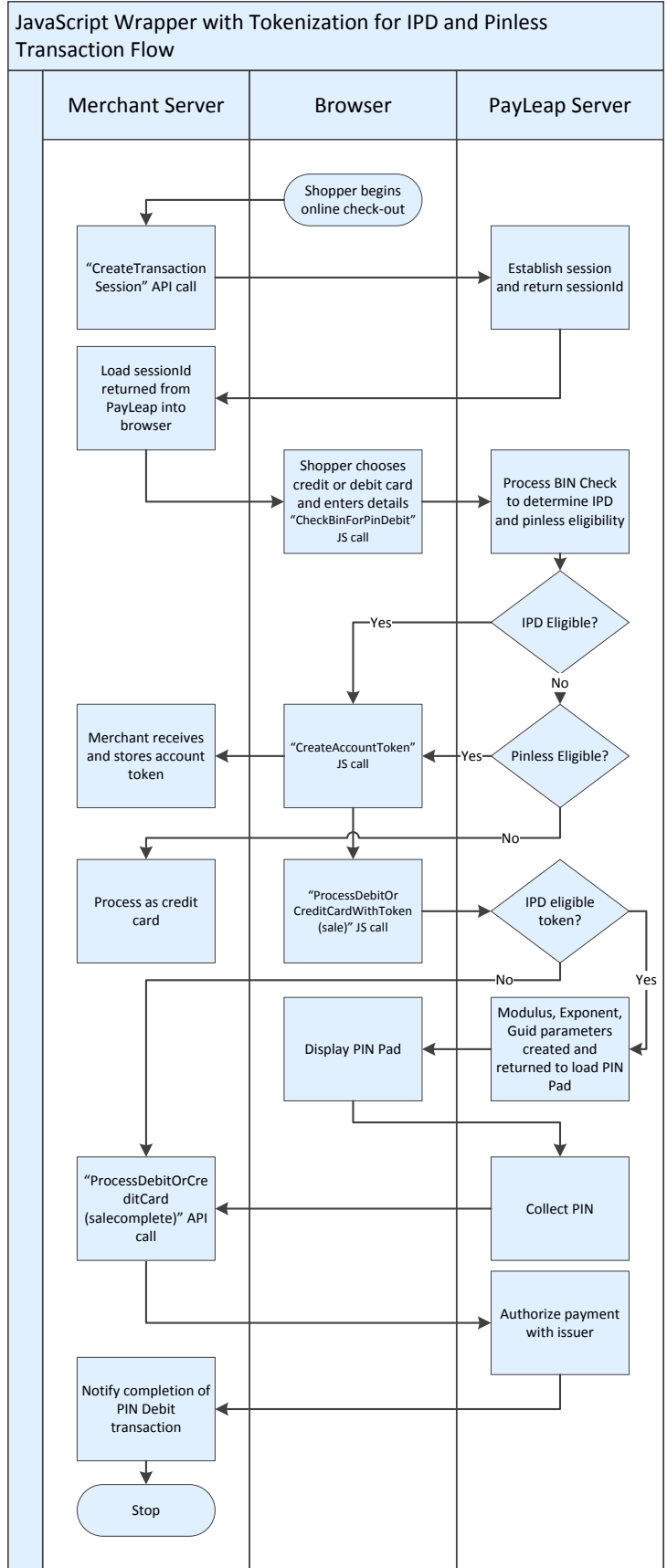
2.17.2.1. JavaScript Wrapper with Tokenization Flow for IPD Only

1. Shopper begins online checkout process.
2. The [TransactServices.svc/CreateTransactionSession](#) API call is made from the merchant server.
3. PayLeap authenticates merchant API credentials and returns a session ID, which the merchant loads into the browser to identify the session in future API calls.
 - a. For first time tokenization enrollment only, the following steps will occur:
 - i. After card details are captured, the [CheckBinForPinDebit](#) JavaScript call is made and PayLeap determines whether the card is eligible for Internet PIN debit.
 - ii. A [CreateAccountToken](#) JavaScript call tokenizes the debit card.
 - iii. The merchant receives and stores the card token for future use.
4. A [ProcessDebitOrCreditCardWithToken \(sale\)](#) JavaScript call is made.
5. If the [ProcessDebitOrCreditCardWithToken \(sale\)](#) call is successful, PayLeap returns values necessary to invoke the PIN Pad in the browser, including
 - GUID
 - Modulus
 - Exponent
 - pnref
6. The PIN Pad is displayed and the shopper enters the PIN associated with the card.
7. PayLeap collects the PIN and the merchant is notified using JavaScript once PIN is successfully captured.
8. The [ProcessDebitOrCreditCard \(salecomplete\)](#) API call is made from the merchant server.
9. PayLeap authorizes the transaction with the card issuer and the approval code is returned in the API response.
10. Results are communicated to the shopper based on the merchant's implementation preferences.



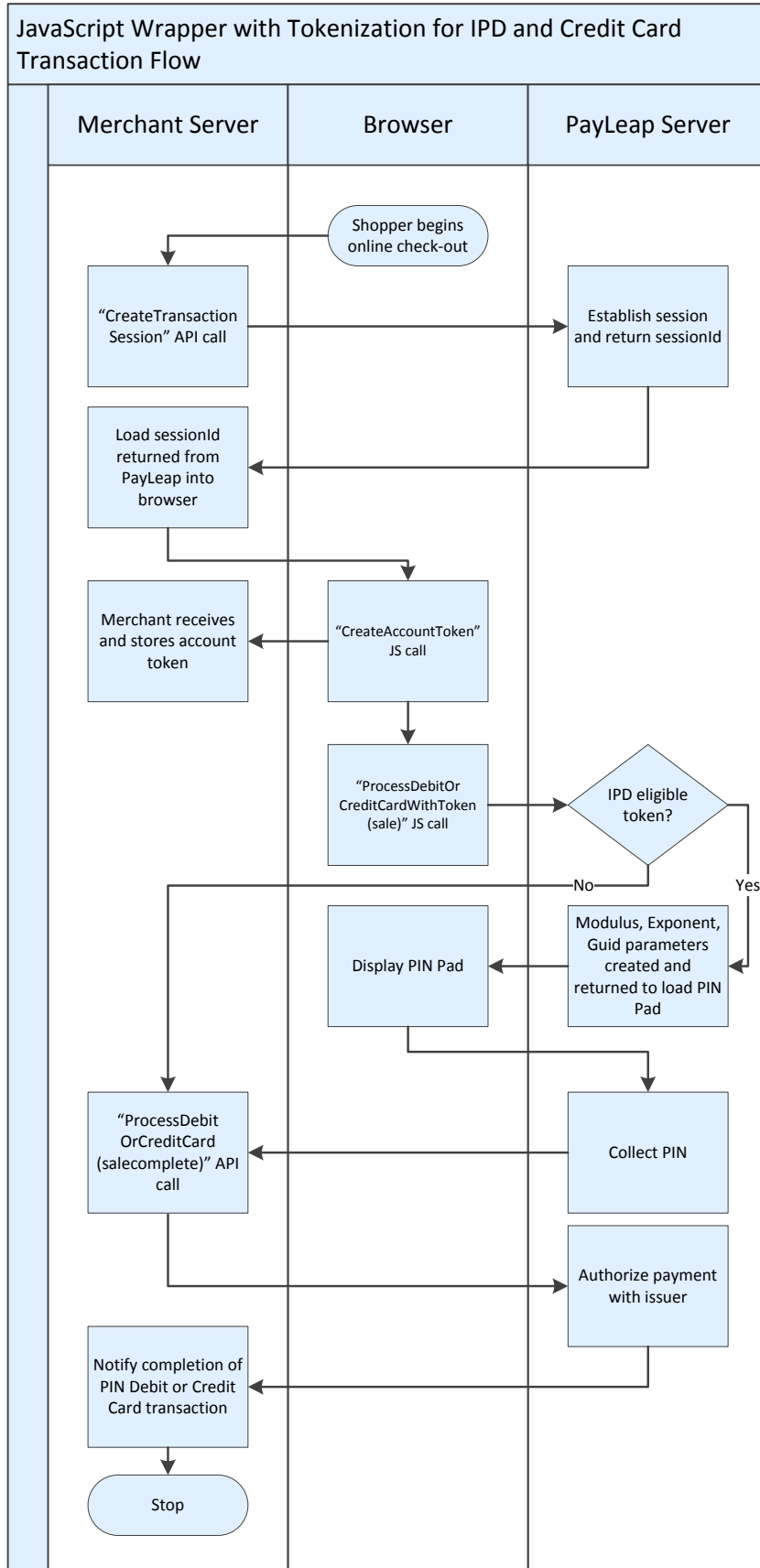
2.17.2.2. JavaScript Wrapper with Tokenization for IPD and Pinless Debit Flow

1. Shopper begins online checkout process.
2. The [TransactServices.svc/CreateTransactionSession](#) API call is made from the merchant server.
3. PayLeap authenticates merchant API credentials and returns a session ID, which the merchant loads into the browser to identify the session in future API calls.
 - a. For first time tokenization enrollment only, the following steps will occur:
 - i. After card details are captured, the [CheckBinForPinDebit](#) JavaScript call is made and PayLeap determines whether the card is eligible for Internet PIN debit and/or pinless debit.
 - ii. A [CreateAccountToken](#) JavaScript call tokenizes the debit card.
 - iii. The merchant receives and stores the card token for future use.
4. A [ProcessDebitOrCreditCardWithToken \(sale\)](#) JavaScript call is made.
 - a. If the card is IPD eligible,
 - i. PayLeap returns values necessary to invoke the PIN Pad in the browser, including:
 - GUID
 - Modulus
 - Exponent
 - Pnref
 - ii. The PIN Pad is displayed and the shopper enters the PIN associated with the card.
 - iii. PayLeap collects the PIN and the merchant is notified using JavaScript once the PIN is successfully captured.
 - b. If the card is not eligible for IPD processing, but is eligible for pinless processing, the PIN Pad security parameters are not returned, and the PinlessOnly flag is set to true.
5. The [ProcessDebitOrCreditCardWithToken \(salecomplete\)](#) API call is made from the merchant server.
6. PayLeap authorizes the transaction with the card issuer and the approval code is returned in the API response. If the transaction was processed on the debit rails without a PIN, the ProcessedAsPinless flag is set to true.
7. Results are communicated to the shopper based on the merchant's implementation preferences.



2.17.2.3. JavaScript Wrapper with Tokenization for IPD and Credit Card Flow

1. Shopper begins online checkout process.
2. The [TransactServices.svc/CreateTransactionSession](#) API call is made from the merchant server.
3. PayLeap authenticates merchant API credentials and returns a session ID, which the merchant loads into the browser to identify the session in future API calls.
 - a. For first time tokenization enrollment only, the following steps will occur:
 - i. A [CreateAccountToken](#) JavaScript call tokenizes the card.
 - ii. The merchant receives and stores the card token for future use.
4. A [ProcessDebitOrCreditCardWithToken \(sale\)](#) JavaScript call is made.
 - a. If the card is IPD eligible,
 - i. PayLeap returns values necessary to invoke the PIN Pad in the browser, including:
 - GUID
 - Modulus
 - Exponent
 - Pnref
 - ii. The PIN Pad is displayed and the shopper enters the PIN associated with the card.
 - iii. PayLeap collects the PIN and the merchant is notified using JavaScript once the PIN is successfully captured.
 - b. If the card is not eligible for IPD processing, the PIN Pad security parameters are not returned, and the [CreditCardOnly](#) flag is set to true.
5. The [ProcessDebitOrCreditCardWithToken \(salecomplete\)](#) API call is made from the merchant server.
6. PayLeap authorizes the transaction with the card issuer and the approval code is returned in the API response. If the transaction was processed on the credit card rails, the [ProcessedAsCreditCard](#) flag is set to true.
7. Results are communicated to the shopper based on the merchant's implementation preferences.



2.17.2.4. Create Transaction Session Call

The merchant calls CreateTransactionSession to establish a connection between the merchant servers and PayLeap servers whereby tokenization may take place and a transaction may be processed. Username and Password parameters (defined below) must be sent with the request (for security purposes, we recommend against loading this information into the web browser). The session ID returned by this call must be loaded into the browser for future calls to identify the transaction. The lifespan of a sessionId is 10 requests or 5 minutes, whichever is reached first.

2.17.2.4.1. Request Parameters

Parameter	Required	Description
username	Required	Merchant PayLeap API login ID
password	Required	Merchant PayLeap API transaction key

2.17.2.4.2. Response Values

Parameter	Description
sessionId	A system-generated reference id for the transaction session; lifespan is 10 requests or 5 minutes, whichever is reached first

2.17.2.5. Check BIN for PIN Debit Call

The Check BIN for PIN Debit Call is only made during the initial transaction in which enrollment/tokenization occurs. Once the card is tokenized, there is no need to re-check IPD eligibility in subsequent transactions using the card token.

2.17.2.5.1. Request Parameters

Parameter	Required	Description
sessionId	Required	sessionId returned by the CreateTransactionSession call
cardnum	Required	Card number

2.17.2.6. Response Values

Parameter	Description
result	0: success (eligible for IPD or pinless debit, depending on merchant configuration) Non-zero value: failure (not eligible for IPD or pinless debit processing)

2.17.2.7. Check BIN for Debit Call

The Check BIN for Debit Call is made to get debit eligibility flags on a card bin.

2.17.2.7.1. Request Parameters

Parameter	Required	Description
sessionId	Required	sessionId returned by the CreateTransactionSession call

Parameter	Required	Description
Cardnum	Required	Card number

2.17.2.8. Response Values

Parameter	Description
Result	0: success Non-zero value: failure
QualifiedInternetPin	True: The card is qualified for internet PIN debit False: The card is not qualified for internet PIN debit
QualifiedSignatureDebit	True: The card is qualified for Signature debit False: The card is not qualified for Signature debit
QualifiedPinless	True: The card is qualified for pinless debit False: The card is not qualified for pinless debit

2.17.2.9. Create Account Token Call

Merchants call the CreateAccountToken call after a successful BIN check is performed to tokenize a shopper's card number. The card is tokenized and that value is returned the merchant to store for future transactions.

2.17.2.9.1. Request Parameters

Parameter	Required	Description
sessionId	Required	sessionId returned by the CreateTransactionSession call
cardnum	Required	The debit card number used for the transaction
nameoncard	Required	The Shopper's name as printed on the card
expdate	Optional	The expiration date of the debit card used for the transaction in MMY format

2.17.2.9.2. Response Values

Parameter	Description
result	0: success (tokenized) Non-zero value: failure (not tokenized)
accounttoken	Card token
ExpDate	The expiration date of the tokenized debit card in MMY format
LastFourOfCard	The last four digits of the tokenized debit card

2.17.2.10. Process Debit or Credit Card with Token (sale) Call

The first time ProcessDebitOrCreditCardWithToken is called the transtype value must be set to "sale." The response values are required to display the PIN Pad to the shopper.

2.17.2.10.1. Request Parameters

Parameter	Required	Description
sessionId	Required	sessionId returned by the CreateTransactionSession call
transtype	Required	Sale
accounttoken	Required	Card token returned by the CreateAccountToken call
cvnum	Optional	The 3-4 digit card verification number
amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
ExtData	Optional	The ExtData parameter takes an XML string. See ExtData for more information

2.17.2.10.2. ExtData

XML Tag	Required	Description
ATMOnly	Optional	Determines if the card is ATMOnly or eligible for signature debit
IPDOnly	Optional	True: Process this transaction only in conjunction with a PIN
PinlessOnly	Optional	True: Process this transaction only on the debit rails without a PIN
CreditCardOnly	Optional	True: Process as a credit card
CertifiedVendorId	Optional	Value passed by shopping cart for reporting
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code

XML Tag	Required	Description
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number
LanguageCode	Optional	EN1 or EN2; value determines PIN Pad CANCEL verbiage

2.17.2.10.3. Response Values

Parameter	Description
Result	0: successful Non-zero value: unsuccessful
GUID	Value is used to create PIN Pad
Modulus	Value is used to create PIN Pad
Exponent	Value is used to create PIN Pad
pnref	A system-generated reference id
ExpDate	The expiration date of the tokenized debit card in MMY format
LastFourOfCard	The last four digits of the tokenized debit card
PinlessOnly	True: will be processed on the debit rails without a PIN during sale complete API call; only if not eligible for IPD
CreditCardOnly	True: will be processed on the credit rails as a signature debit transaction during sale complete API call; only if not eligible for IPD

2.17.2.11. Process Debit or Credit Card (salecomplete) Call

To finalize the transaction, use the salecomplete value for the transtype parameter in a server-side ProcessDebitOrCredit call. This call authorizes a payment of a specified amount, which is deducted from the Shopper's account.

2.17.2.11.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Salecomplete
CardNum	Optional	The debit card number used for the transaction
ExpDate	Required	The expiration date of the debit card used for the transaction in MMY format
MagData	Required	Field required; Value not required
PNRef	Required	Field required; Value not required

Parameter	Required	Description
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format. The amount includes any cash back or surcharge amounts and any tax or tip amounts specified in ExtData
NameOnCard	Optional	The cardholder's name as printed on the card
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.17.2.11.2. ExtData

XML Tag	Required	Description
ATMOnly	Optional	True Determines if the card is ATMOnly or signature debit
IPDOnly	Optional	True: Only process transaction for this card in conjunction with a PIN False: Process as credit card if pinned transaction fails
PONum	Optional	Purchase order number for the transaction. This value takes precedence over Invoice/PONum
CVPresence	Optional	Indicates whether a CVV2 or CID has been sent along with the request. Valid values are: None NotSubmitted Submitted Illegible NotPresent
Invoice	Optional	Contains invoice and billing information
Bill To	Optional	Contains Shopper billing information
CustomerId	Optional	Shopper identification number
Name	Optional	Shopper billing name
Address	Optional	Contains shopper address
Street	Optional	Shopper billing street address
City	Optional	Shopper billing city
State	Optional	Shopper billing state
Zip	Optional	Shopper billing ZIP/postal code
Country	Optional	Shopper billing country
Email	Optional	Shopper billing email address
Phone	Optional	Shopper billing phone number
Fax	Optional	Shopper billing fax number

2.17.2.11.3. Response Values

Response Value	Description
AuthCode	The authorization code for the transaction; returned empty for transaction failure
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success = authorized Failure = not authorized
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor
ProcessedAsCreditCard	True: transaction was processed as a signature debit on the credit rails
ProcessedAsPinless	True: transaction was processed on the debit rails without a PIN

2.17.2.11.4. Example

2.17.2.11.4.1. Sample Process Debit or Credit SaleComplete Request

```
https://uat.payleap.com/TransactServices.svc/processdebitorcredit  
Card?UserName=user123_API&Password=Wrr29qU!@AqHEHAYB&TransType=Sal  
eComplete&CardNum=1111222233334444&ExpDate=1215&MagData=&NameOnCa  
rd=&Amount=18.1&InvNum=&PNRef=144562&Pin=1234&SureChargeAmt=&Cash  
BackAmt=&RegisterNum=&ExtData=
```

2.17.2.11.4.2. Sample Debit or Credit Card SaleComplete Response

```
<?xml version="1.0"?>  
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"  
xmlns="http://www.payleap.com/payments">  
<AuthCode></AuthCode>  
<InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>  
<Message/>  
<PNRef>144562</PNRef>  
<ProcessedAsCreditCard>FALSE</ProcessedAsCreditCard>  
<Result>0</Result>  
<Status>success</Status>  
</Response>
```

2.17.2.12. Process Debit or Credit Card (CUPRegister) Call

This API call is made from client side JavaScript code and used only for CUP cards. This transaction is used for UnionPay card enrollment for the unauthenticated debit program. Use the CUPRegister value for the transtype parameter in a ProcessDebitOrCredit call. This call requests an SMS to the cardholder for verification during enrollment.

2.17.2.12.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	CUPRegister
CardNum	Optional	The card number used for the transaction
ExpDate	Optional	The expiration date of the debit card used for the transaction in MMY format
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.17.2.12.2. ExtData

XML Tag	Required	Description
Bill To		Contains Shopper billing information
Phone	Mandatory	Shopper billing phone number

2.17.2.12.3. Response Values

Response Value	Description
PNRef	The PayLeap-assigned reference number identifying the transaction on the PayLeap gateway; this number is used for adjustments, voids, and returns
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success = authorized Failure = not authorized
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor
IsCreditCard	Indicates if the card is a credit card

2.17.2.12.4. Example

2.17.2.12.4.1. Sample Process Debit or Credit CUPRegister Request

```
https://uat.payleap.com/TransactServices.svc/processdebitorcredit
Card?UserName=user123_API&Password=Wrr29qU!@AqHEHAYB&TransType=CUP
Register&CardNum=1111222233334444&ExpDate=1215&ExtData=<BillTo><P
hone>4445556666</Phone></BillTo>
```

2.17.2.12.4.2. Sample Debit or Credit Card CUPRegister Response

```
<?xml version="1.0"?>
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.payleap.com/payments">
<InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>
<Message/>
<PNRef>144562</PNRef>
<Result>0</Result>
<Status>success</Status>
<IsCreditCard>true</IsCreditCard>
</Response>
```

2.17.2.13. Process Debit or Credit Card (CUPVerification) Call

This API call is made from the JavaScript client side code and used only for CUP cards. Use the CUPVerification value for the transtype parameter in a ProcessDebitOrCredit call after making a CUPRegister call. This call validates the one time token sent to the registered cardholder's mobile phone.

2.17.2.13.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	CUPVerification
PNRef	Required	PNRef returned in the CUPRegister call.
cvnum	Conditional	This field is required if the IsCreditCard flag is true in the CUPRegister call
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.17.2.13.2. ExtData

XML Tag	Required	Description
SMSCode	Mandatory	Contains Shopper billing information

XML Tag	Required	Description
CustomerIPAddress	Mandatory	IP address of the shopper

2.17.2.13.3. Response Values

Response Value	Description
PNRef	This value will be the same as the one returned in the CUPRegister call
accounttoken	Token for the card for future use
CardLast4	Last four digits of the card
CardBIN	First six digits of the card
CardHash	SHA-1 hash of the card number used for the transaction
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success = authorized Failure = not authorized
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor

2.17.2.14. Process Debit or Credit Card With Account Token (Sale) Call

This API call is made from the server. Use the Sale value for the transtype parameter in a ProcessDebitOrCredit call using an enrolled account token. This call processes a payment on a card that was successfully enrolled using the CUPVerification or CreateAccountToken call.

2.17.2.14.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	Sale
Accounttoken	Required	Card token for the card
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format.
ExtData	Optional	An XML string containing additional data for the transaction. See ExtData for more information.
NOTE: Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

2.17.2.14.2. ExtData

XML Tag	Required	Description
CurrencyCode	Optional	Standard ISO currency code in which the amount of the transaction is expressed. If this is omitted (default is USD)
CUPVerified	Conditional	Should be set to true for all CUP (credit and debit) cards that have been previously verified.

2.17.2.14.3. Response Values

Response Value	Description
PNRef	Unique transaction identifier in the PayLeap system
AuthCode	The authorization code for the transaction; returned empty for transaction failure
RespMSG	Response message from PayLeap describing the transaction error
Result	Result code from PayLeap; always 0 for successful transactions (refer to PayLeap Result Codes for the complete list of error result codes)
Status	Success = authorized Failure = not authorized
InnerErrorCode	Inner detailed error code returned from the processor
InnerErrorMessage	Inner detailed error message returned from the processor

2.17.2.14.4. Example

2.17.2.14.4.1. Sample Process Debit or Credit CUPSale Request

```
https://uat.payleap.com/TransactServices.svc/processdebitorcredit
Card?UserName=user123_API&Password=W29qU!@AqHEHAYB&TransType=CUP
Register&CardNum=1111222233334444&ExpDate=1215&ExtData=<BillTo><P
hone>4445556666</Phone></BillTo>
```

2.17.2.14.4.2. Sample Debit or Credit Card CUPSale Response

```
<?xml version="1.0"?>
<Response xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
xmlns="http://www.payleap.com/payments">
<AuthCode>564934</AuthCode>
<InnerErrorCode>0</InnerErrorCode><InnerErrorMessage/>
<Message/>
<PNRef>144562</PNRef>
<Result>0</Result>
<Status>success</Status>
</Response>
```

2.17.3. Sample JavaScript Wrapper with Tokenization Code

```

function CreateToken() {
    TokenUtility.CreateAccountToken({
        nameoncard: $('card_name').val(),
        cardnum: $('card_cardnum').val(),
        expdate: $('card_expiry_month').val() + $('card_expiry_year').val().substring(2)
    },
    function (response) {
        debugger
        if ("0" == response.Result) {
            $('#token').val(response.AccountToken);
        }
        else {
            alert(response.Message);
        }
    });
}
function ProcessUsingToken() {
    TokenUtility.ProcessDebitOrCreditCardWithToken({
        transtype: 'sale',
        accountToken: $('token').val(),
        cvnum: $('cardCVC').val(),
        amount: $('amount').val()
        ExtData: '<LanguageCode>En</LanguageCode>'
    },
    function (response) {
        debugger
        if ("0" == response.Result) {
            Acculynk.createForm(response.GUID, response.LastFourOfCard, response.Modulus,
response.Exponent);

            Acculynk.PINPadLoad();
            $('#pnref').val(response.PNRef);
        }
        else {
            alert(response.Message);
        }
    });
}
function accu_FunctionResponse(strResponse) {

    switch (strResponse) {
        case 'ACCU000': //PIN was received so merchant can process the
authorization
            Acculynk._modalHide();
            document.getElementById('payment_form').submit();
            break;
        case 'ACCU200': //user pressed 'cancel' button so merchant may process as credit
        case 'ACCU400': //user was inactive
        case 'ACCU600': //invalid data was posted to Acculynk
        case 'ACCU800': //general catch all error
            Acculynk._modalHide();
            break;
        case 'ACCU999': //modal popup was opened successfully
            //no action necessary, but open for merchant to use
            break;
        default:
            break;
    }
}
}

```


3. PayLeap Merchant Services API

The PayLeap Merchant Services API allows you to submit payment transactions to your processor over the internet using PayLeap's payment gateway. The PayLeap Merchant Services API supports the following services:

- [AddRecurringCreditCard](#)
- [AddRecurringCheck](#)
- [ProcessCreditCard](#)
- [ProcessCheck](#)
- [ManageCheckInfo](#)
- [ManageCreditCardInfo](#)
- [ManageContract](#)
- [ManageCustomer](#)

Additionally, the PayLeap Merchant Services API card validation service allows you to verify card number, length, and expiration date.

3.1. How to Access

The PayLeap Merchant Services API supports the following types of transaction requests:

- REST
- SOAP

Messages must be sent using URL-encoded, HTTP GET messages.

3.1.2. URL

The testing URL is:

<https://uat.payleap.com/MerchantServices.svc>

The production URL is:

<https://secure1.payleap.com/MerchantServices.svc>

3.1.3. WSDL

The WSDL file for testing is:

<https://uat.payleap.com/MerchantServices.svc?wsdl>

The WSDL file for production is:

<https://secure1.payleap.com/MerchantServices.svc?WSDL>

3.1.4. Setting up Your API Login Credentials

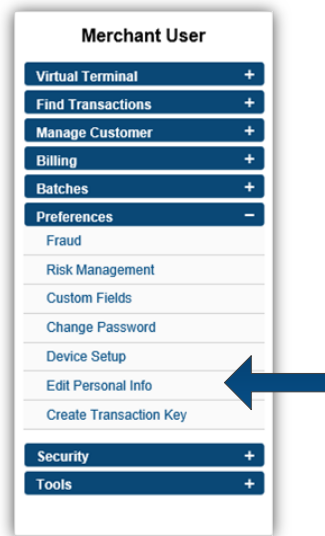
Refer to [Setting up Your API Login Credentials](#) for instructions.

3.2. Locating Your Vendor Number

To use some of the web services in the Merchant Services API, you will need to provide an RPNum value, which is unique to your merchant account. The RPNum is the same as your Vendor Number, which can be found on the PayLeap web interface. To locate vendor number, perform the following steps:

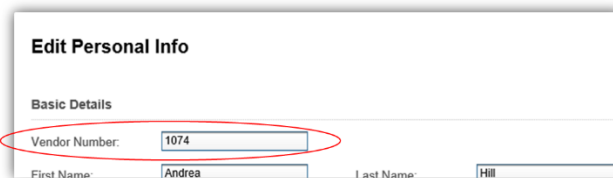
1. Log into the PayLeap web interface using your username and password.
2. From the Merchant User menu, select **Preferences** and then select **Edit Personal Info** (refer to Figure 20).

FIGURE 20. MERCHANT USER MENU > PREFERENCES > EDIT PERSONAL INFO



3. Vendor number is located within Basic Details (refer to Figure 23).

FIGURE 21. VENDOR NUMBER LOCATION



3.3. Test Data

You can request a test account on our testing server. To request this account, please send your email request to our technical support staff. Please include the following information with your test account request: company name, your name, phone number, email address associated with the test account, and which payment processor you would like to test. An email response will be sent with valid test information. Refer to Table 6 for a complete list of test parameters by payment type.

TABLE 6. MERCHANT SERVICES TEST ACCOUNT PARAMETERS

Payment Type	Test Parameters
Credit Card	The test site accepts any valid, mod 10 credit card number. The test site does not validate AVS or CVV data and return passing values for any data submitted
Check	The test site accepts any valid account, routing, and MICR data

3.4. AddRecurringCreditCard

This web service operation allows you to add a customer, contract, and credit card payment method in a single call.

To access AddRecurringCreditCard, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/MerchantServices.svc/AddRecurringCreditCard>

The production URL is:

<https://secure1.payleap.com/MerchantServices.svc/AddRecurringCreditCard>

The following sections describe the parameters required to AddRecurringCreditCard.

3.4.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
Vendor	Required	Merchant PayLeap Vendor Number that uniquely identifies your merchant account
CustomerId	Required	Unique, merchant-supplied identifier for a customer
CustomerName	Required	Name used to refer to customer in Merchant Services API
FirstName	Required	Customer's first name
LastName	Required	Customer's last name
Title	Optional	Customer's title
Department	Optional	Customer's department
Street1	Optional	Line 1 of customer's street address
Street2	Optional	Line 2 of customer's street address
Street3	Optional	Line 3 of customer's street address
City	Optional	Customer's city
StateID	Optional	Customer's 2-digit state code
Province	Optional	Customer's province if outside the USA
Zip	Optional	Customer's ZIP or postal code

Parameter	Required	Description
CountryID	Optional	Customer's 3-digit country code (e.g. USA, CAN, etc.)
Email	Optional	Customer's billing email address
Mobile	Optional	Customer's phone number in ###-###-#### format
ContractID	Required	Unique, merchant-supplied identifier for the contract
ContractName	Required	Merchant-supplied contract name
BillAmt	Required	The amount to be billed in relation to the contract in DDDDDDDDDD.CC format
TaxAmt	Optional	The tax amount in DDDD.CC format
TotalAmt	Required	The total amount of the transaction in DDDDDDDDDD.CC format. This includes any tax specified in the TaxAmt parameter
StartDate	Required	Start date of the contract in MM/DD/YYYY format
EndDate	Optional	End date of the contract in MM/DD/YYYY format. If this date is not give, the contract will continue to run until manually canceled or suspended by the system due to failure of payment
BillingPeriod	Required	Used in conjunction with BillingInterval to compute next bill date. Valid values are: Day or Daily Week or Weekly Biweekly Month or Monthly Semimonth or Semimonthly Year or Annually Semiannually Quarterly

Parameter	Required	Description
BillingInterval	Required	<p>Indicates the day on which the billing interval will be applied.</p> <p>For a BillingPeriod of Week/Weekly or Biweekly, valid values are:</p> <p style="text-align: center;">Mon or 1 Tue or 2 Wed or 3 Thu or 4 Fri or 5 Sat or 6 Sun or 7</p> <p>For a BillingPeriod of Month/Monthly, valid values are: 1 - 31 (the date of the month)</p> <p>For a BillingPeriod of Day/Daily, Year/Annually, Semiannually, Semimonth/Semimonthly, or Quarterly, set this parameter to 0. The system will calculate the BillingInterval using the StartDate in the contract.</p>
MaxFailures	Optional	The maximum number of attempts to submit a payment before the system puts contract into a suspended mode
FailureInterval	Optional	The number of days system will wait between each reattempt at processing payment
EmailCustomer	Optional	Indicates whether to email the customer regarding the status of recurring payment. Valid values are True or False
EmailMerchant	Optional	Indicates whether to email the merchant regarding the status of recurring payment. Valid values are True or False
EmailCustomerFailure	Optional	Indicates whether to email the customer if recurring payment fails. Valid values are True or False
EmailMerchantFailure	Optional	Indicates whether to email the merchant if recurring payment fails. Valid values are True or False
CcAccountNum	Required	Credit card number used for the transaction
CcExpdate	Required	Expiration date of the credit card used for the transaction in MMY format
CcNameOnCard	Optional	Cardholder's name as printed on the card
CcStreet	Optional	Cardholder's street Address. Used for AVS
CcZip	Optional	Cardholder's billing ZIP or postal code. Used for AVS
ExtData	Not Used	Not used for this operation
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

3.4.2. Response Values

3.4.2.1. Success Response

Response Value	Description
CcInfoKey	Unique numerical identifier for credit card. This number is used for processing and management operations.
Code	Always Ok for successful response.
ContractKey	Unique numerical identifier for the contract. This number is used for management operations
CustomerKey	Unique numerical identifier for the customer. This number is used for management operations
Error	Response message from PayLeap confirming the successful operation
UserName	Merchant's PayLeap API login ID
Vendor	The PayLeap Vendor number that uniquely identifies your merchant account

3.4.2.2. Failure Response

Response Value	Description
Code	Always Fail for a failure response
Error	Message describing the error in request
UserName	Merchant's PayLeap API login ID
Vendor	The PayLeap Vendor number that uniquely identifies your merchant account

3.4.3. Example

3.4.3.1. Sample AddRecurringCreditCard Request

```
https://uat.payleap.com/MerchantServices.svc/AddRecurringCreditCard?Userame=user123_API&Password=Nn2jCtsOuxVlcELE&Vendor=123&CustomerID=12345&CustomerName=ABCCompany&FirstName=John&LastName=Doe&Title=&Department=&Street1=&Street2=&Street3=&City=&StateID=&Province=&Zip=&CountryID=&Email=&Mobile=&ContractID=i&ContractName=ABCService&BillAmt=45.00&TaxAmt=&TotalAmt=4500&StartDate=01/01/2012&EndDate=&BillingPeriod=Week&BillingInterval=1&MaxFailures=&FailureInterval=&EmailCustomer=&EmailMerchant=&EmailCustomerFailure=&EmailMerchantFailure=&CcAccountNum=1234567890987654&CcExpdate=1212&CcNameOnCard=&CcStreet=&CcZip=&ExtData=
```

3.4.3.2. Sample Success AddRecurringCreditCard Response

```
<RecurringResult xmlns="http://www.payleap.com/payments" xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
  <CcInfoKey>1234</CcInfoKey>
  <Code>Ok</Code>
  <ContractKey>5678</ContractKey>
  <CustomerKey>9101</CustomerKey>
  <Error>RecurringCreditCard Added</Error>
  <UserName>user123_API</UserName>
  <Vendor>123</Vendor>
</RecurringResult>
```

3.5. AddRecurringCheck

This web service operation allows you to add a customer, contract, and check payment method in a single call.

To access AddRecurringCheck, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/MerchantServices.svc/AddRecurringCheck>

The production URL is:

<https://secure1.payleap.com/MerchantServices.svc/AddRecurringCheck>

The following sections describe the parameters required to AddRecurringCheck.

3.4.4. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
Vendor	Required	Merchant PayLeap Vendor Number that uniquely identifies your merchant account
CustomerId	Required	Unique, merchant-supplied identifier for a customer
CustomerName	Required	Name used to refer to customer in Merchant Services API
FirstName	Required	Customer's first name
LastName	Required	Customer's last name
Title	Optional	Customer's title
Department	Optional	Customer's department
Street1	Optional	Line 1 of customer's street address
Street2	Optional	Line 2 of customer's street address
Street3	Optional	Line 3 of customer's street address
City	Optional	Customer's city
StateID	Optional	Customer's 2-digit state code
Province	Optional	Customer's province if outside the USA
Zip	Optional	Customer's ZIP or postal code
CountryID	Optional	Customer's 3-digit country code (e.g. USA, CAN, etc.)
Email	Optional	Customer's billing email address
Mobile	Optional	Customer's phone number in ###-###-#### format
ContractID	Required	Unique, merchant-supplied identifier for the contract
ContractName	Required	Merchant-supplied contract name
BillAmt	Required	The amount to be billed in relation to the contract in DDDDDDDDDD.CC format
TaxAmt	Optional	The tax amount in DDDD.CC format

Parameter	Required	Description
TotalAmt	Required	The total amount of the transaction in DDDDDDDDDD.CC format. This includes any tax specified in the TaxAmt parameter
StartDate	Required	Start date of the contract in MM/DD/YYYY format
EndDate	Optional	End date of the contract in MM/DD/YYYY format. If this date is not give, the contract will continue to run until manually canceled or suspended by the system due to failure of payment
BillingPeriod	Required	Used in conjunction with BillingInterval to compute next bill date. Valid values are: Day or Daily Week or Weekly Biweekly Month or Monthly Semimonth or Semimonthly Year or Annually Semiannually Quarterly
BillingInterval	Required	Indicates the day on which the billing interval will be applied. For a BillingPeriod of Week/Weekly or Biweekly, valid values are: Mon or 1 Tue or 2 Wed or 3 Thu or 4 Fri or 5 Sat or 6 Sun or 7 For a BillingPeriod of Month/Monthly, valid values are: 1 - 31 (the date of the month) For a BillingPeriod of Day/Daily, Year/Annually, Semiannually, Semimonth/Semimonthly, or Quarterly, set this parameter to 0 . The system will calculate the BillingInterval using the StartDate in the contract.
MaxFailures	Optional	The maximum number of attempts to submit a payment before the system puts contract into a suspended mode
FailureInterval	Optional	The number of days system will wait between each reattempt at processing payment

Parameter	Required	Description
EmailCustomer	Optional	Indicates whether to email the customer regarding the status of recurring payment. Valid values are True or False
EmailMerchant	Optional	Indicates whether to email the merchant regarding the status of recurring payment. Valid values are True or False
EmailCustomerFailure	Optional	Indicates whether to email the customer if recurring payment fails. Valid values are True or False
EmailMerchantFailure	Optional	Indicates whether to email the merchant if recurring payment fails. Valid values are True or False
CheckType	Required	Indicates check type. Valid values are: Personal Business
AccountType	Required	Indicates to which type of account the check points. Valid values are: Checking Savings
CheckNum	Optional	The check number printed on the check
MICR	Optional	The scanned MICR data of the check
AccountNum	Required	The account number printed on the check
TransitNum	Required	The routing number printed on the check
SS	Optional	The customer's Social Security Number in ###-##### format
DOB	Optional	The customer's date of birth in MM/DD/YYYY format
BranchCity	Optional	The city in which the branch of the bank is located
DL	Optional	The customer's date of birth in MM/DD/YYYY format
StateCode	Optional	The customer's two-digit driver's license state or province code
NameOnCheck	Optional	The customer's name as printed on the check
ExtData	Not Used	Not used for this operation
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

3.4.5. Response Values

3.4.5.1. Success Response

Response Value	Description
CheckInfoKey	Unique numerical identifier for check. Used in management operations
Code	Ok for successful response Partial Ok is returned when the routing number is invalid. Verify the value foru TransitNum is correct

Response Value	Description
ContractKey	Unique numerical identifier for the contract. Used in management operations
CustomerKey	Unique numerical identifier for the customer. Used in management operations
Error	Message describing the status of the request
UserName	Your PayLeap API login ID
Vendor	The PayLeap Vendor number that uniquely identifies your merchant account

3.4.5.2. Failure Response

Response Value	Description
Code	Always Fail for an unsuccessful response
Error	Message describing the error in request
UserName	Your PayLeap API login ID
Vendor	Your PayLeap Vendor number that uniquely identifies your merchant account

3.4.6. Example

3.4.6.1. Sample AddRecurringCheck Request

```
https://uat.payleap.com/MerchantServices.svc/AddRecurringCheck?Username=user123_API&Password=Nn2jCtsOuxVlcELE&Vendor=123&CustomerID=12345&CustomerName=Gravity%20Apples&FirstName=Isaac&LastName=Newton&Title=&Department=&Street1=123%20Main%20St&Street2=&Street3=&City=Lincolnshire&StateID=GA&Province=&Zip=12345&CountryID=&Email=&Mobile=123-456-7890&ContractID=54321&ContractName=Required&BillAmt=1&TaxAmt=&TotalAmt=1&StartDate=01/09/2012&EndDate=&BillingPeriod=Month&BillingInterval=1&MaxFailures=&FailureInterval=&EmailCustomer=&EmailMerchant=&EmailCustomerFailure=&EmailMerchantFailure=&CheckType=Personal&AccountType=Checking&CheckNum=&MICR=&AccountNum=1234567890001&TransitNum=987654321&SS=&DOB=12/25/1642&BranchCity=&DL=&StateCode=&NameOnCheck=&ExtData=
```

3.4.6.2. Sample Success AddRecurringCheck Response

```
<RecurringResult xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<CheckInfoKey>1234</CheckInfoKey>
<Code>Ok</Code>
<ContractKey>9696</ContractKey>
<CustomerKey>2468</CustomerKey>
<Error>RecurringCheck Added</Error>
<UserName>user123_API</UserName>
<Vendor>123</Vendor>
</RecurringResult>
```

3.6. ProcessCreditCard – Recurring Billing

This web service operation processes credit card transactions within the recurring billing module.

To access ProcessCreditCard, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/MerchantServices.svc/ProcessCreditCard>

The production URL is:

<https://secure1.payleap.com/MerchantServices.svc/ProcessCreditCard>

The following sections describe the parameters required to ProcessCreditCard.

4.6.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
Vendor	Required	Merchant PayLeap Vendor Number that uniquely identifies your merchant account
CcInfoKey	Required	Unique numerical identifier for credit card. Found in the response values for AddRecurringCreditCard and ManageCreditCardInfo
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
InvNum	Optional	The invoice number used by the merchant to identify the transaction
ExtData	Not Used	Not used for this operation
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

4.6.2. Response Values

4.6.2.1. Success Response

Response Value	Description
AuthCode	The authorization code for the transaction
Message	The response message returned by the host
PNRef	The reference number identifying the transaction on the PayLeap gateway. This number is used for adjustments, voids, and returns
Result	Result code from PayLeap. Always 0 for successful transactions

4.6.2.2. Failure Response

Response Value	Description
Code	Always Fail for a failure response
Error	Message describing the error in request
UserName	Merchant's PayLeap API login ID

4.6.3. Example

4.6.3.1. Sample ProcessCreditCard Request

```
https://uat.payleap.com/MerchantServices.svc/ProcessCreditCard?Username=user123_API&Password=Nn2jCtsOuxVlcELE&Vendor=123&CcInfoKey=1234&Amount=11.00&InvNum=&ExtData=
```

4.6.3.2. Sample Success ProcessCreditCard Response

```
<RecurringResult xmlns="http://www.payleap.com/payments"
xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
<AuthCode>123ASD</AuthCode>
<Message>APPROVAL</Message>
<PNRef>56789</PNRef>
<Result>0</Result>
</RecurringResult>
```

3.7. ProcessCheck – Recurring Billing

This web service operation processes check transactions within the recurring billing module.

To access ProcessCheck, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/MerchantServices.svc/ProcessCheck>

The production URL is:

<https://secure1.payleap.com/MerchantServices.svc/ProcessCheck>

The following sections describe the parameters required to ProcessCheck.

3.7.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
Vendor	Required	Merchant PayLeap Vendor Number that uniquely identifies your merchant account
CheckInfoKey	Required	Unique numerical identifier for check. Found in the response values for AddRecurringCheck and ManageCheckInfo

Parameter	Required	Description
Amount	Required	The dollar amount of the transaction in DDDDDDDDDD.CC format
InvNum	Optional	The invoice number used by the merchant to identify the transaction
ExtData	Not Used	Not used for this operation
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

3.7.2. Response Values

3.7.2.1. Success Response

Response Value	Description
AuthCode	The authorization code for the transaction
Message	The response message returned by the host
PNRef	The reference number identifying the transaction on the PayLeap gateway. This number is used for adjustments, voids, and returns
Result	Result code from PayLeap. Always 0 for successful transactions

3.7.2.2. Failure Response

Response Value	Description
Code	Always Fail for a failure response
Error	Message describing the error in request
UserName	Merchant's PayLeap API login ID

3.7.3. Example

3.7.3.1. Sample ProcessCheck Request

```
https://uat.payleap.com/MerchantServices.svc/ProcessCheck?Username=user12
3_API&Password=Nn2jCtsOuxVlcELE&Vendor=123&CheckInfoKey=1234&Amount=11.00
&InvNum=&ExtData=
```

3.7.3.2. Sample Success ProcessCheck Response

```
<RecurringResult xmlns="http://www.payleap.com/payments" xmlns:i="http://
www.w3.org/2001/XMLSchema-instance">
<AuthCode>123ASD</AuthCode>
<Message>APPROVAL</Message>
<PNRef>56789</PNRef>
<Result>0</Result>
</RecurringResult>
```

3.8. ManageCheckInfo

This web service operation allows you to add, update, and delete check payment information.

To access ManageCheckInfo, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/MerchantServices.svc/ManageCheckInfo>

The production URL is:

<https://secure1.payleap.com/MerchantServices.svc/ManageCheckInfo>

The following sections describe the parameters required to ManageCheckInfo.

3.8.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	The transaction type being performed. Valid values are: Add Update Delete
Vendor	Required	Merchant PayLeap Vendor Number that uniquely identifies your merchant account
CustomerKey	Required	Unique numerical identifier for the customer. Found in the response values of operations for managing customer information and adding recurring payments
CheckInfoKey	Required for Delete and Update	Unique numerical identifier for check. Found in the CheckInfoKey response value for AddRecurringCheck
CheckType	Required	Indicates check type. Valid values are: Personal Business
AccountType	Required	Indicates to which type of account the check points. Valid values are: Checking Savings
CheckNum	Optional	The check number printed on the check
MICR	Optional	The scanned MICR data of the check
AccountNum	Required	The account number printed on the check
TransitNum	Required	The routing number printed on the check

Parameter	Required	Description
SS	Optional	The customer's Social Security Number in ###-##### format
DOB	Optional	The customer's date of birth in MM/DD/YYYY format
BranchCity	Optional	The city in which the branch of the bank is located
DL	Optional	The customer's date of birth in MM/DD/YYYY format
StateCode	Optional	The customer's two-digit driver's license state or province code
NameOnCheck	Optional	The customer's name as printed on the check
Email	Optional	Customer's billing email address
DayPhone	Optional	Customer's phone number in ###-###-#### format
Street1	Optional	Line 1 of customer's street address
Street2	Optional	Line 2 of customer's street address
Street3	Optional	Line 3 of customer's street address
City	Optional	Customer's city
StateID	Optional	Customer's 2-digit state code
Province	Optional	Customer's province if outside the USA
PostalCode	Optional	Customer's ZIP or postal code
CountryID	Optional	Customer's 3-digit country code (e.g. USA, CAN, etc.)
ExtData	Not Used	Not used for this operation
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

3.8.2. Response Values

3.8.2.1. Success Response

Response Value	Description
CheckInfoKey	Unique numerical identifier for check. This number is used for processing and management operations. Note that CheckInfoKey will be returned even in the event of check deletion
Code	Always Ok for successful response
CustomerKey	Unique numerical identifier for the customer. This number is used for management operations
Error	Response message from PayLeap confirming the successful operation
UserName	Merchant's PayLeap API login ID
Vendor	The PayLeap Vendor number that uniquely identifies your merchant account

3.8.2.2. Failure Response

Response Value	Description
CheckInfoKey	Unique numerical identifier for check. This number is used for processing and management operations
Code	Always Fail for a failure response
Error	Message describing the error in request
UserName	Your PayLeap API login ID
Vendor	Your PayLeap Vendor number that uniquely identifies your merchant account

3.8.3. Example

3.8.3.1. Sample ManageCheckInfo Request

```
https://uat.payleap.com/MerchantServices.svc/ManageCheckInfo?Username=user123_API&Password=Nn2jCtsOuxVlcELE&TransType=Add&Vendor=123&CustomerKey=1234&CheckInfoKey=&CheckType=Personal&AccountType=Checking&CheckNum=&MICR=&AccountNum=1234567890001&TransitNum=261072770&SS=&DOB=&BranchCity=&DL=&StateCode=&NameOnCheck=&Email=&DayPhone=&Street1=&Street2=&Street3=&City=&StateID=&Province=&PostalCode=&CountryID=&ExtData=
```

3.8.3.2. Sample Success ManageCheckInfo Response

```
<RecurringResult xmlns="http://www.payleap.com/payments" xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
  <CheckInfoKey>5420</CheckInfoKey>
  <Code>Ok</Code>
  <CustomerKey>1234</CustomerKey>
  <Error>CheckInfo Added</Error>
  <UserName>user123_API</UserName>
  <Vendor>123</Vendor>
</RecurringResult>
```

3.9. ManageCreditCardInfo

This web service operation allows you to add, update, and delete credit card payment information.

To access ManageCreditCardInfo, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/MerchantServices.svc/ManageCreditCardInfo>

The production URL is:

<https://secure1.payleap.com/MerchantServices.svc/ManageCreditCardInfo>

The following sections describe the parameters required to ManageCreditCardInfo.

3.9.1. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	The transaction type being performed. Valid values are: Add Update Delete
Vendor	Required	Merchant PayLeap Vendor Number that uniquely identifies your merchant account
CustomerKey	Required	Unique numerical identifier for the customer. Found in the response values of operations for managing customer information and adding recurring payments
CardInfoKey	Required for Delete and Update	Unique numerical identifier for credit card. Found in the CcInfoKey response value for AddRecurringCreditCard
CcAccountNum	Required	Credit card number used for the transaction
CcExpDate	Required	Expiration date of the credit card used for the transaction in MMY format
CcNameonCard	Optional	Cardholder's name as printed on the card
CcStreet	Optional	Cardholder's street address. Used for AVS
CcZip	Optional	Cardholder's billing ZIP or postal code. Used for AVS
ExtData	Not Used	Not used for this operation
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

3.9.2. Response Values

3.9.2.1. Success Response

Response Value	Description
CcInfoKey	Unique numerical identifier for credit card. This number is used for processing and management operations. Note: CcInfoKey will be returned even in the event of credit card deletion
Code	Always Ok for successful response
CustomerKey	Unique numerical identifier for the customer. This number is used for management operations
Error	Response message from PayLeap confirming the successful operation
UserName	Merchant's PayLeap API login ID
Vendor	The PayLeap Vendor number that uniquely identifies your merchant account

3.9.2.2. Failure Response

Response Value	Description
CcInfoKey	Unique numerical identifier for credit card. This number is used for processing and management operations.
Code	Always Fail for a failure response.
Error	Message describing the error in request.
UserName	Your PayLeap API login ID.
Vendor	Your PayLeap Vendor number that uniquely identifies your merchant account.

3.9.3. Example

3.9.3.1. Sample ManageCreditCardInfo Request

```
https://uat.payleap.com/MerchantServices.svc/ManageCreditCardInfo?Username=user123_API&Password=Nn2jCtsOuxVlcELE&TransType=Add&Vendor=123&CustomerKey=6022&CardInfoKey=&CcAccountNum=8675309867530900&CcExpDate=1212&CcNameonCard=Tommy%20Tutone&CcStreet=&CcZip=&ExtData=
```

3.9.3.2. Sample Success ManageCreditCardInfo Response

```
<RecurringResult xmlns="http://www.payleap.com/payments" xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
  <CcInfoKey>1234</CcInfoKey>
  <Code>Ok</Code>
  <CustomerKey>1234</CustomerKey>
  <Error>CreditCardInfo Added</Error>
  <UserName>user123_API</UserName>
  <Vendor>123</Vendor>
</RecurringResult>
```

3.10. ManageContract

This web service operation allows you to add, update, and delete contract information.

To access ManageContract, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/MerchantServices.svc/ManageContract>

The production URL is:

<https://secure1.payleap.com/MerchantServices.svc/ManageContract>

The following sections describe the parameters required to ManageContract.

3.10.2. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	The transaction type being performed. Valid values are: Add Update Delete
Vendor	Required	Merchant PayLeap Vendor Number that uniquely identifies your merchant account
CustomerKey	Required	Unique numerical identifier for the customer. Found in the response values of operations for managing customer information and adding recurring payments
ContractKey	Required for Update and Delete	Unique numerical identifier for the contract. Found in the response values for AddRecurringCheck and AddRecurringCreditCard
PaymentInfoKey	Required for Update and Add	Dependent on payment type. <ul style="list-style-type: none"> For credit cards, use a CcInfoKey or CardInfoKey (found in the response values of AddRecurringCreditCard and ManageCreditCardInfo) For checks, use a CheckInfoKey (found in the response values of AddRecurringCheck and ManageCheckInfo)
PaymentType	Required for Add and Update	Indicates method of payment. Valid values are: CC (for credit card) CK (for check)
CustomerID	Required for Update and Add	Unique, merchant-supplied identifier for a customer
FirstName	Optional	Customer's first name
LastName	Optional	Customer's last name
Title	Optional	Customer's title
Department	Optional	Customer's department
Street1	Optional	Line 1 of customer's street address
Street2	Optional	Line 2 of customer's street address
Street3	Optional	Line 3 of customer's street address
City	Optional	Customer's city
StateID	Optional	Customer's 2-digit state code
Province	Optional	Customer's province if outside the USA

Parameter	Required	Description
Zip	Optional	Customer's ZIP or postal code
CountryID	Optional	Customer's 3-digit country code (e.g. USA, CAN, etc.)
Email	Optional	Customer's billing email address
DayPhone	Optional	Customer's daytime number in ###-###-#### format
NightPhone	Optional	Customer's nighttime number in ###-###-#### format
Fax	Optional	Customer's fax number in ###-###-#### format
Mobile	Optional	Customer's mobile number in ###-###-#### format
ContractID	Required for Update and Add	Unique, merchant-supplied identifier for the contract
ContractName	Required for Update and Add	Unique, merchant-supplied contract name
BillAmt	Required for Update and Add	The amount to be billed in relation to the contract in DDDDDDDDDD.CC format
TaxAmt	Optional	The tax amount in DDDD.CC format
TotalAmt	Required for Update and Add	The total amount of the transaction in DDDDDDDDDD.CC format. This includes any tax specified in TaxAmt
StartDate	Required for Update and Add	Start date of the contract in MM/DD/YYYY format
EndDate	Optional	End date of the contract in MM/DD/YYYY format. If this date is not given, the contract will continue to run until manually cancelled or suspended by the system due to failure of payment
NextBillDt	Required for Update and Add	Next billing date in MM/DD/YYYY format (e.g. if the next billing date is scheduled to be 01/30/2015, but NextBillDt=02/15/2015 when the request is submitted, the next billing date will change to 02/15/2015)

Parameter	Required	Description
BillingPeriod	Required	Used in conjunction with BillingInterval to compute next bill date. Valid values are: <ul style="list-style-type: none"> Day or Daily Week or Weekly Biweekly Month or Monthly Semimonth or Semimonthly Year or Annually Semiannually Quarterly
BillingInterval	Required	Indicates the day on which the billing interval will be applied. For a BillingPeriod of Week/Weekly or Biweekly, valid values are: <ul style="list-style-type: none"> Mon or 1 Tue or 2 Wed or 3 Thu or 4 Fri or 5 Sat or 6 Sun or 7 For a BillingPeriod of Month/Monthly, valid values are: <ul style="list-style-type: none"> 1 - 31 (the date of the month) For a BillingPeriod of Day/Daily, Year/Annually, Semiannually, Semimonth/Semimonthly, or Quarterly, set this parameter to 0 . The system will calculate the BillingInterval using the StartDate in the contract.
MaxFailures	Optional	The maximum number of attempts to submit a payment before the system puts contract into a suspended mode
FailureInterval	Optional	The number of days system will wait between each reattempt at processing payment
EmailCustomer	Optional	Indicates whether to email the customer regarding the status of recurring payment. Valid values are True or False
EmailMerchant	Optional	Indicates whether to email the merchant regarding the status of recurring payment. Valid values are True or False
EmailCustomerFailure	Optional	Indicates whether to email the customer if recurring payment fails. Valid values are True or False
EmailMerchantFailure	Optional	Indicates whether to email the merchant if recurring payment fails. Valid values are True or False

Parameter	Required	Description
Status	Optional	The status of the contract. Valid values include: Active Inactive
ExtData	Not Used	Not used for this operation
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

3.10.3. Response Values

3.10.3.1. Success Response

Response Value	Description
CcInfoKey	Unique numerical identifier for credit card. This number is used for processing and management operations. Returned if TransType is Add or Update and PaymentType is CC.
CheckInfoKey	Unique, numerical identifier for credit card. This number is used for processing and management operations. Returned if TransType is Add or Update and PaymentType is CK.
Code	Always Ok for successful response
ContractKey	Unique, numerical identifier for the contract. This number is used for management operations. Note that ContractKey will be returned even in the event of contract deletion
CustomerKey	Unique numerical identifier for the customer. This number is used for management operations
Error	Response message from PayLeap confirming the successful operation
UserName	Merchant's PayLeap API login ID
Vendor	The PayLeap Vendor number that uniquely identifies your merchant account

3.10.3.2. Failure Response

Response Value	Description
CcInfoKey	Value submitted in PaymentInfoKey, regardless of whether it was a credit card or check
CheckInfoKey	Value submitted in PaymentInfoKey, regardless of whether it was a credit card or check
Code	Always Fail for a failure response.
CustomerKey	Unique numerical identifier for the customer. This number is used for management operations
Error	Message describing the error in request.
UserName	Your PayLeap API login ID.
Vendor	Your PayLeap Vendor number that uniquely identifies your merchant account.

3.10.4. Example

3.10.4.1. Sample ManageContract Request

```
https://uat.payleap.com/MerchantServices.svc/ManageContract?Username=user123_API&Password=ENn2jCtsOuxVlcELE&TransType=Add&Vendor=123&CustomerKey=6022&ContractKey=&PaymentInfoKey=5452&PaymentType=CC&CustomerID=13579&CustomerName=Garfield%20%20Friends&FirstName=Jon&LastName=Arbuckle&Title=&Department=&Street1=&Street2=&Street3=&City=&StateID=&Province=&Zip=&CountryID=&Email=&DayPhone=&NightPhone=&Fax=&Mobile=&ContractID=12346&ContractName=Lasagna&BillAmt=400.00&TaxAmt=3.00&TotalAmt=403.00&StartDate=01/11/2012&EndDate=&NextBillDt=01/11/2012&BillingPeriod=Semimonthly&BillingInterval=0&MaxFailures=&FailureInterval=&EmailCustomer=&EmailMerchant=&EmailCustomerFailure=&EmailMerchantFailure=&Status=&ExtData=
```

3.10.4.2. Sample Success ManageContract Response

```
<RecurringResult xmlns="http://www.payleap.com/payments" xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
  <CcInfoKey>5450</CcInfoKey>
  <Code>Ok</Code>
  <ContractKey>5402</ContractKey>
  <CustomerKey>6789</CustomerKey>
  <Error>Contract Added</Error>
  <UserName>user123_API</UserName>
  <Vendor>123</Vendor>
</RecurringResult>
```

3.10.4.3. Sample Error ManageContract Response

```
https://uat.payleap.com/MerchantServices.svc/ManageContract?Username=user123_API&Password=ENn2jCtsOuxVlcELE&TransType=Add&Vendor=123&CustomerKey=Odie&ContractKey=&PaymentInfoKey=5452&PaymentType=CC&CustomerID=13579&CustomerName=Garfield%20%20Friends&FirstName=Jon&LastName=Arbuckle&Title=&Department=&Street1=&Street2=&Street3=&City=&StateID=&Province=&Zip=&CountryID=&Email=&DayPhone=&NightPhone=&Fax=&Mobile=&ContractID=12346&ContractName=Lasagna&BillAmt=400.00&TaxAmt=3.00&TotalAmt=403.00&StartDate=01/11/2012&EndDate=&NextBillDt=01/11/2012&BillingPeriod=Semimonthly&BillingInterval=0&MaxFailures=&FailureInterval=&EmailCustomer=&EmailMerchant=&EmailCustomerFailure=&EmailMerchantFailure=&Status=&ExtData=
```

3.10.4.4. Sample Failure ManageContract Response

```
<RecurringResult xmlns="http://www.payleap.com/payments" xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
  <CcInfoKey>5450</CcInfoKey>
  <CheckInfoKey>5450</CheckInfoKey>
  <Code>Fail</Code>
  <ContractKey>5402</ContractKey>
  <CustomerKey>Odie</CustomerKey>
  <Error>Invalid CustomerKey</Error>
  <UserName>user123_API</UserName>
  <Vendor>123</Vendor>
</RecurringResult>
```

3.11. ManageCustomer

This web service operation allows you to add, update, and delete customer information.

To access ManageCustomer, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/MerchantServices.svc/ManageCustomer>

The production URL is:

<https://secure1.payleap.com/MerchantServices.svc/ManageCustomer>

The following sections describe the parameters required to ManageCustomer.

3.11.2. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Required	The transaction type being performed. Valid values are: Add Update Delete
Vendor	Required	Merchant PayLeap Vendor Number that uniquely identifies your merchant account
CustomerKey	Required	Unique numerical identifier for a customer. Found in the response values for AddRecurringCreditCard and AddRecurringCheck
CustomerID	Required for Update and Add	Unique, merchant-supplied identifier for a customer
FirstName	Optional	Customer's first name
LastName	Optional	Customer's last name
Title	Optional	Customer's title
Department	Optional	Customer's department
Street1	Optional	Line 1 of customer's street address
Street2	Optional	Line 2 of customer's street address
Street3	Optional	Line 3 of customer's street address
City	Optional	Customer's city
StateID	Optional	Customer's 2-digit state code
Province	Optional	Customer's province if outside the USA
Zip	Optional	Customer's ZIP or postal code
CountryID	Optional	Customer's 3-digit country code (e.g. USA, CAN, etc.)

Parameter	Required	Description
DayPhone	Optional	Customer's daytime number in ###-###-#### format
NightPhone	Optional	Customer's nighttime number in ###-###-#### format
Fax	Optional	Customer's fax number in ###-###-#### format
Mobile	Optional	Customer's mobile number in ###-###-#### format
Email	Optional	Customer's billing email address
ExtData	Not Used	Not used for this operation
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

3.11.3. Response Values

3.11.3.1. Success Response

Response Value	Description
Code	Always Ok for successful response
CustomerKey	Unique numerical identifier for the customer. This number is used for management operations. Note: CustomerKey will be returned even in the event of customer deletion
Error	Response message from PayLeap confirming the successful operation
UserName	Merchant's PayLeap API login ID
Vendor	The PayLeap Vendor number that uniquely identifies your merchant account

3.11.3.2. Failure Response

Response Value	Description
Code	Always Fail for a failure response.
CustomerKey	Unique numerical identifier for the customer. This number is used for management operations
Error	Message describing the error in request.
UserName	Your PayLeap API login ID.
Vendor	Your PayLeap Vendor number that uniquely identifies your merchant account.

3.11.4. Example

3.11.4.1. Sample ManageCustomer Request

```
https://uat.payleap.com/MerchantServices.svc/ManageCustomer?Username=user123_API&Password=Nn2jCtsOuxVlcELE&TransType=Add&Vendor=123&CustomerKey=&CustomerID=12345&CustomerName=ComedyCo&FirstName=Jack&LastName=Black&Title=&Department=&Street1=&Street2=&Street3=&City=&StateID=&Province=&Zip=&CountryID=&DayPhone=&NightPhone=&Fax=&Email=&Mobile=&Status=&ExtData=
```

3.11.4.2. Sample Success ManageCustomer Response

```
<RecurringResult xmlns="http://www.payleap.com/payments" xmlns:i="http://  
www.w3.org/2001/XMLSchema-instance">  
<CcInfoKey>5450</CcInfoKey>  
<Code>Ok</Code>  
<CustomerKey>6789</CustomerKey>  
<Error>Customer Added Successfully</Error>  
<UserName>user123_API</UserName>  
<Vendor>123</Vendor>  
</RecurringResult>
```

4. PayLeap Reporting API

The PayLeap Reporting API allows you to run reports over the Internet using PayLeap's reporting gateway. The PayLeap Reporting API supports the following services:

- [GetCardTrx](#)
- [GetCardTrxSummary](#)
- [GetCheckTrx](#)
- [GetCardType](#)
- [GetInfo](#)
- [GetOpenBatchSummary](#)

4.1. How to Access

The PayLeap Reporting API supports the following types of transaction requests:

- REST
- SOAP

Messages must be sent using URL-encoded, HTTP GET messages.

4.1.1. URL

The testing URL is:

<https://uat.payleap.com/ReportingServices.svc>

The production URL is:

<https://secure1.payleap.com/ReportingServices.svc>

4.1.2. WSDL

The WSDL file for testing is:

<https://uat.payleap.com/ReportingServices.svc?wsdl>

The WSDL file for production is:

<https://secure1.payleap.com/ReportingServices.svc?WSDL>

4.1.3. Setting up Your API Login Credentials

Refer to [Setting up Your API Login Credentials](#) for instructions.

4.1.4. Locating Your Vendor Number

Refer to [Locating Your Vendor Number](#) for instructions.

4.2. Test Data

You can request a test account on our testing server. To request this account, please send your email request to our technical support staff. Please include the following information with your test account request: company name, your name, phone number, email address associated with the test account, and which payment processor you would like to test. An email response will be sent with valid test information. Refer to Table 7 for a complete list of test parameters by payment type.

TABLE 7. REPORTING API TEST ACCOUNT PARAMETERS

Payment Type	Test Parameters
Credit Card	The test site accepts any valid, mod 10 credit card number. The test site does not validate AVS or CVV data and return passing values for any data submitted
Check	The test site accepts any valid account, routing, and MICR data
Debit Card	The test site accepts any card number of at least 16 digits. The test site does perform any encryption functions, so you can submit any value for the Pin and KeySerialNum values.
EBT	The test site accepts any 16-19 digit card number. The test site does perform any encryption functions, so you can submit any value for the Pin and KeySerialNum values.
Gift Card	The test site accepts any card number for gift card

4.3. GetCardTrx

This web service operation allows you to retrieve card transaction details for a merchant.

To access GetCardTrx, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/reportingservices.svc/GetCardTrx>

The production URL is:

<https://secure1.payleap.com/reportingservices.svc/GetCardTrx>

The following sections describe the parameters required to GetCardTrx.

4.3.2. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
RPNum	Required	The PayLeap Vendor number that uniquely identifies your merchant account
PNRef	Optional	To search for a single transaction, provide the unique payment reference number assigned to the transaction. If this field is provided, all other query fields are ignored.
BeginDt	Required, except when PNRef is provided	<p>The begin date of the date range in MM/DD/YYYY (or YYYY-MM-DD or YYYY-MM-DDThh:mm:ss) format. This date will be converted to YYYY-MM-DDThh:mm:ss (time is in 24-hour format). If the submitted value does not contain time information, BeginDt will default to midnight on the given date.</p> <p>For example:</p> <ul style="list-style-type: none"> 2015-08-19T12:00:12 is kept as is 2015-08-19 becomes 2015-08-19T00:00:00 2015/08/19 becomes 2015-08-19T00:00:00 08/19/2015 becomes 2015-08-19T00:00:00 <p>The reporting service returns transactions dated greater than or equal to the begin date</p>
EndDt	Required, except when PNRef is provided	<p>The end date of the date range in MM/DD/YYYY (or YYYY-MM-DD or YYYY-MM-DDThh:mm:ss) format. This date will be converted to YYYY-MM-DDThh:mm:ss (time is in 24-hour format). If the submitted value does not contain time information, EndDt increments to the next day at midnight, such that no transaction on the desired end date will be excluded based on its time.</p> <p>For example:</p> <ul style="list-style-type: none"> 2015-08-19T12:00:12 is kept as is 2015-08-19 becomes 2015-08-20T00:00:00 08/19/2015 becomes 2015-08-20T00:00:00 <p>The reporting service returns transactions dated less than the end date</p>
PaymentType	Optional	<p>The type of card used for payment. If provided, only those transactions matching the PaymentType will be included. Refer to Appendix F for valid values.</p> <p>To include multiple payment types, submit each desired type separated by commas. For example: "PAYRECEIPT, SETTLE" will pull all transactions with either PayReceipt or Settle payment types.</p>

Parameter	Required	Description
ExcludePaymentType	Optional	Indicates which PaymentType(s) to exclude from the response. If provided, any transaction matching the ExcludePaymentType will be excluded. Refer to Appendix F for valid values.
TransType	Optional	The transaction type being performed. If provided, only those transactions matching the TransType will be included. Refer to Appendix F for valid values. To include multiple payment types, submit each desired type separated by commas. For example: "Credit,Sale" will pull all transactions with either Credit or Sale transaction types.
ExcludeTransType	Optional	Indicates which TransType(s) to exclude from the response. If provided, any transaction matching the ExcludeTransType will be excluded. Refer to Appendix F for valid values.
ApprovalCode	Optional	The code returned by PayLeap for approved transactions. If provided, only those transactions matching the ApprovalCode parameter will be included.
Result	Optional	The transaction result code from PayLeap. If provided, only those transactions matching the Result will be included. Valid values are: <p style="text-align: center;">0 (approved)</p> All other values represent a declined transaction To return all declined transactions, you should leave this field empty and set the ExcludeResult to 0 instead.
ExcludeResult	Optional	Indicates which Result code(s) to exclude from the response. If provided, any transactions matching the ExcludeResult will be excluded.
NameOnCard	Optional	Cardholder's name as it appears on the card. If provided, only those transactions with cardholder's name matching NameOnCard will be included. This parameter uses partial matching. For example: "test" matches "test", "1test" and "1test234".
CardNum	Optional	A card number. If provided, only those transactions with the cardholder's name matching CardNum will be included. This parameter uses partial matching.

Parameter	Required	Description
CardType	Optional	<p>A type of credit card. If provided, only those transactions matching the CardType will be included. Refer to Appendix E for valid values.</p> <p>To include multiple payment types, submit each desired type separated by commas. For example, "VISA,MASTER,DISCOVER" will pull all transactions with either VISA, MASTER and DISCOVER card type.</p>
ExcludeCardType	Optional	<p>Indicates which CardType(s) to exclude from the response. If provided, any transaction with a card type matching the ExcludeCardType will be excluded. Refer to Appendix F for valid values.</p>
ExcludeVoid	Required, unless PRef is provided	<p>An option to exclude voided transactions. Valid values are TRUE or FALSE. The default value is TRUE.</p>
User	Optional	<p>The user who originated the transactions. If provided, only those transactions created by the matching User will be included. This parameter uses partial matching.</p>
InvoiceId	Optional	<p>The invoice ID that was included in the original transaction. If provided, only those transactions with matching InvoiceId will be included. This parameter uses partial matching.</p>
SettleFlag	Optional	<p>An option to retrieve the settled or unsettled transactions. Valid values are TRUE or FALSE</p>
SettleMsg	Optional	<p>The settlement ID or message returned from the host</p>
SettleDt	Optional	<p>The settlement timestamp in MM/DD/YYYYT00:00:00AM format</p>
TransformType	Optional	<p>The type of format to transform the data into. Valid values are:</p> <ul style="list-style-type: none"> XML – outputs the plain XML string XSL – uses XSL to transform the XML output DELIM – uses ColDelim and RowDelim to format the output <p>The default value is XML.</p>

Parameter	Required	Description
Xsl	Optional	The XSL to transform the resulting dataset. This field is used only if the TransformType is XSL. If provided, the resulting dataset will be transformed using this XSL. You may pass in a URL to the XSL file, or the XSL string itself. If this field is not empty, the Web Service tries to locate the file from the URL. If that fails, the Web Service treats it as an XSL string. The final XSL string will be loaded and validated against the XSL schema; if it passes, then that XSL will be used for transformation. For a tab-delimited transformation, a sample, predefined XSL is provided here: http://test.payleap.com/admin/ws/TabDelim.xsl
ColDelim	Optional	The string that separates each field. This field is used only if the TransformType is DELIM.
RowDelim	Optional	The string that separates each transaction. This field is used only if the TransformType is DELIM.
IncludeHeader	Optional	An option to include field headers in the first row using the same delimiter strings. This field is used only if the TransformType is DELIM. Valid values are TRUE or FALSE .
ExtData	Optional	An XML string containing additional data for the transaction. Refer to ExtData for more information.
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

4.3.2.1. ExtData

Parameter	Required	Description
CustomerID	Optional	The customer identification number
Amount	Optional	Total amount to search transactions for in DDDD.CC format
RegisterNum	Optional	The register number (submitted with the original transaction) to use to search for transactions

4.3.3. Response Values

Response Value	Description
TRX_HD_Key	The PNRef number that uniquely identifies the transaction
Invoice_ID	The invoice ID that is associated with the transaction
Date_DT	The date and time the transaction was processed
Merchant_Key	The Vendor ID of the Merchant account
TUser_Name_VC	The name of the user that processed the transaction
Tip_Amt_MN	The tip amount of the transaction
Approval_Code_CH	The approval code of the transaction

Response Value	Description
Auth_Amt_MN	The authorization amount of the transaction
Account_Type_CH	The transaction's account type (Visa, Amex, EBT, etc.)
Last_Update_DT	The date and time the transaction was processed or modified
Orig_TRX_HD_Key	For follow up transactions, the PNRRef # of the original transaction (i.e. the PNRRef # of a sale that was voided).
Result_CH	Displays whether the transaction was APPROVED or DECLINED.
Result_Txt_VC	The result message of the transaction.
Settle_Date_DT	The date and time the transaction was settled.
Settle_Flag_CH	Indicates whether a transaction has been settled.
Trans_Type_ID	The transaction type.
Void_Flag_CH	Indicates whether a transaction has been voided.
CustomerID	A unique number that identifies a customer.
AVS_Resp_CH	The Address Verification Service Code returned by the cardholder's issuing bank.
CV_Resp_CH	The Card Verification Number Code returned by the cardholder's issuing bank.
Host_Ref_Num_CH	The item number in the batch.
Zip_CH	The customer's ZIP code.
Acct_Num_CH	The last four digits of the cardholder's account number.
Total_Amt_MN	The total amount of the transaction.
Exp_CH	The expiration date of the card.
Name_on_Card_VC	The customer's name.
Type_CH	The transaction's payment type (Visa, Amex, EBT, etc.).
Cash_Back_Amt_MN	The cash back amount of the transaction.
Trans_Status	The status of the transaction

4.3.4. Example

4.3.4.1. Sample GetCardTrx Request

```
https://uat.payleap.com/reportingservices.svc/GetCardTrx?UserName=user123
_API&Password=test&RPNuM=123&PNRRef=&BeginDt=2000-01-01&EndDt=3000-01-
01&PaymentType=&ExcludePaymentType=&TransType=Sale
&ExcludeTransType=&ApprovalCode=&Result=&ExcludeResult=&NameOnCard=&CardN
um=&CardType=&ExcludeCardType=&ExcludeVoid=TRUE&User=&InvoiceId=&SettleFl
ag=&SettleMsg=&SettleDt=&TransformType=
&Xsl=&ColDelim=&RowDelim=&IncludeHeader=TRUE&ExtData=
```

4.3.4.2. Sample Success GetCardTrx Response

```
string xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
<RichDBDS><TrxDetailCard><TRX_HD_Key>14514</TRX_HD_Key><Invoice_ID></Invo
ice_ID><Date_DT>9/15/2011 11:53:03
AM</Date_DT><Merchant_Key>394</Merchant_Key><Reseller_Key>4</Reseller_Key
><TUser_Name_VC>shoap123</TUser_Name_VC><Processor_ID>GiftCard
```


Processor</Processor_ID><TRX_Settle_Key></TRX_Settle_Key><Tip_Amt_MN></Tip_Amt_MN><Approval_Code_CH></Approval_Code_CH><Auth_Amt_MN>1</Auth_Amt_MN><IP_VC>72.145.174.124</IP_VC><Account_Type_CH>MANUAL</Account_Type_CH><Last_Update_DT></Last_Update_DT><Orig_TRX_HD_Key></Orig_TRX_HD_Key><Result_CH>0</Result_CH><Result_Txt_VC>approval</Result_Txt_VC><Settle_Date_DT></Settle_Date_DT><Settle_Flag_CH>FALSE</Settle_Flag_CH><Trans_Type_ID>Sale</Trans_Type_ID><Void_Flag_CH>FALSE</Void_Flag_CH><CustomerID></CustomerID><AVS_Resp_CH>N</AVS_Resp_CH><CV_Resp_CH>S</CV_Resp_CH><Host_Ref_Num_CH>c3c7a40c-ae15-491f-82e2-aaba0f25e09c</Host_Ref_Num_CH><Zip_CH></Zip_CH><Acct_Num_CH>4111111111111111</Acct_Num_CH><Total_Amt_MN>1</Total_Amt_MN><Exp_CH>1215</Exp_CH><Name_on_Card_VC>GIFT</Name_on_Card_VC><Type_CH></Type_CH><Cash_Back_Amt_MN></Cash_Back_Amt_MN></TrxDetailCard><TrxDetailCard><TRX_HD_Key>14516</TRX_HD_Key><Invoice_ID></Invoice_ID><Date_DT>9/15/2011 11:53:44 AM</Date_DT><Merchant_Key>394</Merchant_Key><Reseller_Key>4</Reseller_Key><TUser_Name_VC>shoapl23</TUser_Name_VC><Processor_ID>GiftCard
Processor</Processor_ID><TRX_Settle_Key></TRX_Settle_Key><Tip_Amt_MN></Tip_Amt_MN><Approval_Code_CH></Approval_Code_CH><Auth_Amt_MN>1.01</Auth_Amt_MN><IP_VC>72.145.174.124</IP_VC><Account_Type_CH>MANUAL</Account_Type_CH><Last_Update_DT></Last_Update_DT><Orig_TRX_HD_Key></Orig_TRX_HD_Key><Result_CH>0</Result_CH><Result_Txt_VC>approval</Result_Txt_VC><Settle_Date_DT></Settle_Date_DT><Settle_Flag_CH>FALSE</Settle_Flag_CH><Trans_Type_ID>Sale</Trans_Type_ID><Void_Flag_CH>FALSE</Void_Flag_CH><CustomerID></CustomerID><AVS_Resp_CH>N</AVS_Resp_CH><CV_Resp_CH>S</CV_Resp_CH><Host_Ref_Num_CH>7a56be0b-dbb3-4d0c-b731-0298cc2efbc3</Host_Ref_Num_CH><Zip_CH></Zip_CH><Acct_Num_CH>4111111111111111</Acct_Num_CH><Total_Amt_MN>1.01</Total_Amt_MN><Exp_CH>1215</Exp_CH><Name_on_Card_VC>GIFT</Name_on_Card_VC><Type_CH></Type_CH><Cash_Back_Amt_MN></Cash_Back_Amt_MN></TrxDetailCard><TrxDetailCard><TRX_HD_Key>14517</TRX_HD_Key><Invoice_ID></Invoice_ID><Date_DT>9/15/2011 12:02:48 PM</Date_DT><Merchant_Key>394</Merchant_Key><Reseller_Key>4</Reseller_Key><TUser_Name_VC>shoapl23</TUser_Name_VC><Processor_ID>GiftCard
Processor</Processor_ID><TRX_Settle_Key></TRX_Settle_Key><Tip_Amt_MN></Tip_Amt_MN><Approval_Code_CH></Approval_Code_CH><Auth_Amt_MN>1.01</Auth_Amt_MN><IP_VC>72.145.174.124</IP_VC><Account_Type_CH>MANUAL</Account_Type_CH><Last_Update_DT></Last_Update_DT><Orig_TRX_HD_Key></Orig_TRX_HD_Key><Result_CH>0</Result_CH><Result_Txt_VC>approval</Result_Txt_VC><Settle_Date_DT></Settle_Date_DT><Settle_Flag_CH>FALSE</Settle_Flag_CH><Trans_Type_ID>Sale</Trans_Type_ID><Void_Flag_CH>FALSE</Void_Flag_CH><CustomerID></CustomerID><AVS_Resp_CH>N</AVS_Resp_CH><CV_Resp_CH>S</CV_Resp_CH><Host_Ref_Num_CH>2fbfa087-12ec-4157-966d-160a2bea44b4</Host_Ref_Num_CH><Zip_CH></Zip_CH><Acct_Num_CH>4111111111111111</Acct_Num_CH><Total_Amt_MN>1.01</Total_Amt_MN><Exp_CH>1215</Exp_CH><Name_on_Card_VC>GIFT</Name_on_Card_VC><Type_CH></Type_CH><Cash_Back_Amt_MN></Cash_Back_Amt_MN></TrxDetailCard><TrxDetailCard><TRX_HD_Key>14519</TRX_HD_Key><Invoice_ID></Invoice_ID><Date_DT>9/15/2011 12:03:48 PM</Date_DT><Merchant_Key>394</Merchant_Key><Reseller_Key>4</Reseller_Key><TUser_Name_VC>shoapl23</TUser_Name_VC><Processor_ID>GiftCard
Processor</Processor_ID><TRX_Settle_Key></TRX_Settle_Key><Tip_Amt_MN></Tip_Amt_MN><Approval_Code_CH></Approval_Code_CH><Auth_Amt_MN>1.02</Auth_Amt_MN><IP_VC>72.145.174.124</IP_VC><Account_Type_CH>MANUAL</Account_Type_CH><Last_Update_DT></Last_Update_DT><Orig_TRX_HD_Key></Orig_TRX_HD_Key><Result_CH>0</Result_CH><Result_Txt_VC>approval</Result_Txt_VC><Settle_Date_DT></Settle_Date_DT><Settle_Flag_CH>FALSE</Settle_Flag_CH><Trans_Type_ID>Sale</Trans_Type_ID><Void_Flag_CH>FALSE</Void_Flag_CH><CustomerID></CustomerID>

```
erID><AVS_Resp_CH>N</AVS_Resp_CH><CV_Resp_CH>S</CV_Resp_CH><Host_Ref_Num_CH>65652f1b-2671-4351-8214-a200a5a5d75b</Host_Ref_Num_CH><Zip_CH></Zip_CH><Acct_Num_CH>411111111111111111</Acct_Num_CH><Total_Amt_MN>1.02</Total_Amt_MN><Exp_CH>1215</Exp_CH><Name_on_Card_VC>GIFT</Name_on_Card_VC><Type_CH></Type_CH><Cash_Back_Amt_MN></Cash_Back_Amt_MN></TrxDetailCard></RichDBDS> </string>
```

4.3.4.3. Sample Success GetCardTrx Request with a DELIM TransType

```
https://uat.payleap.com/reportingservices.svc/GetCardTrx?UserName=user123_API&Password=test&RPNNum=123&PNRef=&BeginDt=2000-01-01&EndDt=3000-01-01&PaymentType=&ExcludePaymentType=&TransType=Sale&ExcludeTransType=&ApprovalCode=&Result=&ExcludeResult=&NameOnCard=&CardNum=&CardType=&ExcludeCardType=&ExcludeVoid=TRUE&User=&InvoiceId=&SettleFlag=&SettleMsg=&SettleDt=&TransformType=DELIM&Xsl=&ColDelim=, &RowDelim=|&IncludeHeader=TRUE&ExtData=
```

4.3.4.4. Sample Success GetCardTrx Response with a DELIM TransType

```
<string xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
TRX_HD_Key, Invoice_ID, Date_DT, Merchant_Key, Reseller_Key, TUser_Name_VC, Processor_ID, TRX_Settle_Key, Tip_Amt_MN, Approval_Code_CH, Auth_Amt_MN, IP_VC, Account_Type_CH, Last_Update_DT, Orig_TRX_HD_Key, Result_CH, Result_Txt_VC, Settle_Date_DT, Settle_Flag_CH, Trans_Type_ID, Void_Flag_CH, CustomerID, AVS_Resp_CH, CV_Resp_CH, Host_Ref_Num_CH, Zip_CH, Acct_Num_CH, Total_Amt_MN, Exp_CH, Name_on_Card_VC, Type_CH, Cash_Back_Amt_MN|14514,,9/15/2011 11:53:03
AM,123,4,user123,GiftCard
Processor,,,,1,72.145.174.124,MANUAL,,,0,approval,,FALSE,Sale,FALSE,,N,S,c3c7a40c-ae15-491f-82e2-aaba0f25e09c,,4111111111111111,1,1215,GIFT,,|14516,,9/15/2011 11:53:44
AM,123,4,user123,GiftCard
Processor,,,,1.01,72.145.174.124,MANUAL,,,0,approval,,FALSE,Sale,FALSE,,N,S,7a56be0b-dbb3-4d0c-b731-0298cc2efbc3,,4111111111111111,1.01,1215,GIFT,,|14517,,9/15/2011 12:02:48
PM,123,4,user123,GiftCard
Processor,,,,1.01,72.145.174.124,MANUAL,,,0,approval,,FALSE,Sale,FALSE,,N,S,2fbfa087-12ec-4157-966d-160a2bea44b4,,4111111111111111,1.01,1215,GIFT,,|14519,,9/15/2011 12:03:48
PM,123,4,user123,GiftCard
Processor,,,,1.02,72.145.174.124,MANUAL,,,0,approval,,FALSE,Sale,FALSE,,N,S,65652f1b-2671-4351-8214-a200a5a5d75b,,4111111111111111,1.02,1215,GIFT,,|14646,,9/19/2011 1:29:08
PM,123,4,user123,GiftCard
Processor,,,,1.01,72.145.174.124,MANUAL,,,0,approval,,FALSE,Sale,FALSE,,N,S,9f85ed90-c285-4df5-99e7-65cfe3d578ee,,4111111111111111,1.01,1215,GIFT,,|14647,,9/19/2011 1:29:17
PM,123,4,user123,GiftCard
Processor,,,,1.02,72.145.174.124,MANUAL,,,0,approval,,FALSE,Sale,FALSE,,N,S,dcfe5d4d-cceb-42d9-8e0d-abf823b5a9e1,,4111111111111111,1.02,1215,GIFT,,|14648,,9/19/2011 1:29:28
PM,123,4,user123,GiftCard
Processor,,,,1.03,72.145.174.124,MANUAL,,,0,approval,,FALSE,Sale,FALSE,,N,S,2d58544d-1d80-438c-8608-7a0399a932a9,,4111111111111111,1.03,1215,GIFT,,|14663,,9/19/2011 4:22:52
PM,123,4,user123,GiftCard
Processor,,123,1.55,72.145.174.124,MANUAL,,,0,approval,,FALSE,Sale,FALSE,123,N,S,40c06b64-2ae6-4ea6-b032-
```

```
f6aedfe20869,,4111111111111111,1.55,1215,GIFT,,|15519,,9/30/2011 2:26:00
PM,123,4,user123,GiftCard
Processor,,,,1,72.145.174.124,MANUAL,,,0,approval,,FALSE,Sale,FALSE,,N,S,
3a2f35b4-7798-42c8-8c70-e37fdb85395d,,1,1,1215,GIFT,,|
</string>
```

When using the DELIM TransType and multiple transactions are returned in a response, transactions are separated by the RowDelim character. In the example above, the “|” character indicates the start of a new transaction in the response.

4.4. GetCardTrxSummary

This web service operation allows you to retrieve a summary of card payments for a merchant.

To access GetCardTrx, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/reportingservices.svc/GetCardTrxSummary>

The production URL is:

<https://secure1.payleap.com/reportingservices.svc/GetCardTrxSummary>

The following sections describe the parameters required to GetCardTrxSummary.

4.4.2. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
RPNUM	Required	The PayLeap Vendor number that uniquely identifies your merchant account
BeginDt	Required	The begin date of the date range in MM/DD/YYYY format.
EndDt	Required	The inclusive end date of the date range in MM/DD/YYYY format.
ApprovalCode	Optional	The code returned by PayLeap for approved transactions. If provided, only those transactions matching the ApprovalCode parameter will be included.
Register	Optional	The register that originated the transaction. If provided, only those transactions with the matching register will be included.

Parameter	Required	Description
NameOnCard	Optional	Cardholder's name as it appears on the card. If provided, only those transactions with cardholder's name matching NameOnCard will be included. This parameter uses partial matching. For example: "test" matches "test", "1test" and "1test234".
CardNum	Optional	A card number. If provided, only those transactions with the cardholder's name matching CardNum will be included. This parameter uses partial matching.
CardType	Optional	A type of credit card. If provided, only those transactions matching the CardType will be included. Refer to Appendix E for valid values. To include multiple payment types, submit each desired type separated by commas. For example, "VISA,MASTER,DISCOVER" will pull all transactions with either VISA, MASTER and DISCOVER card type.
ExcludeVoid	Required	An option to exclude voided transactions. Valid values are TRUE or FALSE . The default value is TRUE.
User	Optional	The user who originated the transactions. If provided, only those transactions created by the matching User will be included. This parameter uses partial matching.
SettleFlag	Optional	An option to retrieve the settled transactions or unsettled transactions. Valid values are TRUE or FALSE
SettleMsg	Optional	The settlement ID or message returned from the host
SettleDt	Optional	The settlement timestamp in MM/DD/YYYYT00:00:00AM format
TransformType	Optional	The type of format to transform the data into. Valid values are: XML - outputs the plain XML string XSL - uses XSL to transform the XML output DELIM - uses ColDelim and RowDelim to format the output The default value is XML.

Parameter	Required	Description
Xsl	Optional	The XSL to transform the resulting dataset. This field is used only if the TransformType is XSL. If provided, the resulting dataset will be transformed using this XSL. You may pass in a URL to the XSL file, or the XSL string itself. If this field is not empty, the Web Service tries to locate the file from the URL. If that fails, the Web Service treats it as an XSL string. The final XSL string will be loaded and validated against the XSL schema; if it passes, then that XSL will be used for transformation. For a tab-delimited transformation, a sample, predefined XSL is provided here: http://test.payleap.com/admin/ws/TabDelim.xsl
ColDelim	Optional	The string that separates each field. This field is used only if the TransformType is DELIM.
RowDelim	Optional	The string that separates each transaction. This field is used only if the TransformType is DELIM.
IncludeHeader	Optional	An option to include field headers in the first row using the same delimiter strings. This field is used only if the TransformType is DELIM. Valid values are TRUE or FALSE .
ExtData	Not used	Not used for this operation.
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

4.4.3. Response Values

Response Value	Description
CardTrxSummary	Indicates a new card transaction summary.
PaymentMethod	Indicates a new method of payment.
Payment_Type_ID	The transaction's payment type (Visa, Amex, EBT, etc.).
Sale	The dollar amount of all Sale transactions.
Authorization	The dollar amount of all Authorization (PreAuth) transactions.
PostAuth	The dollar amount of all PostAuth transactions.
Return	The dollar amount of all Return (Credit) transactions.
Capture	The dollar amount of all Capture transactions. This value will always return 0 .
TotalAmt	The total amount of a transaction.
Sale_Cnt	The transaction count of all Sale transactions.
Authorization_Cnt	The transaction count of all Authorization (PreAuth) transactions.
PostAuth_Cnt	The transaction count of all PostAuth transactions.
Return_Cnt	The transaction count of all Return (Credit) transactions.

Response Value	Description
Capture_Cnt	The transaction count of all Capture transactions.
Cnt	The CustomerID of a customer associated with the transaction.

4.4.4. Example

4.4.4.1. Sample GetCardTrxSummary Request

```
https://uat.payleap.com/reportingservices.svc/GetCardTrxSummary?UserName=
user123_API&Password=test&RPNu=123&BeginDt=2000-01-01&EndDt=3000-01-
01&ApprovalCode=&Register=&NameOnCard=&CardNum=&CardType=VISA&ExcludeVoid
=FALSE&User=&SettleFlag=&SettleMsg=&SettleDt=&TransformType=&Xsl=&ColDeli
m=&RowDelim=&IncludeHeader=&ExtData=
```

4.4.4.2. Sample Success GetCardTrx Response

```
<string xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
<CardTrxSummary><PaymentMethod><Payment_Type_ID>VISA</Payment_Type_ID><Sa
le>25.12</Sale><Authorization>73.99</Authorization><PostAuth>0</PostAuth>
<Return>0</Return><Capture>1E+25</Capture><TotalAmt>1E+25</TotalAmt><Sale
_Cnt>6</Sale_Cnt><Authorization_Cnt>13</Authorization_Cnt><PostAuth_Cnt>0
</PostAuth_Cnt><Return_Cnt>0</Return_Cnt><Capture_Cnt>96</Capture_Cnt><Cn
t>115</Cnt></PaymentMethod></CardTrxSummary></string>
```

4.5. GetCheckTrx

This web service operation allows you to retrieve check transaction details for a merchant.

To access GetCheckTrx, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/reportingservices.svc/GetCheckTrx>

The production URL is:

<https://secure1.payleap.com/reportingservices.svc/GetCheckTrx>

The following sections describe the parameters required to GetCheckTrx.

4.5.2. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
RPNu	Required	The PayLeap Vendor number that uniquely identifies your merchant account
PNRef	Optional	To search for a single transaction, provide the unique payment reference number assigned to the transaction. If this field is provided, all other query fields are ignored.

Parameter	Required	Description
BeginDt	Required, except when PNRef is provided	<p>The begin date of the date range in MM/DD/YYYY (or YYYY-MM-DD or YYYY-MM-DDThh:mm:ss) format. This date will be converted to YYYY-MM-DDThh:mm:ss (time is in 24-hour format). If the submitted value does not contain time information, BeginDt will default to midnight on the given date.</p> <p>For example:</p> <p style="padding-left: 40px;">2015-08-19T12:00:12 is kept as is</p> <p style="padding-left: 40px;">2015-08-19 becomes 2005-08-19T00:00:00</p> <p style="padding-left: 40px;">2015/08/19 becomes 2005-08-19T00:00:00</p> <p style="padding-left: 40px;">08/19/2015 becomes 2005-08-19T00:00:00</p> <p>The reporting service returns transactions dated greater than or equal to the begin date</p>
EndDt	Required, except when PNRef is provided	<p>The end date of the date range in MM/DD/YYYY (or YYYY-MM-DD or YYYY-MM-DDThh:mm:ss) format. This date will be converted to YYYY-MM-DDThh:mm:ss (time is in 24-hour format). If the submitted value does not contain time information, EndDt increments to the next day at midnight, such that no transaction on the desired end date will be excluded based on its time.</p> <p>For example:</p> <p style="padding-left: 40px;">2005-08-19T12:00:12 is kept as is</p> <p style="padding-left: 40px;">2005-08-19 becomes 2005-08-20T00:00:00</p> <p style="padding-left: 40px;">08/19/2005 becomes 2005-08-20T00:00:00</p> <p>The reporting service returns transactions dated less than the end date</p>
PaymentType	Optional	<p>The type of card used for payment. If provided, only those transactions matching the PaymentType will be included. Refer to Appendix F for valid values.</p> <p>To include multiple payment types, submit each desired type separated by commas. For example, "ACH, ECHECK" will pull all transactions with either ACH or ECHECK payment types.</p>
ExcludePaymentType	Optional	<p>Indicates which PaymentType(s) to exclude from the response. If provided, any transaction matching the ExcludePaymentType will be excluded. Refer to Appendix F for valid values.</p>

Parameter	Required	Description
TransType	Optional	The transaction type being performed. If provided, only those transactions matching the TransType will be included. Refer to Appendix F for valid values. To include multiple payment types, submit each desired type separated by commas. For example: "Credit,Sale" will pull all transactions with either Credit or Sale transaction types.
ExcludeTransType	Optional	Indicates which TransType(s) to exclude from the response. If provided, any transaction matching the ExcludeTransType will be excluded. Refer to Appendix F for valid values.
ApprovalCode	Optional	The code returned by PayLeap for approved transactions. If provided, only those transactions matching the ApprovalCode parameter will be included.
Result	Optional	The transaction result code from PayLeap. If provided, only those transactions matching the Result will be included. Valid values are: 0 (approved) All other values represent a declined transaction To return all declined transactions, you should leave this field empty and set the ExcludeResult to 0 instead.
ExcludeResult	Optional	Indicates which Result code(s) to exclude from the response. If provided, any transactions matching the ExcludeResult will be excluded.
NameOnCheck	Optional	The customer's name as it appears on the check. If provided, only those transactions with cardholder's name matching NameOnCheck will be included. This parameter uses partial matching. For example: "test" matches "test", "1test" and "1test234".
CheckNum	Optional	A check number. If provided, only those transactions with matching CheckNum will be included.
AcctNum	Optional	The customer's checking account number. If provided, only those transactions matching the AcctNum will be included. This parameter uses partial matching.
RouteNum	Optional	The routing number printed on the check. Any transactions matching the RouteNum (Transit Number) will be included. This parameter uses partial matching.
ExcludeVoid	Required, unless PRef is provided	An option to exclude voided transactions. Valid values are TRUE or FALSE . The default value is TRUE.

Parameter	Required	Description
User	Optional	The user who originated the transactions. If provided, only those transactions created by the matching User will be included. This parameter uses partial matching.
InvoiceId	Optional	The invoice ID that was included in the original transaction. If provided, only those transactions with matching InvoiceId will be included. This parameter uses partial matching.
SettleFlag	Optional	An option to retrieve the settled or unsettled transactions. Valid values are TRUE or FALSE
SettleMsg	Optional	The settlement ID or message returned from the host
SettleDt	Optional	The settlement timestamp in MM/DD/YYYYT00:00:00AM format
TransformType	Optional	The type of format to transform the data into. Valid values are: XML – outputs the plain XML string XSL – uses XSL to transform the XML output DELIM – uses ColDelim and RowDelim to format the output The default value is XML.
Xsl	Optional	The XSL to transform the resulting dataset. This field is used only if the TransformType is XSL. If provided, the resulting dataset will be transformed using this XSL. You may pass in a URL to the XSL file, or the XSL string itself. If this field is not empty, the Web Service tries to locate the file from the URL. If that fails, the Web Service treats it as an XSL string. The final XSL string will be loaded and validated against the XSL schema; if it passes, then that XSL will be used for transformation. For a tab-delimited transformation, a sample, predefined XSL is provided here: http://test.payleap.com/admin/ws/TabDelim.xsl
ColDelim	Optional	The string that separates each field. This field is used only if the TransformType is DELIM.
RowDelim	Optional	The string that separates each transaction. This field is used only if the TransformType is DELIM.
IncludeHeader	Optional	An option to include field headers in the first row using the same delimiter strings. This field is used only if the TransformType is DELIM. Valid values are TRUE or FALSE .
ExtData	Optional	An XML string containing additional data for the transaction. Refer to ExtData for more information.
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

4.5.2.1. ExtData

Parameter	Required	Description
ImageType	Optional	Valid values are: NO_IMAGE – Displays no image ONLY_IMAGE – Displays the image only ALL – Displays all images
CustomerID	Optional	The customer identification number
Amount	Optional	Total amount to search transactions for in DDDD.CC format
RegisterNum	Optional	The register number (submitted with the original transaction) to use to search for transactions

4.5.3. Response Values

Response Value	Description
TRX_HD_Key	The PNRef number that uniquely identifies the transaction.
Invoice_ID	The invoice ID that is associated with the transaction.
Date_DT	The date and time the transaction was processed.
Merchant_Key	The Vendor ID of the Merchant account.
TUser_Name_VC	The name of the user that processed the transaction.
Tip_Amt_MN	The tip amount of the transaction.
Approval_Code_CH	The approval code of the transaction.
Auth_Amt_MN	The authorization amount of the transaction.
Account_Type_CH	The transaction's account type (Visa, Amex, EBT, etc.).
Last_Update_DT	The date and time the transaction was processed or modified.
Orig_TRX_HD_Key	For follow up transactions, the PNRef # of the original transaction (i.e. the PNRef # of a sale that was voided).
Result_CH	Displays whether the transaction was APPROVED or DECLINED.
Result_Txt_VC	The result message of the transaction.
Settle_Date_DT	The date and time the transaction was settled.
Settle_Flag_CH	Indicates whether a transaction has been settled.
Trans_Type_ID	The transaction type.
Void_Flag_CH	Indicates whether a transaction has been voided.
CustomerID	A unique number that identifies a customer.
AVS_Resp_CH	The Address Verification Service Code returned by the cardholder's issuing bank.
CV_Resp_CH	The Card Verification Number Code returned by the cardholder's issuing bank.
Host_Ref_Num_CH	The item number in the batch.
Zip_CH	The customer's ZIP code.

Response Value	Description
CheckNum_CH	Check/ACH reports only. The number identifying the check.
AccountNum_VC	Check/ACH reports only. The customer's account number.
Total_Amt_MN	The total amount of the transaction.
NameOnCheck_VC	Check/ACH reports only. The customer's name that appears on the check.
TransitNum_VC	Check/ACH reports only. The routing number identifying the bank that holds the account.

4.5.4. Example

4.5.4.1. Sample GetCheckTrx Request

```
https://uat.payleap.com/reportingservices.svc/GetCheckTrx?UserName=user123_API&Password=test&RPNum=123&PNRef=&BeginDt=2011-09-20T12:00:00&EndDt=2011-09-20T12:30:00&PaymentType=VERIFY&ExcludePaymentType=&TransType=&ExcludeTransType=&ApprovalCode=&Result=0&ExcludeResult=&NameOnCheck=&CheckNum=&AcctNum=&RouteNum=&ExcludeVoid=&User=&InvoiceId=&SettleFlag=&SettleMsg=&SettleDt=&TransformType=&Xsl=&ColDelim=&RowDelim=&IncludeHeader=&ExtData=
```

4.5.4.2. Sample Success GetCheckTrx Response

```
<string xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
<RichDBDS><TrxDetailCheck><TRX_HD_Key>14701</TRX_HD_Key><Invoice_ID></Invoice_ID><Date_DT>9/20/2011 12:29:02
PM</Date_DT><Merchant_Key>123</Merchant_Key><Reseller_Key>4</Reseller_Key><TUser_Name_VC>user123</TUser_Name_VC><Processor_ID>ACH
Processor</Processor_ID><TRX_Settle_Key></TRX_Settle_Key><Tip_Amt_MN></Tip_Amt_MN><Approval_Code_CH></Approval_Code_CH><Auth_Amt_MN>1.02</Auth_Amt_MN><IP_VC>72.145.174.124</IP_VC><Account_Type_CH>MANUAL</Account_Type_CH><Last_Update_DT>9/20/2011 12:29:02
PM</Last_Update_DT><Orig_TRX_HD_Key></Orig_TRX_HD_Key><Result_CH>0</Result_CH><Result_Txt_VC>approval</Result_Txt_VC><Settle_Date_DT>9/21/2011
12:00:00
AM</Settle_Date_DT><Settle_Flag_CH>FALSE</Settle_Flag_CH><Trans_Type_ID>Sale</Trans_Type_ID><Void_Flag_CH>FALSE</Void_Flag_CH><CustomerID></CustomerID><AVS_Resp_CH>N</AVS_Resp_CH><CV_Resp_CH>S</CV_Resp_CH><Host_Ref_Num_CH>6d54be6b-15de-475d-92dc-6528bd14720f</Host_Ref_Num_CH><Zip_CH></Zip_CH><CheckNum_CH>1</CheckNum_CH><AccountNum_VC>1234567890</AccountNum_VC><Total_Amt_MN>1.02</Total_Amt_MN><NameOnCheck_VC>John
Doe</NameOnCheck_VC><TransitNum_VC>262084356</TransitNum_VC></TrxDetailCheck></RichDBDS>
</string>
```

4.6. GetCardType

This web service operation allows you to retrieve the name of the card issuer.

To access GetCardType, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/reportingservices.svc/GetCardType>

The production URL is:

<https://secure1.payleap.com/reportingservices.svc/GetCardType>

The following sections describe the parameters required to GetCardType.

4.6.2. Request Parameters

Parameter	Required	Description
CardNumber	Required	The number of a credit card.

4.6.3. Response Values

Response Value	Description
VISA	Visa card
MASTERCARD	MasterCard card
AMEX	American Express card
DISCOVER	Novus Discover card
DINERSCLUB	Diners Club card

4.6.4. Example

4.6.4.1. Sample GetCardType Request

```
https://uat.payleap.com/reportingservices.svc/GetCardType?CardNumber=4005550000000019
```

4.6.4.2. Sample Success GetCardType Response

```
<string xmlns="http://schemas.microsoft.com/2003/10/Serialization/">VISA </string>
```

4.7. GetInfo

This web service operation allows you to retrieve information to your merchant account, including the following:

- [BatchInquiry](#)
- [Setup](#)
- [StatusCheck](#)
- [Initialize](#)

To access GetInfo, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/reportingservices.svc/GetInfo>

The production URL is:

<https://secure1.payleap.com/reportingservices.svc/GetInfo>

The following sections describe the parameters required to GetInfo.

4.7.2. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key
TransType	Optional	<p>The transaction type being performed. If provided, only those transactions matching the TransType will be included. Refer to Appendix F for valid values. Additional values for this Command:</p> <ul style="list-style-type: none"> • Use the BatchInquiry TransType to generate a summary of transaction counts, payment types, and dollar amounts within the current batch • Use the Setup TransType to view a list of merchant setup information. • Use the StatusCheck TransType to establish a test connection to the payment server. • Use the Initialize TransType to view a list of merchant account information. •
ExtData	Optional	An XML string containing additional data for the transaction. Refer to ExtData for more information.
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

4.7.2.1. ExtData

Parameter	Required	Description
TrainingMode	Optional	An indicator that specifies if transactions will or will not be processed for local loop back testing. Valid values are T or F
BatchSequenceNum	Optional	<p>A number that indicates which previous or current batch the Payment Server should query from the processor in order to get information about the batch. Used when the TransType is BatchInquiry. Valid values are:</p> <ul style="list-style-type: none"> 0 (default; current open batch) 1 (previous batch) 2 (the batch before the previous batch) N (where N is a number of batches before the previous batch)

4.7.3. BatchInquiry

Use the BatchInquiry TransType to generate a summary of transaction counts, payment types, and dollar amounts within the current batch.

4.7.3.1. BatchInquiry TransType Response Values

Response Value	Description
ExtData	A string containing additional information about the transaction.
RespMSG	The response message from PayLeap.
Result	The result code from PayLeap indicating the result of the transaction. Always 0 for successful transactions.

4.7.3.2. Example

4.7.3.2.1. Sample GetInfo Request Using BatchInquiry TransType

```
https://uat.payleap.com/reportingservices.svc/GetInfo?UserName=user123_AP
I&Password=test&TransType=BatchInquiry&ExtData=
```

4.7.3.2.2. Sample Success GetInfo Response Using BatchInquiry TransType

```
<Response xmlns="http://www.payleap.com/payments" xmlns:i="http://www.w3.
org/2001/XMLSchema-instance">
  <ExtData>
    ACH_Sale_Amount=45.21, ACHSale_Count=40, ACH_Return_Amount=5.99,
    ACH_Return_Count=5, ACH_Net_Amount=39.22, ACHNet_Count=45,
    CreditCard_Sale_Amount=13.12, CreditCardSale_Count=3,
    CreditCard_Return_Amount=12, CreditCard_Return_Count=3,
    CreditCard_Net_Amount=1.12, CreditCardNet_Count=6,
    DebitCard_Sale_Amount=36.06, DebitCardSale_Count=4,
    DebitCard_Return_Amount=0, DebitCard_Return_Count=0,
    DebitCard_Net_Amount=36.06, DebitCardNet_Count=4, EBT_Sale_Amount=40.67,
    EBTSale_Count=4, EBT_Return_Amount=0, EBT_Return_Count=0,
    EBT_Net_Amount=40.67, EBTNet_Count=4, GiftCard_Sale_Amount=15.69,
    GiftCardSale_Count=20, GiftCard_Return_Amount=4.21,
    GiftCard_Return_Count=6, GiftCard_Net_Amount=11.48, GiftCardNet_Count=26
  </ExtData>
  <RespMSG>Approved</RespMSG>
  <Result>0</Result>
</Response>
```

4.7.4. Setup

Use the Setup TransType to view a list of merchant setup information.

4.7.4.1. Setup TransType Response Values

Response Value	Description
ExtData	A string containing additional information about the transaction.
RespMSG	The response message from PayLeap.
Result	The result code from PayLeap indicating the result of the transaction. Always 0 for successful transactions.

4.7.4.2. Example

4.7.4.2.1. Sample GetInfo Request Using Setup TransType

```
https://uat.payleap.com/reportingservices.svc/GetInfo?UserName=user123_AP
I&Password=test&TransType=Setup&ExtData=
```

4.7.4.2.2. Sample Success GetInfo Response Using Setup TransType

```
<Response xmlns="http://www.payleap.com/payments" xmlns:i="http://www.w3.
org/2001/XMLSchema-instance">
<ExtData>Force_Duplicates=Y, Auto_Close_Batch=N, DEBIT=Y, AMEX=Y, DINERS=Y,
DISCOVER=Y, JCB=Y, MASTERCARD=Y, VISA=Y, EBT=Y, GIFT=Y,
eCheck=Y</ExtData><RespMSG>Approved</RespMSG><Result>0</Result> </Response>
```

4.7.5. StatusCheck

Use the StatusCheck TransType to establish a test connection to the payment server.

4.7.5.1. StatusCheck TransType Response Values

Response Value	Description
ExtData	A string containing additional information about the transaction.
RespMSG	The response message from PayLeap.
Result	The result code from PayLeap indicating the result of the transaction. Always 0 for successful transactions.

4.7.5.2. Example

4.7.5.2.1. Sample GetInfo Request Using StatusCheck TransType

```
https://uat.payleap.com/reportingservices.svc/GetInfo?UserName=user123_AP
I&Password=test&TransType=StatusCheck&ExtData=
```

4.7.5.2.2. Sample Success GetInfo Response Using StatusCheck TransType

```
<Response xmlns="http://www.payleap.com/payments" xmlns:i="http://www.w3.
org/2001/XMLSchema-instance">
<ExtData>Ok</ExtData><RespMSG>Approved</RespMSG><Result>0</Result> </Response>
```

4.7.6. Initialize

Use the Initialize TransType to view a list of merchant account information.

4.7.6.1. Initialize TransType Response Values

Response Value	Description
ExtData	A string containing additional information about the transaction
Vendor	The Vendor number that uniquely identifies the merchant account
MerchantID	The merchant's ID number
Phone1	The merchant's primary phone number
Phone2	The merchant's secondary phone number
Auto_Close_Batch	Indicates if the merchant automatically closes batches. Valid values are Y or N

Response Value	Description
CreditCard	Indicates if the merchant supports credit card payments
PaymentTypes	Lists all types of payment supported by the merchant
CardType	The credit card type (VISA, MASTERCARD, etc.), payment method (Debit, EBT, or EGC) for card-based payments
RespMSG	The response message from PayLeap.
Result	The result code from PayLeap indicating the result of the transaction. Always 0 for successful transactions.

4.7.6.2. Example

4.7.6.2.1. Sample GetInfo Request Using Initialize TransType

```
https://uat.payleap.com/reportingservices.svc/GetInfo?UserName=user123_API&Password=test&TransType=Initialize&ExtData=
```

4.7.6.2.2. Sample Success GetInfo Response Using Initialize TransType

```
<Response xmlns="http://www.payleap.com/payments" xmlns:i="http://www.w3.org/2001/XMLSchema-instance">
  <ExtData><Vendor>123</Vendor><MerchantID></MerchantID><LiveURL></LiveURL>
  <Phone1>5555551212</Phone1><Phone2></Phone2><Auto_Close_Batch>N</Auto_Close_Batch>
  <eCheck>Y</eCheck><CreditCard>Y</CreditCard><PaymentTypes><CardType>AMEX</CardType>
  <CardType>VISA</CardType><CardType>MASTERCARD</CardType><CardType>DINERS</CardType>
  <CardType>DISCOVER</CardType><CardType>JCB</CardType></PaymentTypes></ExtData>
  <RespMSG>Approved</RespMSG><Result>0</Result> </Response>
```

4.8. GetOpenBatchSummary

This web service operation allows you to retrieve the payment type transaction summary of the current open batch for a merchant.

To access GetOpenBatchSummary, use an HTTP GET to one of the following URLs.

The testing URL is:

<https://uat.payleap.com/reportingservices.svc/GetOpenBatchSummary>

The production URL is:

<https://secure1.payleap.com/reportingservices.svc/GetOpenBatchSummary>

The following sections describe the parameters required to GetOpenBatchSummary.

4.8.2. Request Parameters

Parameter	Required	Description
UserName	Required	Merchant PayLeap API login ID
Password	Required	Merchant PayLeap API transaction key

Parameter	Required	Description
RPNum	Required	The PayLeap Vendor number that uniquely identifies your merchant account.
BeginDt	Optional	The begin date of the date range in MM/DD/YYYY format. This date will be converted to: MM/DD/YYYYT00:00:00:0000AM
EndDt	Optional	The end date of the date range in MM/DD/YYYY format. This date will be converted to: MM/DD/YYYYT12:59:59:9999PM
Parameters marked as optional or not used must be passed as empty parameters if you are not submitting a value		

4.8.3. Response Values

The ValidCard service returns an XML integer element with an integer code describing the response. The following table describes the possible response values.

Response Value	Description
Payment_Type_ID	The transaction's payment type (Visa, Amex, EBT, etc.)
Sale	The dollar amount of all Sale transactions
Authorization	The dollar amount of all Authorization (PreAuth) transactions
PostAuth	The dollar amount of all PostAuth transactions
Return	The dollar amount of all Return (Credit) transactions
Inquire	The dollar amount of a Gift Card Balance Inquiry
Capture	The dollar amount of all Capture transactions. This value will always return 0
Reload	The dollar amount of all Gift Card Reload transactions
Activate	The dollar amount of all Gift Card Activation transactions
Sale_Cnt	The transaction count of all Sale transactions
Authorization_Cnt	The transaction count of all Authorization (PreAuth) transactions
PostAuth_Cnt	The transaction count of all PostAuth transactions
Return_Cnt	The transaction count of all Return (Credit) transactions
Capture_Cnt	The transaction count of all Capture transactions
Inquire_Cnt	The transaction count of all Gift Card Balance Inquiries
Reload_Cnt	The transaction count of all Gift Card Reload transactions
Activate_Cnt	The transaction count of all Gift Card Activation transactions

4.8.4. Example

4.8.4.1. Sample GetOpenBatchSummary Request

```
https://uat.payleap.com/reportingservices.svc/GetOpenBatchSummary?UserNam
e=user123_API&Password=test&RPNum=123&BeginDt=&EndDt=&ExtData=
```

4.8.4.2. Sample Success GetOpenBatchSummary Response

```

<string xmlns="http://schemas.microsoft.com/2003/10/Serialization/">
<OpenBatchSummary><Table><Payment_Type_ID>DEBIT</Payment_Type_ID><Sale>36
.06</Sale><Authorization>0</Authorization><PostAuth>0</PostAuth><Return>0
</Return><Capture>0</Capture><Sale_Cnt>4</Sale_Cnt><Authorization_Cnt>0</
Authorization_Cnt><PostAuth_Cnt>0</PostAuth_Cnt><Return_Cnt>0</Return_Cnt
><Capture_Cnt>0</Capture_Cnt></Table><Table><Payment_Type_ID>EBT</Payment
_Type_ID><Sale>40.67</Sale><Authorization>0</Authorization><PostAuth>0</P
ostAuth><Return>0</Return><Inquire>0</Inquire><Capture>0</Capture><Sale_C
nt>4</Sale_Cnt><Authorization_Cnt>0</Authorization_Cnt><PostAuth_Cnt>0</P
ostAuth_Cnt><Return_Cnt>0</Return_Cnt><Inquire_Cnt>0</Inquire_Cnt><Captur
e_Cnt>0</Capture_Cnt></Table><Table><Payment_Type_ID>eCheck</Payment_Type
_ID><Sale>40.92</Sale><Authorization>12.91</Authorization><PostAuth>4.29<
/PostAuth><Return>5.99</Return><Capture>0</Capture><Sale_Cnt>36</Sale_Cnt
><Authorization_Cnt>12</Authorization_Cnt><PostAuth_Cnt>4</PostAuth_Cnt><
Return_Cnt>5</Return_Cnt><Capture_Cnt>0</Capture_Cnt></Table><Table><Paym
ent_Type_ID>GIFT</Payment_Type_ID><Sale>11.65</Sale><Authorization>0</Aut
horization><PostAuth>0</PostAuth><Return>4.21</Return><Reload>2.03</Reloa
d><Activate>1.11</Activate><Inquire>0</Inquire><Capture>0</Capture><Sale_
Cnt>11</Sale_Cnt><Authorization_Cnt>0</Authorization_Cnt><PostAuth_Cnt>0<
/PostAuth_Cnt><Return_Cnt>6</Return_Cnt><Reload_Cnt>2</Reload_Cnt><Activa
te_Cnt>6</Activate_Cnt><Inquire_Cnt>0</Inquire_Cnt><Capture_Cnt>0</Captur
e_Cnt></Table><Table><Payment_Type_ID>VISA</Payment_Type_ID><Sale>13.12</
Sale><Authorization>73.99</Authorization><PostAuth>0</PostAuth><Return>12
</Return><Capture>0</Capture><Sale_Cnt>3</Sale_Cnt><Authorization_Cnt>13<
/Authorization_Cnt><PostAuth_Cnt>0</PostAuth_Cnt><Return_Cnt>3</Return_Cn
t><Capture_Cnt>0</Capture_Cnt></Table></OpenBatchSummary> </string>

```

Appendix A: PayLeap Response Codes

Code	Message	Recommended Merchant Action
1	User Authentication Failed	Please confirm API Login ID (username) and Transaction Key (password) are correct and reattempt call
3	Transaction Type not Specified	Confirm that the "transtype" parameter is specified
3	Invalid Transaction Type	Specify correct "transtype" for call (i.e. "sale", "salecomplete", "refund")
4	Invalid Amount	Confirm a numeric amount value for amount parameter
4	Amount Not Defined	Confirm a numeric amount value for amount parameter
19	PNRef# or Card Details not defined	Confirm that pnref or card details are provided when required (refer to call parameter tables)
19	Invalid PNRef#	Confirm that pnref for transaction is correct
23	Credit Card Number not Specified	Confirm that cardnum value is specified
23	Invalid Credit Card Number	Confirm that cardnum value is correct
24	Invalid Expiration Date	Confirm that the expdate value is correct
102	Processor Not Available	Contact PayLeap customer service for merchant account configuration
114	Merchant does not have permission to send Transactions via Webservice	Contact PayLeap customer service for merchant account configuration
115	Invalid User	Please confirm API Login ID (username) and Transaction Key (password) are correct and reattempt call
120	Invalid Customer Id (only numeric value is allowed)	Adjust customerId value within the ExtData string
121	Invalid Name on Card	Correct nameoncard value and reattempt call
125	Unable to read from extData	Confirm that the extData value is well formed xml
126	Transaction Processing Error	Reattempt call or contact PayLeap Customer Service to research error
127	Error in Invoice tag: Invalid Phone Number	Correct phone value in ExtData string
128	Error in Invoice tag: Invalid EmailId	Correct email value in ExtData string
129	Error in Invoice tag: PostalCode length cannot be more than 30	Adjust zip value within the ExtData string
145	Invalid BillToCountry	Correct country value within ExtData string
1001	Invalid Login Information	Please confirm API Login ID (username) and Transaction Key (password) are correct and reattempt call

Appendix B: Processor Codes

The following table includes a partial list of the most common error messages returned to merchants from the processor through the PayLeap Transaction API.

Code	Error Message	Description
200	Referral	Referral
201	Invld Mer ID	Invalid Merchant number or Subscriber doesn't exist or is inactive
201	Declined	Invalid Merchant number or Subscriber doesn't exist or is inactive
202	Declined	Declined
202	DOB Error	Date of Birth Error for Check Processing
203	Apprv Lesser Amt	Approved for lesser amount than what was requested (i.e. partial approval)
204	Inv Tran	Invalid Transaction
204	Inv State Code	Invalid State Code for Check Processing
204	Referral-Inv TR1	More than 76 characters in Track 1 or Track 1 not formatted correctly
205	Inv Terminal	Terminal not Found
206	Please Retry	File is temporarily unavailable
207	Declined	Declined
207	Inv Acct Num	Invalid Checking Account Number
207	Do not honor	Declined: Association's payment cancelation advice code provided
207	Do not try again	Declined: Association's payment cancelation advice code provided
207	New Account Information Available	Declined: Association's payment cancelation advice code provided
208	Try again later	Declined: Association's payment cancelation advice code provided
208	Expired Card	Expired Card
208	Do not try again	Applies to recurring authorizations only; the card has expired
208	New Account Information	Applies to recurring authorizations only; the card has expired
209	Incorrect Pin	Incorrect PIN
210	Tran Not Allowed	Transaction Not Allowed
211	Hold-Call Ctr	Capture Card – Call Center
212	Amt Exceeds Lmt	Amount Exceeds Limit
213	Serv Not Allowed	Service Not Allowed
213	Declined	For American Express transactions if the CID from the transaction doesn't match the one on file then decline transaction. Transaction not permitted to acquirer or terminal
213	Do not try again	Applies to recurring authorizations only; there was a security violation
214	Host Key Error	Host Key Error
215	Pin Retry Max	Allowable number of PIN attempts exceeded

Code	Error Message	Description
215	Pin Try Exceeded	Allowable number of PIN attempts exceeded
216	Invalid Term ID	Invalid Term ID
216	Declined	Term record not found on processor system
217	Please Retry	Reasons for this error are one of the following: <ul style="list-style-type: none"> • Format Error • Unable to route transaction • Switch or issuer unavailable • System Busy • Timeout
218	Duplicate Tran	Duplicate Transaction
219	CVV2 Declined	Association indicated the transaction was not approved due to mismatch of the CVV2 value, but it would have been approved had the CVV2 value matched
220	System Problem	System Problem
221	Invld Acct2	Invalid account/date or sales date in future
221	Declined	Invalid Effective Date
222	Rev Rejected	Reversal rejected cannot parse 400 message
223	Enter Lesser Amt	Enter lesser amount
224	Pin Xlate Error	Host Security module could not decrypt the PIN block. Master Session: The master key is missing or incorrect in the PIN pad or the merchant record set up incorrectly at processor host. DUKPT: The Base Derivation Key is missing or incorrect in the PIN pad or is set up incorrectly in the Host Security Module
225	Inv Cashback Amt	Cash back amount greater than total Transaction amount (bit 4)
226	Crypto Box Unav	Crypto box is offline
227	Dbt Switch Unavl	Communications link to debit/EBT network gateway is down or responded with a "System Malfunction (96)" message
227	DBT T.O. Retry	Communications link to debit/EBT network gateway is down or responded with a "System Malfunction (96)" message
228	Issuer Unav	Debit/EBT network gateway cannot get through to the issuer
229	Undefined Card	Debit/EBT network gateway cannot get through to the issuer
230	Dbtsw inv merid	Network Response indicates that Merchant ID/SE is invalid
231	Tran Ct Excd Lmt	Debit/EBT transaction count exceeds predetermined limit in a specified time/Withdrawal limit exceeded
232	Resub Excds Lmt	Resubmission of transaction violates debit/EBT network frequency
233	Dbtsw Pin Xl Err	The authorizing network has a problem decrypting the cryptogram in the request
234	Declined	Insufficient funds

Appendix C: AVS Response Codes

The following table describes the AVS response codes.

Value	Description
X	Exact: Address and nine-digit Zip match
Y	Yes: Address and five-digit Zip match
A	Address: Address matches, Zip does not
Z	5-digit Zip matches, address does not
W	Whole (9-digit) Zip matches, address does not
N	No: Neither address nor Zip matches
U	Unavailable: Address information not available
G	Unavailable: Address information not available for international transaction
R	Retry: System unavailable or time-out
E	Error: Transaction unintelligible for AVS or edit error found in the message that prevents AVS from being performed
S	Not Supported: Issuer doesn't support AVS service
B	*Street Match: Street address match for international transaction, but postal code does not
C	*Street Address and postal code not verified for international transaction
D	*Match: Street addresses and postal codes match for international transaction
I	*Not Verified: Address Information not verified for international transaction
M	*Match: Street address and postal codes match for international transaction
P	*Postal Match: Postal codes match for international transaction, but street address does not
0	**No response sent
5	Invalid AVS response

*Values are Visa specific

**Values are returned by the Payment Server and not the processor

Appendix D: CVV Response Codes

The following table describes the CVV response codes.

Value	Description
M	CVV2/CVC2/CID Match
N	CVV2/CVC2/CID No Match
P	Not Processed
S	Issuer indicates that the CV data should be present on the card, but the merchant has indicated that the CV data is not present on the card
U	No CV Data From Issuer
X	CVV not processed

Appendix E: PIN Debit Codes

Code	Message	Recommended Merchant Action	Development Action
0/00	Call was completed successfully	Show receipt page / payment confirmation	Success; perform respective action;
301	MISSING PARAMETER	Advise shopper of payment failure. Process as Signature Debit or allow shopper to select a different payment type. Investigate error.	Log exact error message and evaluate code to determine root cause.
302	INVALID COMMAND	Advise shopper of payment failure. Process as Signature Debit or allow shopper to select a different payment type. Investigate error.	Log exact error message and evaluate code to determine root cause.
303	PARTNER ID ERROR	Advise shopper of payment failure. Process as Signature Debit or allow shopper to select a different payment type. Investigate error.	Log exact error message and evaluate code to determine root cause.
304	COMMAND NOT SUPPORTED	Advise shopper of payment failure. Process as Signature Debit or allow shopper to select a different payment type. Investigate error.	Log exact error message and evaluate code to determine root cause.
305	COMMAND NOT AUTHORIZED	Advise shopper of payment failure. Process as Signature Debit or allow shopper to select a different payment type. Investigate error.	Log exact error message and evaluate code to determine root cause.
308	DECLINED – Lost Card	Decline and allow shopper to select a new payment type.	Log error message.
309	DECLINED – Invalid account	Decline and allow shopper to select a new payment type.	Log error message.
310	DECLINED – stolen	Decline and allow shopper to select a new payment type.	Log error message.
311	NON SUFFICIENT FUNDS	Decline and allow shopper to select a new payment type.	Log error message.
312	EXPIRED CARD	Decline and ask shopper to select a new payment type.	Log error message.
313	WRONG PIN	Advise shopper of Invalid PIN attempt. Make new ProcessDebitOrCreditCard (sale) call to open a new PIN Pad.	Log error message.
314	DECLINED – No card	Decline. Advise shopper of decline due to invalid card number and allow shopper to re-enter card details or select a new payment type.	Log error message.

Code	Message	Recommended Merchant Action	Development Action
315	DECLINED – Not cardholder	Decline. Advise shopper of decline due to security issue and allow shopper to select a new payment type.	Log error message.
316	DECLINED – Not terminal	Decline and allow shopper to select another payment type.	Log exact error message and evaluate code to determine root cause.
317	DECLINED – Fraud	Decline. Advise shopper of decline due to security issue and allow shopper to select a new payment type.	Log error message.
318	DECLINED – Contact Acquirer	Decline. Advise shopper of decline due to security issue and allow shopper to select a new payment type.	Log error message.
319	DECLINED – Exceeds limit	Process as signature debit or decline and advise shopper that transaction could not be processed due to a restriction by the issuing bank and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.
320	DECLINED – Restricted card	Process as signature debit or decline and advise shopper that transaction could not be processed due to a restriction by the issuing bank and allow shopper to select a new payment type.	Log error message.
321	DECLINED – Exceeds frequency	Process as signature debit or decline and advise shopper that transaction could not be processed due to a restriction by the issuing bank and allow shopper to select a new payment type.	Log error message.
322	PIN EXCEEDED	Process as signature debit or decline and advise shopper that transaction could not be processed due to a restriction by the issuing bank and allow shopper to select a new payment type.	Log error message.
323	VIOLATION	Process as signature debit or decline and advise shopper that transaction could not be processed due to a restriction by the issuing bank and allow shopper to select a new payment type.	Log error message.

Code	Message	Recommended Merchant Action	Development Action
324	SYSTEM ERROR	Process as signature debit or decline and advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.
325	COMMS ERROR	Process as signature debit or decline and advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.
326	TRANSACTION DECLINED	Decline and advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log error message.
327	DCE INVALID DATA	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.
328	SYSTEM UNAVAILABLE	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log error message.
329	GENERAL	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log error message.
330	COMMAND IS NULL OR EMPTY	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.
331	XML IS NULL OR EMPTY	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.
332	UNKNOWN COMMAND	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.

Code	Message	Recommended Merchant Action	Development Action
333	SQL EXCEPTION	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.
334	BAD CREDENTIALS	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.
335	NOT AUTHENTICATED	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.
336	NOT AUTHORIZED	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log error message.
337	XML DATA (i.e. "Missing Mandatory Field(s)")	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.
338	SHOPPER SERVICE (i.e. "Invalid TransactionID a3739f37...")	Make new ProcessDebitOrCreditCard (sale) call to open a new PIN Pad.	Log exact error message and evaluate code to determine root cause.
339	INVALID BIN	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log exact error message and evaluate code to determine root cause.
340	INELIGIBLE PAN	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log error message.
342	PARTNER CONTROLLER ERROR	Process as signature debit or advise shopper that transaction could not be processed due to a system error and allow shopper to select a new payment type.	Log error message.

Appendix F: Request Codes

Card Payment Type Request Codes

The following table lists Card Payment Type request codes for use in the Reporting API.

Value	Description
AMEX	American Express card
CARTBLANCH	Carte Blanch card
DEBIT	Debit card
DINERS	Diners Club card
DISCOVER	Discover card
EBT	Electronic Benefit Transfer card
JAL	JAL card
JCB	Japanese Commercial Bank card
MASTERCARD	MasterCard card
VISA	Visa card
EGC	Gift card
PAYRECEIPT	Retrieves receipt images that were uploaded to the payment server
SETTLE	Retrieves requests to settle transactions

Check Payment Type Request Codes

The following table lists Check Payment Type request codes for use in the Reporting API.

Value	Description
ACH	Automated Clearing House
ECHECK	Electronic check
GUARANTEE	Guarantee check
PAYRECEIPT	Retrieves receipt images uploaded to the payment server
SETTLE	Retrieves requests to settle transactions
VERIFY	Retrieves pre-authorized checks

Transaction Type Request Codes

The following table lists Transaction Type request codes for use in the Reporting API.

Value	Description
Authorization	Retrieves previously-authorized (pre-auth) transactions
Capture	Retrieves captured transactions
Credit	Retrieves return transactions

Value	Description
ForceCapture	Retrieves force-auth transactions
GetStatus	Makes an inquiry to the EDT or gift card's balance
PostAuth	Retrieves post-auth transactions
Purged	Removes a transaction from the current batch due to an error
Receipt	Retrieves receipt images uploaded to the payment server
RepeatSale	Retrieves repeat-sale transactions
Sale	Retrieves sale transactions
Void	Retrieves void transactions

GetInfo TransType Request Codes

The following table lists GetInfo Transaction Type request codes for use in the Reporting API.

Value	Description
BatchInquiry	Returns a comma delimited list in a single XML tag that contains the summarized transaction dollar amount and transaction count for each payment method in the current batch. The list is in the following format: <i>Payment_Method1=0.00, Payment_Method2=0.00</i>
Setup	Returns a comma delimited list in a single XML tag that contains merchant setup information. The list is in the following format: <i>Setup_Name1=Y N, Setup_Name2=Y N</i>
StatusCheck	Returns OK if a connection can be made to the payment server with the supplied user name and password; otherwise, it returns an error message.
Initialize	Returns the merchant account setup, including Partner number, Merchant ID, credit card type, phone number, etc.

Card Type Request Codes

The following table lists Card Type request codes for use in the Reporting API.

Value	Description
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DINERS	Diners Club card
DISCOVER	Discover card
EBT	Electronic Benefit Transfer card
JAL	JAL card
JCB	Japanese Commercial Bank card
MASTERCARD	MasterCard card

Value	Description
VISA	Visa card
EGC	Gift card
ALL	Represents all of the above card types