



PayDollar PayGate

Integration Guide v3.4

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Revision History

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1.0	Apr 28, 2003	First issue (All in One Copy)
1.1	Oct 7, 2003	Add VBV Parameters for Server Side Integration
1.2	Nov 1, 2003	Modify VBV Parameters for Server Side Integration
1.3	Nov 6, 2003	Deleted Data Feed Retry Message
1.4	Nov 13, 2003	Add AuthId to Data Feed Output
1.5	Feb 20, 2004	Add JCB Card Type and Japanese Lang Parameter
1.6	Mar 9, 2004	All-in-One Version
1.7	May 6, 2004	Add JPY and TWD Currency Code
1.8	May 13, 2004	Add data feed flow comment
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2.0	Sept 14, 2004	Add Payment Flow, 3D Transaction, PayPal Transaction and New Currencies
2.1	Oct 8, 2004	Modify the pop-up flow to be inline flow of 3D Transaction
2.2	Dec 6, 2004	Add returnUrl parameter to Direct Client Side Connection
2.3	Sep 15, 2005	Add ECI and Payer Authentication Status to datafeed section
2.5	Jan 25, 2006	Add data feed port requirement
2.6	Mar 30, 2006	Add new parameters to datafeed : - sourceIp - ipCountry
2.7	Jun 15, 2006	Add sample data feed page in ASP.
2.8	Jun 20, 2006	Modified Payment Method to support CUP.
2.9	Nov 27, 2006	Add Transaction Handling and FAQ Section
3.0	Aug 30, 2007	Add Alipay payment method
3.1	Jan 24, 2008	Language update – Supporting Thai
3.11	June, 25, 2008	Revise and updated content
3.2	Mar 25, 2009	Add China UnionPay (CHINAPAY) payment method
3.3	Apr 29, 2009	Add new parameter “payMethod” to Data Feed Output
3.4	Dec 18, 2009	Add new optional parameter for connect to payment page. Origin Country and Destination Country

Table of Contents

OVERVIEW	5
INTRODUCTION.....	5
CLIENT POST THROUGH BROWSER.....	6
SCOPE AND COMPATIBILITY	6
CREDIT CARD PAYMENT FLOW.....	7
PPS, PAYPAL, CHINAPAY & ALIPAY PAYMENT FLOW	8
DEFINITION OF PARAMETERS IN THE INTEGRATION PAGE	9
REQUIREMENT TO DATA FEED PAGE	12
SAMPLE DATA FEED PAGE	14
EXAMPLE OF CLIENT POST METHOD (SOURCE CODE).....	16
KICK OFF.....	16
DIRECT CLIENT SIDE CONNECTION.....	17
PAYMENT FLOW	18
NON-3D TRANSACTION	19
3D TRANSACTION	19
INTEGRATION PROCEDURES	21
DEFINITION OF PARAMETERS IN THE INTEGRATION PAGE	21
EXAMPLE OF CONNECTING TO OUR GATEWAY (DIRECT CLIENT SIDE CONNECTION)	25
KICK OFF.....	26
EXCEPTIONAL TRANSACTION HANDLING	27
A) UNSUCCESSFUL DATA FEED.....	27
B) UNSUCCESSFUL REDIRECTION TO SUCCESSURL / FAILURL / CANCELURL	27
C) INCOMPLETE 3D AUTHENTICATION TRANSACTIONS BY CUSTOMER.....	28
D) INCOMPLETE PPS / CHINAPAY/ALIPAY TRANSACTIONS BY CUSTOMER	28
FREQUENTLY ASKED QUESTIONS	29
SYSTEM SETUP.....	29
COMMON PROBLEMS	29
DATA FEED.....	30
3D-SECURE AUTHENTICATION	31
DATA SECURITY	31
SUPPORT	31

Overview

Introduction

PayDollar PayGate is a powerful web-based online payment services platform, which provides secure, multi-channel, multi-lingual and multi-currency payment services. It is used by many renowned companies and organizations in the region.

This technical specification document prescribes the constituent parts of specification for integration of an e-commerce web site with PayDollar e-commerce service, the on-line payment service by AsiaPay (HK) Limited, by subscribed merchants of the service. This document has been created to ensure that all technical specifications contain sufficient information to enable a merchant to design and modify the codes of an existing on-line shopping architecture or software to cater for the payment –enabling service. It also provides a checklist to enable the reviewers of specifications to conduct tests on the functionalities of the integration.

PayDollar PayGate facilitates merchant to connect to our network with great flexibility. Merchant can choose one of the following integration methods, which will be described in detail in the document.

- Client Post through Browser (e.g. Shopping Cart)
- Direct Client Side Connection

Moreover, a list of merchant API functions will be also described in detail in the later section.

Client Post Through Browser

It is the most popular connection method among merchants. The advantage of this connection method is simple and speedy. On the other hand, payment transaction flow is ready to use. Merchant can kick off the web site on-the-fly with just a small scale integration.

Scope and Compatibility

This connection is designed for merchants who have *Online Shopping Cart System*. The routine is HTML-based with Javascript and should be widely applicable to on-line shopping cart software and architecture, whose technical specifications and varieties are beyond the scope of this document. Compatibility with shopping cart software is yet to be exhaustively given and would not be included in the scope of this document.

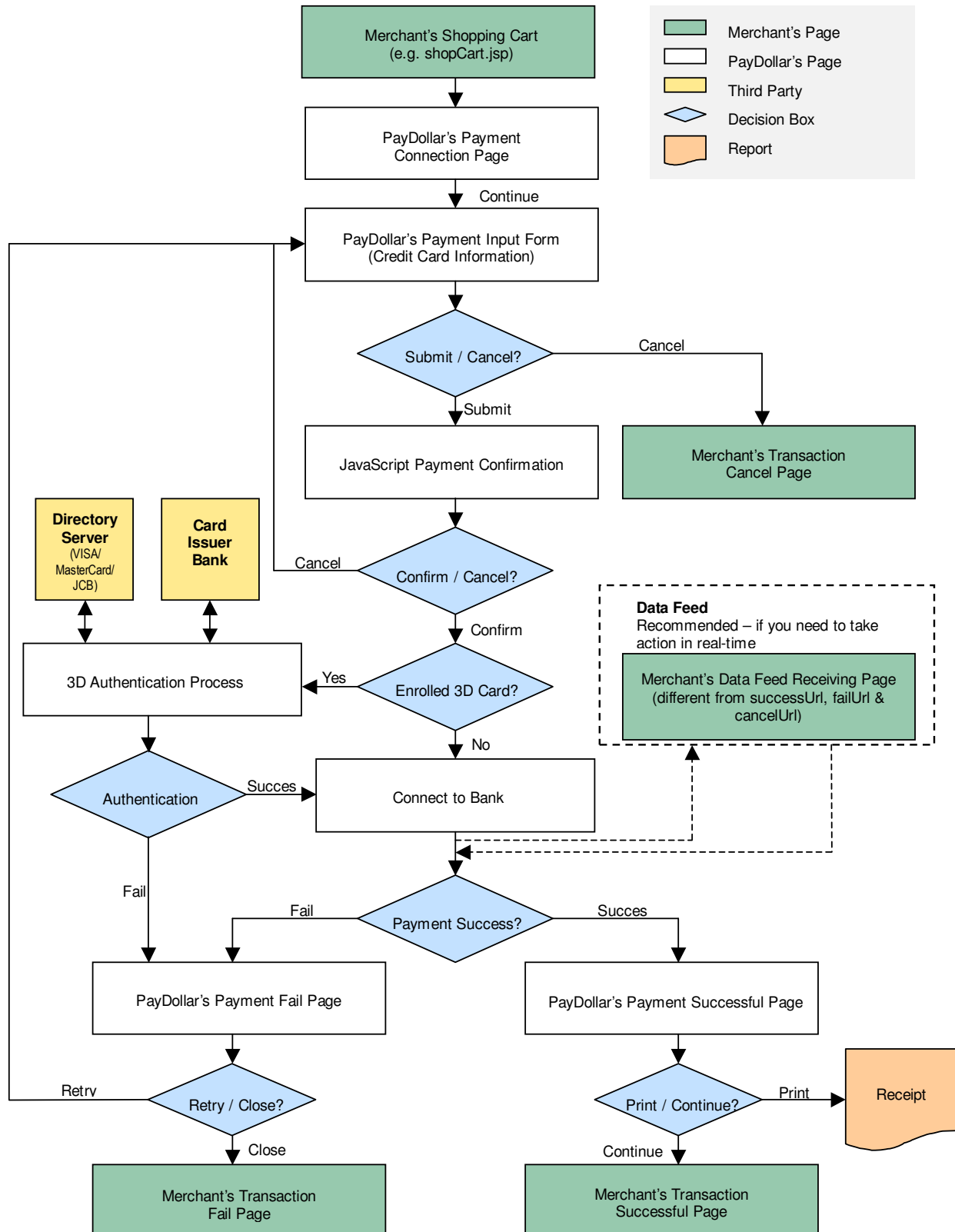
The compatible version of the software code is as follow:

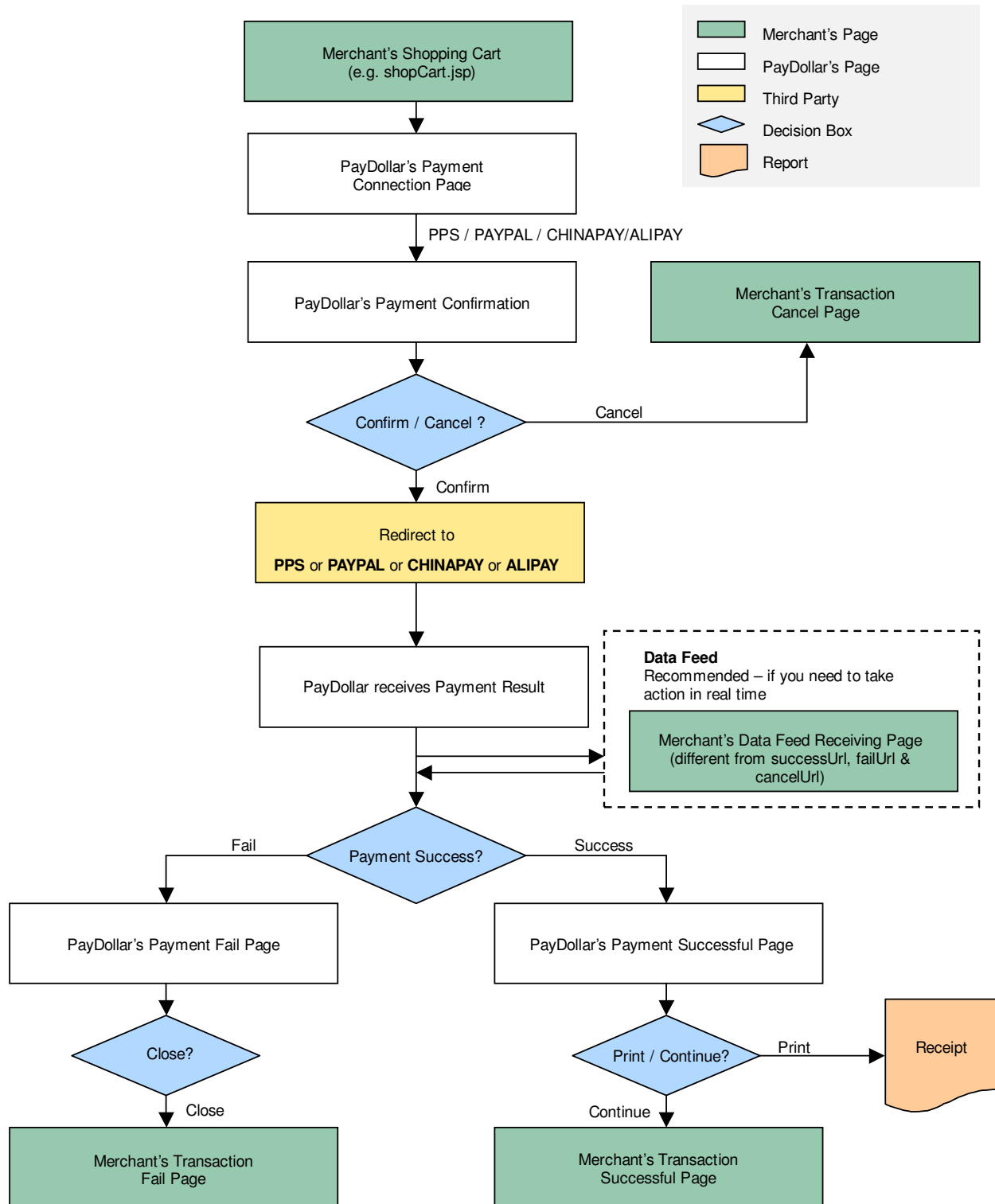
Software Code	Version
HTML	4.0
Javascript	1.3

The version compatibility of the software code with popular browser software is as follow:

Browser	Version
Microsoft Internet Explorer	5.0 or above
Netscape Netvigator (English version)	4.7 or above

Credit Card Payment Flow



PPS, PAYPAL, CHINAPAY & ALIPAY Payment Flow

It is notable that the software codes of the payment routine, whose example is as given, should be embedded into the integration page, as in above, which should be able to generate the sum of purchase from the previous shopping practice of the user. The subsequent parts of the flow would be directed to system architecture in which the payment details are to be submitted by the user, and handled for settlement and clearance.

Definition of Parameters in the Integration Page

The following are the parameters for integration. PayDollar PayGate is case sensitive. Make sure the typeface is correct. When a transaction is finished, the system will return customer a payment message. Merchant can create static HTML pages to display the message. If merchant's web site supports data feed, the system can return payment message as shown in the following table.

Parameters	Data Type	Descriptions
Required Parameter for connect to our payment page		
orderRef	Text (35)	Merchant's Order Reference Number
amount	Number (12,2)	The total amount your want to charge the customer
currCode	Text (3)	The currency of the payment i.e. "344" – HKD "840" – USD "702" – SGD "156" – CNY (RMB) "392" – JPY "901" – TWD "036" – AUD "978" – EUR "826" – GBP "124" – CAD
lang	Text (1)	The language of the payment page i.e. "C" – Traditional Chinese "E" – English "X" – Simplified Chinese "K" – Korean "J" – Japanese "T" – Thai
cancelUrl	Text (300)	A Web page address you want us to redirect upon the transaction being cancelled by your customer (For display

		purpose only. DO NOT use this URL to update your system. Please use DataFeed for this purpose.)
failUrl	Text (300)	A Web page address you want us to redirect upon the transaction being rejected by us. (For display purpose only. DO NOT use this URL to update your system. Please use DataFeed for this purpose.)
successUrl	Text (300)	A Web page address you want us to redirect upon the transaction being accepted by us (For display purpose only. DO NOT use this URL to update your system. Please use DataFeed for this purpose.)
merchantId	Number	The merchant ID we provide to you
payType	Text(1); ("N", "H")	The payment type: "N" – Normal Payment (Sales) "H" – Hold Payment (Authorize only) Remark: PPS, PayPal, CHINAPAY, ALIPAY has no Hold Payment
payMethod	Text; ("ALL", "PPS", "CC", "PAYPAL", "CHINAPAY", "ALIPAY")	The payment method: "ALL" – All the available payment method "CC" – Credit Card Payment "PPS" – PayDollar PPS Payment "PAYPAL" – PayPal By PayDollar Payment "CHINAPAY" – China UnionPay By PayDollar Payment "ALIPAY" – ALIPAY By PayDollar Payment
Optional Parameter for connect to our payment page		
remark	Text (200)	A remark field for you to store additional data that will not show on the transaction web page
redirect	Number	Number of seconds auto-redirection to merchant's site takes place at PayDollar's Payment Success / Fail page
oriCountry	Number(3)	Origin Country Code Example: 344 – "HK" 840 – "US"
destCountry	Number(3)	Destination Country Code Example: 344 – "HK" 840 – "US"
Redirect URL (successUrl, failUrl and cancelUrl) Output		

Ref	Text	Merchant's Order Reference Number (For display purpose only. DO NOT use this URL to update your system. Please use DataFeed for this purpose.)		
Data Feed Output				
src	Number	Return bank host status code (secondary)		
prc	Number	Return bank host status code (primary)		
Ord	Number (40)	Bank Reference – Order id		
Holder	Text	The Holder Name of the Payment Account		
successcode	Number	0- succeeded, 1- failure, Others - error		
Ref	Text	Merchant's Order Reference Number		
PayRef	Number	PayDollar Payment Reference Number		
Amt	Number (15,5)	Transaction Amount		
Cur	Text (3)	Transaction Currency i.e. "344" - HKD "840" – USD "702" – SGD "156" – CNY (RMB) "392" – JPY "901" – TWD "036" – AUD "978" – EUR "826" – GBP "124" – CAD		
remark	Text (200)	A remark field for you to store additional data that will not show on the transaction web page		
AuthId	Text	Approval Code		
eci	Text (5)	ECI value (for 3D enabled Merchants)		
		VISA		
		ECI Value	Definition	
		05	Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful	
		06	Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D cardholder not enrolled 2. Card issuing bank is not 3D Secure ready	
		07	Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction	
		MasterCard		
		ECI Value	Definition	
	00	Authentication is unsuccessful or not		

		<table><tr><td></td><td>attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction</td></tr><tr><td>01</td><td>Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D Cardholder not enrolled 2. Card issuing bank is not 3D Secure ready</td></tr><tr><td>02</td><td>Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful</td></tr><tr><td colspan="2">JCB</td></tr><tr><td>ECI Value</td><td>Definition</td></tr><tr><td>05</td><td>Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful</td></tr><tr><td>06</td><td>Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D cardholder not enrolled 2. Card issuing bank is not 3D Secure ready</td></tr><tr><td>07</td><td>Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction</td></tr></table>		attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction	01	Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D Cardholder not enrolled 2. Card issuing bank is not 3D Secure ready	02	Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful	JCB		ECI Value	Definition	05	Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful	06	Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D cardholder not enrolled 2. Card issuing bank is not 3D Secure ready	07	Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction
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07	Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction																	
		Remark : Empty String will be sent when the transaction is rejected by PayDollar PayAlert.																
payerAuth	Text (5)	Payer Authentication Status Y - Card is 3D-secure enrolled and authentication succeeds. N - Card is 3D-secure enrolled but authentication fails. P - 3D Secure check is pending A - Card is not 3D-secure enrolled yet U - 3D-secure check is not processed.																
sourceIp	Text (15)	IP address of payer																
ipCountry	Text (3)	Country of payer (e.g. HK) - if country is on high risk country list, an asterisk will be shown (e.g. MY*)																
payMethod	Text (10)	Payment method (e.g. VISA, Master, JCB, AMEX)																

Requirement to Data Feed Page

To use data feed function, merchant have to create a data feed page and inform PayDollar about the location of your page (e.g. <http://www.yourdomain.com/datafeed.jsp>). Merchant has to wait until PayDollar has update the system in order to use this function.

The data feed page must meet the following requirement:

- Print 'OK' in HTML when data captured (ACK message)
- **Make Sure to Print 'OK' for acknowledge to our system first then do the rest of your system**

process, if something wrong with your system process (i.e. download photo, ring tone problem) you can send a void request to our system, for more details please refer to our API guide and contact our technical staff.

Please note that the system only supports either port 80 (HTTP) or 443 (HTTPS) for the data feed page location. And make sure the data feed page location is externally accessible, so that our server can call the data feed page.

* Since the system will read from the data feed page for the word 'OK' to determine whether the (data feed) message is delivered or not, if this word does not return successfully, the system will assume the data feed is lost.

Sample Data Feed Page

The following is a sample data feed page in JSP.

```
<%@ page language="java" %>
<%
    String successCode = request.getParameter("successcode");
    String payRef = request.getParameter("PayRef");
    String Ref = request.getParameter("Ref");

    // Print out 'OK' to notify us you have received the payment result
    out.print("OK");

    if ( successCode.equals("0") )
    {
        // Transaction Accepted
        // *** Add the Security Control here, to check the currency, amount with the
        // *** merchant's order reference from your database, if the order exist then
        // *** accepted otherwise rejected the transaction.

        // Update your database for Transaction Accepted and send email or notify your
        // customer.
        ....

        // In case if your database or your system got problem, you can send a void
        transaction request. See API guide for more details
    }
    else
    {
        // Transaction Rejected
        // Update your database for Transaction Rejected
        .....
    }
%>
```


The following is a sample data feed page in ASP.

```
<%@ Language = "VBScript" %>
<%
    Dim successCode
    Dim payRef
    Dim Ref

    successCode = Request.Form("successcode")
    payRef = Request.Form("PayRef")
    Ref = Request.Form("Ref")

    ' Print out 'OK' to notify us you have received the payment result
    Response.write("OK")

    If successCode = "0" Then
        ' Transaction Accepted
        ' *** Add the Security Control here, to check the currency, amount with the
        ' *** merchant's order reference from your database, if the order exist then
        ' *** accepted otherwise rejected the transaction.

        ' Update your database for Transaction Accepted and send email or notify your
        ' customer.
        .....

        ' In case if your database or your system got problem, you can send a void
        ' transaction request. See API guide for more details
    Else
        ' Transaction Rejected
        ' Update your database for Transaction Rejected
        .....
    End If
%>
```

Example of Client Post Method (Source Code)

The following is an example of integration of shopping cart routine with the payment routine of PayDollar PayGate in HTML. It is noteworthy that the portion in bold typeface as follows is mandatory for successful integration.

In the following sample form, hidden fields are used to hold the values:

```
...
<form name="payFormCcard" method="post" action="
    https://www.paydollar.com/b2c2/eng/payment/payForm.jsp
```

Kick Off

After the integration has been completed, it is ready to launch your e-commerce web to serve your customers. Please copy the following **PRODUCTION URL** for client post method:

<https://www.paydollar.com/b2c2/eng/payment/payForm.jsp>

Please copy the following **TESTING URL** for client post method:

<https://test.paydollar.com/b2cDemo/eng/payment/payForm.jsp>

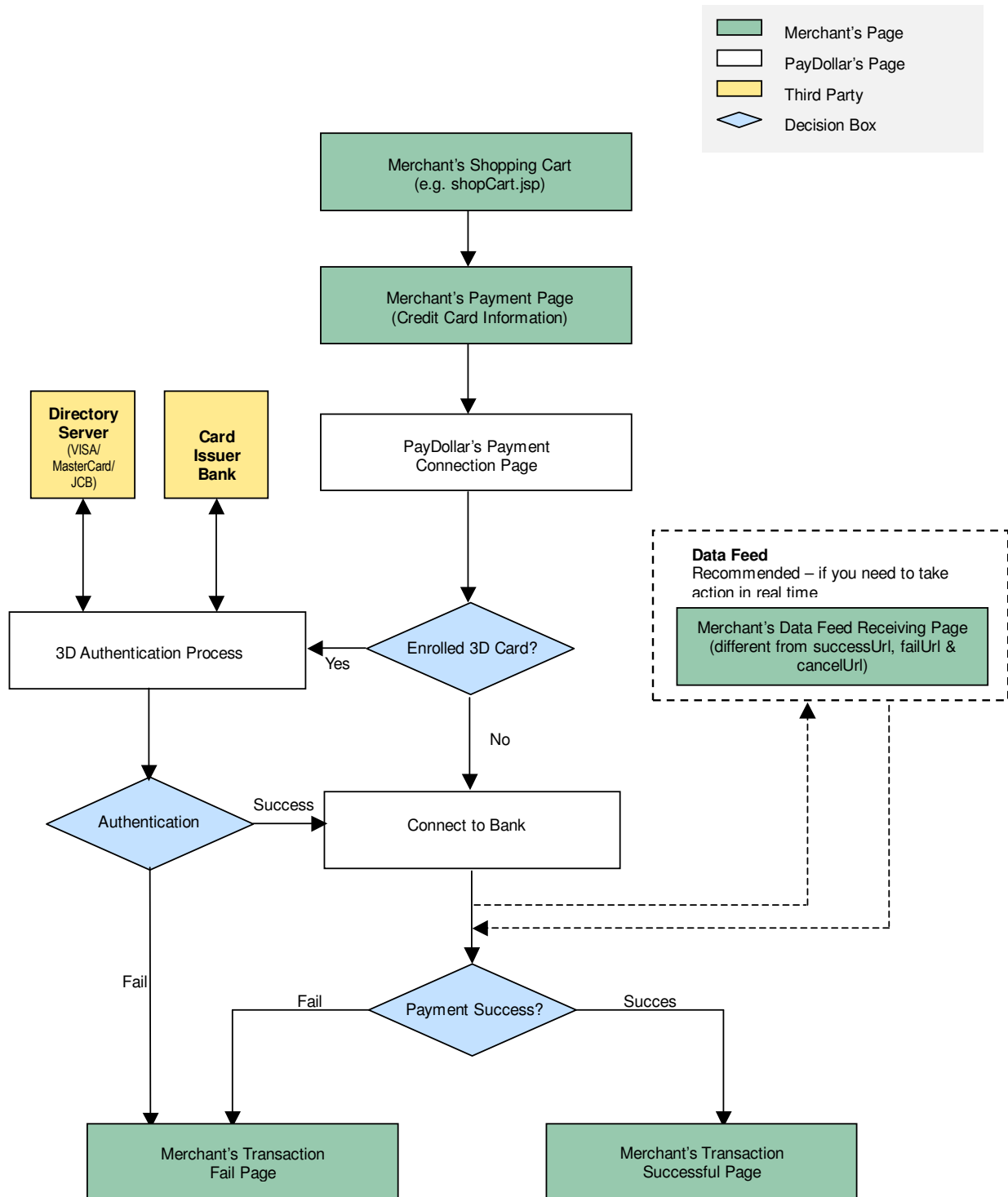
Direct Client Side Connection

This method is used for the merchant if they want to capture the credit card information from their web page instead of using our standard payment page. This connection method only apply to credit card transaction that PPS, PayPal, CHINAPAY and ALIPAY transaction is not allow for using this method. The requirement of using this method is to install a SSL Certificate to your domain in order to protect your customers' credit card information.

Moreover, if the credit card used by the customer is a registered 3D card, the customer will be asked for providing a personal password to verify the payer identity. 3D Secure is a credit card authorization program implemented by VISA with brand named "Verified By VISA", MasterCard with brand named "SecureCode" and JCB with brand named "J/Secure" to reduce fraudulent purchases by verifying purchaser identity during online transactions. PayDollar will assist to carry out this process and the customer will observe the 3D processing pages by our PayDollar shown as the later section.

As the 3D protocol is standardized for all brand types, including Verified By VISA, MasterCard SecureCode and JCB J/Secure. In this document, we use the case of Verified By VISA as an example to show the flow in detail.

Payment Flow



Non-3D transaction

Your client's browser will be redirected from your site to our payment page and then we will redirect the page to your successful/fail page upon completed the transaction.

3D transaction

As 3D Authentication require your customers to enter the password of their cards, your clients' browser will be redirected to a 3D notification web page in order to notify your customers that they need to complete the 3D Authentication by entering the password in the pop-up window. Below are some sample pages for the case of Verified By VISA.

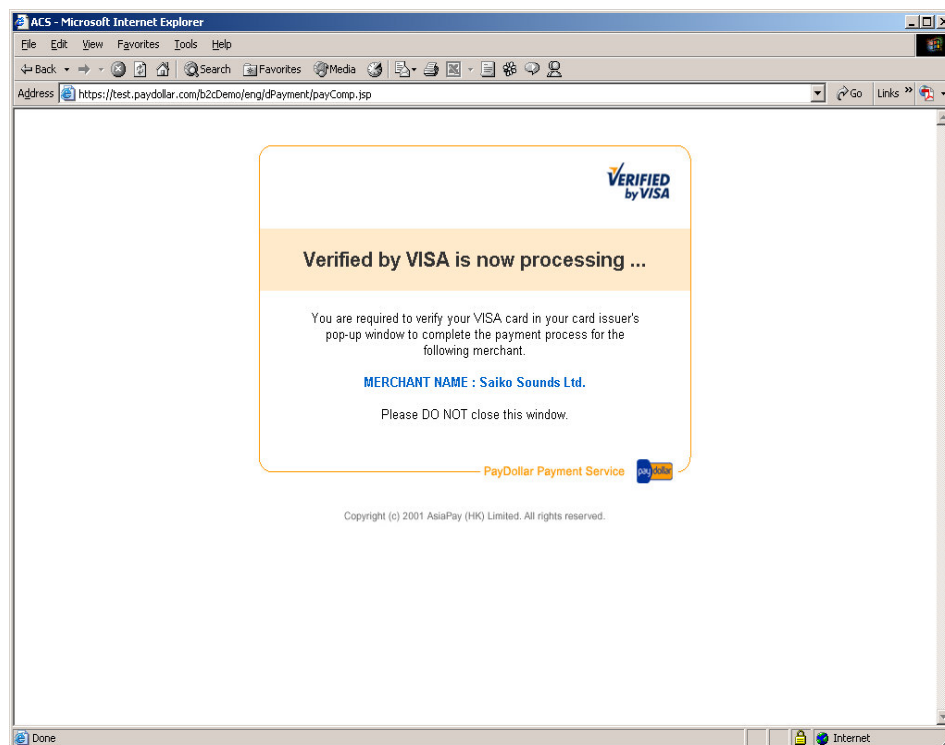


Figure 1.1 Sample notification page

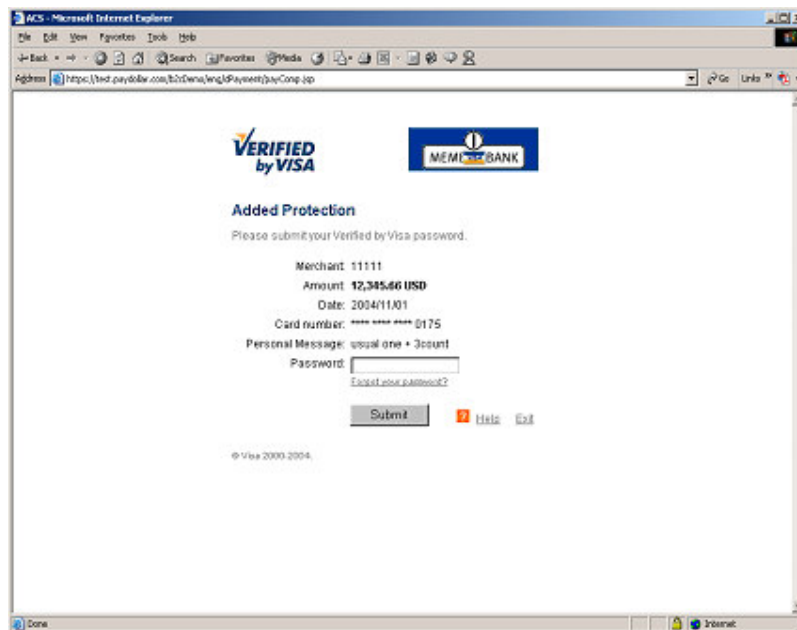


Figure 1.2 Sample issuing bank verification page

After the authentication process, the authentication result will forward to our system and the transaction process will be further continued by our acquiring bank according to the authentication result.

Integration Procedures

To connect to our system, you need to post the required parameters to our payment page URL and then get back the result by using data feed.

Definition of Parameters in the Integration Page

In the targeted page of integration, in which **sum of purchase** has been generated, the following fields (hidden or text) should be added:

Input /Return	Parameters (Required Fields are in Bold typeface) *Case Sensitive	Data Type	Descriptions
Input	orderRef	Text (35)	Merchant's Order Reference Number
	amount	Number	The total amount your want to charge the customer (up to 2 decimal place)
	currCode	Text (3)	The currency of the payment : "344" - HKD "840" - USD "702" - SGD "156" - CNY (RMB) "392" - JPY "901" - TWD "036" - AUD "978" - EUR "826" - GBP "124" - CAD
	lang	Text (1) ("C", "E", "X", "K", "J", "T")	The language of the payment page : "C" - Traditional Chinese "E" - English "X" - Simplified Chinese "K" - Korean "J" - Japanese "T" - Thai
	merchantId	Number	The merchant ID we provide to you
	pMethod	Text ("VISA", "Master", "Diners", "JCB")	The payment card type

		, "AMEX")	
	epMonth	Number(2)	Credit card expiry month
	epYear	Number(4)	Credit card expiry year
	cardNo	Text (16)	Credit card number
	securityCode	Text (4)	Credit Card Verification Code - VISA: CVV (3-digit) - MasterCard: CVC (3-digit) - American Express: 4DBC (4-digit)
	cardHolder	Text (20)	Credit card holder name
	failUrl	Text (300)	A Web page address you want us to redirect upon the transaction being rejected by us (For display purpose only. DO NOT use this URL to update your system. Please use DataFeed for this purpose.)
	successUrl	Text (300)	A Web page address you want us to redirect upon the transaction being accepted by us (For display purpose only. DO NOT use this URL to update your system. Please use DataFeed for this purpose.)
	errorUrl	Text (300)	A Web page address you want us to redirect when unexpected error occur (e.g. parameter incorrect) (For display purpose only. DO NOT use this URL to update your system. Please use DataFeed for this purpose.)
	payType	Text (1) ("N","H")	The payment type: "N" – Normal Payment (Sales) "H" – Hold Payment (Authorize only)
Optional Parameter for connect to our payment page			
Input	remark	Text	An additional remark field that will appear in the confirmation email and transaction detail report to help you to refer the order
	oriCountry	Number(3)	Origin Country Code Example: 344 – "HK" 840 – "US"
	destCountry	Number(3)	Destination Country Code Example: 344 – "HK" 840 – "US"
Redirect URL (successUrl, failUrl and cancelUrl) Output			
Return	Ref	Text	Merchant's Order Reference Number (For display purpose

			only. DO NOT use this URL to update your system. Please use DataFeed for this purpose.)
Data Feed Output (To use the data feed function, you need to email your data feed receiving web page address to us during setup)			
Return	src	Number	Return Payment Manager Status code (Secondary)
	prc	Number	Return Payment Manager Status code (Primary)
	Ord	Number	Bank Reference – Order id
	Holder	Text	The Holder Name of the Payment Account
	successcode	Number	Transaction Status: “-1” – Error “0” – Transaction succeeded “1” – Transaction failure
	Ref	Text	Merchant's Order Reference Number
	PayRef	Number	PayDollar transaction reference
	Amt	Number (15,5)	Transaction Amt
	Cur	Text (3)	Transaction Currency i.e. “344” - HKD “840” – USD “702” – SGD “156” – CNY (RMB) “392” – JPY “901” – TWD “036” – AUD “978” – EUR “826” – GBP “124” – CAD
	AuthId	Text	Approval Code
	eci	Text (5)	ECI value (for 3D enabled Merchants) <div>VISA</div>

			<table><tr><th colspan="2">ECI Value</th><th>Definition</th></tr><tr><td>00</td><td colspan="2">Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction</td></tr><tr><td>01</td><td colspan="2">Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D Cardholder not enrolled 2. Card issuing bank is not 3D Secure ready</td></tr><tr><td>02</td><td colspan="2">Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful</td></tr><tr><td colspan="3">JCB</td></tr><tr><th>ECI Value</th><th colspan="2">Definition</th></tr><tr><td>05</td><td colspan="2">Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful</td></tr><tr><td>06</td><td colspan="2">Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D cardholder not enrolled 2. Card issuing bank is not 3D Secure ready</td></tr><tr><td>07</td><td colspan="2">Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction</td></tr></table> <p>Remark : Empty String will be sent when the transaction is rejected by PayDollar PayAlert.</p>	ECI Value		Definition	00	Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction		01	Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D Cardholder not enrolled 2. Card issuing bank is not 3D Secure ready		02	Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful		JCB			ECI Value	Definition		05	Both cardholder and card issuing bank are 3D enabled. 3D card authentication is successful		06	Either cardholder or card issuing bank is not 3D enrolled. 3D card authentication is unsuccessful, in sample situations as: 1. 3D cardholder not enrolled 2. Card issuing bank is not 3D Secure ready		07	Authentication is unsuccessful or not attempted. The credit card is either a non-3D card or card issuing bank does not handle it as a 3D transaction	
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	payerAuth	Text (5)	<p>Payer Authentication Status</p> <p>Y - Card is 3D-secure enrolled and authentication succeeds.</p> <p>N - Card is 3D-secure enrolled but authentication fails.</p> <p>P - 3D Secure check is pending</p> <p>A - Card is not 3D-secure enrolled yet</p> <p>U - 3D-secure check is not processed.</p>																											
	sourceIp	Text (15)	IP address of payer																											
	ipCountry	Text (3)	<p>Country of payer (e.g. HK)</p> <p>- if country is on high risk country list, an asterisk will be shown (e.g. MY*)</p>																											
	payMethod	Text (10)	<p>Payment method</p> <p>(e.g. VISA, Master, JCB, AMEX)</p>																											

Example of connecting to our gateway (Direct Client Side Connection)

As different type of programming language have different syntax. Therefore, the sample code below, is written in HTML code, the requirement is to form post all the required parameters to our secure API, highlighted in yellow.

Sample code:

```
...  
<form name="payForm" method="post"  
action="https://test.paydollar.com/b2cDemo/eng/dPayment/payComp.jsp">  
<input type="hidden" name="merchantId" value="1">  
<input type="hidden" name="amount" value="3000.0" >  
<input type="hidden" name="orderRef" value="000000000006">  
<input type="hidden" name="currCode" value="344" >  
<input type="hidden" name="pMethod" value="VISA" >  
<input type="hidden" name="cardNo" value="4918914107195005" >  
<input type="hidden" name="securityCode" value="123" >  
<input type="hidden" name="cardHolder" value="Testing" >  
<input type="hidden" name="epMonth" value="07" >  
<input type="hidden" name="epYear" value="2009" >  
<input type="hidden" name="payType" value="N" >  
<input type="hidden" name="successUrl"  
value="http://www.yourwebsite.com/pSuccess.jsp">  
<input type="hidden" name="failUrl" value="http://www.yourwebsite.com/pFail.jsp">  
<input type="hidden" name="errorUrl" value="http://www.yourwebsite.com/pError.jsp">  
<input type="hidden" name="lang" VALUE="E">  
<input type="submit" value="Pay Now">  
</form>  
...
```

For the datafeed handling, it will be the same as the method of Client Post through Browser. Details please refer to [Pg 12](#) in this document.

Kick Off

After the integration has been completed, it is ready to launch your e-commerce web to serve your customers. Please copy the following **PRODUCTION URL** for client post method:

<https://www.paydollar.com/b2c2/eng/dPayment/payComp.jsp>

Please copy the following **TESTING URL** for client post method:

<https://test.paydollar.com/b2cDemo/eng/dPayment/payComp.jsp>

** All the source code in this document are the property of AsiaPay (HK) Limited. Any use, modification and adaptation to the code should be reported to and approved by AsiaPay (HK) Limited. AsiaPay (HK) Limited do not have any liability in any lose to the party using the source code.*

Exceptional Transaction Handling

This section explains various scenarios of transactions, other than good and successful transactions that may occur.

A) Unsuccessful data feed

This may occur if

1. Data feed URL is wrongly set up; or
2. Connection between PayDollar and merchant server is lost; or
3. Server of either side cannot process data feed correctly.

Since the bank has already determined the transaction status, the transaction is completed. Merchant can confirm the status by

1. Log on to Merchant Administration and retrieve the corresponding transactions in Transaction Details Report; or
2. Query the transaction status by using Merchant API.

B) Unsuccessful redirection to returnUrl / failUrl / cancelUrl

This may occur if

1. Wrong / invalid returned URLs are set in the integration; or
2. Connection between the customer and merchant server is lost; or
3. Customer's computer hangs / restarts / loses power.

Since the bank has already determined the transaction status, the transaction is completed. Merchants should educate the customer to contact the merchant and confirm the transaction status with them when such case happens.

C) Incomplete 3D authentication transactions by customer

This may occur if

1. The customer closes the browser when he / she is required to enter 3D authentication information at issuer bank webpage; or
2. The customer cannot access 3D authentication page of issuer bank due to various reasons, e.g. disabled cookies.

The transaction status remains "Pending_3D", and payer authentication status remains "P". In PayDollar production, a schedule job is set up to change the status from "Pending_3D" to "Rejected" from time to time. The PRC / SRC pair is also updated to 3 / 9999. Data feed is also sent out in the schedule job for these unsuccessful transactions.

Sometimes customers may return to PayDollar payment page / merchant site by pressing the 'Back' button of the browser and try again. The same merchant reference number is used for these retry transactions. Thus merchants may receive multiple data feeds regarding transactions with the same merchant reference number, with one success transaction followed by failed transactions. Merchants can choose to ignore the fail transactions with the same merchant reference once a successful transaction has been processed.

D) Incomplete PPS / CHINAPAY/ALIPAY transactions by customer

This may occur if

1. The customer closes the browser when he / she is required to enter PPS / CHINAPAY /ALIPAY account information at respective site; or
2. The customer cannot access PPS / CHINAPAY /ALIPAY page due to various reasons, e.g. disabled cookies or PPS / CHINAPAY / ALIPAY host is down.

The transaction status remains "Pending". In production environment a schedule job is set up in our servers to change the status from "Pending" to "Rejected" from time to time. Data feed is also sent out in the schedule job for these unsuccessful transactions.

Sometimes customers may return to PayDollar payment page by pressing the 'Back' button of the browser and try again. The same merchant reference number is used for these retry transactions.

Thus merchants may receive multiple data feeds regarding transactions with the same merchant reference number, with one success transaction followed by failed transactions. Merchants can choose to ignore the fail transactions with the same merchant reference once a successful transaction has been processed.

Frequently Asked Questions

System Setup

1. What programming languages are supported in the Integration?

HTML, ASP, PHP, JSP / Servlet, and any other server side scripting languages that support HTTP protocol.

2. Is there any consideration on firewall issues on Merchants side?

Merchants have to open HTTP port for data feed handling, i.e. port 80 (HTTP) / port 443 (HTTPS).

3. Does PayDollar PayGate support any shopping cart software?

Technically yes. You are however required to know how to deploy the shopping cart software to work for your requirements. Samples include [OSCommerce](#).

Common Problems

4. During the integration I encounter the error message “Your payment service is not active.”

Make sure you are using the corresponding pair of merchant ID and integration URL.

If you are using the TESTING URL (test.paydollar.com), the TESTING merchant ID, a 6-digits number, should be used. If you are using the PRODUCTION URL (www.paydollar.com), PRODUCTION merchant ID should be used, which usually is a 4-digits number.

5. During the integration I encounter the error message “CurrCode is incorrect.”

One PayDollar merchant ID only allows one currency. Make sure you are using the corresponding currency for the merchant ID in the HTML form.

To apply multi-currencies, please contact our salespersons to open additional merchant accounts.

6. Can I make use of the calling of returnUrl / failUrl / cancelUrl solely to determine the transaction status?

Customer may call the returnUrl / failUrl / cancelUrl (with the merchant reference appended) in the browser and pretend the transaction is completed. Thus we recommend merchants to use data feed to determine the transaction status. Since PayDollar and the merchant are the only parties with the knowledge of the data feed URL, it is safe to determine the status by using the data feed.

7. What is the difference between the parameters: Ref (orderRef), PayRef and Ord?

Ref (orderRef) is merchant's own order reference number. This comes from merchant's database or invoices.

PayRef is PayDollar order reference number. It is unique among all orders from different merchants in PayDollar system.

Ord is bank reference number. It is generated by acquiring banks.

To seek help on transactions, please provide PayRef (preferred) or Ref to us.

Data Feed

8. How do I make use of the data feed?

You may make use of the data passed from PayDollar in the data feed to update your database records regarding the transaction. Since merchant reference can be retrieved from data feed, you can make use of this key to update the corresponding transaction records of your system(s).

9. How to set up data feed in my merchant account?

For **testing environment**, you can contact our Service team by email to service@paydollar.com.

Please indicate with your testing merchant ID and testing data feed URL. Once received the request our Service team will set up the data feed for you.

For **production environment** first launch, you may fill in the production data feed URL in the UAT form. To modify the existing data feed URL, please fill in the Merchant Account Maintenance Form in the Support section of Merchant administration. And, please return the completed forms by faxing to us, attention Operations Department.

10. How do I know if the data feed is set up properly?

You may go to transaction details in the merchant administration site, select output columns "Data Feed Ind." and "Data Feed Return" and view the transaction records. If the data feed indicator is "T", the data feed is set up properly. However, if the indicator is "F", you may look at the "Data Feed Return" column and see what the error is. You may ask our technical team to assist when it relates to data feed setup.

In addition, you can enable "Data Feed Failure Alert by Email" in the merchant administration site > Profile > Payment Options. When it is enabled, and if there is any failure on calling Merchant's data feed, an email will be sent to Merchant's technical contact email account.

11. What programming languages can be used in writing data feed page?

Any programming languages that can handle HTTP Post request parameters can be used.

12. How do I write the data feed page? Should the data feed page display anything on the screen?

The data feed page contains 3 parts, receive HTTP parameters, print 'OK' and your own backend processing (e.g. update database, send email to customer, etc.).

The data feed page is called in the back end. It should not display anything, i.e. no HTML code. However it should respond with the word 'OK' to let our server know that you have successfully received the data feed.

13. How do I know for sure the data feed is calling from PayDollar?

You may check if the data feed HTTP request is calling from these IP ranges.

Testing: 202.64.244.236 – 202.64.244.237

Production: 203.98.136.1 – 203.98.136.30

14. There is data feed error return

**“javax.net.ssl.SSLHandshakeException: sun.security.validator.ValidatorException:
No trusted certificate found”**

Our server cannot recognize your SSL certificate provider. Please contact our I.T. team to resolve the issues. When necessary you will be asked to provide your CA root certificate.

3D-Secure Authentication

15. Can I use FRAMES in designing our website?

Some card issuing banks require Cookies when entering their 3D authentication page. Full page (i.e. no FRAMES) is required in this situation.

Furthermore, the SSL indicator should be displayed somewhere on the browser window to let customers know that the site is secure enough to enter sensitive information such as credit card number. When FRAMES is used, the SSL indicator may not appear if the page required SSL is inside the frame window.

Therefore, it is suggested not to use FRAMES after the HTML form is submitted to PayDollar. You may consider opening another browser window to handle payment transactions.

16. Can I ask for disabling 3D-Secure authentication for my transactions?

This is subject to bank's sole decision. You may be asked for providing business information in order to help the bank risk management team to evaluate your company profile before special approval. Nonetheless, you should be well aware the serious consequences of fraudulent non-3D transactions.

Data Security

17. Can I store the credit card information of my customers?

We recommend our merchants NOT to store credit card information, especially credit card number, expiry date and CVV2 / CVC2. Even if absolute necessary, please ensure to encrypt the data compliant to Visa A.I.S. (Account Information Security) program. You may refer to the following webpage: http://www.visa-asia.com/ap/sea/merchants/riskmgmt/ais_what.shtml. Credit card information stored in PayDollar complies with Visa A.I.S. and MasterCard SDP programs.

Support

18. Who should we contact in case we encounter problems during testing and in production?

You can contact our I.T. team by either of the following ways.

- a. Email: it@paydollar.com
- b. Technical hotline: (852) - 82267981

- The End -