



INTERNET PAYMENT GATEWAY Version 4.6

Application Programming Interface

Distributed By:

**AssureBuy, Inc.
1340 Remington Road – Suite E
Schaumburg, Illinois 60173
Phone: 847-843-7400
Fax: 847-843-7676
URL: www.assurebuy.com**

Last Updated:

July 17, 2006

IMPORTANT NOTICE!

The information contained in this publication is considered to be proprietary and confidential. It is intended solely for the use of AssureBuy partners, clients and employees. The contents of this document and the ideas contained herein may not be disclosed, reproduced or transmitted in any form or distributed, in whole or in part, without the prior written consent of AssureBuy, Inc.

TABLE OF CONTENTS

INTENDED USE	4
INTEGRATION CONSIDERATIONS	4
USE OF INTERNET STANDARDS	5
UPGRADE CONSIDERATIONS.....	6
VERSION 4.1.....	6
VERSION 4.2.....	7
VERSION 4.3.....	9
VERSION 4.4.....	9
VERSION 4.5.....	11
VERSION 4.6.....	13
INPUT PARAMETERS	15
CONNECTION URL.....	15
PARAMETER LIST	15
NAME-VALUE PAIRS.....	28
XML FORMATTED DATA.....	29
RESPONSE PARAMETERS.....	35
PARAMETER LIST	35
NAME-VALUE PAIRS.....	38
XML FORMATTED DATA.....	38
ERROR RESPONSES.....	39
INTEGRATION INSTRUCTIONS.....	41
STEP ONE – COLLECT THE INPUT DATA.....	41
STEP TWO – CHOOSE CONNECTION METHOD.....	42
STEP THREE – CONNECTION URL	42
STEP FOUR – SEND THE DATA	43
STEP FIVE – RECEIVE THE RESPONSE DATA.....	44
STEP SIX – PROCESSING THE RESPONSE DATA.....	48
TESTING CONSIDERATIONS.....	50
APPENDIX A - ASSUREBUY ERROR CODES	51
APPENDIX B - ISO 3166 STANDARD COUNTRY CODES.....	55
APPENDIX C - ISO 4217 STANDARD CURRENCY CODES.....	60
APPENDIX D - ASSUREBUY FRAUD SYSTEM CODES	64
APPENDIX E - AUTHENTICIFY RETURN VALUES	66
APPENDIX F - RELEASE NOTES.....	67
VERSION 04.03.00 - 12/15/2002.....	67
VERSION 04.04.00 - 03/02/2003.....	69
VERSION 04.05.00 - 04/17/2006.....	69

INTENDED USE

This document is intended as an informational guide for AssureBuy partners and clients when interfacing with the AssureBuy Internet Payment Gateway. The primary purpose is to present technical specifications and input/output parameters to be used when communicating with the gateway.

This document is not intended to recommend a single integration strategy, development language or API platform. AssureBuy recognizes that there are many Internet technologies, platforms and operating environments in use today. It is up to the client to determine the most appropriate integration method for a particular application. If additional assistance is required, please contact AssureBuy Support by e-mail at support@assurebuy.com, or by phone at 1-800-326-5474.

NOTE: If you are using one of AssureBuy's enhanced IntegriCharge[®] services, interface to this gateway is usually included with your service package. Contact your AssureBuy account representative for additional information regarding your account.

INTEGRATION CONSIDERATIONS

As a user of AssureBuy's Internet Payment Gateway, you are able to securely send order and payment information from a local server or workstation to AssureBuy over an Internet connection. This information may be sent over any secure SSL Internet connection or over a dedicated SSL connection to one of the AssureBuy data centers.

Depending upon the configuration of your account, the gateway may perform validation rules, tax calculations, shipping calculations, fraud protection, payment authorization and order notification services. The results of these operations are returned to the local server or workstation for processing.

Data must be sent to the AssureBuy servers by performing a secure HTTPS Post operation. The data posted to AssureBuy may be formatted using either xml or name-value pairs.

Data is returned to the local server in a formatted response or by use of a post operation to a local processing script. The data returned by AssureBuy may be formatted using either xml or name-value pairs.

A DTD (Document Type Definition) is available for payment gateway requests and responses using the XML format. A DTD is used to validate the format and integrity of the XML data prior to being processed by the payment gateway.

USE OF INTERNET STANDARDS

AssureBuy processing systems conform to a number of industry standards for security, privacy and data exchange. The list below identifies the major standards in use by AssureBuy:

SSL/3.0 – Secure Socket Layers (SSL) is the universally accepted protocol for authenticated and encrypted communication between World Wide Web clients and servers. For more information, see the following URL:

<http://home.netscape.com/eng/ssl3>

HTTP/1.1 - The Hypertext Transfer Protocol (HTTP) is an application-level protocol for distributed, collaborative, hypermedia information systems. A feature of HTTP is the typing and negotiation of data representation, allowing systems to be built independently of the data being transferred. For more information, see the following URL:

<http://www.w3.org/Protocols/rfc2616/rfc2616.html>

CGI/1.1 - The Common Gateway Interface (CGI) is a standard for interfacing external applications with information servers, such as HTTP or Web servers. For more information, see the following URL:

<http://www.w3.org/CGI>

XML/1.0 - The Extensible Markup Language (XML) is the universal format for structured documents and data on the Web. The base specifications are XML 1.0, W3C Recommendations February, 1998. For more information, see the following URL:

<http://www.w3.org/XML>

P3P - The Platform for Privacy Preferences Project (P3P), developed by the World Wide Web Consortium, is emerging as an industry standard providing a simple, automated way for users to gain more control over the use of personal information on Web sites they visit. For more information, see the following URL:

<http://www.w3.org/P3P>

UPGRADE CONSIDERATIONS

If you are upgrading from a previous version of the AssureBuy Internet Payment Gateway, you may need to make certain changes to your interface in order for the system to function properly. You may use the following summary as a guide to understanding which changes are required for your particular implementation of the system. This section lists only changes that affect the input/output parameters and the functional aspects of the AssureBuy Internet Payment Gateway. For a complete list of all changes included in a particular release, see the Release Notes in Appendix F.

IMPORTANT!

If you are upgrading to a version more than one release above your current version (for example, from version 4.1 to version 4.6), be sure to review all of the upgrade notes for each version above the version currently in use.

Version 4.1

Parameter Changes

1. The ***Ecom_GatewayVersion*** parameter should be changed to **4.1**.
2. If you are using either the AssureBuy or TaxWare tax calculation service, the following parameters should be passed to the payment gateway. Leaving any of these parameters blank may cause the tax to be calculated incorrectly.

Ecom_ShipTo_Postal_City
Ecom_ShipTo_Postal_StateProv
Ecom_ShipTo_Postal_PostalCode
Ecom_ShipTo_Postal_CountryCode

3. If you are using the AssureBuy ACH payment service, a new parameter called ***Ecom_Payment_ACH_AccountIndicator*** has been added. This parameter is required when the ***Ecom_Payment_Type*** parameter is set to **FT**. Valid values are **C** for checking account and **S** for savings account.
4. If you are using the AssureBuy ACH payment service, a new parameter called ***Ecom_Payment_ACH_AccountType*** has been added. This parameter is required when the ***Ecom_Payment_Type*** parameter is set to **FT**. Valid values are **B** for business account and **P** for personal account.

5. The default value for the ***Ecom_Order_Recurring_Cycle*** has been changed from **NULL** to **M** (monthly). This default value is only set when the value of the ***Ecom_Order_Recurring_Amount*** parameter is greater than zero.
6. The ***Ecom_Payment_Action*** parameter now supports the ability to settle a previously authorized credit card transaction. To use this new feature, pass a value of **E** for execute/settle the transaction. When sending a value of **E** to the ***Ecom_Payment_Action*** parameter, the transaction number for the originally authorized transaction must be present in the parameter ***Ecom_Payment_OriginalTransaction***.
7. A new parameter, ***Ecom_Trans_CVVResponse***, has been added to the response parameter set. The ***Ecom_Trans_CVVResponse*** contains the CVV2 response returned from the credit card processor.
8. The ***Ecom_Payment_Name*** parameter has been changed to ***Ecom_Payment_PayerName***. If you are using a DTD (Document Type Definition), you will need to make this change in order for the XML document to validate properly.

Functionality Changes

1. A DTD (Document Type Definition) is available for both requests and responses using the XML format. All XML requests should now contain a line referencing the AssureBuy request DTD, as follows:

```
<!DOCTYPE ASSUREBUY.ECOMREQUEST SYSTEM  
    "http://docs.assurebuy.com/assurebuy_ecomrequest_41.dtd">
```

2. It is no longer a requirement to send XML requests with UTF-16 encoding.

Version 4.2

Parameter Changes

1. The ***Ecom_GatewayVersion*** parameter should be changed to **4.2**.
2. In Version 4.2 and higher, the Authenticate transaction confirmation service has been added. As a result the ***Ecom_Payment_ConfirmValue*** and ***Ecom_Payment_ConfirmPhone*** parameters have been added to hold the order confirmation value and phone number to be used during an Authenticate telephone session.

3. In version 4.2 and higher, the following output parameters have been added to hold the results of an Authenticate transaction:

Ecom_Trans_Authenticate_ReturnCode
Ecom_Trans_Authenticate_ReturnValue
Ecom_Trans_Authenticate_Date

4. In version 4.2 and higher, the following input parameters have been added for advanced tax calculations:

Ecom_ShipFrom_Location_ID
Ecom_ShipFrom_Location_Company
Ecom_ShipFrom_Location_Street_Line1
Ecom_ShipFrom_Location_Street_Line2
Ecom_ShipFrom_Location_Street_Line3
Ecom_ShipFrom_Location_City
Ecom_ShipFrom_Location_StateProv
Ecom_ShipFrom_Location_PostalCode
Ecom_ShipFrom_Location_CountryCode

5. In version 4.2 and higher, the parameter ***Ecom_TestAction*** is no longer required when the value of the ***Ecom_Mode*** parameter is set to **T**. If left blank, the transaction result will be set to **Approved** unless overridden by the fraud system.

Functionality Changes

1. The available set of fraud filters in the response has been expanded. See Appendix D, AssureBuy Fraud System Codes, for more information.
2. In version 4.2, the DTD has changed to accommodate new input parameters. All XML requests should reference the new DTD, as follows:

<!DOCTYPE ASSUREBUY.ECOMREQUEST SYSTEM
“http://docs.assurebuy.com/assurebuy_ecomrequest_42.dtd”>

3. A backup URL has been added to reach the Internet Payment Gateway, as follows:

https://gateway2.assurebuy.com/ics_gateway.exe

4. The error number for "Missing or invalid user-defined parameter has been changed from **5451** to **5551**.

Version 4.3

Parameter Changes

1. The ***Ecom_GatewayVersion*** parameter should be changed to **4.3**.
2. In version 4.3 and higher, the ***Ecom_Order_IPAddress*** parameter is only required when the ***Ecom_Order_Source*** parameter is set to **OL**.
3. In version 4.3 and higher, the ***Ecom_Product_ItemID*** parameter has been changed from a limit of 12 digits to a limit of 9 digits.
4. In version 4.3 and higher, the ***Ecom_Payment_OriginalTransaction*** parameter has been changed from a limit of 10 digits to a limit of 9 digits.
5. In version 4.3 and higher, the ***Ecom_Trans_Number*** response parameter has been changed from 10 digits to 9 digits.

Functionality Changes

1. In version 4.3 and higher, the gateway no longer supports the ECML 1.0 standard. This standard is no longer active.
2. In version 4.3 and higher, when using Test Mode (***Ecom_Mode = T***), and sending a Force transaction (***Ecom_Payment_Action = F***), the value returned in the ***Ecom_Trans_AuthCode*** parameter is now set to the value of the input parameter ***Ecom_Payment_ApprovalCode***. Previously, this value was pre-set to an authorization code of **123456**.

Version 4.4

Parameter Changes

1. The ***Ecom_GatewayVersion*** parameter should be changed to **4.4**.
2. In Version 4.4, the payment gateway has been enhanced to support the passing of Level 3 procurement card data to the processing networks. NOTE: Not all processing networks support Level 3, contact your merchant account provider or AssureBuy for more information. The following gateway request parameters have been added to support Level 3:

Ecom_Order_PONumber
Ecom_Order_VATTaxID
Ecom_Order_VATTaxRate

Ecom_Order_AlternateTaxRate
Ecom_Order_AlternateTaxID
Ecom_Order_Cost_VATTaxAmount
Ecom_Order_Cost_AlternateTaxAmount
Ecom_Order_Cost_DutyAmount
Ecom_Order_Cost_DiscountAmount
Ecom_Product000_Category
Ecom_Product000_UOM
Ecom_Product000_Discount
Ecom_Product000_TaxAmount
Ecom_Product000_TaxRate
Ecom_Product000_TaxCode
Ecom_Product000_TaxExempt
Ecom_Product000_ReturnedItem

3. In Version 4.4, the payment gateway has been enhanced to support the passing of Verified By Visa (VPAS) authentication information to the processing networks. NOTE: Not all processing networks support the Verified By Visa standards, contact your merchant account provider or AssureBuy for more information. The following gateway request parameters have been added to support Verified By Visa:

Ecom_Payment_VPASTransID
Ecom_Payment_CAVV

4. The following gateway response parameters have been added to support the new cost input parameters:

Ecom_Order_Cost_VATTaxAmount
Ecom_Order_Cost_AlternateTaxAmount
Ecom_Order_Cost_DutyAmount
Ecom_Order_Cost_DiscountAmount

5. In version 4.4 and higher, the ***Ecom_Order_Source*** parameter now supports the value **RT** for retail and POS (point-of-sale) transactions.

Functionality Changes

1. In version 4.4, the DTD has changed to accommodate new input parameters. All XML requests should reference the new DTD, as follows:

```
<!DOCTYPE ASSUREBUY.ECOMREQUEST SYSTEM  
  "http://docs.assurebuy.com/assurebuy_ecomrequest_44.dtd">
```

2. In version 4.4, the following error messages have been added:

5215	Missing or invalid PO number.
5216	Missing or invalid VAT tax rate.
5217	Missing or invalid VAT tax ID.
5218	Missing or invalid alternate tax rate.
5219	Missing or invalid alternate tax ID.
5507	Missing or invalid VAT tax.
5508	Missing or invalid alternate tax.
5509	Missing or invalid duty amount.
5510	Missing or invalid discount amount.
5622	Missing or invalid VPAS transaction ID.
5623	Missing or invalid CAVV.
5714	Missing or invalid product category.
5715	Missing or invalid product unit of measure.
5716	Missing or invalid product tax amount.
5717	Missing or invalid product tax rate.
5718	Missing or invalid product tax code.
5719	Missing or invalid product discount amount.
5720	Missing or invalid product tax exempt flag.
5721	Missing or invalid product returned item flag.

3. In version 4.4, when using the automatic order calculation feature, the values from the following fields are included in the calculated order total:

Ecom_Order_Cost_VATTaxAmount
Ecom_Order_Cost_AlternateTaxAmount
Ecom_Order_Cost_DutyAmount
Ecom_Order_Cost_DiscountAmount

4. In version 4.4, when using the automatic order calculation feature, the values from the item detail field, ***Ecom_Product000_TaxAmount***, are totaled to obtain the value for ***Ecom_Order_Cost_SalesTax***.
5. In version 4.4, when using the automatic order calculation feature, the values from the item detail field, ***Ecom_Product000_DiscountAmount***, are totaled to obtain the value for ***Ecom_Order_Cost_Discount***.

Version 4.5

Parameter Changes

1. The ***Ecom_GatewayVersion*** parameter should be changed to **4.5**.
2. In Version 4.5, the payment gateway has been enhanced to support additional invoice information for AssureBuy's View N Pay™ service. The following gateway request parameters have been added to support View N Pay™:

Ecom_Invoice_PeriodStart
Ecom_Invoice_PeriodEnd
Ecom_Invoice_PreviousBillingDate
Ecom_Invoice_PreviousInvoiceBalance
Ecom_Invoice_DueDate
Ecom_Invoice_NotificationFlag
Ecom_Invoice_InvoiceType
Ecom_Invoice_Template

3. In Version 4.5, the

1. In version 4.5, the DTD has changed to accommodate new parameters. All XML requests should reference the new DTD, as follows:

**<!DOCTYPE ASSUREBUY.ECOMREQUEST SYSTEM
“http://docs.assurebuy.com/assurebuy_ecomrequest_45.dtd”>**

2. In version 4.5, the following error messages have been added:

5851	Missing or invalid invoice period start date.	
5852	Missing or invalid invoice period end date.	5853 Missing or invalid previous billing date.
5854	Missing or invalid previous invoice balance.	
5855	Missing or invalid invoice due date.	
5856	Missing or invalid invoice notification flag.	
5857	Missing or invalid invoice type.	5858 Missing or invalid invoice template ID.
5624	Missing or invalid POS entry mode.	

5625	Missing or invalid POS terminal type.
5626	Missing or invalid POS swipe capability.
5627	Missing or invalid POS track 1 data.
5628	Missing or invalid POS track 2 data.
5722	Missing or invalid product reference flag.
5511	Missing or invalid cost discount percent.

3. In version 4.5, when the value of the **Ecom_Order_Source = RT** (Retail), the following parameters are required:

Ecom_Payment_POS_EntryMode
Ecom_Payment_POS_TerminalType
Ecom_Payment_POS_SwipeCapability

4. In version 4.5, when sending Retail POS transactions, the integrator may extract the account number, cardholder name, and expiration date from the swiped date and populate the appropriate input parameters directly. If any of those fields are left empty, the gateway will attempt to extract the data directly from the value of either the **Ecom_Payment_POS_Track1** parameter or the **Ecom_Payment_POS_Track2** parameter, depending on the value found in the **Ecom_Payment_POS_EntryMode** parameter. An error will be returned if the account number, or expiration date cannot be located.
5. In version 4.5, a new payment type of "XX" for retail processing was added. The value "XX" is valid for **Ecom_Payment_Type** only when **Ecom_Order_Source = RT**. For other order source value, the system will return an error message. When using the XX value for this parameter, the payment type will be determined automatically from the credit card number.
6. In version 4.5, two additional response values were added for the **Ecom_Trans_AVS_Address** and **Ecom_Trans_AVS_Zip** parameters, as follows:

X = AVS not supported by processor
E = AVS system error

Version 4.6

Parameter Changes

1. The **Ecom_GatewayVersion** parameter should be changed to **4.6**.
2. In Version 4.6, following new parameters have been added:

Ecom_Payment_VerificationIndicator

Functionality Changes

1. In version 4.6, the DTD has changed to accommodate new input parameters. All XML requests should reference the new DTD, as follows:

```
<!DOCTYPE ASSUREBUY.ECOMREQUEST SYSTEM  
    "http://docs.assurebuy.com/assurebuy_ecomrequest_46.dtd">
```

2. Changed default values for **Ecom_Payment_CardPresent** and **Ecom_Paymnet_CustomerPresent** to be set to "Y" if **Ecom_Order_Source** is set to "RT" for retail.
3. In version 4.6, the following error messages have been added:

5629 Missing or invalid payment verification indicator.

INPUT PARAMETERS

Connection URL

Input parameters are posted to the AssureBuy servers using either name-value pairs or xml formatted data. Regardless of the posting method employed, all data must be submitted using an SSL encrypted secure HTTPS post to the AssureBuy servers, located at one of the following URLs:

https://gateway.assurebuy.com/ics_gateway.exe (primary)
https://gateway2.assurebuy.com/ics_gateway.exe (secondary)

Depending on the method selected for sending input data, the http headers will also need to be set properly. For name-value pairs, use the following header:

Content-type: application/x-www-form-urlencoded

For XML-formatted data, use the following header:

Content-type: text/xml

Parameter List

The following table lists all of the input parameters which may be sent to the AssureBuy Internet Payment Gateway. Note that items listed as optional may become required parameters by adjusting the order validation rules associated with your account. Please contact your account representative if you have questions about using order validation rules with your account.

Parameter	Data Type	Max Length	Required	Description
REQUEST HEADER PARAMETERS				
Ecom_UserID	Text	5	Yes	This parameter must contain the AssureBuy-assigned user ID for this gateway client.
Ecom_Password	Text	20	Yes	This parameter must contain the user-assigned password for this gateway client.
Ecom_Mode	Text	1	Yes	This parameter must contain the desired operation mode of the payment gateway for the current transaction. Valid values include: P = Production/Live Mode T = Test/Development Mode NOTE: There is no default value for this parameter. A valid value must be received or an error will be generated.
Ecom_GatewayVersion	Text	5	Yes	This parameter must contain the version number of the gateway application being used. The value must be set to 4.6 .
Ecom_SchemaVersion	URL	120	Optional	Contains the URL identifying the

				ECML schema used for this version. Should be set to " http://secure.assurebuy.com/ecml/version/1.1a ".
Ecom_P3PPolicy	URL	120	Optional	Contains the URL identifying the location of the privacy policy for this seller.
Ecom_P3PAgent	URL	120	Optional	Contains the URL identifying the location of the third-party agency providing the privacy policy compliance assurance.
Ecom_ResponseType	Text	1	Yes	This parameter determines the type of response generated by the AssureBuy server and how that response is handled. Valid values include: 0 = No response 1 = Name-value pair response only 2 = XML-formatted response only 3 = Name-value post to remote URL 4 = XML post to remote URL only 5 = Name-value response and post 6 = XML response and post
Ecom_PostURL	URL	120	Conditional	This parameter contains the URL of a remote script to which response data should be posted. This parameter is required when Ecom_ResponseType is set to one of the following: 3, 4, 5, 6 .
Ecom_TransactionComplete	Text	1	Optional	A flag to indicate that this webpage/aggregate is the final one for this order.
Ecom_TestAction	Text	1	Optional	This parameter contains the desired transaction result for a test transaction. This parameter is used when the value of the Ecom_Mode parameter is set to T . The default value is Y , unless overridden by the fraud system. Valid values include: Y = Approved (Default) N = Declined V = Void D = Manual Decline C = Auto Cancel (Fraud System) E = Expired H = Hold/Pending
ORDER PARAMETERS				
Ecom_Order_SellerOrderID	Text	30	Optional	A unique order identifier as assigned by the seller.
Ecom_Order_Date	Date	15	Optional	Contains the order date for the current order. Must be in the format MMDDYYYY HHMMSS . Valid time values are 000001 to 235959 . The time portion may be omitted. Default value is the current date.
Ecom_Order_CustomerID	Text	30	Optional	This parameter contains the identifier for the current customer. The default value is NULL . NOTE: When using the AssureBuy customer profile service, this identifier may be used to retrieve and load the BillTo and ShipTo fields from the current customer profile maintained by AssureBuy.
Ecom_Order_PONumber	Text	30	Optional	This parameter contains the customer assigned purchase order number for the current transaction. The default value is NULL .
Ecom_Order_ShipMethod	Text	30	Optional	This parameter contains the method

AssureBuy - Internet Payment Gateway

				to be used for shipping the current order. The default value is NULL .
Ecom_Order_ShippingInstructions	Text	60	Optional	This parameter contains the user-defined shipping instructions as entered by the customer. The default value is NULL .
Ecom_Order_Comments	Text	2048	Optional	This parameter should contain any customer-entered order comments that are associated with this order. The default value is NULL .
Ecom_Order_Source	Text	2	Optional	This parameter contains the code to identify the source for the current order. Valid values include: EM = E-Mail FX = Fax IN = Installment Payment MA = Mail OL = On-Line (default) OT = Other RT = Retail TX = Telephone
Ecom_Order_Language	Number	2	Optional	This parameter identifies the language used by the customer to place the order. Must be a number in the range 1 – 99. Valid values include: 0 = English (default) 1 = French 2 = Swedish 3 = German 4 = Italian 5 = Spanish 6 = Portuguese 7 = Japanese 8 = Cantonese 9 = Dutch
Ecom_Order_TaxJurisdiction	Text	20	Conditional	This parameter should contain the jurisdiction associated with any collected taxes. This parameter is required when tax amount is present. The default value is NULL .
Ecom_Order_TaxCountry	Text	2	Conditional	This parameter should contain the country associated with any collected taxes. Valid values must match the ISO 3166 standard two-letter codes for country names. This parameter is required when tax amount is present. The default value is NULL .
Ecom_Order_VATTaxRate	Number	12	Optional	The tax rate associated with any applicable VAT tax for this transaction. This value should be expressed as a decimal value. For example: 5-3/4% would be sent as 5.75 . The default value is 0.00 .
Ecom_Order_VATTaxID	Text	15	Optional	The tax identification number associated with any VAT tax for this order. The default value is NULL .
Ecom_Order_AlternateTaxRate	Number	12	Optional	The tax rate associated with any applicable alternate tax for this transaction. This value should be expressed as a decimal value. For example: 5-3/4% would be sent as 5.75 . The default value is 0.00 .
Ecom_Order_AlternateTaxID	Text	15	Optional	The tax identification number associated with any alternate tax for this order. The default value is NULL .
Ecom_Order_CurrencyCode	Text	3	Optional	The three-letter ISO 4217 standard currency code. The default value is

AssureBuy - Internet Payment Gateway

				USD.
Ecom_Order_CurrencyRule	Text	1	Optional	This parameter identifies which party determines the currency to be used for the transaction. Valid values include: B = Buyer S = Seller (default)
Ecom_Order_IPAddress	Text	30	Conditional	This parameter should contain the IP address of the customer placing this order. This parameter is required when the Ecom_Order_Source parameter is set to OL .
Ecom_Order_BrowserType	Text	50	Optional	This parameter contains the customer browser type used to place an Internet order. The browser type can be obtained by retrieving the HTTP_AGENT environment variable. The default value is NULL .
INVOICE PARAMETERS				
Ecom_Invoice_PeriodStart	Date	8	Optional	Contains the invoice period start date for the current order/invoice. Must be in the format MMDDYYYY .
Ecom_Invoice_PeriodEnd	Date	8	Optional	Contains the invoice period end date for the current order/invoice. Must be in the format MMDDYYYY .
Ecom_Invoice_PreviousBillingDate	Date	8	Optional	Contains the previous invoice billing date for the current order/invoice. Must be in the format MMDDYYYY .
Ecom_Invoice_PreviousInvoiceBalance	Number	12	Optional	The previous invoice balance for the current order/invoice. The default value is 0.00 .
Ecom_Invoice_DueDate	Date	8	Optional	Contains the payment due date for the current order/invoice. Must be in the format MMDDYYYY . Defaults to the value of Ecom_Order_Date if left blank.
Ecom_Invoice_NotificationFlag	Text	1	Optional	Contains a flag to determine whether or not the invoice notification e-mail message should be sent for the current order/invoice. Valid values include: Y = Yes (default) N = No. NOTE: When this value is set to Y , the sending of the notification e-mail will be depend on the configuration of the settings for both the Seller and the Customer.
Ecom_Invoice_InvoiceType	Text	1	Optional	Contains the invoice type for the current order/invoice. Valid values include: 0 = Invoice (default) 1 = Statement 2 = Master Invoice NOTE: When the value of this parameter is set to 1 , the invoice total will not be included in the total amount owing for the customer in the View N Pay service.
Ecom_Invoice_Template	Text	20	Optional	Contains the name of the invoice template to be used when displaying this invoice in the View N Pay service. If blank, the default template from the Seller configuration settings will be used.
ORDER BILLTO PARAMETERS				
Ecom_BillTo_Postal_Name_First	Text	15	Optional	The first name of the individual associated with the BillTo postal address.

AssureBuy - Internet Payment Gateway

Ecom_BillTo_Postal_Name_Middle	Text	15	Optional	The middle name of the individual associated with the BillTo postal address.
Ecom_BillTo_Postal_Name_Last	Text	30	Optional	The last name of the individual associated with the BillTo postal address.
Ecom_BillTo_Postal_Name_Prefix	Text	4	Optional	The prefix or title associated with the current name. Examples include: Mr., Mrs., Ms., Dr., etc...
Ecom_BillTo_Postal_Name_Company	Text	30	Optional	The company name associated with the BillTo postal address.
Ecom_BillTo_Postal_Street_Line1	Text	30	Conditional	The first line of street address information associated with the BillTo postal address. Required when using address verification service (AVS).
Ecom_BillTo_Postal_Street_Line2	Text	30	Optional	The second line of street address information associated with the BillTo postal address.
Ecom_BillTo_Postal_Street_Line3	Text	30	Optional	The third line of street address information associated with the BillTo postal address.
Ecom_BillTo_Postal_City	Text	30	Optional	The city associated with the BillTo postal address.
Ecom_BillTo_Postal_StateProv	Text	30	Optional	The state/province associated with the BillTo postal address.
Ecom_BillTo_Postal_PostalCode	Text	14	Conditional	The postal code associated with the BillTo postal address. Required when using address verification service (AVS).
Ecom_BillTo_Postal_CountryCode	Text	2	Conditional	The country code associated with the BillTo postal address. Valid values must match the ISO 3166 standard two-letter codes for country names. Required when using address verification service (AVS).
Ecom_BillTo_Telecom_DayPhone	Text	20	Optional	The daytime phone number associated with the BillTo entity.
Ecom_BillTo_Telecom_EvePhone	Text	20	Optional	The evening phone number associated with the BillTo entity.
Ecom_BillTo_Telecom_Fax	Text	20	Optional	The fax number associated with the BillTo entity.
Ecom_BillTo_Online_Email	Text	60	Optional	The e-mail address associated with the BillTo entity.
ORDER SHIPTO PARAMETERS				
Ecom_ShipTo_Postal_Name_First	Text	15	Optional	The first name of the individual associated with the ShipTo postal address.
Ecom_ShipTo_Postal_Name_Middle	Text	15	Optional	The middle name of the individual associated with the ShipTo postal address.
Ecom_ShipTo_Postal_Name_Last	Text	30	Optional	The last name of the individual associated with the ShipTo postal address.
Ecom_ShipTo_Postal_Name_Prefix	Text	4	Optional	The prefix or title associated with the current name. Examples include: Mr., Mrs., Ms., Dr., etc...
Ecom_ShipTo_Postal_Name_Company	Text	30	Optional	The company name associated with the ShipTo postal address.
Ecom_ShipTo_Postal_Street_Line1	Text	30	Optional	The first line of street address information associated with the ShipTo postal address.
Ecom_ShipTo_Postal_Street_Line2	Text	30	Optional	The second line of street address information associated with the ShipTo postal address.
Ecom_ShipTo_Postal_Street_Line3	Text	30	Optional	The third line of street address information associated with the ShipTo postal address.
Ecom_ShipTo_Postal_City	Text	30	Optional	The city associated with the ShipTo

AssureBuy - Internet Payment Gateway

				postal address.
Ecom_ShipTo_Postal_StateProv	Text	30	Conditional	The state/province associated with the ShipTo postal address. Required for proper tax calculation when using either the AssureBuy or TaxWare tax calculation service.
Ecom_ShipTo_Postal_PostalCode	Text	14	Conditional	The postal code associated with the ShipTo postal address. Required for proper tax calculation when using either the AssureBuy or TaxWare tax calculation service.
Ecom_ShipTo_Postal_CountryCode	Text	2	Conditional	The country code associated with the ShipTo postal address. Valid values must match the ISO 3166 standard two-letter codes for country names. Required for proper tax calculation when using either the AssureBuy or TaxWare tax calculation service.
Ecom_ShipTo_Telecom_DayPhone	Text	20	Optional	The daytime phone number associated with the ShipTo entity.
Ecom_ShipTo_Telecom_EvePhone	Text	20	Optional	The evening phone number associated with the ShipTo entity.
Ecom_ShipTo_Telecom_Fax	Text	20	Optional	The fax number associated with the ShipTo entity.
Ecom_ShipTo_Online_Email	Text	60	Optional	The e-mail address associated with the ShipTo entity.
ORDER SHIPFROM PARAMETERS				
Ecom_ShipFrom_Location_ID	Text	20	Optional	The ShipFrom location ID for the current transaction.
Ecom_ShipFrom_Location_Company	Text	30	Optional	The company name associated with the ShipFrom location address.
Ecom_ShipFrom_Location_Street_Line1	Text	30	Optional	The first line of street address information associated with the ShipFrom location address.
Ecom_ShipFrom_Location_Street_Line2	Text	30	Optional	The second line of street address information associated with the ShipFrom location address.
Ecom_ShipFrom_Location_Street_Line3	Text	30	Optional	The third line of street address information associated with the ShipFrom location address.
Ecom_ShipFrom_Location_City	Text	30	Optional	The city associated with the ShipFrom location address.
Ecom_ShipFrom_Location_StateProv	Text	30	Conditional	The state/province associated with the ShipFrom location address. Required for proper tax calculation when using the TaxWare tax calculation service.
Ecom_ShipFrom_Location_PostalCode	Text	14	Conditional	The postal code associated with the ShipFrom location address. Required for proper tax calculation when using the TaxWare tax calculation service.
Ecom_ShipFrom_Location_CountryCode	Text	2	Conditional	The country code associated with the ShipFrom location address. Valid values must match the ISO 3166 standard two-letter codes for country names. Required for proper tax calculation when using the TaxWare tax calculation service.
ORDER COST PARAMETERS				
Ecom_Order_Cost_SubTotal	Number	12	Conditional	The item sub-total of the items on this order. This parameter is required when product detail is not being transmitted. If product detail is being transmitted, this parameter is used as a checksum value to validate the product totals. The default value is 0.00 .
Ecom_Order_Cost_Tax	Number	12	Conditional	The sales tax associated with the

AssureBuy - Internet Payment Gateway

				current order. Required when AssureBuy tax calculation service is not used. The default value is 0.00 .
Ecom_Order_Cost_VATTax	Number	12	Optional	The VAT tax associated with the current order. The default value is 0.00 .
Ecom_Order_Cost_AlternateTax	Number	12	Optional	The alternate tax associated with the current order. The default value is 0.00 .
Ecom_Order_Cost_Shipping	Number	12	Conditional	The shipping and handling cost associated with the current order. Required when AssureBuy shipping calculation service is not being used. The default value is 0.00 .
Ecom_Order_Cost_Duty	Number	12	Optional	The duty amount associated with the current order. The default value is 0.00 .
Ecom_Order_Cost_Discount	Number	12	Optional	The discount amount associated with the current order. The default value is 0.00 .
Ecom_Order_Cost_DiscountPercent	Number	12	Optional	The discount percent associated with the discount amount for the current order. The default value is 0.00 .
Ecom_Order_Cost_Tip	Number	12	Optional	The tip/gratuity associated with the current order. The default value is 0.00 .
Ecom_Order_Cost_Total	Number	12	Conditional	The total payment associated with the current order. The default value is 0.00 . This parameter may be required depending on the payment gateway configuration and when AssureBuy is not automatically calculating the order total.
Ecom_Order_Cost_AmountPaid	Number	12	Optional	The total amount paid by the purchaser on this transaction. This is the amount actually billed to the purchaser. The default is the value found in the Ecom_Order_Cost_Total parameter. This value cannot be larger than the value found in the Ecom_Order_Cost_Total parameter.
ORDER USER-DEFINED PARAMETERS				
Ecom_Order_UserDefined_MaxCount	Number	3	Optional	This parameter should contain the maximum number of user-defined order items for this seller. Valid values are 0 through 999. The default value is 9. Setting this parameter as low as possible will result in improved gateway performance.
Ecom_Order_UserDefined_001 Ecom_Order_UserDefined_nnn	Text	50	Optional	This set of parameters should contain any user-defined customer data collected as part of the order. The numeric suffix must be 3-digits, from 001 to 999. The parameters do not need to be passed or used in order. The default value for each is NULL .
ORDER PAYMENT PARAMETERS				
Ecom_Payment_Action	Text	1	Yes	This parameter holds the action to be performed for the current transaction. Valid values include: A = Authorization E = Execute/Settle Transaction S = Sale C = Refund R = Reversal (Not Supported By All

				Processors) V = Void X = Chargeback F = Force Sale
Ecom_Payment_Type	Text	2	Yes	This parameter identifies the type of payment associated with the current transaction. Valid values include: AM = American Express BR = Bravo CB = Carte Blanche CK = Check CO = C.O.D. CS = Cash CT = Gift Certificate/Coupon DC = Diners Club DI = Discover EC = EuroCard FT = Funds Transfer/ACH GT = Giveaway/Promotion IN = Invoice JC = JCB Card MC = MasterCard MO = Money Order OP = Optima PO = Purchase Order VI = Visa XX = Swipe Terminals Only
Ecom_Payment_CardType	Text	1	Optional	This parameter indicates the type of payment card used for the transaction. Valid values include: 0 = Not a commercial card 1 = Purchasing card 2 = Corporate card 3 = Business card 4 = Unknown (default)
Ecom_Payment_Number	Text	20	Conditional	This parameter holds the number associated with the current payment type. This parameter is required when the Ecom_Payment_Type parameter contains one of the following values: AM, BR, CB, CK, DC, DI, EC, FT, JC, MC, MO, OP, PO, VI. If this parameter is left blank and the value of the Ecom_Order_Source parameter is RT , and the value of the Ecom_Payment_POS_EntryMode = 1 (Track 1) or 2 (Track 2) then the value for this parameter will be extracted from either the Ecom_Payment_POS_Track1 or Ecom_Payment_POS_Track2 parameters.
Ecom_Payment_VerificationIndicator	Text	1	Optional	A flag indicating whether or not CVV2 information was sent to the gateway. Valid values include: Y = CVV Sent N = CVV Deliberately not sent I = CVV on card but not legible M = CVV not on card Default values are as follows: Y if Ecom_Payment_Verification has a value. N if Ecom_Payment_Verification does not have a value.
Ecom_Payment_Verification	Text	4	Optional	This parameter contains an additional payment verification number, such as the American Express CID number, the

AssureBuy - Internet Payment Gateway

				MasterCard CVC2 number or the Visa CVV2 number. (This number is usually not embossed or recorded on the magnetic stripe of a credit card.)
Ecom_Payment_PIN	Text	20	Optional	This parameter contains the PIN number associated with the current transaction type or Check number for Ecom_Payment_Type FT .
Ecom_Payment_CardPresent	Text	1	Optional	This parameter is used to indicate whether or not the payment card used was present at the time of the transaction. Valid values are: Y = Yes N = No (default) If Ecom_Order_Source is set to "RT" then the default value is "Y".
Ecom_Payment_CustomerPresent	Text	1	Optional	This parameter is used to indicate whether or not the customer was present at the time of the transaction. Valid values are: Y = Yes N = No (default) If Ecom_Order_Source is set to "RT" then the default value is "Y".
Ecom_Payment_ExpDate_Day	Number	2	Optional	The day portion of the payment expiration date. Valid values are 1 – 31 . The default value is the last valid day for the month and year entered.
Ecom_Payment_ExpDate_Month	Number	2	Conditional	The month portion of the payment expiration date. Valid values are 1 – 12 . This parameter is required when the Ecom_Payment_Type parameter contains one of the following values: AM, BR, CB, DC, DI, EC, JC, MC, OP, VI . If this parameter is left blank and the value of the Ecom_Order_Source parameter is RT , and the value of the Ecom_Payment_POS_EntryMode = 1 (Track 1) or 2 (Track 2) then the value for this parameter will be extracted from either the Ecom_Payment_POS_Track1 or Ecom_Payment_POS_Track2 parameters.
Ecom_Payment_ExpDate_Year	Number	4	Conditional	The year portion of the payment expiration date. Valid values are 0001 – 9999 (always 4 digits). This parameter is required when the Ecom_Payment_Type parameter contains one of the following values: AM, BR, CB, DC, DI, EC, JC, MC, OP, VI . If this parameter is left blank and the value of the Ecom_Order_Source parameter is RT , and the value of the Ecom_Payment_POS_EntryMode = 1 (Track 1) or 2 (Track 2) then the value for this parameter will be extracted from either the Ecom_Payment_POS_Track1 or Ecom_Payment_POS_Track2 parameters.
Ecom_Payment_PayerName	Text	30	Conditional	This parameter holds the name of the payer for the current transaction. This parameter is required when the Ecom_Payment_Type parameter contains one of the following values:

AssureBuy - Internet Payment Gateway

				CK, FT, MO
Ecom_Payment_BankCode	Text	9	Conditional	The bank ABA or SWIFT code used to identify the purchaser's bank. This value is required when the Ecom_Payment_Type is FT .
Ecom_Payment_POS_EntryMode	Number	1	Optional	The mode used to acquire the account number and expiration date for the current transaction. Valid values include: 0 = Unknown (default) 1 = Track 1 Data (default when Track 1 data is sent) 2 = Track 2 Data (default when Track 2 data is sent) 3 = Manually Keyed
Ecom_Payment_POS_TerminalType	Number	1	Optional	The type of device used to acquire the account number and expiration date for the current transaction. Valid values include: 0 = Unknown (default) 1 = Terminal 2 = Register 3 = Other
Ecom_Payment_POS_SwipeCapability	Text	1	Optional	A flag indicating whether or not the device used to acquire the account number and expiration date for the current transaction has swipe capability. Valid values include: Y = Yes N = No (default)
Ecom_Payment_POS_Track1	Text	80	Optional	The data stream as swiped from Track 1 of a credit card. This parameter, when supplied, will overwrite the values sent for Ecom_Payment_Number , Ecom_Payment_ExpDate_Month , Ecom_Payment_ExpDate_Year , and Ecom_Payment_PayerName .
Ecom_Payment_POS_Track2	Text	40	Optional	The data stream as swiped from Track 2 of a credit card. This parameter, when supplied, will overwrite the values sent for Ecom_Payment_Number , Ecom_Payment_ExpDate_Month , and Ecom_Payment_ExpDate_Year .
Ecom_Payment_ACH_AccountIndicator	Text	1	Conditional	The bank account indicator value for the current transaction. This value is required when using the AssureBuy ACH payment service and the Ecom_Payment_Type is FT . Valid values are: C = Checking Account S = Savings Account
Ecom_Payment_ACH_AccountType	Text	1	Conditional	The bank account type associated with the current transaction. This value is required when using the AssureBuy ACH payment service and the Ecom_Payment_Type is FT . Valid values are: B = Business Account P = Personal Account
Ecom_Payment_RetrievalNumber	Text	12	Optional	This parameter is used to hold a retrieval number associated with charge reversal actions. The default value is NULL .
Ecom_Payment_OriginalTransaction	Number	9	Conditional	This parameter contains the transaction number of the original transaction to be associated with the

				current transaction. If this parameter is set and the original transaction is valid, then the current transaction will be added to the same order as the original transaction and no new order will be created. This parameter is required when the Ecom_Payment_Action parameter contains one of the following values: E, R, V, F .
Ecom_Payment_ApprovalCode	Text	20	Conditional	This parameter contains the approval code to be manually assigned to the current transaction. This parameter is required when the Ecom_Payment_Action parameter is set to F .
Ecom_Payment_ConfirmPhone	Text	20	Conditional	This parameter contains the phone number to be dialed for an Authenticate transaction. This parameter is required if the Authenticate service is being used. See your account representative for more information about the Authenticate service.
Ecom_Payment_ConfirmValue	Text	20	Conditional	This parameter contains the Authenticate transaction confirmation value used to validate the transaction. This parameter is required if the Authenticate service is being used. See your account representative for more information about the Authenticate service.
Ecom_Payment_VPASTransID	Text	40	Optional	This parameter contains the VPAS authentication number previously sent to the password authentication service.
Ecom_Payment_CAVV	Text	40	Optional	This parameter contains the VPAS cardholder authentication verification value returned by the VPAS service.
ORDER PRODUCT PARAMETERS				NOTE: Up to 999 line items may be attached to each order. The product parameters for each line item must contain a unique identifier between 001 and 999 . This unique identifier must be inserted in the parameter names in place of the 000 below.
Ecom_Product000_ItemID	Number	9	Optional	This parameter contains the item price for the specified product. The price is adjusted by the unique price adjustment factor established for your AssureBuy account. See your account representative for more details.
Ecom_Product000_SKU	Text	20	Optional	This parameter contains the SKU or seller-assigned Item Number for the specified product.
Ecom_Product000_ItemDesc	Text	50	Optional	This parameter contains the item description for the specified product.
Ecom_Product000_ItemCategory	Text	20	Optional	This parameter contains the item product category for the specified product.
Ecom_Product000_Quantity	Number	12	Optional	This parameter contains the quantity ordered for the specified product.
Ecom_Product000_UOM	Text	3	Optional	This parameter contains the Unit of Measure for the specified product. The default value is EA .
Ecom_Product000_MinQuantity	Number	12	Optional	This parameter contains the minimum order quantity for this item. This parameter is used for optional product information validation.

AssureBuy - Internet Payment Gateway

Ecom_Product000_ItemWeight	Number	12	Optional	This parameter contains the per item unit weight for the specified product.
Ecom_Product000_TaxAmount	Number	12	Optional	This parameter contains the tax amount associated with the specified item. If the AssureBuy tax calculation service is used, this value will be calculated automatically. This value will be ignored if Ecom_Product000_TaxFlag is set to N or Ecom_Product000_TaxExempt is set to Y . The default value is 0.00 .
Ecom_Product000_TaxRate	Number	12	Optional	The tax rate associated with the calculated tax for the specified item. If not supplied, the rate will be calculated by dividing the tax amount by the line item total.
Ecom_Product000_TaxCode	Text	4	Optional	The 4-digit tax category code associated with the specified item.
Ecom_Product000_DiscountAmount	Number	12	Optional	This parameter contains the discount amount associated with the specified item. This value should be expressed as a positive number and will be deducted from the total amount for this item. This value is an aggregate line item amount and is not multiplied by the item quantity. The value cannot be larger than the line item amount. The default value is 0.00 .
Ecom_Product000_TaxFlag	Text	1	Optional	This parameter contains a flag to indicate whether or not this product is taxable. Valid values include: Y = Yes (default) N = No
Ecom_Product000_TaxExemptFlag	Text	1	Optional	This parameter contains a flag to indicate whether or not this product is tax exempt for the current customer. Valid values include: Y = Yes N = No (default)
Ecom_Product000_ReturnedItemFlag	Text	1	Optional	This parameter contains a flag to indicate whether or not this product is a returned item. The default value is Y for transactions with a payment action of C , R , and X . Otherwise, the default value is N . Valid values include: Y = Yes N = No NOTE: The setting of this parameter is for informational purposes and is used only when sending Level 3 purchase information to card processing networks. It is not used by the AssureBuy automatic order calculation system.
Ecom_Product000_ShipFlag	Text	1	Optional	This parameter contains a flag to indicate whether or not this product is shippable. Valid values include: Y = Yes (default) N = No
Ecom_Product000_ReferenceFlag	Text	1	Optional	This parameter contains a flag to indicate whether or not this line item has been included for reference purposes only. Valid values include: Y = Yes N = No

				The default value of this parameter is N when the Seller has the automatic calculation option enabled, and Y when the automatic calculation option is disabled.
Ecom_Product000_RecurringFlag	Text	1	Optional	This parameter contains a flag to indicate whether or not this product is part of a recurring order. Valid values include: Y = Yes N = No (default) NOTE: If the order is a recurring order, the sum of all products with the Ecom_Product000_RecurringFlag set to Y must equal the value in the Ecom_Order_Recurring_Amount parameter.
Ecom_Product000_DownloadFlag	Text	1	Optional	This parameter contains a flag to indicate whether or not this product is a digital delivery or download item. Valid values include: Y = Yes N = No (default)
Ecom_Product000_DownloadFile	Text	255	Optional	This parameter contains the filename of the file(s) to be delivered for this item.
Ecom_Product000_DownloadDesc	Text	120	Optional	This parameter contains the description to be used on the download link for the on-line product download.
ORDER PRODUCT USER-DEFINED PARAMETERS				
Ecom_Product_UserDefined_MaxCount	Number	3	Optional	This parameter should contain the maximum number of user-defined order detail items for this seller. Valid values are 0 through 999. The default value is 9. Setting this parameter as low as possible will result in improved gateway performance.
Ecom_Product000_UserDefined_001 Ecom_Product000_UserDefined_nnn	Text	50	Optional	This set of parameters should contain any user-defined product data collected or associated with the product identified by the Product000 portion of the parameter name. The numeric suffix must be 3-digits, from 001 to 999. The parameters do not need to be passed or used in order. The default value for each is NULL .
ORDER RECURRING PARAMETERS				
Ecom_Order_Recurring_Amount	Number	12	Optional	This parameter is used to indicate that the order is to be treated as a recurring order. If this parameter is present and is greater than zero, then the order will be treated as a recurring order. The default value is 0.00 .
Ecom_Order_Recurring_Cycle	Text	1	Optional	This parameter contains the recurring order cycle code. Valid values include: D = Daily W = Weekly M = Monthly Q = Quarterly Y = Yearly The default value is NULL .
Ecom_Order_Recurring_Period	Number	3	Optional	This parameter contains the number of periods for each cycle. Valid

				values are 1 – 999. The default value is 1.
Ecom_Order_Recurring_Termination	Date	8	Optional	This parameter contains the date on which recurring orders will terminate. The data must contain the following format: MMDDYYYY . The default value is NULL .

Table 1

Name-Value Pairs

When sending data to the AssureBuy Internet Payment Gateway using name-value pairs, the data must be posted with a standard CGI “post” operation using a secure “https” (SSL Encrypted) connection. The posted data is formatted by creating a single stream of parameters and URL-encoded parameter data in the following format:

parametername=parameterdata¶metername2=parameterdata2&...

For example, the following table shows a series of parameters along with associated parameter values. It is not necessary to send parameters with NULL values.

Parameter Name	Value
Ecom_UserID	12345
Ecom_Password	45#qd78@4v
Ecom_Mode	P
Ecom_GatewayVersion	4.6
Ecom_Order_SellerOrderID	34505
Ecom_Order_Date	07152000 103000
etc...	

Table 2

Using name-value pairs, the above parameters would be posted to the AssureBuy servers in the following format:

***Ecom_UserID=12345&Ecom_Password=45%23qd78%404v&Ecom_Mode=P
&Ecom_GatewayVersion=4%2E6&Ecom_Order_SellerOrderID=34505&Eco
m_Order_Date=07152000+103000&...***

SPECIAL NOTES FOR NAME-VALUE FORMATTED DATA:

1. The above data shows the parameter data in URL-encoded format.
2. The data portion of all name-value parameters passed to the AssureBuy Internet Payment Gateway must be URL-encoded before being sent to the AssureBuy servers.

XML Formatted Data

XML formatted data is posted to the AssureBuy servers using a standard CGI “post” operation using a secure “https” (SSL encrypted) connection in the same manner as name-value pairs. However, using XML, the data must be structured and transmitted in an XML style data stream.

XML uses a hierarchical, or tree, structure for the XML data elements. Each element consists of a start tag and an end tag, between which the parameter data is contained. The only exception to the above rule are the USERID and PASSWORD parameters, which are actually sent as attributes of the top-level start tag.

A major advantage of using XML structured data is that there is no need to uniquely identify data elements which occur multiple times in the transmission. An example of this would be the product detail information, of which there may be multiple occurrences per order. Another advantage is that XML data can be automatically parsed, using a standard XML parser, and be placed into variables inside the receiving application.

The following diagram shows the hierarchy of the XML structure for the input parameters listed in *Table 1*, above:

```
<?xml version = "1.0"?>
<!DOCTYPE ASSUREBUY.ECOMREQUEST SYSTEM
  "http://docs.assurebuy.com/assurebuy_ecomrequest_46.dtd">
<ASSUREBUY.ECOMREQUEST
  USERID="xxxxx"
  PASSWORD="xxxxxxxxxxxxxxxxxxxxxx">
  <Mode></Mode>
  <GatewayVersion></GatewayVersion>
  <SchemaVersion></SchemaVersion>
  <P3Ppolicy></P3Ppolicy>
  <P3Pagent></P3Pagent>
  <ResponseType></ResponseType>
  <PostURL></PostURL>
  <TransactionComplete></TransactionComplete>
  <TestAction></TestAction>

  <Order>
    <SellerOrderID></SellerOrderID>
    <Date></Date>
    <CustomerID></CustomerID>
    <PONumber></PONumber>
    <ShipMethod></ShipMethod>
    <ShippingInstructions></ShippingInstructions>
    <Comments></Comments>
    <Source></Source>
    <Language></Language>
```

```
<TaxJurisdiction></TaxJurisdiction>
<TaxCountry></TaxCountry>
<VATTaxRate></VATTaxRate>
<VATTaxID></VATTaxID>
<AlternateTaxRate></AlternateTaxRate>
<AlternateTaxID></AlternateTaxID>
<CurrencyCode></CurrencyCode>
<CurrencyRule></CurrencyRule>
<IPAddress></IPAddress>
<BrowserType></BrowserType>

<Invoice>
  <PeriodStart></PeriodStart>
  <PeriodEnd></PeriodEnd>
  <PreviousBillingDate></PreviousBillingDate>
  <PreviousInvoiceBalance></PreviousInvoiceBalance>
  <DueDate></DueDate>
  <NotificationFlag></NotificationFlag>
  <InvoiceType></InvoiceType>
  <Template></Template>
</Invoice>

<BillTo>
  <Postal>
    <Name>
      <First></First>
      <Middle></Middle>
      <Last></Last>
      <Prefix></Prefix>
      <Company></Company>
    </Name>
    <Street>
      <Line1></Line1>
      <Line2></Line2>
      <Line3></Line3>
    </Street>
    <City></City>
    <StateProv></StateProv>
    <PostalCode></PostalCode>
    <CountryCode></CountryCode>
  </Postal>
  <Telecom>
    <DayPhone></DayPhone>
    <EvePhone></EvePhone>
    <Fax></Fax>
  </Telecom>
  <Online>
    <Email></Email>
  </Online>
</BillTo>

<ShipTo>
  <Postal>
    <Name>
      <First></First>
      <Middle></Middle>
```

```

        <Last></Last>
        <Prefix></Prefix>
        <Company></Company>
    </Name>
    <Street>
        <Line1></Line1>
        <Line2></Line2>
        <Line3></Line3>
    </Street>
    <City></City>
    <StateProv></StateProv>
    <PostalCode></PostalCode>
    <CountryCode></CountryCode>
</Postal>
<Telecom>
    <DayPhone></DayPhone>
    <EvePhone></EvePhone>
    <Fax></Fax>
</Telecom>
<Online>
    <Email></Email>
</Online>
</ShipTo>

<ShipFrom>
    <Location>
        <ID></ID>
        <Company></Company>
        <Street>
            <Line1></Line1>
            <Line2></Line2>
            <Line3></Line3>
        </Street>
        <City></City>
        <StateProv></StateProv>
        <PostalCode></PostalCode>
        <CountryCode></CountryCode>
    </Location>
</ShipFrom>

<Cost>
    <SubTotal></SubTotal>
    <Tax></Tax>
    <VATTax></VATTax>
    <AlternateTax></AlternateTax>
    <Duty></Duty>
    <Discount></Discount>
    <DiscountPercent></DiscountPercent>
    <Shipping></Shipping>
    <Tip></Tip>
    <Total></Total>
    <AmountPaid></AmountPaid>
</Cost>

<UserDefined>
    <MaxCount></MaxCount>

```



```
<UserDataItem>
  <RefID></RefID>
  <UserData></UserData>
</UserDataItem>
</UserDefined>

<Payment>
  <Action></Action>
  <Type></Type>
  <CardType></CardType>
  <Number></Number>
  <VerificationIndicator></VerificationIndicator>
  <Verification></Verification>
  <PIN></PIN>
  <CardPresent></CardPresent>
  <CustomerPresent></CustomerPresent>
  <ExpDate>
    <Day></Day>
    <Month></Month>
    <Year></Year>
  </ExpDate>
  <PayerName></PayerName>
  <BankCode></BankCode>
  <POS>
    <EntryMode></EntryMode>
    <TerminalType></TerminalType>
    <SwipeCapability></SwipeCapability>
    <Track1></Track1>
    <Track2></Track2>
  </POS>
  <ACH>
    <AccountIndicator></AccountIndicator>
    <AccountType></AccountType>
  </ACH>
  <RetrievalNumber></RetrievalNumber>
  <OriginalTransaction></OriginalTransaction>
  <ApprovalCode></ApprovalCode>
  <ConfirmPhone></ConfirmPhone>
  <ConfirmValue></ConfirmValue>
  <VPASTransID></VPASTransID>
  <CAVV></CAVV>
</Payment>

<Products>
  <Product>
    <LineNum></LineNum>
    <ItemID></ItemID>
    <SKU></SKU>
    <ItemDesc></ItemDesc>
    <ItemCategory></ItemCategory>
    <Quantity></Quantity>
    <UOM></UOM>
    <TaxAmount></TaxAmount>
    <TaxRate></TaxRate>
    <TaxCode></TaxCode>
    <DiscountAmount></DiscountAmount>
```

```

        <MinQuantity></MinQuantity>
        <ItemWeight></ItemWeight>
        <TaxFlag></TaxFlag>
        <TaxExemptFlag></TaxExemptFlag>
        <ReturnedItemFlag></ReturnedItemFlag>
        <ShipFlag></ShipFlag>
        <ReferenceFlag></ReferenceFlag>
        <RecurringFlag></RecurringFlag>
        <DownloadFlag></DownloadFlag>
        <DownloadFile></DownloadFile>
        <DownloadDesc></DownloadDesc>

        <UserDefined>
            <MaxCount></MaxCount>
            <UserDataItem>
                <RefID></RefID>
                <UserData></UserData>
            </UserDataItem>
        </UserDefined>
    </Product>
</Products>

<Recurring>
    <Amount></Amount>
    <Cycle></Cycle>
    <Period></Period>
    <Termination></Termination>
</Recurring>
</Order>
</ASSUREBUY.ECOMREQUEST>

```

For example, the following table shows the same series of parameters as in the name-value pairs example above:

Parameter Name	Value
Ecom_UserID	12345
Ecom_Password	45#qd78@4v
Ecom_Mode	P
Ecom_GatewayVersion	4.6
Ecom_Order_SellerOrderID	18271
Ecom_Order_Date	07152000 103000
etc...	

Table 3

Along with the XML formatted data, you will need to send an XML header tag and document type tag containing version information, encoding attributes and DTD information. These tags do not need to be closed at the end of the XML data stream. The following XML header tag should be used:

```

<?xml version = "1.0"?>
<!DOCTYPE ASSUREBUY.ECOMREQUEST SYSTEM
    "http://docs.assurebuy.com/assurebuy_ecomrequest_46.dtd">

```

Using XML formatted data, the above header and input parameters would be posted to the AssureBuy servers in the following format:

```
<?xml version = "1.0"?>
<!DOCTYPE ASSUREBUY.ECOMREQUEST SYSTEM
    "http://docs.assurebuy.com/assurebuy_ecomrequest_46.dtd">
<ASSUREBUY.ECOMREQUEST USERID="12345" PASSWORD="45#qd78@4v">
    <Mode>P</Mode>
    <GatewayVersion>4.6</GatewayVersion>
    ...
    <Order>
        <SellerOrderID>18271</SellerOrderID>
        <Date>07152000 103000</Date>
        ...
    </Order>
</ASSUREBUY.ECOMREQUEST>
```

SPECIAL NOTES FOR XML FORMATTED DATA:

1. The above example is not a complete sample. The remaining parameters would also need to be sent using the same format.
2. XML formatted data does not need to be URL-encoded. However, certain special characters need to be properly formatted in order for the XML parsing engine to properly understand the XML formatting. These special characters are listed in the following table.

Special Character	ASCII Value	Formatted XML Value
<	60	<
>	62	>
&	38	&
'	39	'
"	34	"

Table 4

RESPONSE PARAMETERS

To use the AssureBuy Internet Payment Gateway, you are required to submit the input parameters to the AssureBuy server using one of the input methods described above. Upon completion of the payment authorization process, a series of response information will be returned to the remote server from which the authorization was initiated. Depending upon the setting of the **Ecom_ResponseType** input parameter, the returned data may be formatted in either name-value pairs or XML-formatted data and may also be posted to a remote processing script on an alternate computer system. When posting the response to a remote processing script, the data will be posted using a standard CGI “post” operation with a secure “https” (SSL Encrypted) connection.

The following table shows the action associated with each setting of the **Ecom_ResponseType** parameter:

<i>Ecom_ResponseType</i> Setting	Data returned to calling server using name-value pairs.	Data returned to calling server using XML-formatted data.	Data automatically posted with name-value pairs to remote script located at the URL identified by the <i>Ecom_PostURL</i> parameter.	Data automatically posted with XML-formatted data to remote script located at the URL identified by the <i>Ecom_PostURL</i> parameter.
0	NO	NO	NO	NO
1	YES	NO	NO	NO
2	NO	YES	NO	NO
3	NO	NO	YES	NO
4	NO	NO	NO	YES
5	YES	NO	YES	NO
6	NO	YES	NO	YES

Table 5

Parameter List

The following table lists all of the response parameters which may be returned by the AssureBuy Internet Payment Gateway. Values returned depend upon the setting of the **Ecom_ResponseType** input parameter (see Table 5, above) and upon the configuration of your AssureBuy account. Please contact your account representative if you have questions about which output parameters apply to your account.

Parameter	Data Type	Max Length	Required	Description
RESPONSE HEADER PARAMETERS				
Ecom_UserID	Text	20	Optional	This parameter contains an optional User ID to identify the AssureBuy response to the remote computer system. This value is to be supplied by the AssureBuy client. The default value is NULL .
Ecom_Password	Text	20	Optional	This parameter contains an optional Password to identify the AssureBuy response to the remote computer. This value is to be supplied by the

AssureBuy - Internet Payment Gateway

				AssureBuy client. The default value is NULL .
Ecom_Mode	Text	1	Yes	This parameter returns the mode in which this transaction was processed. Valid values include: P = Production/Live mode T = Test/Development mode
Ecom_GatewayVersion	Text	5	Yes	This parameter returns the version number of the gateway application used to generate the response.
Ecom_ReturnCode	Number	4	Yes	This parameter contains the return code identifying the type of response returned from the AssureBuy servers. Valid values range from 0000 to 9999 . If the AssureBuy server has successfully processed the requested transaction, this value will be set to 0000 . Any value other than 0000 , indicates that an error has occurred. See the section on Error Responses for more information.
Ecom_SessionID	Text	16	Yes	This parameter contains the unique session identifier for the current gateway request.
ORDER PARAMETERS				
Ecom_Order_SellerOrderID	Text	30	Optional	This parameter contains the unique order identifier as assigned by the seller and as passed to the AssureBuy server with the original request.
Ecom_Order_Reference	Number	13	Yes	This parameter contains the 13-digit unique order reference number as assigned by AssureBuy.
Ecom_Order_Date	Date	15	Yes	Contains the order date for the current order in the format MMDDYYYY HHMMSS . If no value was passed as part of the request, then this parameter will be assigned by AssureBuy.
ORDER TRANSACTION PARAMETERS				
Ecom_Trans_Result	Text	1	Yes	This parameter contains the result of the requested payment action. Valid values include: Y = Approved N = Declined V = Void D = Manual Decline C = Auto Cancel (Fraud System) E = Expired H = Hold/Pending
Ecom_Trans_AlternateResult	Text	120	Optional	This parameter may optionally contain a seller specific custom configured alternate result code based on the current transaction result.
Ecom_Trans_Number	Number	9	Yes	This parameter contains a unique 10-digit transaction number as assigned by AssureBuy.
Ecom_Trans_Action	Text	1	Yes	This parameter returns the requested action to be performed for the current transaction. Valid values include: A = Authorization S = Sale R = Refund X = Chargeback
Ecom_Trans_AuthDate	Date	15	Yes	This parameter contains the date the payment authorization was obtained in the format MMDDYYYY HHMMSS .
Ecom_Trans_AuthCode	Text	20	Conditional	This parameter contains the actual

				authorization code as returned by the payment processing network.
Ecom_Trans_AVS_Address	Text	1	Conditional	This parameter contains the result of the AVS test on the address portion of the payee information. Valid values include: Y = Address matches N = Address does not match U = AVS service not available X = AVS not supported by processor E = AVS system error
Ecom_Trans_AVS_Zip	Text	1	Conditional	This parameter contains the result of the AVS test on the postal code portion of the payee information. Valid values include: Y = Postal code matches N = Post code does not match U = AVS service not available X = AVS not supported by processor E = AVS system error
Ecom_Trans_CVVResponse	Text	4	Conditional	This parameter contains the result of the CVV2 validation as returned by the processor. Parameter values are determined by the processor.
Ecom_Trans_Authentify_ReturnCode	Text	1	Conditional	This parameter contains the return code from an Authenticate transaction. Valid values include: Y = Successful Authenticate validation N = Unsuccessful validation E = Authenticate error U = Authenticate service unavailable
Ecom_Trans_Authentify_ReturnValue	Text	4	Conditional	This parameter contains the actual Authenticate return value for the Authenticate transaction. Actual values are determined by Authenticate.
Ecom_Trans_Authentify_Date	Text	15	Conditional	This parameter contains the date and time of the Authenticate transaction in the format MMDDYYYY HHMMSS .
TRANSACTION FRAUD PARAMETERS				
Ecom_Trans_Fraud_Flag	Text	1	Conditional	This parameter returns the response from the fraud tests performed for this order. Valid values include: Y = Order may contain fraud N = Order has passed all fraud tests U = Fraud service unavailable
Ecom_Trans_Fraud_Response	Text	120	Conditional	If the value of the Ecom_Trans_Fraud_Flag is set to Y , then this parameter will contain a list of 2-digit fraud watch codes to indicate the fraud tests which failed for the current transaction.
ORDER COST PARAMETERS				
Ecom_Order_Cost_SubTotal	Number	12	Yes	This parameter returns the item sub-total of the items on this order.
Ecom_Order_Cost_Tax	Number	12	Yes	This parameter returns the sales tax associated with the current order.
Ecom_Order_Cost_VATTax	Number	12	Yes	This parameter returns the VAT tax associated with the current order.
Ecom_Order_Cost_AlternateTax	Number	12	Optional	This parameter returns the alternate tax associated with the current order.
Ecom_Order_Cost_Shipping	Number	12	Conditional	This parameter returns the shipping and handling cost associated with the current order.
Ecom_Order_Cost_Duty	Number	12	Optional	This parameter returns the duty amount associated with the current order.
Ecom_Order_Cost_Discount	Number	12	Optional	This parameter returns the discount amount associated with the current order.

Ecom_Order_Cost_Tip	Number	12	Yes	This parameter returns the tip/gratuity associated with the current order.
Ecom_Order_Cost_Total	Number	12	Yes	This parameter returns the total payment associated with the current order.
Ecom_Order_Cost_AmountPaid	Number	12	Yes	This parameter contains the total amount approved for the current transaction. If the transaction is not approved, this value will be set to 0.00 .

Table 6

Name-Value Pairs

If the value of the **Ecom_ResponseType** parameter is set to **1, 3, or 5**, then the returned data will be a single stream of parameters and URL-encoded parameter data in the following format:

parametername=parameterdata¶metername2=parameterdata2&...

See the Integration Instructions below for more information about how data is returned in this format.

XML Formatted Data

If the value of the **Ecom_ResponseType** parameter is set to **2, 4, or 6**, then the response will be returned as XML-formatted data using the following data scheme:

```
<?xml version = "1.0"?>
<DOCTYPE ASSUREBUY.ECOMRESPONSE SYSTEM
    "http://docs.assurebuy.com/assurebuy_ecomresponse_46.dtd">
<ASSUREBUY.ECOMRESPONSE
    USERID="xxxxxxxxxxxxxxxxxxxxxx"
    PASSWORD="xxxxxxxxxxxxxxxxxxxxxx">
    <Mode></Mode>
    <GatewayVersion></GatewayVersion>
    <ReturnCode></ReturnCode>
    <SessionID></SessionID>

    <Order>
        <SellerOrderID></SellerOrderID>
        <Reference></Reference>
        <Date></Date>

        <Transaction>
            <Result></Result>
            <AlternateResult></AlternateResult>
            <Number></Number>
            <Action></Action>
```

```

    <AuthDate></AuthDate>
    <AuthCode></AuthCode>
    <AVS>
        <Address></Address>
        <Zip></Zip>
    </AVS>
    <CVVResponse></CVVResponse>
    <Authenticate>
        <ReturnCode></ReturnCode>
        <ReturnValue></ReturnValue>
        <Date></Date>
    </Authenticate>
    <Fraud>
        <Flag></Flag>
        <FraudResponses>
            <FraudResponse>
                <WatchCode></WatchCode>
                <Description></Description>
            </FraudResponse>
        </FraudResponses>
    </Fraud>
</Transaction>

<Cost>
    <SubTotal></SubTotal>
    <Tax></Tax>
    <VATTax></VATTax>
    <AlternateTax></AlternateTax>
    <Duty></Duty>
    <Discount></Discount>
    <Shipping></Shipping>
    <Tip></Tip>
    <Total></Total>
    <AmountPaid></AmountPaid>
</Cost>
</Order>
</ASSUREBUY.ECOMRESPONSE>

```

See the Integration Instructions below for more information about how data is returned in this format.

ERROR RESPONSES

When the ***Ecom_ReturnCode*** parameter contains a value other than **0000**, the AssureBuy server will not return order and transaction parameters. Instead, the following parameters will be returned:

Parameter	Data Type	Max Length	Required	Description
ERROR PARAMETERS				
Ecom_Error_Code	Number	4	Optional	This parameter contains the 4-digit numeric error number associated with the error for the current request. Valid values range from 0001 to

Ecom_Error_Description	Text	50	Optional	9999. This parameter contains the description associated with the error for the current request. The content of this parameter is dependent on the value of the Ecom_Order_Language input parameter.
------------------------	------	----	----------	---

Table 7

For XML-formatted response data, the following data scheme will be used:

```
<?xml version = "1.0"?>
<!DOCTYPE ASSUREBUY.ECOMRESPONSE SYSTEM
    "http://docs.assurebuy.com/assurebuy_ecomresponse_46.dtd">
<ASSUREBUY.ECOMRESPONSE
  USERID="xxxxxxxxxxxxxxxxxxxxxx"
  PASSWORD="xxxxxxxxxxxxxxxxxxxxxx">
  <Mode></Mode>
  <GatewayVersion></GatewayVersion>
  <ReturnCode></ReturnCode>
  <SessionID></SessionID>

  <Order>
    <SellerOrderID></SellerOrderID>
    <Reference></Reference>
    <Date></Date>
  </Order>

  <Error>
    <Code></Code>
    <Description></Description>
  </Error>
</ASSUREBUY.ECOMRESPONSE>
```

NOTE: Only the first error encountered by the AssureBuy server is currently returned.

For a complete list of all AssureBuy Internet Payment Gateway error codes, see Appendix A at the end of this document.

INTEGRATION INSTRUCTIONS

What follows are step-by-step instructions on how to integrate the AssureBuy Internet Payment Gateway into an e-commerce enabled web site. The examples shown in this section include only the minimum requirements for using the payment gateway. Depending upon the specific configuration of your account, other input parameters may be required and more robust functionality may be accessible.

Step One – Collect the Input Data

Certain information is required by the AssureBuy Internet Payment Gateway in order for the gateway to properly process a transaction request. Some of the input parameters contain fixed values that must be stored inside your application and sent with each transaction request. Other parameters, such as customer and order information, are collected by the application or web site in real-time and then sent to the AssureBuy servers. It is the responsibility of the sending application to edit check the data to make sure it meets the enclosed specifications before sending it on to AssureBuy. Failure to provide this error checking may result in gateway errors and will prevent the transaction from being processed. For more information on input parameter specifications, see the section on Input Parameters, above.

The following table provides an example of what a basic credit card transaction might look like:

Parameter	Sample Data	Source
Ecom_UserID	12345	Fixed
Ecom_Password	45#qd78@4v	Fixed
Ecom_Mode	P	Fixed
Ecom_GatewayVersion	4.6	Fixed
Ecom_ResponseType	1	Fixed
Ecom_Order_SellerOrderID	18271	Dynamic
Ecom_Order_Date	07152000 032157	Dynamic
Ecom_Order_IPAddress	195.57.123.91	Dynamic
Ecom_BillTo_Postal_Name_First	Frank	Dynamic
Ecom_BillTo_Postal_Name_Last	Larson	Dynamic
Ecom_BillTo_Postal_Street_Line1	407 Portsmouth Blvd	Dynamic
Ecom_BillTo_Postal_PostalCode	90027	Dynamic
Ecom_Order_Cost_SubTotal	98.50	Dynamic
Ecom_Order_Cost_Total	98.50	Dynamic
Ecom_Order_Cost_AmountPaid	98.50	Dynamic
Ecom_Payment_Action	A	Dynamic
Ecom_Payment_Type	VI	Dynamic
Ecom_Payment_Number	XXXXXXXXXXXXXXXXXX	Dynamic
Ecom_Payment_ExpDate_Month	02	Dynamic
Ecom_Payment_ExpDate_Year	2003	Dynamic
Ecom_Payment_PayerName	Frank D. Larson	Dynamic

Table 8

NOTE: This data is for example purposes only and will not work with the actual AssureBuy Internet Payment Gateway.

NOTE: All payment data collected on a remote server must use secure channel encryption, such as SSL.

Step Two – Choose Connection Method

The AssureBuy Internet Payment Gateway allows two different methods for formatting the data to be sent to the AssureBuy servers. Choose the method that is most appropriate for your particular application. The two methods are:

Name-value pairs – A standard method of sending information between two CGI compliant remote servers. Name-value pairs consist of a parameter name, followed by an equal (“=”) sign and the URL-encoded parameter data. Data elements are separated by an ampersand (“&”). (See Step Four for an example of how data can be sent to the AssureBuy servers using name-value pairs.)

XML formatted data – A standard method of formatting data to be shared between two remote servers. XML formatted data follows a specific formatting standard outlined by the IETF (Internet Engineering Task Force). When using XML formatted data, each data element is encapsulated by a starting and ending tag that identifies the parameter name. Certain special characters, such as the less than sign (“<”), the greater than sign (“>”) and the ampersand (“&”) need to be properly encoded before the XML data is sent. Table 4 in the Input Parameters section shows a complete list of all special characters that need to be formatted. (See Step Four for an example of how to send XML formatted data to the AssureBuy servers.)

Step Three – Connection URL

To use the AssureBuy Internet Payment Gateway, the formatted data will need to be securely posted (using SSL encryption) to one of the following URLs:

`https://gateway.assurebuy.com/ics_gateway.exe`
`https://gateway2.assurebuy.com/ics_gateway.exe`

If the name-value pairs format is being used, the following http header will need to also be sent to the AssureBuy server:

`Content-type: application/x-www-form-urlencoded`

Otherwise, if XML-formatted data is being sent to the AssureBuy server, the following http header will need to be sent:

Content-type: text/xml

Step Four – Send the Data

Connect to the AssureBuy server by posting the properly formatted data to the URL in Step Three, above. The following two examples show how the data might look using each of the different formatting methods.

In the examples below, **<crlf>** is used to indicate the presence of a carriage return (ASCII 13) and a line feed (ASCII 10).

Example 1 - Posting Name-Value Pairs

```
POST /ics_gateway.exe HTTP/1.0<crlf>
Content-type: application/x-www-form-urlencoded<crlf>
Content-length: 648<crlf>
<crlf>
Ecom_UserID=12345&Ecom_Password=45%23qd78%404v&Ecom_Mode=P&Ecom_GatewayV
ersion=4%2E6&Ecom_ResponseType=1&Ecom_Order_SellerOrderID=18271&Ecom_Order_Dat
e=07152000+032157&Ecom_Order_IPAddress=195%2E57%2E123%2E91&Ecom_BillTo_Postal
_Name_First=Frank&Ecom_BillTo_Postal_Name_Last=Larson&Ecom_BillTo_Postal_Street_Line
1=407+Portsmouth+Blvd&Ecom_BillTo_Postal_PostalCode=90027&Ecom_Order_Cost_SubTota
l=98%2E50&Ecom_Order_Cost_Total=98%2E50&Ecom_Order_Cost_AmountPaid=98%2E50&E
com_Payment_Action=A&Ecom_Payment_Type=VI&Ecom_Payment_Number=XXXXXXXXXXXX
XXXX&Ecom_Payment_ExpDate_Month=02&Ecom_Payment_ExpDate_Year=2003&Ecom_Pa
yment_PayerName=Frank+D%2E+Larson
```

Example 2 - Posting XML-Formatted Data

```
POST /ics_gateway.exe HTTP/1.0<crlf>
Content-type: text/xml<crlf>
Content-length: 830<crlf>
<crlf>
<?xml version="1.0"?>
<!DOCTYPE ASSUREBUY.ECOMREQUEST SYSTEM
    "http://docs.assurebuy.com/assurebuy_ecomrequest_46.dtd">
<ASSUREBUY.ECOMREQUEST USERID="12345" PASSWORD="45#qd78@4v">
    <Mode>P</Mode>
    <GatewayVersion>4.6</GatewayVersion>
    <ResponseType>2</ResponseType>
    <Order>
        <SellerOrderID>18271</SellerOrderID>
        <Date>07152000 032157</Date>
        <IPAddress>195.57.123.91</IPAddress>
        <BillTo>
            <Postal>
                <Name>
```

```
                <First>Frank</First>
                <Last>Larson</Last>
            </Name>
            <Street>
                <Line1>407 Portsmouth Blvd</Line1>
            </Street>
            <PostalCode>90027</PostalCode>
        </Postal>
    </BillTo>
    <Cost>
        <SubTotal>98.50</SubTotal>
        <Total>98.50</Total>
        <AmountPaid>98.50</AmountPaid>
    </Cost>
    <Payment>
        <Action>A</Action>
        <Type>VI</Type>
        <Number>XXXXXXXXXXXXXXXXXX</Number>
        <ExpDate>
            <Month>02</Month>
            <Year>2003</Year>
        </ExpDate>
        <PayerName>Frank D. Larson</PayerName>
    </Payment>
</Order>
</ASSUREBUY.ECOMREQUEST>
```

NOTE: The XML data has been formatted for readability purposes. The indentations are not required when posting the actual data to the AssureBuy servers.

Step Five – Receive the Response Data

Depending on the value of the **Ecom_ResponseType** input parameter, the response may be formatted as either name-value pairs or as XML formatted data and may be returned automatically to the calling server or be posted to an alternate script on a remote server.

If the value of the **Ecom_ResponseType** parameter is **0**, then no response will be returned at all.

If the value of the **Ecom_ResponseType** parameter is **1**, **3**, or **5**, the response will be returned as name-value pairs. For a value of **2**, **4**, or **6**, the response is returned as XML-formatted data.

The following table provides an example of the data that might be returned for a typical transaction.

Parameter	Approved Transaction	Fraud Transaction	Error Response
Ecom_UserID	459102304	459102304	459102304
Ecom_Password	w#!78D5\$17	w#!78D5\$17	w#!78D5\$17
Ecom_Mode	P	P	P
Ecom_GatewayVersion	4.6	4.6	4.6
Ecom_ReturnCode	0000	0000	5102
Ecom_SessionID	03307C08F2236181	03307C08F2236181	03307C08F2236181
Ecom_Order_SellerOrderID	18271	18271	18271
Ecom_Order_Reference	1234500021845	1234500021845	
Ecom_Order_Date	07152000 032157	07152000 032157	07152000 032157
Ecom_Trans_Result	Y	H	
Ecom_Trans_Number	1590239462		
Ecom_Trans_Action	A		
Ecom_Trans_AuthDate	07152000		
Ecom_Trans_AuthCode	181706		
Ecom_Trans_AVS_Address	Y		
Ecom_Trans_AVS_Zip	Y		
Ecom_Trans_CVVResponse	M		
Ecom_Trans_Fraud_Flag	N	Y	
Ecom_Trans_Fraud_Response		FMIP	
Ecom_Order_Cost_SubTotal	98.50	98.50	
Ecom_Order_Cost_Tax	0.00	0.00	
Ecom_Order_Cost_VATTax	0.00	0.00	
Ecom_Order_Cost_AlternateTax	0.00	0.00	
Ecom_Order_Cost_Duty	0.00	0.00	
Ecom_Order_Cost_Discount	0.00	0.00	
Ecom_Order_Cost_Shipping	0.00	0.00	
Ecom_Order_Cost_Tip	0.00	0.00	
Ecom_Order_Cost_Total	98.50	98.50	
Ecom_Order_Cost_AmountPaid	98.50	98.50	
Ecom_Error_Code			5102
Ecom_Error_Description			No HTTP post data received.

Table 9

The following examples show how the response would be returned for each of the data formats listed.

Example 3 – Name-Value Pair Response (Approved Transaction)

```
Ecom_UserID=459102304&Ecom_Password=w%23%2178D5%2417&Ecom_Mode=P&Ecom_GatewayVersion=4%2E6&Ecom_ReturnCode=0000&Ecom_Order_SellerOrderID=18271&Ecom_Order_Reference=1234500021845&Ecom_Order_Date=07152000+032157&Ecom_Trans_Result=Y&Ecom_Trans_AlternateResult=&Ecom_Trans_Number=1590239462&Ecom_Trans_Action=A&Ecom_Trans_AuthDate=07152000&Ecom_Trans_AuthCode=181706&Ecom_Trans_AVS_Address=Y&Ecom_Trans_AVS_Zip=Y&Ecom_Trans_CVVResponse=M&Ecom_Trans_Fraud_Flag=N&Ecom_Order_Cost_SubTotal=98%2E50&Ecom_Order_Cost_Total=98%2E50&Ecom_Order_Cost_AmountPaid=98%2E50
```

Example 4 – Name-Value Pair Response (Fraud Transaction)

```
Ecom_UserID=459102304&Ecom_Password=w%23%2178D5%2417&Ecom_Mode=P&Ecom_G
```

```
atewayVersion=4%2E6&Ecom_ReturnCode=0000&Ecom_Order_SellerOrderID=18271&Ecom_Order_Reference=1234500021845&Ecom_Order_Date=07152000+032157&Ecom_Trans_Result=H&Ecom_Trans_AlternateResult=&Ecom_Trans_Fraud_Flag=Y&Ecom_Trans_Fraud_Response=FMIP&Ecom_Order_Cost_SubTotal=98%2E50&Ecom_Order_Cost_Total=98%2E50&Ecom_Order_Cost_AmountPaid=98%2E50
```

Example 5 – Name-Value Pair Response (Error Transaction)

```
Ecom_UserID=459102304&Ecom_Password=w%23%2178D5%2417&Ecom_Mode=P&Ecom_GatewayVersion=4%2E6&Ecom_ReturnCode=5102&Ecom_Order_SellerOrderID=18271&Ecom_Order_Reference=&Ecom_Order_Date=07152000+032157&Ecom_Error_Code=5102&Ecom_Error_Description=No HTTP post data received%2E
```

Example 6 – XML Formatted Response (Approved Transaction)

```
<?xml version = "1.0"?>
<!DOCTYPE ASSUREBUY.ECOMRESPONSE SYSTEM
    "http://docs.assurebuy.com/assurebuy_ecomresponse_46.dtd">
<ASSUREBUY.ECOMRESPONSE USERID="459102304" PASSWORD="w#!78D5$17">
    <Mode>P</Mode>
    <GatewayVersion>4.6</GatewayVersion>
    <ReturnCode>0000</ReturnCode>
    <SessionID>03307C08F2236181</SessionID>
    <Order>
        <SellerOrderID>18271</SellerOrderID>
        <Reference>1234500021845</Reference>
        <Date>07152000 032157</Date>
        <Transaction>
            <Result>Y</Result>
            <AlternateResult></AlternateResult>
            <Number>1590239462</Number>
            <Action>A</Action>
            <AuthDate>07152000</AuthDate>
            <AuthCode>181706</AuthCode>
            <AVS>
                <Address>Y</Address>
                <Zip>Y</Zip>
            </AVS>
            <CVVResponse>M</CVVResponse>
            <Fraud>
                <Flag>N</Flag>
            </Fraud>
        </Transaction>
        <Cost>
            <SubTotal>98.50</SubTotal>
            <Tax>0.00</Tax>
            <VATTax>0.00</VATTax>
            <AlternateTax>0.00</AlternateTax>
            <Duty>0.00</Duty>
            <Discount>0.00</Discount>
            <Shipping>0.00</Shipping>
            <Tip>0.00</Tip>
            <Total>98.50</Total>
            <AmountPaid>98.50</AmountPaid>
        </Cost>
    </Order>
</ASSUREBUY.ECOMRESPONSE>
```

Example 7 – XML Formatted Response (Fraud Transaction)

```
<?xml version = "1.0"?>
<!DOCTYPE ASSUREBUY.ECOMRESPONSE SYSTEM
    "http://docs.assurebuy.com/assurebuy_ecomresponse_46.dtd">
<ASSUREBUY.ECOMRESPONSE USERID="459102304" PASSWORD="w#!78D5$17">
  <Mode>P</Mode>
  <GatewayVersion>4.6</GatewayVersion>
  <ReturnCode>0000</ReturnCode>
  <SessionID>03307C08F2236181</SessionID>
  <Order>
    <SellerOrderID>18271</SellerOrderID>
    <Reference>1234500021845</Reference>
    <Date>07152000 032157</Date>
    <Transaction>
      <Result>H</Result>
      <AlternateResult></AlternateResult>
      <Number>1590239462</Number>
      <Action>A</Action>
      <Fraud>
        <Flag>Y</Flag>
        <FraudResponses>
          <FraudResponse>
            <WatchCode>FM</WatchCode>
            <Description>Free E-mail Acct</Description>
          </FraudResponse>
          <FraudResponse>
            <WatchCode>IP</WatchCode>
            <Description>Restricted IP Addr</Description>
          </FraudResponse>
        </FraudResponses>
      </Fraud>
    </Transaction>
    <Cost>
      <SubTotal>98.50</SubTotal>
      <Tax>0.00</Tax>
      <VATTax>0.00</VATTax>
      <AlternateTax>0.00</AlternateTax>
      <Duty>0.00</Duty>
      <Discount>0.00</Discount>
      <Shipping>0.00</Shipping>
      <Tip>0.00</Tip>
      <Total>98.50</Total>
      <AmountPaid>98.50</AmountPaid>
    </Cost>
  </Order>
</ASSUREBUY.ECOMRESPONSE>
```


Example 8 – XML Formatted Response (Error Transaction)

```
<?xml version = "1.0"?>
<!DOCTYPE ASSUREBUY.ECOMRESPONSE SYSTEM
    "http://docs.assurebuy.com/assurebuy_ecomresponse_46.dtd">
<ASSUREBUY.ECOMRESPONSE USERID="459102304" PASSWORD="w#!78D5$17">
  <Mode>P</Mode>
  <GatewayVersion>4.6</GatewayVersion>
  <ReturnCode>5102</ReturnCode>
  <SessionID>03307C08F2236181</SessionID>
  <Order>
    <SellerOrderID>18271</SellerOrderID>
    <Reference></Reference>
    <Date>07152000 032157</Date>
  </Order>
  <Error>
    <Code>5102</Code>
    <Description>No HTTP post data received.</Description>
  </Error>
</ASSUREBUY.ECOMRESPONSE>
```

When the value of the **Ecom_ResponseType** parameter is greater than **2**, then the response will automatically be posted to the remote script identified in the **Ecom_PostURL** parameter. The remote server must be capable of accepting secure (SSL encrypted) post operations.

Step Six – Processing the Response Data

The response returned from the AssureBuy Internet Payment Gateway will contain all of the information required to evaluate and process the response data. Depending upon your specific application, the response data can be handled in many different ways. What follows is a typical step-by-step example of how you might evaluate the response.

1. Verify that a complete response has been received by examining the post buffer and parsing the XML data if necessary.
2. Examine the contents of the **Ecom_Mode** parameter and ensure that it matches the mode sent as part of the input parameters. NOTE: It is very important that this step be performed to avoid handling a test transaction as a production, or live, order. Test transactions are not saved in the AssureBuy database and are not sent to the payment processor for authorization. All test results are simulated.
3. If the response is being posted to a remote script, it is recommended that the **Ecom_Order_SellerOrderID** parameter be used to hold a unique identifier for the order being passed to AssureBuy for processing. This will allow the remote script to identify which order the response belongs to. If the local

identifier is being used, check the value of this parameter to obtain the identifier as passed to AssureBuy.

4. Check the value of the **Ecom_ReturnCode** parameter. If this parameter contains a value other than **0000**, then an error has occurred. Retrieve the error parameters to obtain the error code and description of the error.
5. Examine the contents of the **Ecom_Trans_Action** parameter to ensure that it matches the action requested by the **Ecom_Payment_Action** input parameter.
6. Examine the contents of the **Ecom_Trans_Result** parameter. This parameter indicates the outcome of the requested payment transaction. If the result is **Y**, then the requested transaction has been approved and the remaining transaction parameters should be retrieved and stored with the order information. A result of **N**, indicates that the actual payment authorization failed. Retrieve the contents of the **Ecom_Trans_AuthCode** parameter for the detailed response from the payment processing network. If the result is either **D** or **H**, the transaction may have been flagged by the AssureBuy fraud protection system as a high risk order. Retrieve the contents of the **Ecom_Trans_Fraud_Flag** parameter and, if necessary, check the contents of the **Ecom_Trans_Fraud_Response** parameter for the detailed fraud system response.
7. If the transaction has been approved, you may also want to check the results of the AVS (Address Verification Service) parameters to identify whether or not the BillTo address information matched the information on file for the credit card holder. NOTE: AVS is not supported by all Visa/MasterCard member banks. As a result, the response will occasionally contain a value of **U**, indicating that the service was not available for the current transaction.
8. Depending on the configuration of your AssureBuy account, the cost parameters may also contain values calculated by the AssureBuy Internet Payment Gateway. If so, be sure to retrieve and store these parameters with the current order information.
9. Retrieve and process any remaining parameters that may be required for your specific implementation of the payment gateway.
10. Regardless of the result of the payment authorization process, it is a good idea to send an e-mail confirmation or receipt to the customer immediately following the completion of the payment authorization process. If your web site does not support the sending of such e-mails, this service can also be provided by AssureBuy. Contact your account representative for more information.

TESTING CONSIDERATIONS

The AssureBuy Internet Payment Gateway can be set to process transactions in “Test” mode during the integration process. To enable the payment gateway for testing purposes, simply change the value of the **Ecom_Mode** parameter from **P** (Production/Live) to **T** (Test/Development) and set the value of the **Ecom_TestAction** parameter to the desired testing result.

Do not attempt to use the test transaction results in any way other than for testing purposes. Test transactions are not saved in the AssureBuy database and are not sent to the payment processor for authorization. All test results are simulated.

In test mode, the payment gateway will perform the same set of error validation as performed for production/live orders. To simulate an error response while in test mode simply configure the input parameters to cause an error to be generated.

IMPORTANT NOTE: It is highly recommended that the **Ecom_Mode** parameter be examined for every response from the AssureBuy Internet Payment Gateway. Failure to examine this parameter, and failure to properly handle the results as test or production could cause the loss of order data or could result in charges to a customer’s credit card. AssureBuy is not liable for your incorrect use of the results returned by the AssureBuy Internet Payment Gateway.

APPENDIX A - ASSUREBUY ERROR CODES

The following table lists the common error codes and messages associated with the AssureBuy Internet Payment Gateway:

Error Code	Description
0174	System currently unavailable.
0175	Internal communications error.
0181	Internal gateway error.
0187	System timeout, try again.
5101	Missing or invalid HTTP Content-type.
5102	No HTTP post data received.
5110	Unable to parse XML input data.
5111	Missing or invalid User ID.
5112	Missing or invalid Password.
5113	Invalid user account.
5114	User account suspended or no longer active.
5118	Invalid operating mode for payment gateway.
5120	Missing or invalid gateway version.
5121	Gateway version no longer supported.
5131	Missing or invalid schema version URL.
5132	Missing or invalid P3P policy URL.
5133	Missing or invalid P3P agent URL.
5141	Missing or invalid response type.
5142	Missing or invalid Post URL.
5145	Missing or invalid TransactionComplete parameter.
5146	Missing or invalid TestAction parameter.
5201	Missing or invalid seller order ID.
5202	Missing or invalid order date.
5203	Missing or invalid customer ID.
5204	Missing or invalid shipping method.
5205	Missing or invalid shipping instructions.
5206	Missing or invalid order comments.
5207	Missing or invalid order source.
5208	Missing or invalid order language.
5209	Missing or invalid tax jurisdiction.
5210	Missing or invalid tax country.
5211	Missing or invalid currency code.
5212	Missing or invalid currency conversion rule.
5213	Missing or invalid IP address.
5214	Missing or invalid browser type.
5215	Missing or invalid PO number.
5216	Missing or invalid VAT tax rate.
5217	Missing or invalid VAT tax ID.
5218	Missing or invalid alternate tax rate.
5219	Missing or invalid alternate tax ID.
5301	Missing or invalid BillTo first name.
5302	Missing or invalid BillTo middle name.
5303	Missing or invalid BillTo last name.
5304	Missing or invalid BillTo name prefix.
5305	Missing or invalid BillTo company name.

5306	Missing or invalid BillTo address line 1.
5307	Missing or invalid BillTo address line 2.
5308	Missing or invalid BillTo address line 3.
5309	Missing or invalid BillTo city.
5310	Missing or invalid BillTo state/province.
5311	Missing or invalid BillTo postal code.
5312	Missing or invalid BillTo country code.
5313	Invalid BillTo state/province for specified BillTo country.
5320	Missing or invalid BillTo day phone number.
5321	Missing or invalid BillTo evening phone number.
5322	Missing or invalid BillTo fax number.
5323	Missing or invalid BillTo e-mail address.
5401	Missing or invalid ShipTo first name.
5402	Missing or invalid ShipTo middle name.
5403	Missing or invalid ShipTo last name.
5404	Missing or invalid ShipTo name prefix.
5405	Missing or invalid ShipTo company name.
5406	Missing or invalid ShipTo address line 1.
5407	Missing or invalid ShipTo address line 2.
5408	Missing or invalid ShipTo address line 3.
5409	Missing or invalid ShipTo city.
5410	Missing or invalid ShipTo state/province.
5411	Missing or invalid ShipTo postal code.
5412	Missing or invalid ShipTo country code.
5413	Invalid ShipTo state/province for specified ShipTo country.
5420	Missing or invalid ShipTo day phone number.
5421	Missing or invalid ShipTo evening phone number.
5422	Missing or invalid ShipTo fax number.
5423	Missing or invalid ShipTo e-mail address.
5450	Missing or invalid ShipFrom location ID.
5451	Missing or invalid ShipFrom company name.
5452	Missing or invalid ShipFrom address line 1.
5453	Missing or invalid ShipFrom address line 2.
5454	Missing or invalid ShipFrom address line 3.
5455	Missing or invalid ShipFrom city.
5456	Missing or invalid ShipFrom state/province.
5457	Missing or invalid ShipFrom postal code.
5458	Missing or invalid ShipFrom country code.
5459	Invalid ShipFrom state/province for specified ShipFrom country.
5501	Missing or invalid order sub total.
5502	Missing or invalid order tax amount.
5503	Missing or invalid order shipping amount.
5504	Missing or invalid order tip amount.
5505	Missing or invalid order total.
5506	Missing or invalid amount paid.
5507	Missing or invalid VAT tax.
5508	Missing or invalid alternate tax.
5509	Missing or invalid duty amount.
5510	Missing or invalid discount amount.
5511	Missing or invalid cost discount percent.
5551	Missing or invalid user-defined parameter.
5601	Missing or invalid payment action code.
5602	Missing or invalid payment type.

5603	Missing or invalid payment card type.
5604	Missing or invalid payment number.
5605	Missing or invalid payment verification number.
5606	Missing or invalid payment PIN.
5607	Missing or invalid card present indicator.
5608	Missing or invalid customer present indicator.
5609	Missing or invalid payment expiration day.
5610	Missing or invalid payment expiration month.
5611	Missing or invalid payment expiration year.
5612	Missing or invalid payer name.
5613	Missing or invalid bank code.
5614	Missing or invalid retrieval number.
5615	Missing or invalid payment information.
5616	Missing or invalid original transaction.
5617	Missing or invalid approval code.
5618	Missing or invalid ACH account indicator.
5619	Missing or invalid ACH account type.
5620	Missing or invalid confirm value.
5621	Missing or invalid confirm phone.
5622	Missing or invalid VPAS transaction ID.
5623	Missing or invalid CAVV.
5624	Missing or invalid POS entry mode.
5625	Missing or invalid POS terminal type.
5626	Missing or invalid POS swipe capability.
5627	Missing or invalid POS track 1 data.
5628	Missing or invalid POS track 2 data.
5629	Missing or invalid payment verification indicator.
5701	Unable to locate product information.
5702	Missing or invalid product item ID.
5703	Missing or invalid product SKU.
5704	Missing or invalid product description.
5705	Missing or invalid product order quantity.
5706	Missing or invalid product minimum order quantity.
5707	Missing or invalid product weight.
5708	Missing or invalid product tax flag.
5709	Missing or invalid product ship flag.
5710	Missing or invalid product recurring flag.
5711	Missing or invalid product download flag.
5712	Missing or invalid product download file.
5713	Missing or invalid product download description.
5714	Missing or invalid product category.
5715	Missing or invalid product unit of measure.
5716	Missing or invalid product tax amount.
5717	Missing or invalid product tax rate.
5718	Missing or invalid product tax code.
5719	Missing or invalid product discount amount.
5720	Missing or invalid product tax exempt flag.
5721	Missing or invalid product returned item flag.
5722	Missing or invalid product reference flag.
5751	Missing or invalid product user-defined parameter.
5801	Missing or invalid recurring order amount.
5802	Missing or invalid recurring order cycle.
5803	Missing or invalid recurring order period.

5804	Missing or invalid recurring order termination date.
5851	Missing or invalid invoice period start date.
5852	Missing or invalid invoice period end date.
5853	Missing or invalid previous billing date.
5854	Missing or invalid previous invoice balance.
5855	Missing or invalid invoice due date.
5856	Missing or invalid invoice notification flag.
5857	Missing or invalid invoice type.
5858	Missing or invalid invoice template ID.
9999	Unknown error.

Table 10

APPENDIX B - ISO 3166 STANDARD COUNTRY CODES

The following is a list of International Standards Organization (ISO) country codes in use by AssureBuy:

Country	Code
AFGHANISTAN	AF
ALBANIA	AL
ALGERIA	DZ
AMERICAN SAMOA	AS
ANDORRA	AD
ANGOLA	AO
ANGUILLA	AI
ANARCTICA	AQ
ANTIGUA AND BARBUDA	AG
ARGENTINA	AR
ARMENIA	AM
ARUBA	AW
AUSTRALIA	AU
AUSTRIA	AT
AZERBAIJAN	AZ
BAHAMAS	BS
BAHRAIN	BH
BANGLADESH	BD
BARBADOS	BB
BELARUS	BY
BELGIUM	BE
BELIZE	BZ
BENIN	BJ
BERMUDA	BM
BHUTAN	BT
BOLIVIA	BO
BOSNIA AND HERZEGOVINA	BA
BOTSWANA	BW
BOUVET ISLAND	BV
BRAZIL	BR
BRITISH INDIAN OCEAN TERRITORY	IO
BRUNDEI DARUSSALAM	BN
BULGARIA	BG
BURKINA FASO	BF
BURUNDI	BI
CAMBODIA	KH
CAMEROON	CM
CANADA	CA
CAPE VERDE	CV
CAYMAN ISLANDS	KY
CENTRAL AFRICAN REPUBLIC	CF
CHAD	TD
CHILE	CL
CHINA	CN
CHRISTMAS ISLAND	CX
COCOS (KEELING) ISLANDS	CC
COLOMBIA	CO

COMOROS	KM
CONGO	CG
CONGO, THE DEMOCRATIC REPUBLIC OF THE/ZAIRE	CD
COOK ISLANDS	CK
COSTA RICA	CR
COTE D'VOIRE	CI
CROATIA	HR
CUBA	CU
CYPRUS	CY
CZECH REPUBLIC	CZ
DENMARK	DK
DJIBOUTI	DJ
DOMINICA	DM
DOMINICAN REPUBLIC	DO
EAST TIMOR	TP
ECUADOR	EC
EGYPT	EG
EL SALVADOR	SV
EQUATORIAL GUINEA	GQ
ERITREA	ER
ESTONIA	EE
ETHIOPIA	ET
FALKLAND ISLANDS (MALVINAS)	FK
FAROE ISLANDS	FO
FIJI	FJ
FINLAND	FI
FRANCE	FR
FRENCH GUIANA	GF
FRENCH POLYNESIA	PF
FRENCH SOUTHERN TERRITORIES	TF
GABON	GA
GAMBIA	GM
GEORGIA	GE
GERMANY	DE
GHANA	GH
GIBRALTAR	GI
GREECE	GR
GREENLAND	GL
GRENADA	GD
GUADELOUPE	GP
GUAM	GU
GUATEMALA	GT
GUINEA	GN
GUINEA-BISSAU	GW
GUYANA	GY
HAITI	HT
HEARD ISLAND AND MCDONALD ISLANDS	HM
HOLY SEE (VATICAN CITY STATE)	VA
HONDURAS	HN
HONG KONG	HK
HUNGARY	HU
ICELAND	IS
INDIA	IN

INDONESIA	ID
IRAN, ISLAMIC REPUBLIC OF	IR
IRAQ	IQ
IRELAND	IE
ISREAL	IL
ITALY	IT
JAMAICA	JM
JAPAN	JP
JORDAN	JO
KAZAKSTAN	KZ
KENYA	KE
KIRIBATI	KI
KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF	KP
KOREA, REPUBLIC OF	KR
KUWAIT	KW
KYRGYZSTAN	KG
LAO PEOPLE'S DEMOCRATIC REPUBLIC	LA
LATVIA	LV
LEBANON	LB
LESOTHO	LS
LIBERIA	LR
LIBYAN ARAB JAMAHIRIYA	LY
LIECHTENSTEIN	LI
LITHUANIA	LT
LUXEMBOURG	LU
MACAU	MO
MACEDONIA, THE FORMER YUGOSLAV REPUBLIC OF	MK
MADAGASCAR	MG
MALAWI	MW
MALAYSIA	MY
MALDIVES	MV
MALI	ML
MALTA	MT
MARSHALL ISLANDS	MH
MARTINIQUE	MQ
MAURITANIA	MR
MAURITIUS	MU
MAYOTTE	YT
MEXICO	MX
MICRONESIA, FEDERATED STATES OF	FM
MOLDOVA, REPUBLIC OF	MD
MONACO	MC
MONGOLIA	MN
MONTSERRAT	MS
MOROCCO	MA
MOZAMBIQUE	MZ
MYANMAR	MM
NAMIBIA	NA
NAURU	NR
NEPAL	NP
NETHERLANDS	NL
NETHERLANDS ANTILLES	AN
NEW CALEDONIA	NC

NEW ZEALAND	NZ
NICARAGUA	NI
NIGER	NE
NIGERIA	NG
NIUE	NU
NORFOLK ISLAND	NF
NORTHERN MARIANA ISLANDS	MP
NORWAY	NO
OMAN	OM
PAKISTAN	PK
PALAU	PW
PALESTINIAN TERRITORY, OCCUPIED	PS
PANAMA	PA
PAPUA NEW GUINEA	PG
PARAGUAY	PY
PERU	PE
PHILIPPINES	PH
PITCAIRN	PN
POLAND	PL
PORTUGAL	PT
PUERTO RICO	PR
QATAR	QA
REUNION	RE
ROMANIA	RO
RUSSIAN FEDERATION	RU
RWANDA	RW
SAINT HELENA	SH
SAINT KITTS AND NEVIS	KN
SAINT LUCIA	LC
SAINT PIERRE AND MIQUELON	PM
SAINT VINCENT AND THE GRENADINES	VC
SAMOA	WS
SAN MARINO	SM
SAO TOME PRINCIPE	ST
SAUDI ARABIA	SA
SENEGAL	SN
SEYCHELLES	SC
SIERRA LEONE	SL
SINGAPORE	SG
SLOVAKIA	SK
SLOVENIA	SI
SOLOMON ISLANDS	SB
SOMALIA	SO
SOUTH AFRICA	ZA
SOUTH GEORGIA /SOUTH SANDWICH ISLANDS	GS
SPAIN	ES
SRI LANKA	LK
SUDAN	SD
SURINAME	SR
SVALBARD AND JAN MAYEN	SJ
SWAZILAND	SZ
SWEDEN	SE
SWITZERLAND	CH

SYRIAN ARAB REPUBLIC	SY
TAIWAN	TW
TAJIKISTAN	TJ
TANZANIA	TZ
THAILAND	TH
TOGO	TG
TOKELAU	TK
TONGA	TO
TRINIDAD AND TOBAGO	TT
TUNISIA	TN
TURKEY	TR
TURKMENISTAN	TM
TURKS AND CAICOS ISLANDS	TC
TUVALU	TV
UGANDA	UG
UKRAINE	UA
UNITED ARAB EMIRATES	AE
UNITED KINGDOM	GB
UNITED STATES	US
UNITED STATES MINOR OUTLYING ISLANDS	UM
URUGUAY	UY
UZBEKISTAN	UZ
VANUATU	VU
VENEZUELA	VE
VIET NAM	VN
VIRGIN ISLANDS, BRITISH	VG
VIRGIN ISLANDS, U.S.	VI
WALLIS AND FUTUNA	WF
WESTERN SAHARA	EH
YEMEN	YE
YUGOSLAVIA	YU
ZAMBIA	ZM
ZIMBABWE	ZW

Table 11

APPENDIX C - ISO 4217 STANDARD CURRENCY CODES

The following is a list of International Standards Organization (ISO) currency codes in use by AssureBuy:

Code	Description
ADP	ANDORRAN PESETA
AED	UNITED ARAB EMIRATES DIRHAM
AFA	AFGHANISTAN AFGHANI
ALL	ALBANIAN LEK
ANG	NETHERLAND ANTILLIAN GUILDER
AOK	ANGOLAN KWANZA
ARA	ARGENTINIAN AUSTRAL
ATS	AUSTRIAN SCHILLING
AUD	AUSTRALIAN DOLLAR
AWG	ARUBAN FLORIN
BBD	BARBADOS DOLLAR
BDT	BANGLADESHI TAKA
BEF	BELGIAN FRANC
BGL	BULGARIAN LEV
BHD	BAHRAINI DINAR
BIF	BURUNDI FRANC
BMD	BERMUDIAN DOLLAR
BND	BRUNEI DOLLAR
BOB	BOLIVIAN BOLIVIANO
BRC	BRAZILIAN CRUZEIRO
BSD	BAHAMIAN DOLLAR
BTN	BHUTAN NGULTRUM
BUK	BURMA KYAT
BWP	BOTSWANIAN PULA
BZD	BELIZE DOLLAR
CAD	CANADIAN DOLLAR
CHF	SWISS FRANC
CLF	CHILEAN UNIDADES DE FOMENTO
CLP	CHILEAN PESO
CNY	YUAN (CHINESE) RENMINBI
COP	COLUMBIAN PESO
CRC	COSTA RICAN COLON
CSK	CZECH KORUNA
CUP	CUBAN PESO
CVE	CAPE VERDE ESCUDO
CYP	CYPRUS POUND
DDM	EAST GERMAN MARK (DDR)
DEM	DEUTSCHE MARK
DJF	DJIBOUTI FRANC
DKK	DANISH KRONE
DOP	DOMINICAN PESO
DZD	ALGERIAN DINAR
ECS	ECUADOR SUCRE
EGP	EGYPTIAN POUND
ESP	SPANISH PESETA
ETB	ETHIOPIAN BIRR
EUR	EURO

FIM	FINNISH MARKKA
FJD	FIJI DOLLAR
FKP	FALKLAND ISLANDS POUND
FRF	FRENCH FRANC
GBP	BRITISH POUND
GHC	GHANAIAN CEDI
GIP	GIBRALTAR POUND
GMD	GAMBIAN DALASI
GNF	GUINEA FRANC
GRD	GREEK DRACHMA
GTQ	GUATEMALAN QUETZAL
GWP	GUINEA-BISSAU PESO
GYD	GUYANAN DOLLAR
HKD	HONG KONG DOLLAR
HNL	HONDURAN LEMPIRA
HTG	HAITIAN GOURDE
HUF	HUNGARIAN FORINT
IDR	INDONESIAN RUPIAH
IEP	IRISH PUNT
ILS	ISRAELI SHEKEL
INR	INDIAN RUPEE
IQD	IRAQI DINAR
IRR	IRANIAN RIAL
ISK	ICELAND KRONA
ITL	ITALIAN LIRA
JMD	JAMAICAN DOLLAR
JOD	JORDANIAN DINAR
JPY	JAPANESE YEN
KES	KENYAN SCHILLING
KHR	KAMPUCHEAN (CAMBODIAN) RIEL
KMF	COMOROS FRANC
KPW	NORTH KOREAN WON
KRW	(SOUTH) KOREAN WON
KWD	KUWAITI DINAR
KYD	CAYMAN ISLANDS DOLLAR
LAK	LAO KIP
LBP	LEBANESE POUND
LKR	SRI LANKA RUPEE
LRD	LIBERIAN DOLLAR
LSL	LESOTHO LOTI
LUF	LUXEMBOURG FRANC
LYD	LIBYAN DINAR
MAD	MOROCCAN DIRHAM
MGF	MALAGASY FRANC
MNT	MONGOLIAN TUGRIK
MOP	MACAU PATACA
MRO	MAURITANIAN OUGUIYA
MTL	MALTESE LIRA
MUR	MAURITIUS RUPEE
MVR	MALDIVE RUFYAA
MWK	MALAWI KWACHA
MXP	MEXICAN PESO
MYR	MALAYSIAN RINGGIT

MZM	MOZAMBIQUE METICAL
NGN	NIGERIAN NAIRA
NIC	NICARAGUAN CORDOBA
NLG	DUTCH GUILDER
NOK	NORWEGIAN KRONER
NPR	NEPALESE RUPEE
NZD	NEW ZEALAND DOLLAR
OMR	OMANI RIAL
PAB	PANAMANIAN BALBOA
PEI	PERUVIAN INTI
PGK	PAPUA NEW GUINEA KINA
PHP	PHILIPPINE PESO
PKR	PAKISTAN RUPEE
PLZ	POLISH ZLOTY
PTE	PORTUGUESE ESCUDO
PYG	PARAGUAY GUARANI
QAR	QATARI RIAL
ROL	ROMAIAN LEU
RWF	RWANDA FRANC
SAR	SAUDI ARABIAN RIYAL
SBD	SOLOMON ISLANDS DOLLAR
SCR	SEYCHELLES RUPEE
SDP	SUDANESE POUND
SEK	SWEDISH KRONA
SGD	SINGAPORE DOLLAR
SHP	ST. HELENA POUND
SLL	SIERRA LEONE LEONE
SOS	SOMALI SCHILLING
SRG	SURINAME GUILDER
STD	SAO TOME AND PRINCIPE DOBRA
SUR	USSR ROUBLE
SVC	EL SALVADOR COLON
SYP	SYRIAN POTMD
SZL	SWAZILAND LILANGENI
THB	THAI BHAT
TND	TUNISIAN DINAR
TOP	TONGAN PA'ANGA
TPE	EAST TIMOR ESCUDO
TRL	TURKISH LIRA
TTD	TRINIDAD AND TOBAGO DOLLAR
TWD	TAIWAN DOLLAR
TZS	TANZANIAN SCHILLING
UGS	UGANDA SHILLING
USD	US DOLLAR
UYP	URUGUAYAN PESO
VEB	VENEZUALAN BOLIVAR
VND	VIETNAMESE DONG
VUV	VANUATU VATU
WST	SAMOAN TALA
YDD	DEMOCRATIC YEMENI DINAR
YER	YEMENI RIAL
YUD	NEW YUGOSLAVIA DINAR
ZAR	SOUTH AFRICAN RAND

ZMK	ZAMBIAN KWACHA
ZRZ	ZAIRE ZAIRE
ZWD	ZIMBABWE DOLLAR

Table 12

APPENDIX D - ASSUREBUY FRAUD SYSTEM CODES

The following is a list of the fraud system watch codes currently in use by AssureBuy:

Level 1 Codes

Code	Description
CD	Restricted Credit Card
EM	Restricted Email Address
IP	Restricted IP Address
OV	Order Value Too High
NM	Restricted Name
XC	Too Many Orders From Same Credit Card Number
XP	Too Many Orders From Same IP Address

Table 13

Level 2 Codes

Code	Description
AC	Address/City Contain Matching Values
AR	Invalid Phone Number Area Code (US Only)
CH	Cardholder Does Not Match Billing Name
CI	Restricted City
CO	Restricted Company
CT	Restricted Country
CZ	City/Postal Code Contain Matching Values
FL	First Name/Last Name Contain Matching Values
FM	Free Email Account Used
IC	Too Many Items Ordered
ID	Invalid Email Domain Used
IQ	Too High Quantity On A Single Item
NA	Last Name/Address Contain Matching Values
NC	No Capital Letters In Name
PD	High Risk Product
PO	Post Office Box Used
RB	Restricted Buyer
RD	Restricted Email Domain
RQ	Restricted Quantity
SM	High Risk Shipping Method
SZ	Invalid City/State/Postal Code Combination (US Only)
TM	Restricted Time Of Day
TX	Invalid Phone Number Format (US Only)
VC	Suspect Vowel Count
VO	Missing Vowels
WD	Restricted Words
XB	Too Many Orders From Same Billing Address
XR	Too Many Orders From Same IP Range
XS	Too Many Orders From Same Shipping Address

Table 14

Level 3 Codes

Code	Description
AU	Failed Authentify Confirmation
AV	Bad Response From AVS System
DL	High Risk Delivery Location
IT	IP Address Does Not Match Billing Country

Table 15

APPENDIX E - AUTHENTICIFY RETURN VALUES

The following is a list of the return values currently in use by Authentify:

Code	Description
0000	Confirmation Success
1010	System Overload
1020	System Error
2110	Browser Invalid
2120	Unable To Decrypt
2122	Invalid HTML
2130	No Redirect URL Provided
2140	Invalid Parameters
2142	Invalid TSOID or TSOID Inactive
2145	Invalid Extra Parameters
2510	Invalid XML (Parsing Error)
2520	Invalid Password
2540	Invalid TEID
3101	Invalid Country Code
3102	Invalid Area Code (U.S. and Canada only)
3103	Invalid Area Code/Exchange Combination
3104	Invalid Telephone Number
3110	Unassigned Number
3111	Blocked Telephone Number
3120	Network Congestion
3130	Phone Network Problems
3150	Special Information Tone
3210	Line Busy
3220	Fax Answered
3230	No Answer
3305	Abandon Web Session
3310	Visitor Canceled Web Session
3320	Phone Disconnected
3330	No Sound Detected
3340	No Affirmation
3350	Too Many Helps
3420	Confirmation Number Failure
3510	No Voice Heard
3520	Recording Too Short
3610	Data Provider Error
3612	Unable To Reach Data Provider
3620	Number Not Found
3622	Invalid Number
3810	Invalid Resume Contents
3820	Visitor Resumed Too Soon
9999	Session Timeout

Table 16

APPENDIX F - RELEASE NOTES

This appendix contains a detailed listing of the changes made for each new version of the AssureBuy Payment Gateway. This section was added to this document in Version 4.3. Please contact AssureBuy directly for release information relating to prior versions of the Internet Payment Gateway.

Version 04.03.00 - 12/15/2002

1. ENHANCEMENT: Updated the remote HTTP post capabilities to use the latest version of the Microsoft MSXML DLL (msxml3.dll). (#160)
2. ENHANCEMENT: Updated the data validation routines to check for an invalid price factor value. If the value supplied in the ***Ecom_Product_ItemID*** parameter is not divisible by the specified seller price factor to produce an item price with two decimal places, a **5702** error is generated. (#165)
3. ENHANCEMENT: Added a procedure to remove non-alphanumeric characters from the customer address fields before sending the data to the card processor. Occasionally the non-alphanumeric characters were rejected by the processors. (#166)
4. ENHANCEMENT: The name (**NM**) fraud filter has been enhanced to look at both the First/Last name combination and the First/Middle/Last name combination. Formerly, only the First/Middle/Last name combination was examined. (#170)
5. ENHANCEMENT: The access log file (access.log) has been modified to include the processing mode parameter. (#182)
6. ENHANCEMENT: Added a procedure to automatically decline an expired card before sending the transaction to the payment processing engine. Previously, the payment processing engine returned an error, resulting in the order being placed on hold. (#245)
7. ENHANCEMENT: A new order index table has been added to increase performance during fraud scans. (#247)
8. ENHANCEMENT: The routines for obtaining the highest number generated on a given auto-numbering table have been updated to avoid a known SQL problem. (#251)
9. ENHANCEMENT: The alert monitoring system has been updated to accommodate internal pagers and cell phones with limited text messaging capabilities. (#261)

10. ENHANCEMENT: The system monitoring programs have been enhanced to allow an internal alert when order traffic stops for specified sellers. (#263)
11. ENHANCEMENT: The AssureBuy return code has been added to the backup tables to identify the error condition on transactions that were rejected by the payment gateway. (#264)
12. ENHANCEMENT: The system date has been added to all log file names to better allow for archiving or historical data. (#265)
13. ENHANCEMENT: The customer IP address validation routine has been changed to only require the IP address when the order source is **OL** (On-Line). Previously, the IP address was required for all orders. (#266)
14. ENHANCEMENT: The payment processing engine has been updated to send the e-commerce indicator only on e-commerce transactions. Previously, the e-commerce indicator was sent on all non-recurring transactions. (#267)
15. ENHANCEMENT: In test mode, a Force transaction now returns the approval code passed to the gateway in the ***Ecom_Payment_OriginalTransaction*** parameter. Previously, a static value of **123456** was returned. (#269)
16. ENHANCEMENT: When the processing engine is unable to void a transaction because it either does not exist or has already been captured, the transaction is now automatically declined. Previously, an error was generated. (#270)
17. BUG FIX: Transaction errors were not always written properly to the backup tables when a SQL formatting error caused the transaction to fail because of a control character. All backup data is now scanned before being written to the backup tables. (#246)
18. BUG FIX: The trapping code for processor timeouts has been updated to reset the transaction values and re-send the transaction three times. Previously, the error trapping code failed after the first attempt to re-send the transaction. (#248)
19. BUG FIX: The length of the following parameters was modified to avoid an internal overflow error. (#275)

Ecom_Payment_OriginalTransaction
Ecom_Product_ItemID
Ecom_Trans_Number

Version 04.04.00 - 03/02/2003

1. ENHANCEMENT: Redundant payment processing engine capabilities have been added to provide expanded access to processing networks. (#292)
2. ENHANCEMENT: Level 3 procurement card capabilities have been added to the payment gateway and FDMS South network. (#134)
3. ENHANCEMENT: Verified by Visa (VPAS) capabilities have been added to the payment gateway. (#214)
4. ENHANCEMENT: An archive database has been added to store historical transactions outside of the production environment. The administration system users are allowed to access the historical transaction data with a unique login account. (#291)
5. ENHANCEMENT: An automated archiving utility has been added that archives data to the archive database on a regular basis. (#290)
6. ENHANCEMENT: The ability to view the notification profile settings from within the administration system has been added. (#289)
7. ENHANCEMENT: A product category parameter has been added to the product detail information. (#168)
8. ENHANCEMENT: A product unit of measure parameter has been added to the product detail information. (#173)
9. ENHANCEMENT: A line item tax amount parameter has been added to the product detail information. (#175)
10. BUG FIX: Recurring transaction resubmits have been updated to always send the recurring transaction as a type "Sale". (#279)

Version 04.05.00 - 04/17/2006

1. ENHANCEMENT: Added Level III Processing for Paylinx. (#485)
2. ENHANCEMENT: Added feature to add customers to customer database. (#105)
3. ENHANCEMENT: Upgraded Gateway to support View N Pay. (#406)
4. ENHANCEMENT: Added Track1/Track2 and other retail parameters to gateway. (#389)

5. BUG FIX: Fixed the error with the Virtual Terminal. (#449)
6. ENHANCEMENT: Added payment type of "XX" for retail transactions only. (#533)
7. ENHANCEMENT: Added the ability to send second payment transaction for MMS. (#534)
8. ENHANCEMENT: Changed the DBIO routines to use the Replace command on all strings. (#535)
9. ENHANCEMENT: Updated the DBIO routines to verify dates prior to setting fields. (#536)
10. ENHANCEMENT: Updated the processing routines to add support for enhanced processing engine. (#537)
11. ENHANCEMENT: Updated the confirmation/notification routines to support multiple email addresses. (#550)
12. ENHANCEMENT: The system uses the processor avs response to generate more accurate AVS response. (#551)
13. BUG FIX: Added missing report totals and fixed error with transaction percentages when the printing of transaction details is suppressed on the Transaction Summary report. (#549).

Version 04.06.00 - 07/17/2006

1. ENHANCEMENT: Update the gateway to cancel a previous invoice with the same invoice number when sent from a View N Pay client. (#576)
2. ENHANCEMENT: Update the AVS processing code on Paylinx to always send AVS info if available. (#488)
3. ENHANCEMENT: Add a field to identify whether or not the CVV value was sent to us with the transaction. (#436)
4. ENHANCEMENT: Allow Ecom_Order_Date to be set to a date in future for transaction type "IN" to support View N Pay auto and delay payments. (#586)
5. BUG FIX: The amount written by ics_gateway to the requests.log file uses the order header amount instead of the transaction amount. (#508)

6. BUG FIX: Fix the looping issue for second transaction when parent seller id and seller id are 91134. (#582)
7. BUG FIX: Update the setting for card and customer present flag in Paylinx code. (#587)
8. BUG FIX: Set default to “Y” for Ecom_Payment_CardPresent and Ecom_Payment_CustomerPresent when Ecom_Order_Souce is “RT”. (#588)
9. BUG FIX: Updated execute method and fProcessTransaction routine to use both SE_SendMailFlag and SE_NotifyType when setting NotifyDate and ConfirmDate in OrderTrans table. (#589)
10. BUG FIX: Updated fSendConfirmation, fSendProblemMail and fSendNotification routine to respect NotifyType flag from SellerReports table. (#590)

###

This report is a technical document, distributed by AssureBuy, Inc., for partners and clients. AssureBuy is an experienced leader in the outsourced Internet payment and transaction processing industry. The company is headquartered in Schaumburg, Illinois.