

Innovative Gateway Solutions

Universal Payment Gateway Interface
COM Component Developer Documentation

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1 Introduction

The Universal Payment Gateway Interface COM component (UpgiClient) is used by Innovative Gateway Solutions merchants to process credit card transactions. UpgiClient exposes an easy-to-use application programming interface (API) for IGS merchants. Merchants may use the UpgiClient component from ASP, VBScript, VBA, VB, C++, and other COM or Automation capable languages.

The following VB code snippet shows how easy UpgiClient is to use.

```
Private Sub Command1_Click()  
    Dim upgi As UpgiClient.CPayment  
    Dim bSuccess As Boolean  
  
    Set upgi = CreateObject("UpgiClient.Payment")  
    upgi.CardType = "visa"  
    upgi.PW = "GateTest2002"  
    upgi.UserName = "GatewayTest"  
    upgi.CCNumber = "5424000000000015"  
    upgi.Month = "12"  
    upgi.Year = "04"  
    upgi.FullTotal = "2.00"  
    upgi.CCName = "Gateway Test"  
  
    bSuccess = upgi.ProcessTransaction  
    If bSuccess = True Then  
        Label1.Caption = upgi.Approval  
    Else  
        Label1.Caption = upgi.ErrorString  
    End If  
End Sub
```

The simplicity of this programming model and the wide variety of languages supported by it allows virtually any merchant the ability to easily integrate credit card processing into their system.

1.1 Installation

Installation of the UpgiClient component is as simple as running the setup program. The UpgiClient COM component along with documentation and examples are installed into the user's directory of choice and the UpgiClient self-registers so that it is immediately ready to be used.

1.2 Examples

Provided in the installation are examples in VB and ASP. The VB example has an easy to use interface which allows the user to test transactions as well as process real transactions once a valid merchant account has been set up.

The ASP example demonstrates making similar UpgiClient calls from an ASP page. In order to run this page, however, the developer must have IIS installed on his development machine or some other machine in order to run it.

2 UpgiClient API Reference

The UpgiClient COM component consists of two (2) methods and fifty-seven (57) properties. Although the interface has a lot of properties, many of the properties are optional.

2.1 Methods

The following table shows each of the UpgiClient methods, return values, and the description of each.

Note: All required properties must be set prior to calling the ProcessTransaction method or an error will be returned.

Name	Returns	Description
ProcessTransaction	Boolean	Submit payment information for authorization. 'true' is returned if the payment was authorized. 'false' is returned if an error occurred or if the authorization was denied. Check the 'ErrorString' property for the error message.
SetUserDefinedField	N/A	This extensibility feature sets a user defined field and associated value. The 'UserDefinedField' property returns the value of the specified field.

2.2 Properties

The following table describes each of the interface properties. In addition, the table specifies if the property is required prior to calling the ProcessTransaction method and if the property is a read-only property or a read-write property.

Note: read-only properties are valid only after the ProcessTransaction method has been called. Optionally Required properties are properties which are required if the merchant has been configured them to be required.

Name	Required/Optional	Read/Write	Description
AuthAmount	Required if TranType = 'postauth'	r w	Must be set with the amount specified by the original 'preauth' transaction.
Amount	Returned on success	r	Should match FullTotal after the transaction is processed.
AnaTransID	Returned on success	r	The Transaction ID generated by the IGS Gateway. Needed for credits, post-auths, and voids.
Approval	Returned on success	r	The authorization code if the ProcessTransaction method was successful.
AVS	Returned on success	r	AVS code for pre-auth and sale transactions.
BillingAddress1	Optionally Required	r w	The billing address of the card holder.
BillingAddress2	Optionally Required	r w	The billing address of the card holder.
BillingCity	Optionally Required	r w	The billing city of the card holder.
BillingCountry	Optionally Required	r w	The billing country of the card holder.
BillingEmail	Optionally Required	r w	The billing email address of the card holder.
BillingFax	Optional	r w	The billing fax number of the card holder.
BillingNamePrefix	Optional	r w	The billing name prefix (e.g. Dr.) of the card holder.

Name	Required/Optional	Read/Write	Description
			the card holder.
BillingNameSuffix	Optional	r w	The billing name suffix (e.g. Jr.) of the card holder.
BillingPhone	Optionally Required	r w	The billing phone number of the card holder.
BillingState	Optionally Required	r w	The billing state of the card holder.
BillingZip	Optionally Required	r w	The billing zip code of the card holder.
CardType	Optional	r w	The type of card. Valid values are: 'visa', 'mc', 'amex', 'diners', 'discover', 'jcb'.
CCIdentifier	Optional	r w	CVV2 identifier from the credit card.
CCName	Optionally Required	r w	The name as it appears on the credit card.
CCNumber	Required	r w	The credit card number with/without spaces and/or dashes.
Duplicate	Returned if duplicate transaction.	r	Returned only if the transaction is a duplicate. If a duplicate transaction has been processed, this property will be set to 'yes'.
DutyAmount	Required - FDC commercial card only	r w	Amount of duty calculated or entered.
EcomShipToPostalCode	Required - FDC commercial card only	r w	The shipping address zip code.
ErrorString	Returned on failure	r	The error string indicating the reason for the failure of the ProcessTransaction method.
FieldCapture	Optional	r w	For merchant use to store a comma-delimited list of fields to store on the IGS server.
FreightAmount	Required - FDC commercial card only	r w	Amount of freight calculated or entered.
FullTotal	Required	r w	Total amount to be charged. Decimal number only; do not include the dollar sign ('\$').
Month	Required	r w	Two-digit expiration month on the card.
NotifyEmail	Optional	r w	Value of "no" will suppress the email. An email address will generate additional confirmation email.
OrderNumber	Optional	r w	Merchant tracking number. If this is not set prior to the

Name	Required/Optional	Read/Write	Description
			ProcessTransaction method call, one will be automatically generated.
PONumber	Required - FDC commercial card only	r w	Purchase order number or customer code.
PW	Required	r w	Password set by the setup routine when the gateway account was established or the password chosen by the user when a change was made.
ReceiptEmail	Optional	r w	Value of "no" will suppress receipt email otherwise sent to purchaser.
Reference	Required for postauth, voids and credits	r w	Identifies the Approval value when submitting a transaction for 'postauth', 'void', and 'credit'.
ShippingAddress1	Optional	r w	Address to which the item is shipped.
ShippingAddress2	Optional	r w	Address to which the item is shipped.
ShippingCity	Optional	r w	City to which the item is shipped.
ShippingCountry	Optional	r w	Country to which the item is shipped.
ShippingEmail	Optional	r w	Email address for notification email.
ShippingFax	Optional	r w	Fax number where the item is shipped.
ShippingPhone	Optional	r w	Phone number where the item is shipped.
ShippingState	Optional	r w	State to which the item is shipped.
ShippingZip	Optional	r w	Zip code to which the item is shipped.
ShippingNamePrefix	Optional	r w	The name prefix to whom the item is shipped.
ShippingNameSuffix	Optional	r w	The name suffix to whom the item is shipped.
TaxAmount	Required - FDC commercial card only	r w	Amount of tax calculated or entered.
TaxExemptIndicator	Required - FDC commercial card only	r w	Tax status of the transaction. The following values are valid: 'unknown', 'exempt', 'non-exempt'.
TestOverrideErrors	Optional	r w	Any value with username gatewaytest overrides errors and forces approval

Name	Required/Optional	Read/Write	Description
TransID	Required for postauth, voids and credits	r w	The transaction ID. Required for postauth, voids, and credits.
TranType	Required	r w	Credit card transaction to be performed. The following values are valid: 'preauth', 'postauth', 'sale', 'credit', 'void'.
UserDefinedField	Optional	r w	Returns the value of the specified user defined field.
UserName	Required	r w	Username chosen on our system at time of setup.
VoiceAuth	Optional when trantype=postauth	r w	Only used when the TranType property is set to 'postauth'. The value of 'yes' indicates that the transaction is a voice authorization. The default is 'no'.
XEmailFields	Optional	r w	Comma delimited list of field names to add with their values to the notify email.
XHeader	Optional	r w	Header description created by the Look & Feel Editor for use with payment pages.
XsubjectNotify	Optional	r w	Allows the merchant to specify a unique subject for the email sent to the notification email.
Year	Required	r w	A two or four digit year on the card.