




# COMSGATE<sup>®</sup>


## Payment Form Specifications

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Prepared for: CHARGE Anywhere  
4041B Hadley Rd  
South Plainfield, NJ 07080  
Phone + 1 (800) 211-1256  
Fax + 1 (732) 417-4448

 <p><b>CHARGE Anywhere</b> Empowering Payments®</p> <p>South Plainfield, NJ USA</p>	<p><b>STANDARD GUIDE</b></p> <p><b>Information Technology</b></p> <p>ComsGate™ Payment Form</p>	No. CA_PF-GUID-010
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## 1 PURPOSE

ComsGate®, the proprietary gateway of CHARGE Anywhere, facilitates electronic commerce by enabling merchants to accept credit cards as a form of online payment. The gateway acts as a bridge between the merchant’s website and the financial institution that processes the payment transactions. Merchants may request ComsGate to host the page where the customer enters payment data. This page is referred to as the Payment Form and may be configured to look like the Merchant’s website.

This guide describes how the merchant may configure the Payment Forms available through ComsGate’s Web Terminal Application.

## 2 SCOPE

This guide applies to all Merchants and their employees or contractors authorized to use ComsGate’s Web Terminal application.

## 3 BACKGROUND

Payment data is collected online from the shopper and submitted to the gateway for real-time authorization. The merchant may collect payment information on their Website using ComsGate’s Payment Form. Using this Payment Form, merchants can collect payment data securely without having a secure Website. The Payment Form offered by CHARGE Anywhere can be utilized via Client-to-Server or Server-to-Server mode of communication.

## 4 DEFINITIONS


**PF** – Payment Form

**CTS** – Client to Server

**STS** – Server to Server

**SIP** – Simple Integration Protocol

**AIP** – Advanced Integration Protocol

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## 5 PAYMENT FORM MODES

The Payment Form may be used with two different protocols: Simple Integration Protocol and Advanced Integration Protocol. The selected protocol will determine how the collected payment data will be sent to the ComsGate gateway, and will also determine the way the customer views the response.

The Simple Integration Protocol also has two ways to present a payment form to the client. *SIP – Basic* allows merchants to have CHARGE Anywhere collect the payment data on their behalf, making it easy for any merchant to set up a Payment Form on their site. *SIP-Advanced* allows merchants to collect payment data on their own site using an HTML page of their own design if they desire. Both *SIP-Basic* and *SIP-Advanced* post information directly to CHARGE Anywhere ComsGate.


*AIP*- The merchant collects payment data and submits it to CHARGE Anywhere. Payment data passes through the merchant’s servers.

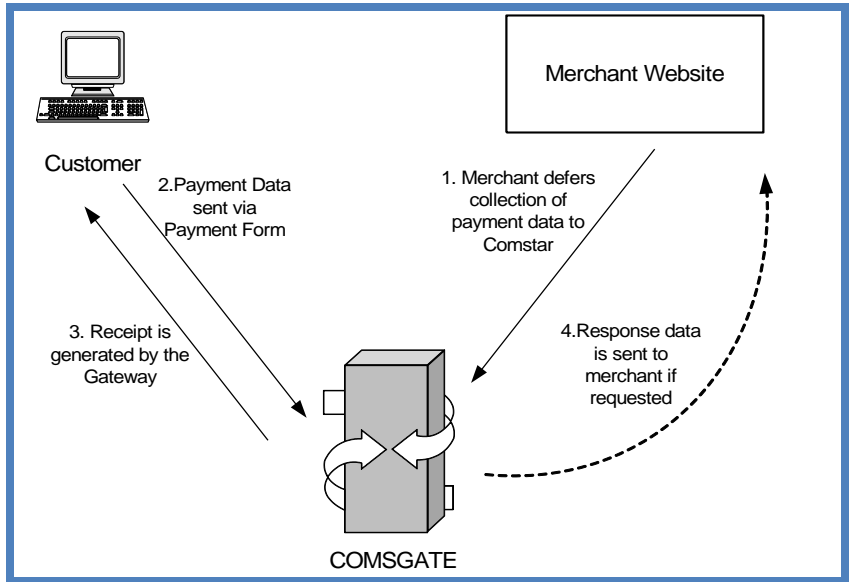
Action	SIP Basic	SIP Advanced	AIP
Payment Data is Collected by CHARGE Anywhere	✓		
Payment Data is Collected by Merchant		✓	✓
Payment Data is sent to CHARGE Anywhere	✓	✓	
Payment Data is sent to Merchant			✓
CHARGE Anywhere process transaction	✓	✓	✓
Receipt is sent by CHARGE Anywhere	✓	✓	
Receipt is sent by the Merchant			✓


### 5.1 Simple Integration Protocol (SIP)

#### 5.1.1 Basic: CHARGE Anywhere hosts the Payment Form

- The merchant uses a client-to-server method of communication.
- The merchant delegates the collection of payment data to CHARGE Anywhere
- CHARGE Anywhere collects the payment data using the CHARGE Anywhere Payment Form generated by the merchant.
- CHARGE Anywhere sends a receipt to the customer.
- CHARGE Anywhere also sends payment data to the merchant.

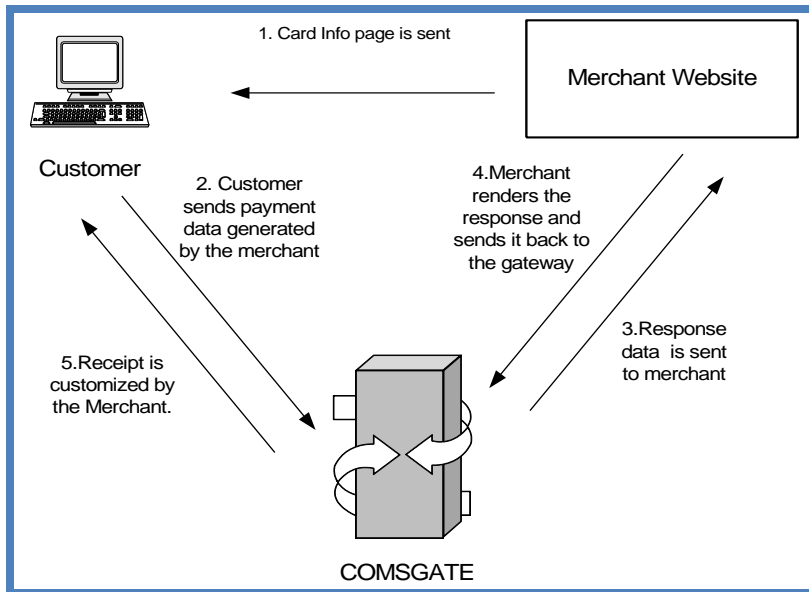
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### 5.1.2 Advanced: Merchant hosts their own Payment Form

- The merchant uses a client-to-server method of communication. The merchant collects the payment data and submits it to CHARGE Anywhere.
- CHARGE Anywhere processes the transaction and sends the response to the merchant.
- The merchant customizes a receipt and CHARGE Anywhere forwards that receipt to the customer. The receipt is configured to look like the merchants webpage.

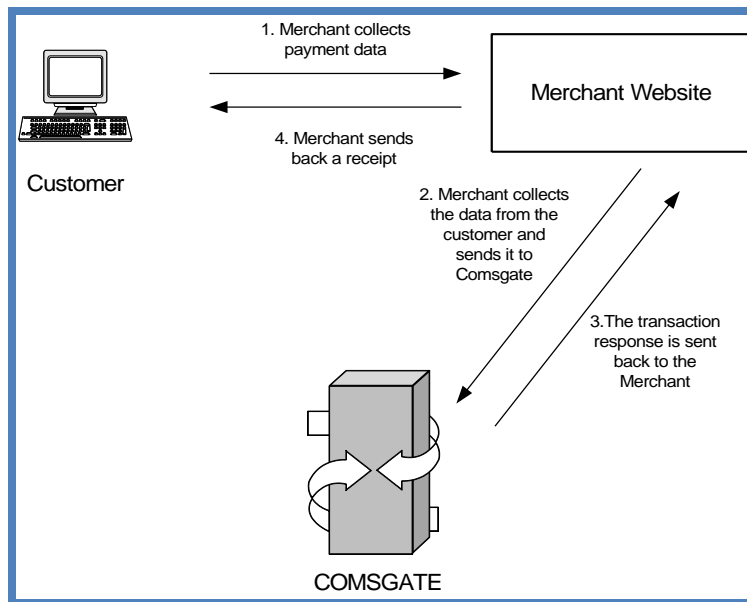


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## 5.2 Advanced Integration Protocol (AIP)

In this mode,


- The merchant collects payment data from the customer and submits it to CHARGE Anywhere
- CHARGE Anywhere returns the response to the merchant
- The Merchant sends a receipt to the customer.





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FIELD	REQUIRED	VALUE	DESCRIPTION
<b>Header</b>	Optional	Valid text or HTML code	The text contained in this field will be displayed as the header on the Payment Form
<b>Footer</b>	Optional	Valid text or HTML code	The text contained in this field will be displayed as the Footer on the Payment Form
<b>Center</b>	Optional	Checkbox	If <i>checked</i> the payment form will be center aligned.
<b>BackgroundColor</b>	Optional	Any valid HTML color name or color hex code	Value in this field will set the background color for the Payment Form. Background will be obscured if image is specified.
<b>BackgroundImage</b>	Optional	Any valid HTML color name or color hex code	Value in this field will set the background image for the Payment Form. Background Image will tile.
<b>MerchantReceiptURL</b>	Required / Default	A valid url	If a receipt page is not specified, one is available by default
<b>MerchantResultsURL</b>	Optional	A valid url	The results of the transaction are sent to this url.

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## 6 PAYMENT FORM

### 6.1 Payment Form Options

The Payment Form hosted by *CHARGE Anywhere ComsGate* (SIP-Basic) may be configured, as specified below.


- All fields on the payment form can be customized. While setting up the Payment Form, the following may be specified:
  - View: The check box next to the field must be selected to view the field on the payment form
  - Edit: The check box next to the Edit field must be selected to allow the user to make changes to the value of the field.
  - Required: The check box next to the field must be selected in order to require a value to be entered in order to save the form and proceed with the checkout process
- The following tables list the fields available on the payment form. The fields are grouped logically in the tables, based on the information submitted. Each table contains the following information:

<b>Field</b>	Name of the parameter that may be submitted on a transaction
<b>Required</b>	Indicates whether the field is required on a transaction
<b>Value</b>	Lists the possible values that may be submitted for the field
<b>Max Length</b>	Indicates the maximum number of characters that may be supplied for each field.
<b>Description</b>	Provides additional details on how the field is used

#### 6.1.1 Invoice Information

Based on their requirements, merchants may submit invoice information with a transaction. The following fields are provided in the ComsGate API

FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>Version</b>	Required	1.2		Version of the Protocol. Version 1.0 is deprecated.
<b>Mode</b>	Required	0, 1, or 2	1	Mode used, Default 0

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<b>InvoiceNumber</b>	Optional	Any String	50	Merchant-assigned invoice number
<b>Description</b>	Optional	Any String	225	Description of the transaction
<b>Amount</b>	Required	Any Amount	15	Total value to be charged

## 6.1.2 Customer Information

### 6.1.2.1 Customer Name and Billing Address

The customer billing address fields listed below contain the customer billing address information associated with each transaction.

FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>CustomerNumber</b>	Optional	Any string	50	A unique number assigned to a customer by the merchant
<b>BIFirstName</b>	Optional	Any string	50	Contains the first name of the customer associated with the billing address for the transaction
<b>BILastName</b>	Optional	Any string	50	Contains the last name of the customer associated with the billing address for the transaction
<b>BICompanyName</b>	Optional	Any string	50	Contains the company name of the customer associated with the billing address for the transaction
<b>BIAddress</b>	Optional	Any string	50	Contains the address of the customer associated with the billing address for the transaction
<b>BICity</b>	Optional	Any string	50	Contains the city of the customer associated with the billing address for the transaction
<b>BIState</b>	Optional	Any valid two character state code or full state name	50	Contains the state of the customer associated with the billing address for the transaction
<b>BIZipCode</b>	Optional	Any five digit or	9	Contains the zip of the


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FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
		nine digit zip code		customer associated with the billing address for the transaction
<b>BICountry</b>	Optional	Any valid two character country code or full country name	50	Contains the country of the customer associated with the billing address for the transaction
<b>BIPhone</b>	Optional	Any string  Recommended Format is (111) 123-1234	25	Contains the phone number of the customer associated with the billing address for the transaction
<b>BIFax</b>	Optional	Any string  Recommended Format is (111) 123-1234	25	Contains the fax number of the customer associated with the billing address for the transaction
<b>BIEmail</b>	Optional	Any valid email address		Email address to which the customer's copy of the confirmation email is sent. No email will be sent to the customer if the email address does not meet the standard email format checks.

#### 6.1.2.2 Customer Shipping Address

The following fields describe the customer shipping information that may be submitted with each transaction

FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>SIFirstName</b>	Optional	Any string	50	Contains the customer shipping first name
<b>SILastName</b>	Optional	Any string	50	Contains the customer shipping last name
<b>SICompanyName</b>	Optional	Any string	50	Contains the customer shipping company name
<b>SIAddress</b>	Optional	Any string	50	Contains the customer shipping address
<b>SICity</b>	Optional	Any string	50	Contains the customer shipping city name

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FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>SISate</b>	Optional	Any valid two character state code or full state name	50	Contains the customer shipping state name
<b>SIZipCode</b>	Optional	Any five digit or nine digit zip code	9	Contains the customer shipping zip code
<b>SICountry</b>	Optional	Any valid two character country code or full country name	50	Contains the customer shipping country


### 6.1.3 Transactions Supported

- **Credit Cards**

- **Sale:** Can be used in all modes. This is the most basic credit card transaction used for the purchase of goods or services
- **Auth Only:** Can be used in all modes. This credit card transaction is used to verify funds.
- **Force:** Can be used in all modes. This credit card transaction is used to complete a previously authorized (Auth Only) transaction.
- **Void:** Can be used in all modes. This credit card transaction is used to cancel a Sale, a Force, or a Return, performed on the current open batch.
- **Return:** Mode 2 Only. This credit card transaction is used to refund funds previously obtained from the cardholder's credit card, should be used where Void cannot be used.

- **ACH**

- **Debit:** Can be used in all modes, This ACH transaction is used for the purchase of goods or services
- **Refund:** Mode 2 Only, This ACH transaction is used to refund funds previously obtained from the customer's bank account.

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#### 6.1.4 Credit Card Information

The following fields describe the credit card information submitted with each transaction.

FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>TransactionType</b>	Optional	String	NA	Default Sale.
<b>PaymentMethod</b>	Required	Numeric	1	Contains Payment Method. CreditCard=1, ACH=2
<b>CardNumber</b>	Required	Numeric credit card number	22	Contains credit card number
<b>ExpMonth</b>	Required	MM	NA	Contains the month in which card expires
<b>ExpYear</b>	Required	YY	NA	Contains the year in which the card expires
<b>CardVerification Value</b>	Optional	Valid CVV2 value	4	Contains 3 or 4 digit number on back of the card

#### 6.1.5 ACH Information


The following fields describe the credit card information submitted with each transaction.

FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>PaymentMethod</b>	Required	Numeric	1	Contains Payment Method. CreditCard=1, ACH=2
<b>AccountType</b>	Required	Numeric	1	Contains Account Type Value. Personal Saving=0. Personal Checking=1, Business Checking=2
<b>RoutingNumber</b>	Required	Numeric	9	Contains Routing#
<b>AccountNumber</b>	Required	Numeric	6 or more	Contains Account#

#### 6.1.6 Captcha

Captcha is a field that contains the value embedded in the Captcha image that is generated and sent to users in Mode 0 and Mode 1

FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
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<b>Captcha</b>	Required for Mode 0 and Mode 1	8 alpha numeric	8	Contains alpha numeric value embedded in the Captcha image. Applicable to Mode 0 & 1
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### 6.1.7 Additional Information

The following fields describe additional information that may be submitted with each transaction

FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>Tax</b>	Optional	Any valid tax amount	NA	Contains sales tax amount. Dollar sign is not allowed
<b>Shipping</b>	Optional	Any valid shipping amount	NA	Contains shipping amount charged. Dollar sign is not allowed
<b>TaxExempt</b>	Optional	TRUE, FALSE	5	Indicates whether the transaction is tax exempt
<b>PurchaseCode</b>	Optional	Any string	25	Contains the code on a purchase card issued by a particular business
<b>EmailMerchant</b>	Optional	True or False		Set to False to suppress sending receipt to Merchant
<b>EmailCustomer</b>	Optional	True or False		Set to False to suppress sending receipt to Customer
<b>ResponseFieldSeperator</b>	Optional	Any Character	1	Default is & Mode2 Only Character used to separate fields in response
<b>ResponseNameValueSeperator</b>	Optional	Any Character		Default is = Mode2 Only Character used to separate name/value pairs in response

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<b>ResponseValueWrapper</b>	Optional	True or False		Mode2 Only Character used to wrap values in response
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### 6.1.8 Recurring Information

The following fields describe field that may be submitted with each transaction to identify a transaction as being recurring


FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>IsRecurring</b>	Optional	0 or 1	NA	Specifies either the transaction is recurring or not
<b>RecurringEffectiveDate</b>	Optional	Any valid Date: MM-DD-YY	8	Specifies first date when payment will be processed
<b>RecurringFrequency</b>	Optional	0-Daily 1-Weekly 2-Bi- Monthly 3-Monthly 4-Annually	1	Specifies how often this payment will be applied
<b>RecurringPayments</b>	Optional	Any valid number greater than zero	NA	Specifies how many payments will be applied

### 6.1.9 Original Transaction Info

The following fields describe fields that may be submitted with each transaction to identify the original transaction. These fields are only applicable to Force, Return and Voids

FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>OriginalReferenceNumber</b>	Optional	Numeric	12	Specifies reference# of original transaction
<b>OriginalApprovalCode</b>	Optional	Alpha Numeric	6	Specifies approval code of original



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				transaction
<b>OriginalAmount</b>	Optional	Any Amount	15	Specifies amount of original transaction


## 6.2 Line Items

Starting with version 1.2 of the CHARGE Anywhere Payment Forms, merchants can choose to send line items, item tax details, and transaction tax details with each transaction. The information will be stored in the CHARGE Anywhere system and the merchant will be able to view it when viewing the transaction details.

The three tables below indicate the fields that can be sent for Line Items, Line Item Tax Detail, and Transaction Tax Detail. For samples on how to POST the data to CHARGE Anywhere Payment Forms, refer to section 10 and section 11 for Code Examples.

### Line Item Details

FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>Id</b>	Optional	Numeric	--	A counter value for the item. This field will not be saved.
<b>Description</b>	Required	Alpha Numeric	70	The item name or a brief description of the item.
<b>Product Code</b>	Optional	Alpha Numeric	25	The product code, such as UPC, of the item.
<b>Unit Of Measure</b>	Optional	Alpha Numeric	25	The units that are used to measure this item.
<b>Taxable</b>	Optional	Boolean	1	0 if the item is not taxable. 1 if it is.
<b>Commodity Code</b>	Optional	Alpha Numeric	25	Commodity Code that describes the item
<b>Category</b>	Optional	Alpha Numeric	25	Category of the Item.
<b>Price</b>	Required	Numeric Float	--	The cost of a single unit of the item
<b>Quantity</b>	Required	Numeric Float	-	The number of this particular item purchased.
<b>Total</b>	Required	Numeric	--	The total final

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		Float		
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Line Item Tax Details


FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>Enabled</b>	Optional	Boolean	1	Informs if the tax is enabled. Should be 1 if Tax is enabled.
<b>Description</b>	Optional	Alpha Numeric	25	The name or a brief description of the item tax.
<b>Rate</b>	Optional	Numeric Float	--	The percentage tax rate of the tax
<b>Amount</b>	Optional	Numeric Float	--	The tax amount that is applied to this item.

Transaction Tax Detail

FIELD	REQUIRED	VALUE	MAX LENGTH	DESCRIPTION
<b>Enabled</b>	Optional	Boolean	1	Informs if the tax is enabled. Should be 1 if Tax is enabled.
<b>Description</b>	Optional	Alpha Numeric	25	The name or a brief description of the item tax.
<b>Rate</b>	Optional	Numeric Float	--	The percentage tax rate of the tax
<b>Amount</b>	Optional	Numeric Float	--	The tax amount that is applied to this transaction.

Because multiple line items and transaction taxes can be sent in a single order, these fields are sent differently than other payment form information. All line items should sent in the following format:

```
<input type="hidden" name="LineItem"
value="id[|]description[|]product_code[|]UnitOfMeasure[|]Taxable[|]CommodityCode[|]C
ategory[|]Price[|]Quantity[|]Total[~]TaxEnabled1[-]TaxDescription1[-]TaxRate1[-
]TaxAmount1[^]TaxEnabled2[-]TaxDescription2[-]TaxRate2[-]TaxAmount2 ...>"
```

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Transaction Taxes should be sent in the following format:

```
<input type="hidden" name="TranTax" value="TaxEnabled[-]TaxDescription[-]TaxRate[-]TaxAmount">
```

For sample code on how to POST the data to *CHARGE Anywhere Payment Forms*, refer to section 10 and section 11.

### 6.3 Gateway Response

In *Simple Integration Protocol – Advanced*, ComsGate will POST a response to a URL designated by the merchant. This section describes the response returned by the gateway when a transaction is submitted for processing. The merchant can parse the string, customize a response, and submit it back to *ComsGate*, which will then relay the response to the customer’s browser.

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All credit card numbers in the Gateway response will be truncated.  
CardVerificationValue (CVV) and Captcha will not be returned in the response.

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#### 6.3.1 FIELDS IN THE GATEWAY RESPONSE:

The gateway response contains **all fields sent to the gateway** as described in the tables above, *in addition* to the fields described below:

FIELD	INFORMATION	DESCRIPTION
<b>ResponseCode</b>	Code sent by ComsGate	A code sent out by ComsGate to track transaction
<b>ResponseText</b>	Response reason text	Indicates the result of the transaction 1 = Approved 2 = Declined 3 = Error
<b>ProcessorResponseCode</b>	Code sent by credit card processor	A code sent by the processor to track transaction
<b>ApprovalCode</b>	Approval Code by credit card processor	The six-digit authorization or approval code. (Always begins with 000)

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<b>AVSResponse</b>	AVS result Code	AVS verifies that the information entered, matches what the credit card company has for billing purposes. One of the following codes is received as a response: A = Address (Street) matches, ZIP does not B = Address information not provided for AVS check E = AVS error G = Non U.S. Card Issuing Bank N = No Match on Address (Street) or ZIP P = AVS not applicable for this transaction R = Retry – System unavailable or timed out S = Service not supported by issuer U = Address information is unavailable W = 9 digit ZIP matches, Address (Street) does not X = Address (Street) and 9 digit ZIP match Y = Address (Street) and 5 digit ZIP match Z = 5 digit ZIP matches, Address (Street) does not
<b>CVVResponse</b>	Card code response code	Indicates the result of Card Code verification M = Card Code matches N = Card Code does not match P = Card Code was not processed S = Card Code should be on card but was not indicated U = Issuer was not certified for Card Code  This value will not display on the Payment Form
<b>RecurringResponse</b>	Result for creating recurring	0 = Failure 1 = Success
<b>ReferenceNumber</b>	Unique Reference#	This value represent a unique identifier in the payment system
<b>CustomerNumber</b>	Customer ID	Echoed from form input value for CustomerNumber
<b>BIFirstName</b>	Cardholder First Name	Echoed from form input value for BIFirstName
<b>BILastName</b>	Cardholder Last Name	Echoed from form input value for BILastName
<b>BICompanyName</b>	Customer Company	Echoed from form input value for BICompanyName
<b>BIAddress</b>	Customer Billing Address	Echoed from form input value for BIAddress
<b>BICity</b>	Customer City	Echoed from form input value for BICity.

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<b>BIState</b>	Customer State	Echoed from form input value for BIState.
<b>BIZipCode</b>	Customer Zip	Echoed from form input value for BIZipCode
<b>BICountry</b>	Customer Country	Echoed from form input value for BICountry.
<b>BIPhone</b>	Customer Phone	Echoed from form input value for BIPhone.
<b>BIFax</b>	Customer Fax	Echoed from form input value for BIFax.
<b>BIEmail</b>	Customer Email	Echoed from form input value for BIEmail.
<b>SIFirstName</b>	Customer Ship to First Name	Echoed from form input value for SIFirstName
<b>SILastName</b>	Customer Ship to Last Name	Echoed from form input value for Customer SILastName
<b>SICompanyName</b>	Customer Ship to Company	Echoed from form input value for SICompanyName
<b>SIAddress</b>	Customer Ship to Address	Echoed from form input value for SIAddress
<b>ShipCity</b>	Customer Ship to City	Echoed from form input value for Customer ship_to_city.
<b>SIState</b>	Customer Ship to State	Echoed from form input value for SIState
<b>SIZipCode</b>	Customer Ship to Zip	Echoed from form input value for SIZipCode
<b>SICountry</b>	Customer Ship to Country	Echoed from form input value for SICountry
<b>Tax</b>	Tax Amount	Echoed from form input value for tax.
<b>Shipping</b>	Shipping Amount	Echoed from form input value for shipping
<b>TaxExempt</b>	Tax Exempt Flag	Echoed from form input value for taxexempt.
<b>TransactionType</b>	Transaction Type	Echoed from form input value for TransactionType.


## 7 SUBMITTING A REQUEST TO COMSGATE

In order to integrate with ComsGate, the merchant must be able to construct an HTML form that can generate signature and post information including the signature.

The form must be sent to:

<https://www.chargeanywhere.com/chargeanywheremanager/PaymentForm/PaymentForm.asp>

The client-to-server request by the merchant to generate ComsGate's Payment Form must include a unique merchant-generated Signature. This signature is used to authenticate requests submitted by an authorized merchant.

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## 7.1 Signature

The Signature is configured using the Merchant ID, Terminal ID, Seed number (a randomly generated number) and the Amount of the transaction

Sample of signature generation:

```
vSignature = hex_hmac_md5(vSecret, vMerchantId & ":" & vTerminalId
& ":" & vSeed & ":" & vAmount)
```

Where:

vMerchantId	=	Your Merchant ID	As it appears on the <i>Payment Form Processing Data</i> page
vTerminalId	=	Your Terminal ID	As it appears on the <i>Payment Form Processing Data</i> page
vSeed	=	'Rnd'	A random value
vAmount	=	The Amount of the transaction	Numeric value Eg. 10.50

## 7.2 Secret


When using Advanced Integration Protocol, any request made by the merchant to generate a ComsGate Payment Form must include the Secret. The Secret is similar to a password. It is a gateway-generated, random string that is unique and is submitted by the merchant to the Gateway. It is used by ComsGate to authenticate the request as originating from an authorized merchant. The Secret should be stored securely on the merchant's server once it has been obtained. It should only be used in the Server to Server method of communication so that the secret is not exposed to the client.

The secret can be obtained by clicking on the **Payment Form Processing Data** page in CHARGE Anywhere manager.

## 8 OTHER

### 8.1 Payment Form Best Practices

- The Secret should be stored securely on the merchant's web server or hosting provider (The Secret should never be stored in the wwwroot directory)
- The Secret should never be used when using Simple Integration Protocol.

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- The Secret should not be exposed in any web page that is displayed to the end customer.
- The Secret should not appear in any hidden HTML form field.
- The Secret should be changed periodically.

**To change your Secret:**

- Log in to Virtual Terminal in the CHARGE Anywhere Manager (refer sec. 9.1.3)
- Select Payment Form Processing Details
- In the Action Column, Select Rotate Secret

---

Note: The old secret will be disabled as soon as the new secret is generated

---

## 9 HELP

### 9.1.1 SUBMIT A FORM

Submit the form to defer payment to CHARGE Anywhere at:

<https://www.chargeanywhere.com/chargeanywheremanager/PaymentForm/PaymentForm.asp>

### 9.1.2 VIEW A TEST FORM

To view a test page go to:

<https://webtest.chargeanywhere.com/chargeanywheremanager/PaymentForm/PaymentForm.asp>

### 9.1.3 OBTAIN PROCESSING DATA

Processing data like **Merchant ID**, **Terminal ID**, **Secret** are available at:

<https://www.chargeanywhere.com/chargeanywheremanager/PaymentForm/PaymentFormProcessingData.asp>


(To obtain data in test mode, change the www to webtest)

### 9.1.4 AVAILABLE CODE

Code is available from CHARGE Anywhere upon request

### 9.1.5 QUESTIONS

Questions may be sent to - [cert.questions@chargeanywhere.com](mailto:cert.questions@chargeanywhere.com)

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## 10 Code Examples – Simple Integration Protocol

To generate a Payment Form request from the gateway the following information must be included using the CTS method of communication.

### 10.1 Sample SIP-Basic

#### 10.1.1 Without Line Items

```

<!-- md5-inc.asp MUST BE INCLUDED -->
<%
    Randomize

    vSecret      = \Your Secret value obtained from ChargeAnywhere
                  Manager
    vVersion     = 1.2
    vMerchantId  = 'Your Merchant ID
    vTerminalId  = 'Your Terminal ID
    vSeed        = Rnd 'A random value
    vAmount      = 'The Amount of the transaction
    vMode        = 0


    vSignature   = hex_hmac_md5(vSecret, vMerchantId & ":" &
                              vTerminalId & ":" & vSeed & ":" & vAmount)
%>

<FORM name="Form1"
action="https://www.chargeanywhere.com/ChargeAnywhereManager/PaymentForm/PaymentF
orm.asp" method="post">
    <input type="hidden" name="Version" value= "<%vVersion%>"
    <input type="hidden" name="MerchantId" value= "<%vMerchantId%>"
    <input type="hidden" name="TerminalId" value= "<%vTerminalId%>"
    <input type="hidden" name="Seed" value= "<%vSeed%>"
    <input type="hidden" name="Amount" value= "<%vAmount%>"
    <input type="hidden" name="Signature" value= "<%vSignature%>"
    <input type="hidden" name="Mode" value=0>
    <input type="submit" value="Submit Transaction">
</FORM>

```

#### 10.1.2 With Line Items



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```

<!-- md5-inc.asp MUST BE INCLUDED -->
<%
  Randomize

  vSecret      = 'Your Secret value obtained from ChargeAnywhere
                Manager
  vVersion     = 1.2
  vMerchantId  = 'Your Merchant ID
  vTerminalId  = 'Your Terminal ID
  vSeed        = Rnd 'A random value
  vAmount      = 'The Amount of the transaction
  vMode        = 0

  vSignature   = hex_hmac_md5(vSecret, vMerchantId & ":" &
                              vTerminalId & ":" & vSeed & ":" & vAmount)

  vLineItemId1 = "1"
  vLineItemDescription1 = "golf balls"
  vLineItemProductCode1 = "123456"
  vLineItemUOM1 = "balls"
  vLineItemTaxable1 = "Y"
  vLineItemCommodityCode1 = ""
  vLineItemCategory1 = ""
  vLineItemPrice1 = "3.00"
  vLineItemQuantity1 = "2"
  vLineItemTotal1 = "6.00"


  vLineItemTax1Enabled = "1"
  vLineItemTax1Description = "Tax1"
  vLineItemTax1Rate = "6.00"
  vLineItemTax1Amount = "0.18"

  vLineItemTax2Enabled = "1"
  vLineItemTax2Description = "Tax2"
  vLineItemTax2Rate = "5.00"
  vLineItemTax2Amount = "0.15"

  vTranTax1Enabled = "1"
  vTranTax1Description = "Tax3"
  vTranTax1Rate = "1.00"
  vTranTax1Amount = "3.00"
%>

<FORM name="Form1"
action="https://www.chargeanywhere.com/ChargeAnywhereManager/PaymentForm/PaymentF
orm.asp" method="post">

```

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```



```


## 10.2 Sample SIP-Advanced

### 10.2.1 Without Line Items

```

<!-- md5-inc.asp MUST BE INCLUDED -->
<%
Randomize
vSecret = 'Your Secret value obtained from ChargeAnywhere
Manager
vVersion = 1.2
vMerchantId = 'Your Merchant ID
vTerminalId = 'Your Terminal ID
vSeed = Rnd 'A random value
vCardNumber = 'Customer Credit Card number
vExpMonth = 'Expiration Month on the Credit Card
vExpYear = 'Expiration Year on the Credit Card
vAmount = 'The Amount of the transaction
vMode = 1

```

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```

vSignature = hex_hmac_md5(vSecret, vMerchantId & ":" &
    vTerminalId & ":" & vSeed & ":" & vAmount)
%>

<FORM name="Form1"
action="https://www.chargeanywhere.com/ChargeAnywhereManager/PaymentForm/PaymentForm.asp" method="post">
  <input type="hidden" name="Version" value="<%vVersion%>"
  <input type="hidden" name="MerchantId" value="<%vMerchantId%>"
  <input type="hidden" name="TerminalId" value="<%vTerminalId%>"
  <input type="hidden" name="Seed" value="<%vSeed%>"
  <input type="hidden" name="Amount" value="<%vAmount%>"
  <input type="hidden" name="Signature" value="<%vSignature%>"
  <input type="hidden" name="Mode" value="1"
  <input type="hidden" name="CardNumber" value="<%vCardNumber%>"
  <input type="hidden" name="ExpMonth" value="<%vExpMonth%>"
  <input type="hidden" name="ExpYear" value="<%vExpYear%>"
  <input type="submit" value="Submit Transaction">
</FORM>

```


### 10.2.2 With Line Items

```

<!-- md5-inc.asp MUST BE INCLUDED -->
<%
Randomize
vSecret = 'Your Secret value obtained from ChargeAnywhere
    Manager
vVersion = 1.2
vMerchantId = 'Your Merchant ID
vTerminalId = 'Your Terminal ID
vSeed = Rnd 'A random value
vCardNumber = 'Customer Credit Card number
vExpMonth = 'Expiration Month on the Credit Card
vExpYear = 'Expiration Year on the Credit Card
vAmount = 'The Amount of the transaction
vMode = 1

vSignature = hex_hmac_md5(vSecret, vMerchantId & ":" &
    vTerminalId & ":" & vSeed & ":" & vAmount)
vLineItemId1 = "1"
vLineItemDescription1 = "golf balls"
vLineItemProductCode1 = "123456"
vLineItemUOM1 = "balls"
vLineItemTaxable1 = "Y"
vLineItemCommodityCode1 = ""

```

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```

vLineItemCategory1 = ""
vLineItemPrice1 = "3.00"
vLineItemQuantity1 = "2"
vLineItemTotal1 = "6.00"

vLineItemTax1Enabled = "1"
vLineItemTax1Description = "Tax1"
vLineItemTax1Rate = "6.00"
vLineItemTax1Amount = "0.18"

vLineItemTax2Enabled = "1"
vLineItemTax2Description = "Tax2"
vLineItemTax2Rate = "5.00"
vLineItemTax2Amount = "0.15"

vTranTax1Enabled = "1"
vTranTax1Description = "Tax3"
vTranTax1Rate = "1.00"


```

%>

```

<FORM name="Form1"
action="https://www.chargeanywhere.com/ChargeAnywhereManager/Payme
ntForm/PaymentForm.asp" method="post">
  <input type="hidden" name="Version" value="<%=vVersion%>"
  <input type="hidden" name="MerchantId" value="<%=vMerchantId%>"
  <input type="hidden" name="TerminalId" value="<%=vTerminalId%>"
  <input type="hidden" name="Seed" value="<%=vSeed%>"
  <input type="hidden" name="Amount" value="<%=vAmount%>"
  <input type="hidden" name="Signature" value="<%=vSignature%>"
  <input type="hidden" name="Mode" value=
  1
  <input type="hidden" name="CardNumber" value="<%=vCardNumber%>"
  <input type="hidden" name="ExpMonth" value="<%=vExpMonth%>"
  <input type="hidden" name="ExpYear" value="<%=vExpYear%>"
  <input type="hidden" name="LineItem"
value="<%=vLineItemId1%>[|]<%=vLineItemDescription1%>[|]<
%=vLineItemProductCode1%>[|]<%=vLineItemUOM1%>[|]<%=vLine
ItemTaxable1%>[|]<%=vLineItemCommodityCode1%>[|]<%=vLineI
temCategory1%>[|]<%=vLineItemPrice1%>[|]<%=vLineItemQuant
ity1%>[|]<%=vLineItemTotal1%>[~]<%=vLineItemTax1Enabled%>
[-]<%=vLineItemTax1Description%>[-
]<%=vLineItemTax1Rate%>[-
]<%=vLineItemTax1Amount%>[^]<%=vLineItemTax2Enabled%>[-
]<%=vLineItemTax2Enabled%>[-]<%=vLineItemTax2Rate%>[-
]<%=vLineItemTax2Amount%>">

```

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```



```

## 11 Code Sample – Advanced Integration Protocol

To generate a Payment Form request from the Gateway using Mode 2, the following information must be included using the STS method of communication.

### 11.1 Without Line Items

```

<%
vSecret = 'Your Secret value obtained from ChargeAnywhere Manager
vVersion   = 1.2
vMerchantId = 'Your Merchant ID
vTerminalId = 'Your Terminal ID
vCardNumber = 'Customer Credit Card number
vExpMonth   = 'Expiration Month on the Credit Card
vExpYear    = 'Expiration Year on the Credit Card
vAmount     = 'The Amount of the transaction
vMode       = 2

postData = "Mode=" & vMode
postData = postData & "&MerchantId=" & vMerchantId
postData = postData & "&TerminalId=" & vTerminalId
postData = postData & "&Secret=" & vSecret
postData = postData & "&CardNumber=" & vCardNumber
postData = postData & "&ExpMonth=" & vExpMonth
postData = postData & "&ExpYear=" & vExpYear
postData = postData & "&Amount=" & vAmount
postData = postData & "&Version=" & vVersion

'Post you data to CHARGE Anywhere's Secure Server -
https://www.chargeanywheremanager.com/ChargeAnywhereManager/
PaymentForm/PaymentForm.asp
%>


```

### 11.2 With Line Items

```

<%
vSecret = 'Your Secret value obtained from ChargeAnywhere Manager

```

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```

vVersion      = 1.2
vMerchantId   = 'Your Merchant ID
vTerminalId   = 'Your Terminal ID
vCardNumber   = 'Customer Credit Card number
vExpMonth     = 'Expiration Month on the Credit Card
vExpYear      = 'Expiration Year on the Credit Card
vAmount       = 'The Amount of the transaction
vMode         = 2

```

```

vLineItemId1 = "1"
vLineItemDescription1 = "golf balls"
vLineItemProductCode1 = "123456"
vLineItemUOM1 = "balls"
vLineItemTaxable1 = "Y"
vLineItemCommodityCode1 = ""
vLineItemCategory1 = ""
vLineItemPrice1 = "3.00"
vLineItemQuantity1 = "2"
vLineItemTotal1 = "6.00"

```

```

vLineItemTax1Enabled = "1"
vLineItemTax1Description = "Tax1"
vLineItemTax1Rate = "6.00"
vLineItemTax1Amount = "0.18"

```

```

vLineItemTax2Enabled = "1"
vLineItemTax2Description = "Tax2"
vLineItemTax2Rate = "5.00"
vLineItemTax2Amount = "0.15"

```

```


vTranTax1Enabled = "1"
vTranTax1Description = "Tax3"
vTranTax1Rate = "1.00"

```

```

postData = "Mode=" & vMode
postData = postData & "&MerchantId=" & vMerchantId
postData = postData & "&TerminalId=" & vTerminalId
postData = postData & "&Secret=" & vSecret
postData = postData & "&CardNumber=" & vCardNumber
postData = postData & "&ExpMonth=" & vExpMonth
postData = postData & "&ExpYear=" & vExpYear
postData = postData & "&Amount=" & vAmount
postData = postData & "&Version=" & vVersion
postData = postData & "&LineItem=" & vLineItemId1 & "[|]" &
vLineItemDescription1 & "[|]" & vLineItemProductCode1 & "[|]" &

```

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```
vLineItemUOM1 & "[|]" & vLineItemTaxable1 & "[|]" &
vLineItemCommodityCode1 & "[|]" & vLineItemCategory1 & "[|]" &
vLineItemPrice1 & "[|]" & vLineItemQuantity1 & "[|]" &
vLineItemTotal1 & "[~]" & vLineItemTax1Enabled & "[-]" &
vLineItemTax1Description & "[-]" & vLineItemTax1Rate & "[-]" &
vLineItemTax1Amount & "[^]" & vLineItemTax2Enabled & "[-]" &
vLineItemTax2Enabled & "[-]" & vLineItemTax2Rate & "[-]" &
vLineItemTax2Amount
```

```
postData = postData & "&TranTax=" & vTranTax1Enabled & "[-]" &
vTranTax1Description & "[-]" & vTranTax1Rate & "[-]" &
vTranTax1Amount
```

```
'Post you data to CHARGE Anywhere's Secure Server -
https://www.chargeanywheremanager.com/ChargeAnywhereManager/
PaymentForm/PaymentForm.asp
```

%>

---

**CAUTION!** The Secret should be stored securely on the merchant's server once it has been obtained. It should only be used in the Server to Server method of communication. **The secret should never be exposed to the client.**

---

## 12 SUBMITTING TEST TRANSACTIONS


### 12.1 Test Mode

ComsGate offers a test mode during the initial setup phase, where a merchant may want to test their setup without processing live card data.

- Go to [webtest.chargeanywhere.com/chargeanywheremanager/login.asp](https://webtest.chargeanywhere.com/chargeanywheremanager/login.asp)
- Enter your *Username* and *password*
- Click **Virtual Terminal**
- Select **Payment Forms**
- Configure the form as explained in this document.
- View the response at


```
https://webtest.chargeanywhere.com/chargeanywheremanager/
PaymentForm/PaymentForm.asp
```

In Test Mode, all transactions appear to process as real transactions. The gateway accepts the transactions, but does not pass them on to the financial institutions. All

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transactions will be approved in Test Mode. Transactions submitted in Test Mode are not stored on the system, and will not appear in any reports or lists.



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### 13 REVISION HISTORY

Version	Revision Date	Revision Description	Author
1.0	03/07/07	New	SL
1.4	08/17/07	Payment Form Modes added	SL
1.4.1	09/27/07	CTS/STS methods of communication	SL
1.4.1	10/04/07	Sample code for CTS/STS	SL
1.4.2	12/05/07	Updates ,formatting, edits	SL
1.4.2	12/05/07	Updates ,formatting, edits	SL
1.4.4	06/18/09	Include Payment Types & ACH	TS
1.4.5	08/21/09	Include Supported Transaction Types	TS
1.4.6	11/17/09	Correct Date Format for recurring	TS
1.4.7	01/12/10	Correct type in signature calculation	TS
1.4.8	03/11/11	Rewrite to use SIP/AIP terminology and add Line Item support.	SW