

Merchant Web Services API

Customer Information Manager (CIM) SOAP Guide

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Revision History

PUBLISH DATE	UPDATES
November 2007	Initial release of the Customer Information Manager (CIM) API
September 2008	Removal of SecureSource requirements
January 2009	Addition of GetCustomerProfileIds and various updates
May 2009	Specify validationMode parameter as required for CreateCustomerProfile and UpdateCustomerPaymentProfile. Clarify usage of validationMode parameter for CustomerProfileRequest and CreateCustomerProfile calls when no payment profile information is included.
June 2009	Corrected formatting notes for some numeric fields Added note about optional fields and .NET programming
September 2009	Update validationMode field to document changes for authorizations for Visa transactions
April 2010	Update to table of error codes
	Added explanatory guidelines for createCustomerProfileTransaction for Refund transactions.
June 2010	Changes required for Partial Authorization processing
July 2010	Correct function name (UpdateSplitTenderGroup) and add output
May 2011	Add hosted option Clarification of validationMode

Section 1 Developer Introduction

This guide describes the Web development required to create and manage customer profile information for the purpose of submitting transactions to the Authorize. Net Payment Gateway directly from a Web site or other application using Simple Object Access Protocol (SOAP).

SOAP provides a standards-based mechanism to access Web services from a wide range of platforms. Typically, clients access the Web services using a SOAP client on their respective programming environment. The SOAP client typically generates the native objects and interfaces based on a Web Services description Language (WSDL) that is published by Authorize.Net. The client application initializes the local object and invokes the method as if it is calling a local procedure. The SOAP client handles the generation and parsing of the underlying extensible markup language (XML) documents that form the basis of the SOAP protocol.

Specifically, the Authorize.Net Customer Information Manager (CIM) Application Programming Interface (API) provides a mechanism for developers and value added resellers (VARs) to create, delete, get, and update customer profile information, including payment and address information, by means of direct integration between client software or applications and the Authorize.Net Payment Gateway.

Please refer to specific SOAP client documentation for details on how to consume SOAP-based Web services.

Integration Methods

Various options exist for integrating payments, designed to accommodate a range of business needs and coding abilities.

Standard API

You can use the API to submit transaction information to Authorize. Net when your customers enter data on your website. In this case, the customer enters data on your website, your website calls the API using either XML or SOAP:

- XML: The Authorize.Net Application Programming Interface (API) offers an XML-only option, which allows you to invoke methods using XML for the exchange of information.
- SOAP: The Authorize.Net API offers an alternate communication method, SOAP, to exchange information.

The choice of XML or SOAP depends on the programming language you use. For PHP and Ruby, XML is recommended. For C# and other .NET languages, SOAP is recommended. With Java, either option will work.

For information regarding requirements for using the API, see "Minimum Requirements" below.

Hosted Option API

For more secure exchange of information, the API allows you to establish a hosted connection, where any exchange of information occurs on the Authorize. Net secure servers. If the merchant

needs to transmit sensitive cardholder information (for example, if a customer needs to change credit card information or add a new payment method), the hosted CIM option can be used. Using the hosted CIM option, credit card data never needs to flow through the merchant's website. You can use the hosted option either as an XML or a SOAP implementation.

You must still use the standard API (either SOAP or XML) for some operations, such as creating a ransaction. The hosted page only provides functionality for creating, updating, and deleting payment profiles and shipping addresses.

For more information, please refer to Section 2, "Using the Hosted CIM Option," on page 9.

Minimum Requirements

Before you begin this integration for an Authorize. Net Payment Gateway account, please check with the merchant to make sure that the following minimum requirements have already been met.

- The merchant must have a U.S. based merchant bank account that allows Internet transactions.
- The merchant must have an active Authorize.Net Card Not Present Payment Gateway account.
- The merchant must be signed up for the CIM service.
- The merchant must store account authentication data securely (for example, API login ID, transaction key).
- The merchant's website must use https.
- The merchant's website must support secure user registration for returning users.

Note: Merchants should avoid storing any type of sensitive cardholder information. However, in the event that a merchant or third party must store sensitive customer business or payment information, compliance with industry standard storage requirements is required. Please see the *Developer Security Best Practices White Paper* at http://www.authorize.net/files/developerbestpractices.pdf for guidelines.

Developer Support

There are several resources available to help you successfully integrate a merchant Web site or other application to the Authorize.Net Payment Gateway.

- The Developer Center at http://developer.authorize.net provides test accounts, sample code, FAQs, and troubleshooting tools.
- If you can't find what you need in the Developer Center, our Integration Team is available to answer your questions by e-mail at integration@authorize.net.
- Be sure to read our *Developer Security Best Practices White Paper* at http://www.authorize.net/files/developerbestpractices.pdf for information on how to maximize the security and reliability of your merchant integration solutions.

If you have any suggestions about how we can improve or correct this guide, please e-mail documentation@authorize.net.

Software Development Kits

Authorize.Net offers Software Development Kits (SDKs) that present an alternate object-oriented model, in several popular languages. The SDK performs the core payment activities (such as error handling and parsing, network communication, and data encoding) behind the scenes.

The SDK provides utility methods to help developers build payment flows for each of the integration methods. You can download the SDKs at http://developer.authorize.net/downloads/.

Section 2 Using the Hosted CIM Option

Authorize. Net offers merchants the option of connecting their customers directly to the Authorize. Net website if they need to transmit sensitive data such as changes in payment profiles. The purpose of the hosted CIM API is to collect data, not to process payments. Processing payments is done using the standard CIM API where payment data is represented by a profile ID.

The steps in a typical hosted CIM process are:

- A customer registers an account with a merchant website
- The merchant calls Authorize.Net API method CreateCustomerProfile to create an empty profile
 - Input: customer's email address and/or other identifier that the merchant uses to identify this customer
 - Output: customer profile ID
- The customer logs on to the merchant website
- The merchant calls Authorize.Net API method GetHostedProfilePage to get a token
 - Inputs: customer profile ID and a list of settings that control how the customer interacts with the Authorize.Net page. See <u>Guidelines for Settings Parameters_for a</u> description of the settings.
 - Output: token (expires in 15 minutes)
- The merchant displays a button on their website
- The customer clicks the button and is directed either to the Authorize. Net page, or the Authorize. Net page is opened within the merchant's website as a lightbox popup with an iframe.
- The customer makes changes to their credit card information, eCheck.Net information, or shipping information
- The customer returns to the merchant website by clicking a button or closing the popup
- The merchant calls Authorize.Net API method GetCustomerProfile to see what changes were made by the customer
 - Input: customer profile ID
 - Output: list of payment profiles with sensitive fields masked, list of shipping addresses
- The merchant can call Authorize.Net API method CreateProfileTransaction at any time to charge the credit card (or eCheck.Net)

Designing Your Web Page

There are three ways to integrate:

- The customer is directed to Authorize. Net to manage payments and shipping all on one page. For a sample, see "Example of a redirect to the hosted page:" on page **Error! Bookmark not defined.**
- Open a lightbox popup with an iframe within your page to manage payments and shipping all within one popup
- Open a lightbox popup with an iframe within your page for adding or editing individual payment profiles and shipping addresses. Sample screens begin on page 13.

Implementing a Redirect to Authorize.Net

To implement hosted CIM access by means of a redirect to Authorize. Net, you need to include the following.

Once you receive the token returned by the **getHostedProfilePage** function call, put a hidden form somewhere on your page (the value for the token will be the value returned by the function call).

If you are using the test environment, replace secure.authorize.net/profile/manage with test.authorize.net/profile/manage.

Example: opening a new page for the Authorize. Net host

```
<form method="post"
action="https://secure.authorize.net/profile/manage"
id="formAuthorizeNetPage" style="display:none;">
<input type="hidden" name="Token"
value="pfGaUNntoTxZYeqqYDjGCQ4qyCHcsXGXLJ2i7MPCEiH6CH5n5qKqc18EBiTClxu01BSeH5eZg7LVUVVzw5kJKVMitQ3pyMB5UZCduMWd6Ku9aT2gyFm69EKMGfyWPmI4p+Bb4TJf2F07rInSrn2MWlM6f2xd7aRulXBn0WXoPxKlj9FMGX2CNCoCBp3cOXB7"/>
</form>
```

Add a button on your page that redirects the customer to Authorize. Net's secure site. You can customize the text to say anything you want:

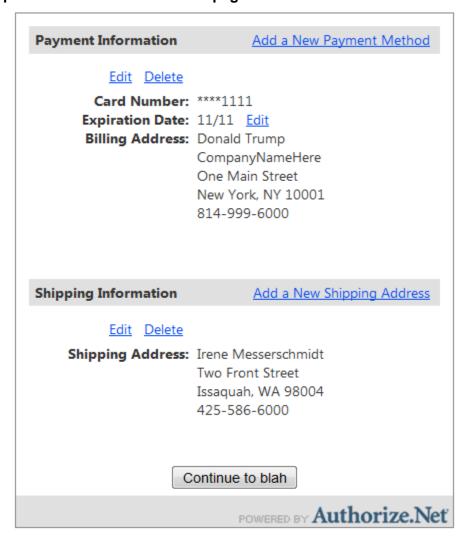
In this example, the button with the text "Manage my payment and shipping information" directs the user to the Authorize.Net Customer Information Manager Hosted page, where they can:

- Create a new payment profile
- Update or delete current credit card or bank information
- Enter a new shipping address
- Update or delete current shipping address

When the customer has finished, a link on the bottom of the page returns them to the merchant's website.

The following image shows what the customers see when they are connected to the Authorize.Net hosted page.

Example of a redirect to the hosted page:



Implementing an iframe popup

To open the Authorize. Net hosted page in a popup inside your web page, do the following:

- place an <iframe> tag on your page. Add other elements around it, such as a <div> tag and some images, to give it borders and shading. Make it appear in the middle of your page, covering anything else that might be on the page.
- Put a hidden <form> on your page with a hidden field inside it that includes the token from the call to the GetHostedProfilePage API method. The <form> tag should have a target attribute pointing to the id or name of the <iframe>. The Authorize.Net hosted page provides a way to dynamically change the size of your popup so that there are no scroll bars.

For the full documentation of this integration method, download the sample application at http://developer.authorize.net/downloads/samplecode/, listed under the *Customer Information Manager (CIM)* heading. You can find two zip files, containing all the necessary html code as well

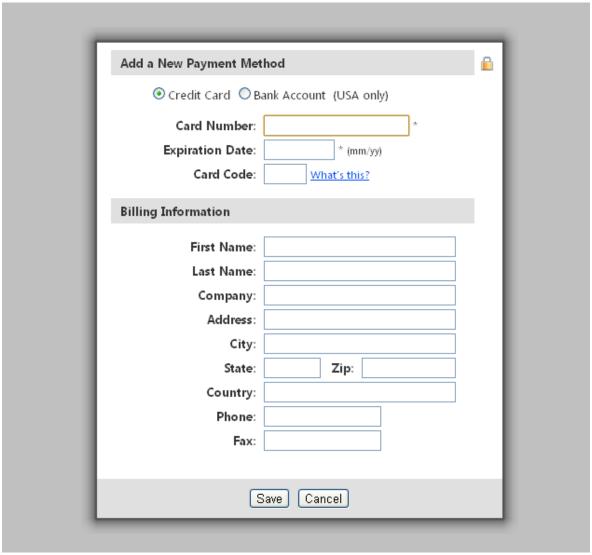
as instructions, to implement iframe popups for managing payment and shipping information on the same page, or separately.

To implement	Select
iframe popup for managing payment and shipping information on the same page	hostedProfileManage.zip
iframe popup for managing only payment information	hostedProfilePaymentsShipping.zip
iframe popup for managing shipping information	hostedProfilePaymentsShipping.zip

You can design your popup so that it manages either the payment and shipping information on the same page, or you can add buttons that manage payment and shipping information separately.

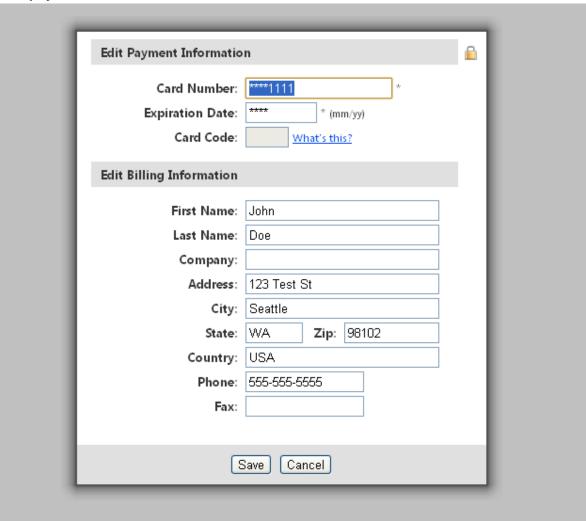
The following images show some sample popups, with their associated buttons.

Add payment



<button onclick="AuthorizeNetPopup.openAddPaymentPopup()">Add a New
Payment Method/button>

Edit payment



Add a button with the PaymentProfileId for each payment profile

<button
onclick="AuthorizeNetPopup.openEditPaymentPopup('123456')">Edit
Payment Method</button>

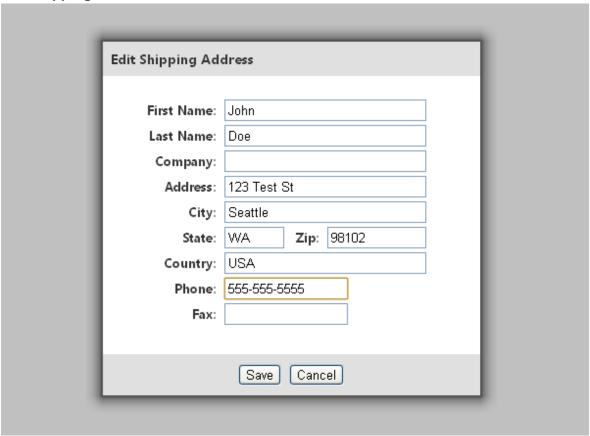
Note: Replace '123456' with the payment profile ID.

Add shipping

First Name:		
Last Name:		
Company:		
Address:		
City:		
State:	Zip:	
Country:		
Phone:		
Fax:		

<button onclick="AuthorizeNetPopup.openAddShippingPopup()">Add a
New Shipping Address/button>

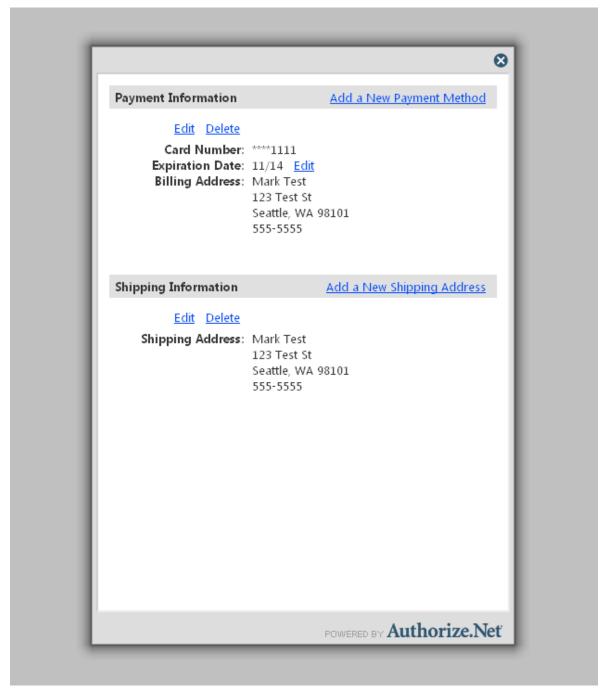
Edit shipping



Add a button with the ShippingAddressId for each shipping address

<button
onclick="AuthorizeNetPopup.openEditShippingPopup('123456')">Edit
Shipping Address</button>

Manage payment and shipping



<button onclick="AuthorizeNetPopup.openManagePopup()">Manage my
payment and shipping information/button>

Guidelines for Settings Parameters

To integrate to the hosted page as a redirect, pass hostedProfileReturnUrl and hostedProfileReturnUrlText. Do not pass hostedProfileIFrameCommunicatorUrl. The parameter hostedProfilePageBorderVisible=true is optional. Do not pass hostedProfilePageBorderVisible=false.

To integrate to the hosted page as a popup, do not pass hostedProfileReturnUrl or hostedProfileReturnUrlText. Pass hostedProfilePageBorderVisible=false and pass hostedProfileIFrameCommunicatorUrl.

The following table shows possible settings:

Parameter	Description
hostedProfileReturnUrl	Enter the URL to return to after the hosted session ends. Do not pass this setting for iframes or popups.
	The return URL is validated to verify that it begins with http:// or https://.
hostedProfileReturnUrlText	Enter the text to display on the button that returns the customer to your website. The value can be any text up to 200 characters. If you do not pass this parameter, the default button text is Continue . Do not pass this setting for iframes or popups.
hostedProfilePageBorderVisible	Enter true or false. Must be false for iframes or popups, and must be true for redirects.
hostedProfileHeadingBgColor	Enter a hex color string such as #e0e0e0. It changes the background color of the section headers from gray to a custom color.
hostedProfileIFrameCommunicatorUrl	Enter the url to a page that can communicate with the merchant's main page using javascript. This enables you to dynamically change the size of the popup so there are no scroll bars. This is required only for iframe or lightbox applications

Section 3 Executing an API Call

The following sections describe the minimum requirements for executing an API call for managing customer profiles using SOAP.

There are two options for developing the request script:

- You can develop a custom script yourself using the API fields information provided in this document, OR
- You can use Authorize. Net sample code in C# and Java available for free from our Developer Center at http://developer.authorize.net/samplecode.

Note: If you choose to use Authorize.Net sample code, please be aware that in order to achieve a successful implementation it **must** be modified with developer test account or the merchant's specific payment gateway account information.

Web Service Locations

ITEM	LOCATION
Web Service URL in Production	https://api.authorize.net/soap/v1/Service.asmx
Web Service URL in Developer Test	https://apitest.authorize.net/soap/v1/Service.asmx
WSDL	https://api.authorize.net/soap/v1/Service.asmx?WSDL

Note: The Developer Test URL requires the use of a developer test payment gateway account. You can request a test account from our Developer Center at http://developer.authorize.net/testaccount. Developer test accounts cannot be used to test against the Production URL.

CIM Functions

The CIM API includes the following functions:

- **CreateCustomerProfile** Create a new customer profile along with any customer payment profiles and customer shipping addresses for the customer profile.
- **CreateCustomerPaymentProfile** Create a new customer payment profile for an existing customer profile.
- **CreateCustomerShippingAddress** Create a new customer shipping address for an existing customer profile.

- **CreateCustomerProfileTransaction** Create a new payment transaction from an existing customer profile
- **DeleteCustomerProfile** Delete an existing customer profile along with all associated customer payment profiles and customer shipping addresses.
- **DeleteCustomerPaymentProfile** Delete a customer payment profile from an existing customer profile.
- **DeleteCustomerShippingAddress** Delete a customer shipping address from an existing customer profile.
- **GetCustomerProfileIds** Retrieve all customer profile IDs you have previously created.
- **GetCustomerProfile** Retrieve an existing customer profile along with all the associated customer payment profiles and customer shipping addresses.
- **GetCustomerPaymentProfile** Retrieve a customer payment profile for an existing customer profile.
- **GetCustomerShippingAddress** Retrieve a customer shipping address for an existing customer profile.
- GetHostedProfilePage—sends a request for access to the hosted CIM page. The response
 includes a token that allows the customer to update their information directly on the
 Authorize.Net website.
- **UpdateCustomerProfile** Update an existing customer profile.
- **UpdateCustomerPaymentProfile** Update a customer payment profile for an existing customer profile.
- **UpdateCustomerShippingAddress** Update a shipping address for an existing customer profile.
- **UpdateSplitTenderGroup** Update the status of a split tender group (a group of transactions, each of which pays for part of one order).
- **ValidateCustomerPaymentProfile** Verify an existing customer payment profile by generating a test transaction.

The following sections provide information about the input parameters required for executing the functions listed above. Indentations in the Parameter column indicate grouping hierarchy. All parameters are case sensitive and must be submitted in the order listed here. Parameters are required unless otherwise indicated. Optional parameters should not be submitted unless they contain valid values.

Note: Parameters required for individual API calls are in addition to the authentication parameters required for all API calls.

Note for .NET programmers: When a parameter is optional, and if you use serialization, then the .NET language you are using automatically creates Boolean properties that indicate whether or not non-nullable parameters are specified. For example, if there is a parameter named *validationMode* that is an Enumeration type, a parameter called *validationModeSpecified* is automatically created. By default, these properties are set to "false." If a request passes a value for an optional parameter, be sure to set these properties to "true" so that the value is not ignored.

Field Validation and Test Mode

The validationMode parameter allows you to generate a test transaction at the time you create or update a customer profile. The functions createCustomerProfile, createCustomerPaymentProfile, updateCustomerPaymentProfile and validateCustomerPaymentProfile all include a validationMode parameter, which can have one of the following values:

- testMode—performs field validation only. During field validation, all fields are checked.
 However, fields with unrestricted field definitions (such as telephone number) do not
 generate errors.
 - If you select **testMode**, a \$1.00 test transaction is submitted to verify that the credit card number is in a valid format using the Luhn MOD 10 algorithm. This test transaction does not appear on the customer's credit card statement, but it will generate a transaction receipt e-mail to the merchant.
- **liveMode**—generates a transaction to the processor in the amount of \$0.01 or \$0.00. If successful, the transaction is immediately voided. Visa authorization transactions are being switched from \$0.01 to \$0.00 for all processors. All other credit card types use \$0.01. We recommend you consult your Merchant Account Provider before switching to Zero Dollar Authorizations for Visa, because you may be subject to fees.
 - For Visa transactions using \$0.00, the billTo address and billTo zip fields are required.
- none—When this value is submitted, no additional validation is performed.
- (blank)—this is the same as using the value **none**.

When you call **createCustomerProfile**, then you must use a value of **none** (or leave the value blank) if the request does not include any payment profile information.

When you call validateCustomerPaymentProfile, then you must use either testMode or liveMode.

If a validation transaction is unsuccessful, the profile is not created and the merchant will receive an error.

Authentication

All Web services calls must be authenticated to ensure they originate from authorized sources. This implementation of the merchant Web services API supports authentication using the API Login ID and Transaction Key.

PARAMETER	VALUE	TYPE/FORMAT	NOTES
merchantAuthentication	Contains merchant unique information for purposes of authentication	MerchantAuthentication Type	
name	The valid API Login ID for the developer test or merchant account	20	Submit the API Login ID used to submit transactions
transactionKey	The valid Transaction Key for the developer test or merchant account	16	Submit the Transaction Key obtained from the Merchant Interface

Example of Authentication with the Login ID and Transaction Key

The authentication information with the merchant's Login ID and Transaction Key is sent in SOAP body, as shown below:

Note: The sample code included in this document uses dummy field values. When using or testing sample code, be sure to enter valid field values. Additional sample code is available for download from the Authorize.Net Developer Center at http://developer.authorize.net/samplecode.

Input Parameters for CreateCustomerProfile

This function is used to create a new customer profile along with any customer payment profiles and customer shipping addresses for the customer profile.

The following table lists the input parameters for executing an API call to the **CreateCustomerProfile** function.

FIELD	VALUE	TYPE/FORMAT	NOTES
profile	Contains information for the customer profile	CustomerProfileType	At least one of the following fields must be submitted under profile: merchantCustomerId, description or email.
merchantCustomerld	Merchant assigned ID for the customer Conditional	Up to 20 characters	Required only if no values for both description and email are submitted.
description	Description of the customer or customer profile Conditional	Up to 255 characters	Required only if no values for both merchantCustomerId and email are submitted.
email	Email address associated with the customer	Up to 255 characters	Required only if no values for both description and

FIELD	VALUE	TYPE/FORMAT	NOTES
	profile Conditional		merchantCustomerId are submitted.
paymentProfiles	Contains payment profiles for the customer profile Optional	CustomerPaymentProfile Type	Multiple instances of this parameter and its children can be submitted to create multiple payment profiles for the customer profile.
customerType	Optional	CustomerTypeEnum individual business	
billTo		CustomerAddressType	
firstName	The customer's first name Optional	Up to 50 characters (no symbols)	
lastName	The customer's last name Optional	Up to 50 characters (no symbols)	
company	The name of the company associated with the customer, if applicable Optional	Up to 50 characters (no symbols)	
address	The customer's address Optional	Up to 60 characters (no symbols)	
city	The city of the customer's address Optional	Up to 40 characters (no symbols)	
state	The state of the customer's address Optional	Up to 40 characters (no symbols)	
zip	The ZIP code of the customer's address	Up to 20 characters (no symbols)	

FIELD	VALUE	TYPE/FORMAT	NOTES
	Optional		
country	The country of the customer's address Optional	Up to 60 characters (no symbols)	
phoneNumber	The phone number associated with the customer profile Optional	Up to 25 digits (no letters) Ex. (123)123-1234	
faxNumber	The fax number associated with the customer profile Optional	Up to 25 digits (no letters) Ex. (123)123-1234	
payment	Contains payment profile information for the customer profile	PaymentSimpleType	Can contain CreditCardSimpleType or BankAccountType.
creditCard	Contains credit card payment information for the payment profile	CreditCardSimpleType	This parameter and its children are only required when the payment profile is credit card.
cardNumber	The customer's credit card number	13 to 16 digits	
expirationDate	The expiration date for the customer's credit card	YYYY-MM	For .Net users, the class System.Runtime.Remo ting.Metadata.W3cXsd 2001.SoapYearMonth can be used to manage gYearMonth types.
cardCode	The three- or four-digit number on the back of a credit card (on the front for American Express) Optional	Numeric	This field is required if the merchant would like to use the Card Code Verification (CCV) security feature. For more information, please see the Merchant Integration Guide at http://www.authorize.

FIELD	VALUE	TYPE/FORMAT	NOTES
			net/support/merchant /http://www.authoriz e.net/support/mercha nt/. cardCode is only used for validation and will not be stored in the customer profile. It should only be used when submitting validationMode with a value of testMode or liveMode.
bankAccount	Contains bank account payment information for the payment profile	BankAccountType	This parameter and its children are only required when the payment profile is bank account.
accountType	The type of bank account for the payment profile Optional	BankAccountTypeEnum checking savings businessChecking	
routingNumber	The routing number of the customer's bank	9 digits	
accountNumber	The customer's bank account number	5 to 17 digits	
nameOnAccount	The customer's full name as listed on the bank account	Up to 22 characters	
echeckType	The type of electronic check transaction Optional	EcheckTypeEnum CCD PPD TEL WEB	Currently, the CIM API does not support ARC or BOC transaction types.
bankName	The name of the bank associated with the bank account number	Up to 50 characters	

FIELD	VALUE	TYPE/FORMAT	NOTES
	Optional		
shipToList	Contains shipping address information for the customer profile	CustomerAddressType	
firstName	The customer's first name Optional	Up to 50 characters (no symbols)	
lastName	The customer's last name Optional	Up to 50 characters (no symbols)	
company	The name of the company associated with the customer, if applicable Optional	Up to 50 characters (no symbols)	
address	The customer's shipping address Optional	Up to 60 characters (no symbols)	
city	The city of the customer's shipping address Optional	Up to 40 characters (no symbols)	
state	The state of the customer's shipping address Optional	Up to 40 characters (no symbols)	
zip	The ZIP code of the customer's shipping address Optional	Up to 20 characters (no symbols)	
country	The country of the customer's shipping address	Up to 60 characters (no symbols)	

FIELD	VALUE	TYPE/FORMAT	NOTES
	Optional		
phoneNumber	The phone number associated with the customer profile Optional	Up to 25 digits (no letters) Ex. (123)123-1234	
faxNumber	The fax number associated with the customer profile Optional	Up to 25 digits (no letters) Ex. (123)123-1234	
validationMode	Indicates the processing mode for the request	none testMode liveMode	For more information on use and restrictions of validationMode, see "Field Validation and Test Mode."

For information about output for this function, see the section of this document titled "Output Parameters for CreateCustomerProfileResponse."

Example CreateCustomerProfile

```
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope</pre>
xmlns:soap="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
<soap:Body>
<CreateCustomerProfile
xmlns="https://api.authorize.net/soap/v1/">
<merchantAuthentication>
  <name>API Login ID here
  <transactionKey>Transaction Key here</transactionKey>
</merchantAuthentication>
cprofile>
   <merchantCustomerId>Merchant Customer ID
here</merchantCustomerId>
   <description>Profile description here</description>
   <email>customer profile email address here</email>
<paymentProfiles>
<CustomerPaymentProfileType>
  <customerType>individual</customerType>
    <payment>
      <creditCard>
        <cardNumber>Credit card number here</cardNumber>
        <expirationDate>Credit card expiration date
```

Note: The sample code included in this document uses dummy field values. When using or testing sample code, be sure to enter valid field values. Additional sample code is available for download from the Authorize.Net Developer Center at http://developer.authorize.net/samplecode.

Input Parameters for CreateCustomerPaymentProfile

This function is used to create a new customer payment profile for an existing customer profile.

The following table lists the input parameters for executing an API call to the CreateCustomerPaymentProfile function.

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
paymentProfile	Contains payment information for the customer profile	CustomerPaymentProfile Type	
customerType	Optional	CustomerTypeEnum individual business	
billTo		CustomerAddressType	
firstName	The customer's first name Optional	Up to 50 characters (no symbols)	
lastName	The customer's last name Optional	Up to 50 characters (no symbols)	
company	The name of the company associated with the customer, if	Up to 50 characters (no symbols)	

FIELD	VALUE	TYPE/FORMAT	NOTES
I ILLU	VALUE	TH LH ONWAL	IVOTES
	applicable		
	Optional		
address	The customer's	Up to 60 characters (no	
	address	symbols)	
	Optional		
city	The city of the customer's address	Up to 40 characters (no	
	Optional	symbols)	
	Ориона		
state	The state of the customer's address	Up to 40 characters (no symbols)	
	Optional	Symbolo)	
	·		
zip	The ZIP code of the customer's address	Up to 20 characters (no symbols)	
	Optional		
country	The country of the	Up to 60 characters (no	
Country	customer's address	symbols)	
	Optional		
phoneNumber	The phone number	Up to 25 digits (no	
	associated with the customer's address	letters)	
	Optional	Ex. (123)123-1234	
faxNumber	The fax number	Up to 25 digita (no	
raxinumber	associated with the	Up to 25 digits (no letters)	
	customer's address	Ex. (123)123-1234	
	Optional		
payment	Contains payment information for the	PaymentSimpleType	Can contain
	customer profile		CreditCardSimpleType or BankAccountType.
creditCard	Contains credit card	CreditCardSimpleType	This parameter and its
Creditoard	payment information	Credit Card Simple Type	children are only
	for the customer profile		required when the payment profile is credit
			card.
cardNumber	The customer's	13 to 16 digits	
	credit card number		
expirationDate	The expiration date	YYYY-MM	For .Net users, the class
	for the customer's credit card		System.Runtime.Remoti ng.Metadata.W3cXsd20
			01.SoapYearMonth can be used to manage
		<u> </u>	1

FIELD	VALUE	TYPE/FORMAT	NOTES
			gYearMonth types.
cardCode	The three- or four-digit number on the back of a credit card (on the front for American Express) Optional	Numeric	This field is required if the merchant would like to use the Card Code Verification (CCV) security feature. For more information, please see the Merchant Integration Guide at http://www.authorize.net/support/merchant/http://www.authorize.net/support/Merchant/default.htm . cardCode is only used for validation and will not be stored in the customer profile. It should only be used when submitting validationMode with a value of testMode or liveMode.
bankAccount	Contains bank account payment information for the customer profile	BankAccountType	This parameter and its children are only required when the payment profile is bank account.
accountType	The type of bank account for the payment profile Optional	BankAccountTypeEnum checking savings businessChecking	
routingNumber	The routing number of the customer's bank	9 digits	
accountNumber	The customer's bank account number	5 to 17 digits	
nameOnAccount	The customer's full name as listed on the bank account	Up to 22 characters	
echeckType	The type of electronic check transaction	EcheckTypeEnum CCD PPD	Currently, the CIM API does not support ARC or BOC transaction types.

FIELD	VALUE	TYPE/FORMAT	NOTES
	Optional	TEL WEB	
bankName	The name of the bank associated with the bank account number Optional	Up to 50 characters	
validationMode	Indicates the processing mode for the request	ValidationModeEnum none testMode liveMode	For more information on use and restrictions of validationMode, see "Field Validation and Test Mode."

For information about output parameters for this function, see the section of this document titled "Output Parameters for CreateCustomerPaymentProfileResponse."

Input Parameters for CreateCustomerShippingAddress

This function is used to create a new customer shipping address for an existing customer profile.

The following table lists the input parameters for executing an API call to the CreateCustomerShippingAddress function.

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
address	Contains shipping address information for the customer profile	CustomerAddressType	
firstName	The customer's first name Optional	Up to 50 characters (no symbols)	
lastName	The customer's last name Optional	Up to 50 characters (no symbols)	
company	The name of the company associated with the customer, if applicable Optional	Up to 50 characters (no symbols)	

FIELD	VALUE	TYPE/FORMAT	NOTES
address	The customer's shipping address Optional	Up to 60 characters (no symbols)	
city	The city of the customer's shipping address Optional	Up to 40 characters (no symbols)	
state	The state of the customer's shipping address Optional	Up to 40 characters (no symbols)	
zip	The ZIP code of the customer's shipping address Optional	Up to 20 characters (no symbols)	
country	The country of the customer's shipping address Optional	Up to 60 characters (no symbols)	
phoneNumber	The phone number associated with the customer's shipping address Optional	Up to 25 digits (no letters) Ex. (123)123-1234	
faxNumber	The fax number associated with the customer's shipping address Optional	Up to 25 digits (no letters) Ex. (123)123-1234	

For information about output parameters for this function, see the section of this document titled "Output Parameters for CreateCustomerShippingAddressResponse."

Input Parameters for CreateCustomerProfileTransaction

This function is used to create a payment transaction from an existing customer profile. You can submit one of six transaction types: Authorization Only, Authorization and Capture, Capture Only, Prior Authorization and Capture, Refund and Void. For more information on these transaction types, please see the *Merchant Integration Guide* at

 $\frac{http://www.authorize.net/support/merchant/http://www.authorize.net/support/Merchant/default.}{httm}.$

Note: The only transaction types that generate a customer receipt email are Authorization Only, Authorization and Capture, and Refund.

For Authorization Only transactions

The following table lists the input parameters for executing an API call to the **CreateCustomerProfileTransaction** function for an Authorization Only transaction.

FIELD	VALUE	TYPE/FORMAT	NOTES
transaction	Contains transaction information	ProfileTransactionType	
profileTransAuthOnly	The transaction type that is being requested	ProfileTransAuthOnlyType	Only one transaction type is allowed per request.
amount	The total amount of the transaction	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount should include all other amounts such as tax amount, shipping amount, etc.
tax	Contains tax information for the transaction Optional	ExtendedAmountType	
amount	The tax amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the tax for the transaction Optional	Up to 31 characters	
description	The tax description for the transaction Optional	Up to 255 characters	
shipping	Contains shipping information for the transaction Optional	ExtendedAmountType	

FIELD	VALUE	TYPE/FORMAT	NOTES
amount	The shipping amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the shipping for the transaction Optional	Up to 31 characters	
description	The shipping description for the transaction Optional	Up to 255 characters	
duty	Contains duty information for the transaction Optional	ExtendedAmountType	
amount	The duty amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the duty for the transaction Optional	Up to 31 characters	
description	The duty description for the transaction Optional	Up to 255 characters	
lineItems	Contains line item details about the order Optional	LineItemType	Up to 30 distinct instances of this parameter and its children can be included per transaction to describe items included in the order.
itemId	The ID assigned to the item Optional	Up to 31 characters	

FIELD	VALUE	TYPE/FORMAT	NOTES
name	A short description of an item Optional	Up to 31 characters	
description	A detailed description of an item Optional	Up to 255 characters	
quantity	The quantity of an item Optional	Up to 4 digits (up to two decimal places)	
unitPrice	Cost of an item per unit excluding tax, freight, and duty Optional	Up to 4 digits with a decimal point (no dollar symbol) Ex. 4.95	
taxable	Indicates whether the item is subject to tax Optional	TRUE FALSE	
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address Optional	Numeric	If customerShippi ngAddressId is not passed, shipping information will not be included with the transaction.

FIELD	VALUE	TYPE/FORMAT	NOTES
order	Contains information about the order Optional	OrderExType	
invoiceNumber	The merchant assigned invoice number for the transaction Optional	Up to 20 characters (no symbols)	
description	The transaction description Optional	Up to 255 characters (no symbols)	
purchaseOrderNumber	The merchant assigned purchase order number Optional	Up to 25 characters (no symbols)	
taxExempt	The tax exempt status Optional	TRUE FALSE	
recurringBilling	The recurring billing status Optional	TRUE FALSE	
cardCode	The customer's card code (the three- or four-digit number on the back or front of a credit card) Required only when the merchant would like to use the Card Code Verification (CCV) filter Conditional	3 to 4 digits	This field is required if the merchant would like to use the CCV security feature. For more information, please see the Merchant Integration Guide at http://www.aut horize.net/supp ort/merchant/ht tp://www.auth orize.net/supp ort/Merchant/d efault.htm.

FIELD	VALUE	TYPE/FORMAT	NOTES
splitTenderId	Conditional	Up to 6 digits	This field is required for second and subsequent transactions related to a partial authorizaction transaction.
extraOptions	Information in name/value pair format that does not exist within CIM, such as customer IP address, etc. Optional	String	For a complete list of the transaction variable names available, please review the AIM Implementation Guide located at http://www.aut horize.net/supp ort/AIM guide. pdf.

For information about output parameters for this function, see the section of this document titled "Output Parameters for CreateCustomerProfileTransactionResponse."

For Authorization and Capture Transactions

The following table lists the input parameters for executing an API call to the **CreateCustomerProfileTransaction** function for an Authorization and Capture transaction.

FIELD	VALUE	TYPE/FORMAT	NOTES
transaction	Contains transaction information	ProfileTransactionType	
profileTransAuthCapture	The transaction type that is being requested	ProfileTransAuthCaptureTyp e	Only one transaction type is allowed per request.
amount	The total amount of the transaction	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount should include all other amounts such as tax amount, shipping amount, etc.
tax	Contains tax information for	ExtendedAmountType	

FIELD	VALUE	TYPE/FORMAT	NOTES
	the transaction Optional		
amount	The tax amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the tax for the transaction Optional	Up to 31 characters	
description	The tax description for the transaction Optional	Up to 255 characters	
shipping	Contains shipping information for the transaction Optional	ExtendedAmountType	
amount	The shipping amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the shipping for the transaction Optional	Up to 31 characters	
description	The shipping description for the transaction Optional	Up to 255 characters	
duty	Contains duty information for the transaction Optional	ExtendedAmountType	
amount	The duty amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.

FIELD	VALUE	TYPE/FORMAT	NOTES
name	The name of the duty for the transaction Optional	Up to 31 characters	
description	The duty description for the transaction Optional	Up to 255 characters	
lineItems	Contains line item details about the order Optional	LineItemType	Up to 30 distinct instances of this parameter and its children can be included per transaction to describe items included in the order.
itemId	The ID assigned to the item Optional	Up to 31 characters	
name	A short description of an item Optional	Up to 31 characters	
description	A detailed description of an item Optional	Up to 255 characters	
quantity	The quantity of an item Optional	Up to 4 digits (up to two decimal places)	
unitPrice	Cost of an item per unit excluding tax, freight, and duty Optional	Up to 4 digits with a decimal point (no dollar symbol) Ex. 4.95	
taxable	Indicates whether the item is subject to tax Optional	TRUE	

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address Optional	Numeric	If customerShippi ngAddressId is not passed, shipping information will not be included with the transaction.
order	Contains information about the order Optional	OrderExType	
invoiceNumber	The merchant assigned invoice number for the transaction Optional	Up to 20 characters (no symbols)	
description	The transaction description Optional	Up to 255 characters (no symbols)	
purchaseOrderNumber	The merchant assigned purchase order number Optional	Up to 25 characters (no symbols)	
taxExempt	The tax exempt status Optional	TRUE	
recurringBilling	The recurring billing status	TRUE FALSE	

FIELD	VALUE	TYPE/FORMAT	NOTES
	Optional		
cardCode	The customer's card code (the three- or four-digit number on the back or front of a credit card) Required only when the merchant would like to use the Card Code Verification (CCV) filter Conditional	3 to 4 digits	This field is required if the merchant would like to use the CCV security feature. For more information, please see the Merchant Integration Guide at http://www.authorize.net/support/merchant/http://www.authorize.net/support/Merchant/default.htm.
splitTenderId	Conditional	Up to 6 digits	This field is required for second and subsequent transactions related to a partial authorization transaction.
extraOptions	Information in name/value pair format that does not exist within CIM, such as customer IP address, etc. Optional	String	For a complete list of the transaction variable names available, please review the AIM Implementation Guide located at http://www.aut horize.net/support/AIM guide.pdf.

For information about output parameters for this function, see the section of this document titled "Output Parameters for CreateCustomerProfileTransactionResponse."

For Capture Only Transactions

The following table lists the input parameters for executing an API call to the **CreateCustomerProfileTransaction** function for a Capture Only transaction.

FIELD	VALUE	TYPE/FORMAT	NOTES
transaction	Contains transaction information	ProfileTransactionType	
profileTransCaptureOnly	The transaction type that is being requested	ProfileTransCaptureOnlyType	Only one transaction type is allowed per request.
amount	The total amount of the transaction	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount should include all other amounts such as tax amount, shipping amount, etc.
tax	Contains tax information for the transaction Optional	ExtendedAmountType	
amount	The tax amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the tax for the transaction Optional	Up to 31 characters	
description	The tax description for the transaction Optional	Up to 255 characters	
shipping	Contains shipping information for the transaction Optional	ExtendedAmountType	
amount	The shipping amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.

FIELD	VALUE	TYPE/FORMAT	NOTES
name	The name of the shipping for the transaction Optional	Up to 31 characters	
description	The shipping description for the transaction Optional	Up to 255 characters	
duty	Contains duty information for the transaction Optional	ExtendedAmountType	
amount	The duty amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the duty for the transaction Optional	Up to 31 characters	
description	The duty description for the transaction Optional	Up to 255 characters	
lineltems	Contains line item details about the order Optional	LineItemType	Up to 30 distinct instances of this parameter and its children can be included per transaction to describe items included in the order.
itemId	The ID assigned to the item Optional	Up to 31 characters	
name	A short description of an item Optional	Up to 31 characters	

FIELD	VALUE	TYPE/FORMAT	NOTES
description	A detailed description of an item	Up to 255 characters	
quantity	The quantity of an item Optional	Up to 4 digits (up to two decimal places)	
unitPrice	Cost of an item per unit excluding tax, freight, and duty Optional	Up to 4 digits with a decimal point (no dollar symbol) Ex. 4.95	
taxable	Indicates whether the item is subject to tax Optional	TRUE FALSE	
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address Optional	Numeric	If customerShip pingAddressId is not passed, shipping information will not be included with the transaction.
order	Contains information about the order Optional	OrderExType	
invoiceNumber	The merchant assigned invoice number for the transaction Optional	Up to 20 characters (no symbols)	
description	The transaction	Up to 255 characters (no	

FIELD	VALUE	TYPE/FORMAT	NOTES
	description Optional	symbols)	
purchaseOrderNumber	The merchant assigned purchase order number Optional	Up to 25 characters (no symbols)	
taxExempt	The tax exempt status Optional	TRUE FALSE	
recurringBilling	The recurring billing status Optional	TRUE FALSE	
cardCode	The customer's card code (the three- or four-digit number on the back or front of a credit card) Required only when the merchant would like to use the Card Code Verification (CCV) filter Conditional	3 to 4 digits	This field is required if the merchant would like to use the CCV security feature. For more information, please see the Merchant Integration Guide at http://www.authorize.net/support/merchant/http://www.authorize.net/support/merchant/http://www.authorize.net/support/Merchant/default.htm.
approvalCode	The authorization code of an original transaction required for a Capture Only Conditional	6 characters	This field is only required for the Capture Only transaction type.

FIELD	VALUE	TYPE/FORMAT	NOTES
splitTenderId	Conditional	Up to 6 digits	This field is required for second and subsequent transactions related to a partial authorizaction transaction.
extraOptions	Information in name/value pair format that does not exist within CIM, such as customer IP address, etc. Optional	String	For a complete list of the transaction variable names available, please review the AIM Implementatio n Guide located at http://www.authorize.net/support/AIM guide.pdf.

For information about output parameters for this function, see the section of this document titled "Output Parameters for CreateCustomerProfileTransactionResponse."

For Prior Authorization and Capture Transactions

The following table lists the input parameters for executing an API call to the **CreateCustomerProfileTransaction** function for a Prior Authorization and Capture transaction.

FIELD	VALUE	TYPE/FORMAT	NOTES
transaction	Contains transaction information	ProfileTransactionType	
profileTransPriorAuthCapture	The transaction type that is being requested	ProfileTransPriorAuthCapture Type	Only one transaction type is allowed per request.
amount	The total amount of the transaction	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount should include all other amounts such as tax amount, shipping

FIELD	VALUE	TYPE/FORMAT	NOTES
			amount, etc.
tax	Contains tax information for the transaction Optional	ExtendedAmountType	Tax information from the original authorization transaction will be used if this field is not submitted.
amount	The tax amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the tax for the transaction Optional	Up to 31 characters	
description	The tax description for the transaction Optional	Up to 255 characters	
shipping	Contains shipping information for the transaction Optional	ExtendedAmountType	Shipping information from the original authorization transaction will be used if this field is not submitted.
amount	The shipping amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the shipping for the transaction Optional	Up to 31 characters	
description	The shipping description for the transaction Optional	Up to 255 characters	
duty	Contains duty information for	ExtendedAmountType	Duty information from the original authorization

FIELD	VALUE	TYPE/FORMAT	NOTES
	the transaction Optional		transaction will be used if this field is not submitted.
amount	The duty amount for the transaction Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the duty for the transaction Optional	Up to 31 characters	
description	The duty description for the transaction Optional	Up to 255 characters	
lineItems	Contains line item details about the order Optional	LineItemType	Line item information from the original authorization transaction will be used if this field is not submitted. Up to 30 distinct instances of this parameter and its children can be included per transaction to describe items included in the order.
itemId	The ID assigned to the item Optional	Up to 31 characters	
name	A short description of an item Optional	Up to 31 characters	
description	A detailed description of an item Optional	Up to 255 characters	

FIELD	VALUE	TYPE/FORMAT	NOTES
quantity	The quantity of an item Optional	Up to 4 digits (up to two decimal places)	
unitPrice	Cost of an item per unit excluding tax, freight, and duty Optional	Up to 4 digits with a decimal point (no dollar symbol) Ex. 4.95	
taxable	Indicates whether the item is subject to tax Optional	TRUE FALSE	
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	If a value is submitted for this field, it must be the same ID used for the original authorization transaction.
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	If a value is submitted for this field, it must be the same ID used for the original authorization transaction.
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address Optional	Numeric	If a value is submitted for this field, it must be the same ID used for the original authorization transaction.
transId	The payment gateway-assigned transaction ID of the original transaction	Numeric	
extraOptions	Information in name/value pair format that does not exist	String	For a complete list of the transaction variable names

FIELD	VALUE	TYPE/FORMAT	NOTES
	within CIM, such as customer IP address, etc. Optional		available, please review the AIM Implementation Guide located at http://www.aut horize.net/supp ort/AIM_guide. pdf.

For information about output parameters for this function, see the section of this document titled "Output Parameters for CreateCustomerProfileTransactionResponse."

For Refund Transactions

- If you are submitting a refund against a previous CIM transaction, the following guidelines apply: include customerProfileId, customerPaymentProfileId, and transId.
- customerShippingAddressId is optional.
- creditCardNumberMasked, bankRoutingNumberMasked, and bankAccountNumberMasked do not need to be included, but will be validated if they are included.

If you are submitting a refund against a previous transaction that is not a CIM transaction, the following guidelines apply:

- you must include transId, creditCardNumberMasked (or bankRoutingNumberMasked and bankAccountNumberMasked).
- do not include customerProfileId, customerPaymentProfileId, and customerShippingAddressId.

You can also issue an unlinked refund against a previous CIM transaction. In this case, the following rules apply:

- you must be enrolled in Expanded Credit Capabilities (ECC). For more information about ECC, see http://www.authorize.net/files/ecc.pdf.
- you must include customerProfileId and customerPaymentProfileId.
- customerShippingAddressId is optional.
- you should not include transId, creditCardNumberMasked, bankRoutingNumberMasked, and bankAccountNumberMasked.

The following table lists the input parameters for executing an API call to the CreateCustomerProfileTransaction function for a Refund transaction.

FIELD	VALUE	TYPE/FORMAT	NOTES
transaction	Contains transaction information	ProfileTransactionType	

FIELD	VALUE	TYPE/FORMAT	NOTES
profileTransRefund	The transaction type that is being requested	ProfileTransRefundType	Only one transaction type is allowed per request.
amount	The total amount to be refunded	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount should include all other amounts such as tax amount, shipping amount, etc.
tax	Contains tax information for the refund Optional	ExtendedAmountType	
amount	The tax amount to be refunded Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the tax for the transaction Optional	Up to 31 characters	
description	The tax description for the transaction Optional	Up to 255 characters	
shipping	Contains shipping information for the refund Optional	ExtendedAmountType	
amount	The shipping amount to be refunded Optional	Up to 4 digits after the decimal point (no dollar symbol) Ex. 12.99 or 12.9999	This amount must be included in the total amount for the transaction.
name	The name of the shipping for the transaction Optional	Up to 31 characters	
description	The shipping description for	Up to 255 characters	

FIELD	VALUE	TYPE/FORMAT	NOTES
	the transaction Optional		
duty	Contains duty information for the refund	ExtendedAmountType	
	Optional		
amount	The duty amount to be refunded	Up to 4 digits after the decimal point (no dollar symbol)	This amount must be included in the total amount for
	Optional	Ex. 12.99 or 12.9999	the transaction.
name	The name of the duty for the transaction	Up to 31 characters	
	Optional		
description	The duty description for the transaction	Up to 255 characters	
	Optional		
lineItems	Contains line item details about the refund Optional	LineItemType	Up to 30 distinct instances of this parameter and its children can be included per transaction to describe items included in the order.
itemId	The ID assigned to the item	Up to 31 characters	
	Optional		
name	A short description of an item	Up to 31 characters	
	Optional		
description	A detailed description of an item	Up to 255 characters	
	Optional		
quantity	The quantity of an item	Up to 4 digits (up to two decimal places)	

FIELD	VALUE	TYPE/FORMAT	NOTES
	Optional		
unitPrice	Cost of an item per unit excluding tax, freight, and duty Optional	Up to 4 digits with a decimal point (no dollar symbol) Ex. 4.95	
taxable	Indicates whether the item is subject to tax Optional	TRUE FALSE	
customerProfileId	Payment gateway assigned ID associated with the customer profile Conditional	Numeric	If a value is submitted for this field, it must be the same ID used for the original transaction. For more complete information, see For Refund Transactions on page 49
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile Conditional	Numeric	If a value is submitted for this field, it must be the same ID used for the original transaction. For more complete information, see For Refund Transactions on page 49
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address Optional	Numeric	If a value is submitted for this field, it must be the same ID used for the original authorization transaction. For more complete information, see For Refund

FIELD	VALUE	TYPE/FORMAT	NOTES
			Transactions on page 49
creditCardNumberMasked	The last four digits of the credit card number to be refunded	Four Xs followed by the last four digits of the credit card number to be refunded. Ex. XXXX1234	If a value is submitted, the last four digits must be the same ones used for the original transaction. For more complete information, see
			For Refund Transactions on page 49
bankRoutingNumberMasked	The last four digits of the routing number to be refunded Conditional	Four Xs followed by the last four digits of the routing number to be refunded. Ex. XXXX1234	If a value is submitted, the last four digits must be the same ones used for the original transaction. For more complete information, see For Refund
			Transactions on page 49
bankAccountNumberMasked	The last four digits of the bank account number to be refunded Conditional	Four Xs followed by the last four digits of the bank account to be refunded. Ex. XXXX1234	If a value is submitted, the last four digits must be the same ones used for the original transaction.
			For more complete information, see For Refund Transactions on page 49
order	Contains information about the order Optional		
invoiceNumber	The merchant assigned	Up to 20 characters (no	

FIELD	VALUE	TYPE/FORMAT	NOTES
	invoice number for the transaction Optional	symbols)	
description	The transaction description Optional	Up to 255 characters (no symbols)	
purchaseOrderNumber	The merchant assigned purchase order number Optional	Up to 25 characters (no symbols)	
transId	The payment gateway assigned transaction ID of the original transaction. Conditional	Numeric	For more complete information, see For Refund Transactions on page 49
extraOptions	Information in name/value pair format that does not exist within CIM, such as customer IP address, etc. Optional	String	For a complete list of the transaction variable names available, please review the AIM Implementation Guide located at http://www.aut horize.net/support/AIM_guide.pdf.

For information about output parameters for this function, see the section of this document titled "Output Parameters for CreateCustomerProfileTransactionResponse."

For a Void Transaction

The following table lists the input parameters for executing an API call to the **CreateCustomerProfileTransaction** function for a Void transaction.

FIELD	VALUE	TYPE/FORMAT	NOTES
transaction	Contains transaction	ProfileTransactionType	

FIELD	VALUE	TYPE/FORMAT	NOTES
	information		
profileTransVoid	The transaction type that is being requested	ProfileTransVoidType	Only one transaction type is allowed per request.
customerProfileId	Payment gateway assigned ID associated with the customer profile Conditional	Numeric	If a value is submitted for this field, it must be the same ID used for the original transaction.
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile Optional	Numeric	If a value is submitted for this field, it must be the same ID used for the original transaction.
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address Optional	Numeric	If a value is submitted for this field, it must be the same ID used for the original transaction.
transId	The payment gateway assigned transaction ID of the original transaction	Numeric	
extraOptions	Information in name/value pair format that does not exist within CIM, such as customer IP address, etc. Optional	String	For a complete list of the transaction variable names available, please review the AIM Implementation Guide located at http://www.aut horize.net/supp ort/AIM guide.pdf.

Input Parameters for DeleteCustomerProfile

This function is used to delete an existing customer profile along with all associated customer payment profiles and customer shipping addresses.

The following table lists the input parameters for executing an API call to the DeleteCustomerProfile function.

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	

For information about output parameters for this function, see the section of this document titled "Output Parameters for DeleteCustomerProfileResponse."

Input Parameters for DeleteCustomerPaymentProfile

This function is used to delete a customer payment profile from an existing customer profile.

The following table lists the input parameters for executing an API call to the **DeleteCustomerPaymentProfile** function.

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Payment gateway- assigned ID associated with the customer profile	Numeric	
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	

For information about output parameters for this function, see the section of this document titled "<u>Output Parameters for DeleteCustomerPaymentProfileResponse</u>."

Input Parameters for DeleteCustomerShippingAddress

This function is used to delete a customer shipping address from an existing customer profile.

The following table lists the input parameters for executing an API call to the **DeleteCustomerShippingAddress** function.

FIELD	VALUE	TYPE/FORMAT	NOTES

customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address	Numeric	

For information about output parameters for this function, see the section of this document titled "Output Parameters for DeleteCustomerShippingAddressResponse."

Input Parameters for GetCustomerProfileIds

This function is used to retrieve all existing customer profile Ids.

The following table lists the input parameters for executing an API call to the **GetCustomerProfileIds** function.

FIELD	VALUE	TYPE/FORMAT	NOTES
merchantAuthentication	Contains merchant unique information for purposes of authentication		
name	The valid API Login ID for the developer test or merchant account	Up to 25 characters	Submit the API Login ID used to submit transactions
transactionKey	The valid Transaction Key for the developer test or merchant account	16 characters	Submit the Transaction Key obtained from the Merchant Interface

For information about output parameters for this function, see the section of this document titled "<u>Output Parameters for GetCustomerProfileIdsResponse</u>."

Input Parameters for GetCustomerProfile

This function is used to retrieve an existing customer profile along with all the associated customer payment profiles and customer shipping addresses.

The following table lists the input parameters for executing an API call to the **GetCustomerProfile** function.

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Payment gateway assigned ID associated	Numeric	

with the custo	mer profile	

For information about output parameters for this function, see the section of this document titled "Output Parameters for GetCustomerProfileResponse."

Input Parameters for GetCustomerPaymentProfile

This function is used to retrieve a customer payment profile for an existing customer profile.

The following table lists the input parameters for executing an API call to the **GetCustomerPaymentProfile** function.

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	

For information about output parameters for this function, see the section of this document titled "Output Parameters for GetCustomerPaymentProfileResponse."

Input Parameters for GetCustomerShippingAddress

This function is used to retrieve a customer shipping address for an existing customer profile.

The following table lists the input parameters for executing an API call to the **GetCustomerShippingAddress** function.

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address	Numeric	

For information about output parameters for this function, see the section of this document titled "Output Parameters for GetCustomerShippingAddressResponse."

Input Parameters for getHostedProfilePage

Use this function to initiate a request for direct access to the Authorize. Net website.

The following table lists the input parameters for executing an API call to the **getHostedProfilePage** function.

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Merchant-assigned ID for the customer	Up to 20 characters	
hostedProfileSettings	Optional. This is an array of settings for the se	ession.	
settingName	Optional. One of: hostedProfileReturnUrl, hostedProfileReturnUrlText, hostedProfileHeadingBgColor, hostedProfilePageBorderVisible, hostedProfileIFrameCommunicatorUrl		
settingValue	See " <u>Guidelines for Settings Parameters</u> " on page 16 for a detailed description of these parameters.		

Example

Input Parameters for UpdateCustomerProfile

This function is used to update an existing customer profile.

The following table lists the input parameters for executing an API call to the UpdateCustomerProfile function.

FIELD	VALUE	TYPE/FORMAT	NOTES
profile	Contains payment information for the customer profile	CustomerProfileExType	
merchantCustomerId	Merchant assigned ID for the customer Optional	Up to 20 characters	
description	Description of the customer or customer profile Optional	Up to 255 characters	
email	Email address associated with the customer profile Optional	Up to 255 characters	
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	

For information about output parameters for this function, see the section of this document titled "Output Parameters for UpdateCustomerProfileResponse."

Input Parameters for UpdateCustomerPaymentProfile

This function is used to update a customer payment profile for an existing customer profile.

The following table lists the input parameters for executing an API call to the **UpdateCustomerPaymentProfile** function.

Note: If some fields in this request are not submitted or are submitted with a blank value, the values in the original profile will be removed. As a best practice to prevent this from happening, call GetCustomerPaymentProfile before calling

UpdateCustomerPaymentProfile. That will return all current information including masked payment information. Then, simply change the field that needs updating and use that to call UpdateCustomerPaymentProfile.

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
paymentProfile	Contains payment information for the customer profile	CustomerPaymentProfile ExType	Sensitive information that is not being updated can be masked.
customerType	Optional	CustomerTypeEnum individual business	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
billTo		CustomerAddressType	If this entire section is not submitted, the original billing information for the profile will stay the same. If updating only one or more elements under billTo, all elements must be submitted with their valid values to prevent the original values from being removed.

FIELD	VALUE	TYPE/FORMAT	NOTES
firstName	The customer's first name Optional	Up to 50 characters (no symbols)	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
lastName	The customer's last name Optional	Up to 50 characters (no symbols)	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
company	The name of the company associated with the customer, if applicable Optional	Up to 50 characters (no symbols)	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
address	The customer's address Optional	Up to 60 characters (no symbols)	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
city	The city of the customer's shipping address Optional	Up to 40 characters (no symbols)	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
state	The state of the customer's address Optional	Up to 40 characters (no symbols)	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
zip	The ZIP code of the customer's address	Up to 20 characters (no symbols)	If this field is not submitted in the request, or

FIELD	VALUE	TYPE/FORMAT	NOTES
	Optional		submitted with a blank value, the original value will be removed from the profile.
country	The country of the customer's address Optional	Up to 60 characters (no symbols)	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
phoneNumber	The phone number associated with the customer's address Optional	Up to 25 digits (no letters) Ex. (123)123-1234	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
faxNumber	The fax number associated with the customer's address Optional	Up to 25 digits (no letters) Ex. (123)123-1234	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
payment	Contains payment information for the customer profile	PaymentSimpleType	Can contain CreditCardSimpleTy pe or BankAccountType.
creditCard	Contains credit card payment information for the customer profile Conditional	CreditCardSimpleType	This parameter and its children are only required when the payment profile is credit card.
cardNumber	The customer's credit card number	13 to 16 digits Number can also be masked, ex. XXXX1111	If value is masked, the last four digits must match the original value in the profile. If a masked value is submitted, the original value will not be updated.
expirationDate	The expiration date for the customer's credit	YYYY-MM	If a masked value is submitted, the

FIELD	VALUE	TYPE/FORMAT	NOTES
	card	Number can also be masked, ex. XXXX	original value will not be updated. For .Net users, the class System.Runtime.Re moting.Metadata.W 3cXsd2001.SoapYe arMonth can be used to manage gYearMonth types.
cardCode	The three- or four-digit number on the back of a credit card (on the front for American Express) Optional	Numeric	This field is required if the merchant would like to use the Card Code Verification (CCV) security feature. For more information, please see the Merchant Integration Guide at http://www.authorize.net/support/Merchant/default.htm . cardCode is only used for validation and will not be stored in the customer profile. It should only be used when submitting validationMode with a value of testMode or liveMode.
bankAccount	Contains bank account payment information for the customer profile Conditional	BankAccountType	This parameter and its children are only required when the payment profile is bank account.
accountType	The type of bank account for the payment profile Optional	BankAccountTypeEnum checking savings businessChecking	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
routingNumber	The routing number of	9 digits	If value is masked, the last four digits

FIELD	VALUE	TYPE/FORMAT	NOTES
	the customer's bank	Number can also be masked, ex. XXXX1111	must match the original value in the profile. If a masked value is submitted, the original value will not be updated.
accountNumber	The customer's bank account number	5 to 17 digits Number can also be masked, ex. XXXX1111	If value is masked, the last four digits must match the original value in the profile. If a masked value is submitted, the original value will not be updated.
nameOnAccount	The customer's full name as listed on the bank account	Up to 22 characters	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
echeckType	The type of electronic check transaction Optional	EcheckTypeEnum CCD PPD TEL WEB	Currently, the CIM API does not support ARC or BOC transaction types. If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
bankName	The name of the bank associated with the bank account number Optional	Up to 50 characters	If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	

FIELD	VALUE	TYPE/FORMAT	NOTES
validationMode	Indicates the processing mode for the request	none testMode liveMode	For more information on use and restrictions of validationMode, see "Field Validation and Test Mode"

To test to see if the new payment information is valid, you can call **ValidateCustomerPaymentProfile** after successfully updating the payment profile. See the section of this document titled "<u>Input Parameters for ValidateCustomerPaymentProfile</u>" for more information.

For information about output parameters for this function, see the section of this document titled "Output Parameters for UpdateCustomerPaymentProfileResponse."

Input Parameters for UpdateCustomerShippingAddress

This function is used to update a shipping address for an existing customer profile.

The following table lists the input parameters for executing an API call to the UpdateCustomerShippingAddress function.

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
address	Contains shipping address information for the customer profile	CustomerAddress ExType	
firstName	The customer's first name Optional	Up to 50 characters (no symbols)	
lastName	The customer's last name Optional	Up to 50 characters (no symbols)	
company	The name of the company associated with the customer, if applicable Optional	Up to 50 characters (no symbols)	
address	The customer's shipping address	Up to 60 characters (no	

FIELD	VALUE	TYPE/FORMAT	NOTES
	Optional	symbols)	
city	The city of the customer's shipping address Optional	Up to 40 characters (no symbols)	
state	The state of the customer's shipping address Optional	Up to 40 characters (no symbols)	
zip	The ZIP code of the customer's shipping address Optional	Up to 20 characters (no symbols)	
country	The country of the customer's shipping address Optional	Up to 60 characters (no symbols)	
phoneNumber	The phone number associated with the customer's shipping address Optional	Up to 25 digits (no letters) Ex. (123)123-1234	
faxNumber	The fax number associated with the customer's shipping address Optional	Up to 25 digits (no letters) Ex. (123)123-1234	
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address	Numeric	

For information about output parameters for this function, see the section of this document titled "Output Parameters for UpdateCustomerShippingAddressResponse."

Input Elements for UpdateSplitTenderGroup

This function is used to update the status of an existing order than contains multiple transactions with the same splitTenderId.

The following table lists the input elements for executing an API call to the **UpdateSplitTenderGroup** function.

ELEMENT	VALUE	FORMAT	NOTES
splitTenderld	Payment gateway- assigned number associated with the order. Required	Numeric	
splitTenderStatus	Indicates the status of all transactions associated with the order.	voided or completed.	Use voided to void the entire order; use completed to indicate there are no further transactions in this order.

Input Parameters for ValidateCustomerPaymentProfile

This function is used to verify an existing customer payment profile by generating a test transaction. No customer receipt emails are sent when calling ValidateCustomerPaymentProfile.

The following table lists the input parameters for executing an API call to the **ValidateCustomerPaymentProfile** function.

FIELD	VALUE	TYPE/FORMAT	NOTES
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address Optional	Numeric	If customerShippingAddressI d is not passed, shipping information will not be included with the transaction.
cardCode	The three- or four-digit number on the back of a credit card (on the front for American Express) Optional	Numeric	This field is required if the merchant would like to use the Card Code Verification (CCV) security feature. For more information, please see the Merchant Integration Guide at http://www.authorize.net/support/merchant/http://www.authorize.net/support/merchant/default.htm . cardCode is only used for validation and will not be stored in the customer profile. It should only be

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FIELD	VALUE	TYPE/FORMAT	NOTES
			used when submitting validationMode with a value of testMode or liveMode.
validationMode	Indicates the processing mode for the request	testMode liveMode	For more information on use and restrictions of validationMode, see "Field Validation and Test Mode."

For information about output parameters for this function, see the section of this document titled "Output Parameters for ValidateCustomerPaymentProfileResponse."

Section 4 Responses

The response from the payment gateway to the API call is a set of fields that provides information about the status of the request.

The following table lists output for API calls.

FIELD	VALUE	TYPE/FORMAT	NOTES
resultCode	Contains additional information about the results of the request	MessageTypeEnum Ok Error	
messages	Contains the result code and text	MessagesTypeMessage	Messages provide more details about the error(s).
code	A code that represents the reason for the error	String	See the "Response Codes" section of this document for possible values.
text	A text description of the error	String	See the "Response Codes" section of this document for possible values.

CIM Responses

The sample below illustrates the structure of a typical response from the payment gateway for any of the CIM API calls.

Sample Response

Output for CreateCustomerProfileResponse

The following table lists the output returned from the payment gateway for an API call to the CreateCustomerProfile function.

Note: The createCustomerProfileResponse only returns the assigned customerProfileId for the created profile. To retrieve the customerPaymentProfileId and the customerShippingId that may also be created when using the createCustomerProfile function, you must submit the getCustomerProfile function, using the assigned customerProfileId for that customer profile.

FIELD	VALUE	TYPE/FORMAT	NOTES
CreateCustomerProfileResult	Contains the result of the API request to create a customer profile	CreateCustomerProfil eResponseType	See the "Response Codes" section of this document for possible values.
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	This output is only present for successful requests.
customerPaymentProfileIdList	A list of all payment profile IDs created with the request Optional	Numeric	This output is only present for requests that contain one or more payment profiles. The payment profile IDs will be returned in the same order as they were in the request.
customerShippingAddressIdList	A list of all shipping profile IDs created with the request Optional	Numeric	This output is only present for requests that contain multiple shipping profiles. The shipping profile IDs will be returned in the same order as they were in the request.
validationDirectResponseList	A list of the direct response results for the validation	String See the <i>Advanced</i>	This output is only present if the ValidationMode input

FIELD	VALUE	TYPE/FORMAT	NOTES
	transaction for each payment profile. Optional	Integration Guide at http://www.authorize.net/support/AIM guide.pdf for details about information included in the payment gateway transaction response.	element is passed with a value of testMode or liveMode. The list will be returned in the same order as the payment profiles were submitted in the request.

Output for CreateCustomerPaymentProfileResponse

The following table lists the output returned from the payment gateway for an API call to the CreateCustomerPaymentProfile function.

FIELD	VALUE	TYPE/FORMAT	NOTES
CreateCustomerPaymentProfileResult	Contains the result of the API request to create a customer payment profile	CreateCustomerPayme ntProfileResponseType	See the "Response Codes" section of this document for possible values.
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	This output is only present for successful requests.
validationDirectResponse	Contains detailed information about the result of the transaction.	String See the Advanced Integration Guide at http://www.authorize. net/support/AIM guid e.pdf for details about information included in the payment gateway transaction response.	This output is only present if the ValidationMode input parameter is passed with a value of testMode or liveMode.

Output for CreateCustomerShippingAddressResponse

The following table represents the output returned from the payment gateway for an API call to the CreateCustomerShippingAddress function.

FIELD	VALUE	TYPE/FORMAT	NOTES
CreateCustomerShippingAddressResult	Contains the result of the API request to create a customer shipping address	CreateCustomer ShippingAddress ResponseType	See the "Response Codes" section of this document for possible values.
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address	Numeric	This output is only present for successful requests.

Output for CreateCustomerProfileTransactionResponse

The following table represents the output returned from the payment gateway for an API call to the CreateCustomerProfileTransaction function.

FIELD	VALUE	TYPE/FORMAT	NOTES
CreateCustomerProfileTransactionResult	Contains the result of the API request to create a customer profile transaction	CreateCustomerProfile TransactionResponse Type	See the "Response Codes" section of this document for possible values.
directResponse	Contains detailed information about the result of the transaction.	String See the Advanced Integration Guide at http://www.authorize. net/support/AIM_gui de.pdf for details about information included in the payment gateway transaction response.	Transactions created from a customer profile will behave the same as regular transactions - you and your customer will receive all associated email notifications. Additionally, all fraud settings, including FDS filters and AVS and CCV settings, will be enforced.

Output for DeleteCustomerProfileResponse

The following table lists the output returned from the payment gateway for an API call to the DeleteCustomerProfile function.

FIELD	VALUE	TYPE/FORMAT	NOTES
DeleteCustomerProfileResult	Contains the result of the API request to delete a customer profile	DeleteCustomerPr ofileResponseType	See the "Response Codes" section of this document for possible values.

Output for DeleteCustomerPaymentProfileResponse

The following table lists the output returned from the payment gateway for an API call to the DeleteCustomerPaymentProfile function.

FIELD	VALUE	TYPE/FORMAT	NOTES
DeleteCustomerPaymentProfileResult	Contains the result of the API request to delete a customer payment profile	DeleteCustomer PaymentProfileR esponseType	See the "Response Codes" section of this document for possible values.

Output for DeleteCustomerShippingAddressResponse

The following table lists the output returned from the payment gateway for an API call to the DeleteCustomerShippingAddress function.

FIELD	VALUE	TYPE/FORMAT	NOTES
DeleteCustomerShippingAddressResult	Contains the result of the API request to delete a customer shipping address	DeleteCustomer ShippingAddress ResponseType	See the "Response Codes" section of this document for possible values.

Output for GetCustomerProfileIdsResponse

The following table lists the output returned from the payment gateway for an API call to the GetCustomerProfileIds function.

FIELD	VALUE	TYPE/FORMAT	NOTES
GetCustomerProfileIdsResult	Contains the result of the API request to get all customer	GetCustomerProfileIdsRe sponseType	See the "Response Codes" section of this document for possible

FIELD	VALUE	TYPE/FORMAT	NOTES
	profile IDs		values.
ids	Payment gateway assigned IDs associated with the customer profiles	Numeric	This output is only present for successful requests.

Output for GetCustomerProfileResponse

The following table lists the output returned from the payment gateway for an API call to the GetCustomerProfile function.

FIELD	VALUE	TYPE/FORMAT	NOTES
GetCustomerProfileResult	Contains the result of the API request to get a customer profile	GetCustomerProfileRespo nseType	See the "Response Codes" section of this document for possible values.
profile	Contains information for the customer profile	CustomerProfileMasked Type	
paymentProfiles	Contains payment profiles for the customer profile	CustomerPaymentProfile MaskedType	
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	
payment	Contains payment profile information for the customer profile	PaymentMaskedType	

FIELD	VALUE	TYPE/FORMAT	NOTES
creditCard	Contains credit card payment information for the customer profile	CreditCardMaskedType	
cardNumber	The customer's credit card number	13 to 16 digits	All sensitive payment information in the output is masked.
expirationDate	The expiration date for the customer's credit card	YYYY-MM	All sensitive payment information in the output is masked.
bankAccount	Contains bank account payment information for the customer profile	BankAccountMaskedType	
routingNumber	The routing number of the customer's bank	9 digits	All sensitive payment information in the output is masked.
accountNumber	The customer's bank account number	5 to 17 digits	All sensitive payment information in the output is masked.
driversLicense	Contains the customer's driver's license information	DriversLicenseMasked Type	This field is no longer supported in CIM requests and is only returned for profiles that were created under the SecureSource product.
state	The state of the customer's driver's license	A valid two-character state code	This field is no longer supported in CIM requests and is only returned for profiles that were created

FIELD	VALUE	TYPE/FORMAT	NOTES
			under the SecureSource product.
number	The customer's driver's license number	5 to 20 characters	This field is no longer supported in CIM requests and is only returned for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.
dateOfBirth	The date of birth listed on the customer's driver's license	YYYY-MM-DD	This field is no longer supported in CIM requests and is only returned for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.
taxld	The customer's Social Security Number or tax ID	9 digits	This field is no longer supported in CIM requests and is only returned for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.

FIELD	VALUE	TYPE/FORMAT	NOTES
shipToList	Contains shipping address profile information for the customer profile	CustomerAddressExType	
customerShippingAddressId	Payment gateway- assigned ID associated with the customer shipping address	Numeric	

Output for GetCustomerPaymentProfileResponse

The following table lists the output returned from the payment gateway for an API call to the GetCustomerPaymentProfile function.

FIELD	VALUE	TYPE/FORMAT	NOTES
GetCustomerPaymentProfileResult	Contains the result of the API request to get a customer payment profile	GetCustomerPaymentPro fileResponseType	See the "Response Codes" section of this document for possible values.
paymentProfile	Contains payment information for the customer profile	CustomerPaymentProfile MaskedType	
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	
customerType		CustomerTypeEnum	
		individual	
		business	
billTo		CustomerAddressType	
firstName	The customer's first name	Up to 50 characters (no symbols)	
lastName	The customer's last name	Up to 50 characters (no symbols)	

FIELD	VALUE	TYPE/FORMAT	NOTES
company	The name of the company associated with the customer, if applicable	Up to 50 characters (no symbols)	
address	The customer's address	Up to 60 characters (no symbols)	
city	The city of the customer's address	Up to 40 characters (no symbols)	
state	The state of the customer's address	Up to 40 characters (no symbols)	
zip	The ZIP code of the customer's address	Up to 20 characters (no symbols)	
country	The country of the customer's address	Up to 60 characters (no symbols)	
phoneNumber	The phone number associated with the customer's address	Up to 25 digits (no letters) Ex. (123)123-1234	
faxNumber	The fax number associated with the customer's address	Up to 25 digits (no letters) Ex. (123)123-1234	
payment	Contains payment profile information for the customer profile	PaymentMaskedType	
creditCard	Contains credit card payment information for the payment profile	CreditCardMaskedType	
cardNumber	The customer's credit card number	13 to 16 digits	All sensitive payment information in the output is masked.
expirationDate	The expiration date for the customer's credit card	YYYY-MM	All sensitive payment information in the output is masked.

FIELD	VALUE	TYPE/FORMAT	NOTES
bankAccount	Contains bank account payment information for the payment profile	BankAccountMaskedType	
accountType	The type of bank account for the payment profile	checking savings businessChecking	
routingNumber	The routing number of the customer's bank	9 digits	All sensitive payment information in the output is masked.
accountNumber	The customer's bank account number	5 to 17 digits	All sensitive payment information in the output is masked.
nameOnAccount	The customer's full name as listed on the bank account	Up to 22 characters	
echeckType	The type of electronic check transaction	CCD PPD TEL WEB	Currently, the CIM API does not support ARC or BOC transaction types.
bankName	The name of the bank associated with the bank account number	Up to 50 characters	
driversLicense	Contains the customer's driver's license information	DriversLicenseMasked Type	This field is no longer supported in CIM requests and is only returned for profiles that were created under the SecureSource product.
state	The state of the customer's driver's license	A valid two-character state code	This field is no longer supported in CIM requests and is only returned for profiles that were created under the SecureSource product.

FIELD	VALUE	TYPE/FORMAT	NOTES
number	The customer's driver's license number	Between 5 and 20 characters	This field is no longer supported in CIM requests and is only returned for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.
dateOfBirth	The date of birth listed on the customer's driver's license	YYYY-MM-DD	This field is no longer supported in CIM requests and is only returned for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.
taxld	The customer's Social Security Number or tax ID	9 digits	This field is no longer supported in CIM requests and is only returned for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.

Output for GetCustomerShippingAddressResponse

The following table lists the output returned from the payment gateway for an API call to the GetCustomerShippingAddress function.

FIELD	VALUE	TYPE/FORMAT	NOTES
GetCustomerShippingAddressResult	Contains the result of the API request	GetCustomerShippi ngAddressRespons	

FIELD	VALUE	TYPE/FORMAT	NOTES
	to get a customer shipping address	еТуре	this document for possible values.
address	Contains shipping address information for the customer profile	CustomerAddress ExType	
customerShippingAddressId	Payment gateway assigned ID associated with the customer shipping address	Numeric	

Output for getHostedProfilePage

The following table lists the output returned from the payment gateway for an API call to the getHostedProfilePage function.

FIELD	VALUE	TYPE/FORMAT	NOTES
Token	string	An encrypted string that the merchant must include when posting to the Authorize.Net web page.	If not used within 15 minutes of the original API call, this token expires.

The customer's browser posts the token, Authorize. Net validates it, and makes sure the timestamp is less than 15 minutes old.

For more complete information on how to use hosted CIM access, see "Section 2 Using the Hosted CIM Option" on page 9.

Output for UpdateCustomerProfileResponse

The following table lists the output returned from the payment gateway for an API call to the UpdateCustomerProfile function.

FIELD	VALUE	TYPE/FORMAT	NOTES
UpdateCustomerProfileResult	Contains the result of the API request to update a customer profile	UpdateCustomerProfile ResponseType	See the "Response Codes" section of this document for possible values.

Output for UpdateCustomerPaymentProfileResponse

The following table lists the output returned from the payment gateway for an API call to the UpdateCustomerPaymentProfile function.

FIELD	VALUE	TYPE/FORMAT	NOTES
UpdateCustomerPaymentProfileResult	Contains the result of the API request to update a customer payment profile	UpdateCustomer PaymentProfileRe sponseType	See the "Response Codes" section of this document for possible values.
validationDirectResponse	Contains detailed information about the result of the transaction. Optional	String See the Advanced Integration Guide at http://www.autho rize.net/support/ AIM_guide.pdf for details about information included in the payment gateway transaction response.	This output is only present if the ValidationMode input element is passed with a value of testMode or liveMode.

Output for UpdateCustomerShippingAddressResponse

The following table lists the output returned from the payment gateway for an API call to the UpdateCustomerShippingAddress function.

FIELD	VALUE	TYPE/FORMAT	NOTES
UpdateCustomerShippingAddressResult	Contains the result of the API request to update a customer shipping address	UpdateCustomer ShippingAddress ResponseType	See the "Response Codes" section of this document for possible values.

Output for UpdateSplitTenderGroup

The following table lists the output returned from the payment gateway for an API call to the UpdateSplitTenderGroup function.

FIELD	VALUE	TYPE/FORMAT	NOTES
UpdateSplitTenderGroupResult	Contains the result of the API request to update a split tender group	UpdateSplitTend erGroupRespons eType	See the "Response Codes" section of this document for possible values.

Output for ValidateCustomerPaymentProfileResponse

The following table represents the output returned from the payment gateway for an API call to the ValidateCustomerPaymentProfile function.

FIELD	VALUE	TYPE/FORMAT	NOTES
ValidateCustomerPaymentProfileResult	Contains the result of the API request to validate a customer payment profile	ValidateCustomer PaymentProfileRe sonseType	See the "Response Codes" section of this document for possible values.
directResponse	Contains detailed information about the result of the transaction.	String See the Advanced Integration Guide at http://www.authorize.net/support/AIM guide.pdf for details about information included in the payment gateway transaction response.	

Duplicate Profile Verification

When submitting calls to the CreateCustomerProfile, CreateCustomerPaymentProfile, and CreateCustomerShippingAddress functions, the payment gateway checks certain fields in each request to determine that a profile with that same information does not already exist. If a profile already exists that contains the values being submitted in the new request, then the payment gateway returns an error message. If the duplicate profile is a customer profile, the error message contains the ID of the already-created profile. The duplicate profile verification serves as a safeguard against accidental duplicate submissions.

The following table lists the fields for each function that cannot match any other profile already created. An error will only occur if ALL the values for each field being submitted match ALL the values for each field in the already existing profile.

FUNCTION	FIELDS USED FOR DUPLICATE PROFILE VERIFICATION
CreateCustomerProfile	merchantCustomerId, description, email
CreateCustomerPaymentProfile	customerProfileId, cardNumber, accountNumber, routingNumber, billToFirstName, billToLastName, billToAddress, and billToZip
CreateCustomerShippingAddress	customerProfileId, firstName, lastName, address, zip and phoneNumber

Response Codes

The following table lists the common response codes and texts for requests to the Customer Information Manager API.

CODE	TEXT	DESCRIPTION
100001	Successful	The request was processed successfully.
100003	The record has already been deleted.	The record has already been deleted.
E00001	An error occurred during processing. Please try again.	An unexpected system error occurred while processing this request.
E00002	The content-type specified is not supported.	The only supported content-types are text/xml and application/xml.
E00003	An error occurred while parsing the XML request.	This is the result of an XML parser error.
E00004	The name of the requested API method is invalid.	The name of the root node of the XML request is the API method being called. It is not valid.
E00005	The merchantAuthentication.transactionKey is invalid or not present.	Merchant authentication requires a valid value for transaction key.
E00006	The merchantAuthentication.name is invalid or not present.	Merchant authentication requires a valid value for name.
E00007	User authentication failed due to invalid authentication values.	The name/and or transaction key is invalid.
E00008	User authentication failed. The payment gateway account or user is inactive.	The payment gateway or user account is not currently active.
E00009	The payment gateway account is in Test Mode. The request cannot be processed.	The requested API method cannot be executed while the payment gateway account is in Test Mode.
E00010	User authentication failed. You do not have the	The user does not have permission to call the

CODE	TEXT	DESCRIPTION
	appropriate permissions.	API.
E00011	Access denied. You do not have the appropriate permissions.	The user does not have permission to call the API method.
E00013	The field is invalid.	One of the field values is not valid.
E00014	A required field is not present.	One of the required fields was not present.
E00015	The field length is invalid.	One of the fields has an invalid length.
E00016	The field type is invalid.	The field type is not valid.
E00019	The customer taxld or driversLicense information is required.	The customer tax ID or driver's license information (driver's license number, driver's license state, driver's license DOB) is required for the subscription.
E00027	The transaction was unsuccessful.	An approval was not returned for the transaction.
E00029	Payment information is required.	Payment information is required when creating a subscription or payment profile.
E00039	A duplicate record already exists.	A duplicate of the customer profile, customer payment profile, or customer address was already submitted.
E00040	The record cannot be found.	The profileID, paymentProfileId, or shippingAddressId for this request is not valid for this merchant.
E00041	One or more fields must contain a value.	All of the fields were empty or missing.
E00042	The maximum number of payment profiles allowed for the customer profile is {0}.	The maximum number of payment profiles for the customer profile has been reached.
E00043	The maximum number of shipping addresses allowed for the customer profile is {0}.	The maximum number of shipping addresses for the customer profile has been reached.
E00044	Customer Information Manager is not enabled.	The payment gateway account is not enabled for Customer Information Manager (CIM).
E00051	The original transaction was not issued for this payment profile.	If the customer profile ID, payment profile ID, and shipping address ID are included, they must match the original transaction.

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