Authorize.Net®

a CyberSource solution

Merchant Web Services API

Customer Information Manager (CIM)
XML Guide

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Revision History

PUBLISH DATE	UPDATES
November 2007	Initial release of the Customer Information Manager (CIM) API

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 extensible markup language (XML).

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, via direct integration between client software or applications and the Authorize.Net Payment Gateway.

The CIM API accomplishes these functions through an XML call and subsequent XML response.

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).**

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 Integration 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 Integration Center, our Integration Team is available to answer your questions via 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.

Section 2
Executing an API Call

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

There are two options for developing the request script:

- You may develop a custom script yourself using the API fields information provided in this document, OR
- You may use Authorize.Net sample code in C# and Java available for free from our Integration 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
Production	https://api.authorize.net/xml/v1/request.api
Developer Test	https://apitest.authorize.net/xml/v1/request.api
XML Schema	https://api.authorize.net/xml/v1/schema/AnetApiSchema.xsd

In order to be processed successfully, API requests and responses must conform to the CIM API XML schema.

> **Note:** The Developer Test URL requires the use of a developer test payment gateway account. You can request a test account from our Integration 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:

- **createCustomerProfileRequest** – Create a new customer profile along with any customer payment profiles and customer shipping addresses for the customer profile.
- **createCustomerPaymentProfileRequest** – Create a new customer payment profile for an existing customer profile.

- **createCustomerShippingAddressRequest** – Create a new customer shipping address for an existing customer profile.
- **createCustomerProfileTransactionRequest** – Create a new payment transaction from an existing customer profile
- **deleteCustomerProfileRequest** – Delete an existing customer profile along with all associated customer payment profiles and customer shipping addresses.
- **deleteCustomerPaymentProfileRequest** – Delete a customer payment profile from an existing customer profile.
- **deleteCustomerShippingAddressRequest** – Delete a customer shipping address from an existing customer profile.
- **getCustomerProfileRequest** – Retrieve an existing customer profile along with all the associated customer payment profiles and customer shipping addresses.
- **getCustomerPaymentProfileRequest** – Retrieve a customer payment profile for an existing customer profile.
- **getCustomerShippingAddressRequest** – Retrieve a customer shipping address for an existing customer profile.
- **updateCustomerProfileRequest** – Update an existing customer profile.
- **updateCustomerPaymentProfileRequest** – Update a customer payment profile for an existing customer profile.
- **updateCustomerShippingAddressRequest** – Update a shipping address for an existing customer profile.
- **validateCustomerPaymentProfileRequest** – Verify an existing customer payment profile by generating a test transaction.

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

Note: Elements required for individual API calls are in addition to the authentication elements required for all API calls.

Authentication

ALL calls to the API require merchant authentication 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.

ELEMENT	VALUE	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	16 characters	Submit the

| | for the developer test or merchant account | | Transaction Key obtained from the Merchant Interface. |

Example of Authentication with the Login ID and Transaction Key

```
<?xml version="1.0" encoding="utf-8"?>
<createCustomerProfileRequest xmlns=
"AnetApi/xml/v1/schema/AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>mytestacct</name>
    <transactionKey>112223344</transactionKey>
  </merchantAuthentication>
</createCustomerProfileRequest>
```

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 Integration Center at http://developer.authorize.net/samplecode.

Input Elements for createCustomerProfileRequest

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 elements for executing an API call to the createCustomerProfileRequest function.

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
profile	Contains information for the customer profile		
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	Up to 255 characters	

ELEMENT	VALUE	FORMAT	NOTES
	associated with the customer profile *Optional*		
paymentProfiles	Contains payment profiles for the customer profile *Optional*		Multiple instances of this element may be submitted to create multiple payment profiles for the customer profile.
customerType	*Optional*	individual business	
billTo			
address			
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*	A valid two-character state code	
zip	The ZIP code of the customer's address *Optional*	Up to 20 characters (no symbols)	
country	The country of	Up to 60 characters (no	

ELEMENT	VALUE	FORMAT	NOTES
	the customer's address *Optional*	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		Can contain creditCard or bankAccount
creditCard	Contains credit card payment information for the payment profile		This element is 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	
bankAccount	Contains bank account payment information for the payment profile		This element is only required when the payment profile is bank account.
accountType	The type of bank account for the payment profile *Optional*	checking savings businessChecking	
nameOnAccount	The customer's full name as listed on the bank account	Up to 22 characters	
echeckType	The type of electronic check	CCD PPD	Currently, the CIM API does not support ARC

ELEMENT	VALUE	FORMAT	NOTES
	transaction *Optional*	TEL WEB	or BOC transaction types
bankName	The name of the bank associated with the bank account number *Optional*	Up to 50 characters	
routingNumber	The routing number of the customer's bank	9 digits	
accountNumber	The customer's bank account number	5 to 17 digits	
driversLicense	Contains driver's license information for the customer profile *Conditional*		This element is only required for Wells Fargo SecureSource eCheck.Net merchants
state	The state of the customer's driver's license	A valid two-character state code	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
number	The customer's driver's license number *Conditional*	5 to 20 characters	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
dateOfBirth	The date of birth listed on the customer's driver's license *Conditional*	YYYY-MM-DD	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
taxId	The customer's Social Security Number or tax ID *Conditional*	9 digits	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
shipToList	Contains shipping address information for the customer profile		
address	Contains		

ELEMENT	VALUE	FORMAT	NOTES
	address information for the customer profile		
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*	A valid two-character state code	
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	Up to 25 digits (no letters) Ex. (123)123-1234	

ELEMENT	VALUE	FORMAT	NOTES
	profile *Optional*		
faxNumber	The fax number associated with the customer profile *Optional*	Up to 25 digits (no letters) Ex. (123)123-1234	

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

Example createCustomerProfileRequest

```xml
<?xml version="1.0" encoding="utf-8"?>
<createCustomerProfileRequest
xmlns="AnetApi/xml/v1/schema/AnetApiSchema.xsd">
    <merchantAuthentication>
      <name>API Login ID here</name>
      <transactionKey>Transaction Key here</transactionKey>
    </merchantAuthentication>
   <profile>
     <merchantCustomerId>Merchant Customer ID
      here</merchantCustomerId>
     <description>Profile description here</description>
     <email>customer profile email address here</email>
     <paymentProfiles>
         <customerType>individual</customerType>
         <payment>
             <creditCard>
                 <cardNumber>Credit card number here</cardNumber>
                 <expirationDate>Credit card expiration date
                   here</expirationDate>
             </creditCard>
         </payment>
     </paymentProfiles>
   </profile>
</createCustomerProfileRequest>
```

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 Integration Center at http://developer.authorize.net/samplecode.

Input Elements for createCustomerPaymentProfileRequest

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

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

ELEMENT	VALUE	FORMAT	NOTES

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
paymentProfile	Contains payment information for the customer profile		
customerType	*Optional*	individual business	
billTo			
address			
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*	A valid two-character state code	
zip	The ZIP code of the customer's address *Optional*	Up to 20 characters (no symbols)	
country	The country of the	Up to 60 characters (no	

ELEMENT	VALUE	FORMAT	NOTES
	customer's address *Optional*	symbols)	
phoneNumber	The phone number associated with the customer's address *Optional*	Up to 25 digits (no letters) Ex. (123)123-1234	
faxNumber	The fax number associated with the customer's address *Optional*	Up to 25 digits (no letters) Ex. (123)123-1234	
payment	Contains payment information for the customer profile		Can contain creditCard or bankAccount
creditCard	Contains credit card payment information for the customer profile		This element is 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	
bankAccount	Contains bank account payment information for the customer profile		This element is only required when the payment profile is bank account.
accountType	The type of bank account for the payment profile *Optional*	checking savings businessChecking	
nameOnAccount	The customer's full name as listed on the bank account	Up to 22 characters	
echeckType	The type of electronic check transaction *Optional*	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 *Optional*	Up to 50 characters	
routingNumber	The routing number of the customer's	9 digits	

ELEMENT	VALUE	FORMAT	NOTES
	bank		
accountNumber	The customer's bank account number	5 to 17 digits	
driversLicense	Contains the customer's driver's license information *Conditional*		This element is only required for Wells Fargo SecureSource eCheck.Net merchants
state	The state of the customer's driver's license	A valid two-character state code	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
number	The customer's driver's license number *Conditional*	5 to 20 characters	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
dateOfBirth	The date of birth listed on the customer's driver's license *Conditional*	YYYY-MM-DD	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
taxId	The customer's Social Security Number or tax ID *Conditional*	9 digits	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
validationMode	Indicates the processing mode for the request	none testMode liveMode	Validation mode allows you to generate a test transaction at the time you create a customer payment profile. In Test Mode, only field validation is performed. In Live Mode, a transaction is generated and submitted to the processor with the amount of $0.01. If successful, the transaction is immediately voided. When a value of "none" is submitted, no additional validation is performed.

For information about output elements for this function, see the section of this document titled "Output Elements for createCustomerPaymentProfileResponse."

Input Elements for createCustomerShippingAddressRequest

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

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
address	Contains shipping address information for the customer profile		
address			
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*	A valid two-character state code	
zip	The ZIP code of the customer's shipping address *Optional*	Up to 20 characters (no symbols)	
country	The country of the	Up to 60 characters (no	

ELEMENT	VALUE	FORMAT	NOTES
	customer's shipping address *Optional*	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 elements for this function, see the section of this document titled "Output Elements for createCustomerShippingAddressResponse."

Input Elements for createCustomerProfileTransactionRequest

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

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
transaction	Contains transaction information		
profileTransCaptureOnly OR **profileTransAuthCapture** OR **profileTransAuthOnly**	The credit card transaction type that is being requested		Only one transaction type is allowed per request.
amount	The total	Up to 4 digits with a decimal	This amount

ELEMENT	VALUE	FORMAT	NOTES
	amount of the transaction	point (no dollar symbol) Ex. 4.95	should include all other amounts such as tax amount, shipping amount, etc.
tax	Contains tax information for the transaction *Optional*		
amount	The tax amount for the transaction *Optional*	Up to 4 digits with a decimal point (no dollar symbol) Ex. 4.95	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*		
amount	The shipping amount for the transaction *Optional*	Up to 4 digits with a decimal point (no dollar symbol) Ex. 4.95	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*		

ELEMENT	VALUE	FORMAT	NOTES
amount	The duty amount for the transaction *Optional*	Up to 4 digits with a decimal point (no dollar symbol) Ex. 4.95	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*		Up to 30 distinct instances of this element may 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	TRUE FALSE	

ELEMENT	VALUE	FORMAT	NOTES
	Optional		
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	
customerAddressId	Payment gateway assigned ID associated with the customer shipping address *Optional*		If the customer AddressId is not passed, shipping information will not be included with the transaction.
order	Contains information about the order *Optional*		
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	TRUE FALSE	

ELEMENT	VALUE	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.auth orize.net/suppor t/Merchant/defa ult.htm
approvalCode	The authorization code of an original transaction required for a Capture Only *Conditional*	6 characters	This element is only required for the Capture Only transaction type.

For information about output elements for this function, see the section of this document titled "Output Elements for createCustomerProfileTransactionResponse."

Input Elements for deleteCustomerProfileRequest

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 elements for executing an API call to the deleteCustomerProfileRequest function.

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	

For information about output elements for this function, see the section of this document titled "Output Elements for deleteCustomerProfileResponse."

Input Elements for deleteCustomerPaymentProfileRequest

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

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
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 elements for this function, see the section of this document titled "Output Elements for deleteCustomerPaymentProfileResponse."

Input Elements for deleteCustomerShippingAddressRequest

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

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
customerAddressId	Payment gateway assigned ID associated with the customer shipping address	Numeric	

For information about output elements for this function, see the section of this document titled "Output Elements for deleteCustomerShippingAddressResponse."

Input Elements for getCustomerProfileRequest

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 elements for executing an API call to the getCustomerProfileRequest function.

ELEMENT	VALUE	FORMAT	NOTES
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	

For information about output elements for this function, see the section of this document titled "Output Elements for getCustomerProfileResponse."

Input Elements for getCustomerPaymentProfileRequest

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

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

ELEMENT	VALUE	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 elements for this function, see the section of this document titled "Output Elements for getCustomerPaymentProfileResponse."

Input Elements for getCustomerShippingAddress

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

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

ELEMENT	VALUE	FORMAT	NOTES
customerProfileId	Payment gateway	Numeric	

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

For information about output elements for this function, see the section of this document titled "Output Elements for getCustomerShippingAddressResponse."

Input Elements for updateCustomerProfileRequest

This function is used to update an existing customer profile.

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
profile	Contains payment information for the customer profile		
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 elements for this function, see the section of this document titled "Output Elements for updateCustomerProfileResponse."

Input Elements for updateCustomerPaymentProfileRequest

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

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
paymentProfile	Contains payment information for the customer profile		Sensitive information that is not being updated can be masked.
customerType	*Optional*	individual business	
billTo			
address			
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	A valid two-character	

ELEMENT	VALUE	FORMAT	NOTES
	customer's shipping address *Optional*	state code	
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	
payment	Contains payment information for the customer profile		Can contain creditCard or bankAccount
creditCard	Contains credit card payment information for the customer profile		This element is 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	
bankAccount	Contains bank account payment information for the customer profile		This element is only required when the payment profile is bank account.
accountType	The type of bank account for the payment profile *Optional*	checking savings businessChecking	
nameOnAccount	The customer's full name as listed on the bank account	Up to 22 characters	

ELEMENT	VALUE	FORMAT	NOTES
echeckType	The type of electronic check transaction *Optional*	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 *Optional*	Up to 50 characters	
routingNumber	The routing number of the customer's bank	9 digits	
accountNumber	The customer's bank account number	5 to 17 digits	
driversLicense	Contains the customer's driver's license information *Conditional*		This element is only required for Wells Fargo SecureSource eCheck.Net merchants
state	The state of the customer's driver's license	A valid two-character state code	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
number	The customer's driver's license number *Conditional*	5 to 20 characters	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
dateOfBirth	The date of birth listed on the customer's driver's license *Conditional*	YYYY-MM-DD	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
taxId	The customer's Social Security Number or tax ID *Conditional*	9 digits	This element is only required for Wells Fargo SecureSource eCheck.Net merchants
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	

For information about output elements for this function, see the section of this document titled "Output Elements for updateCustomerPaymentProfileResponse."

Input Elements for updateCustomerShippingAddressRequest

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

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	
address	Contains shipping address information for the customer profile		
address			
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*	A valid two-character state code	

ELEMENT	VALUE	FORMAT	NOTES
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	
customerAddressId	Payment gateway assigned ID associated with the customer shipping address	Numeric	

For information about output elements for this function, see the section of this document titled "Output Elements for updateCustomerShippingAddressResponse."

Input Elements for validateCustomerPaymentProfileRequest

This function is used to verify an existing customer payment profile by generating a test transaction.

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

ELEMENT	VALUE	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	
customerAddressId	Payment gateway assigned ID associated with the customer shipping address *Optional*	Numeric	If the customer AddressId is not passed, shipping information will not be included with the transaction.

ELEMENT	VALUE	FORMAT	NOTES
validationMode	Indicates the processing mode for the request	testMode liveMode	Validation mode allows you to generate a test transaction in either Test Mode or Live Mode to check the validity of customer information. In Test Mode, only field validation is performed. In Live Mode, a transaction is generated and submitted to the processor with the amount of $0.01. If successful, the transaction is immediately voided.

For information about output elements for this function, see the section of this document titled "Output Elements for validateCustomerPaymentProfileResponse."

Section 3

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.

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
messages	Contains information about the results of the request		
resultCode	Contains additional information about the results of the request	Ok Error	
message	Contains the result code and text		Message provides 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

```
<?xml version="1.0" encoding="utf-8" ?>
<createCustomerProfileResponse
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
    xmlns="AnetApi/xml/v1/schema/AnetApiSchema.xsd">
    <refId>refid1</refId>
    <messages>
        <resultCode>Ok</resultCode>
        <message>
```

```
            <code>I00001</code>
            <text>Successful.</text>
        </message>
    </messages>
    <customerProfileId>3187</customerProfileId>
</createCustomerProfileResponse>
```

Output for createCustomerProfileResponse

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	Payment gateway assigned ID associated with the customer profile	Numeric	This output is only present for successful requests.

Output for createCustomerPaymentProfileResponse

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
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	String See the *Advanced Integration Guide* at http://www.authorize.ne	This output is only present if the ValidationMode input parameter is passed with a value

	transaction.	t/support/AIM_guide.pdf for details about information included in the payment gateway transaction response.	of "testMode" or "liveMode.".

Output for createCustomerShippingAddressResponse

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerAddressId	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 additional output returned from the payment gateway for an API call to the createCustomerProfileTransactionRequest function.

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
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.	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 additional output returned from the payment gateway for an API call to the deleteCustomerProfileRequest function.

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.

Output for deleteCustomerPaymentProfileResponse

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.

Output for deleteCustomerShippingAddressResponse

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.

Output for getCustomerProfileResponse

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

ELEMENT	VALUE	FORMAT	NOTES
profile	Contains information for the customer profile		
paymentProfiles	Contains payment profiles for the customer profile		
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	
payment	Contains payment profile information for the customer profile		
creditCard	Contains credit card payment information for the customer profile		
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		
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		

ELEMENT	VALUE	FORMAT	NOTES
	customer's driver's license information		
state	The state of the customer's driver's license	A valid two-character state code	
number	The customer's driver's license number	5 to 20 characters	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	All sensitive payment information in the output is masked.
taxId	The customer's Social Security Number or tax ID	9 digits	All sensitive payment information in the output is masked.
shipToList	Contains shipping address profile information for the customer profile		
customerAddressId	Payment gateway assigned ID associated with the customer shipping address	Numeric	

Output for getCustomerPaymentProfileResponse

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

ELEMENT	VALUE	FORMAT	NOTES
paymentProfile	Contains payment information for the customer profile		
customerPaymentProfileId	Payment gateway assigned ID associated with the customer payment profile	Numeric	
customerType		individual business	

ELEMENT	VALUE	FORMAT	NOTES
billTo			
address			
firstName	The customer's first name	Up to 50 characters (no symbols)	
lastName	The customer's last name	Up to 50 characters (no symbols)	
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	A valid two-character state code	
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		
creditCard	Contains credit card payment information for the payment profile		
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	YYYY-MM	All sensitive payment

ELEMENT	VALUE	FORMAT	NOTES
	customer's credit card		information in the output is masked.
bankAccount	Contains bank account payment information for the payment profile		
accountType	The type of bank account for the payment profile	checking savings businessChecking	
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	
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		
state	The state of the customer's driver's license	A valid two-character state code	
number	The customer's driver's license number	Between 5 and 20 characters	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	All sensitive payment information in the output is masked.
taxId	The customer's Social Security Number or tax ID	9 digits	All sensitive payment information in the output is masked.

Output for getCustomerShippingAddressResponse

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

ELEMENT	VALUE	FORMAT	NOTES
address	Contains shipping address information for the customer profile		
customerAddressId	Payment gateway assigned ID associated with the customer shipping address	Numeric	

Output for updateCustomerProfileResponse

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.

Output for updateCustomerPaymentProfileResponse

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.

Output for updateCustomerShippingAddressResponse

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

ELEMENT	VALUE	FORMAT	NOTES
refId	Merchant-assigned reference ID for the request *Optional*	Up to 20 characters	If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.

Output for validateCustomerPaymentProfileResponse

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

ELEMENT	VALUE	FORMAT	NOTES
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.	

Response Codes

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

CODE	TEXT	DESCRIPTION
I00001	Successful	The request was processed successfully.
I00003	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 appropriate permissions.	The user does not have permission to call the 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 taxId 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).