Merchant Web Services API

Customer Information Manager (CIM)
XML Guide

July 2015

Authorize.Net

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Revision History

This table lists the changes made in the last six releases of this document:

Publish Date	Update
July 2015	Added a section about EVOSnap to "Payment Processors," page 9.
	Added a new production URL to "Web Service Locations," page 18.
June 2015	Listed line item fields as required only if **lineItem** is submitted.
March 2015	Added **hostedProfileBillingAddressRequired** and **hostedProfileCardCodeRequired** to "Guidelines for Parameter Settings," page 122.
February 2015	Added **hostedProfileBillingAddressRequired** and **hostedProfileCardCodeRequired** to "Input Parameters for getHostedProfilePageRequest," page 73.
	Added EVO to "North American Payment Processors," page 9.
	Added the section "EVO Billing and Shipping Fields," page 88.
September 2014	Added the **createCustomerProfileFromTransactionRequest** function to "Input Element for createCustomerProfileFromTransactionRequest," page 22.
	Added the **createCustomerProfileFromTransactionResponse** function to "Output for createCustomerProfileFromTransactionResponse," page 90.
	Added the following error messages to "Response Codes," page 125:
	▪ E00098
	▪ E00099
	▪ E00100
	▪ E00101
	▪ E00102
August 2014	This version contains only formatting updates and does not include any content updates.

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).

The Authorize.Net Customer Information Manager (CIM) Application Programming Interface (API) provides a mechanism for developers and value-added resellers (VARs) to create, delete, retrieve, and update customer profile information, including payment and address information, by directly integrating client software and the Authorize.Net Payment Gateway.

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

Audience For This Guide

This guide is intended for developers who are responsible for maintaining a merchant's web site and integrating it with the Authorize.Net Payment Gateway.

Integration Methods

The two methods for integrating payments, Standard API and Hosted API, can 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 web site. When the customer enters the data, your web site calls the API using either XML or SOAP.

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 will work.

For information regarding requirements for using the API, see "Minimum Requirements," page 8 below.

Hosted Form

For a more secure exchange of information, a hosted form enables you to establish a hosted connection on Authorize.Net secure servers. If the merchant needs to transmit sensitive cardholder information (for example, a customer needs to change credit card information or add a new payment method), you can use the hosted form option. With the hosted CIM option, credit card data never flows through your web site. You can implement the hosted option using either XML or SOAP.

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

For more information, refer to "Using a Hosted Form," page 114.

Minimum Requirements

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

- The merchant must have a merchant bank account that allows Internet transactions.
- The merchant must have an active Authorize.Net Card Not Present Payment Gateway account.
- The merchant must have signed up for the CIM service.
- The merchant must store account authentication data securely (for example, API login ID, transaction key).

■ The merchant's web site must use HTTPS.

■ The merchant's web site must support secure user registration for returning users.

> **Note** Merchants should avoid storing any type of sensitive cardholder information. However, if a merchant or third party must store sensitive customer business or payment information, they must comply with industry standard storage requirements. See *Understanding PCI Compliance*.

Payment Processors

The merchant's payment processor determines the card types and currencies that the merchant can support.

North American Payment Processors

Authorize.Net supports the following payment processors.

Table 1 North American Payment Processors, Accepted Card Types, and Accepted Currencies

Payment Processor	Accepted Card Types	Accepted Currencies
Chase Paymentech Tampa	■ American Express ■ Diners Club ■ Discover ■ JCB ■ Mastercard ■ Visa	United States Dollar (USD) Canadian Dollar (CAD)
Elavon	■ American Express ■ Diners Club ■ Discover ■ JCB ■ Mastercard ■ Visa	United States Dollar (USD) Canadian Dollar (CAD)
EVO Payments	■ American Express ■ Discover ■ JCB ■ Mastercard ■ Visa	United States Dollar (USD)

**Table 1   North American Payment Processors, Accepted Card Types,
                 and Accepted Currencies (Continued)**

Payment Processor	Accepted Card Types	Accepted Currencies
First Data Merchant Services (FDMS) Omaha, Nashville, and EFSNet	■ American Express ■ Diners Club ■ Discover ■ JCB ■ Mastercard ■ Visa	United States Dollar (USD) Canadian Dollar (CAD)
Global Payments	■ American Express ■ Diners Club ■ Discover ■ JCB ■ Mastercard ■ Visa	United States Dollar (USD) Canadian Dollar (CAD)
Heartland Payment Systems	■ American Express ■ Diners Club ■ Discover ■ JCB ■ Mastercard ■ Visa	United States Dollar (USD)
TSYS Acquiring Solutions	■ American Express ■ Diners Club ■ Discover ■ JCB ■ Mastercard ■ Visa	United States Dollar (USD)
WorldPay Atlanta	■ American Express ■ Diners Club ■ Discover ■ JCB ■ Mastercard ■ Visa	United States Dollar (USD)

European Payment Processors

Authorize.Net supports the following European payment processors.

Table 2   **European Payment Processors, Accepted Card Types, and Accepted Currencies**

Payment Processor	Accepted Card Types	Accepted Currencies
AIB Merchant Services	■ Mastercard ■ Visa	British Pounds (GBP) Euro (EUR) United States Dollar (USD)
Barclaycard	■ JCB ■ Mastercard ■ Visa	British Pounds (GBP) Euro (EUR)
First Data Merchant Solutions (MSIP platform)	■ Mastercard ■ Visa	British Pounds (GBP)
HSBC Merchant Services	■ Mastercard ■ Visa	British Pounds (GBP) Euro (EUR) United States Dollar (USD)
Lloyds Bank Cardnet	■ Mastercard ■ Visa	British Pounds (GBP)
Streamline	■ JCB ■ Mastercard ■ Visa	British Pounds (GBP) Euro (EUR) United States Dollar (USD)

Asia-Pacific Processors

Authorize.Net supports the following Asia-Pacific payment processors for Card-Not-Present (CNP) transactions.

Table 3   **Asia-Pacific Payment Processor, Accepted Card Types, and Accepted Currencies**

Payment Processor	Accepted Card Types	Accepted Currencies
FDI Australia	■ Mastercard ■ Visa	Australian Dollar (AUD) New Zealand Dollar (NZD) United States Dollar (USD)
Westpac	■ Mastercard ■ Visa	Australian Dollar (AUD)

EVOSnap

There are multiple EVOSnap processing platforms. If you use the U.S. Dollar (USD), you are assigned to EVOSnap Domestic. If you use any other currencies, you are assigned to EVOSnap International.

Accepted Authorization/Settlement Currencies

- USD—U.S. Dollar
- CAD—Canada Dollar
- CHF—Swiss Franc
- DKK—Danish Krone
- EUR—Euro
- GBP—British Pound
- NOK—Norway Krone
- PLN—Poland złoty (MasterCard Only)
- SEK—Sweden Krone
- ZAR—South African Rand

Accepted Billing Currencies

- USD—U.S. Dollar
- AUD—Australian Dollar
- GBP—British Pound

Accepted Card Types

- Visa
- MasterCard
- American Express
- JCB
- Diners Club—Supported for U.S. services only.

EVOSnap Supported Services

U.S. Services

Table 4   Authorize.Net Services Supported by EVOSnap U.S.

Service	eCommerce	MOTO	Retail
Transaction Types	X	X	X
Authorization only	X	X	X

Table 4   Authorize.Net Services Supported by EVOSnap U.S.

Service	eCommerce	MOTO	Retail
Authorization and capture (sale)	X	X	X
Capture	X	X	X
Void	X	X	X
Credit (refund)	X	X	X
Features			
AVS	X	X	X
CVV2/CVC2/CID	X	X	X
3DS	X		
Purchase card—level 2	X	X	X
Partial Approvals (Partial Authorization)	X	X	X
Supported card types:	X	X	X

- Visa
- Mastercard
- American Express
- Discover
- JCB
- Diners Club

	Apple Pay and soft descriptors are not supported by EVOSnap.
Note	

International Services

Table 5   Authorize.Net Services Supported by EVOSnap International

Service	MOTO	eCommerce
Authorize	X	X
Authorize and Capture	X	X
Capture	X	X
Void	X	X
Credit	X	X
AVS—Visa and American Express only.	X	X
CVV2/CVC2/CID	X	X
3DS		X

Not Supported

- Retail
- Level 2 data
- Soft descriptors
- Partial authorization
- Consolidated accounts (MOTO/eCommerce)—separate accounts are required.
- Automated recurring billing and customer information manager

CVV

EVOSnap Requires CVV for all international transactions. CVV must be enabled in the Authorize.Net merchant Interface's Virtual Terminal settings.

To enable CVV:

Step 1   Navigate to the Authorize.Net merchant interface.

Step 2   Navigate to **Accounts > Settings > Transaction Format Settings > Virtual Terminal**.

Step 3   Check the **View/Edit** box for **Card Code**.

Step 4   Click **Submit**.

International AVS Behavior

The standard behavior of European AVS processing causes a decline of the transaction if the submitted address data does not match. This standard behavior may be overridden on a per-transaction basis, if permitted by EVOSnap. Merchants are configured to either use or not use AVS processing when they are boarded. If they are configured to not use AVS

processing, AVS is not performed, even if the data is included. If the merchant is configured to use AVS, then every transaction must include AVS data, uncless the merchant is authorized by EVOSnap to override the AVS processing.

AVS Response Logic:

```
       /*  Not using G, U, S
           G - The credit card issuing bank is of non-U.S. origin and does
not support AVS
           U - Address information is not available for the customer's
credit card
           S - The U.S. card issuing bank does not support AVS
       */

       if (addressResult == AddressResult.MATCH && postalCodeResult ==
PostalCodeResult.MATCH){
           //1.The street address and the first 5 digits of the ZIP code
match perfectly
           result = AVSResult.Y;
       } else if (addressResult == AddressResult.NO_MATCH &&
postalCodeResult == PostalCodeResult.NO_MATCH){
           //2. Neither the street address nor the 5-digit ZIP code
matches the address and ZIP code on file for the card
           result = AVSResult.N;
       } else if (addressResult == AddressResult.NO_MATCH &&
postalCodeResult == PostalCodeResult.MATCH){
           //3. The first 5 digits of the ZIP code matches, but the street
address does not match
           result = AVSResult.Z;
       } else if (addressResult == AddressResult.MATCH &&
postalCodeResult == PostalCodeResult.NO_MATCH){
           //4. The street address matches, but the 5-digit ZIP code does
not
           result = AVSResult.A;
       } else if (addressResult == AddressResult.BAD_FORMAT ||
postalCodeResult == PostalCodeResult.BAD_FORMAT){
           //5. The AVS data provided is invalid, or AVS is not allowed
for the card type submitted
           result = AVSResult.E;
       } else if (addressResult == AddressResult.NO_RESPONSE_FROM_CARD_
ASSOCIATION || postalCodeResult == PostalCodeResult.NO_RESPONSE_FROM_CARD_
ASSOCIATION){
           //8. AVS was unavailable at the time the transaction was
processed. Retry transaction
           result = AVSResult.R;
       } else if (addressResult == AddressResult.NOT_SET ||
postalCodeResult == PostalCodeResult.NOT_SET){
           //7. Address information was not submitted in the transaction
information, so AVS check could not be performed
           result = AVSResult.B;
       } else {
           result = AVSResult.N;
```

```
    }
```

Customer ID

Customer ID is required when customer data or billing data is present.

API

Customer Code is required. If not present, customer code will be populated with 0000.
Country code must be in ISO format. For example, GBP, CHE, AUS.

Error Codes

RTC 350
Description—EVOSnap: Country must be a valid three-character value if specified.
Message—Country must be a valid three-character value if specified.

RTC 351
Description—EVOSnap: Employee ID cannot be more than 6 characters in length, 4 for a
retail transaction.
Message—Employee ID must be 1 to %x characters in length.
Note—The %x is replaced with a 6 for eCommerce and MOTO transaction types and 4 for
Retail transaction types.

Automated Recurring Billing

Merchants using Automated Recurring Billing must be approved by their MSP.

Billing Information

If any billing information is submitted, all of the billing fields must be provided. This applies
to both U.S. and international platforms.

Developer Support

Resources are available to help you successfully integrate a merchant web site or other
application to the Authorize.Net Payment Gateway.

- The Developer Center provides sandbox accounts, sample code, FAQs, and
  troubleshooting tools.
- Developer training videos cover a variety of topics.

- The developer community provides answers to questions from other Authorize.Net developers.

- Ask us a question at our Developer Support page.

- Search our knowledge base for answers to commonly asked questions.

To submit suggestions for improving or correcting this guide, send email to documentation@authorize.net.

Software Development Kits

Authorize.Net offers software development kits (SDKs) that present an alternate object-oriented model in several popular languages. Use the SDK to program the core payment activities (such as error handling and parsing, network communication, and data encoding) that occur 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:

http://developer.authorize.net/downloads/.

Executing an API Call

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

You can develop a request script in one of two ways:

- Develop a custom script yourself using the API field information provided in this document.

- Use Authorize.Net sample code 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, you must modify the code with developer test account or the merchant's specific payment gateway account information.

Web Service Locations

The following table shows where to find the web service locations.

Table 4   Web Service Locations

Item	Location
Web Service URL in Production	https://api2.authorize.net/xml/v1/request.api
	Legacy but supported URL:
	https://api.authorize.net/xml/v1/request.api
Web Service URL in Developer Test	https://apitest.authorize.net/xml/v1/request.api
WSDL	https://api.authorize.net/xml/v1/schema/AnetApiSchema.xsd

Note	Do not submit transactions to an IP address. Use the URLs shown above.

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 Developer Center at http://developer.authorize.net/testaccount. Developer test accounts cannot be used to test your implementation against the production URL.

CIM Functions

The CIM API comprises these functions:

- createCustomerProfileFromTransactionRequest—Create a customer profile, payment profile, and shipping profile from an existing successful transaction by referencing the transaction ID.

- 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.

- getCustomerProfileIdsRequest—Retrieve all customer profile IDs you have previously created.

- 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.

- getHostedProfilePageRequest—sends a request for access to the hosted CIM page. The response includes a token that enables customers to update their information directly on the Authorize.Net web site.

- 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.

- updateSplitTenderGroupRequest—Update the status of a split tender group (a group of transactions each of which pays for part of one order).

- validateCustomerPaymentProfileRequest—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. 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.

The validationMode Parameter

The validationMode parameter enables you to generate a test transaction at the time you create or update a customer profile. The functions createCustomerProfileRequest, createCustomerPaymentProfileRequest, updateCustomerPaymentProfileRequest, and validateCustomerPaymentProfileRequest all include a validationMode parameter, which can have one of the following values:

- liveMode—This value is the default setting.

  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 changing from $0.01 to $0.00 for

all processors. All other credit card types use $0.01. Standard gateway and merchant account fees may apply to the authorization transactions.

For Visa transactions using $0.00, the billTo address and billTo zip fields are required.

■ testMode—Performs field validation only. All fields are validated. 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 using the Luhn MOD 10 algorithm to verify that the credit card number is in a valid format. This test transaction does not appear on the customer's credit card statement, but it will generate and send a transaction receipt email to the merchant.

■ none—When this value is submitted, no additional validation is performed.

When you call the createCustomerProfileRequest function, you must use a value of *none* if the request does not include any payment profile information.

When you call the validateCustomerPaymentProfileRequest function, you must use either testMode or liveMode.

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

	For information about the hostedProfileValidationMode parameter, see "Guidelines for Parameter Settings," page 117.
Note	

Authentication

All calls to the API must be authenticated to ensure that they originate from authorized sources. The merchant Web services API authenticates calls with the API login ID and transaction key.

Table 5   Merchant Authentication

Element	Description
merchantAuthentication	**Value**: Contains merchant unique information for purposes of authentication
■ name	**Value**: The valid API Login ID for the developer test or merchant account **Format**: 20 characters **Notes:** Submit the API Login ID used to submit transactions
■ transactionKey	**Value**: The valid Transaction Key for the developer test or merchant account **Format**: 16 characters **Notes:** Submit the Transaction Key obtained from the Merchant Interface

Example 1   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 simulated 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 Element for createCustomerProfileFromTransactionRequest

This request enables you to create a CIM profile, payment profile, and shipping profile from an existing successful transaction.

Table 6   Input Element for createCustomerProfileFromTransactionRequest

Element	Description
transId	The transaction ID for the successful transaction that you would like to generate from a customer profile from.

Example 2   createCustomerProfileFromTransactionRequest

```
<?xml version="1.0" encoding="utf-8"?>

<createCustomerProfileFromTransactionRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">

    <merchantAuthentication>

        <name>API_LOGIN</name>

        <transactionKey>TRANSACTION_KEY</transactionKey>

    </merchantAuthentication>

    <transId>122</transId>

</createCustomerProfileFromTransactionRequest>
```

Input Elements for createCustomerProfileRequest

This function is used to create a new customer profile including any customer payment profiles and customer shipping addresses.

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

Table 7   Input Elements for createCustomerProfileRequest

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
profile	**Value**: Contains information for the customer profile.
	Notes: At least one of the following fields must be submitted under profile: **merchantCustomerId**, **description**, or **email**.
▪ merchantCustomerId	**Value**: Merchant assigned ID for the customer.
	Conditional.
	Format: 20-character maximum.
	Notes: Required only if no values for both description and email are submitted.
▪ description	**Value**: Description of the customer or customer profile.
	Conditional.
	Format: 255-character maximum.
	Notes: Required only if no values for both **merchantCustomerId** and **email** are submitted.
▪ email	**Value**: Email address associated with the customer profile.
	Conditional.
	Format: 255-character maximum.
	Notes: Required if no values for both **description** and **merchantCustomerId** are submitted.
	Required only when you use a European payment processor.
▪ paymentProfiles	**Value**: Contains payment profiles for the customer profile.
	Optional.
	Notes: Multiple instances of this element can be submitted to create multiple payment profiles for the customer profile.
● customerType	Optional.
	Format: individual or business

Table 7   Input Elements for createCustomerProfileRequest (Continued)

Field	Description
● billTo	Customer billing information.
• firstName	**Value**: The customer's first name.
	Optional.
	Format: 50-character maximum (no symbols).
	Notes: Required when you use a European payment processor.
	When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• lastName	**Value**: The customer's last name.
	Optional.
	Format: 50-character maximum (no symbols).
	Notes: Required when you use a European payment processor.
	When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• company	**Value**: The name of the company associated with the customer, if applicable.
	Optional.
	Format: 50-character maximum (no symbols).
• address	**Value**: The customer's address.
	Optional.
	Format: 60-character maximum (no symbols).
	Notes: Required when you use a European payment processor.
	When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• city	**Value**: The city of the customer's address.
	Optional.
	Format: 40-character maximum (no symbols).
	Notes: Required when you use a European payment processor.
	When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• state	**Value**: The state of the customer's address.
	Optional.
	Format: 40-character maximum (no symbols).
	Notes: Required when you use a European payment processor.
	When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.

Table 7   Input Elements for createCustomerProfileRequest (Continued)

Field	Description
• zip	**Value**: The ZIP code of the customer's address.
	Optional.
	Format: 20-character maximum (no symbols).
	Notes: Required when you use a European payment processor.
	When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• country	**Value**: The country of the customer's address.
	Optional.
	Format: 60-character maximum (no symbols).
	Notes: Required only when you use a European payment processor.
• phoneNumber	**Value**: The phone number associated with the customer profile.
	Optional.
	Format: 25-digit maximum (no letters).
	For example, (123)123-1234
• faxNumber	**Value**: The fax number associated with the customer profile.
	Optional.
	Format: 25-digit maximum (no letters).
	For example, (123)123-1234
● payment	**Value**: Contains payment profile information for the customer profile.
	Notes: Can contain creditCard or bankAccount.
• creditCard	**Value**: Contains credit card payment information for the payment profile.
	Notes: This element are only required when the payment profile is credit card.
• cardNumber	**Value**: The customer's credit card number.
	Format: 13 to 16 digits (inclusive).
• expirationDate	**Value**: The expiration date for the customer's credit card.
	Format: YYYY-MM

Table 7   Input Elements for createCustomerProfileRequest (Continued)

Field	Description
• cardCode	**Value**: The three- or four-digit number on the back of a credit card (on the front for American Express).
	Optional.
	Format: Numeric.
	Notes: This field is required if the merchant would like to use the Card Code Verification (CCV) security feature. For more information, see the *Merchant Integration Guide* at http://www.authorize.net/support/merchant/.
	cardCode is used only for validation and is not stored in the customer profile. Use it only when submitting **validationMode** with a value of `testMode` or `liveMode`.
• bankAccount	**Value**: Contains bank account payment information for the payment profile.
	Notes: This element are required only when the payment profile is bank account.
accountType	**Value**: The type of bank account for the payment profile.
	Optional
	Format: checking , savings, or businessChecking.
routingNumber	**Value**: The routing number of the customer's bank.
	Format: 9 digits.
accountNumber	**Value**: The customer's bank account number.
	Format: 5 to 17 digits.
nameOnAccount	**Value**: The customer's full name as listed on the bank account.
	Format: 22-character maximum.
echeckType	**Value**: The type of electronic check transaction.
	Optional
	Format: CCD, PPD, TEL, or WEB
	Notes: Currently, the CIM API does not support ARC or BOC transaction types.
bankName	**Value**: The name of the bank associated with the bank account number.
	Optional.
	Format: 50-character maximum.
• shipToList	**Value**: Contains shipping address information for the customer profile.

Table 7   Input Elements for createCustomerProfileRequest (Continued)

Field	Description
• firstName	**Value**: The customer's first name. Optional. **Format**: 50-character maximum (no symbols). **Notes**: Required when you use a European payment processor. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• lastName	**Value**: The customer's last name. Optional. **Format**: 50-character maximum (no symbols). **Notes**: Required when you use a European payment processor. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• company	**Value**: The name of the company associated with the customer, if applicable. Optional. **Format**: 50-character maximum (no symbols).
• address	**Value**: The customer's shipping address. Optional. **Format**: 60-character maximum (no symbols). **Notes**: Required when you use a European payment processor. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• city	**Value**: The city of the customer's shipping address. Optional. **Format**: 40-character maximum (no symbols). **Notes**: Required when you use a European payment processor. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• state	**Value**: The state of the customer's shipping address. Optional. **Format**: 40-character maximum (no symbols). **Notes**: Required when you use a European payment processor. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.

Table 7   Input Elements for createCustomerProfileRequest (Continued)

Field	Description
• zip	**Value**: The ZIP code of the customer's shipping address. Optional. **Format**: 20-character maximum (no symbols). **Notes**: Required when you use a European payment processor. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• country	**Value**: The country of the customer's shipping address. Optional. **Format**: 60-character maximum (no symbols).
phoneNumber	**Value**: The phone number associated with the customer profile. Optional. **Format**: 25-digits maximum (no letters). For example, (123)123-1234
faxNumber	**Value**: The fax number associated with the customer profile. Optional. **Format**: 25-digits maximum (no letters). For example, (123)123-1234
validationMode	**Value**: Indicates the processing mode for the request. Optional. **Format**: none, testMode, or liveMode **Notes**: For more information on use and restrictions of validationMode, see "The validationMode Parameter," page 15.

For information about output for this function, see "Output for createCustomerProfileResponse," page 87.

Example 3   **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>
   <validationMode>liveMode</validationMode>
  </createCustomerProfileRequest>
```

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 parameters for executing an API call to the c**reateCustomerPaymentProfile**Request function.

Table 8 **Input Elements for createCustomerPaymentProfileRequest**

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 290character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	**Value**: Payment gateway assigned ID associated with the customer profile.
	Format: Numeric.
paymentProfile	**Value**: Contains payment information for the customer profile.
■ customerType	Optional.
	Format: individual or business
■ billTo	**Customer** information
● firstName	**Value**: The customer's first name.
	Optional.
	Format: 50-character maximum (no symbols).
	Notes: Required when you use a European payment processor.
	When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
● lastName	**Value**: The customer's last name.
	Optional.
	Format: 50-character maximum (no symbols).
	Notes: Required when you use a European payment processor.
	When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
● company	**Value**: The name of the company associated with the customer, if applicable.
	Optional.
	Format: 50-character maximum (no symbols).

Table 8   Input Elements for createCustomerPaymentProfileRequest (Continued)

Field	Description
• address	**Value**: The customer's address. Optional. **Format**: 60-character maximum (no symbols). **Notes**: Required when you use a European payment processor. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• city	**Value**: The city of the customer's address. Optional. **Format**: 40-character maximum (no symbols). **Notes**: Required when you use a European payment processor. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• state	**Value**: The state of the customer's address. Optional. **Format**: 40-character maximum (no symbols). **Notes**: Required when you use a European payment processor. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• zip	**Value**: The ZIP code of the customer's address. Optional. **Format**: 20-character maximum (no symbols). **Notes**: Required when you use a European payment processor. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
• country	**Value**: The country of the customer's address. Optional. **Format**: 60-character maximum (no symbols).
• phoneNumber	**Value**: The phone number associated with the customer's address. Optional. **Format**: 25-digit maximum (no letters). For example, (123)123-1234
• faxNumber	**Value**: The fax number associated with the customer's address. Optional. **Format**: 25-digit maximum (no letters). For example, (123)123-1234

Table 8   Input Elements for createCustomerPaymentProfileRequest (Continued)

Field	Description
■ payment	**Value**: Contains payment information for the customer profile.
	Notes: Can contain **CreditCardSimpleType** or **BankAccountType**.
● creditCard	**Value**: Contains credit card payment information for the customer profile.
	Notes: This pelement is required only when the payment profile is credit card.
● cardNumber	**Value**: The customer's credit card number.
	Format: 13 to 16 digits (inclusive).
● expirationDate	**Value**: The expiration date for the customer's credit card.
	Format: YYYY-MM
● cardCode	**Value**: The three- or four-digit number on the back of a credit card (on the front for American Express).
	Optional.
	Format: Numeric.
	Notes: This field is required if the merchant would like to use the Card Code Verification (CCV) security feature. For more information, see the *Merchant Integration Guide* at /http://www.authorize.net/support/ Merchant/default.htm.
	cardCode is used only for validation and is not stored in the customer profile. Use it only when submitting **validationMode** with a value of **testMode** or **liveMode**.
● bankAccount	**Value**: Contains bank account payment information for the customer profile.
	Notes: This element is required only when the payment profile is bank account.
● accountType	**Value**: The type of bank account for the payment profile.
	Optional.
	Format: checking, savings, or businessChecking
● routingNumber	**Value**: The routing number of the customer's bank.
	Format: 9 digits.
● accountNumber	**Value**: The customer's bank account number.
	Format: 5 to 17 digits (inclusive).
● nameOnAccount	**Value**: The customer's full name as listed on the bank account.
	Format: 22-character maximum.

Table 8   Input Elements for createCustomerPaymentProfileRequest (Continued)

Field	Description
• echeckType	**Value**: The type of electronic check transaction. Optional. **Format**: CCD, PPD, TEL, or WEB **Notes**: Currently, the CIM API does not support ARC or BOC transaction types.
• bankName	**Value**: The name of the bank associated with the bank account number. Optional. **Format**: 50-character maximum.
validationMode	**Value**: Indicates the processing mode for the request. **Format**: none, testMode, or liveMode **Notes**: For more information on use and restrictions of **validationMode**, see "The validationMode Parameter," page 15.

For information about output parameters for this function, see "Output for createCustomerPaymentProfileResponse," page 90.

Example 4   createCustomerPaymentProfileRequest

```xml
<?xml version="1.0" encoding="utf-8"?>
<createCustomerPaymentProfileRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <customerProfileId>10000</customerProfileId>
  <paymentProfile>
    <billTo>
      <firstName>John</firstName>
      <lastName>Doe</lastName>
      <company></company>
      <address>123 Main St.</address>
      <city>Bellevue</city>
      <state>WA</state>
      <zip>98004</zip>
      <country>USA</country>
      <phoneNumber>000-000-0000</phoneNumber>
      <faxNumber></faxNumber>
    </billTo>
    <payment>
      <creditCard>
        <cardNumber>4111111111111111</cardNumber>
        <expirationDate>2023-12</expirationDate>
      </creditCard>
    </payment>
  </paymentProfile>
  <validationMode>liveMode</validationMode>
</createCustomerPaymentProfileRequest>
```

Input Parameters for createCustomerShippingAddressRequest

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 c**reateCustomerShippingAddress**Request function.

Table 9   Input Parameters for createCustomerShippingAddressRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	**Value**: Payment gateway assigned ID associated with the customer profile.
	Format: Numeric.
address	**Value**: Contains shipping address information for the customer profile.
■ firstName	**Value**: The customer's first name.
	Optional.
	Format: 50-character maximum (no symbols).
	Notes: When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
■ lastName	**Value**: The customer's last name.
	Optional.
	Format: 50-character maximum (no symbols).
	Notes: When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
■ company	**Value**: The name of the company associated with the customer, if applicable.
	Optional.
	Format: 50-character maximum (no symbols).

Table 9   **Input Parameters for createCustomerShippingAddressRequest (Continued)**

Element	Description
■ address	**Value**: The customer's shipping address. Optional. **Format**: 60-character maximum (no symbols). **Notes**: When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
■ city	**Value**: The city of the customer's shipping address. Optional. **Format**: 40-character maximum (no symbols). **Notes**: When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
■ state	**Value**: The state of the customer's shipping address. Optional. **Format**: 40-character maximum (no symbols). **Notes**: When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
■ zip	**Value**: The ZIP code of the customer's shipping address. Optional. **Format**: 20-character maximum (no symbols). **Notes**: When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
■ country	**Value**: The country of the customer's shipping address. Optional. **Format**: 60-character maximum (no symbols).
■ phoneNumber	**Value**: The phone number associated with the customer's shipping address. Optional. **Format**: 25-digit maximum (no letters). For example, (123)123-1234
■ faxNumber	**Value**: The fax number associated with the customer's shipping address Optional. **Format**: 25-digit maximum (no letters). For example, (123)123-1234

For information about output parameters for this function, see "Output for createCustomerShippingAddressResponse," page 91.

Example 5   createCustomerShippingAddressRequest

```xml
<?xml version="1.0" encoding="utf-8"?>
<createCustomerShippingAddressRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <customerProfileId>10000</customerProfileId>
  <address>
    <firstName>John</firstName>
    <lastName>Doe</lastName>
    <company></company>
    <address>123 Main St.</address>
    <city>Bellevue</city>
    <state>WA</state>
    <zip>98004</zip>
    <country>USA</country>
    <phoneNumber>000-000-0000</phoneNumber>
    <faxNumber></faxNumber>
  </address>
</createCustomerShippingAddressRequest>
```

Input Elements for createCustomerProfileTransactionRequest

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, see the *Merchant Integration Guide* at http://www.authorize.net/support/merchant/.

> **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
c**reateCustomerProfileTransaction**Request function for an Authorization Only transaction.

**Table 10   Input Elements for
createCustomerProfileTransactionRequest**

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
transaction	**Value**: Contains transaction information.
■ profileTransAuthOnly	**Value**: The transaction type that is being requested.
	Notes: Only one transaction type is allowed per request.
● amount	**Value**: The total amount of the transaction.
	Format: Up to 4 digits after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount should include all other amounts such as tax amount, shipping amount, etc.
● tax	**Value**: Contains tax information for the transaction.
	Optional.
• amount	**Value**: The tax amount for the transaction.
	Optional.
	Format: Up to 4 digits after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the tax for the transaction.
	Optional.
	Format: 31-character maximum.
• description	**Value**: The tax description for the transaction.
	Optional.
	Format: U255-character maximum.

**Table 10   Input Elements for
       createCustomerProfileTransactionRequest (Continued)**

Element	Description
● shipping	**Value**: Contains shipping information for the transaction.
	Optional.
• amount	**Value**: The shipping amount for the transaction.
	Optional.
	Format: 4-digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the shipping for the transaction.
	Optional.
	Format: 31-character maximum.
• description	**Value**: The shipping description for the transaction.
	Optional.
	Format: 255-character maximum.
● duty	**Value**: Contains duty information for the transaction.
	Optional.
• amount	**Value**: The duty amount for the transaction.
	Optional.
	Format: 4-digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the duty for the transaction.
	Optional.
	Format: 31-character maximum.
• description	**Value**: The duty description for the transaction.
	Optional.
	Format: 255-character maximum.

Table 10 **Input Elements for**
createCustomerProfileTransactionRequest (Continued)

Element	Description
• lineItems	**Value**: Contains line item details about the order.
	Optional.
	Notes: Up to 30 distinct instances of this element can be included per transaction to describe items included in the order.
• itemId	**Value**: The ID assigned to the item.
	Required if **lineItems** is submitted.
	Format: 31-character maximum.
• name	**Value**: A short description of an item
	Required if **lineItems** is submitted.
	Format: 31-character maximum.
• description	**Value**: A detailed description of an item
	Optional
	Format: 255-character maximum.
• quantity	**Value**: The quantity of an item.
	Required if **lineItems** is submitted.
	Format: 4-digit maximum (up to two decimal places).
• unitPrice	**Value**: Cost of an item per unit excluding tax, freight, and duty.
	Required if **lineItems** is submitted.
	Format: 4-digit maximum with a decimal point (no dollar symbol).
	For example, 4.95
• taxable	**Value**: Indicates whether the item is subject to tax.
	Optional.
	Format: true or false
• customerProfileId	**Value**: Payment gateway assigned ID associated with the customer profile.
	Format: Numeric.
• customerPaymentProfileId	**Value**: Payment gateway assigned ID associated with the customer payment profile.
	Format: Numeric.

Table 10 **Input Elements for**
createCustomerProfileTransactionRequest (Continued)

Element	Description
● customerShippingAddressId	**Value**: Payment gateway assigned ID associated with the customer shipping address.
	Optional.
	Format: Numeric.
	Notes: If **customerShippingAddressId** is not passed, shipping information will not be included with the transaction.
● order	**Value**: Contains information about the order.
	Optional.
• invoiceNumber	**Value**: The merchant assigned invoice number for the transaction.
	Optional.
	Format: 20-character maximum (no symbols).
• description	**Value**: The transaction description.
	Optional.
	Format: 255-character maximum (no symbols).
• purchaseOrderNumber	**Value**: The merchant assigned purchase order number.
	Optional.
	Format: 25-character maximum (no symbols).
● taxExempt	**Value**: The tax exempt status.
	Optional.
	Format: true or false
● recurringBilling	**Value**: The recurring billing status.
	Optional.
	Format: true or false
● cardCode	**Value**: The customer's card code (the three- or four-digit number on the back or front of a credit card).
	Conditional.
	Format: 3 to 4 digits.
	Notes: This field is required if the merchant would like to use the Card Code Verification (CCV) security feature. For more information, see the *Merchant Integration Guide* at http://www.authorize.net/support/merchant/

Table 10   Input Elements for createCustomerProfileTransactionRequest (Continued)

Element	Description
● splitTenderId	**Value**: Payment gateway-assigned number associated with the order.
	Conditional
	Format: 6-digits maximum.
	Notes: This field is required for second and subsequent transactions related to a partial authorization transaction.
extraOptions	**Value**: Information in name/value pair format that does not exist within CIM, such as customer IP address, etc.
	Optional.
	Format: String.
	Notes: For a complete list of the transaction variable names available, review the *AIM Implementation Guide* located at http://www.authorize.net/support/AIM_guide.pdf.

For information about output parameters for this function, see "Input Elements for createCustomerProfileTransactionRequest," page 32.

Example 6   createCustomerProfileTransactionRequest for an Authorization Only transaction

```
<?xml version="1.0" encoding="utf-8"?>
<createCustomerProfileTransactionRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <transaction>
    <profileTransAuthOnly>
      <amount>10.95</amount>
      <tax>
        <amount>1.00</amount>
        <name>WA state sales tax</name>
        <description>Washington state sales tax</description>
      </tax>
      <shipping>
        <amount>2.00</amount>
        <name>ground based shipping</name>
        <description>Ground based 5 to 10 day shipping
        </description>
      </shipping>
<lineItems>
      <itemId>ITEM00001</itemId>
      <name>name of item sold</name>
      <description>Description of item sold</description>
      <quantity>1</quantity>
      <unitPrice>6.95</unitPrice>
```

```
      <taxable>true</taxable>
    </lineItems>
    <lineItems>
      <itemId>ITEM00002</itemId>
      <name>name of other item sold</name>
      <description>Description of other item sold
      </description>
      <quantity>1</quantity>
      <unitPrice>1.00</unitPrice>
      <taxable>true</taxable>
    </lineItems>
    <customerProfileId>10000</customerProfileId>
    <customerPaymentProfileId>20000</customerPaymentProfileId>
  <customerShippingAddressId>30000</customerShippingAddressId>
<order>
      <invoiceNumber>INV000001</invoiceNumber>
      <description>description of transaction</description>
      <purchaseOrderNumber>PONUM000001</purchaseOrderNumber>
    </order>
    <taxExempt>false</taxExempt>
    <recurringBilling>false</recurringBilling>
    <cardCode>000</cardCode>
    <splitTenderId>123456</splitTenderId>
  </profileTransAuthOnly>
</transaction>
<extraOptions><![CDATA[x_customer_ip=100.0.0.1&x_authentication_indicator=5&x_
cardholder_authentication_value=uq3wDbqt8A26rfANAAAAAP]]></extraOptions>
</createCustomerProfileTransactionRequest>
```

For Authorization and Capture Transactions

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

**Table 11   Input Elements for
            createCustomerProfileTransactionRequest**

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 290character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
transaction	**Value**: Contains transaction information.
▪ profileTransAuthCapture	**Value**: The transaction type that is being requested.
	Notes: Only one transaction type is allowed per request.

Table 11 Input Elements for
createCustomerProfileTransactionRequest (Continued)

Element	Description
• amount	**Value**: The total amount of the transaction.
	Format: 4-digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount should include all other amounts such as tax amount, shipping amount, etc.
• tax	**Value**: Contains tax information for the transaction.
	Optional
• amount	**Value**: The tax amount for the transaction.
	Optional.
	Format: 4-digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the tax for the transaction.
	Optional.
	Format: 31-character maximum.
• description	**Value**: The tax description for the transaction.
	Optional.
	Format: 255-character maximum.
• shipping	**Value**: Contains shipping information for the transaction.
	Optional.
• amount	**Value**: The shipping amount for the transaction.
	Optional.
	Format: 4-digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the shipping for the transaction.
	Optional.
	Format: 31-character maximum.

Table 11   Input Elements for
createCustomerProfileTransactionRequest (Continued)

Element	Description
• description	**Value**: The shipping description for the transaction. Optional. **Format**: 255-character maximum.
• duty	**Value**: Contains duty information for the transaction. Optional.
• amount	**Value**: The duty amount for the transaction. Optional. **Format**: 4 digit maximum after the decimal point (no dollar symbol). For example, 12.99 or 12.9999 **Notes**: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the duty for the transaction. Optional. **Format**: 31-character maximum.
• description	**Value**: The duty description for the transaction. Optional. **Format**: 255-character maximum.
• lineItems	**Value**: Contains line item details about the order. Required if **lineItems** is submitted. **Notes**: Up to 30 distinct instances of this parameter and its children can be included per transaction to describe items included in the order.
• itemId	**Value**: The ID assigned to the item. Required if **lineItems** is submitted. **Format**: 31-character maximum.
• name	**Value**: A short description of an item. Required if **lineItems** is submitted. **Format**: 31-character maximum.
• description	**Value**: A detailed description of an item. Optional. **Format**: 255-character maximum.
• quantity	**Value**: The quantity of an item. Required if **lineItems** is submitted. **Format**: 4-digit maximum (up to two decimal places).

Table 11 **Input Elements for**
createCustomerProfileTransactionRequest (Continued)

Element	Description
• unitPrice	**Value**: Cost of an item per unit excluding tax, freight, and duty. Required if **lineItems** is submitted. **Format**: 4 digit maximum with a decimal point (no dollar symbol). For example, 4.95
• taxable	**Value**: Indicates whether the item is subject to tax. Optional. **Format**: TRUE or FALSE
• customerProfileId	**Value**: Payment gateway-assigned ID associated with the customer profile. **Format**: Numeric.
• customerPaymentProfileId	**Value**: Payment gateway-assigned ID associated with the customer payment profile. **Format**: Numeric.
• customerShippingAddressId	**Value**: Payment gateway-assigned ID associated with the customer shipping address. Optional. **Format**: Numeric. **Notes**: If **customerShippingAddressId** is not passed, shipping information will not be included with the transaction.
• order	**Value**: Contains information about the order. Optional.
• invoiceNumber	**Value**: The merchant-assigned invoice number for the transaction. Optional. **Format**: 20-character maximum (no symbols).
• description	**Value**: The transaction description. Optional. **Format**: 255-character maximum (no symbols).
• purchaseOrderNumber	**Value**: The merchant-assigned purchase order number. Optional. **Format**: 25-character maximum (no symbols).

**Table 11   Input Elements for
createCustomerProfileTransactionRequest (Continued)**

Element	Description
• taxExempt	**Value**: The tax exempt status.
	Optional.
	Format: TRUE or FALSE
• recurringBilling	**Value**: The recurring billing status.
	Optional.
	Format: TRUE or FALSE
• cardCode	The customer's card code (the three- or four-digit number on the back or front of a credit card).
	Conditional.
	Format: 3 to 4 digits.
	Notes: This field is required if the merchant would like to use the Card Code Verification (CCV) security feature. For more information, see the *Merchant Integration Guide* at http://www.authorize.net/support/merchant/default.htm.
• splitTenderId	**Value:** The payment gateway-assigned number associated with the order.
	Conditional.
	Format: 6-digit maximum.
	Notes: 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.
	Format: String.
	Notes: For a complete list of the transaction variable names available, review the *AIM Implementation Guide* located at http://www.authorize.net/support/AIM_guide.pdf.

For information about output parameters for this function, see "Output for createCustomerProfileTransactionResponse," page 92.

Example 7   createCustomerProfileTransactionRequest for an Authorization and Capture transaction

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

```
    <transaction>
      <profileTransAuthCapture>
        <amount>10.95</amount>
        <tax>
          <amount>1.00</amount>
          <name>WA state sales tax</name>
          <description>Washington state sales tax</description>
        </tax>
        <shipping>
          <amount>2.00</amount>
          <name>ground based shipping</name>
          <description>Ground based 5 to 10 day shipping</description>
        </shipping>
        <lineItems>
          <itemId>ITEM00001</itemId>
          <name>name of item sold</name>
          <description>Description of item sold</description>
          <quantity>1</quantity>
          <unitPrice>6.95</unitPrice>
          <taxable>true</taxable>
        </lineItems>
        <lineItems>
          <itemId>ITEM00002</itemId>
          <name>name of other item sold</name>
          <description>Description of other item sold</description>
          <quantity>1</quantity>
          <unitPrice>1.00</unitPrice>
          <taxable>true</taxable>
        </lineItems>
        <customerProfileId>10000</customerProfileId>
        <customerPaymentProfileId>20000</customerPaymentProfileId>
        <customerShippingAddressId>30000</customerShippingAddressId>
        <order>
          <invoiceNumber>INV000001</invoiceNumber>
          <description>description of transaction</description>
          <purchaseOrderNumber>PONUM000001</purchaseOrderNumber>
        </order>
        <taxExempt>false</taxExempt>
        <recurringBilling>false</recurringBilling>
        <cardCode>000</cardCode>
        <splitTenderId>123456</splitTenderId>
      </profileTransAuthCapture>
    </transaction>
    <extraOptions><![CDATA[x_customer_ip=100.0.0.1]]></extraOptions>
</createCustomerProfileTransactionRequest>
```

For Capture Only Transactions

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

Table 12   Input Elements for createCustomerProfileTransactionRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
transaction	**Value**: Contains transaction information.
▪ profileTransCaptureOnly	**Value**: The transaction type that is being requested.
	Notes: Only one transaction type is allowed per request.
● amount	**Value**: The total amount of the transaction.
	Format: 4 digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount should include all other amounts such as tax amount, shipping amount, etc.
● tax	**Value**: Contains tax information for the transaction.
	Optional.
• amount	**Value**: The tax amount for the transaction.
	Optional.
	Format: 4 digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the tax for the transaction.
	Optional.
	Format: 31-character maximum.
• description	**Value**: The tax description for the transaction.
	Optional.
	Format: 255-character maximum.

**Table 12   Input Elements for
createCustomerProfileTransactionRequest (Continued)**

Element	Description
● shipping	**Value**: Contains shipping information for the transaction. Optional
• amount	**Value**: The shipping amount for the transaction. Optional. **Format**: 4 digit maximum after the decimal point (no dollar symbol). For example, 12.99 or 12.9999 **Notes**: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the shipping for the transaction. Optional. **Format**: 31-character maximum.
• description	**Value**: The shipping description for the transaction. Optional. **Format**: 255-character maximum.
● duty	**Value**: Contains duty information for the transaction. Optional.
• amount	**Value**: The duty amount for the transaction. Optional. **Format**: 4-digit maximum after the decimal point (no dollar symbol). For example, 12.99 or 12.9999 **Notes**: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the duty for the transaction. Optional. **Format**: 31-character maximum.
• description	**Value**: The duty description for the transaction. Optional. **Format**: 255-character maximum.

Table 12   Input Elements for
createCustomerProfileTransactionRequest (Continued)

Element	Description
• lineItems	**Value**: Contains line item details about the order.
	Optional.
	Notes: Up to 30 distinct instances of this parameter and its children can be included per transaction to describe items included in the order.
• itemId	**Value**: The ID assigned to the item.
	Required if **lineItems** is submitted.
	Format: 31-character maximum.
• name	**Value**: A short description of an item.
	Required if **lineItems** is submitted.
	Format: 31-character maximum.
• description	**Value**: A detailed description of an item.
	Optional.
	Format: 255-character maximum.
• quantity	**Value**: The quantity of an item.
	Required if **lineItems** is submitted.
	Format: 4-digit maximum (up to two decimal places).
• unitPrice	**Value**: Cost of an item per unit excluding tax, freight, and duty.
	Required if **lineItems** is submitted.
	Format: 4-digit maximum with a decimal point (no dollar symbol).
	For example, 4.95
• taxable	**Value**: Indicates whether the item is subject to tax.
	Optional.
	Format: TRUE or FALSE
• customerProfileId	**Value**: Payment gateway assigned ID associated with the customer profile.
	Format: Numeric.
• customerPaymentProfileId	**Value**: Payment gateway assigned ID associated with the customer payment profile.
	Format: Numeric.

**Table 12   Input Elements for
              createCustomerProfileTransactionRequest (Continued)**

Element	Description
• customerShippingAddressId	**Value**: Payment gateway assigned ID associated with the customer shipping address. Optional. **Format**: Numeric. **Notes**: If **customerShippingAddressId** is not passed, shipping information will not be included with the transaction.
• order	**Value**: Contains information about the order. Optional.
• invoiceNumber	**Value**: The merchant assigned invoice number for the transaction. Optional. **Format**: 20-character maximum (no symbols).
• description	**Value**: The transaction description. Optional. **Format**: 255-character maximum (no symbols).
• purchaseOrderNumber	**Value**: The merchant assigned purchase order number. Optional. **Format**: 25-character maximum (no symbols).
• taxExempt	**Value**: The tax exempt status. Optional. **Format**: TRUE or FALSE
• recurringBilling	**Value**: The recurring billing status. Optional. **Format**: TRUE or FALSE
• cardCode	**Value**: The customer's card code (the three- or four-digit number on the back or front of a credit card). Conditional. **Format**: 3 to 4 digits. **Notes**: This field is required if the merchant would like to use the Card Code Verification (CCV) security feature. For more information, see the *Merchant Integration Guide* at http://www.authorize.net/support/Merchant/default.htm.

Table 12 **Input Elements for**
createCustomerProfileTransactionRequest (Continued)

Element	Description
● splitTenderId	**Value**: Payment gateway-assigned number associated with the order.
	Conditional.
	Format: 6-digit maximum.
	Notes: This field is only required for second and subsequent transactions related to a partial authorizaqtion transaction.
● approvalCode	**Value**: The authorization code of an original transaction required for a Capture Only.
	Conditional.
	Format: 6 characters.
	Notes: This field is only required for the Capture Only transaction type.
extraOptions	**Value**: Information in name/value pair format that does not exist within CIM, such as customer IP address, etc.
	Optional.
	Format: String.
	Notes: For a complete list of the transaction variable names available, review the *AIM Implementation Guide* located at http://www.authorize.net/support/AIM_guide.pdf.

For information about output parameters for this function, see "Output for createCustomerProfileTransactionResponse," page 92.

Example 8 **createCustomerProfileTransactionRequest for a Capture Only transaction**

```
<?xml version="1.0" encoding="utf-8"?>
<createCustomerProfileTransactionRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <transaction>
    <profileTransCaptureOnly>
      <amount>10.95</amount>
      <tax>
        <amount>1.00</amount>
        <name>WA state sales tax</name>
        <description>Washington state sales tax</description>
      </tax>
      <shipping>
        <amount>2.00</amount>
        <name>ground based shipping</name>
```

```
        <description>Ground based 5 to 10 day shipping</description>
      </shipping>
      <lineItems>
        <itemId>ITEM00001</itemId>
        <name>name of item sold</name>
        <description>Description of item sold</description>
        <quantity>1</quantity>
        <unitPrice>6.95</unitPrice>
        <taxable>true</taxable>
      </lineItems>
      <lineItems>
        <itemId>ITEM00002</itemId>
        <name>name of other item sold</name>
        <description>Description of other item sold</description>
        <quantity>1</quantity>
        <unitPrice>1.00</unitPrice>
        <taxable>true</taxable>
      </lineItems>
      <customerProfileId>10000</customerProfileId>
      <customerPaymentProfileId>20000</customerPaymentProfileId>
      <customerShippingAddressId>30000</customerShippingAddressId>
      <order>
        <invoiceNumber>INV000001</invoiceNumber>
        <description>description of transaction</description>
        <purchaseOrderNumber>PONUM000001</purchaseOrderNumber>
      </order>
      <taxExempt>false</taxExempt>
      <recurringBilling>false</recurringBilling>
      <cardCode>000</cardCode>
      <approvalCode>000000</approvalCode>
      <splitTenderId>123456</splitTenderId>
    </profileTransCaptureOnly>
  </transaction>
  <extraOptions><![CDATA[x_customer_ip=100.0.0.1]]></extraOptions>
</createCustomerProfileTransactionRequest>
```

For Prior Authorization and Capture Transactions

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

Table 13 **Input Elements for createCustomerProfileTransactionRequest**

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
transaction	**Value**: Contains transaction information.
▪ profileTransPriorAuthCapture	**Value**: The transaction type that is being requested.
	Notes: Only one transaction type is allowed per request.
● amount	**Value**: The total amount of the transaction.
	Format: 4-digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount should include all other amounts such as tax amount, shipping amount, etc.
● tax	**Value**: Contains tax information for the transaction.
	Optional.
	Notes: Tax information from the original authorization transaction will be used if this field is not submitted.
• amount	**Value**: The tax amount for the transaction.
	Optional.
	Format: 4-digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the tax for the transaction.
	Optional.
	Format: 31-character maximum.

Table 13   Input Elements for
             createCustomerProfileTransactionRequest (Continued)

Element	Description
• description	**Value**: The tax description for the transaction. Optional. **Format**: 255-character maximum.
● shipping	**Value**: Contains shipping information for the transaction. Optional. **Notes**: Shipping information from the original authorization transaction will be used if this field is not submitted.
• amount	**Value**: The shipping amount for the transaction. Optional. **Format**: 4-digit maximum after the decimal point (no dollar symbol). For example, 12.99 or 12.9999 **Notes**: This amount must be included in the total amount for the transaction.
● name	**Value**: The name of the shipping for the transaction. Optional. **Format**: 31-character maximum.
• description	**Value**: The shipping description for the transaction. Optional. **Format**: 255-character maximum.
● duty	**Value**: Contains duty information for the transaction. Optional. **Notes**: Duty information from the original authorization transaction will be used if this field is not submitted.
• amount	**Value**: The duty amount for the transaction. Optional. **Format**: 4-digit maximum after the decimal point (no dollar symbol). For example, 12.99 or 12.9999 **Notes**: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the duty for the transaction. Optional. **Format**: 31-character maximum.

Table 13   Input Elements for createCustomerProfileTransactionRequest (Continued)

Element	Description
• description	**Value**: The duty description for the transaction. Optional. **Format**: 255-character maximum.
● lineItems	**Value**: Contains line item details about the order. Optional. **Notes**: 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	**Value**: The ID assigned to the item. Required if **lineItems** is submitted. **Format**: 31-character maximum.
• name	**Value**: A short description of an item. Required if **lineItems** is submitted. **Format**: 31-character maximum.
• description	**Value**: A detailed description of an item. Optional. **Format**: 255-character maximum.
• quantity	**Value**: The quantity of an item. Required if **lineItems** is submitted. **Format**: 4-digit maximum (up to two decimal places).
• unitPrice	**Value**: Cost of an item per unit excluding tax, freight, and duty. Required if **lineItems** is submitted. **Format**: 4-digit maximum with a decimal point (no dollar symbol). For example, 4.95
• taxable	**Value**: Indicates whether the item is subject to tax. Optional **Format**: TRUE or FALSE
● customerProfileId	**Value**: Payment gateway-assigned ID associated with the customer profile. **Format**: Numeric. **Notes**: If a value is submitted for this field, it must be the same ID used for the original authorization transaction.

Table 13 Input Elements for
createCustomerProfileTransactionRequest (Continued)

Element	Description
• customerPaymentProfileId	**Value**: Payment gateway-assigned ID associated with the customer payment profile.
	Format: Numeric.
	Notes: If a value is submitted for this field, it must be the same ID used for the original authorization transaction.
• customerShippingAddressId	**Value**: Payment gateway-assigned ID associated with the customer shipping address.
	Optional.
	Format: Numeric.
	Notes: If a value is submitted for this field, it must be the same ID used for the original authorization transaction.
• transId	**Value**: The payment gateway-assigned transaction ID of the original transaction.
	Format: Numeric.
extraOptions	**Value**: Information in name/value pair format that does not exist within CIM, such as customer IP address, etc.
	Optional.
	Format: String.
	Notes: For a complete list of the transaction variable names available, review the *AIM Implementation Guide* located at http://www.authorize.net/support/AIM_guide.pdf.

For information about output parameters for this function, see "Output for
createCustomerProfileTransactionResponse," page 92.

Example 9 **createCustomerProfileTransactionRequest for a Prior Authorization and Capture transaction**

```
<?xml version="1.0" encoding="utf-8"?>
<createCustomerProfileTransactionRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <transaction>
    <profileTransPriorAuthCapture>
      <amount>10.95</amount>
      <tax>
        <amount>1.00</amount>
        <name>WA state sales tax</name>
        <description>Washington state sales tax</description>
```

```
          </tax><shipping>
            <amount>2.00</amount>
            <name>ground based shipping</name>
            <description>Ground based 5 to 10 day shipping</description>
          </shipping>
          <lineItems>
            <itemId>ITEM00001</itemId>
            <name>name of item sold</name>
            <description>Description of item sold</description>
            <quantity>1</quantity>
            <unitPrice>6.95</unitPrice>
            <taxable>true</taxable>
          </lineItems>
          <lineItems>
            <itemId>ITEM00002</itemId>
            <name>name of other item sold</name>
            <description>Description of other item sold</description>
            <quantity>1</quantity>
            <unitPrice>1.00</unitPrice>
            <taxable>true</taxable>
          </lineItems>
          <customerProfileId>10000</customerProfileId>
          <customerPaymentProfileId>20000</customerPaymentProfileId>
          <customerShippingAddressId>30000</customerShippingAddressId>
          <transId>40000</transId>
        </profileTransPriorAuthCapture>
      </transaction>
      <extraOptions><![CDATA[]]></extraOptions>
</createCustomerProfileTransactionRequest>
```

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 they will be validated if they are included.

If you are submitting a refund for a non-CIM transaction, the following guidelines apply:

- you must include **transId**, **creditCardNumberMasked** (or **bankRoutingNumberMasked** and **bankAccountNumberMasked**).

- do not include **customerProfileId**, **customerPaymentProfileId**, or **customerShippingAddressId**.

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

- you must be enrolled in Expanded Credit Capabilities (ECC). For more information about ECC, go to http://www.authorize.net/files/ecc.pdf.

- you must include **customerProfileId** and **customerPaymentProfileId**.

- **customerShippingAddressId** is optional.

- do not include **transId**, **creditCardNumberMasked**, **bankRoutingNumberMasked**, or **bankAccountNumberMasked**.

The following table lists the input elements for executing an API call to the c**reateCustomerProfileTransaction**Request function for a Refund transaction.

Table 14   Input Elements for createCustomerProfileTransactionRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
transaction	**Value**: Contains transaction information.
■ profileTransRefund	**Value**: The transaction type that is being requested.
	Notes: Only one transaction type is allowed per request.
● amount	**Value**: The total amount to be refunded.
	Format: 4-digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount should include all other amounts such as tax amount, shipping amount, etc.
● tax	**Value**: Contains tax information for the refund.
	Optional.
• amount	**Value**: The tax amount to be refunded.
	Optional.
	Format: 4-digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the tax for the transaction.
	Optional.
	Format: 31-character maximum.
• description	**Value**: The tax description for the transaction.
	Optional.
	Format: 255-character maximum.

Table 14 **Input Elements for createCustomerProfileTransactionRequest (Continued)**

Element	Description
• shipping	**Value**: Contains shipping information for the refund.
	Optional.
• amount	**Value**: The shipping amount to be refunded.
	Optional.
	Format: 4 digit. maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the shipping for the transaction.
	Optional.
	Format: 31-character maximum.
• description	**Value**: The shipping description for the transaction.
	Optional.
	Format: 255-character maximum.
• duty	**Value**: Contains duty information for the refund.
	Optional.
• amount	**Value**: The duty amount to be refunded.
	Optional.
	Format: 4-digit maximum after the decimal point (no dollar symbol).
	For example, 12.99 or 12.9999
	Notes: This amount must be included in the total amount for the transaction.
• name	**Value**: The name of the duty for the transaction.
	Optional.
	Format: 31-character maximum.
• description	**Value**: The duty description for the transaction.
	Optional.
	Format: 255-character maximum.
• lineItems	**Value**: Contains line item details about the refund.
	Optional
	Notes: Up to 30 distinct instances of this element can be included per transaction to describe items included in the order.

Table 14   Input Elements for createCustomerProfileTransactionRequest (Continued)

Element	Description
• itemId	**Value**: The ID assigned to the item. Required if **lineItems** is submitted. **Format**: 31-character maximum.
• name	**Value**: A short description of an item. Required if **lineItems** is submitted. **Format**: 31-character maximum.
• description	**Value**: A detailed description of an item. Optional **Format**: 255-character maximum.
• quantity	**Value**: The quantity of an item. Required if **lineItems** is submitted. **Format**: 4-digit maximum (up to two decimal places).
• unitPrice	**Value**: Cost of an item per unit excluding tax, freight, and duty. Required if **lineItems** is submitted. **Format**: 4-digit maximum with a decimal point (no dollar symbol). For example, 4.95
• taxable	**Value**: Indicates whether the item is subject to tax. Optional. **Format**: TRUE or FALSE
• customerProfileId	**Value**: Payment gateway assigned ID associated with the customer profile. Conditional. **Format**: Numeric. **Notes**: 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," page 54.
• customerPaymentProfileId	**Value**: Payment gateway assigned ID associated with the customer payment profile. Conditional. **Format**: Numeric. **Notes**: 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," page 54.

Table 14   Input Elements for createCustomerProfileTransactionRequest (Continued)

Element	Description
● customerShippingAddressId	**Value**: Payment gateway assigned ID associated with the customer shipping address.
	Optional.
	Format: Numeric.
	Notes: 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 Transactions," page 54.
● creditCardNumberMasked	**Value**: The last four digits of the credit card number to be refunded.
	Conditional.
	Format: Four Xs followed by the last four digits of the credit card number to be refunded.
	For example, XXXX1234
	Notes: 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," page 54.
● bankRoutingNumberMasked	**Value**: The last four digits of the routing number to be refunded.
	Conditional.
	Format: Four Xs followed by the last four digits of the routing number to be refunded.
	For example, XXXX1234
	Notes: 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," page 54.
● bankAccountNumberMasked	**Value**: The last four digits of the bank account number to be refunded.
	Conditional.
	Format: Four Xs followed by the last four digits of the bank account to be refunded.
	For example, XXXX1234
	Notes: 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," page 54.
● order	**Value**: Contains information about the order.
	Optional.

Table 14   **Input Elements for createCustomerProfileTransactionRequest (Continued)**

Element	Description
• invoiceNumber	**Value**: The merchant assigned invoice number for the transaction. Optional. **Format**: 20-character maximum (no symbols).
• description	**Value**: The transaction description. Optional. **Format**: 255-character maximum (no symbols).
• purchaseOrderNumber	**Value**: The merchant assigned purchase order number. Optional. **Format**: 25-character maximum (no symbols).
• transId	**Value**: The payment gateway assigned transaction ID of the original transaction. Conditional. **Format**: Numeric. **Notes**: For more complete information, see "For Refund Transactions," page 54.
extraOptions	**Value**: Information in name/value pair format that does not exist within CIM, such as customer IP address, etc. Optional. **Format**: String. **Notes**: For a complete list of the transaction variable names available, review the *AIM Implementation Guide* located at http://www.authorize.net/support/AIM_guide.pdf.

For information about output parameters for this function, see "Input Elements for createCustomerProfileTransactionRequest," page 32.

Example 10   **createCustomerProfileTransactionRequest for a Refund transaction**

```
<?xml version="1.0" encoding="utf-8"?>
<createCustomerProfileTransactionRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <transaction>
    <profileTransRefund>
      <amount>10.95</amount>
      <tax>
        <amount>1.00</amount>
        <name>WA state sales tax</name>
        <description>Washington state sales tax</description>
```

```
      </tax>
      <shipping>
        <amount>2.00</amount>
        <name>ground based shipping</name>
        <description>Ground based 5 to 10 day shipping</description>
      </shipping>
      <lineItems>
        <itemId>ITEM00001</itemId>
        <name>name of item sold</name>
        <description>Description of item sold</description>
        <quantity>1</quantity>
        <unitPrice>6.95</unitPrice>
        <taxable>true</taxable>
      </lineItems>
      <lineItems>
        <itemId>ITEM00002</itemId>
        <name>name of other item sold</name>
        <description>Description of other item sold</description>
        <quantity>1</quantity>
        <unitPrice>1.00</unitPrice>
        <taxable>true</taxable>
      </lineItems>
      <customerProfileId>10000</customerProfileId>
      <customerPaymentProfileId>20000</customerPaymentProfileId>
      <customerShippingAddressId>30000</customerShippingAddressId>
      <creditCardNumberMasked>XXXX1111</creditCardNumberMasked>
      <order>
        <invoiceNumber>INV000001</invoiceNumber>
        <description>description of transaction</description>
        <purchaseOrderNumber>PONUM000001</purchaseOrderNumber>
      </order>
      <transId>40000</transId>
    </profileTransRefund>
  </transaction>
  <extraOptions><![CDATA[]]></extraOptions>
</createCustomerProfileTransactionRequest>
```

For a Void Transaction

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

Table 15   Input Elements for createCustomerProfileTransactionRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request. Optional. **Format**: 20-character maximum. **Notes**: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
transaction	**Value**: Contains transaction information.
■ profileTransVoid	**Value**: The transaction type that is being requested. **Notes**: Only one transaction type is allowed per request.
● customerProfileId	**Value**: Payment gateway assigned ID associated with the customer profile. Conditional. **Format**: Numeric. **Notes**: If a value is submitted for this field, it must be the same ID used for the original transaction.
● customerPaymentProfileId	**Value**: Payment gateway assigned ID associated with the customer payment profile. Conditional. **Format**: Numeric. **Notes**: If a value is submitted for this field, it must be the same ID used for the original transaction.
● customerShippingAddressId	**Value**: Payment gateway assigned ID associated with the customer shipping address. Optional. **Format**: Numeric. **Notes**: If a value is submitted for this field, it must be the same ID used for the original authorization transaction.
● transId	**Value**: The payment gateway assigned transaction ID of the original transaction. Conditional. **Format**: Numeric.

Example 11   createCustomerProfileTransactionRequest for a Void transaction

```
<?xml version="1.0" encoding="utf-8"?>
<createCustomerProfileTransactionRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <transaction>
    <profileTransVoid>
      <customerProfileId>10000</customerProfileId>
      <customerPaymentProfileId>20000</customerPaymentProfileId>
    <customerShippingAddressId>30000</customerShippingAddressId>
      <transId>40000</transId>
    </profileTransVoid>
  </transaction>
</createCustomerProfileTransactionRequest>
```

Input Parameters 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 parameters for executing an API call to the d**eleteCustomerProfile**Request function.

Table 16   Input Parameters for deleteCustomerProfileRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: 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 parameters for this function, see "Output for deleteCustomerProfileResponse," page 93.

Example 12   deleteCustomerProfileRequest

```
<?xml version="1.0" encoding="utf-8"?>
<deleteCustomerProfileRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <customerProfileId>10000</customerProfileId>
</deleteCustomerProfileRequest>
```

Input Parameters 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 d**eleteCustomerPaymentProfile**Request function.

Table 17   Input Parameters for deleteCustomerPaymentProfileRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	**Value**: Payment gateway-assigned ID associated with the customer profile.
	Format: Numeric.
customerPaymentProfileId	**Value**: Payment gateway assigned ID associated with the customer payment profile.
	Format: Numeric.

For information about output parameters for this function, see "Output for deleteCustomerPaymentProfileResponse," page 94.

Example 13 deleteCustomerPaymentProfileRequest

```xml
<?xml version="1.0" encoding="utf-8"?>
<deleteCustomerPaymentProfileRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <customerProfileId>10000</customerProfileId>
  <customerPaymentProfileId>20000</customerPaymentProfileId>
</deleteCustomerPaymentProfileRequest>
```

Input Parameters 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 d**eleteCustomerShippingAddress**Request function.

Table 18 Input Parameters for deleteCustomerShippingAddressRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	**Value**: Payment gateway-assigned ID associated with the customer profile.
	Format: Numeric.
customerShippingAddressId	**Value**: Payment gateway-assigned ID associated with the customer shipping address.
	Format: Numeric.

For information about output parameters for this function, see "Output for deleteCustomerShippingAddressResponse," page 95.

Example 14   Example deleteCustomerShippingAddressRequest

```xml
<?xml version="1.0" encoding="utf-8"?>
<deleteCustomerShippingAddressRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <customerProfileId>10000</customerProfileId>
  <customerAddressId>30000</customerAddressId>
</deleteCustomerShippingAddressRequest>
```

Input Parameters for getCustomerProfileIdsRequest

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
g**etCustomerProfileIds**Request function.

**Table 19   Input Parameters for
                getCustomerProfileIdsRequest**

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
merchantAuthentication	**Value**: Contains unique merchant information for purposes of authentication.
■ name	**Value**: The valid API login ID for the developer test or merchant account.
	Format: 25-character maximum.
	Notes: Submit the API login ID used to submit transactions.
■ transactionKey	**Value**: The valid Transaction Key for the developer test or merchant account.
	Format: 16 characters.
	Notes: Submit the transaction key obtained from the Merchant Interface.

For information about output parameters for this function, see "Output for
getCustomerProfileIdsResponse," page 95.

Example 15   **Example getCustomerProfileIdsRequest**

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

Input Parameters for getCustomerProfileRequest

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

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

Table 20   **Input Parameters for getCustomerProfileRequest**

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional. If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
	Format: 20-character maximum.
customerProfileId	**Value**: Payment gateway-assigned ID associated with the customer profile.
	Format: Numeric.

For information about output parameters for this function, see .

Example 16   **getCustomerProfileRequest**

```
<?xml version="1.0" encoding="utf-8"?>
<getCustomerProfileRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <customerProfileId>10000</customerProfileId>
</getCustomerProfileRequest>
```

Input Parameters 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 g**etCustomerPaymentProfile**Request function.

Table 21 **Input Parameters for getCustomerPaymentProfileRequest**

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	**Value**: Payment gateway-assigned ID associated with the customer profile.
	Format: Numeric.
customerPaymentProfileId	**Value**: Payment gateway-assigned ID associated with the customer payment profile.
	Format: Numeric.

For information about output parameters for this function, see "Output for getCustomerProfileResponse," page 96.

Example 17 **Example getCustomerPaymentProfileRequest**

```
<?xml version="1.0" encoding="utf-8"?>
<getCustomerPaymentProfileRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <customerProfileId>10000</customerProfileId>
  <customerPaymentProfileId>20000</customerPaymentProfileId>
</getCustomerPaymentProfileRequest>
```

Input Parameters for getCustomerShippingAddressRequest

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
g**etCustomerShippingAddress**Request function.

Table 22   Input Parameters for
getCustomerShippingAddressRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	**Value**: Payment gateway-assigned ID associated with the customer profile.
	Format: Numeric.
customerShippingAddressId	**Value**: Payment gateway-assigned ID associated with the customer shipping address.
	Format: Numeric.

For information about output parameters for this function, see "Output for
getCustomerShippingAddressResponse," page 106.

Example 18   getCustomerShippingAddressRequest

```
<?xml version="1.0" encoding="utf-8"?>
<getCustomerShippingAddressRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <customerProfileId>10000</customerProfileId>
  <customerAddressId>30000</customerAddressId>
</getCustomerShippingAddressRequest>
```

Input Parameters for getHostedProfilePageRequest

Use this function to initiate a request for direct access to the Authorize.Net web site. For more information
on using the hosted form, see "Using a Hosted Form," page 114.

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

Table 23   Input Parameters for getHostedProfilePageRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request. Optional. **Format**: 20-character maximum. **Notes**: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	**Value**: Payment gateway assigned ID associated with the customer profile. **Format:** Numeric.
hostedProfileSettings	**Value**: Optional. This is an array of settings for the session.
▪ settingName	**Value**: Optional. One of: ▪ hostedProfileReturnUrl ▪ hostedProfileReturnUrlText ▪ hostedProfileHeadingBgColor ▪ hostedProfilePageBorderVisible ▪ hostedProfileIFrameCommunicatorUrl ▪ hostedProfileValidationMode ▪ hostedProfileBillingAddressRequired ▪ hostedProfileCardCodeRequired
▪ settingValue	**Value**: See "Guidelines for Parameter Settings," page 117 for a detailed description of these parameters.

Example 19   getHostedProfilePageRequest

```xml
<?xml version="1.0" encoding="utf-8"?>
<getHostedProfilePageRequest xmlns="AnetApi/xml/v1/schema/AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <customerProfileId>YourProfileID</customerProfileId>
  <hostedProfileSettings>
    <setting>
      <settingName>hostedProfileReturnUrl</settingName>
      <settingValue>https://blah.com/blah/</settingValue>
    </setting>
    <setting>
      <settingName>hostedProfileReturnUrlText</settingName>
      <settingValue>Continue to blah.</settingValue>
    </setting>
        <setting>
              <settingName>hostedProfilePageBorderVisible</settingName>
               <settingValue>true</settingValue>
        </setting>
  </hostedProfileSettings>
</getHostedProfilePageRequest>
```

Input Parameters 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 u**pdateCustomerProfile**Request function.

Table 24   Input Parameters for updateCustomerProfileRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
profile	**Value**: Contains payment information for the customer profile.
■ merchantCustomerId	**Value**: Merchant assigned ID for the customer.
	Optional.
	Format: 20-character maximum.

Table 24   Input Parameters for updateCustomerProfileRequest (Continued)

Element	Description
▪ description	**Value**: Description of the customer or customer profile.
	Optional.
	Format: 255-character maximum.
▪ email	**Value**: Email address associated with the customer profile.
	Optional.
	Format: 255-character maximum.
▪ customerProfileId	**Value**: Payment gateway assigned ID associated with the customer profile.
	Format: Numeric.

For information about output parameters for this function, see "Output for updateCustomerProfileResponse," page 108.

Example 20   updateCustomerProfileRequest

```
<?xml version="1.0" encoding="utf-8"?>
<updateCustomerProfileRequest xmlns="AnetApi/xml/v1/schema/AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <profile>
    <merchantCustomerId>custId123</merchantCustomerId>
    <description>some description</description>
    <email>newaddress@example.com</email>
    <customerProfileId>10000</customerProfileId>
  </profile>
</updateCustomerProfileRequest>
```

Input Parameters for updateCustomerPaymentProfileRequest

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

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

Note	If some fields in this request are not submitted or are submitted with a blank value, the values in the original profile are removed. As a best practice to prevent this from happening, call g**etCustomerPaymentProfile**Request before calling u**pdateCustomerPaymentProfile**Request. That will return all current information including masked payment information. Then, simply change the field that needs updating and use that to call u**pdateCustomerPaymentProfile**Request.

Table 25   Input Parameters for updateCustomerPaymentProfileRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	**Value**: Payment gateway-assigned ID associated with the customer profile.
	Format: Numeric.
paymentProfile	**Value**: Contains payment information for the customer profile.
	Notes: Sensitive information that is not being updated can be masked.
▪ customerType	Optional.
	Format: individual or business
	Notes: 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	**Notes**: 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.

Table 25   Input Parameters for updateCustomerPaymentProfileRequest (Continued)

Element	Description
● firstName	**Value**: The customer's first name. Optional. **Format:** 50-character maximum (no symbols). **Notes**: If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
● lastName	**Value**: The customer's last name. Optional. **Format:** 50-character maximum (no symbols). **Notes**: If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
● company	**Value**: The name of the company associated with the customer, if applicable. Optional. **Format:** 50-character maximum (no symbols). **Notes**: 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	**Value**: The customer's address. Optional. **Format:** 60-character maximum (no symbols). **Notes**: If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.

Table 25   Input Parameters for updateCustomerPaymentProfileRequest (Continued)

Element	Description
● city	**Value**: The city of the customer's shipping address. Optional. **Format:** 40-character maximum (no symbols). **Notes**: If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
● state	**Value**: The state of the customer's address. Optional. **Format:** 40-character maximum (no symbols). **Notes**: If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
● zip	**Value**: The ZIP code of the customer's address. Optional. **Format:** 20-character maximum (no symbols). **Notes**: If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile. When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
● country	**Value**: The country of the customer's address. Optional. **Format:** 60-character maximum (no symbols). **Notes**: If this field is not submitted in the request, or submitted with a blank value, the original value will be removed from the profile.

Table 25   Input Parameters for updateCustomerPaymentProfileRequest (Continued)

Element	Description
● phoneNumber	**Value**: The phone number associated with the customer's address.
	Optional.
	Format: 25-digit maximum (no letters).
	For example, (123)123-1234
	Notes: 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	**Value**: The fax number associated with the customer's address.
	Optional.
	Format: 25-digit maximum (no letters).
	For example, (123)123-1234
	Notes: 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	**Value**: Contains payment information for the customer profile.
	Notes: Can contain **CreditCardSimpleType** or **BankAccountType**.
● creditCard	**Value**: Contains credit card payment information for the customer profile.
	Conditional.
	Notes: This parameter and its children are only required when the payment profile is credit card.
● cardNumber	**Value**: The customer's credit card number.
	Format: 13 to 16 digits (inclusive).
	Number can also be masked, for example, XXXX1111
	Notes: If the 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	**Value**: The expiration date for the customer's credit card.
	Format: YYYY-MM
	Number can also be masked, for example, XXXX
	Notes: If a masked value is submitted, the original value will not be updated.
	For .Net users, the class System.Runtime.Remoting.Metadata.W3cXsd2001.SoapYearMonth can be used to manage gYearMonth types.

Table 25   Input Parameters for updateCustomerPaymentProfileRequest (Continued)

Element	Description
• cardCode	**Value**: The three- or four-digit number on the back of a credit card (on the front for American Express).
	Optional.
	Format: Numeric.
	Notes: This field is required if the merchant would like to use the Card Code Verification (CCV) security feature. For more information, see the *Merchant Integration Guide* at http://www.authorize.net/support/Merchant/default.htm.
	cardCode is only used for validation and is not stored in the customer profile. It should only be used when submitting **validationMode** with a value of **testMode** or **liveMode**.
• bankAccount	**Value**: Contains bank account payment information for the customer profile.
	Conditional.
	Notes: This parameter and its children are only required when the payment profile is bank account.
• accountType	**Value**: The type of bank account for the payment profile.
	Optional.
	Format: checking, savings, or businessChecking
	Notes: 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	**Value**: The routing number of the customer's bank.
	Format: 9 digits.
	Number can also be masked, for example, XXXX1111
	Notes: If the 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.
• accountNumber	**Value**: The customer's bank account number.
	Format: 5 to 17 digits (inclusive).
	Number can also be masked, for example, XXXX1111
	Notes: If the 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.

Table 25   Input Parameters for updateCustomerPaymentProfileRequest (Continued)

Element	Description
• nameOnAccount	**Value**: The customer's full name as listed on the bank account.
	Format: 22-character maximum.
	Notes: 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	**Value**: The type of electronic check transaction.
	Optional.
	Format: CCD, PPD, TEL, or WEB
	Notes: 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	**Value**: The name of the bank associated with the bank account number.
	Optional.
	Format: 50-character maximum.
	Notes: 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	**Value**: Payment gateway-assigned ID associated with the customer payment profile.
	Format: Numeric.
validationMode	**Value**: Indicates the processing mode for the request.
	Format: none, testMode, or liveMode
	Notes: For more information on use and restrictions of validationMode, see "The validationMode Parameter," page 15.

To test the validity of new payment information, call validateCustomerPaymentProfileRequest after successfully updating the payment profile. See "Input Parameters for validateCustomerPaymentProfileRequest," page 81.

For information about output parameters for this function, see "Input Parameters for updateCustomerPaymentProfileRequest," page 71.

Input Parameters 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
u**pdateCustomerShippingAddress**Request function.

Table 26   Input Parameters for updateCustomerShippingAddressRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request. Optional. **Format**: 20-character maximum. **Notes**: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	**Value**: Payment gateway-assigned ID associated with the customer profile. **Format**: Numeric.
address	**Value**: Contains shipping address information for the customer profile.
▪ firstName	**Value**: The customer's first name. Optional. **Format**: 50-character maximum (no symbols). When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
▪ lastName	**Value**: The customer's last name. Optional. **Format**: 50-character maximum (no symbols). When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
▪ company	**Value**: The name of the company associated with the customer, if applicable. Optional. **Format**: 50-character maximum (no symbols).
▪ address	**Value**: The customer's shipping address. Optional. **Format**: 60-character maximum (no symbols). When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.

Table 26   Input Parameters for updateCustomerShippingAddressRequest (Continued)

Element	Description
■ city	**Value**: The city of the customer's shipping address. Optional. **Format**: 40-character maximum (no symbols). When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
■ state	**Value**: The state of the customer's shipping address. Optional. **Format**: 40-character maximum (no symbols). When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
■ zip	**Value**: The ZIP code of the customer's shipping address. Optional. **Format**: 20-character maximum (no symbols). When your payment processor is EVO and you submit this field, other fields are required. See "EVO Billing and Shipping Fields," page 83.
■ country	**Value**: The country of the customer's shipping address. Optional. **Format**: 60-character maximum (no symbols).
■ phoneNumber	**Value**: The phone number associated with the customer's shipping address. Optional. **Format**: 25-digit maximum (no letters). For example, (123)123-1234
■ faxNumber	**Value**: The fax number associated with the customer's shipping address. Optional. **Format**: 25-digit maximum (no letters). For example, (123)123-1234
■ customerShippingAddressId	**Value**: Payment gateway-assigned ID associated with the customer shipping address. **Format**: Numeric.

For information about output parameters for this function, see "Output for updateCustomerShippingAddressResponse," page 110.

Example 21 updateCustomerShippingAddressRequest

```
<?xml version="1.0" encoding="utf-8"?>
<updateCustomerShippingAddressRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <customerProfileId>10000</customerProfileId>
  <address>
    <firstName>Newfirstname</firstName>
    <lastName>Doe</lastName>
    <company></company>
    <address>123 Main St.</address>
    <city>Bellevue</city>
    <state>WA</state>
    <zip>98004</zip>
    <country>USA</country>
    <phoneNumber>000-000-0000</phoneNumber>
    <faxNumber></faxNumber>
    <customerAddressId>30000</customerAddressId>
  </address>
 </updateCustomerShippingAddressRequest>
```

Input Elements for updateSplitTenderGroupRequest

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

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

Table 27 Input Elements for updateSplitTenderGroupRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
splitTenderId	**Value**: Payment gateway-assigned number associated with the order.
	Required.
	Format: Numeric.

Table 27   Input Elements for updateSplitTenderGroupRequest (Continued)

Element	Description
splitTenderStatus	**Value**: Indicates the status of all transactions associated with the order.
	Format: voided, or completed.
	Notes: Use voided to void the entire order; use completed to indicate there are no further transactions in this order.

Example 22   updateSplitTenderGroupRequest

```xml
<?xml version="1.0" encoding="utf-8"?>
<updateSplitTenderGroupRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <splitTenderId>123456</splitTenderId>
  <splitTenderStatus>voided</splitTenderStatus>
</updateSplitTenderGroupRequest>
```

Input Parameters for validateCustomerPaymentProfileRequest

This function is used to verify an existing customer payment profile by generating a test transaction. No customer receipt emails are sent when v**alidateCustomerPaymentProfile**Request. is called

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

Table 28   Input Parameters for validateCustomerPaymentProfileRequest

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
customerProfileId	**Value:** Payment gateway-assigned ID associated with the customer profile.
	Format: Numeric.
customerPaymentProfileId	**Value:** Payment gateway-assigned ID associated with the customer payment. profile
	Format: Numeric.

Table 28   Input Parameters for validateCustomerPaymentProfileRequest (Continued)

Element	Description
customerShippingAddressId	**Value:** Payment gateway-assigned ID associated with the customer shipping address.
	Optional.
	Format: Numeric.
	Notes: If **customerShippingAddressId** is not passed, shipping information will not be included with the transaction.
cardCode	**Value:** The three- or four-digit number on the back of a credit card (on the front for American Express).
	Optional.
	Format: Numeric.
	Notes: This field is required if the merchant would like to use the Card Code Verification (CCV) security feature. For more information, see the *Merchant Integration Guide* at http://www.authorize.net/support/Merchant/default.htm.
	cardCode is used only for validation and is not stored in the customer profile. It should be used only when submitting **validationMode** with a value of **testMode** or **liveMode**.
validationMode	**Value:** Indicates the processing mode for the request.
	Format: testMode or liveMode
	Notes: For more information on use and restrictions of **validationMode**, see "The validationMode Parameter," page 15.

For information about output parameters for this function, see "Output for validateCustomerPaymentProfileResponse," page 112.

Example 23   validateCustomerPaymentProfileRequest

```
<?xml version="1.0" encoding="utf-8"?>
<validateCustomerPaymentProfileRequest xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <merchantAuthentication>
    <name>YourUserLogin</name>
    <transactionKey>YourTranKey</transactionKey>
  </merchantAuthentication>
  <customerProfileId>10000</customerProfileId>
  <customerPaymentProfileId>20000</customerPaymentProfileId>
  <customerShippingAddressId>30000</customerShippingAddressId>
  <validationMode>liveMode</validationMode>
</validateCustomerPaymentProfileRequest>
```

	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.
Note	

EVO Billing and Shipping Fields

If your payment processor is EVO and you submit any of the following billing fields, you must submit all of them.

- firstName
- lastName
- address
- city
- state
- zip

If your payment processor is EVO and you submit any of the following shipping fields, you must submit all of them.

- firstName
- lastName
- address
- city
- state
- zip

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.

Table 29   Payment gateway responses

Element	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: 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	**Value**: Contains additional information about the results of the request.
	Format: Ok or Error
message	**Value**: Contains the result code and text.
	Notes: Provides more details about the error(s).
● code	**Value**: A code that represents the reason for the error.
	Format: String.
	Notes: See "Response Codes," page 120 for possible values.
● text	**Value**: A text description of the error.
	Format: String.
	Notes: See "Response Codes," page 120 for possible values.

CIM Responses

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

Example 24   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 createCustomerProfileFromTransactionResponse

The following table lists the output returned from the payment gateway for an API call to the c**reateCustomerProfileFromTransaction**Request function.

Table 30   Output for createCustomerProfileFromTransactionResponse

Field	Description
messages	This element contains one or more **message** elements.
▪ message	Contains detailed information about the status of a particular transaction.
● code	Response Code that represents status.
● text	Text description of status.
customerProfileId	Payment gateway-assigned ID that is associated with the customer profile.
customerPaymentProfileIdList	Contains the customer payment profile ID element.

Table 30   Output for createCustomerProfileFromTransactionResponse

Field	Description
■ numericString	**Value**: Payment gateway-assigned ID that is associated with the customer payment profile.
	Format: Numeric.
	Notes: This is included only if the original transaction included a billing address.
customerShippingAddressIdList	Contains the Customer Shipping Profile ID element.
■ numericString	**Value**: Payment gateway-assigned ID that is associated with the customer shipping profile.
	Format: Numeric.
	Notes: This is included only if the original transaction included a shipping address.

Example 25   createCustomerProfileFromTransactionResponse

```
<?xml version="1.0" encoding="utf-8"?>

<createCustomerProfileFromTransactionResponse xmlns:xsi="http://
www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://
www.w3.org/2001/XMLSchema" xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">

    <messages>

        <resultCode>Ok</resultCode>

        <message>

            <code>I00001</code>

            <text>Successful.</text>

        </message>

    </messages>

    <customerProfileId>38</customerProfileId>

    <customerPaymentProfileIdList>

        <numericString>38</numericString>

    </customerPaymentProfileIdList>

    <customerShippingAddressIdList>

        <numericString>26</numericString>

    </customerShippingAddressIdList>

    <validationDirectResponseList />

</createCustomerProfileFromTransactionResponse>
```

Output for createCustomerProfileResponse

The following table lists the additional output returned from the payment gateway for an API call to the c**reateCustomerProfile**Request function.

Table 31   Output for createCustomerProfileResponse

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
■ customerProfileId	**Value**: Payment gateway-assigned ID associated with the customer profile.
	Format: Numeric.
	Notes: This output is present only for successful requests.
■ customerPaymentProfileIdList	**Value**: A list of all payment profile IDs created with the request.
	Optional.
	Format: Numeric.
	Notes: This output is present only for requests that contain one or more payment profiles.
	The payment profile IDs are returned in the same order as they were in the request.
■ customerShippingAddressIdList	**Value**: A list of all shipping profile IDs created with the request.
	Optional.
	Format: Numeric.
	Notes: This output is present only for requests that contain multiple shipping profiles.
	The shipping profile IDs are returned in the same order as they were in the request.

Table 31   Output for createCustomerProfileResponse (Continued)

Field	Description
■ validationDirectResponseList	**Value**: A list of the direct response results for the validation transaction for each payment profile.
	Optional.
	Format: 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.
	Notes: This output is present only if the **ValidationMode** input element is passed with a value of **testMode** or **liveMode**.
	The list is returned in the same order as the payment profiles were submitted in the request.

Note	The c**reateCustomerProfileResponse** field returns only the assigned **customerProfileId** field for the created profile. To retrieve the **customerPaymentProfileId** field and the **customerShippingId** field that may also be created when using the c**reateCustomerProfile** function, you must submit the g**etCustomerProfile**Request function using the assigned the **customerProfileId** value for that customer profile.

Example 26   Successful createCustomerProfileResponse

```xml
<?xml version="1.0" encoding="utf-8"?>
<createCustomerProfileResponse xmlns="AnetApi/xml/v1/schema/AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
  <customerProfileId>10000</customerProfileId>
<customerPaymentProfileIdList>
   <numericString>20000</numericString>
   <numericString>20001</numericString>
</customerPaymentProfileIdList>
<customerShippingAddressIdList>
   <numericString>30000</numericString>
   <numericString>30001</numericString>
</customerShippingAddressIdList>
<validationDirectResponseList>
<string>1,1,1,This transaction has been approved.,000000,Y,2000000000,none,Test
transaction for
ValidateCustomerPaymentProfile.,0.01,CC,auth_only,custId123,
John,Doe,,123 Main St.,Bellevue,WA,98004,USA,000-000-
0000,,mark@example.com,,,,,,,,,0.00,0.00,0.00,,none,
D18EB6B211FE0BBF556B271FDA6F92EE,,,,,,,,,,,,,,,,,,,,,,,,,,,</string>
<string>1,1,1,This transaction has been approved.,000000,Y,2000000001,none,Test
transaction for
ValidateCustomerPaymentProfile.,0.01,CC,auth_only,custId123,
John,Doe,,123 Main St.,Bellevue,WA,98004,USA,000-000-
0000,,mark@example.com,,,,,,,,,0.00,0.00,0.00,,none,
D18EB6B211FE0BBF556B271FDA6F92EE,,,,,,,,,,,,,,,,,,,,,,,,,,,</string>
  </validationDirectResponseList>
</createCustomerProfileResponse>
```

Output for createCustomerPaymentProfileResponse

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

Table 32   Output for createCustomerPaymentProfileResponse

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
■ customerPaymentProfileId	**Value**: Payment gateway assigned ID associated with the customer payment profile.
	Format: Numeric.
	Notes: This output is present only for successful requests.
■ validationDirectResponse	**Value**: Contains detailed information about the result of the transaction.
	Format: 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.
	Notes: This output is present only if the **ValidationMode** input parameter is passed with a value of **testMode** or **liveMode**.

```
<?xml version="1.0" encoding="utf-8"?>
<createCustomerPaymentProfileResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
  <customerPaymentProfileId>20000</customerPaymentProfileId>
  <validationDirectResponse>1,1,1,This transaction has been
approved.,000000,Y,2000000000,none,Test transaction for
ValidateCustomerPaymentProfile.,0.01,CC,auth_only,custId123,
John,Doe,,123 Main St.,Bellevue,WA,98004,USA,000-000-
0000,,mark@example.com,,,,,,,,,,0.00,0.00,0.00,,none,
D18EB6B211FE0BBF556B271FDA6F92EE,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
  </validationDirectResponse>
</createCustomerPaymentProfileResponse>
```

Output for createCustomerShippingAddressResponse

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

Table 33   Output for createCustomerShippingAddressResponse

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value is included in the response. This feature might be especially useful for multi-threaded applications.
▪ customerShippingAddressId	**Value**: Payment gateway assigned ID associated with the customer shipping address.
	Format: Numeric.
	Notes: This output is present only for successful requests.

Example 28   Sample createCustomerShippingAddressResponse

```
<?xml version="1.0" encoding="utf-8"?>
<createCustomerShippingAddressResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
  <customerAddressId>30000</customerAddressId>
</createCustomerShippingAddressResponse>
```

Output for createCustomerProfileTransactionResponse

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

Table 34   Output for createCustomerProfileTransactionResponse

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value is included in the response. This feature might be especially useful for multi-threaded applications.
▪ directResponse	**Value**: Contains detailed information about the result of the transaction.
	Format: 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.
	Notes: Transactions created from a customer profile 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.

Example 29   createCustomerProfileTransactionResponse

```xml
<?xml version="1.0" encoding="utf-8"?>
<createCustomerProfileTransactionResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
  <directResponse>1,1,1,This transaction has been
approved.,000000,Y,2000000001,INV000001,description of
transaction,10.95,CC,auth_capture,custId123,John,Doe,,123 Main
St.,Bellevue,WA,98004,USA,000-000-0000,,mark@example.com,John,Doe,,123
Main St.,Bellevue,WA,98004,USA,1.00,0.00,2.00,FALSE,PONUM000001,
D18EB6B211FE0BBF556B271FDA6F92EE,M,2,,,,,,,,,,,,,,,,,,,,,,,,,,,,
  </directResponse>
</createCustomerProfileTransactionResponse>
```

Output for deleteCustomerProfileResponse

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

Table 35   Output for deleteCustomerProfileResponse

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value is included in the response. This feature might be especially useful for multi-threaded applications.

Example 30   deleteCustomerProfileResponse

```
<?xml version="1.0" encoding="utf-8"?>
<deleteCustomerProfileResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
</deleteCustomerProfileResponse>
```

Output for deleteCustomerPaymentProfileResponse

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

Table 36   Output for deleteCustomerPaymentProfileResponse

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value is included in the response. This feature might be especially useful for multi-threaded applications.

Example 31   deleteCustomerPaymentProfileResponse

```
<?xml version="1.0" encoding="utf-8"?>
<deleteCustomerPaymentProfileResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
</deleteCustomerPaymentProfileResponse>
```

Output for deleteCustomerShippingAddressResponse

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

Table 37   Output for deleteCustomerShippingAddressResponse

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value is included in the response. This feature might be especially useful for multi-threaded applications.

Example 32   deleteCustomerShippingAddressResponse

```
<?xml version="1.0" encoding="utf-8"?>
<deleteCustomerShippingAddressResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
</deleteCustomerShippingAddressResponse>
```

Output for getCustomerProfileIdsResponse

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

Table 38   Output for getCustomerProfileIdsResponse

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value is included in the response. This feature might be especially useful for multi-threaded applications.

Table 38   Output for getCustomerProfileIdsResponse (Continued)

Field	Description
ids	**Value**: Payment gateway assigned IDs associated with the customer profiles.
	Format: Numeric.
	Notes: This output is present only for successful requests.

Example 33   Successful getCustomerProfileIdsResponse

```
<?xml version="1.0" encoding="utf-8"?>
<getCustomerProfileIdsResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
  <ids>
    <numericString>10000</numericString>
    <numericString>10001</numericString>
    <numericString>10002</numericString>
  </ids>
</getCustomerProfileIdsResponse>
```

Output for getCustomerProfileResponse

- The following information lists the output returned from the payment gateway for an API call to the getCustomerProfile function.

Table 39   Output for getCustomerProfileResponse

Field	Description
profile	**Value**: Contains information for the customer profile.
▪ customerProfileId	**Value**: Payment gateway-assigned ID associated with the customer profile.
	Format: Numeric.
	Notes: This output is present only for successful requests.
▪ merchantCustomerId	**Value**: Merchant-assigned ID for the customer.
	Optional.
	Format: 2-character maximum.

Table 39   Output for getCustomerProfileResponse (Continued)

Field	Description
■ description	**Value**: Description of the customer or customer profile. Optional. **Format**: 255-character maximum.
■ email	**Value**: Email address associated with the customer profile. Optional. **Format**: 255-character maximum.
● paymentProfiles	**Value**: Contains payment profiles for the customer profile
• customerPaymentProfileId	**Value**: Payment gateway assigned ID associated with the customer payment profile. **Format**: Numeric.
• payment	**Value**: Contains payment profile information for the customer profile.
• creditCard	**Value**: Contains credit card payment information for the customer profile
• cardNumber	**Value**: The customer's credit card number. **Format**: 13 to 16 digits (inclusive). **Notes**: All sensitive payment information in the output is masked.
• expirationDate	**Value**: The expiration date for the customer's credit card. **Format**: YYYY-MM **Notes**: All sensitive payment information in the output is masked.
● bankAccount	**Value**: Contains bank account payment information for the customer profile.
• routingNumber	**Value**: The routing number of the customer's bank. **Format**: 9 digits. **Notes**: All sensitive payment information in the output is masked.

Table 39   Output for getCustomerProfileResponse (Continued)

Field	Description
• accountNumber	**Value**: The customer's bank account number. **Format**: 5 to 17 digits (inclusive). **Notes**: All sensitive payment information in the output is masked.
driversLicense	**Value**: Contains the customer's driver's license information. **Notes**: This field is no longer supported in CIM requests and is returned only for profiles that were created under the SecureSource product.
▪ state	**Value**: The state of the customer's driver's license. **Format**: A valid two-character state code. **Notes**: This field is no longer supported in CIM requests and is returned only for profiles that were created under the SecureSource product.
▪ number	**Value**: The customer's driver's license number. **Format**: 5 to 20 characters (inclusive). **Notes**: This field is no longer supported in CIM requests and is returned only for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.
▪ dateOfBirth	**Value**: The date of birth listed on the customer's driver's license. **Format**: YYYY-MM-DD **Notes**: This field is no longer supported in CIM requests and is returned only for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.
▪ taxId	**Value**: The customer's Social Security Number or tax ID. **Format**: 9 digits. **Notes**: This field is no longer supported in CIM requests and is returned only for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.
• shipToList	**Value**: Contains shipping address profile information for the customer profile.

Table 39   Output for getCustomerProfileResponse (Continued)

Field	Description
• customerShippingAddressId	**Value**: Payment gateway-assigned ID associated with the customer shipping address.
	Format: Numeric.
• firstName	**Value**: The customer's first name.
	Optional.
	Format: 50-character maximum (no symbols).
• lastName	**Value**: The customer's last name.
	Optional.
	Format: 50-character maximum (no symbols).
• company	**Value**: The name of the company associated with the customer, if applicable.
	Optional.
	Format: 50-character maximum (no symbols).
• address	**Value**: The customer's shipping address.
	Optional.
	Format: 60-character maximum (no symbols).
• city	**Value**: The city of the customer's shipping address.
	Optional.
	Format: 40-character maximum (no symbols).
• state	**Value**: The state of the customer's shipping address.
	Optional.
	Format: 40-character maximum (no symbols).
• zip	**Value**: The zip code of the customer's shipping address.
	Optional.
	Format: 20-character maximum (no symbols).
• country	**Value**: The country of the customer's shipping address.
	Optional.
	Format: 60-character maximum (no symbols).
• phoneNumber	**Value**: The phone number associated with the customer's shipping address.
	Optional.
	Format: Up to 25 digits (no letters).
	For example, (123)123-1234

Table 39   Output for getCustomerProfileResponse (Continued)

Field	Description
• faxNumber	**Value**: The fax number associated with the customer's shipping address. Optional. **Format**: Up to 25 digits (no letters). For example, (123)123-1234

Example 34   getCustomerProfileResponse

```xml
<?xml version="1.0" encoding="utf-8"?>
<getCustomerProfileResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
  <profile>
    <merchantCustomerId>custId123</merchantCustomerId>
    <description>some description</description>
    <email>mark@example.com</email>
    <customerProfileId>10000</customerProfileId>
    <paymentProfiles>
      <billTo>
        <firstName>John</firstName>
        <lastName>Doe</lastName>
        <company></company>
        <address>123 Main St.</address>
        <city>Bellevue</city>
        <state>WA</state>
        <zip>98004</zip>
        <country>USA</country>
        <phoneNumber>000-000-0000</phoneNumber>
        <faxNumber></faxNumber>
      </billTo>
      <customerPaymentProfileId>20000</customerPaymentProfileId>
      <payment>
        <creditCard>
          <cardNumber>XXXX1111</cardNumber>
          <expirationDate>XXXX</expirationDate>
        </creditCard>
      </payment>
    </paymentProfiles>
    <paymentProfiles>
      <customerPaymentProfileId>20001</customerPaymentProfileId>
      <payment>
        <bankAccount>
          <accountType>checking</accountType>
```

```
                <routingNumber>XXXX0000</
routingNumber>          <accountNumber>XXXX0000</accountNumber>
               <nameOnAccount>John Doe</nameOnAccount>
               <bankName>Bank of Washington</bankName>
            </bankAccount>
         </payment>
       </paymentProfiles>
       <shipToList>
         <firstName>John</firstName>
         <lastName>Doe</lastName>
         <company></company>
         <address>123 Main St.</address>
         <city>Bellevue</city>
         <state>WA</state>
         <zip>98004</zip>
         <country>USA</country>
         <phoneNumber>000-000-0000</phoneNumber>
         <faxNumber></faxNumber>
       </shipToList>
       <shipToList>
         <firstName>Jane</firstName>
         <lastName>Doe</lastName>
         <address>123 Main St.</address>
         <city>Bellevue</city>
         <state>WA</state>
         <zip>98004</zip>
         <country>USA</country>
         <phoneNumber>000-000-0000</phoneNumber>
       </shipToList>
    </profile>
</getCustomerProfileResponse>
```

Output for getCustomerPaymentProfileResponse

Example 35 The following table lists the output returned from the payment gateway for an API call to the g**etCustomerPaymentProfile**Request function.**getCustomerPaymentProfileResponse**

Table 40 Output for getCustomerPaymentProfileResponse

Field	Description
■ paymentProfile	**Value**: Contains payment information for the customer profile.
● customerPaymentProfileId	**Value**: Payment gateway assigned ID associated with the customer payment profile. **Format**: Numeric.
● customerType	**Format**: individual or business.
● billTo	Customer's billing information.
• firstName	**Value**: The customer's first name. **Format**: 50-character maximum (no symbols).
• lastName	**Value**: The customer's last name. **Format**: 50-character maximum (no symbols).
• company	**Value**: The name of the company associated with the customer, if applicable. **Format**: 50-character maximum (no symbols).
• address	**Value**: The customer's address. **Format**: 60-character maximum (no symbols).
• city	**Value**: The city of the customer's address. **Format**: 40-character maximum (no symbols).
• state	**Value**: The state of the customer's address. **Format**: 40-character maximum (no symbols).
• zip	**Value**: The ZIP code of the customer's address. **Format**: 20-character maximum (no symbols).
• country	**Value**: The country of the customer's address. **Format**: 60-character maximum (no symbols).
• phoneNumber	**Value**: The phone number associated with the customer's address. **Format**: Up to 25 digits (no letters). For example, (123)123-1234

Table 40   Output for getCustomerPaymentProfileResponse (Continued)

Field	Description
• faxNumber	**Value**: The fax number associated with the customer's address.
	Format: Up to 25 digits (no letters).
	For example, (123)123-1234
● payment	**Value**: Contains payment profile information for the customer profile.
● creditCard	**Value**: Contains credit card payment information for the payment profile.
• cardNumber	**Value**: The customer's credit card number.
	Format: 13 to 16 digits (inclusive).
	Notes: All sensitive payment information in the output is masked.
• expirationDate	**Value**: The expiration date for the customer's credit card.
	Format: YYYY-MM
	Notes: All sensitive payment information in the output is masked.
• bankAccount	**Value**: Contains bank account payment information for the payment profile.
• accountType	**Value**: The type of bank account for the payment profile.
	Format: checking, savings, or businessChecking
• routingNumber	**Value**: The routing number of the customer's bank.
	Format: 9 digits.
	Notes: All sensitive payment information in the output is masked.
• accountNumber	**Value**: The customer's bank account number.
	Format: 5 to 17 digits (inclusive).
	Notes: All sensitive payment information in the output is masked.
• nameOnAccount	**Value**: The customer's full name as listed on the bank account.
	Format: 22-character maximum.
• echeckType	**Value**: The type of electronic check transaction.
	Format: CCD, PPD, TEL, or WEB
	Notes: Currently, the CIM API does not support ARC or BOC transaction types.

Table 40   Output for getCustomerPaymentProfileResponse (Continued)

Field	Description
• bankName	**Value**: The name of the bank associated with the bank account number. **Format**: 50-character maximum.
driversLicense	**Value**: Contains the customer's driver's license information. **Notes**: This field is no longer supported in CIM requests and is returned only for profiles that were created under the SecureSource product.
• state	**Value**: The state of the customer's driver's license. **Format**: A valid two-character state code. **Notes**: This field is no longer supported in CIM requests and is returned only for profiles that were created under the SecureSource product.
• number	**Value**: The customer's driver's license number. **Format**: Between 5 and 20 characters (inclusive). **Notes**: This field is no longer supported in CIM requests and is returned only for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.
• dateOfBirth	**Value**: The date of birth listed on the customer's driver's license. **Format**: YYYY-MM-DD **Notes**: This field is no longer supported in CIM requests and is returned only for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.
• taxId	**Value**: The customer's Social Security Number or tax ID. **Format**: 9 digits. **Notes**: This field is no longer supported in CIM requests and is returned only for profiles that were created under the SecureSource product. All sensitive payment information in the output is masked.

```xml
<?xml version="1.0" encoding="utf-8"?>
<getCustomerPaymentProfileResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
```

```
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
  <paymentProfile>
    <billTo>
      <firstName>John</firstName>
      <lastName>Doe</lastName>
      <company></company>
      <address>123 Main St.</address>
      <city>Bellevue</city>
      <state>WA</state>
      <zip>98004</zip>
      <country>USA</country>
      <phoneNumber>000-000-0000</phoneNumber>
      <faxNumber></faxNumber>
    </billTo>
    <customerPaymentProfileId>20000</customerPaymentProfileId>
    <payment>
      <creditCard>
        <cardNumber>XXXX1111</cardNumber>
        <expirationDate>XXXX</expirationDate>
      </creditCard>
    </payment>
  </paymentProfile>
</getCustomerPaymentProfileResponse>
```

Output for getCustomerShippingAddressResponse

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

Table 41   Output for getCustomerShippingAddressResponse

Field	Description
■ address	**Value**: Contains shipping address information for the customer profile.
● customerShippingAddressId	**Value**: Payment gateway-assigned ID associated with the customer shipping address. **Format**: Numeric.
• firstName	**Value**: The customer's first name. **Format**: 50-character maximum (no symbols).
• lastName	**Value**: The customer's last name. **Format**: 50-character maximum (no symbols).
• company	**Value**: The name of the company associated with the customer, if applicable. **Format**: 50-character maximum (no symbols).
• address	**Value**: The customer's address. **Format**: 60-character maximum (no symbols).
• city	**Value**: The city of the customer's address. **Format**: 60-character maximum (no symbols).
• state	**Value**: The state of the customer's address. **Format**: 40-character maximum (no symbols).
• zip	**Value**: The ZIP code of the customer's address. **Format**: 20-character maximum (no symbols).
• country	**Value**: The country of the customer's address. **Format**: 60-character maximum (no symbols).
• phoneNumber	**Value**: The phone number associated with the customer's address. **Format**: Up to 25 digits (no letters). For example, (123)123-1234
• faxNumber	**Value**: The fax number associated with the customer's address. **Format**: Up to 25 digits (no letters). For example, (123)123-1234

Example 36   getCustomerShippingAddressResponse

```xml
<?xml version="1.0" encoding="utf-8"?>
<getCustomerShippingAddressResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
  <address>
    <firstName>John</firstName>
    <lastName>Doe</lastName>
    <company></company>
    <address>123 Main St.</address>
    <city>Bellevue</city>
    <state>WA</state>
    <zip>98004</zip>
    <country>USA</country>
    <phoneNumber>000-000-0000</phoneNumber>
    <faxNumber></faxNumber>
    <customerShippingAddressId>30000</customerShippingAddressId>
  </address>
</getCustomerShippingAddressResponse>
```

Output for getHostedProfilePage

The following table lists the output returned from the payment gateway for an API call to the g**etHostedProfilePage**Request function.

Table 42   Output for getHostedProfilePage

Field	Description
Token	**Value**: string.
	Format: An encrypted string that the merchant must include when posting to the Authorize.Net web page.
	Notes: 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 Chapter 4, "Using a Hosted Form," on page 114.

Example 37   Sample getHostedProfilePageResponse

```
<?xml version="1.0" encoding="utf-8"?>
<getHostedProfilePageResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>

<token>+ZeWDaUOPoQPRGTHcKd7DYbMfcAFDrhO8GPOFNt+ACzJnvkz+aWO0SYSAA9x602jAI
KKfUHUt2ybwQRaG8LzHluuR5dRgsuh+kjarKvD0hpieGjLHmnz0LHmFv1Xe9P3zpmawqBCSB/
d4jcSg9dAxecNBUzMwIuYzY+vGUGLUXgr9QPaRh93HqWZrV4Mbwop</token>
</getHostedProfilePageResponse>
```

Output for updateCustomerProfileResponse

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

Table 43   Output for updateCustomerProfileResponse

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
UpdateCustomerProfileResult	**Value**: Contains the result of the API request to update a customer profile.
	Notes: See "Response Codes," page 120 for possible values.

Example 38   updateCustomerProfileResponse

```xml
<?xml version="1.0" encoding="utf-8"?>
<updateCustomerProfileResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
</updateCustomerProfileResponse>
```

Output for updateCustomerPaymentProfileResponse

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

Table 44   Output for updateCustomerPaymentProfileResponse

Field	Description
refId	**Value**: Merchant-assigned reference ID for the request.
	Optional.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.
validationDirectResponse	**Value**: Contains detailed information about the result of the transaction.
	Optional.
	Format: String.
	Notes: 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.
	This output is only present if the **ValidationMode** input element is passed with a value of **testMode** or **liveMode**.

Example 39 **updateCustomerPaymentProfileResponse**

```
<?xml version="1.0" encoding="utf-8"?>
<updateCustomerPaymentProfileResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
</updateCustomerPaymentProfileResponse>
```

Output for updateCustomerShippingAddressResponse

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

Table 45 **Output for updateCustomerShippingAddressResponse**

Field	Description
refId	Optional.
	Value: Merchant-assigned reference ID for the request.
	Format: 20-character maximum.
	Notes: If included in the request, this value will be included in the response. This feature might be especially useful for multi-threaded applications.

Example 40   updateCustomerShippingAddressResponse

```
<?xml version="1.0" encoding="utf-8"?>
<updateCustomerShippingAddressResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
</updateCustomerShippingAddressResponse>
```

Output for updateSplitTenderGroup

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

Table 46   Output for updateSplitTenderGroup

Field	Description
refId	Optional.
	Value: Merchant-assigned reference ID for the request.
	Format: 20-character maximum.
	Notes: If included in the request, this value is included in the response. This feature might be especially useful for multi-threaded applications.

Example 41   Output for updateSplitTenderGroupResponse

```
<?xml version="1.0" encoding="utf-8"?>
<updateSplitTenderGroupResponse xmlns="AnetApi/xml/v1/schema/AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
</updateSplitTenderGroupResponse>
```

Output for validateCustomerPaymentProfileResponse

The following table represents the output returned from the payment gateway for an API call to the v**alidateCustomerPaymentProfile**Request function.

Table 47   Output for validateCustomerPaymentProfileResponse

Field	Description
■ directResponse	**Value**: Contains detailed information about the result of the transaction.
	Format: 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.

Example 42   validateCustomerPaymentProfileResponse

```
<?xml version="1.0" encoding="utf-8"?>
<validateCustomerPaymentProfileResponse xmlns="AnetApi/xml/v1/schema/
AnetApiSchema.xsd">
  <messages>
    <resultCode>Ok</resultCode>
    <message>
      <code>I00001</code>
      <text>Successful.</text>
    </message>
  </messages>
  <directResponse>1,1,1,This transaction has been
approved.,000000,Y,2000000003,none,Test transaction for
ValidateCustomerPaymentProfile.,0.01,CC,auth_only,custId123,
John,Doe,,123 Main St.,Bellevue,WA,98004,USA,000-000-
0000,,mark@example.com,John,Doe,,123 Main
St.,Bellevue,WA,98004,USA,0.00,0.00,0.00,,none,
D18EB6B211FE0BBF556B271FDA6F92EE,,,,,,,,,,,,,,,,,,,,,,,,,,,,
  </directResponse>
</validateCustomerPaymentProfileResponse>
```

Duplicate Profile Verification

When you submit calls to the c**reateCustomerProfile**Request, c**reateCustomerPaymentProfile**Request, and c**reateCustomerShippingAddress**Request functions, the payment gateway checks certain fields in each request to ensure 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 occur only if all the values for each field being submitted match all the values for each field in the already existing profile.

Table 48   Duplicate Profile Verification

Function	Fields Used for Duplicate Profile Verification
createCustomerProfileRequest	■ merchantCustomerId ■ description ■ email
createCustomerPaymentProfileRequest	■ customerProfileId ■ cardNumber ■ accountNumber ■ routingNumber ■ billToFirstName ■ billToLastName ■ billToAddress ■ billToZip
createCustomerShippingAddressRequest	■ customerProfileId ■ firstName ■ lastName ■ address ■ zip ■ phoneNumber

Using a Hosted Form

Identifying the Customer

Before you can present the hosted form, you need a way of identifying returning customers. You can have the customer log in to your site. Several content management systems and shopping carts automatically support that functionality. It is important that the login process is reliable so that one customer does not have access to another's stored payment information.

For first-time customers, you must create a new profile using the **createCustomerProfileRequest** field.

A customer profile contains any unique combination:

- Customer ID (any value you choose)
- Email
- Description

Once the profile is created, you'll receive a unique profile ID that you can use to identify this customer in the future.

Retrieving a Token

Before you can send the HTML form post, you will need to retrieve a token using the **getHostedProfilePageRequest** field.

You must include the Customer's profile ID in your request.

Settings include:

- Return URL and return text—used to place a link back to your site. The return URL and return text are usually used only if you are having the customer completely leave your site and go to our hosted form.

- Page border visibility—determines if a black border will be drawn around the edge of the hosted form. This setting may help you seamlessly fit it into your own site.

- Heading background color—defaults to gray; you can set this to any color.

- Communicator URL—used for embedding the hosted form into your own page.

- HostedProfile validation mode—**liveMode** or **testMode**

Presenting the Hosted Form

The token is passed in a basic HTML form with the input name `token`. The input name `token` is the only input value that must be included for a request to add a new payment or shipping profile, or to manage all of your profiles in one window. If you want to prompt to edit only a single existing profile, then you must include the associated **paymentProfileId** field or **shippingAddressId** field.

The type of form that you display is determined by the URL that the form is submitted to, also known as the *form action*, shown below:

Form Action URLs

- Manage Profiles—https://test.authorize.net/profile/manage
- Add Payment Profile—https://test.authorize.net/profile/addPayment
- Add Shipping Profile—https://test.authorize.net/profile/addShipping
- Edit Payment Profile—https://test.authorize.net/profile/editPayment
- Edit Shipping Profile—https://test.authorize.net/profile/editShipping

Conditional fields

- Edit Payment Profile—include **paymentProfileId**
- Edit Shipping Address—include **shppingAddressId**

Displaying the Form

The hosted form is designed so that you have the freedom to integrate it into your site in almost any way. You can configure it as a separate pop-up window or embed it into your existing site. You can use a "shadow box" layout, in which the box pops up in front of the rest of your site, but not in a new window. Finally, you can just use the full window by directing the customer to Authorize.Net and letting them direct themselves back again, which avoids the use of Javascript.

We have sample code available in our developer forums that shows one example of how to open the hosted form in a shadow box. The shadow box layout can also be accomplished with third-party Javascript toolkits such as jquery.

Redirect

To implement hosted CIM access by using a redirect to Authorize.Net, follow these steps:

Step 1 When you receive the token returned by the **gGetHostedProfilePageResponse** 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 43   Redirecting to the Authorize.Net Host

```
<form method="post" action="https://secure.authorize.net/
profile/manage">

    <input type="hidden" name="token"
value="pfGaUNntoTxZYeqqYDjGCQ4qyCHcsXGXLJ2i7MPCEiH6CH5n5qKqcl8EB
iTClxu01BSeH5eZg7LVUVVzw5kJKVMitQ3pyMB5UZCduMWd6Ku9aT2gyFm69EKMG
fyWPmI4p+Bb4TJf2F07rInSrn2MWlM6f2xd7aRu1XBn0WXoPxK1j9FMGX2CNCoCB
p3cOXB7"/>

    <input type="submit" value="Manage my payment and shipping
information"/>

</form>
```

Step 2 Add a button on your page that redirects the customer to Authorize.Net's secure site. You can customize the text:

Example 44   Adding a Redirect Button

```
    <input type="button" onclick= "document.getElementById(
'formAuthorizeNetPage').submit();">Manage my payment and shipping
information</button>
```

In this example, the "Manage my payment and shipping information" button directs users 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

A link on the bottom of the page returns customers to the merchant's web site.

iFrame

For security reasons, web browsers do not allow Javascript communication between two pages that are hosted on different domains, even if one is embedded within another. Therefore, our hosted form cannot directly provide information to the page that is encapsulating it.

However, it is beneficial to provide some small amount of information indirectly through a third page. You can embed our hosted form in an iFrame, which enables us to embed your iFrameCommunicator inside our hosted form. This channel of communication allows us to send messages to your iFrameCommunicator page. As long as your communicator page is hosted on the same domain as your main page, it can be used to communicate.

This channel of communication is used to pass a few basic messages to your site:

■   Ideal height and width of the window—allows you to resize the frame and avoid any scrollbars from appearing.

■   Changes Saved—returned whenever the customer saves changes to their profile. You can use this notification to know when to look for those changes through the CIM API.

■   Request Cancelled—returned when the merchant backs out of the hosted form.

	You must use **https** when using iFrameCommunicator.
Note	

Guidelines for Parameter Settings

The following parameter settings are used with the **getHostedProfilePageRequest** field.

To integrate to the hosted page as a redirect, pass the **hostedProfileReturnUrl** parameter and the **hostedProfileReturnUrlText** parameter. The parameter **hostedProfilePageBorderVisible**=`true` is optional.

To integrate to the hosted page as a popup, pass the **hostedProfilePageBorderVisible**=`false` parameter and the **hostedProfileIFrameCommunicatorUrl** parameter.

The following table shows possible settings:

Table 49   Parameter Settings

Parameter	Description
hostedProfileReturnUrl	Enter the URL for the page that the customer returns to when 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 web site. 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. The background color of the section headers changes 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 parameter enables you to dynamically change the size of the popup so that there are no scroll bars. This parameter is required only for iframe or lightbox applications.

Table 49   Parameter Settings (Continued)

Parameter	Description (Continued)
hostedProfileValidationMode	`liveMode`—this value is the default setting. `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 changing from 0.01 to 0.00 for all processors. All other credit card types use 0.01.
	Standard gateway and merchant account fees may apply to the authorization transactions. For Visa transactions using 0.00, the **billTo_address** and **billTo_zip** fields are required.
	`testMode`—performs field validation only. All fields are validated. 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 using the Luhn MOD 10 algorithm to verify that the credit card number is in a valid format. This test transaction does not appear on the customer's credit card statement, but it will generate and send a transaction receipt email to the merchant.
	If a validation transaction is unsuccessful, the profile is not created, and the merchant receives an error.
hostedProfileBillingAddressRequired	**Format**: Boolean; default is `false`.
	Notes: When set to `true`, results in an asterisk next to the required fields on the hosted form. Sets First Name, Last Name, Address, City, State, and Zip Code as required fields in order for a payment profile to be created or updated within a hosted CIM form.
hostedProfileCardCodeRequired	**Format**: Boolean. Default is `false`.
	Notes: When set to `true`, sets the Card Code field as required in order for a payment profile to be created or updated within a hosted CIM form. Results in an asterisk next to the card code field on the hosted form.

Response Codes

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

Table 50   Response Codes

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.

Table 50   Response Codes (Continued)

Code	Text	Description
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).
E00045	The root node does not reference a valid XML namespace.	An error exists in the XML namespace. This error is similar to E00003
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.
E00098	Customer Profile ID or Shipping Profile ID not found.	Search for shipping profile using customer profile id and shipping profile id did not find any records.
E00099	Customer profile creation failed. This transaction ID is invalid.	Customer profile creation failed. This transaction ID is invalid.
E00100	Customer profile creation failed. This transaction type does not support profile creation.	Customer profile creation failed. This transaction type does not support profile creation.
E00101	Customer profile creation failed.	Error creating a customer payment profile from transaction.
E00102	Customer profile creation failed.	Error creating a customer profile from transaction.