



# Account Manager

## XML API

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## 1.0 General Information

PSiGate specializes in the integration and deployment of e-commerce payment service solutions. PSiGate's payment solutions enable automated and secure authorization and fulfillment of credit card and INTERAC Online transactions. PSiGate communicates directly with major Canadian and U.S. credit card financial institutions and supports businesses that wish to deploy an online storefront.

### 1.1 About this Guide

The Account Manager Service was created to allow merchants to register customer payment accounts and store customer payment information for future recurring or real-time authorization. Merchants may use payment account information to track customers' recurring or real-time transaction activity in the form of invoices. Merchants may either administer their accounts via an online user interface (aka "Merchant Tools") available at <https://secure.psigate.com> or via an application you create using the information within this document.

This document provides merchants and their affiliates, the tools to integrate with PSiGate's *Account Manager XML Interface* to perform one of the following checked Account Manager actions:

Context Summary Level	Retrieve
Account (Summary)	<input checked="" type="checkbox"/>
Charge (Summary)	<input checked="" type="checkbox"/>
Invoice (Summary)	<input checked="" type="checkbox"/>
Template (Summary)	<input checked="" type="checkbox"/>
E-mail Report (Summary)	<input checked="" type="checkbox"/>

Context Body Level	Register	Update	Delete	Get Detail	Enable/Disable	Imm. Charge	Import
Account (Body)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Charge (Body)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Invoice (Body)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Template (Body)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E-mail Report (Body)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Context Detail Level	Add	Update	Delete	Enable/Disable	Import
Account (Detail)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Charge (Detail)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Template (Detail)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## ***1.2 Revision History***

To view our notes regarding the changes to this Account Manager API, review the release notes available at <https://www.psigate.com/release-notes> for any mention of the “Account Manager API”.

## ***1.3 Intended Audiences***

This document is intended to be used by merchants, developers and shopping cart development teams with some level of XML programming proficiency.

## ***1.4 Contact Information***

### **Support Team:**

Please contact the support team to help you integrate this document and resolve errors you encounter.

Phone: 1-877-374-9444 option 4

E-mail: [support@psigate.com](mailto:support@psigate.com)

### **Sales Team:**

Please contact the sales team to apply for a gateway and/or online merchant account or to ask for updates regarding your applications.

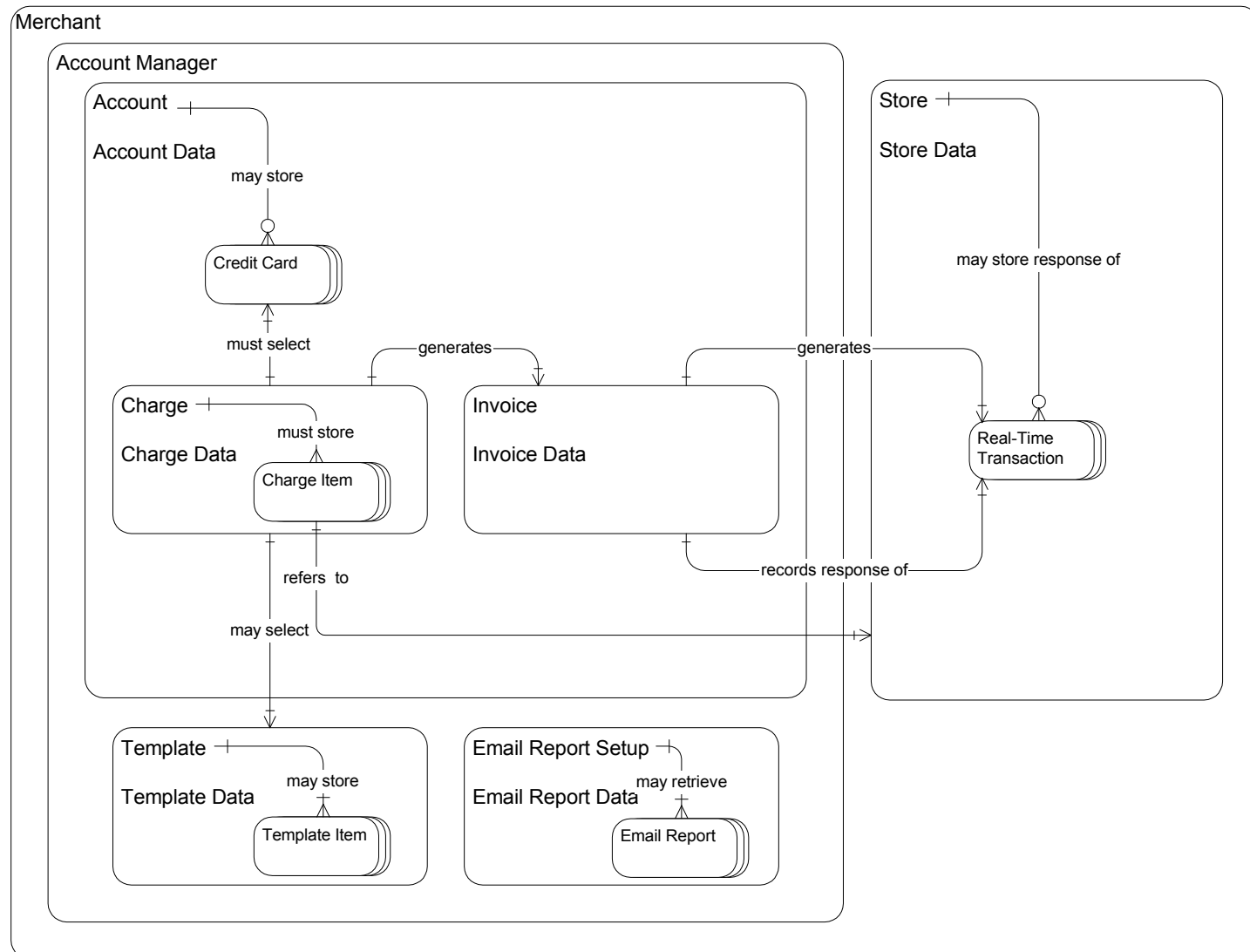
Phone: 1-877-374-9444 option 3

E-mail: [sales@psigate.com](mailto:sales@psigate.com)

## 2.0 About this Application

The *Account Manager API* allows merchants to create and configure customer accounts for the purpose of charging their customers in the future.

### 2.1 Account Manager Entity Relationship Diagram



## 2.2 Terminology

**Entity:** A real or abstract object (noun) about which we want to store data.

**Merchant:** Any business that collects payment for the sale of goods or services.

**Account:** Merchant's customer or client.

**Payment Method:** The means by which payment is accepted. (ie. credit card, electronic account transfer, cheques, etc.)

**Charge:** The group of controls that determine the amount of an invoice and the conditions in which that invoice is generated. Charges are assigned to accounts to control when and how a merchant receives payment from a client.

**Item:** The good or service provided to the client.

**Invoice:** An invoice is an electronic notification to the seller and buyer, indicating the products, quantities and agreed prices for products or services with which the seller has provided the buyer. An invoice indicates that payment is due from the buyer to the seller, according to the payment terms.

**Charge Template:** A charge profile that has not yet been assigned to an account. Merchants store charge templates to simplify the account setup process. Using charge templates prevents merchants from inputting charge data that has already been created for another account.

**E-mail Report:** An electronic mail report of data. Report types include past invoices, soon-to-be expired cards, and soon-to-be expired charges.

**Store:** A profile that specifies how transactions are processed and settled. It communicates the identity of the merchant, how to route funds to the merchant and the currency of the transaction.

**Transaction:** A merchant's electronic request to receive payment from their client.

## 2.3 Operating Requirements

The Account Manager Interface transfers data securely from a merchant's host server to PSiGate's transaction server via XML.

Development/Production Network Requirements:

- Ability to communicate across the standard HTTPS port 443
- Ability to process transactions using encryption protocol TLS 1.1 or better

## 2.4 How to refund invoices

Merchants may refund invoices through one of the following ways:

Through Merchant Tools,

- By clicking the "Refund" button to the right of an invoice within the Invoices screen accessed from the Customers tab.
- By clicking the "Refund" button to the right of the order you wish to refund within the Confirmed Orders screen. The OrderID will have the format "Invoice-[InvoiceNo]".
- By sending a "Credit" transaction request via the [Real-time XML API](#).

Note: Split-funded invoices generated from split-funded charges can only be refunded once through the Real-time XML API. If a subsequent refund must be done to a split-funded invoice, it must be done another way.

## 3.0 Test Account Information

PSiGate's testing environment supports a shared test account that you are welcome to use while developing and testing your interface.

**IMPORTANT:**

- Do **NOT** use real credit card numbers within the testing environment. For a list of test card numbers, please see **Appendix C: Test Card Numbers**.
- When you are ready to go live, send an e-mail to [support@psigate.com](mailto:support@psigate.com) to receive your production URL and production parameters.

Send your test transactions to: <https://accountsstaging.psigate.com/xml>

To process a transaction through the shared test account, pass the following :

CID: 1000001  
UserID: teststore  
Password: Testpass12341234

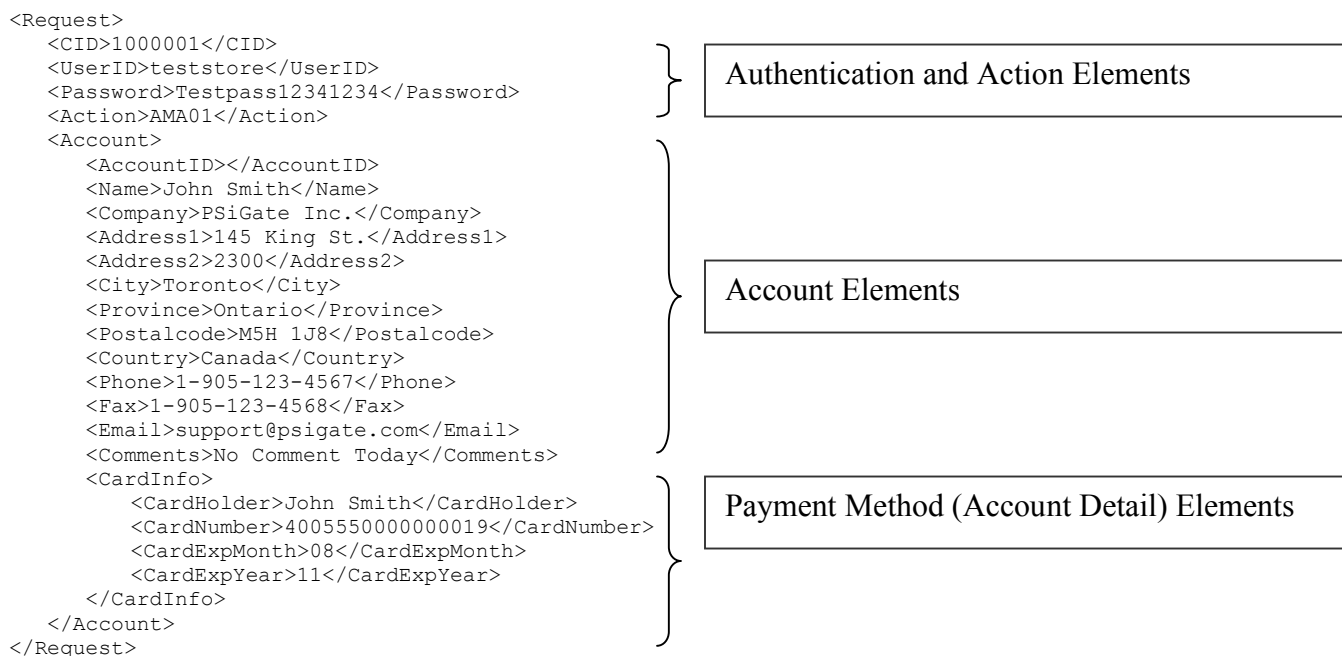
To review your test transactions, log into <https://staging.psigate.com/MerchantTools/Login/login> with the login credentials above.

If you require an unshared test account, send a request to [support@psigate.com](mailto:support@psigate.com) once the merchant has begun the application process.



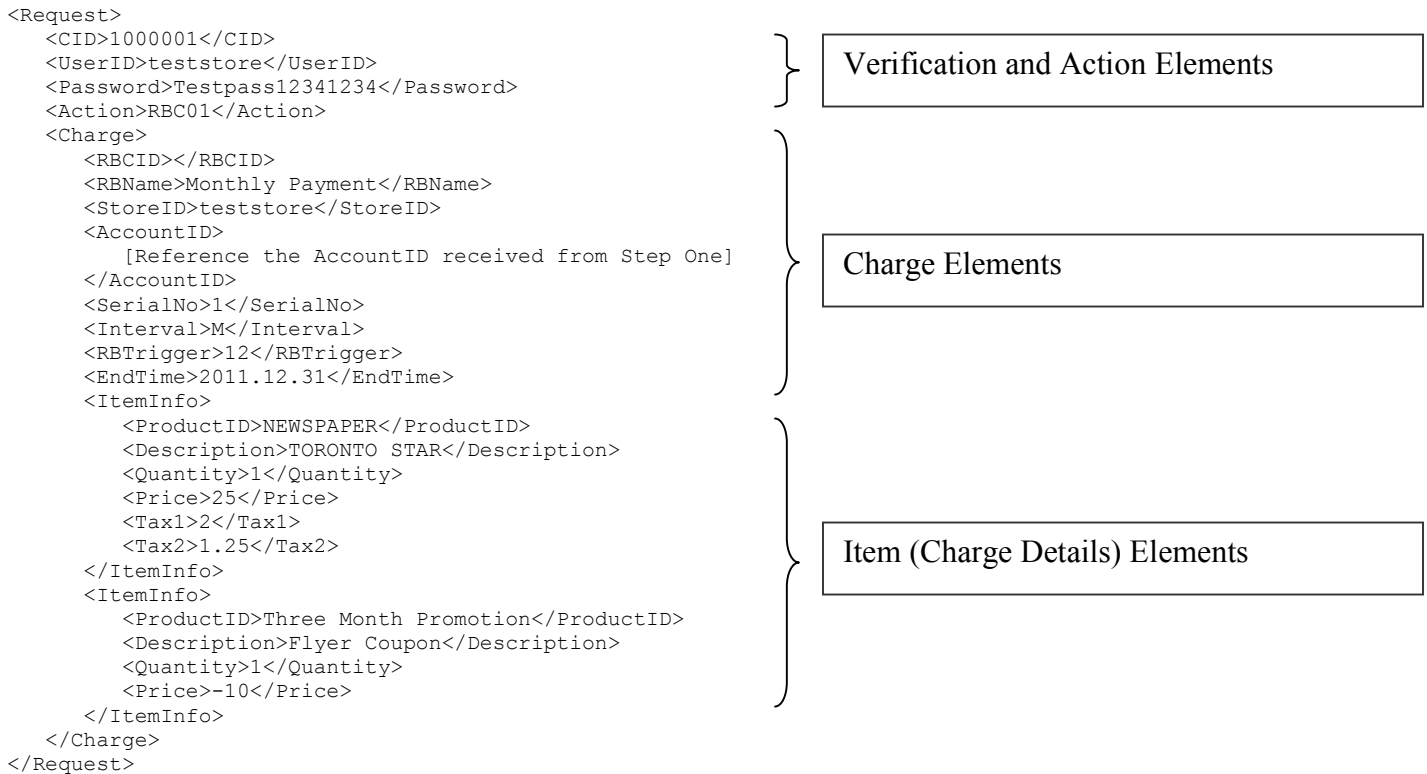
## 4.0 Sample Implementation

### Step One: Register account body and account detail information



In Step One, an account entity is created and the following occurs:

- a unique AccountID is created by PSiGate and assigned to the account
- account information is recorded
- credit card information is recorded

**Step Two: Register charge information and item information.**

In Step Two, a charge entity is created and the following occurs:

- a unique RBCID is created by PSiGate and assigned to the charge
- a store is selected that indicates the merchant's online bank account and currency
- an AccountID is referenced to assign the charge to an account
- the first credit card on file is selected to be used when the charge is triggered
- the charge interval is set to "Monthly"
- the trigger date is set to the twelfth of the month
- the end date is set to midnight December 31<sup>st</sup>, 2011
- the charge item is one Toronto Star newspaper that costs twenty five dollars in the currency of the selected store
- two set of taxes are applied to the charge
- one promotion credit (flyer coupon) is applied to the charge

## 5.0 Requests and Responses

### 5.1 Common Request Elements

The **Account Manager API** transfers XML requests from the merchant's application to PSiGate. Each Account Manager request contains authentication elements, an action element and action-specific elements. The minimum number of action-specific elements required for a particular request depends on the value of the Action element.

Information is passed within the elements using this format: <Element>Value</Element>

Requests are context and action specific.

**Note:** There may be more than one set of detail level elements. Special symbols such as the ampersand symbol (“&”) must be formatted for XML using UTF-8. The ampersand symbol is an invalid XML character and will cause an error if inputted within any element of the XML request. For example, the XML format for the ampersand is represented by the text “&amp;”

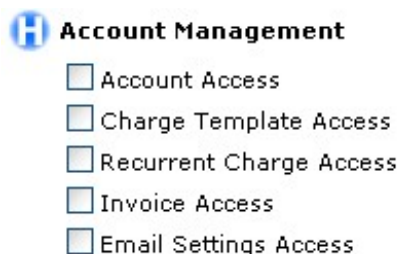
#### 5.1.1 Register Account Management User

To send transaction requests to the **Account Manager API**, a CID, Password and UserID must be registered for each merchant entity. The CID and Password are given to a merchant within a Welcome E-mail when their PSiGate gateway setup is completed. To create and register the UserID you will use when submitting Account Manager XML requests, do the following:

- 1) Go to <https://secure.psigate.com>.
- 2) Login with the CID, UserID and User Password given to you within your **Welcome E-mail**.
- 3) Select “Setup User Permissions” from the merchant menu.
- 4) Click the “New User” button.
- 5) Create a UserID that is between 8 and 12 characters and contains at least one number, upper case letter and lower case letter.

**Note – Never login to the Merchant Tools interface using this UserID otherwise its password will expire in 90 days and then you will have to change the UserID's password in both the interface and your code.**

- 6) We recommend you give this UserID only the Account Management permissions cited below:



- 7) Click the “Save Merchant Level Permissions” button.
- 8) Use the UserID you have created as a authentication element within transaction requests you send to the Account Manager API.

## 5.1.2 Authentication Elements

The authentication elements are CID, Password and UserID. These elements specify the merchant's client identifier, client password and the unique user identifier of the person or application making the request.

Name	Description	Notes
CID	Specifies a merchant account.	Required.
Password	Specifies the merchant account password. A request with an invalid password will not be accepted or processed.	Required. The maximum length of a Password is 16 characters.
UserID	Specifies the individual or application that created the request.	Required. The maximum length of a UserID is 12 characters.

## 5.1.3 Action Element

Each action code belongs to one of five entities. Those entities are: Accounts, Templates, Charges, Invoices and Reports. This document shall define each entity, list all entity-related actions and elements and provide sample requests and responses for each entity action.

Name	Description	Notes
Action	A code that specifies the action the system will use the data to perform. This element also determines which element(s) may be included within requests. See the context Action Tables or Appendix for values.	Required.

## 5.2 Basic Response Format

Each Account Manager response includes a reference to the merchant (CID), action description, result code, and result message.

Basic response format:

Basic Response Format
<pre>&lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;[ReturnCode]&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;[ReturnMessage]&lt;/ReturnMessage&gt; &lt;/Response&gt;</pre>

## 5.3 Context-specific Actions

The Account Manager API includes five entities: Accounts, Charges, Charge Templates, Invoices and E-mail Reports. Each entity may have three levels of information: Summary, Body and Detail. A context is a reference to an entity and level combination. Each context performs its own set of actions.

### 5.3.1 Context Information Table

	Summary	Body	Detail
<b>Accounts</b>	Account reference info	Account info	Payment Method
<b>Charges</b>	Charge reference info	Charge info	Item info
<b>Invoices</b>	Invoice reference info	Invoice info	N/A
<b>Charge Templates</b>	Template reference info	Charge Template info	Item info
<b>E-mail Reports</b>	Reporting reference info	Reporting info	N/A

### 5.3.2 Accounts

Accounts store customer contact information. Charges and payment methods such as credit cards are added to accounts for future billing of the customer. All account action values have the format “AMAXX”.

#### Table of Account Actions

Context	Retrieve	Register (Add)	Update	Delete	Get Detail	Enable/Disable	Generate from existing RT Order
Account (Summary)	AMA00						
Account (Body)		AMA01	AMA02		AMA05	AMA08/AMA09	AMA20
Account (Detail)		AMA11	AMA12	AMA14		AMA18/AMA19	AMA21

#### Account Summary Request and Response

The only Account Summary action (action AMA00) retrieves a list of all accounts registered to a merchant that matches account conditions. All accounts shall be listed if you include no conditions but if you do include conditions, only accounts that match all conditions will be listed. The retrieved AccountID and account holder name describe returned account records. You may use the retrieved AccountIDs to get the account body and account detail information via action “AMA05”.

Account Summary request and response formats:

AMA00 Request Format (Retrieve)	AMA00 Response Format (Retrieve)
<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;AMA00&lt;/Action&gt;   &lt;Condition&gt;     Conditions...   &lt;/Condition&gt; &lt;/Request&gt;</pre>	<pre>&lt;Response&gt;   &lt;CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;Return Code&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;Return Message&lt;/ReturnMessage&gt;   &lt;Condition&gt;     Given Conditions...   &lt;/Condition&gt;   &lt;Account&gt;     &lt;AccountID&gt;[AccountID]&lt;/AccountID&gt;     &lt;Name&gt;[Name]&lt;/Name&gt;   &lt;/Account&gt;   More than one Charge Template record may exist. &lt;/Response&gt;</pre>

**Note:** To display all registered accounts, do not include conditions.

## Account Summary Actions

*Action: AMA00*

*Action Description: Retrieve account summary*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA00</Action>
  <Condition>
    <AccountID>[AccountID]</AccountID>
    <DateFrom>[DateFrom]</DateFrom>
    <DateTo>[DateTo]</DateTo>
  </Condition>
</Request>
```

Verification and Action Elements

Conditions

The Account elements listed below filter account summary and if used, must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	0/25	Optional.
DateFrom	Start date search criteria	0/10	Optional. Format: yyyy.mm.dd
DateTo	End date search criteria	0/10	Optional. Format: yyyy.mm.dd
Name	Client's name	0/100	Optional.
Company	Billing company name	0/100	Optional.
Address1	Billing address line 1	0/100	Optional.
Address2	Billing address line 2	0/100	Optional.
City	Billing city	0/100	Optional.
Province	Billing province	0/100	Optional.
Postalcode	Billing postalcode	0/100	Optional.
Country	Billing country	0/50	Optional.
Phone	Phone number	0/50	Optional.
Fax	Fax number	0/50	Optional.
Email	Email address	0/100	Optional.
Comments	Comments	0/300	Optional.

**Note:** Only accounts that exactly match the given conditions will be returned.

## Account Body Formats

Account Body requests may follow one of three formats. The account body “register” request (action AMA01) format includes account information and associated payment method (credit card) information. The account body “update” request (action AMA02) format includes a reference to an account (AccountID) and the updated account information. All other request formats include only a reference to the account.

Account Body request formats:

AMA01 Request Format (Register)	AMA02 Request Format (Update)	AMA0X Request Format (Other)
<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;AMA01&lt;/Action&gt;   &lt;Account&gt;     Account Elements...     &lt;CardInfo&gt;       Card Elements...     &lt;/CardInfo&gt;   &lt;/Account&gt; &lt;/Request&gt; </pre>	<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;AMA02&lt;/Action&gt;   &lt;Condition&gt;     &lt;AccountID&gt;       [AccountID]     &lt;/AccountID&gt;   &lt;/Condition&gt;   &lt;Update&gt;     Updated Account Elements...   &lt;/Update&gt; &lt;/Request&gt; </pre>	<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;AMA0X&lt;/Action&gt;   &lt;Condition&gt;     &lt;AccountID&gt;       [AccountID]     &lt;/AccountID&gt;   &lt;/Condition&gt; &lt;/Request&gt; </pre>

**Note:** Currently, credit cards are the only accepted payment method. Credit card information within Account requests must be placed within the element “CardInfo”.

## Account Body Actions

*Action: AMA01*

*Action Description: Register a new account*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA01</Action>
  <Account>
    <AccountID></AccountID>
    <Name>John Smith</Name>
    <Company>PSiGate Inc.</Company>
    <Address1>145 King St.</Address1>
    <Address2>2300</Address2>
    <City>Toronto</City>
    <Province>Ontario</Province>
    <Postalcode>M5H 1J8</Postalcode>
    <Country>Canada</Country>
    <Phone>1-905-123-4567</Phone>
    <Fax>1-905-123-4568</Fax>
    <Email>support@psigate.com</Email>
    <Comments>No Comment Today</Comments>
    <CardInfo>
      <CardHolder>John Smith</CardHolder>
      <CardNumber>4005550000000019</CardNumber>
      <CardExpMonth>08</CardExpMonth>
      <CardExpYear>11</CardExpYear>
    </CardInfo>
  </Account>
</Request>
```

}

Verification and Action Elements

}

Account Elements

}

Payment Method (Account Detail) Elements

Account elements listed below describe the newly registered account and must be included within the XML element pair `<Account></Account>`.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	0/25	Optional. Must be unique. If not provided, PSiGate will assign.
Name	Client's name	0/100	Optional.
Company	Billing company	0/100	Optional.
Address1	Billing address line 1	0/100	Optional.
Address2	Billing address line 2	0/100	Optional.
City	Billing city	0/100	Optional.
Province	Billing province	0/100	Optional.
Postalcode	Billing postal code	0/100	Optional.
Country	Billing Country	0/50	Optional.
Phone	Phone number	0/50	Optional.
Fax	Fax number	0/50	Optional.
Email	E-mail address	0/100	Optional.
Comments	Comments	0/300	Optional.



Payment-related elements (Account Details or Card Info) are stored to be billed in the future and must be included within XML element pairs <Account><CardInfo></CardInfo></Account>.

Name	Description	Length Min/Max	Notes
CardHolder	Card Holder Name	0/100	Optional.
CardNumber	Card Number	10/16	Optional.
CardExpMonth	Card Expiry Month	2/2	Optional.
CardExpYear	Card Expiry Year	2/2	Optional.

*Action: AMA02*

*Action Description: Update an account*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA02</Action>
  <Condition>
    <AccountID>
      [AccountID]
    </AccountID>
  </Condition>
  <Update>
    <Address1>[Address1]</Address1>
  </Update>
</Request>
```

Verification and Action Elements

Conditions

Updatable Account Elements

The account identifier of the account to be updated must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	1/25	Required.

Updatable account elements listed below must be included within the XML element pair <Update></Update>.

Name	Description	Length Min/Max	Notes
Company	Billing company	0/100	Optional.
Name	Client's name	0/100	Optional.
Address1	Billing address line 1	0/100	Optional.
Address2	Billing address line 2	0/100	Optional.
City	Billing city	0/100	Optional.
Province	Billing province	0/100	Optional.
Postalcode	Billing postal code	0/100	Optional.
Country	Billing Country	0/50	Optional.
Phone	Phone number	0/50	Optional.
Fax	Fax number	0/50	Optional.
Email	E-mail address	0/100	Optional.
Comments	Comments	0/300	Optional.

**Action: AMA05****Action Description:** Retrieve account details**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA05</Action>
  <Condition>
    <AccountID>[AccountID]</AccountID>
  </Condition>
</Request>
```

Verification and Action Elements

Conditions

The account identifier of the account details to be retrieved must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	1/25	Required.

**Action: AMA08****Action Description:** Enable account(s)**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA08</Action>
  <Condition>
    <AccountID>[AccountID]</AccountID>
  </Condition>
</Request>
```

Verification and Action Elements

Conditions

The account identifier(s) of the account to be enabled must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	1/25	Required, may be multiple.

**Action: AMA09****Action Description:** *Disable account(s)***Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA09</Action>
  <Condition>
    <AccountID>[AccountID]</AccountID>
  </Condition>
</Request>

```

Verification and Action Elements

Conditions

The account identifier(s) of the account to be disabled must be included within XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	1/25	Required, may be multiple.

**Account Body Responses**

Account Body responses may follow one of three formats. The account body “register” response includes basic response information, account information and associated payment information. The account body “update” response includes basic response information, updated account information and a reference to the affected account (AccountID). All other responses aside from the “retrieve” request (action AMA05) and basic response information include only a reference to the affected account(s). The “retrieve” response additionally includes account information.

**Account Body response formats:**

AMA01 Response Format (Register)	AMA02 Response Format (Update)	AMA0X Response Format (Other)
<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;     Action Description...   &lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;Account&gt;     Account Elements...     &lt;CardInfo&gt;       Credit Card Elements...     &lt;/CardInfo&gt;   &lt;/Account&gt; &lt;/Response&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;     Action Description...   &lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;AccountID&gt;       [AccountID]     &lt;/AccountID&gt;   &lt;/Condition&gt;   &lt;Update&gt;     Updated Account Elements...   &lt;/Update&gt; &lt;/Response&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;     Action Description...   &lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;AccountID&gt;       [AccountID]     &lt;/AccountID&gt;   &lt;/Condition&gt;   Action AMA05 displays   Account information here... &lt;/Response&gt; </pre>

## Account Detail Formats

Account Detail requests may follow one of two formats. The account detail “add” request (action AMA11) format includes a reference to an account (AccountID) and associated payment information to be added to the account. All other request formats include a reference to an account and a reference to the associated payment data (SerialNo).

Account Detail request formats:

AMA11 Request Format (Add)	AMA1X Request Format (Other)
<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;AMA11&lt;/Action&gt;   &lt;Account&gt;     &lt;AccountID&gt;[AccountID]&lt;/AccountID&gt;     &lt;CardInfo&gt;       Card Elements...     &lt;/CardInfo&gt;   &lt;/Account&gt; &lt;/Request&gt;</pre>	<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;AMA1X&lt;/Action&gt;   &lt;Condition&gt;     &lt;AccountID&gt;[AccountID]&lt;/AccountID&gt;     &lt;SerialNo&gt;[SerialNo]&lt;/SerialNo&gt;   &lt;/Condition&gt; &lt;/Request&gt;</pre>

**Note:** There is no account detail (credit card or future payment methods) update request. Instead you may disable or delete old payment data and then add new payment data.

## Account Detail Actions

*Action: AMA11*

*Action Description: Add new credit cards to an account*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA11</Action>
  <Account>
    <AccountID>[AccountID]</AccountID>
    <CardInfo>
      <CardHolder>Johnathan Smith</CardHolder>
      <CardNumber>4111111111111111</CardNumber>
      <CardExpMonth>07</CardExpMonth>
      <CardExpYear>12</CardExpYear>
    </CardInfo>
  </Account>
</Request>
```

}	Verification and Action Elements
	AccountID
}	Payment Method (Account Detail) Elements

The account identifier of the account to receive new credit cards must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	1/25	Required.

Credit Card elements (aka. Account Details) are stored to be billed in the future and must be included within the XML element pairs <Account><CardInfo></CardInfo></Account>.

Name	Description	Length Min/Max	Notes
CardHolder	Cardholder name	0/100	Optional.
CardNumber	Card number	10/16	Required.
CardExpMonth	Card expiry month	2/2	Required.
CardExpYear	Card expiry year	2/2	Required.

*Action: AMA12*

*Action Description: Update a credit card expiration date*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA12</Action>
  <Condition>
    <AccountID>[AccountID]</AccountID>
    <SerialNo>[SerialNo]</SerialNo>
  </Condition>
  <Update>
    <CardExpMonth>07</CardExpMonth>
    <CardExpYear>15</CardExpYear>
  </Update>
</Request>
```

Verification and Action Elements

AccountID

Payment Method (Account Detail) Elements

The account identifier and the serial number of the card to be updated must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	1/25	Required.
SerialNo	Payment method serial number	0/2, Pregenerated by PSiGate	Required.

Credit Card elements (aka. Account Details) listed below are used to update the card expiration date when included within the XML element pair <Update></Update>.

Name	Description	Length Min/Max	Notes
CardExpMonth	Card expiry month	2/2	Required.
CardExpYear	Card expiry year	2/2	Required.

**Action: AMA14***Action Description: Delete a credit card***Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA14</Action>
  <Condition>
    <AccountID>[AccountID]</AccountID>
    <SerialNo>[SerialNo]</SerialNo>
  </Condition>
</Request>

```

Verification and Action Elements

Conditions

The account identifier and the serial number of the card to be deleted must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	1/25	Required.
SerialNo	Payment method serial number	0/2, Pregenerated by PSiGate	Required.

**Action: AMA18***Action Description: Enable a credit card***Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA18</Action>
  <Condition>
    <AccountID>[AccountID]</AccountID>
    <SerialNo>[SerialNo]</SerialNo>
  </Condition>
</Request>

```

Verification and Action Elements

Conditions

The account identifier and the serial number of the card to be enabled must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	1/25	Required.
SerialNo	Payment method serial number	0/2, Pregenerated by PSiGate	Required.

**Action: AMA19***Action Description: Disable a credit card***Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA19</Action>
  <Condition>
    <AccountID>[AccountID]</AccountID>
    <SerialNo>[SerialNo]</SerialNo>
  </Condition>
</Request>

```

Verification and Action Elements

Conditions

The account identifier and the serial number of the card to be deleted must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	1/25	Required.
SerialNo	Payment method serial number	0/2, Pregenerated by PSiGate	Required.

**Action: AMA20***Action Description: Create an account from an existing real-time order***Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA20</Action>
  <Condition>
    <AccountID>[AccountID]</AccountID>
    <StoreID>[StoreID]</StoreID>
    <OrderID>[OrderID]</OrderID>
  </Condition>
</Request>

```

Verification and Action Elements

Conditions

The real-time store and order identifiers of the order from which an account is to be created must be included within the XML element pair `<Condition></Condition>`. You may assign the account identifier to be used to reference the account that will be made. PSiGate will generate the account identifier if one is not provided.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	1/25	Optional.
StoreID	Real-time store identifier	1/100	Required.
OrderID	Real-time order identifier	1/25	Required.

**Action: AMA21**

*Action Description: Add card information to an account from an existing real-time order*

**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>AMA21</Action>
  <Condition>
    <AccountID>[AccountID]</AccountID>
    <StoreID>[StoreID]</StoreID>
    <OrderID>[OrderID]</OrderID>
  </Condition>
</Request>
```

Verification and Action Elements

Conditions

The real-time store and order identifiers of the order from which an account is to be created must be included within the XML element pair <Condition></Condition>. You may assign the account identifier to be used to reference the account that will be made. PSiGate will generate the account identifier if one is not provided.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	1/25	Required.
StoreID	Real-time store identifier	1/100	Required.
OrderID	Real-time order identifier	1/25	Required.

**Account Detail Responses**

Account Detail responses may follow one of two formats. The account detail “Add” response includes a basic response while other account detail responses includes the basic response and a reference to the affected account (AccountID) and associated payment data (SerialNo).

**Account Detail response formats:**

AMA11 Response Format (Add)	AMA1X Response Format (Other)
<pre>&lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;[ReturnCode]&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;[ReturnMessage] &lt;/ReturnMessage&gt; &lt;/Response&gt;</pre>	<pre>&lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;[ReturnCode]&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;[ReturnMessage]&lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;AccountID&gt;[AccountID]&lt;/AccountID&gt;     &lt;SerialNo&gt;[SerialNo]&lt;/SerialNo&gt;   &lt;/Condition&gt; &lt;/Response&gt;</pre>

**Note:** There is no account detail (credit card or future payment methods) update request. Instead new payment data is added and old payment data is disabled or deleted.



### 5.3.3 Charges

Charges control how and when accounts are billed. Charges set the store profile, payment method (credit card), charge interval, and trigger date used to process the invoice. All charge action values have the format “RBCXX”.

#### Table of Charge Actions

Context	Retrieve	Register (Add)	Update	Delete	Get Detail	Enable/Disable	Immediate Charge	Mass Update of Template Info
Charge (Summary)	RBC00							
Charge (Body)		RBC01	RBC02	RBC04	RBC05	RBC08/RBC09	RBC99	RBC52*
Charge (Detail)		RBC11		RBC14		RBC18/RBC19		RBC52*

#### Charge Summary Formats

The only Charge Summary action (action RBC00) retrieves a list of all charges registered to a merchant that matches given charge conditions. All charges will be listed if you include no conditions but if you choose to include conditions, only charges that match all given conditions will be listed. You may use the retrieved RBCIDs to get charge body and charge detail information via action “RBC05”.

Charge Summary request and response formats:

RBC00 Request Format (Retrieve)	RBC00 Response Format (Retrieve)
<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;RBC00&lt;/Action&gt;   &lt;Condition&gt;     &lt;RBTrigger&gt;[RBTrigger]&lt;/RBTrigger&gt;     Other Conditions...   &lt;/Condition&gt; &lt;/Request&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;Return Code&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;Return Message&lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;RBTrigger&gt;[RBTrigger]&lt;/RBTrigger&gt;     Given Conditions...   &lt;/Condition&gt;   &lt;ChargeTemplate&gt;     &lt;RBCID&gt;[RBCID]&lt;/RBCID&gt;     Other charge elements...   &lt;/ChargeTemplate&gt;   More than one Charge record may exist. &lt;/Response&gt; </pre>

**Note:** To display all registered charges, do not include conditions.

## Charge Summary Action

*Action: RBC00*

*Action Description: Retrieve charge summary*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass12341234</Password>
  <Action>RBC00</Action>
  <Condition>
    <Status>Active</Status>
    <DateFrom>[DateFrom]</DateFrom>
    <DateTo>[DateTo]</DateTo>
  </Condition>
</Request>
```

Verification and Action Elements

Conditions

Charge elements listed below filter the charge summary and must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	0/25	Optional.
AccountID	Unique account identifier	0/25	Optional.
TemplateID	Unique template identifier	0/25	Optional.
DateFrom	Start date search criteria	0/10	Optional. Format: yyyy.mm.dd
DateTo	End date search criteria	0/10	Optional. Format: yyyy.mm.dd
RBName	Charge name	0/50	Optional.
StoreID	Assigned StoreID	0/25	Optional. Controls settlement currency
Interval	Charge interval	0/1	Optional.  Intervals include: O: Onetime                      Q: Quarterly D: Daily                         S: Semi-Annually W: Weekly                       A: Annually B: Biweekly                    X: Every X Days M: Monthly  Note: The maximum number of days for the Every X Days interval is 365.
RBTrigger	Charge trigger date	0/10	Optional.  Required for intervals other than Daily. Indicates specific trigger date within an interval.  Trigger date formats: OneTime - "2012.12.31" Daily - "" Not applicable Weekly - "1" (Sunday = 1) Biweekly - "1" (Sunday = 1) Monthly - "25" (25 <sup>th</sup> ) Quarterly - "03.25" (Mar. 25) Annually - "03.25" (Mar. 25) Semi-Annually - "03.25" (Mar. 25) Every X Days - "25" (25 <sup>th</sup> )
ProcessType	Payment schedule type	0/1	Optional. Default is "A".

			Process types include: A: Automatic Sale – Card will be authorized and charged on the trigger date. P: Automatic Auth – Card will only be authorized on the trigger date. I: Installment – Multiple invoices will be created immediately with each to be charged on the trigger date. M: Manual – Invoice will be created but the card will not be charged. It may be charged manually via the online Merchant Tools interface.
Status	Current status of charge	0/1	Optional.  Y = “Active” N = “Inactive”  <b>Note:</b> The RBTrigger of active charges will generate invoices provided the date/time is within the StartTime and EndTime
StartTime	Charge start date and time inclusive.	0/10	Optional. Format is YYYY.MM.DD
EndTime	Charge start date and time inclusive.	0/10	Optional. Format is YYYY.MM.DD
OrderBy	Determines the field that the returned list of charges is ordered by.	0/50	Optional. Example: “StartTime”, “RBName”, etc.
OrderType	Determines how the OrderBy field is sorted.	0/1	Optional. The default is “A”. A = “Ascending” D = “Descending”

**Note:** Only charges that exactly match the given conditions will be returned.

## Charge Body Formats

Charge Body requests may follow one of four formats. The charge body “register” request (action RBC01) includes charge information and associated item information. The charge body “update” request (action RBC02) includes a reference to a charge (RBCID) and updated charge information. The charge body “immediate charge” request (action RBC99) includes charge information and associated item information. All other charge body requests include only a reference to the affected charge.

### Charge Body request formats:

RBC01 Request Format (Register)	RBC02 Request Format (Update)
<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;RBC01&lt;/Action&gt;   &lt;Charge&gt; (May be multiple)     Charge Elements...     &lt;ItemInfo&gt; (May be multiple)       Item Elements...     &lt;/ItemInfo&gt;   &lt;/Charge&gt; &lt;/Request&gt; </pre>	<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;RBC02&lt;/Action&gt;   &lt;Condition&gt;     &lt;RBCID&gt;[RBCID]&lt;/RBCID&gt;   &lt;/Condition&gt;   &lt;Update&gt;     Updated Charge Elements...   &lt;/Update&gt; &lt;/Request&gt; </pre>
RBC0X Request Format (Other)	RBC99 Request Format (Immediate Charge)

<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;RBC0X&lt;/Action&gt;   &lt;Condition&gt;     &lt;RBCID&gt;[RBCID]&lt;/RBCID&gt;   &lt;/Condition&gt; &lt;/Request&gt; </pre>	<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;RBC99&lt;/Action&gt;   &lt;Charge&gt;     Immediate Charge Elements...     &lt;ItemInfo&gt; (May be multiple)       Item Elements...     &lt;/ItemInfo&gt;   &lt;/Charge&gt; &lt;/Request&gt; </pre>
---	---

## Charge Body Actions

*Action: RBC01*

*Action Description: Register a new charge*

Sample request:

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC01</Action>
  <Charge>
    <RBCID></RBCID>
    <TemplateID></TemplateID>
    <RBName>Monthly Payment</RBName>
    <StoreID>teststore</StoreID>
    <AccountID>
      [Reference the AccountID received from Step One]
    </AccountID>
    <SerialNo>1</SerialNo>
    <Interval>M</Interval>
    <RBTrigger>12</RBTrigger>
    <EndTime>2011.12.31</EndTime>
    <ItemInfo>
      <ProductID>NEWSPAPER</ProductID>
      <Description>TORONTO STAR</Description>
      <Quantity>1</Quantity>
      <Price>25</Price>
      <Tax1>2</Tax1>
      <Tax2>1.25</Tax2>
    </ItemInfo>
    <ItemInfo>
      <ProductID>Three Month Promotion</ProductID>
      <Description>Flyer Coupon</Description>
      <Quantity>1</Quantity>
      <Price>-10</Price>
    </ItemInfo>
    <SplitFunded>
      <SplitPart>
        <StoreID>TestStoreRB</StoreID>
        <SplitAmount>5.00</SplitAmount>
      </SplitPart>
      <SplitPart>
        <StoreID>teststore056</StoreID>
        <SplitAmount>2.00</SplitAmount>
      </SplitPart>
      <SplitPart>
        <StoreID>teststore057</StoreID>
        <SplitAmount>0.34</SplitAmount>
      </SplitPart>
    </SplitFunded>
  </Charge>
</Request>

```

Verification and Action Elements

Charge Elements

Item Elements

Split-funding Elements

Charge elements listed below describe the newly registered charge and must be included within the XML element pair <Charge></Charge>.

Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	0/25	Optional. If not provided, PSiGate will assign.
AccountID	Unique account identifier	1/25	Required.
TemplateID	Unique template identifier	0/25	Optional.
RBName	Charge name	0/50	Optional.
StoreID	Assigned StoreID	1/25	Required. Controls settlement currency
SerialNo	Payment method serial number	1/2	Required. Identifies the registered payment method to be charged.
Interval	Charge interval	1/1	Required.  Intervals include: O: Onetime                      M: Monthly D: Daily                         Q: Quarterly W: Weekly                      A: Annually S: Semi-Annually            X: Every X Days  Note: The maximum number of days for the Every X Days interval is 365.
RBTrigger	Charge trigger date	1/10	Required.  Required for intervals other than Daily. Indicates specific trigger date within an interval.  Trigger date formats: OneTime - "2012.12.31" Daily - "" Not applicable Weekly - "1" (Sunday = 1) Monthly - "25" (25 <sup>th</sup> ) Quarterly - "03.25" (Mar. 25) Annually - "03.25" (Mar. 25) Semi-Annually - "03.25" (Mar. 25) Every X Days - "25" (25 <sup>th</sup> )
ProcessType	Payment schedule type	0/1	Optional. Default is "A".  Process types include: A: Automatic Sale – Card will be authorized and charged on the trigger date. P: Automatic Auth – Card will only be authorized on the trigger date. I: Installment – Multiple invoices will be created immediately with each to be charged on the trigger date. M: Manual – Invoice will be created but the card will not be charged. It may be charged manually via the online Merchant Tools interface.
InstallmentNo	The number of equal installments if the Process Type was set to "I".	0/2	Required only if the ProcessType = "I". The dollar value of each invoice created as a result of the charge will equal the Subtotal divided by the InstallmentNo value.
StartTime	Charge start date inclusive.	0/10	Optional. Format is YYYY.MM.DD

			Default is Today (Creation date of the charge)
EndTime	Charge end date inclusive.	0/10	Optional. Format is YYYY.MM.DD  Default for all intervals except Onetime is Never (Dec. 31, 2999)  Default for the Onetime interval is Today (Creation date of the charge)

Item elements (Charge Details) listed below, determine the recurring amount of the newly registered charge and must be included within the XML element pairs

<Charge><ItemInfo>[insert item info here]</ItemInfo></Charge>.

Name	Description	Length Min/Max	Notes
ProductID	Unique product identifier	1/50	Required
Description	Item description	0/150	Optional
Quantity	Item quantity	1/10	Required
Price	Item price	1/10	Required
Tax1 <sup>1</sup>	First Tax	0/10	Optional
Tax2 <sup>1</sup>	Second Tax	0/10	Optional
Shipping <sup>2</sup>	Shipping and Handling fees	0/10	Optional

**Note:**

<sup>1</sup> Input taxes as an amount, pre-calculated by your system or cart, and not as a percentage. To avoid any discrepancies, PSiGate has elected to process the tax amount you specify rather than calculate the tax from a percentage.

<sup>2</sup> You may include the shipping fee to only one item should a charge contain multiple items. When you do this and you wish to delete the item that is associated with the shipping fee, remember to transfer a modified shipping fee to one of the remaining items.

Split-funding

PSiGate now has the ability to split the funding of a single order among two or more bank accounts. To do this, include split-funding instructions within the registration of a charge and when the invoice is generated, all of the bank accounts included within split-funding instructions will be funded accordingly.

Split-funding elements listed below define the split-funding instructions that should be included each time the registered charge is triggered. These instructions must be included within the XML element pairs

<Charge><SplitFunded><SplitPart>[insert instructions here]</SplitPart></SplitFunded></Charge>.

Name	Description	Length Min/Max	Notes
StoreID	Instructs the charge to fund the associated StoreAmount value to this StoreID.	1/25	Required
SplitAmount	Instructs the charge to fund this amount to the associated StoreID.	1/10	Required

**Note:** The sum of all of the charge's SplitAmount values must be equal to the SubTotal of the charge.

**Action: RBC02****Action Description: Update a charge****Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC02</Action>
  <Condition>
    <RBCID>[RBCID]</RBCID>
  </Condition>
  <Update>
    <RBTrigger>25</RBTrigger>
  </Update>
</Request>

```

Verification and Action Elements

Conditions

Updatable Charge Elements

The charge identifier of the charge to be updated must be included within the XML element pair **<Condition></Condition>**.

Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	1/25	Required.

The updatable charge elements listed below must be included within the XML element pair **<Update></Update>**.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	0/25	Optional.
TemplateID	Unique template identifier	0/25	Optional.
RBName	Charge name	0/50	Optional.
StoreID	Assigned StoreID	0/25	Optional. Controls settlement currency
SerialNo	Payment method serial number	0/2	Optional. Identifies the registered payment method to be charged.
Interval	Charge interval	0/1	Optional.  Intervals include: O: Onetime                      M: Monthly D: Daily                        Q: Quarterly W: Weekly                      A: Annually S: Semi-Annually            X: Every X Days  Note: The maximum number of days for the Every X Days interval is 365.
RBTrigger	Charge trigger date	0/10	Optional.  Required for intervals other than Daily. Indicates specific trigger date within an interval.  Trigger date formats: OneTime - "2012.12.31" Daily - "" Not applicable Weekly - "1" (Sunday = 1) Monthly - "25" (25 <sup>th</sup> ) Quarterly - "03.25" (Mar. 25) Annually - "03.25" (Mar. 25) Semi-Annually - "03.25" (Mar. 25) Every X Days - "25" (25 <sup>th</sup> )
ProcessType	Payment schedule type	0/1	Optional. Default is "A".

			<p>Process types include:</p> <p>A: Automatic Sale – Card will be authorized and charged on the trigger date.</p> <p>P: Automatic Auth – Card will only be authorized on the trigger date.</p> <p>I: Installment – Multiple invoices will be created immediately with each to be charged on the trigger date.</p> <p>M: Manual – Invoice will be created but the card will not be charged. It may be charged manually via the online Merchant Tools interface.</p>
StartTime	Charge start date and time inclusive.	0/10	<p>Optional.</p> <p>Format is YYYY.MM.DD</p> <p>Default is Today (Creation date of the charge)</p>
EndTime	Charge start date and time inclusive.	0/10	<p>Optional.</p> <p>Format is YYYY.MM.DD</p> <p>Default for all intervals except Onetime is Never (Dec. 31, 2999)</p> <p>Default for the Onetime interval is Today (Creation date of the charge)</p>



**Action: RBC04****Action Description:** Delete a charge**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC04</Action>
  <Condition>
    <RBCID>[RBCID]</RBCID>
  </Condition>
</Request>
```

Verification and Action Elements

Conditions

The charge identifier of the charge details to be deleted must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	1/25	Required.

**Action: RBC05****Action Description:** Retrieve charge details**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC05</Action>
  <Condition>
    <RBCID>[RBCID]</RBCID>
  </Condition>
</Request>
```

Verification and Action Elements

Conditions

The charge identifier of the charge details to be retrieved must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	1/25	Required.

**Action: RBC08****Action Description:** *Enable charge(s) – Changes the charge status to “Active”***Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC08</Action>
  <Condition>
    <RBCID>[RBCID]</RBCID>
  </Condition>
</Request>
```

Verification and Action Elements

Conditions

The charge identifier(s) of the charge details to be enabled must be included within the XML element pair **<Condition></Condition>**.

Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	1/25	Required, may be multiple.

**Action: RBC09****Action Description:** *Disable charge(s) – Changes the charge status to “Inactive”***Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC09</Action>
  <Condition>
    <RBCID>[RBCID]</RBCID>
  </Condition>
</Request>
```

Verification and Action Elements

Conditions

The charge identifier(s) of the charge details to be disabled must be included within the XML element pair **<Condition></Condition>**.

Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	1/25	Required, may be multiple.

**Action: RBC99****Action Description:** *Perform an immediate charge***Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC99</Action>
  <Charge>
    <RBCID></RBCID>
    <RBName>Immediate Payment</RBName>
    <StoreID>teststore</StoreID>
    <AccountID>
      [Reference the AccountID received from Step One]
    </AccountID>
    <SerialNo>1</SerialNo>
    <CardIDNumber>123</CardIDNumber>
    <ItemInfo>
      <ProductID>NEWSPAPER</ProductID>
      <Description>TORONTO STAR</Description>
      <Quantity>1</Quantity>
      <Price>25</Price>
      <Tax1>2</Tax1>
      <Tax2>1.25</Tax2>
    </ItemInfo>
    <SplitFunded>
      <SplitPart>
        <StoreID>TestStoreRB</StoreID>
        <SplitAmount>5.00</SplitAmount>
      </SplitPart>
      <SplitPart>
        <StoreID>teststore056</StoreID>
        <SplitAmount>2.00</SplitAmount>
      </SplitPart>
      <SplitPart>
        <StoreID>teststore057</StoreID>
        <SplitAmount>0.34</SplitAmount>
      </SplitPart>
    </SplitFunded>
  </Charge>
</Request>

```

Verification and Action Elements

Charge Elements

Item Elements

Split-funding Elements

Charge elements listed below are used to describe the immediate charge and must be included within the XML element pair <Charge></Charge>.

Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	0/25	Optional. If not provided, PSiGate will assign.
TemplateID	Unique template identifier	0/25	Optional.
RBName	Charge name	0/50	Optional.
StoreID	Assigned StoreID	1/25	Required. Controls settlement currency
AccountID	Unique account identifier	1/25	Required.
ProcessType	Payment schedule type	0/1	Optional. Default is "A".  Process types include: A: Automatic Sale – Card will be immediately authorized and charged. P: Automatic Auth – Card will be immediately authorized.

Recurring	A flag indicating that the immediate charge is a recurring charge.	1/1	Set to "Y" if the charge is part of a group of transactions scheduled to be processed at predetermined intervals not to exceed one year between transactions, representing an agreement between a cardholder and a merchant to purchase goods or services provided over a period of time.
SerialNo	Payment method serial number	1/2	Required. Identifies the registered payment method to be charged.
CardIDNumber	Security code listed on the front or back of the credit card.	0/4	Optional. The CardIDNumber is only used to process the transaction. PSiGate does not store the CardIDNumber within our database.

Item elements (Charge Details) listed below are used to determine the amount to immediately charge and must be included within the XML element pairs <Charge><ItemInfo></ItemInfo></Charge>.

Name	Description	Length Min/Max	Notes
ProductID	Unique product identifier	1/50	Required
Description	Item description	0/150	Optional
Quantity	Item quantity	1/10	Required
Price	Item price	1/10	Required
Tax1 <sup>1</sup>	First Tax	0/10	Optional
Tax2 <sup>1</sup>	Second Tax	0/10	Optional
Shipping <sup>2</sup>	Shipping and Handling fees	0/10	Optional

**Note:**

<sup>1</sup> Input taxes as an amount, pre-calculated by your system or cart, and not as a percentage. To avoid any discrepancies, PSiGate has elected to process the tax amount you specify rather than calculate the tax from a percentage.

<sup>2</sup> You may include the shipping fee to only one item should a charge contain multiple items. When you do this and you wish to delete the item that is associated with the shipping fee, remember to transfer a modified shipping fee to one of the remaining items.

Split-funding elements listed below define the split-funding instructions that should be included each time the registered charge is triggered. These instructions must be included within the XML element pairs <Charge><SplitFunded><SplitPart>[insert instructions here]</SplitPart></SplitFunded></Charge>.

Name	Description	Length Min/Max	Notes
StoreID	Instructs the charge to fund the associated StoreAmount value to this StoreID.	1/25	Required
SplitAmount	Instructs the charge to fund this amount to the associated StoreID.	1/10	Required

**Note:** The sum of all of the charge's SplitAmount values must be equal to the SubTotal of the charge.

## Charge Body Responses

Charge Body responses may follow one of four formats. The charge body “Add” response includes the basic response, charge information and associated item information. The charge body “update” response includes the basic response, a reference to the affected charge (RBCID) and the updated charge information. The charge body “immediate charge” response includes the basic response and a reference to the affected charge. All other charge body responses include the basic response and a reference to the affected charge (RBCID).

Charge Body response formats:

RBC01 Response Format (Register)	RBC02 Response Format (Update)
<pre> &lt;Response&gt;   Authentication Elements...   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;Charge&gt; (May be multiple)     Charge Elements...     &lt;ItemInfo&gt; (May be multiple)       Item Elements...     &lt;/ItemInfo&gt;   &lt;/Charge&gt; &lt;/Response&gt; </pre>	<pre> &lt;Response&gt;   Authentication Elements...   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;RBCID&gt;[RBCID]&lt;/RBCID&gt;   &lt;/Condition&gt;   &lt;Update&gt;     Updated Charge Elements...   &lt;/Update&gt; &lt;/Response&gt; </pre>

RBC0X Response Format (Other)	RBC99 Response Format (Immediate Charge)
<pre> &lt;Response&gt;   Authentication Elements...   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;RBCID&gt;[RBCID]&lt;/RBCID&gt;   &lt;/Condition&gt;   Action RBC05 displays Charge information here... &lt;/Response&gt; </pre>	<pre> &lt;Response&gt;   Authentication Elements...   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;RBCID&gt;[RBCID]&lt;/RBCID&gt;   &lt;/Condition&gt;   &lt;Invoice&gt;     &lt;StoreID&gt;[StoreID]&lt;/StoreID&gt;     &lt;PayerName&gt;[PayerName]&lt;/PayerName&gt;     &lt;Status&gt;[Status]&lt;/Status&gt;     &lt;InvoiceNo&gt;[InvoiceNo]&lt;/InvoiceNo&gt;     &lt;SubNo&gt;[SubNo]&lt;/SubNo&gt;     &lt;ReturnCode&gt;[ReturnCode]&lt;/ReturnCode&gt;     &lt;ErrMsg&gt;[ErrMsg]&lt;/ErrMsg&gt;     &lt;ExecDate&gt;[ExecDate]&lt;/ExecDate&gt;     &lt;AccountID&gt;[AccountID]&lt;/AccountID&gt;     &lt;SerialNo&gt;[SerialNo]&lt;/SerialNo&gt;     &lt;CardNumber&gt;[CardNumber]&lt;/CardNumber&gt;     &lt;CardExpMonth&gt;[CardExpMonth]&lt;/CardExpMonth&gt;     &lt;CardExpYear&gt;[CardExpYear]&lt;/CardExpYear&gt;     &lt;CardType&gt;[CardType]&lt;/CardType&gt;   &lt;/Invoice&gt;   &lt;Result&gt;     &lt;TransTime&gt;[TransTime]&lt;/TransTime&gt;     &lt;OrderID&gt;[OrderID]&lt;/OrderID&gt;     &lt;TransactionType&gt;[TransactionType]&lt;/TransactionType&gt;     &lt;Approved&gt;[Approved]&lt;/Approved&gt;     &lt;ReturnCode&gt;[ReturnCode]&lt;/ReturnCode&gt;     &lt;ErrMsg&gt;[ErrMsg]&lt;/ErrMsg&gt; </pre>

	<pre>&lt;TaxTotal&gt;[TaxTotal]&lt;/TaxTotal&gt; &lt;SubTotal&gt;[SubTotal]&lt;/SubTotal&gt; &lt;FullTotal&gt;[FullTotal]&lt;/FullTotal&gt; &lt;PaymentType&gt;[PaymentType]&lt;/PaymentType&gt; &lt;CardNumber&gt;[CardNumber]&lt;/CardNumber&gt; &lt;TransRefNumber&gt;[TransRefNumber] &lt;/TransRefNumber&gt; &lt;CardIDResult&gt;[CardIDResult]&lt;/CardIDResult&gt; &lt;/Result&gt; &lt;/Response&gt;</pre>
--	---

Charge Detail Formats

Charge detail requests may follow one of two formats. The charge detail “Add” request (action RBC11) format includes a reference to the “RBCID” and item information. All other request formats include a reference to the merchant’s “RBCID” and payment method (SerialNo).

Charge Detail request formats:

RBC11 Request Format (Add)	RBC1X Request Format (Other)
<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;RBC11&lt;/Action&gt;   &lt;Charge&gt;     &lt;RBCID&gt;[RBCID]&lt;/RBCID&gt;     &lt;ItemInfo&gt;       Item Elements...     &lt;/ItemInfo&gt;   &lt;/Charge&gt; &lt;/Request&gt;</pre>	<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;RBC1X&lt;/Action&gt;   &lt;Condition&gt;     &lt;RBCID&gt;[RBCID]&lt;/RBCID&gt;     &lt;ItemSerialNo&gt;[ItemSerialNo]&lt;/ItemSerialNo&gt;   &lt;/Condition&gt; &lt;/Request&gt;</pre>

## Charge Detail Actions

*Action: RBC11*

*Action Description: Add new charge item(s)*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC11</Action>
  <Charge>
    <StoreID>teststore</StoreID>
    <AccountID>
      [Reference the AccountID of the account the charge item is to be added to]
    </AccountID>
    <SerialNo>1</SerialNo>
    <Interval>M</Interval>
    <RBTrigger>20</RBTrigger>
    <RBCID>
      [Reference the RBCID of the charge the charge item is to be added to]
    </RBCID>
    <ItemInfo>
      <ProductID>MEMBERSHIP</ProductID>
      <Description>CAA</Description>
      <Quantity>1</Quantity>
      <Price>60</Price>
      <Tax1></Tax1>
      <Tax2></Tax2>
      <Cost></Cost>
    </ItemInfo>
  </Charge>
</Request>
```

Verification and Action Elements

The Charge identifier RBCID must be included within the XML element pair <Charge> </Charge>.

Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	1/25	Required

The item elements (Charge Details) listed below are used to determine the amount to immediately charge and must be included within the XML element pairs <Charge><ItemInfo></ItemInfo></Charge>. May be multiple.

Name	Description	Length Min/Max	Notes
ProductID	Unique product identifier	1/50	Required. May be multiple.
Description	Item description	0/150	Optional
Quantity	Item quantity	1/10	Required
Price	Item price	1/10	Required
Tax1 <sup>1</sup>	First Tax	0/10	Optional
Tax2 <sup>1</sup>	Second Tax	0/10	Optional
Shipping <sup>2</sup>	Shipping and Handling fees	0/10	Optional

**Note:**

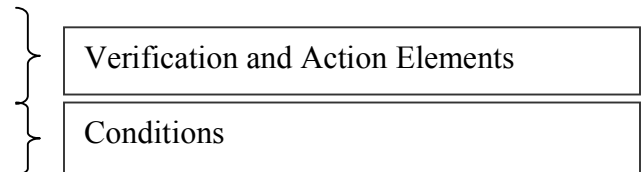
<sup>1</sup> Input taxes as an amount, pre-calculated by your system or cart, and not as a percentage. To avoid any discrepancies, PSiGate has elected to process the tax amount you specify rather than calculate the tax from a percentage.

<sup>2</sup> You may include the shipping fee to only one item should a charge contain multiple items. When you do this and you wish to delete the item that is associated with the shipping fee, remember to transfer a modified shipping fee to one of the remaining items.

### Action: RBC14

*Action Description: Delete a charge item*

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC14</Action>
  <Condition>
    <RBCID>[RBCID]</RBCID>
    <ItemSerialNo>[SerialNo]</ItemSerialNo>
  </Condition>
</Request>
```



The charge identifier and item serial number of the charge item whose item information will be deleted must be included within the XML element pair <Condition></Condition>.

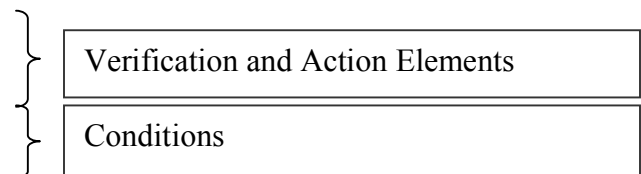
Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	1/25	Required
ItemSerialNo	Item serial number	0/2, Pregenerated by PSiGate	Required

### Action: RBC18

*Action Description: Enable a charge item - Changes the charge item status returned via RBC05 to “Active”*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC18</Action>
  <Condition>
    <RBCID>[RBCID]</RBCID>
    <ItemSerialNo>[SerialNo]</ItemSerialNo>
  </Condition>
</Request>
```



The charge identifier and item serial number of the charge item whose item information will be enabled must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	1/25	Required
ItemSerialNo	Item serial number	0/2, Pregenerated by PSiGate	Required

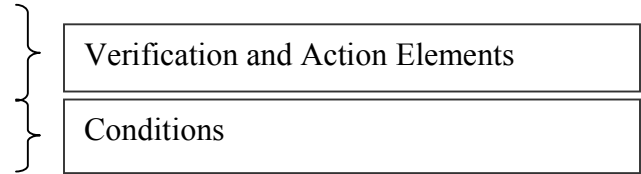


**Action: RBC19***Action Description: Disable a charge item - Changes the charge item status returned via RBC05 to “Inactive”***Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC19</Action>
  <Condition>
    <RBCID>[RBCID]</RBCID>
    <ItemSerialNo>[SerialNo]</ItemSerialNo>
  </Condition>
</Request>

```



The charge identifier and item serial number of the charge item whose item information will be disabled must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
RBCID	Unique charge identifier	1/25	Required
ItemSerialNo	Item serial number	0/2, Pregenerated by PSiGate	Required

**Action: RBC52***Action Description: Mass update of Charge Information derived from Template Information*

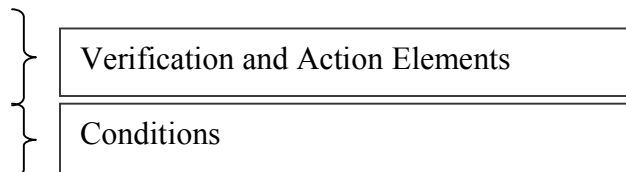
When this action is performed, all charges that have the same TemplateID as that referenced will be updated with the referenced template's RBName and Item information. This allows merchants to quickly change pricing packages.

**Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>RBC52</Action>
  <Condition>
    <TemplateID>[TemplateID]</TemplateID>
  </Condition>
</Request>

```



The charge identifier and item serial number of the charge item whose item information will be disabled must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/25	Required.

## Charge Detail Response Formats

Charge Detail responses may follow one of two formats. The charge detail “add” response includes the basic response information, charge information and associated item information. All other charge detail responses follow the basic response format.

Charge Detail response formats:

RBC11 Response Format (Add)	RBC1X Response Format (Other)
<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;[ReturnCode]&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     [ReturnMessage]   &lt;/ReturnMessage&gt;   &lt;Charge&gt;     &lt;RBCID&gt;[RBCID]&lt;/RBCID&gt;     &lt;ItemInfo&gt; (May be multiple)       Item Elements...     &lt;/ItemInfo&gt;   &lt;/Charge&gt; &lt;/Response&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;[ReturnCode]&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     [ReturnMessage]   &lt;/ReturnMessage&gt; &lt;/Response&gt; </pre>

**Note:** There is no Charge Detail (item info) update request. Instead new items are added and old items are disabled or deleted.

### 5.3.4 Charge Templates

For convenience, merchants may store charge profiles as templates and select those templates when charges are assigned to accounts from within the online interface. All charge template action values have the format “CTLXX”.

#### Table of Charge Template Actions

Context	Retrieve	Register (Add)	Update	Delete	Get Detail	Enable/Disable
Charge Template (Summary)	CTL00					
Charge Template (Body)		CTL01	CTL02	CTL04	CTL05	CTL08/CTL09
Charge Template (Detail)		CTL11		CTL14		CTL18/CTL19

#### Charge Template Summary Request and Response

The only Charge Template Summary action retrieves a list of all templates registered to a merchant that matches template conditions. All templates shall be listed if you include no conditions but if you do include conditions, only templates that match all conditions will be listed. The retrieved TemplateID and charge template data describe existing charge template records. You may use the retrieved TemplateIDs to get the charge template body and charge template detail information via action “CTL05”.

## Charge Template Summary request and response formats:

CTL00 Request Format (Retrieve)	CTL00 Response Format (Retrieve)
<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;CTL00&lt;/Action&gt;   &lt;Condition&gt;     &lt;Status&gt;[Status]&lt;/Status&gt;     Other Conditions...   &lt;/Condition&gt; &lt;/Request&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;Return Code&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;Return Message&lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;Status&gt;[Status]&lt;/Status&gt;     Given Conditions...   &lt;/Condition&gt;   &lt;ChargeTemplate&gt; (May be multiple)     &lt;TemplateID&gt;[TempID]&lt;/TemplateID&gt;     Other charge template elements...   &lt;/ChargeTemplate&gt; &lt;/Response&gt; </pre>

**Note:** To display all registered templates, do not include conditions.

## Charge Template Summary Action

*Action: CTL00*

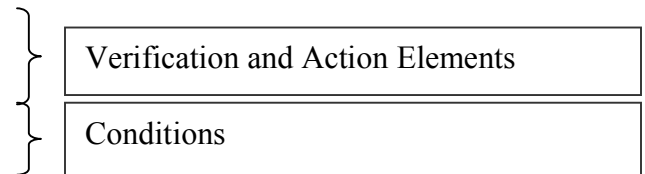
*Action Description: Retrieve Charge Template Summary*

Sample request:

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>CTL00</Action>
  <Condition>
    <Interval>M</Interval>
    <DateFrom>[DateFrom]</DateFrom>
    <DateTo>[DateTo]</DateTo>
  </Condition>
</Request>

```



Charge Template elements listed below may be used to filter the charge template summary and must be included within XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/25	Optional.
DateFrom	Start date search criteria	0/10	Optional. Format: yyyy.mm.dd
DateTo	End date search criteria	0/10	Optional. Format: yyyy.mm.dd
RBName	Charge name	0/50	Optional.
StoreID	Assigned StoreID (Controls settlement currency)	0/25	Optional.
Interval	Charge interval	0/1	Optional.  Intervals include: O: Onetime                      M: Monthly D: Daily                        Q: Quarterly W: Weekly                      A: Annually S: Semi-Annually              X: Every X Days  Note: The maximum number of days for the

			Every X Days interval is 365.
RBTrigger	Charge trigger date	0/10	Optional.  Required for intervals other than Daily. Indicates specific trigger date within an interval.  Trigger date formats: OneTime - "2012.12.31" Daily - "" Not applicable Weekly - "1" (Sunday = 1) Monthly - "25" (25 <sup>th</sup> ) Quarterly - "03.25" (Mar. 25) Annually - "03.25" (Mar. 25) Semi-Annually - "03.25" (Mar. 25) Every X Days - "25" (25 <sup>th</sup> )
ProcessType	Payment schedule type	0/1	Optional. Default is "A".  Process types include: A: Automatic Sale – Card will be authorized and charged on the trigger date. P: Automatic Auth – Card will only be authorized on the trigger date. I: Installment – Multiple invoices will be created immediately with each to be charged on the trigger date. M: Manual – Invoice will be created but the card will not be charged. It may be charged manually via the online Merchant Tools interface.
Status	Current status of charge template	0/1	Y = "Active" N = "Inactive"  <b>Note:</b> The RBTrigger of active charges will generate invoices provided the date/time is within the StartTime and EndTime
StartTime	Charge start date and time inclusive.	0/10	Optional. Format is YYYY.MM.DD  Default is Today (Creation date of the charge)
EndTime	Charge start date and time inclusive.	0/10	Optional. Format is YYYY.MM.DD  Default for all intervals except Onetime is Never (Dec. 31, 2999)  Default for the Onetime interval is Today (Creation date of the charge)

**Note:** Only charge templates that exactly match the given conditions will be returned.

## Charge Template Body Requests

Charge Template Body requests may follow one of three formats. The charge template body “Register” request (action CTL01) includes new charge profile information and associated item information. The charge template body “update” request (action CTL02) includes a reference to the affected template (RBCID) and updated template information. All other requests include only a reference to the affected template.

Charge Template Body request formats:

CTL01 Request Format (Register)	CTL02 Request Format (Update)	CTL0X Request Format (Other)
<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;CTL01&lt;/Action&gt;   &lt;ChargeTemplate&gt;     Template Elements...     &lt;ItemInfo&gt;       Item Elements...     &lt;/ItemInfo&gt;     More than one item     record may be added.   &lt;/ChargeTemplate&gt; &lt;/Request&gt;</pre>	<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;CTL02&lt;/Action&gt;   &lt;Condition&gt;     &lt;TemplateID&gt;[TempID]&lt;/TemplateID&gt;   &lt;/Condition&gt;   &lt;Update&gt;     Updated Template Elements...   &lt;/Update&gt; &lt;/Request&gt;</pre>	<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;CTL0X&lt;/Action&gt;   &lt;Condition&gt;     &lt;TemplateID&gt;[TempID]&lt;/TemplateID&gt;   &lt;/Condition&gt; &lt;/Request&gt;</pre>

## Charge Template Body Actions

*Action: CTL01*

Action Description: Register a new charge template

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>CTL01</Action>
  <ChargeTemplate>
    <TemplateID></TemplateID>
    <RBName>Charge Template</RBName>
    <StoreID>teststore</StoreID>
    <AccountID>
      [Reference the AccountID received]
    </AccountID>
    <SerialNo>1</SerialNo>
    <ItemInfo>
      <ProductID>NEWSPAPER</ProductID>
      <Description>TORONTO STAR</Description>
      <Quantity>1</Quantity>
      <Price>25</Price>
      <Tax1>2</Tax1>
      <Tax2>1.25</Tax2>
    </ItemInfo>
  </ChargeTemplate>
</Request>
```

Verification and Action Elements

Charge Template Elements

Item Elements

You may use the Charge Template elements listed below to describe the newly registered charge template and must be included within <ChargeTemplate></ChargeTemplate>.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/25	Optional.
RBName	Charge name	0/50	Optional.
StoreID	Assigned StoreID (controls settlement currency)	0/25	Optional.
Interval	Charge interval	0/1	Optional.  Intervals include: O: Onetime                      M: Monthly D: Daily                        Q: Quarterly W: Weekly                      A: Annually S: Semi-Annually            X: Every X Days  Note: The maximum number of days for the Every X Days interval is 365.
RBTrigger	Charge trigger date	0/10	Optional.  Required for intervals other than Daily. Indicates specific trigger date within an interval.  Trigger date formats: OneTime - "2012.12.31" Daily - "" Not applicable Weekly - "1" (Sunday = 1) Monthly - "25" (25 <sup>th</sup> ) Quarterly - "03.25" (Mar. 25) Annually - "03.25" (Mar. 25) Semi-Annually - "03.25" (Mar. 25) Every X Days - "25" (25 <sup>th</sup> )
ProcessType	Payment schedule type	0/1	Optional. Default is "A".  Process types include: A: Automatic Sale – Card will be authorized and charged on the trigger date. P: Automatic Auth – Card will only be authorized on the trigger date. I: Installment – Multiple invoices will be created immediately with each to be charged on the trigger date. M: Manual – Invoice will be created but the card will not be charged. It may be charged manually via the online Merchant Tools interface.
StartTime	Charge start date and time inclusive.	0/10	Optional. Format is YYYY.MM.DD  Default is Today (Creation date of the charge)
EndTime	Charge start date and time inclusive.	0/10	Optional. Format is YYYY.MM.DD  Default for all intervals except Onetime is Never (Dec. 31, 2999)  Default for the Onetime interval is Today (Creation date of the charge)

Item elements (Charge Details) listed below are used to determine the amount to immediately charge and must be included within <ChargeTemplate><ItemInfo></ItemInfo></ChargeTemplate>. Multiple item elements may be included.

Name	Description	Length Min/Max	Notes
ProductID	Unique product identifier	1/50	Required.
Description	Item description	0/150	Optional.
Quantity	Item quantity	1/10	Required.
Price	Item price	1/10	Required.
Tax1 <sup>1</sup>	First Tax	0/10	Optional
Tax2 <sup>1</sup>	Second Tax	0/10	Optional
Shipping <sup>2</sup>	Shipping and Handling fees	0/10	Optional

**Note:**

<sup>1</sup> Input taxes as an amount, pre-calculated by your system or cart, and not as a percentage. To avoid any discrepancies, PSiGate has elected to process the tax amount you specify rather than calculate the tax from a percentage.

<sup>2</sup> You may include the shipping fee to only one item should a charge contain multiple items. When you do this and you wish to delete the item that is associated with the shipping fee, remember to transfer a modified shipping fee to one of the remaining items.

*Action: CTL02*

*Action Description: Update a charge template*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>CTL02</Action>
  <Condition>
    <TemplateID>[TemplateID]</TemplateID>
  </Condition>
  <Update>
    <RBName>Jane Smith</RBName>
  </Update>
</Request>
```

Verification and Action Elements
RBCID
Updatable Charge Template Elements

The charge identifier of the charge template to be updated must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/25	Required.

Updatable charge template elements listed below must be included within the XML element pair <Update></Update>.

Name	Description	Length Min/Max	Notes
RBName	Charge Name	0/50	Optional
StoreID	Assigned StoreID (controls settlement currency)	1/25	Optional
Interval	Charge interval	1/1	Optional.

			<p>Intervals include:</p> <p>O: Onetime                      M: Monthly  D: Daily                         Q: Quarterly  W: Weekly                      A: Annually  S: Semi-Annually            X: Every X Days</p> <p>Note: The maximum number of days for the Every X Days interval is 365.</p>
RBTrigger	Charge trigger date	0/10	<p>Optional.</p> <p>Required for intervals other than Daily. Indicates specific trigger date within an interval.</p> <p>Trigger date formats:  OneTime - "2012.12.31"  Daily - "" Not applicable  Weekly - "1" (Sunday = 1)  Monthly - "25" (25<sup>th</sup>)  Quarterly - "03.25" (Mar. 25)  Annually - "03.25" (Mar. 25)  Semi-Annually - "03.25" (Mar. 25)  Every X Days - "25" (25<sup>th</sup>)</p>
ProcessType	Payment schedule type	1/1	<p>Optional. Default is "A".</p> <p>Process types include:  A: Automatic Sale – Card will be authorized and charged on the trigger date.  P: Automatic Auth – Card will only be authorized on the trigger date.  I: Installment – Multiple invoices will be created immediately with each to be charged on the trigger date.  M: Manual – Invoice will be created but the card will not be charged. It may be charged manually via the online Merchant Tools interface.</p>
StartTime	Charge start date and time inclusive.	0/10	<p>Optional.  Format is YYYY.MM.DD</p> <p>Default is Today (Creation date of the charge)</p>
EndTime	Charge start date and time inclusive.	0/10	<p>Optional.  Format is YYYY.MM.DD</p> <p>Default for all intervals except Onetime is Never (Dec. 31, 2999)</p> <p>Default for the Onetime interval is Today (Creation date of the charge)</p>



**Action: CTL04****Action Description:** Delete a charge template**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>CTL04</Action>
  <Condition>
    <TemplateID>[TemplateID]</TemplateID>
  </Condition>
</Request>
```

Verification and Action Elements

RBCID

The charge identifier of the charge template to be deleted must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/25	Required.

**Action: CTL05****Action Description:** Retrieve charge template details**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>CTL05</Action>
  <Condition>
    <TemplateID>[TemplateID]</TemplateID>
  </Condition>
</Request>
```

Verification and Action Elements

RBCID

The charge identifier of the charge template details to be retrieved must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/25	Required.

**Action: CTL08****Action Description:** Enable charge template**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>CTL08</Action>
  <Condition>
    <TemplateID>[TemplateID]</TemplateID>
  </Condition>
</Request>
```

Verification and Action Elements

RBCID

The charge identifier of the charge template details to be enabled must be included within the XML element pair `<Condition></Condition>`. May list multiple TemplateIDs.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/25	Required, may be multiple.

**Action: CTL09****Action Description:** Disable charge template(s)**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>CTL09</Action>
  <Condition>
    <TemplateID>[TemplateID]</TemplateID>
  </Condition>
</Request>
```

Verification and Action Elements

RBCID

The charge identifier of the charge template details to be disabled must be included within the XML element pair `<Condition></Condition>`. May list multiple TemplateIDs.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/25	Required, may be multiple.

## Charge Template Body Responses

Charge Template Body responses may follow one of three formats. The charge template body “Register” response includes the basic response, template information and associated item information. The other account detail responses include the basic response, a reference to the affected account (AccountID) and a reference to associated payment data (SerialNo).

Charge Template Body response formats:

CTL01 Response Format (Register)	CTL02 Response Format (Update)	CTL0X Response Format (Other)
<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;     Action Description...   &lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;ChargeTemplate&gt;     Template Elements...     &lt;ItemInfo&gt;       Item Elements...     &lt;/ItemInfo&gt;   &lt;/ChargeTemplate&gt; &lt;/Response&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;     Action Description...   &lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;TemplateID&gt;[TempID]   &lt;/TemplateID&gt;   &lt;/Condition&gt;   &lt;Update&gt;     Updated Template Elements...   &lt;/Update&gt; &lt;/Response&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;     Action Description...   &lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;TemplateID&gt;[TempID]   &lt;/TemplateID&gt;   &lt;/Condition&gt;   Action CTL05 displays   Template information   here... &lt;/Response&gt; </pre>

## Charge Template Detail Requests

Charge Template Detail requests may follow one of two formats. The charge template detail “Add” request (action CTL11) format includes a reference to the “RBCID” and item information to add the referenced template. All other request formats include a reference to the affected account (Account ID) and a reference to the affected payment data (SerialNo).

Charge Template Detail request formats:

CTL11 Request Format (Add)	CTL1X Request Format (Other)
<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;CTL11&lt;/Action&gt;   &lt;ChargeTemplate&gt;     &lt;TemplateID&gt;[TempID]&lt;/TemplateID&gt;     &lt;ItemInfo&gt;       Item Elements...     &lt;/ItemInfo&gt;     More ItemInfo elements may be given...   &lt;/ChargeTemplate&gt; &lt;/Request&gt; </pre>	<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;CTL1X&lt;/Action&gt;   &lt;Condition&gt;     &lt;TemplateID&gt;[TempID]&lt;/TemplateID&gt;     &lt;SerialNo&gt;[SerialNo]&lt;/SerialNo&gt;   &lt;/Condition&gt; &lt;/Request&gt; </pre>

**Note:** There is no Charge Template Detail (item info) update request. Instead a new item is added and the old item is disabled or deleted.

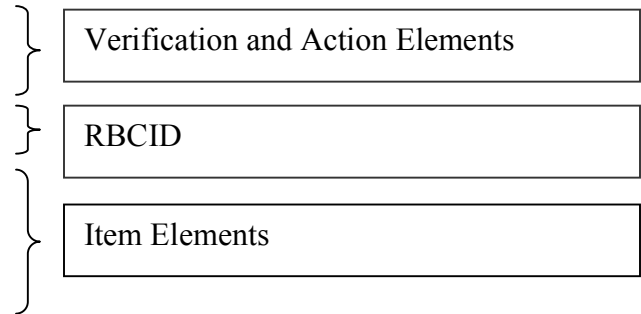
## Charge Template Detail Actions

*Action: CTL11*

*Action Description: Add new charge template item(s)*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>CTL11</Action>
  <ChargeTemplate>
    <TemplateID>[TempID]</TemplateID>
    <ItemInfo>
      <ProductID>Goodyear</ProductID>
      <Description>Tires</Description>
      <Quantity>8</Quantity>
      <Price>25</Price>
      <Tax1>16</Tax1>
      <Tax2>10</Tax2>
    </ItemInfo>
  </ChargeTemplate>
</Request>
```



The charge identifier of the charge template item information to be added must be included within the XML element pair <ChargeTemplate></ChargeTemplate>.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/25	Required, may be multiple.

Item elements (Charge Details) listed below are used to describe the charge template item(s) and must be included within <ChargeTemplate><ItemInfo></ItemInfo></ChargeTemplate>. Multiple item elements may be included.

Name	Description	Length Min/Max	Notes
ProductID	Unique product identifier	1/50	Required.
Description	Item description	0/150	Optional.
Quantity	Item quantity	1/10	Required.
Price	Item price	1/10	Required.
Tax1 <sup>1</sup>	First Tax	0/10	Optional
Tax2 <sup>1</sup>	Second Tax	0/10	Optional
Shipping <sup>2</sup>	Shipping and Handling fees	0/10	Optional

**Note:**

<sup>1</sup> Input taxes as an amount, pre-calculated by your system or cart, and not as a percentage. To avoid any discrepancies, PSiGate has elected to process the tax amount you specify rather than calculate the tax from a percentage.

<sup>2</sup> You may include the shipping fee to only one item should a charge contain multiple items. When you do this and you wish to delete the item that is associated with the shipping fee, remember to transfer a modified shipping fee to one of the remaining items.

**Action: CTL14****Action Description:** Delete charge template item**Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>CTL14</Action>
  <Condition>
    <TemplateID>[TempID]</TemplateID>
    <ItemSerialNo>[ItemSerialNo]</ItemSerialNo>
  </Condition>
</Request>

```

Verification and Action Elements

RBCID

The charge identifier and item serial number of the charge template item whose information will be deleted must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/50	Required.
ItemSerialNo	Item serial number	Pregenerated by PSiGate.	Required.

**Action: CTL18****Action Description:** Enable charge template item**Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>CTL18</Action>
  <Condition>
    <TemplateID>[TempID]</TemplateID>
    <ItemSerialNo>[ItemSerialNo]</ItemSerialNo>
  </Condition>
</Request>

```

Verification and Action Elements

RBCID, ItemSerialNo

The charge identifier and item serial number of the charge template item whose information will be enabled must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/50	Required.
ItemSerialNo	Item serial number	Given by PSiGate. Number (any length)	Required.

**Action: CTL19***Action Description: Disable charge template item*

Sample request:

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>CTL19</Action>
  <ChargeTemplate>
    <TemplateID>[TempID]</TemplateID>
    <ItemSerialNo>[ItemSerialNo]</ItemSerialNo>
  </ChargeTemplate>
</Request>

```

Verification and Action Elements

RBCID, ItemSerialNo

The charge identifier and item serial number of the charge template item whose information will be disabled must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
TemplateID	Unique template identifier	1/50	Required.
ItemSerialNo	Item serial number	Given by PSiGate. Number (any length)	Required.

**Charge Template Detail Responses**

Charge Template Detail responses may follow one of two formats. The charge template detail “Add” response is a basic response. The charge template body “register” response includes the basic response, a reference to the affected charge template information and a reference to the affected item.

Charge Template Detail response formats:

CTL11 Response Format	CTL1X Response Format
<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;[ReturnCode]&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;[ReturnMessage]&lt;/ReturnMessage&gt; &lt;/Response&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;[ReturnCode]&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;[ReturnMessage]&lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;TemplateID&gt;[TempID]&lt;/TemplateID&gt;     &lt;SerialNo&gt;[SerialNo]&lt;/SerialNo&gt;   &lt;/Condition&gt; &lt;/Response&gt; </pre>

## 5.3.5 Invoices

Triggered charges generate invoices. The bank response of triggered charges is stored within invoices. The status of an invoice may be outstanding, pending or paid. If the status is outstanding, the cause will be listed within the ReturnCode and ErrMsg. Invoice actions include retrieval of summary and detail invoice data and modification of the invoice status.

### Table of Invoice Actions

Context	Retrieve	Update	Get Detail	Enable/Disable	PostAuth/Forced Confirm	Rebill Invoice
Invoice (Summary)	INV00					
Invoice (Body)		INV02	INV05	INV08/INV09	INV22/INV26	INV99

**Note:** Invoices do not perform detail level actions.

### Invoice Summary Request and Response

The only invoice summary action retrieves a list of all the merchant's invoices that match given invoice conditions. All invoices will be listed if you include no conditions, but if you choose to include conditions, only invoices that match all conditions will be listed. You may use the retrieved "InvoiceNo" to get additional invoice information via action "INV05".

Invoice Summary request and response formats:

INV00 Request Format	INV00 Response Format
<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;INV00&lt;/Action&gt;   &lt;Condition&gt;     &lt;InvoiceNo&gt;[InvoiceNo]&lt;/InvoiceNo&gt;     Other Conditions...   &lt;/Condition&gt; &lt;/Request&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;[ReturnCode]&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;[ReturnMessage]&lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;InvoiceNo&gt;[InvoiceNo]&lt;/InvoiceNo&gt;     Given Conditions...   &lt;/Condition&gt;   &lt;Invoice&gt;     &lt;InvoiceNo&gt;[InvoiceNo]&lt;/InvoiceNo&gt;     &lt;ReturnCode&gt;Auth. Response...&lt;/ReturnCode&gt;     &lt;ErrMsg&gt;Error Message if applicable...&lt;/ErrMsg&gt;     Other invoice elements...   &lt;/Invoice&gt;   More than one Invoice record may exist. &lt;/Response&gt; </pre>

**Note:** To display all report types, do not include conditions.

**Note:** The Invoice "ReturnCode" element returns the card issuer's authorization response.

## Invoice Summary Action

*Action: INV00*

*Action Description: Retrieve invoice summary*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>INV00</Action>
  <Condition>
    <InvoiceNo>[InvoiceNo]</InvoiceNo>
    <DateFrom>[DateFrom]</DateFrom>
    <DateTo>[DateTo]</DateTo>
  </Condition>
</Request>
```

Verification and Action Elements

Conditions

Invoice elements listed below are used to filter the invoice summary and must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
AccountID	Unique account identifier	0/25	Optional.
InvoiceNo	Unique invoice identifier	0/8	Optional.
PayerName	Name of the person charged (May be the same as the cardholder name)	0/50	Optional.
DateFrom	Start date search criteria	0/10	Optional. Format: yyyy.mm.dd
DateTo	End date search criteria	0/10	Optional. Format: yyyy.mm.dd
SubNo	Invoice installment identifier	0/2	Optional. Default is '0'. When ProcessType is set to "I" (for Installment), the values may be "1, 2, 3..."
Status	Current status of an invoice	0/1	Optional.  Statuses include: 0 = Pending 1 = Outstanding 7 = Cancelled 8 = Paid  <b>Note:</b> The system scans the database every two minutes for 'Pending' invoices and immediately bills the invoice.

**Note:** Only invoices that exactly match the given conditions will be returned.



## Invoice Body Requests

Invoice Body requests have one format. Invoice body requests include a reference to the affected invoice (InvoiceNo).

Invoice Body request format:

INV02 Request Format	INV0X or INV99 Request Format (All requests)
<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;INV02&lt;/Action&gt;   &lt;Condition&gt;     &lt;InvoiceNo&gt;[InvoiceNo]&lt;/InvoiceNo&gt;   &lt;/Condition&gt;   &lt;Update&gt;     &lt;SerialNo&gt;[SerialNo]&lt;/SerialNo&gt;   &lt;/Update&gt; &lt;/Request&gt;</pre>	<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;INV0X&lt;/Action&gt;   &lt;Condition&gt;     &lt;InvoiceNo&gt;[InvoiceNo]&lt;/InvoiceNo&gt;   &lt;/Condition&gt; &lt;/Request&gt;</pre>

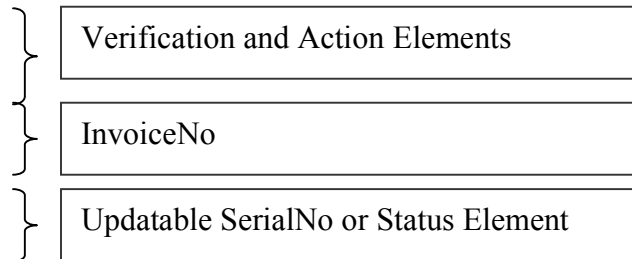
## Invoice Body Actions

*Action: INV02*

*Action Description: Update an invoice*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>INV02</Action>
  <Condition>
    <InvoiceNo>[InvoiceNo]</InvoiceNo>
  </Condition>
  <Update>
    <SerialNo>[SerialNo]</SerialNo>
    <Status>[Status]</Status>
  </Update>
</Request>
```



The invoice identifier of the invoice to be updated must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
InvoiceNo	Unique invoice identifier	0/8	Required.

Updatable invoice elements listed below must be included within the XML element pair `<Update></Update>`.

Name	Description	Length Min/Max	Notes
SerialNo	Payment method serial number	0/2	Required.
Status	Current status of an invoice	1	Statuses include: 0 = Pending 1 = Outstanding 7 = Cancelled 8 = Paid  <b>Note:</b> The system scans the database every two minutes for 'Pending' invoices and

			immediately bills the invoice.
--	--	--	--------------------------------

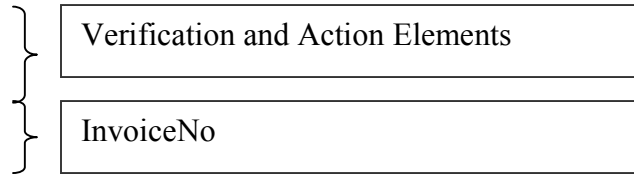
**Note:** If a credit card has expired, add a new credit card via action AMA11 and then update the SerialNo via action INV02 to use the new credit card information to charge the outstanding invoice.

*Action: INV05*

*Action Description: Retrieve invoice details*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>INV05</Action>
  <Condition>
    <InvoiceNo>[InvoiceNo]</InvoiceNo>
  </Condition>
</Request>
```



The invoice identifier of the invoice to be updated must be included within the XML element pair `<Condition></Condition>`.

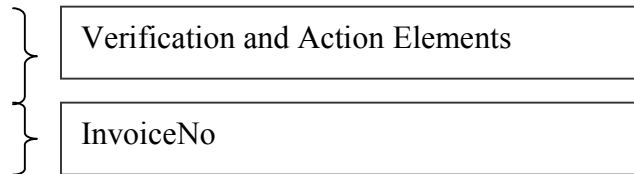
Name	Description	Length Min/Max	Notes
InvoiceNo	Unique invoice identifier	Given Number (any length)	Required.

*Action: INV08*

*Action Description: Change Invoice Status to Paid*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>INV08</Action>
  <Condition>
    <InvoiceNo>[InvoiceNo]</InvoiceNo>
  </Condition>
</Request>
```



The invoice identifier of the invoice whose status shall be changed to Paid must be included within the XML element pair `<Condition></Condition>`. May list multiple InvoiceNos.

Name	Description	Length Min/Max	Notes
InvoiceNo	Unique invoice identifier	Given Number (any length)	Required, may be multiple.

**Action: INV09****Action Description:** *Change Invoice Status to Outstanding***Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>INV09</Action>
  <Condition>
    <InvoiceNo>[InvoiceNo]</InvoiceNo>
  </Condition>
</Request>

```

Verification and Action Elements

InvoiceNo

The invoice identifier of the invoice whose status shall be changed to Outstanding must be included within the XML element pair `<Condition></Condition>`. May list multiple InvoiceNos.

Name	Description	Length Min/Max	Notes
InvoiceNo	Unique invoice identifier	Given Number (any length)	Required, may be multiple.

**Action: INV22****Action Description:** *Post-authorization of one or more previously authorized invoices***Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>INV22</Action>
  <Condition>
    <InvoiceNo>[InvoiceNo]${Amount to charge}</InvoiceNo>
    <InvoiceNo>[InvoiceNo]${Amount to charge}</InvoiceNo>
    <InvoiceNo>[InvoiceNo]${Amount to charge}</InvoiceNo>
  </Condition>
</Request>

```

Verification and Action Elements

InvoiceNo and the amount to charge from the amount authorized by the previously sent Automatic Auth (RBC01 or RBC99 with ProcessType = "P") request.

The invoice identifier of the invoice to be re-billed must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
InvoiceNo	Unique invoice identifier followed by a dollar sign and the amount to be charged. Ex. "023053\$10.00"	Given Number (any length), two decimal places for the amount to be charged.	Required. You may supply multiple Invoice numbers as shown in the sample request.

**Action: INV26****Action Description:** Forced Post-authorization of one or more previously authorized invoices**Prerequisites:**

- Forced Post-authorization is enabled. By default this transaction type is disabled. Contact the Merchant Services team to request permission to enable this transaction type.

**Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>INV26</Action>
  <Condition>
    <InvoiceNo>[InvoiceNo]$[Amount to charge]</InvoiceNo>
    <InvoiceNo>[InvoiceNo]$[Amount to charge]</InvoiceNo>
    <InvoiceNo>[InvoiceNo]$[Amount to charge]</InvoiceNo>
  </Condition>
</Request>

```

Verification and Action Elements

InvoiceNo and the amount to charge from the amount authorized by the previously sent Automatic Auth (RBC01 or RBC99 with ProcessType = "P") request.

The invoice identifier of the invoice to be re-billed must be included within the XML element pair **<Condition></Condition>**.

Name	Description	Length Min/Max	Notes
InvoiceNo	Unique invoice identifier followed by a dollar sign and the amount to be charged. Ex. "023053\$10.00"	Given Number (any length), two decimal places for the amount to be charged.	Required. You may supply multiple Invoice numbers as shown in the sample request.

**Action: INV99****Action Description:** Rebill invoice**Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>INV99</Action>
  <Condition>
    <InvoiceNo>[InvoiceNo]</InvoiceNo>
  </Condition>
</Request>

```

Verification and Action Elements

InvoiceNo

The invoice identifier of the invoice to be re-billed must be included within the XML element pair **<Condition></Condition>**.

Name	Description	Length Min/Max	Notes
InvoiceNo	Unique invoice identifier	Given Number (any length)	Required.

## Invoice Body Responses

Invoice Body responses have one format. Invoice body responses include the basic response and a reference to the affected invoice (InvoiceNo).

Invoice Body response formats:

### INV0X Response Format (All requests)

```
<Response>
  <CID>[CID]</CID>
  <Action>Action Description...</Action>
  <ReturnCode>Return Code...</ReturnCode>
  <ReturnMessage>Return Message...</ReturnMessage>
  <Condition>
    <InvoiceNo>[InvoiceNo]</InvoiceNo>
  </Condition>
  Action INV05 displays Invoice information here...
</Response>
```

The action INV00 returns the following invoice elements.

Name	Description	Max. Length	Notes
RBCID	Unique charge identifier	25	
StoreID	Assigned store identifier (controls settlement currency)	25	
OrderID	Assigned real-time order identifier	25	Reference this value when attempting to refund an order through the Merchant Tools user interface.
PayerName	Name of the person charged (May be the same as the cardholder name)	50	
Status	Current status of an invoice	1	<p>Statuses include:</p> <ul style="list-style-type: none"> <li>1 = Outstanding</li> <li>0 = Pending</li> <li>7 = Cancelled</li> <li>8 = Paid</li> </ul> <p><b>Note:</b> The system scans the database every two minutes for 'Pending' invoices and immediately bills the invoice.</p>
InvoiceNo	Unique invoice identifier	8	
SubNo	Invoice installment identifier	2	Optional. Default is '0'. When ProcessType is set to "I" (for Installment), the values may be "1, 2, 3..."
ReturnCode	Abbreviated real-time response code	50	<p>Summary of result codes returned from the transaction request. The first character indicates whether the transaction was approved or declined. A "Y" signifies the transaction request was approved. Any other value indicates the transaction request was declined.</p> <p>PSiGate returns the <i>ReturnCode</i> in any one of the following formats:</p> <p>N:ERROR – An error occurred and the request was not completed. See <i>ErrMsg</i> for details.</p>

			<p>N:FRAUD – The transaction request activated a fraud condition. See <i>ErrMsg</i> for details.</p> <p>If the <i>PaymentType</i> is “CC”, the following formats are also possible:</p> <p>N:Bank Error Code/Decline MSG.</p> <p>Y:CardAuthNumber: CardRefNumber:CardIDResult:AVSResult:IPResult</p>
ErrMsg	Response message	150	<p>Error Message detail. Populated if the <i>ReturnCode</i> is “N:ERROR” or “N:FRAUD”.</p> <p>The format is <i>ERRORCODE:ERRORTEXT</i>. Where ERRORCODE is the system assigned error code and ERRORTEXT is a text summary that describes the ERRORCODE.</p>
TransRefNumber	Orders may be attempted more than once hence each attempt (transaction) has its own identifier.	18	
InvoiceDate	Date the invoice was scheduled to be billed	10	YYYY.MM.DD
ExecDate	Date the invoice was billed	10	YYYY.MM.DD
AccountID	Unique account identifier	25	
SerialNo	Serial number of the registered card the invoice billed	2	
CardNumber	Span (first six and last four digits) of the card that the invoice billed	13	
CardExpMonth	Expiry month of the card billed	2	
CardExpYear	Expiry year of the card billed	2	
CardType	Card type of the card billed	25	VISA, MC or AMEX
InvoiceTotal	Invoice amount billed	25	Sum of Item Totals (Quantity * Price + Tax1 + Tax2 + Shipping)

### 5.3.6 E-mail Reports

There are three reports that may be configured to be sent to the merchant by e-mail. These reports include the “soon to be expired card report”, the “soon to be expired charge” report and a “past invoices report”. Configuration of the reports control if and how reports are sent.

#### Table of E-mail Report Actions

Context	Retrieve	Register (Add)	Update	Delete	Enable	Disable	Immediately Generate
E-mail Report (Summary)	EMR00						
E-mail Report (Body)		EMR01	EMR02	EMR04	EMR08	EMR09	EMR99

**Note:** E-mail Reports do not have detail level actions.

#### E-mail Report Summary Request and Response

The E-mail Report Summary action retrieves the detail of each e-mail report type. If no conditions are included within the request, each report type will be listed, but if the request includes any conditions, only reports that match all given conditions will be listed.

E-mail Report Summary request and response formats:

EMR00 Request Format (Retrieve)	EMR00 Response Format (Retrieve)
<pre> &lt;Request&gt;   Authentication Elements...   &lt;Action&gt;EMR00&lt;/Action&gt;   &lt;Condition&gt;     &lt;Type&gt;[Type]&lt;/Type&gt;     Other Conditions...   &lt;/Condition&gt; &lt;/Request&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;   &lt;Action&gt;Action Description...&lt;/Action&gt;   &lt;ReturnCode&gt;[ReturnCode]&lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;[ReturnMessage]&lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;Type&gt;[Type]&lt;/Type&gt;     Given Conditions...   &lt;/Condition&gt;   &lt;EmailReportSetting&gt;     &lt;Type&gt;[Type]&lt;/Type&gt;     Other email report elements...   &lt;/EmailReportSetting&gt;   More than one email report record may exist. &lt;/Response&gt; </pre>

**Note:** To display all report types, do not include conditions.

## E-mail Report Summary Actions

*Action: EMR00*

*Action Description: Retrieve e-mail report(s)*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>EMR00</Action>
  <Condition>
    <Type>[Type]</Type>
  </Condition>
</Request>
```

Verification and Action Elements

Conditions

E-mail Report elements listed below are used to filter the e-mail report summary and must be included within the XML element pair <Condition></Condition>.

Name	Description	Length Min/Max	Notes
Type	E-mail report type	1/1	Required. Types include: “C” = expiring card report “R” = expiring charge report “I” = past invoice report
Interval	The frequency of reports generation.	1/1	Optional. Default is “M”.  Intervals include: D: Daily W: Weekly (Mondays) M: Monthly (1 <sup>st</sup> day of the Month)
Period	Number of past or future intervals to report.	0/2	Optional. Default is “1”.
Address	E-mail address to receive the report.	6/100	Required. May be multiple. Separate addresses with a comma.
Status	Current status	1/1	Optional. Statuses include: “A” for “Active” “N” for “Inactive”

**Note:** Only e-mail reports that exactly match the given conditions will be returned.



## E-mail Report Body Requests

E-mail Report Body requests may follow one of three formats. The e-mail report body “register” request (action EMR01) includes configuration settings for the new e-mail report. The e-mail report body “update” request includes a reference to the affected report (Type) and updated account information. All other requests include only a reference to the affected report.

E-mail Report Body request formats:

EMR01 Request Format (Register)	EMR02 Request Format (Update)	EMR0X Request Format (Other)
<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;EMR01&lt;/Action&gt;   &lt;EmailReportSetting&gt;     Email Report Elements...   &lt;/EmailReportSetting&gt; &lt;/Request&gt;</pre>	<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;EMR02&lt;/Action&gt;   &lt;Condition&gt;     &lt;Type&gt;[Type]&lt;/Type&gt;   &lt;/Condition&gt;   &lt;Update&gt;     Updated Report Elements...   &lt;/Update&gt; &lt;/Request&gt;</pre>	<pre>&lt;Request&gt;   Authentication Elements...   &lt;Action&gt;EMR0X&lt;/Action&gt;   &lt;Condition&gt;     &lt;Type&gt;[Type]&lt;/Type&gt;   &lt;/Condition&gt; &lt;/Request&gt;</pre>

## E-mail Report Body Actions

*Action: EMR01*

*Action Description: Register an e-mail report*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>EMR01</Action>
  <EmailReportSetting>
    <Type>C</Type>
    <Interval>M</Interval>
    <Period>1</Period>
    <Address>[Your Email Address]</Address>
    <Status></Status>
  </EmailReportSetting>
</Request>
```

Verification and Action Elements

Email Report Elements

E-mail report elements listed below are used to describe the newly registered e-mail report and must be included within the XML element pair <EmailReportSetting></EmailReportSetting>.

Name	Description	Length Min/Max	Notes
Type	E-mail report type	1/1	Required. Types include: “C” = expiring card report “R” = expiring charge report “I” = past invoice report
Interval	The frequency of reports generation.	1/1	Optional. Default is “M”.  Intervals include: D:Daily W:Weekly (Mondays) M:Monthly (1 <sup>st</sup> day of the Mth)
Period	Number of past or future intervals to report.	0/2	Optional. Default is “1”.
Address	E-mail address to receive the report.	6/100	Required. May be multiple. Separate

			addresses with a comma.
Status	Current status	1/1	Optional. Statuses include: “A” for “Active” “N” for “Inactive”

*Action: EMR02*

*Action Description: Update an e-mail report*

Sample request:

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>EMR02</Action>
  <Condition>
    <Type>[Type]</Type>
  </Condition>
  <Update>
    <Status>N</Status>
  </Update>
</Request>
```

Verification and Action Elements
Type
Updatable Email Report Elements

The e-mail report type of the report to be retrieved must be included within XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
Type	E-mail report type	1/1	Required. Types include: “C” = expiring card report “R” = expiring charge report “I” = past invoice report

Updatable e-mail report elements listed below must be included within the XML element pair `<Update></Update>`.

Name	Description	Length Min/Max	Notes
Interval		1/1	Optional. Default is “M”.  Intervals include: D:Daily W:Weekly (Mondays) M:Monthly (1 <sup>st</sup> day of the Mth)
Period		0/2	Optional. Default is “1”.
Address	E-mail address to receive the report.	0/100	Optional. May be multiple. Separate addresses with a comma.
Status		1/1	Optional. Statuses include: “A” for “Active” “N” for “Inactive”

**Action: EMR04****Action Description:** Delete an e-mail report**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>EMR04</Action>
  <Condition>
    <Type>[Type]</Type>
  </Condition>
</Request>
```

Verification and Action Elements

Type

The e-mail report type of the report to be deleted must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
Type	E-mail report type	1/1	Required. Types include: "C" = expiring card report "R" = expiring charge report "I" = past invoice report

**Action: EMR05****Action Description:** Retrieve e-mail report details**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>EMR05</Action>
  <Condition>
    <Type>[Type]</Type>
  </Condition>
</Request>
```

Verification and Action Elements

Type

The e-mail report type of the report to be retrieved must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
Type	E-mail report type	1/1	Required. Types include: "C" = expiring card report "R" = expiring charge report "I" = past invoice report

**Action: EMR08****Action Description:** Enable e-mail report(s)**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>EMR08</Action>
  <Condition>
    <Type>[Type]</Type>
  </Condition>
</Request>
```

Verification and Action Elements

Type

The e-mail report type of the report to be enabled must be included within the XML element pair `<Condition></Condition>`. May list multiple Types.

Name	Description	Length Min/Max	Notes
Type	E-mail report type	1/1	Required, may be multiple. Types include: "C" = expiring card report "R" = expiring charge report "I" = past invoice report

**Action: EMR09****Action Description:** Disable e-mail report(s)**Sample request:**

```
<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>EMR09</Action>
  <Condition>
    <Type>[Type]</Type>
  </Condition>
</Request>
```

Verification and Action Elements

Type

The e-mail report type of the report to be disabled must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
Type	E-mail report type	1/1	Required, may be multiple. Types include: "C" = expiring card report "R" = expiring charge report "I" = past invoice report

**Action: EMR99****Action Description:** Immediate report generation**Sample request:**

```

<Request>
  <CID>1000001</CID>
  <UserID>teststore</UserID>
  <Password>Testpass1234</Password>
  <Action>EMR99</Action>
  <Condition>
    <Type>[Type]</Type>
  </Condition>
</Request>

```

Verification and Action Elements

Type

The e-mail report type of the report to be disabled must be included within the XML element pair `<Condition></Condition>`.

Name	Description	Length Min/Max	Notes
Type	E-mail report type	1/1	Required. Types include: "C" = expiring card report "R" = expiring charge report "I" = past invoice report

**E-mail Report Body Responses**

The E-mail Report Body responses may follow one of three formats. The e-mail report body "register" request includes a basic response and configuration settings for the new e-mail report. The e-mail report body "update" request includes a reference to the affected report and updated report information. All other requests include only a reference to the affected report.

**E-mail Report Body response format:**

EMR01 Response Format (Register)	EMR02 Response Format (Update)	EMR0X Response Format (Other)
<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;     Action Description...   &lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;EmailReportSetting&gt;     Report Elements...   &lt;/EmailReportSetting&gt; &lt;/Response&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;     Action Description...   &lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;Type&gt;[Type]&lt;/Type&gt;   &lt;/Condition&gt;   &lt;Update&gt;     Updated Report Elements...   &lt;/Update&gt; &lt;/Response&gt; </pre>	<pre> &lt;Response&gt;   &lt;CID&gt;[CID]&lt;/CID&gt;   &lt;Action&gt;     Action Description...   &lt;/Action&gt;   &lt;ReturnCode&gt;     Return Code...   &lt;/ReturnCode&gt;   &lt;ReturnMessage&gt;     Return Message...   &lt;/ReturnMessage&gt;   &lt;Condition&gt;     &lt;Type&gt;[Type]&lt;/Type&gt;   &lt;/Condition&gt; &lt;/Response&gt; </pre>

## Appendix A - Return Codes and Messages

Return Messages	
Account Errors	
RPA-0000	Register Account action completed successfully.
RPA-0001	Register Account action completed partially.
RPA-0002	Register Account action failed.
RPA-0010	Register Account action completed successfully.
RPA-0011	Duplicate AccountID.
RPA-0015	Add Card action completed successfully.
RPA-0016	Add Card action failed. Invalid AccountID.
RPA-0017	Add Card action partially failed. Invalid Card Number.
RPA-0019	Retrieve Account(s) action failed. Invalid AccountID.
RPA-0020	Retrieve Account(s) action completed successfully.
RPA-0021	No Accounts found.
RPA-0022	Update Account action completed successfully.
RPA-0023	Update Account action failed. Invalid AccountID.
RPA-0024	Update Account action failed. Invalid Change Item.
RPA-0025	Update Card action completed successfully.
RPA-0026	Update Card action failed. Invalid AccountID.
RPA-0027	Update Card action failed. Invalid SerialNo.
RPA-0028	Update Card action failed. Invalid Change Item.
RPA-0040	Disable Account(s) action completed successfully.
RPA-0041	Disable Account(s) action failed. Invalid AccountID.
RPA-0042	Disable Card action completed successfully.
RPA-0043	Disable Card action failed. Invalid AccountID.
RPA-0044	Disable Card action failed. Invalid SerialNo.
RPA-0046	Enable Account(s) action completed successfully.
RPA-0047	Enable Account(s) action failed. Invalid AccountID.
RPA-0048	Enable Card action completed successfully.
RPA-0049	Enable Card action failed. Invalid AccountID.
RPA-0057	Delete Card action failed. No record found.
RPA-0058	Delete Card action completed successfully.
RPA-0059	Delete Card action failed. Invalid AccountID.
RPA-0125	Update Card action failed. No record found.
RPA-0444	Enable Card action failed. Invalid SerialNo.
RPA-0454	Delete Card action failed. Invalid SerialNo.
Charge Response Codes	
PSI-0000	The transaction completed successfully. (For Immediate charges)
RRC-0000	Register Charge action completed successfully.
RRC-0005	Register Charge action completed partially.
RRC-0006	Register Charge action failed.
RRC-0019	Register Charge action failed. Invalid Charge ID.
RRC-0050	Register Charge action completed successfully.
RRC-0051	Duplicate Charge ID.
RRC-0060	Retrieve Charge Summary action completed successfully.
RRC-0061	No Recurring Charges found.
RRC-0065	Add Charge Item action completed successfully.
RRC-0066	Add Charge Item action failed. Invalid Charge ID.
RRC-0072	Update Charge action completed successfully.
RRC-0073	Update Charge action failed. Invalid Charge ID.
RRC-0074	Update Charge action failed. Invalid Charge Item.
RRC-0075	Update Charge Item action completed successfully.

RRC-0076	Update Charge Item action failed. Invalid Charge ID.
RRC-0077	Update Charge Item action failed. Invalid SerialNo.
RRC-0078	Update Charge Item action failed. Invalid Change Item.
RRC-0082	Delete Charge action completed successfully.
RRC-0083	Delete Charge Charge action failed. Invalid Charge ID.
RRC-0090	Disable Charge(s) action completed successfully.
RRC-0091	Disable Charge(s) action failed. Invalid Charge ID(s).
RRC-0092	Disable Charge Item action completed successfully.
RRC-0093	Disable Charge Item action failed. Invalid Charge ID.
RRC-0094	Disable Charge Item action failed. Invalid SerialNo.
RRC-0095	Enable Charge Item action completed successfully.
RRC-0096	Enable Charge Item action failed. Invalid Charge ID.
RRC-0097	Enable Charge Item action failed. Invalid SerialNo.
RRC-0098	Delete Charge Item action completed successfully.
RRC-0099	No record found.
RRC-0100	The action is invalid.
RRC-0101	Data validation failed. No StoreID.
RRC-0102	Data validation failed. No AccountID.
RRC-0103	Data validation failed. No SerialNo.
RRC-0104	Data validation failed. No Interval.
RRC-0105	Data validation failed. No Trigger.
RRC-0106	Data validation failed. Invalid Trigger.
RRC-0107	Data validation failed. Invalid StartTime.
RRC-0108	Data validation failed. Invalid EndTime.
RRC-0109	Data validation failed. StartTime later than EndTime.
RRC-0110	Data validation failed. No Item.
RRC-0111	Data validation failed. Invalid amount data.
RRC-0112	Data validation failed. No Charge found.
RRC-0190	Enable Charge(s) action completed successfully.
RRC-0191	Enable Charge(s) action failed. Invalid Charge ID(s).
RRC-0192	Data validation failed. Invalid StoreID.
<b>Charge Template Response Codes</b>	
CTL-0000	Register Charge Template action completed successfully.
CTL-0005	Register Charge Template action completed partially.
CTL-0006	Register Charge Template action failed.
CTL-0050	Register Charge Template completed successfully.
CTL-0051	Duplicate Charge Template ID.
CTL-0060	Retrieve Charge Template Summary action completed successfully.
CTL-0061	No Charge Templates found.
CTL-0065	Add Charge Template Item action completed successfully.
CTL-0066	Add Charge Template Item action failed. Invalid Charge ID.
CTL-0072	Update Charge Template action completed successfully.
CTL-0073	Update Charge Template action failed. Invalid Charge ID.
CTL-0074	Update Charge Template action failed. Invalid Change Item.
CTL-0075	Update Charge Template Item action completed successfully.
CTL-0076	Update Charge Template Item action failed. Invalid Charge ID.
CTL-0077	Update Charge Template Item action failed. Invalid SerialNo.
CTL-0078	Update Charge Template Item action failed. Invalid Change Item.
CTL-0082	Delete Charge Template action completed successfully.
CTL-0083	Delete Charge Template action failed. Invalid Charge ID.
CTL-0090	Disable Charge Template(s) action completed successfully.
CTL-0091	Disable Charge Template(s) action failed. Invalid Recurring Charge IDs.
CTL-0092	Disable Charge Template Item action completed successfully.

CTL-0093	Disable Charge Template Item action failed. Invalid Charge ID.
CTL-0094	Disable Charge Template Item action failed. Invalid SerialNo.
CTL-0096	Delete Charge Template Item action failed. Invalid Charge ID.
CTL-0097	Delete Charge Template Item action failed. Invalid SerialNo.
CTL-0098	Delete Charge Template Item action completed successfully.
CTL-0100	The action is invalid.
CTL-0190	Enable Charge Template(s) action completed successfully.
CTL-0191	Enable Charge Template(s) action failed. Invalid Recurring Charge IDs.
CTL-0192	Enable Charge Template Item action completed successfully.
CTL-0193	Enable Charge Template Item action failed. Invalid Charge ID.
CTL-0194	Enable Charge Template Item action failed. Invalid SerialNo.
<b>Invoice Response Codes</b>	
RIV-0019	Retrieve Invoice details action failed. Invalid InvoiceNo.
RIV-0050	Register Invoice action completed successfully.
RIV-0051	Duplicate Invoice ID.
RIV-0060	Retrieve Invoice Summary action completed successfully.
RIV-0061	No Invoices found.
RIV-0072	Update Invoice action completed successfully.
RIV-0073	Update Invoice action failed. Invalid InvoiceNo.
RIV-0074	Update Invoice action failed. Invalid Invoice Item.
RIV-0090	Change Invoice Status to OUTSTANDING action completed successfully.
RIV-0091	Change Invoice Status to OUTSTANDING action failed. Invalid InvoiceNo..
RIV-0100	The action is invalid.
RIV-0190	Change Invoice Status to PAID action completed successfully.
RIV-0191	Change Invoice Status to PAID action failed. Invalid Invoice Number.
RIV-0196	Immediate Charge invoice failed.
RIV-0197	Immediate Charge invoice completed partially.
RIV-0198	Immediate Charge invoice completed successfully.
<b>E-mail Report Response Codes</b>	
EMR-0000	Register Email Report action completed successfully.
EMR-0005	Register Email Report action completed partially.
EMR-0006	Register Email Report action failed.
EMR-0050	Register Email Report action completed successfully.
EMR-0051	Register Email Report action failed. Duplicate record.
EMR-0052	Register Email Report action failed.
EMR-0060	Retrieve Email Report details action completed successfully.
EMR-0061	No Email Report Types found.
EMR-0071	Update Email Report action failed. No record found.
EMR-0072	Update Email Report action completed successfully.
EMR-0073	Update Email Report action failed. Invalid Type(s).
EMR-0074	Update Email Report action failed. Invalid Change Item.
EMR-0081	Delete Email Report action failed. No record found.
EMR-0082	Delete Email Report action completed successfully.
EMR-0090	Disable Email Report action completed successfully.
EMR-0091	Disable Email Report action failed. Invalid Type(s).
EMR-0092	Disable Email Report action failed. No record found.
EMR-0100	The action is invalid.
EMR-0190	Enable Email Report action completed successfully.
EMR-0191	Enable Email Report action failed. Invalid Type(s).
EMR-0192	Enable Email Report action failed. No record found.



## Appendix B - Test Credit Card Numbers

If you need to use credit card numbers to test transaction in our dev environment please use the test card numbers below. Please keep in mind that the appropriate response for a test card number submitted within a live transaction is a response indicating that the card does not belong to a valid institution because although these numbers fit the credit card algorithm, they have not been issued by a credit card issuer.

### VISA test numbers

4111111111111111  
4012000033330026  
4111111111111112  
4012000033330036  
4005550000000019  
4387751111111111  
4387752222222227  
4005519255555555  
4116110000000018

### MC test numbers

5454545454545454  
5424180279791732  
5191230005263745  
5442982222222220  
5405070000000011  
5529040000000015

### MC 2BIN test numbers

2221011111222226  
2221000000111111  
2720999999111113  
2222400041240011  
2223000048400011

### Discover (MC test numbers)

6011000991300009

### AMEX test numbers

371449635398431

### VISA Debit test numbers

4005550000000001 + TestResult = "A"

## Appendix C - Sample E-mail Reports

### Sample Expiry Card Report

AccountID	SerialNo	CardHolder	CardNumber	Expiry
2012081540573	1	Jane Smith	411111...1111	01/12
2012082751831	1	John Smith	545454...5454	07/12

### Sample Expiry Charge Report

AccountID	ChargeID	ChargeName	Interval	Trigger	Amount	Expiry
test for sunny	2012082016015028891		0	2012.08.20	21.00	2012.08.20
Marek Recurring	2012082108323628895		0	2012.08.21	126.00	2012.08.21
Marek Recurring	201208221525228943		0	2012.08.22	0.00	2012.08.22
Marek Recurring	2012082215391628950		0		0.00	2012.08.22
Marek Recurring	2012082215402528951		0		146.00	2012.08.22
Marek Recurring	2012082215410028952		0	2012.08.22	2344.00	2012.08.22
Marek Recurring	2012082215420928953		0	2012.08.22	123.00	2012.08.22
AccAdminTest	New Installments Temp2	New Installments Temp 10 insta	0		10.00	2012.08.22
99	Sun Try out	Sun Try out	0		14.00	2012.08.22
test for sunny	one time instal	one time instal	0	2012.08.20	11.00	2012.08.20
99	test for Charlie	10 installments	0		20.00	2012.08.22
test for sunny	test for sunny	test for sunny	0	2012.08.20	33.00	2012.08.20

### Sample Monthly Invoice Report

Date	InvoiceNo	Payer Name	Status	ItemTotal	Tax1	Tax2	Ship	Amount	Response
2012.08.27	039076	mr cardholder	Paid	6.00	0.30	0.00	0.00	6.30	Y:123456:0abcdf:M:X:NN
2012.08.27	039075	BillingName	Outstanding	99.00	0.00	0.00	0.00	99.00	N:ERROR
2012.08.27	039074	Q1f300eb948c4473d89e6c3219c8f0466	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039073	Z8cc651f80133453ba7cef8d78de413a5	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039072	BillingName	Outstanding	199.00	0.00	0.00	0.00	199.00	N:ERROR
2012.08.27	039071	Dan Meeking	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039070	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039069	BillingName	Paid	199.00	0.00	0.00	0.00	199.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039068	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039067	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039066	Nbb93407873884df08853c2643fcd430c	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039065	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039064	BillingName	Outstanding	99.00	0.00	0.00	0.00	99.00	N:ERROR
2012.08.27	039063	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039062	BillingName	Paid	199.00	0.00	0.00	0.00	199.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039061	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039060	J48101f6ef2134e428faef910c989f841	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039059	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039058	BillingName	Outstanding	99.00	0.00	0.00	0.00	99.00	N:ERROR
2012.08.27	039057	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039056	Me3dfefb9f8f454844a31b5a68de3e48b5	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039055	BillingName	Outstanding	99.00	0.00	0.00	0.00	99.00	N:ERROR
2012.08.27	039054	BillingName	Outstanding	99.00	0.00	0.00	0.00	99.00	N:ERROR
2012.08.27	039053	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039052	BillingName	Paid	199.00	0.00	0.00	0.00	199.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039051	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039050	L0e58cf3bb4034d2fb8e9fcf33d4d6c8c	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039049	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039048	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039047	D2030d8ca7d6c4020b34ac124d53b337a	Outstanding	99.00	0.00	0.00	0.00	99.00	N:ERROR
2012.08.27	039046	BillingName	Paid	199.00	0.00	0.00	0.00	199.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039045	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039044	BillingName	Paid	99.00	0.00	0.00	0.00	99.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039043	BOBBBY AVALOS	Paid	19.00	0.95	1.52	0.00	21.47	Y:123456:0abcdf:M:X:NN
2012.08.27	039042	BOBBBY AVALOS	Paid	19.00	0.95	1.52	0.00	21.47	Y:123456:0abcdf:M:X:NN
2012.08.27	039041	Bob Joe	Paid	10.00	0.00	0.00	0.00	10.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039040	BOBBBY AVALOS	Paid	19.00	0.95	1.52	0.00	21.47	Y:123456:0abcdf:M:X:NN
2012.08.27	039039	Bob Joe	Paid	10.00	0.00	0.00	0.00	10.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039038	BOBBBY AVALOS	Paid	19.00	0.95	1.52	0.00	21.47	Y:123456:0abcdf:M:X:NN
2012.08.27	039037	Bob Joe	Outstanding	9.99	0.00	0.00	0.00	9.99	N:ERROR
2012.08.27	039036	BOBBBY AVALOS	Outstanding	0.00	0.00	0.00	0.00	0.00	N:ERROR
2012.08.27	039035	BOBBBY AVALOS	Outstanding	0.00	0.00	0.00	0.00	0.00	N:ERROR
2012.08.27	039034	John Smith	Paid	14.99	0.00	0.00	0.00	14.99	Y:123456:0abcdf:M:X:NN
2012.08.27	039033	John Palumbo	Paid	100.00	0.00	0.00	0.00	100.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039032	Nobodys Fool	Paid	11.00	0.00	0.00	0.00	11.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039031	mike tyson	Paid	895.00	0.00	0.00	0.00	895.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039030	Bhaurao Bheke	Paid	18.00	0.00	0.00	0.00	18.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039029	Ramesh Bhalerao	Paid	129.00	0.00	0.00	0.00	129.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039028	AWMC John	Paid	5.00	0.00	0.00	0.00	5.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039027	AWMC John	Paid	5.00	0.00	0.00	0.00	5.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039026	Ben	Paid	4.50	0.00	0.00	0.00	4.50	Y:123456:0abcdf:M:X:NN
2012.08.27	039025	Bob Joe	Paid	10.00	0.00	0.00	0.00	10.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039024	Bob Joe	Paid	10.00	0.00	0.00	0.00	10.00	Y:123456:0abcdf:M:X:NN
2012.08.27	039023	Bob Joe	Paid	9.99	0.00	0.00	0.00	9.99	Y:123456:0abcdf:M:X:NN

## Appendix D - Connection Troubleshooting Guide

If you cannot connect to PSiGate via XML, it could be that:

1. PSiGate's service was down
2. PostURL is incorrect
3. DNS did not resolve the name correctly. We communicate via:
4. Test Environment - <https://staging.psigate.com:8645/Messenger/XMLMessenger> (216.220.59.211 via port 8645)
5. Production Environment - <https://secure.psigate.com:10921/Messenger/XMLMessenger> (216.220.59.210 via port 10921)
6. Ports are not open (8645, 18645 or 28645 for Test Environment. 10921, 20921 or 30921 for Production environment)
7. The port within your Action URL does not support the same encryption protocols that your server supports. Try a different port number from #3.
8. Your firewall has blocked PSiGate's IP address.
9. Timeout is set too low. Set to 30 seconds.

If you have tried all of the above, please ask your host to perform a traceroute and notify us of the result if the trace shows that the connection was dropped after it reached PSiGate.

If you would like for us to check our logs for your transaction requests, ask your host provider to run four telnet tests (details below), report to us the results of each and supply us with their server's Source IP or Subnet and the timestamp of the last transaction attempt.

From the command window,

Input "telnet secure.psigate.com"

Input "telnet secure.psigate.com 10921"

Input "telnet secure.psigate.com 20921"

Input "telnet secure.psigate.com 27934"

Results include:

PASS if the DOS screen goes blank.

FAIL if you see a "Trying to connect..." message.

Send an email to [support@psigate.com](mailto:support@psigate.com) with the results of all four tests.