

Green.Money™

<https://www.green.money/>

eNotification API

Version 1.0

(HTTP POST, SOAP 1.1, SOAP 1.2)

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Introduction

Green.Money™'s (<http://green.money>) eNotification API v1.0 contains all the methods necessary for retrieving and deleting system event notifications.

The API is a .NET web service written in VB managed code and exposes all of the custom classes you will need for calling its methods and interpreting responses. The service resides on our gateway behind 2048-bit encryption via SSL.

Service Protocols Supported

The eNotification API supports SOAP 1.1 and 1.2 as well as HTTP POST/GET. The choice is left up to your application development team as to which of these methods to use. However, please note that some method parameters require binary data. In those cases, only the SOAP protocol is capable of handling those requests.

SOAP vs. POST/GET

Originally, SOAP was the acronym for Simple Object Access Protocol. However, recently it has also been known to stand for Service Oriented Architecture Protocol. Either way, SOAP is a protocol for exchanging XML-based messages over computer networks, normally using HTTP or HTTPS. SOAP forms the foundation layer of the Web Services stack, providing a basic messaging framework in which more abstract layers can be built upon. SOAP messages transferred over HTTPS works well with firewalls and is the advocated WS-I method to provide web service security.

Message Encryption and Authentication

The SSL protocol allows applications to communicate across a network in a way designed to prevent eavesdropping, tampering, and message forgery. SSL provides endpoint authentication and communications privacy over the Internet using cryptography. Typically, only the server is authenticated (i.e., its identity is ensured) while the client remains unauthenticated; this means that the end user (be that a person, or an application such as a web browser), can be sure with whom they are "talking".

When any method is called, the client must send its Client ID and the appropriate API Service Password along with all of the other input parameters specific to the method. This authorizes use of the method by validating that the password matches a currently active Client ID.

Gateway Endpoint Address

The live web service is hosted at the following web address:

<https://www.greenbyphone.com/eNotification.asmx>

Available Methods

We support several different web methods that will allow you to view notifications as well as clear them from your queue

Please note: Method names are case sensitive when called.

```
AllNotifications  
UnseenNotifications  
ClearNotification  
NotificationStatus
```

Testing Methods

You are able to test any of the available web methods online whenever you like. Simply go to the [eNotification.asmx page](https://www.greenbyphone.com/eNotification.asmx) and select a method. A description will be displayed with a test input form (see below). This is a live testing page! Simply enter the data that your system will attempt to enter and you will get live results back.

Please note: We would like to stress that this page is live. Retrieving or clearing notifications with your given `Client_ID` and `ApiPassword`, will mark those notifications as viewed or deleted and subsequent method calls may not give the same results.

eCheck

Click [here](#) for a complete list of operations.

BillPayCheckNoBankInfo

Test

To test the operation using the HTTP POST protocol, click the 'Invoke' button.

Parameter	Value
Client_ID:	<input type="text"/>
ApiPassword:	<input type="text"/>
Name:	<input type="text"/>
Address1:	<input type="text"/>
Address2:	<input type="text"/>
City:	<input type="text"/>
State:	<input type="text"/>
Zip:	<input type="text"/>
Country:	<input type="text"/>
CheckMemo:	<input type="text"/>
CheckAmount:	<input type="text"/>
CheckDate:	<input type="text"/>
x_delim_data:	<input type="text"/>
x_delim_char:	<input type="text"/>

Common Input Fields

All web methods share 4 common input fields. Two of them are for authentication -- the Client_ID and ApiPassword fields -- and the other two are for defining output specification -- x_delim_data and x_delim_char .

Authentication Input Fields

```
<Client_ID>string</Client_ID>
<ApiPassword>string</ApiPassword>
```

Field Name	Data Type	Description
Client_ID	string	Numeric Client ID assigned to your account by the system.
ApiPassword	string	an alphanumeric string assigned to your account by the system.

Note: These credentials are auto-generated and are completely separate from the username and password combination you use for the web interface. These credentials, when created, will be emailed directly to the email account we have on file for your account. If you do not have these yet, contact [Customer Support](#) to have them created for you.

Output Specification Fields

```
<x_delim_data>string</x_delim_data>
<x_delim_char>string</x_delim_char>
```

Field Name	Data Type	Description	Accepted Values
x_delim_data	string	Determines whether or not output is delivered as delimited text data.	FALSE (<i>default</i>) - "" TRUE - "true", "T", "yes", "Y", "1", "on"
x_delim_char	string	If delimited data is requested, this field allows the user to specify the character used to delimit data	" " (<i>default</i>) " " "~"

Since we are using XML Web Services, all output defaults to XML. However, many legacy systems still use older character delimited text protocols. Setting x_delim_data to *TRUE*, forces the system output to delimited text.

Examples:

Input Request	Output
x_delim_data=&x_delim_char=	<pre><ReturnResult> <value1>1</value1> <value2>\$2.00</value2> <value3>3.0%</value3> </ReturnResult></pre>
x_delim_data=TRUE&x_delim_char=	1 \$2.00 3.0%
x_delim_data=y&x_delim_char=,	1,\$2.00,3.0%

AllNotifications - Return All Notifications In Queue

This method returns all notifications available to you, regardless of whether they have been previously viewed or marked for future deletion.

Input

```
<AllNotifications>
  <Client_ID>string</Client_ID>
  <ApiPassword>string</ApiPassword>
  <x_delim_data>string</x_delim_data>
  <x_delim_char>string</x_delim_char>
</AllNotifications>
```

Field Name	Required?	Data Type	Description	Example Values
Client_ID	Yes	string	See Authentication Input Fields	
ApiPassword	Yes	string	See Authentication Input Fields	
x_delim_data		string	See Output Specification Fields	
x_delim_char		string	See Output Specification Fields	

Output

```
<AllNotificationsResult>
  <Result>string</Result>
  <ResultDescription>string</ResultDescription>
  <NotificationsCount>int</NotificationsCount>
  <Notifications>
    <ClientNotification>
      <ClientNotification_ID>long</ClientNotification_ID>
      <Message>string</Message>
      <Client_ID>long</Client_ID>
      <EntryClient_ID>long</EntryClient_ID>
      <timeApiViewed>dateTime</timeApiViewed>
      <timeEmailViewed>dateTime</timeEmailViewed>
      <timePortalViewed>dateTime</timePortalViewed>
      <timeUpdated>dateTime</timeUpdated>
      <timeCreated>dateTime</timeCreated>
      <deleted>boolean</deleted>
    </ClientNotification>
    ...
  </Notifications>
</AllNotificationsResult>
```

Field Name	Data Type	Description
Result	string	The numeric result code. A value of '0' means that the debit was accepted into the system. All other codes indicate that the data was NOT stored in the system.
ResultDescription	string	A text description of the Result field from above.
NotificationsCount	int	Returns the number of notifications that will be in the Notifications field
Notifications	object	An array of NotificationsCount entries containing ClientNotification objects
ClientNotification	object	An object containing information about a given notification. See reference table below.

ClientNotification

Field Name	Data Type	Description
ClientNotification_ID	long	The unique system identifier for this individual notification
Message	string	A text description of the event in the system
Client_ID	long	The client this notification is assigned to. This will always be your Client ID
EntryClient_ID	long	The Client ID of the user who initiated the event.
timeApiViewed	dateTime	The date and time value of when the notification was last viewed via API
timeEmailViewed	dateTime	The date and time value of when the notification was last sent via email
timePortalViewed	dateTime	The date and time value of when the notification was last viewed in the Green Portal
timeUpdated	dateTime	The date and time value of when the notification was last updated
timeCreated	dateTime	The date and time the notification was created
delete	boolean	Whether the notification has been marked for deletion

UnseenNotifications

This method returns only those notifications which haven't been viewed via API yet and which haven't been marked for deletion.

Input

```
<UnseenNotifications>
  <Client_ID>string</Client_ID>
  <ApiPassword>string</ApiPassword>
  <x_delim_data>string</x_delim_data>
  <x_delim_char>string</x_delim_char>
</UnseenNotifications>
```

Field Name	Required?	Data Type	Description	Example Values
Client_ID	Yes	string	See Authentication Input Fields	
ApiPassword	Yes	string	See Authentication Input Fields	
x_delim_data		string	See Output Specification Fields	
x_delim_char		string	See Output Specification Fields	

Output

```
<UnseenNotificationsResult>
  <Result>string</Result>
  <ResultDescription>string</ResultDescription>
  <NotificationsCount>int</NotificationsCount>
  <Notifications>
    <ClientNotification>
      <ClientNotification_ID>long</ClientNotification_ID>
      <Message>string</Message>
      <Client_ID>long</Client_ID>
      <EntryClient_ID>long</EntryClient_ID>
      <timeApiViewed>dateTime</timeApiViewed>
      <timeEmailViewed>dateTime</timeEmailViewed>
      <timePortalViewed>dateTime</timePortalViewed>
      <timeUpdated>dateTime</timeUpdated>
      <timeCreated>dateTime</timeCreated>
      <deleted>boolean</deleted>
    </ClientNotification>
    ...
  </Notifications>
</UnseenNotificationsResult>
```

Field Name	Data Type	Description
Result	string	The numeric result code. A value of '0' means that the debit was accepted into the system. All other codes indicate that the data was NOT stored in the system.
ResultDescription	string	A text description of the Result field from above.
NotificationsCount	int	Returns the number of notifications that will be in the Notifications field
Notifications	object	An array of NotificationsCount entries containing ClientNotification objects
ClientNotification	object	An object containing information about a given notification. See reference table below.

ClientNotification

Field Name	Data Type	Description
ClientNotification_ID	long	The unique system identifier for this individual notification
Message	string	A text description of the event in the system
Client_ID	long	The client this notification is assigned to. This will always be your Client ID
EntryClient_ID	long	The Client ID of the user who initiated the event.
timeApiViewed	dateTime	The date and time value of when the notification was last viewed via API. This will always be the date and time of retrieval, since this will be the first instance the notification was viewed via API
timeEmailViewed	dateTime	The date and time value of when the notification was last sent via email
timePortalViewed	dateTime	The date and time value of when the notification was last viewed in the Green Portal
timeUpdated	dateTime	The date and time value of when the notification was last updated
timeCreated	dateTime	The date and time the notification was created
delete	boolean	Whether the notification has been marked for deletion

ClearNotification

Mark a single notification as deleted so it won't return on subsequent calls, daily emails, or Green Portal logins.

Notifications marked for deletion will still return in calls to "All Notifications" until the system runs the cleaning protocols on our database. Typically this happens overnight

Input

```
<ClearNotification>
  <Client_ID>string</Client_ID>
  <ApiPassword>string</ApiPassword>
  <ClientNotification_ID>string</ClientNotification_ID>
  <x_delim_data>string</x_delim_data>
  <x_delim_char>string</x_delim_char>
</ClearNotification >
```

Field Name	Required?	Data Type	Description	Example Values
Client_ID	Yes	string	See Authentication Input Fields	
ApiPassword	Yes	string	See Authentication Input Fields	
ClientNotification_ID	Yes	string	The unique record identifier for the notification you wish to delete	
x_delim_data		string	See Output Specification Fields	
x_delim_char		string	See Output Specification Fields	

Output

```
<ClearNotificationResult>
  <Result>string</Result>
  <ResultDescription>string</ResultDescription>
  <NotificationsCount>int</NotificationsCount>
  <Notifications>
    <ClientNotification>
      <ClientNotification_ID>long</ClientNotification_ID>
      <Message>string</Message>
      <Client_ID>long</Client_ID>
      <EntryClient_ID>long</EntryClient_ID>
      <timeApiViewed>dateTime</timeApiViewed>
      <timeEmailViewed>dateTime</timeEmailViewed>
      <timePortalViewed>dateTime</timePortalViewed>
      <timeUpdated>dateTime</timeUpdated>
      <timeCreated>dateTime</timeCreated>
      <deleted>boolean</deleted>
    </ClientNotification>
    ...
  </Notifications>
</UnseenNotificationsResult>
```

Field Name	Data Type	Description
Result	string	The numeric result code. A value of '0' means that the debit was accepted into the system. All other codes indicate that the data was NOT stored in the system.
ResultDescription	string	A text description of the Result field from above.
NotificationsCount	int	Returns the number of notifications that will be in the Notifications field. Will always be 1 on success or 0 on failure.
Notifications	object	An array of NotificationsCount entries containing ClientNotification objects. In this case, will always contain the notification cleared.
ClientNotification	object	An object containing information about a given notification. See reference table below.

ClientNotification

Field Name	Data Type	Description
ClientNotification_ID	long	The unique system identifier for this individual notification
Message	string	A text description of the event in the system
Client_ID	long	The client this notification is assigned to. This will always be your Client ID
EntryClient_ID	long	The Client ID of the user who initiated the event.
timeApiViewed	dateTime	The date and time value of when the notification was last viewed via API. This will always be the date and time of retrieval, since this will be the first instance the notification was viewed via API
timeEmailViewed	dateTime	The date and time value of when the notification was last sent via email
timePortalViewed	dateTime	The date and time value of when the notification was last viewed in the Green Portal
timeUpdated	dateTime	The date and time value of when the notification was last updated
timeCreated	dateTime	The date and time the notification was created
delete	boolean	Whether the notification has been marked for deletion

NotificationStatus

Return all information about a single specified notification event

Input

```
<NotificationStatus>
  <Client_ID>string</Client_ID>
  <ApiPassword>string</ApiPassword>
  <ClientNotification_ID>string</ClientNotification_ID>
  <x_delim_data>string</x_delim_data>
  <x_delim_char>string</x_delim_char>
</NotificationStatus>
```

Field Name	Required?	Data Type	Description	Example Values
Client_ID	Yes	string	See Authentication Input Fields	
ApiPassword	Yes	string	See Authentication Input Fields	
ClientNotification_ID	Yes	string	The unique record identifier for the notification you wish to retrieve	
x_delim_data		string	See Output Specification Fields	
x_delim_char		string	See Output Specification Fields	

Output

```
<NotificationStatusResult>
  <Result>string</Result>
  <ResultDescription>string</ResultDescription>
  <NotificationsCount>int</NotificationsCount>
  <Notifications>
    <ClientNotification>
      <ClientNotification_ID>long</ClientNotification_ID>
      <Message>string</Message>
      <Client_ID>long</Client_ID>
      <EntryClient_ID>long</EntryClient_ID>
      <timeApiViewed>dateTime</timeApiViewed>
      <timeEmailViewed>dateTime</timeEmailViewed>
      <timePortalViewed>dateTime</timePortalViewed>
      <timeUpdated>dateTime</timeUpdated>
      <timeCreated>dateTime</timeCreated>
      <deleted>boolean</deleted>
    </ClientNotification>
    ...
  </Notifications>
</NotificationStatusResult>
```

Field Name	Data Type	Description
Result	string	The numeric result code. A value of '0' means that the debit was accepted into the system. All other codes indicate that the data was NOT stored in the system.
ResultDescription	string	A text description of the Result field from above.
NotificationsCount	int	Returns the number of notifications that will be in the Notifications field. Will always be 1 on success or 0 on failure.
Notifications	object	An array of NotificationsCount entries containing ClientNotification objects. In this case, will always contain one entry..
ClientNotification	object	An object containing information about a given notification. See reference table below.

ClientNotification

Field Name	Data Type	Description
ClientNotification_ID	long	The unique system identifier for this individual notification
Message	string	A text description of the event in the system
Client_ID	long	The client this notification is assigned to. This will always be your Client ID
EntryClient_ID	long	The Client ID of the user who initiated the event.
timeApiViewed	dateTime	The date and time value of when the notification was last viewed via API. This will always be the date and time of retrieval, since this will be the first instance the notification was viewed via API
timeEmailViewed	dateTime	The date and time value of when the notification was last sent via email
timePortalViewed	dateTime	The date and time value of when the notification was last viewed in the Green Portal
timeUpdated	dateTime	The date and time value of when the notification was last updated
timeCreated	dateTime	The date and time the notification was created
delete	boolean	Whether the notification has been marked for deletion

Common Error Results

This section will contain many of the most common errors received from our API, what they potentially mean, and a few first steps you can take to try and resolve that problem. If any of the solutions presented here do not match your problem, feel free to reach out to [Customer Support](#) for more in depth help!

The requested URL was rejected. Please consult with your administrator. Your support ID is: XXXXXXXXXXXXXXXX

This is the most general, catchall of the errors returned by our API. In most cases this is caused because your integration is not sending all fields with the request to a method. Remember that even though a field is optional, it MUST be sent with the request, even if it is a blank or empty string.

Client_ID Not Found

This message simply means that the Client_ID you're passing to the API method could not be found in our system. Please verify a few things:

1. Your account is Active with Green. You've completed the underwriting process and Green Technical Support has sent you the system generated API credentials. If your account is inactive, you will be unable to make API calls.
2. Your Client_ID and ApiCredentials match those sent to the account on file by the system when the API was setup for you.
3. You're pointed to the correct endpoint. Note that we do have two different available APIs (one for the live system and another for our Sandbox system). These two endpoints require completely separate API credentials so if you're attempting to use the Client_ID and ApiPassword given to you by the Sandbox system but your integration is pointed to the live endpoint, you will get the Client_ID Not Found error.

Password Supplied Not Correct

As the error message states, the ApiPassword sent does not match what the system generated for the given Client_ID. Please verify again that the ApiPassword matches what was sent to the email account on file when the system generated credentials for this account.

If you have verified that they match and you are still receiving this error, simply send [Customer Support](#) a request email and they can easily reset and resend your API credentials. In this email, please either send the request from the email address we have on file with the account or make note of what merchant account you are the developer for. That will help speed the process up!

_____ Does Not Belong To Client

This happens when an API call attempts to access an item that does not belong to the Client_ID passed to the API. Please verify that the ClientNotification_ID field you're passing matches the unique record identifier in Green.

_____ Not Found

This happens because the given request could not find the Item_ID passed. Please verify that you're entering the correct ClientNotification_ID, etc.