



Paythem.Net.API for .Net libraries

This document contains the details of the PayThem.Net dll file for .Net Core 3.1, .Net Standard 2.0 and .Net Framework 3.0



Version Control

Revision	Changes	Dated
Rev 0	Creation of .Net documentation	2021/09/10

Related Documents

Number	Document Name	Description	Link
1	PayThem.Net - webAPI Developers Guide for API v2.2.2.pdf	Web API Documentation & developer's guide on API calls and structure	API Libraries

Paythem.Net via API object

The .Net library contains an object to call the PayThem.Net server directly

Function and object definition

PayThem.Net.API

This is an API calling object. Using this object, calls can be made directly to the PayThem.Net API server. When this object is used, the query builder approach is not needed and visa versa.

Constructor()

No parameters need to be passed to the API constructor. Settings for this is to be set at a later stage.

get_OEMList()

Retrieves a list of all OEM information available to the user that the module is set to use. This function does not require any parameters to be passed.

get_BrandList()

Retrieves a list of all brand information available to the user that the module is set to use. This function does not require any parameters to be passed.

get_ProductList()

Retrieves a full list of all information available to the user that the module is set to use. This function does not require any parameters to be passed.

get_ProductAvailability(productId)

Retrieves the availability of the product. This function requires that the ID of the product to check, be passed as the parameter.

get_AllProductAvailability()

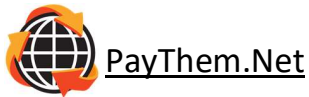
This retrieves product availability in the same way as with the *get_ProductAvailability*, but it will retrieve the details for all products. This function does not require any parameters to be passed.

get_AccountBalance()

Retrieves the current balance of the user that the module is set to use. This will be in the currency specified on the PayThem.Net servers, and a currency will be passed in the results. This function does not require any parameters to be passed.

get_Vouchers(productId, quantity, reference)

This is the function to call to purchase a voucher, or multiple vouchers of the same product. This function requires that the ID of the product to be purchased, be passed as the first parameter. The quantity of vouchers requested is to be passed as the second parameter, and as the third and final parameter, a reference for the purchase order.



get_FinancialTransaction_ByDateRange(fromDate, toDate)

Retrieves all financial transactions for the user that the module is set to use. The transactions retrieved is limited to the date range passed. Pass a date as the first parameter, this will be where the transaction retrieval will start. Pass a date as the second parameter, this will be where the transaction retrieval will end.

get_SalesTransaction_ByDateRange(fromDate, toDate)

Retrieves all sales transactions for the user that the module is set to use. The transactions retrieved is limited to the date range passed. Pass a date as the first parameter, this will be where the transaction retrieval will start. Pass a date as the second parameter, this will be where the transaction retrieval will end.

get_ProductFormats()

Retrieves all product's voucher's output formats. An ID and a description is retrieved for the output formats registered for vouchers. Each voucher purchase or sales transaction will contain an ID of this value.

get_LastSale()

Retrieves details about the last transaction of the user, along with all vouchers for the sale.

liveEnvironment()

This function sets the module to call the production server on all future calls. If this function is not set, all calls will be directed to a PayThem.Net test server.

Example Code:

```
Paythem.Net.API api = new Paythem.Net.API()
{
    PublicKey = xPublicKey,
    EncryptionKey = xEncryptionKey,
    Username = xUsername,
    Password = xPassword,
    TimeZone = xTimeZone
};
api.liveEnvironment();
api.get_Vouchers(1002, 5, xReferenceID);
```

PayThem.Net via Query Builder

The .Net library contains a query builder, allowing the use of custom callers if needed

Function and object definition

PayThem.Net.QueryBuilder

The query builder constructs an object that will contain a complete JSON string of the call to the server. This string can then be retrieved, along with all other required information to call the PayThem.Net API server with a custom web request objects.

AddParameter(key, value)

Some calls to the server will require certain parameters passed in the request. Use this function to define the parameters on the call.

GenerateContent()

This is only to be called once all required information has been set in the query builder. This will generate the JSON string for the call.

Variables

Function

This is the function to call on the server. Example: `get_LastSale`. This is to be set as a standard string in the query builder object.

EncryptionKey

The key to be used as a password when encrypting the content to the server. The encryption key is the Private Key, provided by PayThem.Net. This is to be set as a standard string in the query builder object.

Username

The API user's username. Provided by PayThem.Net. This is to be set as a standard string in the query builder object.

Password

The API user's password. Provided by PayThem.Net. This is to be set as a standard string in the query builder object.

TimeStamp

The current timestamp in the timezone that the code is generated in. This is to be set as a standard string in the query builder object.

HMAC

This is the generated HMAC that is required in the headers. This is only accessible for reading after the query builder has generated its content. Returned as a string.

Content

A JSON encoded, encrypted string to be placed in the body content. This is the request content to the API server. This is only accessible for reading after the query builder has generated it's content. Returned as a string.

Example Code:

```
Paythem.Net.QueryBuilder queryBuilder = new Paythem.Net.QueryBuilder()
{
    EncryptionKey = xEncryptionKey,
    Username = xUsername,
    Password = xPassword,
    TimeZone = xTimeZone
};
queryBuilder.Function = "get_Vouchers";
queryBuilder.AddParameter("PRODUCT_ID", "1002");
queryBuilder.AddParameter("QUANTITY", "5");
queryBuilder.AddParameter("REFERENCE_ID", xReferenceID);
queryBuilder.TimeStamp = xTimeStamp;
Paythem.Net.Response response = queryBuilder.GenerateContent();
if (response.Success)
{
    contentToSend = queryBuilder.Content;
    xHash = queryBuilder.HMAC;
    // Web call
}
```

Live Environment

The module connects to a PayThem.Net testing environment by default. Once the module has been set up correctly and the calls to the test server have been approved, you may switch over to the live environment with the actions below

Live environment switch

A simple function will switch the module from a testing environment, to the live environment. This can be achieved using the module function of [liveEnvironment\(\)](#).

The switch to the live environment needs to occur before any other call to the server. The live environment will also have different credentials than the ones initially provided for the testing and development with the module.

Once the module object has been instantiated with the 'new' command, the live environment switch can be turned on by calling the function mentioned above. This can be done right after the object is created, or after the server and user settings have been set to the module.

Any call to the server that is placed above this switch, will be sent to a PayThem.Net testing server.

Responses

All responses from the PayThem.Net API server follow the same structure

Documentation

For a full description of the responses received from the server, for each of the functions of this module, please refer to the API documentation listed at the top of this document, or by visiting the link below.

[PayThem.Net - webAPI Developers Guide for API v2.2.2.pdf](#)