POSitive API

You'll need to have an active Gold Subscription, and a recent version of a POSitive product, in order to use the POSitive API. Contact POSitive for more information.

POSitive Software Company has decided to no longer create, and maintain, individual interfaces to specific services such as e-commerce sites, and has released an API that will allow developers to create custom interfaces for a variety of services.

API is the acronym for "Application Programming Interface", which is a software intermediary that allows two applications to talk to each other. Each time you use an app like Facebook, send an instant message, or check the weather on your phone, you're using an API.

Think of an API like a menu in a restaurant. The menu provides a list of dishes you can order, along with a description of each dish. When you specify what menu items you want, the restaurant's kitchen does the work and provides you with some finished dishes. You don't know exactly how the restaurant prepares that food, and you don't really need to.

Similarly, an API lists a bunch of operations that developers can use, along with a description of what they do. The developer doesn't necessarily need to know how, for example, an operating system builds and presents a "Save As" dialog box. They just need to know that it's available for use in their app.

This isn't a perfect metaphor, as developers may have to provide their own data to the API to get the results, so perhaps it's more like a fancy restaurant where you can provide some of your own ingredients the kitchen will work with.

But it's broadly accurate. APIs allow developers to save time by taking advantage of a platform's implementation to do the nitty-gritty work. This helps reduce the amount of code developers need to create and improves consistency across apps for the same platform. APIs can control access to hardware and software resources.

Documentation for the POSitive API is available here: POSitive API Documentation

POSitive API Setup

The POSitive Anywhere web service must be running on your server in order to use the API. You'll need to have an active Gold Subscription in order to use POSitive Anywhere, and it may be necessary to update your POSitive registration key. Contact POSitive for more information.

An Application Programming Interface (API) is a set of subroutine definitions, communication protocols, and tools for building software. In general terms, it is a set of clearly defined methods of communication among various components in POSitive. Documentation for the POSitive API is available here: <u>http://psc.positiveanywhere.com/api</u>

Creating your API Credentials

E-Commerce Edition Setup			
Magento Garden Conneg Developer Integration			V OK [F10] X Cancel
Name	Developer ID	Developer Key	
API	APILDiDRVJptoMHDjqtZVIn	HPERrR5A7bsr0mxNWNOf	
	(2)	(3)	
		Add Edit Delete	

In your POSitive product go to E-Commerce, Web Store Setup, Developer Integration. Click the Add button and enter the following:

1. Create a name to identify what these credentials are for. In our example it is for the API.

2. Create a Developer ID. This can be anything you want and may contain a mix of letters, numbers and special characters.

3. Create a Developer Key. Again, this can be anything you want and may contain a mix of letters, numbers and special characters.

Click OK to save your credentials, which you will also use in your interface to connect to POSitive's database.

API Fields

Note: This information is subject to change. For latest Field listing go to: http://psc.positiveanywhere.com/api

- <u>chartdata_retrieve</u> Send your credentials to verify that you get back a valid response.
- <u>credential check</u> Send your credentials to verify that you get back a valid response.
- <u>customer create</u> Create a new Customer. Returns a unique Customer identifier.
- <u>customer_update</u> Update Customer information
- <u>customer address create</u> Create billing or shipping address for a customer.
- <u>customer address update</u> Update a Customer address.
- <u>customer_address_list</u> Retrieves billing and shipping addresses for a specific customer.
- <u>customer Info</u> Returns Customer information for a specific Customer.
- <u>customer_list</u> Lists all customers in blocks of 50. Returns total number of customer records and how many records were returned. Call this method with incrementing block numbers until the status returned is "no records retrieved".
- <u>customer_udf_update</u> Returns all Customer Categories along with their defined User Defined Fields and Options if applicable.

- <u>customer udf definitions list</u> List of products in blocks of 50. Returns total number of product records and how many records were returned. Call this method with incrementing block numbers until the status returned is "no records retrieved".
- <u>customer_document_update</u> Receive a document to be added to the Customer's stored documents. Documents with the same name as an existing document will be updated.
- <u>customer_invoice_summary_list</u> Returns Customer Invoice Summary for a specific Customer. Use this list to retrieve individual invoice with transaction_invoice_info
- <u>department_create</u> Create new department.
- <u>divisions list</u> Retrieve list of Divisions
- <u>product_list</u> List of products in blocks of 50. Returns total number of product records and how many records were returned. Call this method with incrementing block numbers until the status returned is "no records retrieved".
- <u>product_contract_pricing_list</u> Retrieve contract pricing by customerid, or by customerid/productid.
- <u>product_department_category_list</u> Retrive contract pricing by customerid, or by customerid/productid.
- <u>product_price_groups_list</u> List of product price groups.
- <u>product_image_list</u> Retrieve images by localproductid or productid. Images are returned as "primary", "thumbnail", or "additional"
- product_stock_info Returns stock information for a specific product
- <u>transaction create</u> Creates a transaction header.
- <u>transaction_invoice_info</u> Returns invoice header and detail
- <u>transaction_invoice_list</u> Returns invoice headers
- <u>transaction_product_taxrate</u> Retrieves the tax rate for a product, based on the customer tax group id and the product's category tax group id
- <u>transaction_payment_create</u> Creates a transaction payment for a specified transactionid.
- <u>transaction_pending_info</u> Returns pending transaction header and detail
- <u>transaction_pending_list</u> Returns pending transaction headers
- <u>tax_customer_group_list</u> Customer Tax Group definitions. Each Customer is assigned to a tax group. Each tax group has individually defined Product Category tax groups and rates.
- <u>tax_category_group_list</u> Category Tax Group definitions. Each Product Category is assigned a Category Tax Group. Category Tax Groups are then assigned Tax Rates.
- <u>tax_taxrate_list</u> Tax rates. Each Tax rate is assigned to a Category Tax Group.
- <u>tax_category_taxrate_link_list</u> Linking table, that links customer_group_id, category_group_id, and taxrate_id
- <u>station_list</u> Retrieve list of Stations and their settings
- <u>system_changes_list</u> List of changes

• <u>tender_definitions_list</u> Tax rates. Each Tax rate is assigned to a Category Tax Group.

Sample API Workflow

Customers

------Creating a customer (core): customer_create customer_address_create (Billing) customer_address_create (shipping)

Updating a customer (basic contact details): customer_update

updating a customer (billing address): customer_address_update

Updating a customer (shipping address): customer_address_update

Extended customer details (creating/updating): customer_udf_definitions_list customer_udf_update customer_document_update

Transactions

Creating pending Orders: transaction_create transaction_payment_create

If POStive tax system is required for customer orders, web dev can use: transaction_product_taxrate to receive the customer/category specific tax rates before the above transaction create is used

Lookup existing pending transaction transaction_pending_list (groups of pending transactions) transaction_pending_info (single pending transaction)

Lookup existing Invoices transaction_invoice_list (groups of invoices) transaction_invoice_info (single invoice)

Inventory

-----tax_rates_list tax_category_group_list tax_category_taxrate_link_list tax_customer_group_lists

division_list Product_price_groups_list product_department_categoty_list product_list product_image_list product_contract_pricing_list

Synchronization

system changes list

Web dev should save the last successful system_changes_list call and then the next time it is called use this last unc date/time.

Depending on what was in the system_changes_list, make calls as required eg customer related, product related calls to update the website.

Example of customer_create Sent:

{

```
"customer" : {
                "localcustomerid" : "13779",
                "customertype" : "P",
                "lookupcode" : "test123",
                "email" : "testadd@gmail.com",
                "company" : "Generic Corp.",
                "firstname" : "John",
                "lastname" : "Brown",
                "homephone" : "555-555-5555",
                "workphone" : "556-556-5556",
                "cellphone" : "",
                "faxphone" : "",
                "taxvat" : "",
                "taxgroupid": 0
        }
}
```

```
Received:
```

```
{
    "createcustomer_response" : {
        "result" : {
            "status" : "Success",
            "localcustomerid" : "13779",
            "customerid" : "26"
        }
}
```

POSitive Anywhere API Tester

The POSitive Anywhere API Tester utility allows you to confirm that you are connecting to the client database and you may download it here: <u>ftp://gopositive.com/pub/tools/API_Test_App.zip</u>

POSitive Anywhere API Tester, v.2019.08.15.200 password: HPERrR5A7bsr0mxNWNOf api url: 127.0.0.1:1130 username: APILDiDRVJptoMHDjqtZVIn ● json ○ xml ofield Customer API Inventory API Transactions API Taxes Other credential_check system_changes_list tender_definitions_list chartdata_retrieve divisions_list Copy To Clipboard Copy To Clipboard Received Sent HTTP/1.1 200 OK Date: Thu, 02 Apr 2020 18:26:39 GMT POST /credential_check HT Accept: text/ison Accept-Language: en Authorization: Basic QVBJTERPR Expires: Wed, 03 Apr 2019 18:26:39 GMT Content-Type: application/json; charset=utf-8 VSnB0b01IRGpxdFpWbG46SFBFUnJSNUE3YnNyMG14TldOT2Y= Content-Type: text/json Cache-Control: no-store, no-cache, must-revalidate, private,post-check=0, pre-check=0, max-age=0 User-Agent: Mozilla/5.0 (Windows Host: 127.0.0.1:1130 Windows NT 6.0; en-US; rv:1.9.2.16) Gecko/20110319 Firefox/3. Pragma: no-cache Set-Cookie: SESSIONIDX=vvdl2NerEgSk9UckN0mWhMjnUcREUu; path=/; HttpOnly Content-Length: 53 Pragma: No-Cache Connection: close Access-Control-Allow-Origin: * Cache-Control: No-Cache X-Frame-Options: sameorigin Referrer-Policy: strict-origin-when-cross-origin X-Content-Type-Options: nosniff Connection: Keep-Alive X-Xss-Protection: 1; mode=block "request" : { "anyvalue" : "test value' "credential_check_response" : { 3 "result" : { A product_stock_list × "status" : "OK" "anyvalue" : "test value", "server_date" : "2020-04-02", "server_time" : "11:26:39" Post Call Count: Success: 0 } } 0 Failure: Stress Test

To use it, make sure POSitive Anywhere is running at the client location and enter the following:

- 1. API URL: This is your POSitive Anywhere URL. For example: abc.positiveanywhere.com (Note: In our example we are using a local IP address.)
- 2. Username: This is the Developer ID you entered in POSitive under E-Commerce, Web Store Setup, Developer Integration.
- 3. Password: This is the Developer Key you entered with the Developer ID.
- 4. Select an API post to test.

In our example we've selected Other, credential_check. In the prompt box we left the values at 0 and posted. If everything is working properly you should see POSitive reply with a credential_check_response.