

PHP SDK Version 2.x.x



Zoho CRM
zoho.com/crm-

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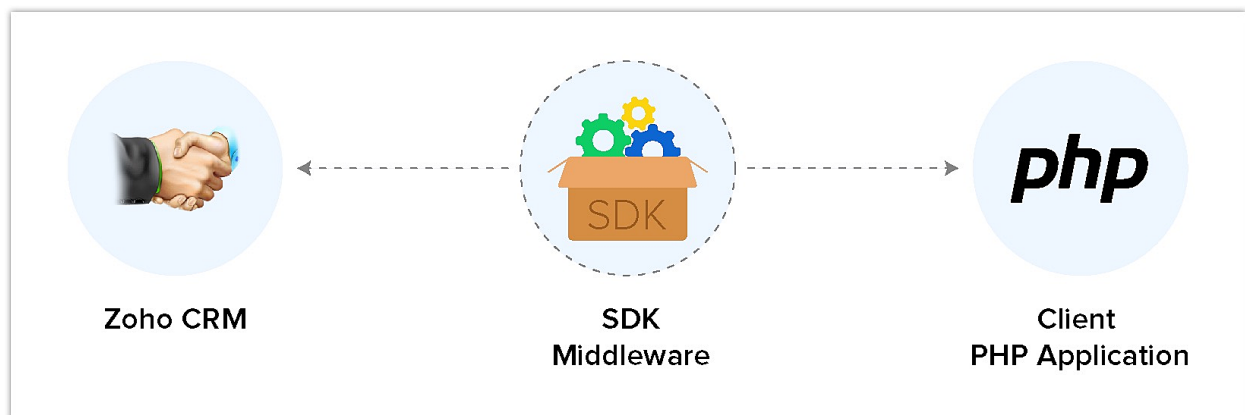
Overview

PHP SDK offers a way to create client PHP applications that can be integrated with Zoho CRM. This SDK makes the access and use of necessary CRM APIs with ease. In other words, it serves as a wrapper for the REST APIs, making it easier to use the services of Zoho CRM.

Note:

The PHP SDK for Zoho CRM has been updated to the latest version (2.1.0). In case you require the documentation for the previous versions (1.x.x), you can view the PDF [here](#).

A sample of how an SDK acts a middle ware or interface between Zoho CRM and a client PHP application.



PHP SDK allows you to:

1. Exchange data between Zoho CRM and the client application where the CRM entities are modelled as classes.
2. Declare and define CRM API equivalents as simple functions in your PHP application.
3. Push data into Zoho CRM by accessing appropriate APIs of the CRM Service.

Environmental Setup

PHP SDK is installable through **composer**. Composer is a tool for dependency management in PHP. SDK expects the following from the client app.

- Client app must have **PHP 5.6** or above with curl extension **enabled**.
- PHP SDK must be installed into client app through composer.
- The function `ZCRMRestClient::initialize($configuration)` must be called on startup of app.
 - `$configuration` - Contains the configuration details as a key-value pair.
- Token persistence handling (storing and utilizing the oauth tokens) can be done in three ways. File, DB and Custom persistence. To know more about that, refer to this [page](#).

Using the SDK

Add the below line in your client app PHP files, where you would like to make use of PHP SDK.

```
1 require 'vendor/autoload.php'
```

Through this line, you can access all the functionalities of the PHP SDK. The namespaces of the class to be used must be included within the "use" statement. For example: If ZCRMRestclient class is being used, you must add the following:

```
1 use zcrmsdk\crm\setup\restclient\ZCRMRestClient;
```

Note:

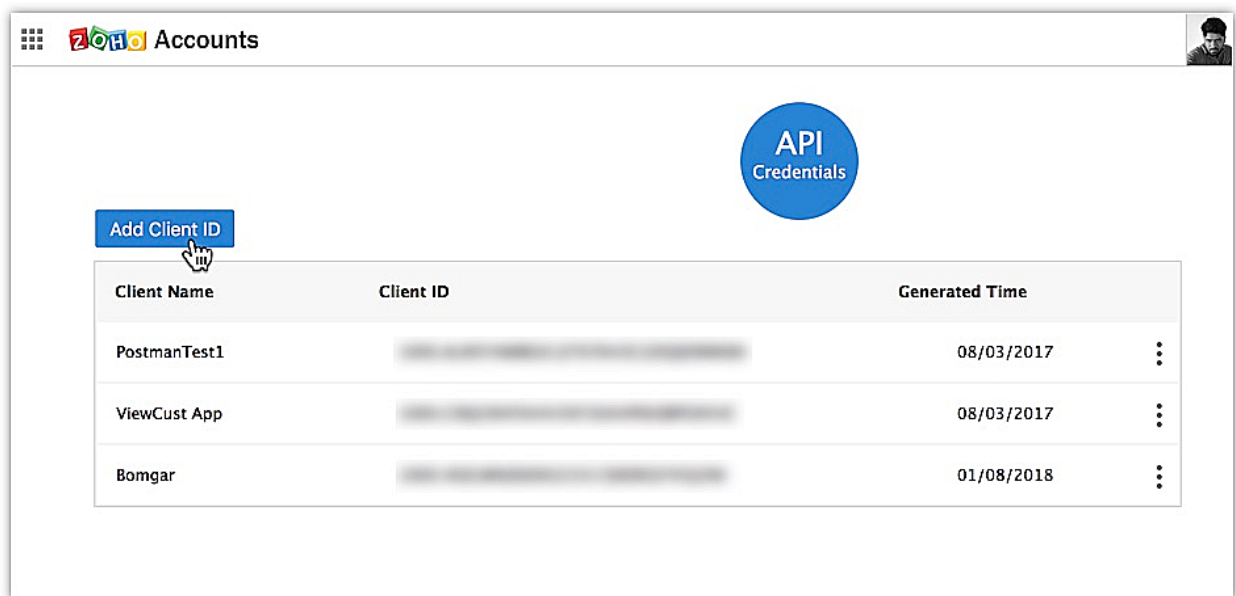
- The access and refresh tokens are environment-specific and domain-specific. When you handle various environments and domains such as Production, Sandbox, or Developer and IN, CN, US, EU, or AU, respectively, you must use the access token and refresh token generated only in those respective environments and domains. The SDK throws an error, otherwise.
- For example, if you generate the tokens for your Sandbox environment in the CN domain, you must use only those tokens for that domain and environment. You cannot use the tokens generated for a different environment or a domain.

Register your application

All the Zoho CRM APIs are authenticated with OAuth2 standards, so it is mandatory to register and authenticate your client app with Zoho.

To register:

1. Go to the site accounts.zoho.com/developerconsole
2. Click Add Client ID.



3. Enter the **Client Name**, **Client Domain** and **Authorized Redirect URL**.
4. Select the **Client Type** as **Web based**.

Create Zoho Client ID

Client Name

Internal Data Compiler

Client Domain

www.abc.com

Authorized redirect URIs

https://www.abc.com

Client Type

WEB Based 

Create

Cancel

5. Click **Create**.
6. Your Client app would have been created and displayed by now.
7. The newly registered app's Client ID and Client Secret can be found by clicking **Options** → **Edit**.

Note

Options is the three dot icon at the right corner.

Registered applications will receive the following credentials:

Client id – The consumer key generated from the connected app.

Client Secret – The consumer secret generated from the connected app.

Redirect URI – The Callback URL that you registered during the app registration.

Installation of PHP SDK through composer

Install Composer (if not installed)

Run this command to install the composer.

```
1 curl -sS https://getcomposer.org/installer | php
```

To install composer on mac/linux machine:

```
1 https://getcomposer.org/doc/00-intro.md#installation-linux-unix-osx
```

To install composer on windows machine:

```
1 https://getcomposer.org/doc/00-intro.md#installation-windows
```

Install PHP SDK

1. Navigate to the workspace of your client app.
2. Run the command below:

```
1 composer require zohocrm/php-sdk-archive
```

3. The PHP SDK will be installed and a package named **vendor** would be created in the workspace of your client app.

Configuration

To access the CRM services through SDK, the client application must be first authenticated. This can be done by passing a key-value configuration pair to the initialization process.

1. The \$configuration array must be created. It will contain the authentication credentials required.
2. The configuration array must then be passed using the `ZCRMRestClient::initialize($configuration);`

Sample:

```
1 $configuration=array("client_id"=>{client_id},"client_secret"=>{client_secret});
2 ZCRMRestClient::initialize($configuration);
```

Configuration Array

The user must pass the configuration values as php array(key-value pair) as argument to the `ZCRMRestClient::initialize($configuration)`; function. Below is the list of keys that are to be in the array.

Mandatory Keys	Optional Keys
client_id	applicationLogFilePath
client_secret	sandbox
redirect_uri	apiBaseUrl
currentUserEmail	apiVersion
fileUploadUrl (Mandatory when using Bulk Write API)	access_type
	accounts_url
	persistence_handler_class

	token_persistence_path
	persistence_handler_class_name
	db_port
	db_username
	db_password
	host_address

Mandatory properties

- **client_id**, **client_secret**, and **redirect_uri** are your OAuth client's configurations that you get after registering your Zoho client.
- **currentUserEmail** - In case of single user, this configuration can be set using "ZCRMRestClient::setCurrentUserEmailId({user_email_id})".

Note

The current user email can be set in one of two methods.

- Through the "currentUserEmail" key in the configuration array (or)
- Through the ZCRMRestClient::setCurrentUserEmailId({user_email_id}) line in the code.

Additional properties

- **access_type** must be set only to offline as online OAuth client is not supported by the PHP SDK as of now.
- **apiBaseUrl** - URL to be used when calling an API. It denotes the domain of the user. This URL may be:
 - www.zohoapis.com (default)



- www.zohoapis.eu
- www.zohoapis.com.cn
- www.zohoapis.jp
- **apiVersion** is "v2".
- **accounts_url** - Default value is set as US domain. This value can be changed based on your domain (EU, CN).
 - <https://accounts.zoho.com>
 - <https://accounts.zoho.eu>
 - <https://accounts.zoho.com.cn>
 - <https://accounts.zoho.jp>
- **sandbox** - To make API calls to sandbox account, change the value of this key to true. By default, the value is false.
- **applicationLogFilePath** - The SDK stores the log information in a file.
 - The file path of the folder must be specified in the key and the SDK automatically creates the file. The default file name is the ZCRMClientLibrary.log.
 - In case the path is not specified, the log file will be created inside the project.
- **persistence_handler_class** is the implementation of the **ZohoOAuthPersistenceInterface**. Refer to [this page](#) for more details.
- **persistence_handler_class_name** is the name of the custom class for persistence. This key is available only from version 2.0.7.
- **host_address** is the address of the machine in which MySQL server is running. Default is 'local host'. This key is available only from version 2.0.7.
- **fileUploadUrl** - <https://content.zohoapis.com>. This key is mandatory when you want to use the Bulk Write API.

Note:

- If the optional keys are not specified, their default values will be assigned automatically.
- The `apiBaseUrl` and `accounts_url` keys are mandatory in case the user is not in the "com" domain.

Below is an example of a PHP array containing the mandatory keys.

```
1 $configuration=array("client_id"=>"value","client_secret"=>
"value","redirect_uri"=>"value","currentUserEmail"=>"value"
```



```
);  
2 ZCRMRestClient::initialize($configuration);
```

Below is an example of a PHP array containing all the keys.

```
1 $configuration=array("client_id"=>"value","client_secret"=>  
"value","redirect_uri"=>"value","currentUserEmail"=>"value"  
,"applicationLogFilePath"=>"value","sandbox"=>"value","apiB  
  
2 ZCRMRestClient::initialize($configuration);
```

Note

- **The access and refresh tokens are environment-specific and domain-specific.** When you handle various environments and domains such as Production, Sandbox, or Developer and IN, CN, US, EU, or AU, respectively, you must use the access token and refresh token generated only in those respective environments and domains. The SDK throws an error, otherwise.
- For example, if you generate the tokens for your Sandbox environment in the CN domain, you must use only those tokens for that domain and environment. You cannot use the tokens generated for a different environment or a domain.

Token Persistence

Token persistence refers to storing and utilizing the authentication tokens that are provided by Zoho. There are three ways provided by the SDK in which persistence can

be applied. They are file persistence, DB persistence (default) and Custom persistence.

Database Persistence

In case the user prefers using database persistence, MySQL can be used. The DB persistence mechanism is the default method in PHP SDK.

- The database name should be zohooauth.
- There must be a table oauthtokens with columns
 - useridentifier (varchar(100))
 - accesstoken (varchar(100))
 - refreshtoken (varchar(100))
 - expirytime (bigint)

Note

From version 2.0.7 onwards, you can provide the address of the machine in the `host_address` key of the configuration array. The default value is 'local host'.

File Persistence

In case of file persistence, the user can also set up persistence as a file in the local drive, he needs to set the file path in the `token_persistence_path`, of the `$configuration` array (key-value pair).

- In case the user uses file persistence, he has to create an empty file with the file name `zcrm_oauthtokens.txt`.
- The file path of the folder containing the `zcrm_oauthtokens.txt` file must be provided in `token_persistence_path`.

For example, if the file has to be under folder "TokenStorage", then

```
1 token_persistence_path="{path/to/TokenStorage}"
```

Note:

You must not include "zcrm_oauthtokens.txt" in the path.

Custom Persistence

Starting from the PHP SDK version 2, the user can have his own implementation of persistence. The user needs to provide the file path of the PHP file that implements the custom persistence, in the `persistence_handler_class` key of the configuration array (key-value pair).

Note

From version 2.0.7 onwards, you can provide the name of the persistence handler class in the `persistence_handler_class_name` key of the configuration array.

- The class must implement **ZohoOAuthPersistenceInterface**.

The user can write an implementation of the inbuilt **ZohoPersistenceHandler** interface, which must contain the following callback methods.

- **saveOAuthData(ZohoOAuthTokens tokens)** - invoked while fetching access and refresh tokens from Zoho.
- **deleteOAuthTokens(\$userId)** - invoked before saving the newly received tokens.
- **getOAuthTokens(\$userId)** - invoked before firing a request to fetch the saved tokens. This method should return ZohoOAuthTokens object for the library to process it.

Initialization

The app would be ready to be initialized after defining the OAuth configuration configuration array. The user can now proceed to generate the required tokens to run the app.

The generation of the grant token can be done using two methods.

- Self-Client
- [Redirection-based code generation](#)

We will be using the self-client option here to demonstrate the process.

Generating self-authorized grant and refresh token

For self client apps, the self authorized grant token should be generated from the Zoho Developer Console (<https://accounts.zoho.com/developerconsole>)

1. Go to [Zoho Developer Console](#)

2. Click **Options** → **Self Client** of the client for which you wish to authorize.
3. Enter one or more (comma separated) valid Zoho CRM scopes, that you wish to authorize, in the Scope field and choose a time of expiry. Provide **aaaserver.profile.READ** scope along with Zoho CRM scopes.
4. Copy the **grant token** for backup.
5. Generate refresh_token from grant token by making a POST request with the URL below

```
1 https://accounts.zoho.com/oauth/v2/token?code={grant\_token}&redirect\_uri={redirect\_uri}&client\_id={client\_id}&client\_secret={client\_secret}&grant\_type=authorization\_code
```

6. Copy the **refresh token** for backup.

Please note that the generated grant token is valid only for the stipulated time you choose while generating it. Hence, the access and refresh tokens should be generated within that time.

Note

- The access and refresh tokens are environment-specific and domain-specific. When you handle various environments and domains such as Production, Sandbox, or Developer and IN, CN, US, EU, or AU, respectively, you must use the access token and refresh token generated only in those respective environments and domains. The SDK throws an error, otherwise.
- For example, if you generate the tokens for your Sandbox environment in the CN domain, you must use only those tokens for that domain and environment. You cannot use the tokens generated for a different environment or a domain

Generating an access token

Access token can be generated by grant token or refresh token. Following any one of the two methods is sufficient.

Generating Access token from Grant token

The following code snippet should be executed from your main class to get access and refresh tokens. Paste the copied grant token in the string literal mentioned below. This is a one-time process.

```
1 $configuration
```

```

    =array("client_id"=>{client_id},"client_secret"=>{client_secret});

2 ZCRMRestClient::initialize($configuration);
3 $oAuthClient = ZohoOAuth::getClientInstance();
4 $grantToken = "paste_the_self_authorized_grant_token_here";
5 $oAuthTokens = $oAuthClient->getTokens($grantToken);

```

Please note that the above code snippet is valid only once per grant token. Upon successful execution of the above code snippet, the generated access and refresh tokens would have been persisted through our persistence handler class.

Generating Access token from Refresh token

The following code snippet should be executed from your main class to get access and refresh tokens. Please paste the generated refresh token in the string literal mentioned below. This is a one-time process.

```

1 $configuration
    =array("client_id"=>{client_id},"client_secret"=>{client_secret});

2 ZCRMRestClient::initialize($configuration);
3 $oAuthClient = ZohoOAuth::getClientInstance();
4 $refreshToken = "paste_the_refresh_token_here";
5 $userIdentifier = "provide_user_identifier_like_email_here";
6 $oAuthClient->getTokensFromRefreshToken($refreshToken,$userIdentifier);

```

Upon successful execution of the above code snippet, the generated access token and given refresh token would have been persisted through our persistence handler class.

Once the OAuth tokens have been persisted, subsequent API calls would use the persisted access and refresh tokens. The PHP SDK will take care of refreshing the access token using refresh token, as and when required.

App Startup

The PHP SDK requires the following line of code invoked every time your client app is started.

```
1 $configuration
   =array("client_id"=>{client_id},"client_secret"=>{client_sec

2 ZCRMRestClient::initialize($configuration);
```

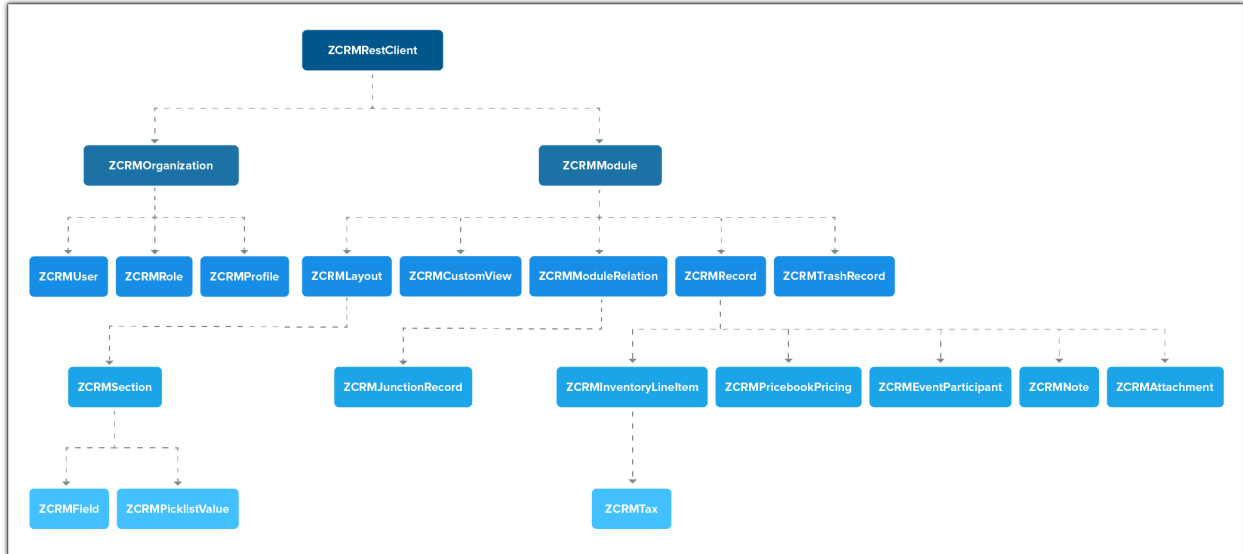
Once the PHP SDK has been initialized by the above line, you could use any APIs of the SDK to get proper results.

Class Hierarchy

All Zoho CRM entities are modelled as classes having members and methods applicable to that particular entity.

- ZCRMRestClient is the base class of the SDK. This class has methods to get instances of various other Zoho CRM entities.
- The class relations and hierarchy of the SDK follows the entity hierarchy inside Zoho CRM.
- Each class entity has functions to fetch its own properties and to fetch data of its immediate child entities through an API call. For example, a Zoho CRM module (ZCRMModule) object will have member functions to get a module's properties like display name, module Id, etc, and will also have functions to fetch all its child objects (like ZCRMLayout).

The class hierarchy of various Zoho CRM entities is depicted as:



As appearing in the hierarchy, every entity class will have instance variables to fetch its own properties and to fetch data of its immediate child entities through an API call.

Instance Objects

It is not always effective to follow the complete class hierarchy from the top to fetch the data of an entity at some lower level, since this would involve API calls at every level. In order to handle this, every entity class will have a **getInstance()** method to get its own dummy object and methods to get dummy objects of its child entities.

Note:

`getInstance()` methods would not have any of its properties filled since it would not fire an API call. This would just return a dummy object that shall be only used to access the non-static methods of the class.

Summing it up,

- **ZCRMRestClient.get_module("Contacts")** would return the actual Contacts module, that has all the properties of the Contacts module filled through an API call.
- **ZCRMRestClient.get_module_instance("Contacts")** would return a dummy ZCRMModule object that would refer to the Contacts module, with no properties filled, since this doesn't make an API call.

Hence, to get records from a module, there's no need to start from ZCRMRestClient. Instead, you could get a ZCRMModule instance with ZCRMModule.getInstance() and then invoke its non-static getRecords() method from the created instance. This would avoid the API call that would otherwise have been triggered to populate the ZCRMModule object.

Accessing record properties

Since record properties are dynamic across modules, we have only given the common fields like createdTime, createdBy, owner etc, as ZCRMRecord's default members. All other record properties are available as a map in ZCRMRecord object.

To access the individual field values of a record, use the getter and setter methods available. These methods only support API names.

- To get a field value, use **record.getFieldValue(field_api_name)**;
- To set a field value, use **record.setFieldValue(field_api_name, new_value)**;

API Names

The keys of the record properties map are the API names of the module's fields. They are available in your CRM under **Setup** → **Developer Space** → **APIs** → **CRM API** → **API Names..**

Note:

While setting a field value, make sure that the set value is of the data type of the field to which you are going to set it.

Responses & Exceptions

APIResponse, **BulkAPIResponse** and **FileAPIResponse** are the wrapper objects for Zoho CRM APIs' responses. All API calling methods would return one of these two objects.

- A method-seeking entity would return **APIResponse** object, whereas a method-seeking list of entities would return **BulkAPIResponse** object.
- **FileAPIResponse** will be returned for file download APIs to download a photo or an attachment from a record or note such as **record.DownloadPhoto**,

record.DownloadAttachment etc.

- Use the instance variable "**Data**" or "**BulkData**" property to get the entity data alone from the response wrapper objects. **APIResponse.Data** would return a single Zoho CRM entity object, while **BulkAPIResponse.BulkData** would return a list of Zoho CRM entity objects.
- **FileAPIResponse** has two defined methods namely **FileAPIResponse.GetFileName()** which returns the name of the file that is downloaded and **FileAPIResponse.GetFileAsStream()** that gives the file content as `InputStream`.

Note:

BulkAPIResponse is a generic class. Hence, to get the records, the corresponding type has to be used.

```
"ZCRMModule module = ZCRMModule.GetInstance("Contacts");  
BulkAPIResponse<ZCRMRecord> response = module.GetRecords();  
List<ZCRMRecord> records = response.BulkData;"
```

Other than data, these response wrapper objects have the following properties:

1. **ResponseHeaders** - remaining API counts for the present day/window and time elapsed for the present window reset. It is available through:
`response.GetResponseHeaders()`
2. **ResponseInfo** - any other information, if provided by the API, in addition to the actual data. `response.Info`
3. **List<EntityResponse>** - status of individual entities in a bulk API. For example: an insert records API may partially fail because of a few records. This dictionary gives the individual records' creation status. It is available through:
`response.BulkEntitiesResponse`

Check Exceptions

All unexpected behaviors like faulty API responses, SDK anomalies are handled by the SDK and are thrown only as a single exception – **ZCRMException**. Hence, it's enough to catch this exception alone in the client app code.

Errors and Solutions

1. Error while fetching access token from refresh token

```
index.php x configuration.properties oauth_configuration.properties sample.php
1  ?php
2  require 'vendor/autoload.php';
3  ZCRMRestClient::initialize();
4  $zcrmModuleIns = ZCRMModule::getInstance("Contacts");
5  $bulkAPIResponse=$zcrmModuleIns->getRecords(          null,null,null,5);
6  var_dump($bulkAPIResponse->getData());
7  ?

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL 1: bash
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPTDo1$ php index.php
PHP Warning: fopen(/usr/share/php/ZCRMClientLibrary.log): failed to open stream: No such file or directory in /home/test/Documents/PHPSDK/PHPTDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/exception/Logger.php on line 14
PHP Fatal error: Uncaught ZCRMException Caused by: 'Current user should either be set in ZCRMRestClient or in configuration.properties file' in /home/test/Documents/PHPSDK/PHPTDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/common/ZCRMConfigUtil.php(117)
#0 /home/test/Documents/PHPSDK/PHPTDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/APIRequest.php(59): ZCRMConfigUtil::getAccessToken()
#1 /home/test/Documents/PHPSDK/PHPTDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/APIRequest.php(101): APIRequest->authenticateRequest()
#2 /home/test/Documents/PHPSDK/PHPTDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/handler/MassEntityAPIHandler.php(315): APIRequest->getBulkAPIResponse()
#3 /home/test/Documents/PHPSDK/PHPTDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/crud/ZCRMModule.php(877): MassEntityAPIHandler->getRecords(3372164000000087529, NULL, NULL, NULL, 5, NULL)
#4 /home/test/Documents/PHPSDK/PHPTDo1/index.php(5): ZCRMModule->getRecords(, NULL, NULL, NULL, 5)
#5 {main}
in /home/test/Documents/PHPSDK/PHPTDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/common/ZCRMConfigUtil.php on line 117
```

Reason

The configuration details are not given in configuration.properties and oauth_configuration.properties files.

```
index.php sample.php configuration.properties x oauth_configuration.properties x
1  apiBaseUrl=www.zohoapis.com
2  apiVersion=v2
3  sandbox=false
4  applicationLogFilePath=
5  currentUserEmail=

1  client_id=
2  client_secret=
3  redirect_uri=
4  accounts_url= https://accounts.zoho.com
5  token_persistence_path=
6  access_type=
7  persistence_handler_class=
8  db_port=3306
9  db_username=root
10 db_password=test
```

Solution

Set configuration and OAuth configuration properties as displayed in the below image.

```
File Edit Selection View Go Debug Terminal Help oauth_configuration.properties - PHPTDo1 - Visual Studio Code
configuration.properties x oauth_configuration.properties x
1  apiBaseUrl=www.zohoapis.com
2  apiVersion=v2
3  sandbox=false
4  applicationLogFilePath=
5  currentUserEmail=

1  client_id= 1000.
2  client_secret=
3  redirect_uri=
4  accounts_url= https://accounts.zoho.com
5  token_persistence_path=
6  access_type= offline
7  persistence_handler_class= ZohoOAuthPersistenceHandler
8  db_port= 3306
9  db_username= root
10 db_password=
```

```

1 <?php
2 require 'vendor/autoload.php';
3 ZCRMRestClient::initialize();
4 $zcrmModuleIns = ZCRMModule::getInstance("Contacts");
5 $bulkAPIResponse=$zcrmModuleIns->getRecords([],null,null,null,$[]);
6 var_dump($bulkAPIResponse->getData());
7

```

```

test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
array(1) (
  [0] =>
  object(ZCRMRecord)#0 (17) (
    ["entityID":"ZCRMRecord":private] =>
    string(19) " "
    ["moduleName":"ZCRMRecord":private] =>
    string(8) "Contacts"
    ["lineItems":"ZCRMRecord":private] =>
    array(0) (
    )
    ["lookupLabel":"ZCRMRecord":private] =>
    NULL
    ["owner":"ZCRMRecord":private] =>
    object(ZCRMUser)#11 (44) (
      ["id":"ZCRMUser":private] =>
      string(19) " "
      ["name":"ZCRMUser":private] =>
      string(7) " "
      ["signature":"ZCRMUser":private] =>
      NULL
    )
  )
)

```

2. Error while fetching access token from grant token

```

1 <?php
2 require 'vendor/autoload.php';
3 ZCRMRestClient::initialize();
4 $oAuthCli = ZohoOAuth::getClientInstance();
5 $grantToken = "1000.xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx";
6 $token = $oAuthCli->generateAccessToken($grantToken);
7 var_dump($token);
8
9

```

```

test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
PHP Fatal error: Uncaught ZohoOAuthException Caused by: 'Exception while fetching access token from grant token - HTTP/1.1 200 Server: ZGS
Date: Fri, 22 Feb 2019 10:29:53 GMT
Content-Type: application/json;charset=UTF-8
Content-Length: 24
Connection: keep-alive
Set-Cookie: ; Path=/
X-Content-Type-Options: nosniff
X-XSS-Protection: 1
Set-Cookie: iamcsr=; path=/; Secure; priority=high
X-Frame-Options: SAMEORIGIN
Strict-Transport-Security: max-age=15768000

{"error":"invalid_code"}' in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/oauth/client/ZohoOAuthClient.php(84)
#0 /home/test/Documents/PHPSDK/PHPToDo1/index.php(6): ZohoOAuthClient->generateAccessToken('1000.xxxxxxxxxx...')
#1 {main} in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/oauth/client/ZohoOAuthClient.php(89)
#0 /home/test/Documents/PHPSDK/PHPToDo1/index.php(6): ZohoOAuthClient->generateAccessTo in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com
uthClient.php on line 89

```

Reason

The grant token has expired.

Solution

Regenerate grant token and use within the stipulated time.

```

index.php x sample.php oauth_configuration.properties configuration.properties
1  <?php
2  require 'vendor/autoload.php';
3  ZCRMRestClient::initialize();
4  $oAuthCli = ZohoOAuth::getClientInstance();
5  $grantToken = "1000.xxxxxxxxxxxxxxxxxxxxxx.xxxxxxxxxxxxxxxxxxxxxx";
6  $token = $oAuthCli->generateAccessToken($grantToken);
7  var_dump($token);
8
9  ?>

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
object(ZohoOAuthTokens)#5 (4) {
  ["refreshToken":"ZohoOAuthTokens":private]=>
  string(70) "1000. "
  ["accessToken":"ZohoOAuthTokens":private]=>
  string(70) "1000. "
  ["expiryTime":"ZohoOAuthTokens":private]=>
  float(1550834841341)
  ["userEmailId":"ZohoOAuthTokens":private]=>
  string(21) ""
}

```

3. Undefined index: Email

```


index.php x sample.php oauth_configuration.properties configuration.properties
1  <?php
2  require 'vendor/autoload.php';
3  ZCRMRestClient::initialize();
4  $oAuthCli = ZohoOAuth::getClientInstance();
5  $grantToken = "1000.xxxxxxxxxxxxxxxxxxxxxx.xxxxxxxxxxxxxxxxxxxxxx";
6  $token = $oAuthCli->generateAccessToken($grantToken);
7  var_dump($token);
8
9  ?>

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  1: bash
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
PHP Notice: Undefined index: Email in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/oauth/client/ZohoOAuthClient.php on line 181
object(ZohoOAuthTokens)#5 (4) {
  ["refreshToken":"ZohoOAuthTokens":private]=>
  string(70) "1000. "
  ["accessToken":"ZohoOAuthTokens":private]=>
  string(70) "1000. "
  ["expiryTime":"ZohoOAuthTokens":private]=>
  float(1550836026149)
  ["userEmailId":"ZohoOAuthTokens":private]=>
  NULL
}

```

Reason

The user has not included the scope "Aaaserver.profile.Read" while generating the grant token(authorization code).



Self client

Scope:


zohocrm.modules.all

Expiry: 10 minutes ▼

[View Code](#) [Cancel](#)

Solution

Include the scope “Aaaserver.profile.Read” while generating the grant token(authorization code).



Self client

Scope:

ZohoCRM.modules.ALL,Aaaserver.profile.READ

Expiry: 3 minutes ▼

[View Code](#) [Cancel](#)

```

index.php x sample.php oauth_configuration.properties configuration.properties
1 <?php
2 require 'vendor/autoload.php';
3 ZCRMRestClient::initialize();
4 $oAuthCli = ZohoOAuth::getClientInstance();
5 $grantToken = "1000.xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx";
6 $token = $oAuthCli->generateAccessToken($grantToken);
7 var_dump($token);
8
9 ?>

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPTodo1$ php index.php
object(ZohoOAuthTokens)#5 (4) {
  ["refreshToken": "ZohoOAuthTokens":private]=>
  string(70) "1000.
  ["accessToken": "ZohoOAuthTokens":private]=>
  string(70) "1000.
  ["expiryTime": "ZohoOAuthTokens":private]=>
  float(1550834841341)
  ["userEmailId": "ZohoOAuthTokens":private]=>
  string(21) "
}

```

4. Undefined offset 1

```

error.php x ZCRMOrganiz... Organizatio... APIRequest.php ZohoHTTPCon... logsp.php configuratio... ZohoOAuthHI...
1 <?php
2 require 'vendor/autoload.php';
3
4 ZCRMRestClient::initialize();
5 $oAuthClient = ZohoOAuth::getClientInstance();
6 $user=ZCRMOrganization::getInstance()->getUser("3453453554")->getData();
7 $callInstance=ZCRMRecord::getInstance("Calls",null);
8 $callInstance->setFieldValue("Subject","asdsa");
9 $callInstance->setOwner($user);
10 //set the other required fields
11 $callInstance->create();
12 ?>

Console x
terminated> error [PHP CLI Application] C:\php\php.exe
HP Notice: Undefined offset: 1 in C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\api\rresponse\CommonAPIResponse.php
HP Notice: Undefined offset: 1 in C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\api\rresponse\CommonAPIResponse.php
HP Warning: array_key_exists() expects parameter 2 to be array, null given in C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\api\rresponse\CommonAPIResponse.php
HP Warning: Invalid argument supplied for foreach() in C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\api\rresponse\CommonAPIResponse.php
HP Notice: Undefined offset: 1 in C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\api\rresponse\CommonAPIResponse.php
HP Notice: Undefined offset: 1 in C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\api\rresponse\CommonAPIResponse.php

```

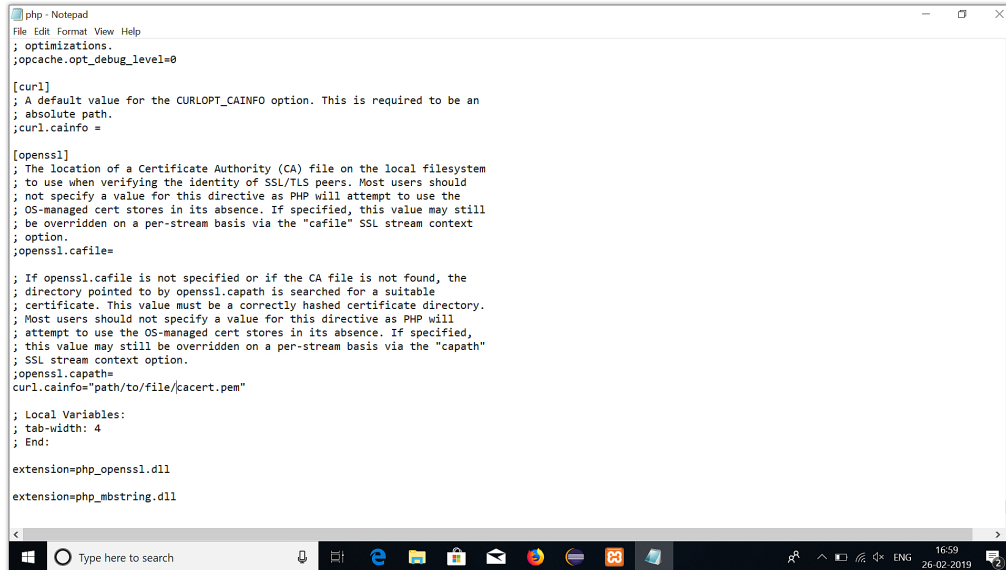

Reason

SSL certificate is not updated.

Solution 1

Download the file from <https://curl.haxx.se/ca/cacert.pem> and add this line to the php.ini file.

`curl.cainfo="path/to/file/cacert.pem"`



```
php - Notepad
File Edit Format View Help
; optimizations.
;opcache.opt_debug_level=0

[curl]
; A default value for the CURLOPT_CAINFO option. This is required to be an
; absolute path.
;curl.cainfo =

[openssl]
; The location of a Certificate Authority (CA) file on the local filesystem
; to use when verifying the identity of SSL/TLS peers. Most users should
; not specify a value for this directive as PHP will attempt to use the
; OS-managed cert stores in its absence. If specified, this value may still
; be overridden on a per-stream basis via the "cafile" SSL stream context
; option.
;openssl.cafile=

; If openssl.cafile is not specified or if the CA file is not found, the
; directory pointed to by openssl.capath is searched for a suitable
; certificate. This value must be a correctly hashed certificate directory.
; Most users should not specify a value for this directive as PHP will
; attempt to use the OS-managed cert stores in its absence. If specified,
; this value may still be overridden on a per-stream basis via the "capath"
; SSL stream context option.
;openssl.capath=
curl.cainfo="path/to/file/cacert.pem"

; Local Variables:
; tab-width: 4
; End:

extension=php_openssl.dll

extension=php_mbstring.dll
```

Solution 2

Add the below line before `$result=curl_exec($curl_pointer)` in the `firerequest()` and `downloadFile()` methods of `ZohoHTTPConnector.php` file, and the `post()` and `get()` methods of the `ZohoOAuthHTTPConnector.php` file.

`curl_setopt($curl_pointer, CURLOPT_SSL_VERIFYPEER, 0);`

```
error.php | logspgs.php | ZohoOAuthHTTPConnector.php
6 private $requestParams = array();
7 private $requestHeaders = array();
8 private $requestParamCount=0;
9
10 public function post()
11 {
12     $curl_pointer=curl_init();
13     curl_setopt($curl_pointer,CURLOPT_URL,$self::getUrl());
14     curl_setopt($curl_pointer,CURLOPT_HEADER,1);
15     curl_setopt($curl_pointer,CURLOPT_POSTFIELDS,$self::getUrlParamsAsString($this->requestParams));
16     curl_setopt($curl_pointer,CURLOPT_RETURNTRANSFER,true);
17     curl_setopt($curl_pointer,CURLOPT_USERAGENT,'Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US; rv:1.8.1.13) Gecko/20080311 Firefox/2.0.0.13');
18     curl_setopt($curl_pointer,CURLOPT_HTTPHEADER,$self::getRequestHeadersAsArray());
19     curl_setopt($curl_pointer,CURLOPT_SSL_VERIFYPEER,0);
20     curl_setopt($curl_pointer,CURLOPT_POST,$this->requestParamCount);
21     curl_setopt($curl_pointer,CURLOPT_CUSTOMREQUEST,ZohoOAuthConstants::REQUEST_METHOD_POST);
22
23
24     $result=curl_exec($curl_pointer);
25     curl_close($curl_pointer);
26
27     return $result;
28 }
```

```
Console
<terminated> logspgs [PHP CLI Application] C:\php\php.exe
1000100Records inserted successfully.100Records inserted successfully.100Records inserted successfully.100Records inserted
logs from22/02/2019 20:00:00to 23/02/2019 00:00:00
1000100Records inserted successfully.100Records inserted successfully.100Records inserted successfully.100Records inserted
logs from23/02/2019 00:00:00to 23/02/2019 04:00:00
1000100Records inserted successfully.100Records inserted successfully.100Records inserted successfully.100Records inserted
logs from23/02/2019 04:00:00to 23/02/2019 08:00:00
1000100Records inserted successfully.100Records inserted successfully.100Records inserted successfully.100Records inserted
logs from23/02/2019 08:00:00to 23/02/2019 12:00:00
1000100Records inserted successfully.100Records inserted successfully.100Records inserted successfully.100Records inserted
logs from23/02/2019 12:00:00to 23/02/2019 16:00:00
1000100Records inserted successfully.100Records inserted successfully.100Records inserted successfully.100Records inserted
logs from23/02/2019 16:00:00to 23/02/2019 20:00:00
1000100Records inserted successfully.100Records inserted successfully.100Records inserted successfully.100Records inserted
logs from23/02/2019 20:00:00to 24/02/2019 00:00:00
1000100Records inserted successfully.100Records inserted successfully.100Records inserted successfully.100Records inserted
```

This solution will bypass the verification of the SSL certificate. Solution 1 is recommended.

5. Refresh token is not provided

```
index.php x oauth_configuration.properties configuration.properties
1 <?php
2 require 'vendor/autoload.php';
3 ZCRMRestClient::initialize();
4 $zcrmModuleIns = ZCRMModule::getInstance("Contacts");
5 $bulkAPIResponse=$zcrmModuleIns->getRecords(,null,null,null,5);
6 var_dump($bulkAPIResponse->getData());
7 ?>
```

test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1\$ php index.php
PHP Fatal error: Uncaught ZohoAuthException Caused by: 'Refresh token is not provided.' in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/oauth/client/ZohoOAuthClient.php(57): ZohoOAuthClient->rAuthClient.php(101)
#0 /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/oauth/client/ZohoOAuthClient.php(57): ZohoOAuthClient->rAuthClient.php(101)
#1 /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/common/ZCRMConfigUtil.php(124): ZohoOAuthClient->rAuthClient.php(101)
#2 /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/APIRequest.php(59): ZCRMConfigUtil->getAuthClient.php(101)
#3 /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/APIRequest.php(101): APIRequest->authenticate.php(315): APIRequest->authenticate.php(315)
#4 /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/handler/MassEntityAPIHandler.php(315): APIRequest->authenticate.php(315)
#5 /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/oauth/client/ZohoOAuthClient.php(57): ZohoOAuthClient->rAuthClient.php(101)

Reason

The user tries to call an API without generating access and refresh tokens.

```
mysql> use zohooauth;
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
mysql> select * from oauthtokens;
Empty set (0.00 sec)
```

Solution

Generate access and refresh tokens from grant token

```
index.php x sample.php oauth_configuration.properties configuration.properties
1 <?php
2 require 'vendor/autoload.php';
3 ZCRMRestClient::initialize();
4 $oAuthCli = ZohoOAuth::getClientInstance();
5 $grantToken = "1000.....";
6 $token = $oAuthCli->generateAccessToken($grantToken);
7 var_dump($token);
8
9 ?>
```

test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1\$ php index.php
object(ZohoOAuthTokens)#5 (4) {
 ["refreshToken":ZohoOAuthTokens:private]=>
 string(70) "1000....."
 ["accessToken":ZohoOAuthTokens:private]=>
 string(70) "1000....."
 ["expiryTime":ZohoOAuthTokens:private]=>
 float(1550834841341)
 ["userEmailId":ZohoOAuthTokens:private]=>
 string(21) "....."
}

6. Current user should be either set in ZCRMRestClient or in configuration.properties file - 1

```
index.php x  oauth_configuration.properties  configuration.properties
1 <?php
2 require 'vendor/autoload.php';
3 ZCRMRestClient::initialize();
4 $zcrmModuleIns = ZCRMModule::getInstance("Contacts");
5 $bulkAPIResponse=$zcrmModuleIns->getRecords(,null,null,null,5);
6 var_dump($bulkAPIResponse->getData());
7 ?>
```

```
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
PHP Warning: fopen(./usr/share/php/ZCRMClientLibrary.log): failed to open stream: No such file or directory in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/con/zoho/crm/library/common/ZCRMConfigUtil.php on line 14
PHP Fatal error: Uncaught ZCRMException caused by: 'current user should either be set in ZCRMRestClient or in configuration.properties file' in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/con/zoho/crm/library/api/APIRequest.php(59): ZCRMConfigUtil::getAccessToken()
#0 /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/con/zoho/crm/library/api/APIRequest.php(101): APIRequest->authenticateRequest()
```

Reason

The email ID of the current user is not specified in configuration map or configuration.properties file.

Solution

Enter the email ID of the current user in the configuration.properties file or on the server as shown below.

```
error.php  *configuration.properties  oauth_configuration.properties
1 apiBaseUrl=www.zohoapis.com
2 apiVersion=v2
3 sandbox=false
4 applicationLogFilePath=
5 currentUserEmail=useremailid
```

```
*error.php  configuration.properties  oauth_configuration.properties  APIRequest.php
1 <?php
2 require 'vendor/autoload.php';
3 $_SERVER['user_email_id']="useremailid";
4 ZCRMRestClient::initialize();
5 $rest=ZCRMRestClient::getInstance();//to get the rest client
6 $orgIns=$rest->getOrganizationDetails()->getData();
7 ?>
```

```

1 <?php
2 require 'vendor/autoload.php';
3 ZCRMRestClient::initialize();
4 $zcrmModuleIns = ZCRMModule::getInstance("Contacts");
5 $bulkAPIResponse=$zcrmModuleIns->getRecords(,null,null,null,5);
6 var_dump($bulkAPIResponse->getData());
7

```

```

test@zcrmsdk-test1:~/Documents/PHPSDK/PHPTodo1$ php index.php
array(1) {
  [0]=>
  object(ZCRMRecord)#0 (17) {
    ["entityID":"ZCRMRecord":private]=>
    string(19) "
    ["moduleName":"ZCRMRecord":private]=>
    string(8) "Contacts"
    ["lineItems":"ZCRMRecord":private]=>
    array(0) {
    }
    ["lookupLabel":"ZCRMRecord":private]=>
    NULL
    ["owner":"ZCRMRecord":private]=>
    object(ZCRMUser)#11 (44) {
      ["id":"ZCRMUser":private]=>
      string(19) "
      ["name":"ZCRMUser":private]=>
      string(7) "
      ["signature":"ZCRMUser":private]=>
      NULL

```

7. Current user should be either set in ZCRMRestClient or in configuration.properties file - 2

```

1 <?php
2 require 'vendor/autoload.php';
3 $zcrmModuleIns = ZCRMModule::getInstance("Contacts");
4 $bulkAPIResponse=$zcrmModuleIns->getRecords(,null,null,null,5);
5 var_dump($bulkAPIResponse->getData());
6

```

```

test@zcrmsdk-test1:~/Documents/PHPSDK/PHPTodo1$ php index.php
PHP Warning: fopen(/usr/share/php/ZCRMClientLibrary.log): failed to open stream: No such file or directory in /home/test/Documents/PHPSDK/PHPTodo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/exception/Logger.php on line 14
PHP Fatal error: Uncaught ZCRMException Caused by: 'Current user should either be set in ZCRMRestClient or in configuration.properties' in /home/test/Documents/PHPSDK/PHPTodo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/common/ZCRMConfigUtil.php(117)
#0 /home/test/Documents/PHPSDK/PHPTodo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/APIRequest.php(59): ZCRMConfigUtil::getConfigurationProperties()
#1 /home/test/Documents/PHPSDK/PHPTodo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/APIRequest.php(101): APIRequest->authenticate()

```

Reason

The SDK is not initialized by not calling ZCRMRestClient::initialize().

Solution

Follow the steps mentioned in Initialization - PHP SDK to initialize the SDK.

```

1 <?php
2 require 'vendor/autoload.php';
3 ZCRMRestClient::initialize();
4 $zcrmModuleIns = $zcrmModuleIns->getInstance("Contacts");
5 $bulkAPIResponse = $zcrmModuleIns->getRecords([], null, null, null, $);
6 var_dump($bulkAPIResponse->getData());
7 ?>

```

```

test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
array(1) (
  [0] =>
  object(ZCRMRecord)#6 (17) {
    ["entityId":ZCRMRecord:private] =>
    string(19) ""
    ["moduleApiName":ZCRMRecord:private] =>
    string(9) "Contacts"
    ["lineItems":ZCRMRecord:private] =>
    array(0) {
    }
    ["lookupLabel":ZCRMRecord:private] =>
    NULL
    ["owner":ZCRMRecord:private] =>
    object(ZCRMUser)#11 (44) {
      ["id":ZCRMUser:private] =>
      string(19) "3477061000000173021"
      ["name":ZCRMUser:private] =>
      string(7) ""
      ["signature":ZCRMUser:private] =>
      NULL
    }
  }
}

```

8. Exception while fetching access token from grant token

```

1 <?php
2 require 'vendor/autoload.php';
3 ZCRMRestClient::initialize();
4 $oAuthCli = ZohoOAuth::getClientInstance();
5 $grantToken = "1000. ....";
6 $token = $oAuthCli->generateAccessToken($grantToken);
7 var_dump($token);
8
9 ?>

```

```

test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
PHP Fatal error: Uncaught ZohoOAuthException Caused by: 'Exception while fetching access token from grant token - HTTP/1.1 200 Server: ZGS
Date: Fri, 22 Feb 2019 10:29:53 GMT
Content-Type: application/json;charset=UTF-8
Content-Length: 24
Connection: keep-alive
Set-Cookie: ; Path=/
X-Content-Type-Options: nosniff
X-XSS-Protection: 1
Set-Cookie: iamcsr=; path=/; Secure; priority=high
X-Frame-Options: SAMEORIGIN
Strict-Transport-Security: max-age=15768000

{"error":"invalid_code"}' in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/oauth/client/ZohoOAuthClient.php(84)
#0 /home/test/Documents/PHPSDK/PHPToDo1/index.php(6): ZohoOAuthClient->generateAccessToken('1000. ....')
#1 {main} in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/oauth/client/ZohoOAuthClient.php(89)
#0 /home/test/Documents/PHPSDK/PHPToDo1/index.php(6): ZohoOAuthClient->generateAccessTo in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/uthClient.php on line 89

```

Reason

The user tries to generate grant token and access token from different domains. For example, the user generates the grant token from accounts.zoho.com and tries to generate the access token from accounts.zoho.eu.

```
File Edit Selection View Go Debug Terminal Help
configuration.properties  oauth_configuration.properties x  index.php
1 client_id= 1000.
2 client_secret=
3 redirect_uri=
4 accounts_url= https://accounts.zoho.eu
5 token_persistence_path=
6 access_type= offline
7 persistence_handler_class= ZohoOAuthPersistenceHandler
8 db_port= 3306
9 db_username= root
10 db_password=
```

Solution

Generate both grant token and access token from the same domain.

```
File Edit Selection View Go Debug Terminal Help  oauth_configurati
configuration.properties  oauth_configuration.properties x  index.php
1 client_id= 1000.
2 client_secret=
3 redirect_uri=
4 accounts_url= https://accounts.zoho.com
5 token_persistence_path=
6 access_type= offline
7 persistence_handler_class= ZohoOAuthPersistenceHandler
8 db_port= 3306
9 db_username= root
10 db_password=
```

```
index.php x  sample.php  oauth_configuration.properties  configuration.properties
1 <?php
2 require 'vendor/autoload.php';
3 ZCRMRestClient::initialize();
4 $oAuthCli = ZohoOAuth::getClientInstance();
5 $grantToken = "1000.xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx";
6 $token = $oAuthCli->generateAccessToken($grantToken);
7 var_dump($token);
8
9 ?>
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPTodo1$ php index.php
object(ZohoOAuthTokens)#5 (4) {
  ["refreshToken":ZohoOAuthTokens:private]=>
  string(70) "1000.
  ["accessToken":ZohoOAuthTokens:private]=>
  string(70) "1000.
  ["expiryTime":ZohoOAuthTokens:private]=>
  float(1550834841341)
  ["userId":ZohoOAuthTokens:private]=>
  string(21) "
```


9. Invalid OAuth Token

```
index.php x sample.php oauth_configuration.properties configuration.properties
1  ?php
2  require 'vendor/autoload.php';
3  ZCRMRestClient::initialize();
4  $zcrmModuleIns = ZCRMModule::getInstance("Contacts");
5  $bulkAPIResponse=$zcrmModuleIns->getRecords(,null,null,null,5);
6  var_dump($bulkAPIResponse->getData());
7  ?

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPTodo1$ php index.php
PHP Warning: fopen(/usr/share/php/ZCRMClientLibrary.log): failed to open stream: No such file or directory in /home/test/Docu
ho/crm/library/exception/Logger.php on line 14
PHP Fatal error: Uncaught ZCRMException Caused by: 'invalid oauth token' in /home/test/Documents/PHPSDK/PHPTodo1/vendor/zohocrm/
sponse.php(60)
#0 /home/test/Documents/PHPSDK/PHPTodo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/response/CommonAPIResponse.php(59):
#1 /home/test/Documents/PHPSDK/PHPTodo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/response/CommonAPIResponse.php(50):
#2 /home/test/Documents/PHPSDK/PHPTodo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/response/BulkAPIResponse.php(37): Cor
1)
```

Reason

The user generates access token in a domain but tries to access a record in a different domain. For example, the user generates the access token from www.zohoapis.com and tries to access a module in www.zohoapis.eu

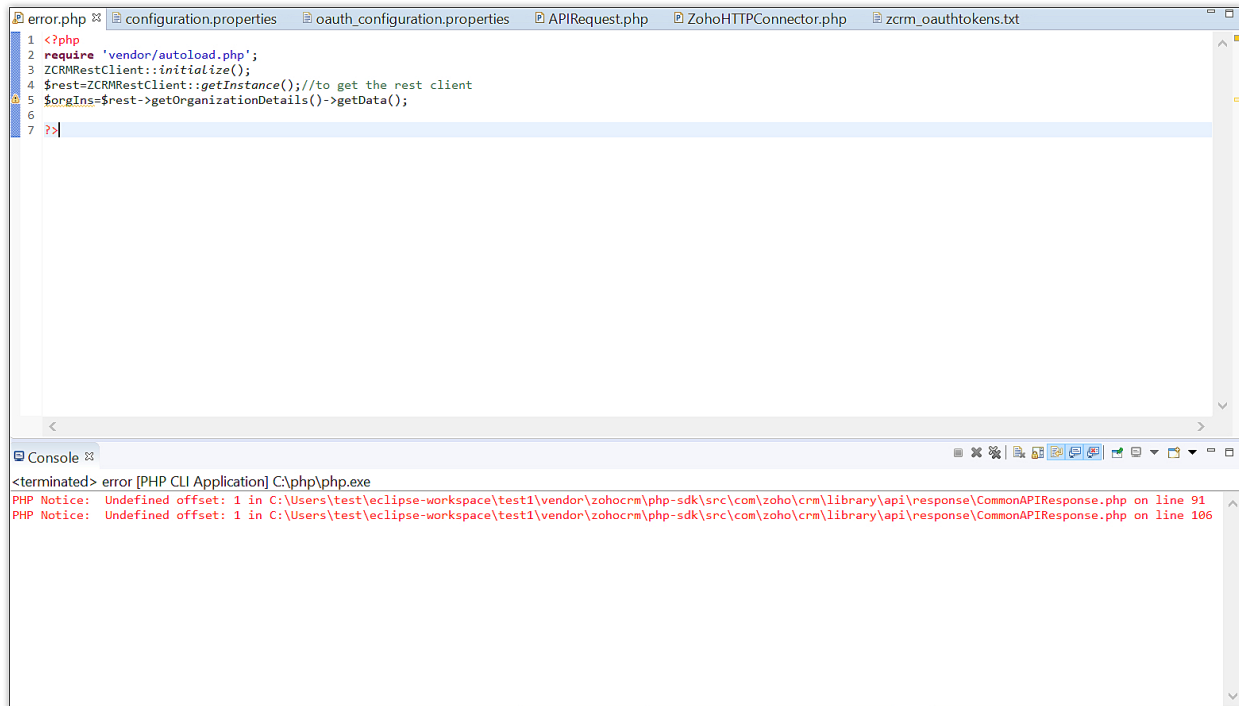
```
index.php sample.php oauth_configuration.properties configuration.properties x
1  apiBaseUrl=www.zohoapis.eu
2  apiVersion=v2
3  sandbox=false
4  applicationLogFilePath=
5  currentUserEmail=
```

Solution

Access the records in the same domain as you generated the access token in, that is, specify the same domain name suffix in `accounts_url` and `apiBaseUrl`.

```
index.php sample.php oauth_configuration.properties configuration.properties x
1  apiBaseUrl=www.zohoapis.com
2  apiVersion=v2
3  sandbox=false
4  applicationLogFilePath=
5  currentUserEmail= com
```


10. Undefined offset



```
error.php
1 <?php
2 require 'vendor/autoload.php';
3 ZCRMRestClient::initialize();
4 $rest=ZCRMRestClient::getInstance();//to get the rest client
5 $orgIns=$rest->getOrganizationDetails()->getData();
6
7 >>
```

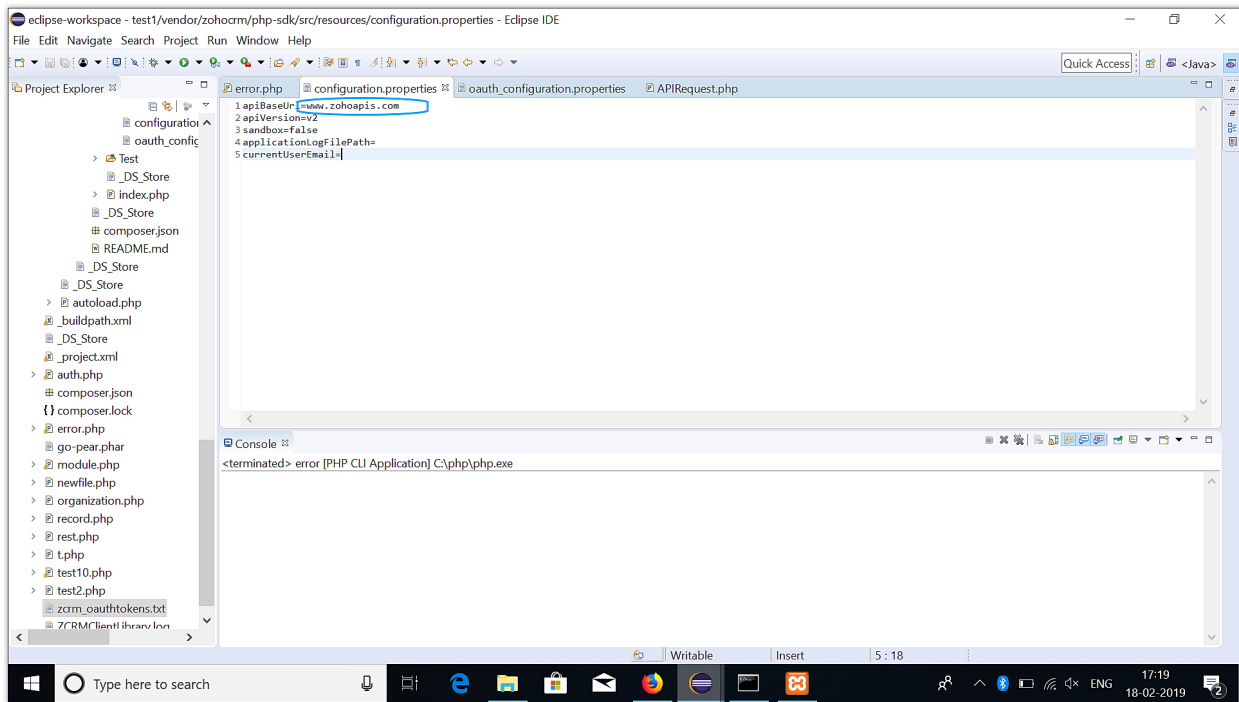
```
<terminated> error [PHP CLI Application] C:\php\php.exe
PHP Notice: Undefined offset: 1 in C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\api\response\CommonAPIResponse.php on line 91
PHP Notice: Undefined offset: 1 in C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\api\response\CommonAPIResponse.php on line 106
```

Reason

The base url for API is not set in "apiBaseUrl" in the configuration.properties file.

Solution

Specify the base URL in "apiBaseUrl" in the configuration.properties file.



```
eclipse-workspace - test1/vendor/zohocrm/php-sdk/src/resources/configuration.properties - Eclipse IDE
File Edit Navigate Search Project Run Window Help
Project Explorer
configuration
  Test
  _DS_Store
  index.php
  _DS_Store
  composer.json
  README.md
  _DS_Store
  autoload.php
  _buildpath.xml
  _DS_Store
  _project.xml
  auth.php
  composer.json
  composer.lock
  error.php
  go-pear.phar
  module.php
  newfile.php
  organization.php
  record.php
  rest.php
  t.php
  test10.php
  test2.php
  zcrm_oauthtokens.txt
  ZCRMClientIhravu Inn
configuration.properties
1 apiBaseUrl=www.zohoapis.com
2 apiVersion=V2
3 sandbox=false
4 applicationLogFilePath=
5 currentUserEmail=
```

```
<terminated> error [PHP CLI Application] C:\php\php.exe
```

11. Class 'ZCRMRestClient' not found

```
error.php
1 <?php
2 ZCRMRestClient::initialize();
3 $rest=ZCRMRestClient::getInstance();//to get the rest client
4 $orgIns=$rest->getOrganizationDetails()->getData();
5 ?>
```

```
Console
<terminated> error [PHP CLI Application] C:\php\php.exe
PHP Fatal error:  Uncaught Error: Class 'ZCRMRestClient' not found in C:\Users\test\workspace\test1\error.php:2
Stack trace:
#0 {main}
  thrown in C:\Users\test\workspace\test1\error.php on line 2
```

Reason

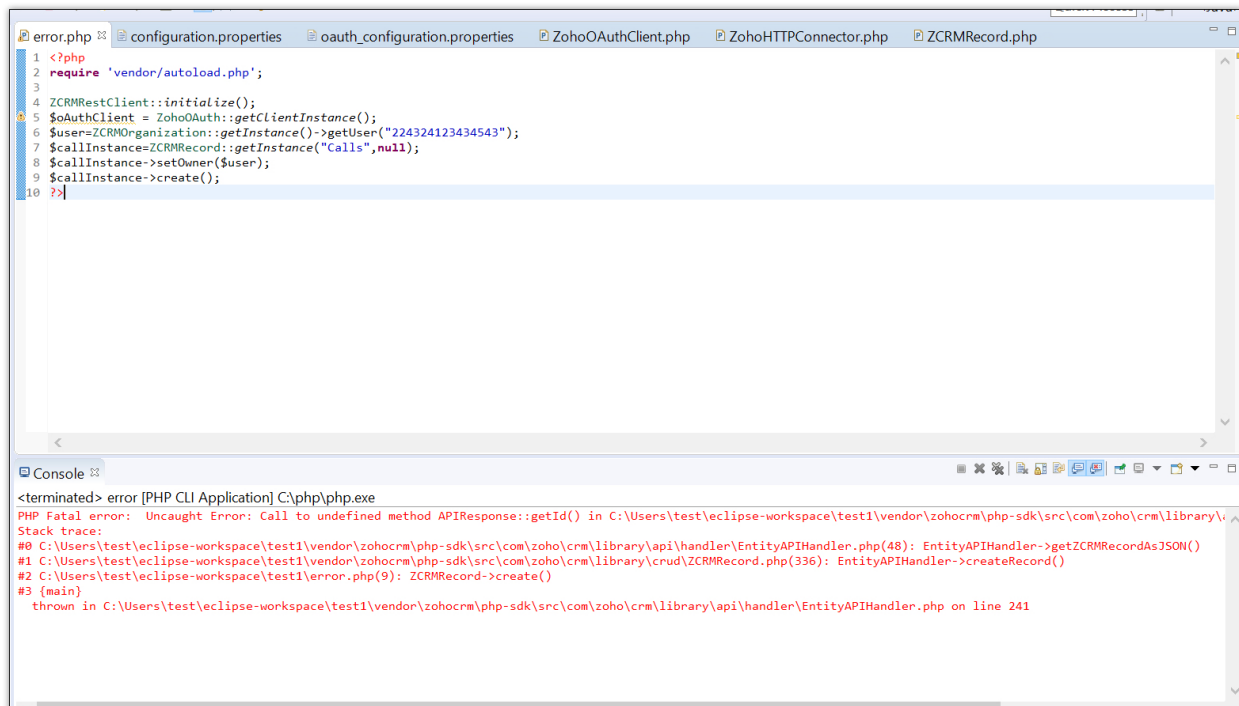
The vendor path is not included in the PHP file.

Solution

Add the vendor path require 'vendor/autoload.php' in the PHP file.

```
error.php  rest.php
1 <?php
2 require vendor/autoload.php;
3 ZCRMRestClient::initialize();
4 $rest=ZCRMRestClient::getInstance();//to get the rest client
5 $orgIns=$rest->getOrganizationDetails()->getData();
6 ?>
```

12. Call to undefined method ApiResponse::getId()



The screenshot shows an IDE with several tabs: error.php, configuration.properties, oauth_configuration.properties, ZohoOAuthClient.php, ZohoHTTPConnector.php, and ZCRMRecord.php. The error.php tab is active and contains the following PHP code:

```
1 <?php
2 require 'vendor/autoload.php';
3
4 ZCRMRestClient::initialize();
5 $oAuthClient = ZohoOAuth::getClientInstance();
6 $user=ZCRMOrganization::getInstance()->getUser("224324123434543");
7 $callInstance=ZCRMRecord::getInstance("Calls",null);
8 $callInstance->setOwner($user);
9 $callInstance->create();
10 ?>
```

The Console window below shows the error output:

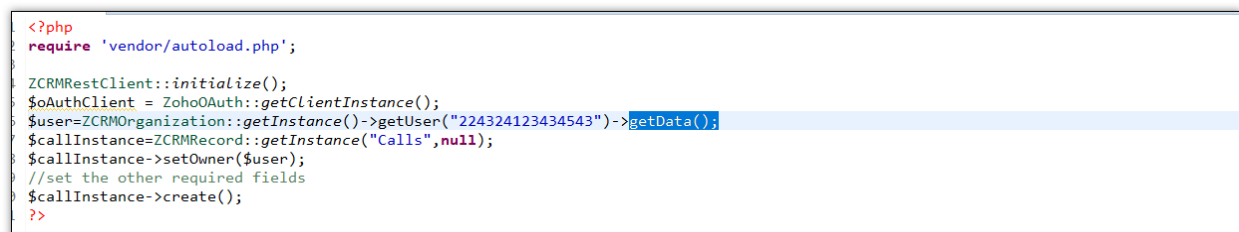
```
<terminated> error [PHP CLI Application] C:\php\php.exe
PHP Fatal error:  Uncaught Error: Call to undefined method ApiResponse::getId() in C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\api\handler\EntityAPIHandler.php:241
Stack trace:
#0 C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\api\handler\EntityAPIHandler.php(48): EntityAPIHandler->getZCRMRecordAsJSON()
#1 C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\crud\ZCRMRecord.php(336): EntityAPIHandler->createRecord()
#2 C:\Users\test\workspace\test1\error.php(9): ZCRMRecord->create()
#3 {main}
  thrown in C:\Users\test\workspace\test1\vendor\zohocrm\php-sdk\src\com\zoho\crm\library\api\handler\EntityAPIHandler.php on line 241
```

Reason

Passing an incorrect object to the method setOwner()

Solution

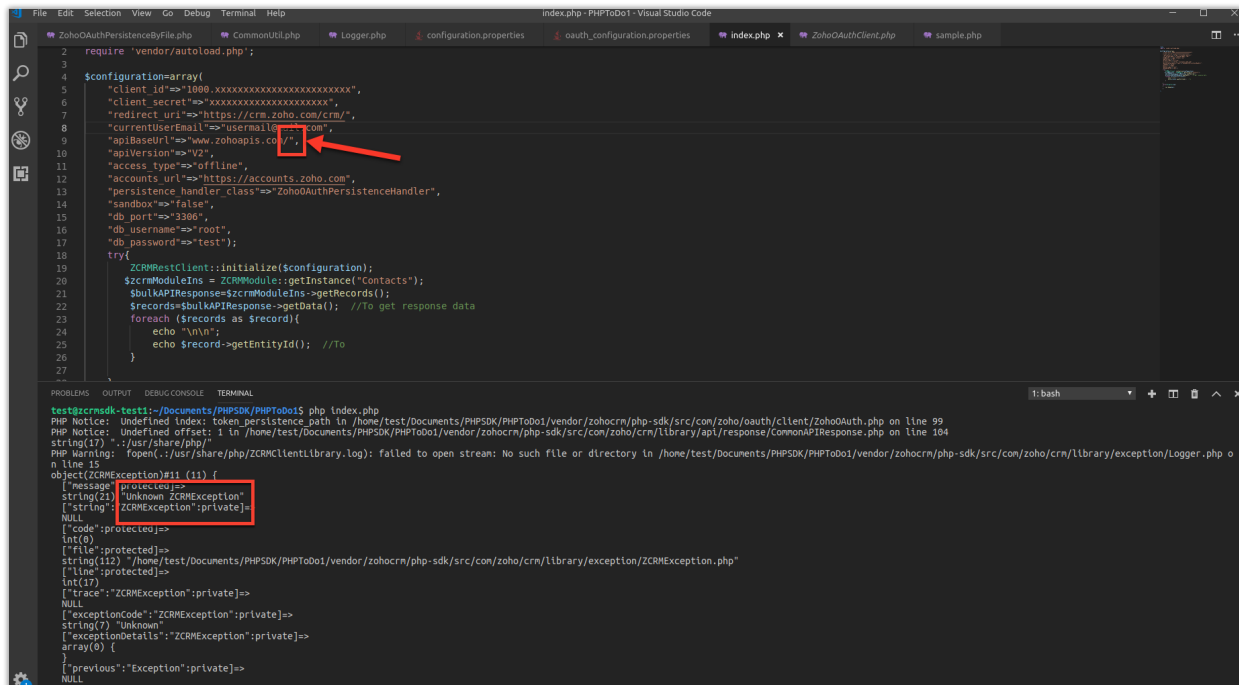
Use the method getData() to get the ZCRM user instance before passing the object to the method setOwner().



```
<?php
require 'vendor/autoload.php';

ZCRMRestClient::initialize();
$oAuthClient = ZohoOAuth::getClientInstance();
$user=ZCRMOrganization::getInstance()->getUser("224324123434543")->getData();
$callInstance=ZCRMRecord::getInstance("Calls",null);
$callInstance->setOwner($user);
//set the other required fields
$callInstance->create();
?>
```

13. ZCRMException Caused by:'Unknown ZCRMException'



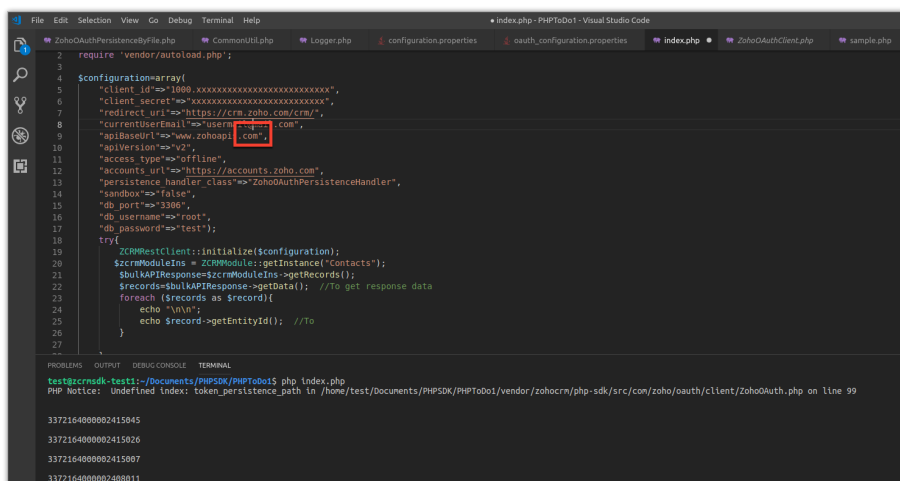
```
File Edit Selection View Go Debug Terminal Help
index.php - PHPToDo1 - Visual Studio Code
ZohoOAuthPersistenceByFile.php CommonUtil.php Logger.php configuration.properties oauth_configuration.properties index.php x zohoOAuthClient.php sample.php
2 require 'vendor/autoload.php';
3
4 $configuration=array(
5     "client_id"=>"1000.xxxxxxxxxxxxxxxxxxxxxx",
6     "client_secret"=>"xxxxxxxxxxxxxxxxxxxxx",
7     "redirect_uri"=>"https://crm.zoho.com/crm/",
8     "currentUserEmail"=>"usermail@zoho.com",
9     "apiBaseUrl"=>"www.zohoapis.com/",
10
11     "apiVersion"=>"v2",
12     "access_type"=>"offline",
13     "accounts_url"=>"https://accounts.zoho.com",
14     "persistence_handler_class"=>"ZohoOAuthPersistenceHandler",
15     "sandbox"=>"false",
16     "db_port"=>"3306",
17     "db_username"=>"root",
18     "db_password"=>"test");
19
20 try{
21     ZCRMRestClient::initialize($configuration);
22     $zcrmModuleIns = ZCRMModule::getInstance("contacts");
23     $bulkAPIResponse=$zcrmModuleIns->getRecords();
24     $records=$bulkAPIResponse->getData(); //To get response data
25     foreach ($records as $record){
26         echo "\n\n";
27         echo $record->getEntityId(); //To
28     }
29 }
30
31 PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
PHP Notice: Undefined index: token_persistence_path in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/oauth/client/ZohoOAuth.php on line 99
PHP Notice: Undefined offset: 1 in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/api/response/CommonAPIResponse.php on line 104
string(17) ".:usr/share/php/
PHP Warning: fopen(./usr/share/php/ZCRMClientLibrary.log): failed to open stream: No such file or directory in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/exception/Logger.php o
n line 15
object(ZCRMException)#1 (1) {
  ["message":protected] =>
  string(21) "Unknown ZCRMException"
  ["string":ZCRMException:private] =>
  NULL
  ["code":protected] =>
  int(0)
  ["file":protected] =>
  string(112) "/home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/crm/library/exception/ZCRMException.php"
  ["line":protected] =>
  int(17)
  ["trace":ZCRMException:private] =>
  NULL
  ["exceptionCode":ZCRMException:private] =>
  string(7) "Unknown"
  ["exceptionDetails":ZCRMException:private] =>
  array(0) {
  }
  ["previous":Exception:private] =>
  NULL
}
```

Reason

The apiBaseUrl key in the configuration dictionary must have had the value as "https://www.zohoapis.com/". The slash at the end of the line is automatically added by the SDK. Hence if the user adds a slash as well, the final input to the SDK will have two slashes. Ex: "https://www.zohoapis.com//".

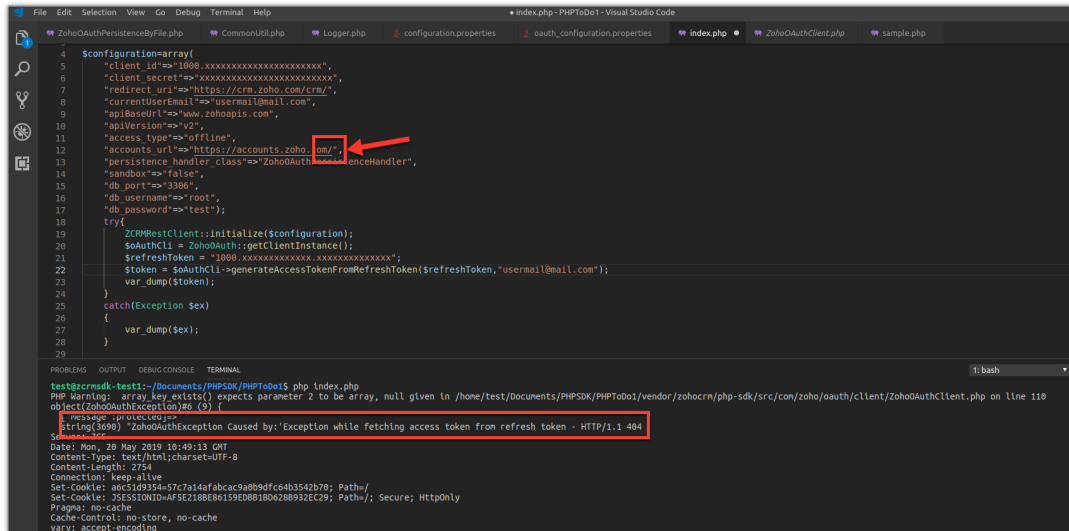
Solution

Remove the (/) slash after https://www.zohoapis.com in the "apiBaseUrl" key of the configuration dictionary.



```
File Edit Selection View Go Debug Terminal Help
index.php - PHPToDo1 - Visual Studio Code
ZohoOAuthPersistenceByFile.php CommonUtil.php Logger.php configuration.properties oauth_configuration.properties index.php x zohoOAuthClient.php sample.php
2 require 'vendor/autoload.php';
3
4 $configuration=array(
5     "client_id"=>"1000.xxxxxxxxxxxxxxxxxxxxxx",
6     "client_secret"=>"xxxxxxxxxxxxxxxxxxxxx",
7     "redirect_uri"=>"https://crm.zoho.com/crm/",
8     "currentUserEmail"=>"usermail@zoho.com",
9     "apiBaseUrl"=>"www.zohoapis.com",
10
11     "apiVersion"=>"v2",
12     "access_type"=>"offline",
13     "accounts_url"=>"https://accounts.zoho.com",
14     "persistence_handler_class"=>"ZohoOAuthPersistenceHandler",
15     "sandbox"=>"false",
16     "db_port"=>"3306",
17     "db_username"=>"root",
18     "db_password"=>"test");
19
20 try{
21     ZCRMRestClient::initialize($configuration);
22     $zcrmModuleIns = ZCRMModule::getInstance("contacts");
23     $bulkAPIResponse=$zcrmModuleIns->getRecords();
24     $records=$bulkAPIResponse->getData(); //To get response data
25     foreach ($records as $record){
26         echo "\n\n";
27         echo $record->getEntityId(); //To
28     }
29 }
30
31 PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
PHP Notice: Undefined index: token_persistence_path in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/com/zoho/oauth/client/ZohoOAuth.php on line 99
3372164000002415045
3372164000002415026
3372164000002415007
3372164000002408011
```

14. ZohoOAuthException Caused by:'ZohoOAuthException Caused by:'Exception while fetching access token from refresh token - HTTP/1.1 404



```
4 $configuration=array(
5     "client_id"=>"1000. xxxxxxxxxxxxxxxxxxxxxxxx",
6     "client_secret"=>"xxxxxxxxxxxxxxxxxxxxxxxxxx",
7     "redirect_uri"=>"https://crm.zoho.com/crm/",
8     "currentUserEmail"=>"usermail@mail.com",
9     "apiBaseUrl"=>"www.zohoapis.com",
10    "apiVersion"=>"v2",
11    "access_type"=>"offline",
12    "accounts_url"=>"https://accounts.zoho.com/",
13    "persistence_handler_class"=>"ZohoOAuthPersistenceHandler",
14    "sandbox"=>"false",
15    "db_port"=>"3306",
16    "db_username"=>"root",
17    "db_password"=>"test");
18    try{
19        ZCRMRestClient::initialize($configuration);
20        $OAuthCli = zohoOAuth::getClientInstance();
21        $refreshToken = "1000. xxxxxxxxxxxxxxxx. xxxxxxxxxxxxxxxx";
22        $token = $OAuthCli->generateAccessTokenFromRefreshToken($refreshToken, "usermail@mail.com");
23        var_dump($token);
24    }
25    catch(Exception $ex)
26    {
27        var_dump($ex);
28    }
29 }
```

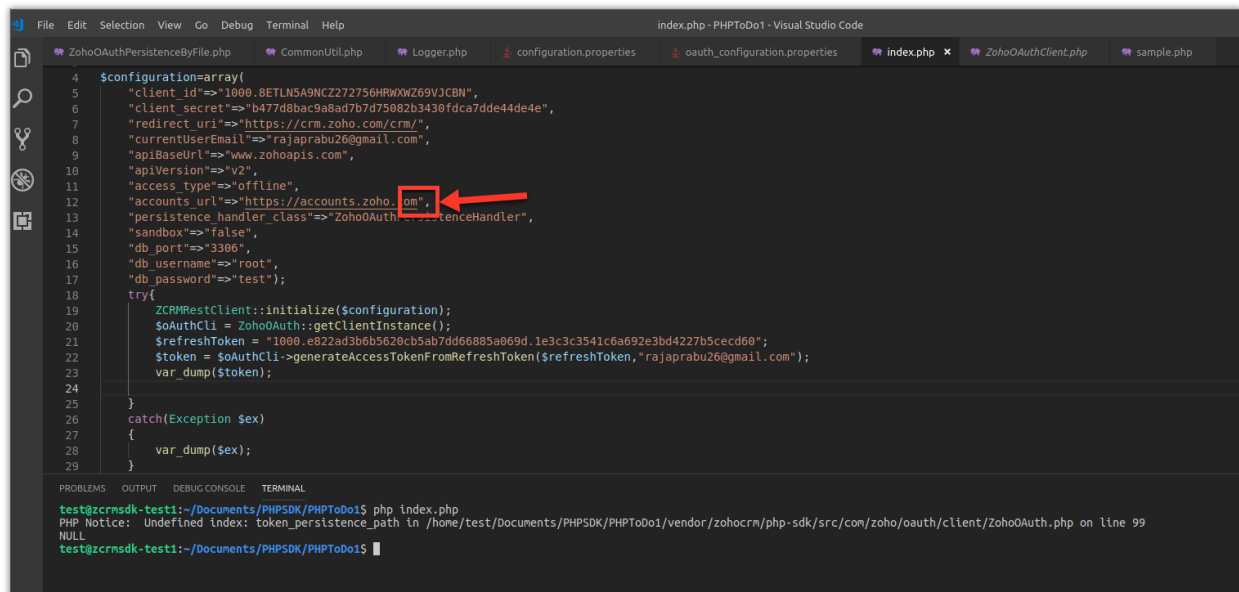
```
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
PHP Warning: array_key_exists() expects parameter 2 to be array, null given in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrn/php-sdk/src/con/zoho/oauth/client/ZohoOAuthClient.php on line 110
Object(ZohoOAuthException)#0 (9) {
  #message: private string(3698) "ZohoOAuthException Caused by:'Exception while fetching access token from refresh token - HTTP/1.1 404
  #code: 0
  #file: /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrn/php-sdk/src/con/zoho/oauth/client/ZohoOAuthClient.php
  #line: 110
  #severity: 3
  #trace: #0 /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrn/php-sdk/src/con/zoho/oauth/client/ZohoOAuthClient.php:110
  #previous: NULL
  #wakeup: NULL
  #require: NULL
  #throw: NULL
  #parent: NULL
  #type: ZohoOAuthException
}
Date: Mon, 20 May 2019 10:49:13 GMT
Content-Type: text/html; charset=UTF-8
Content-Length: 2754
Connection: keep-alive
Set-Cookie: acc1d9334-57c7a144fabac9a0b9dfc64b3542b78; Path=/
Set-Cookie: 3f53101d4e4f2c2188180e3592d81b0e28032cc9; Path=/; Secure; HttpOnly
Pragma: no-cache
Cache-Control: no-store, no-cache
vary: accept-encoding
```

Reason

The accounts_url key in the configuration dictionary must have had the value as "https://accounts.zoho.com/". The slash at the end of the line is automatically added added by the SDK. Hence if the user adds a slash as well, the final input to the SDK will have two slashes. Ex: "https://accounts.zoho.com//".

Solution

Remove the (/) slash after https://accounts.zoho.com in the "accounts_url" key of the configuration dictionary.

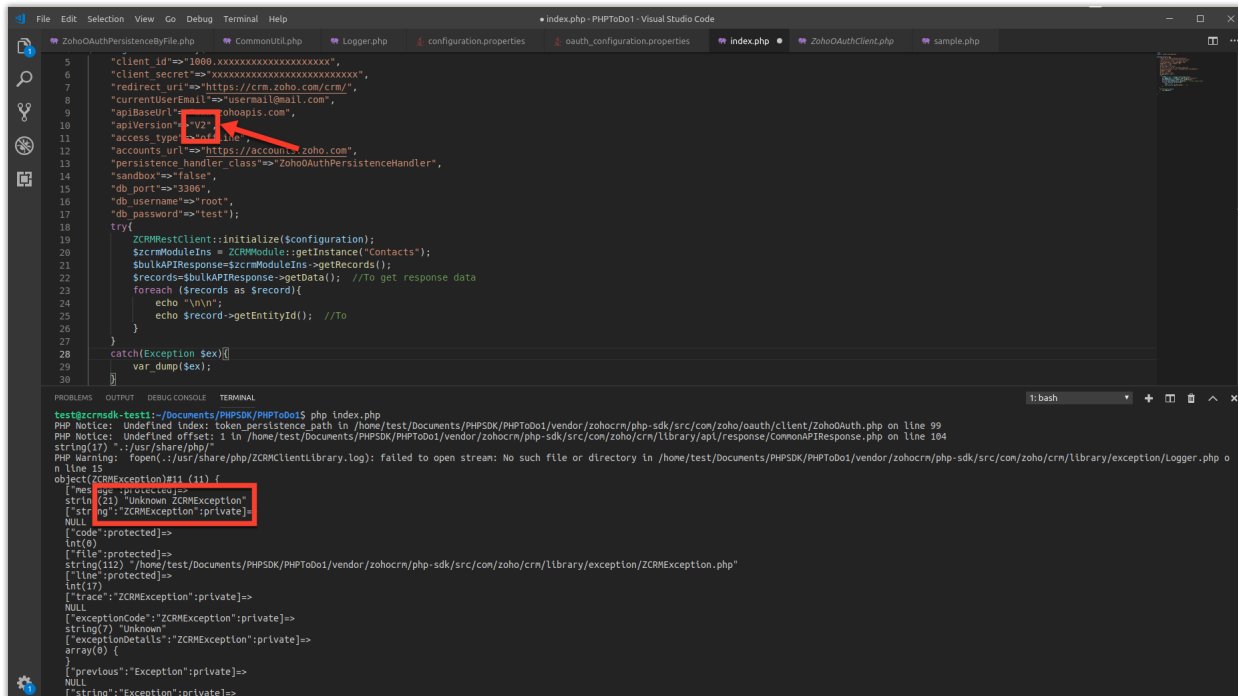


```
4 $configuration=array(
5     "client_id"=>"1000.8ETLN5A9NCZ272756HRWV269VJCBN",
6     "client_secret"=>"b477d8bac9a8ad7b7d75082b3430fdca7dde44de4e",
7     "redirect_uri"=>"https://crm.zoho.com/crm",
8     "currentUserEmail"=>"rajaprabu26@gmail.com",
9     "apiBaseUrl"=>"www.zohoapis.com",
10    "apiVersion"=>"v2",
11    "access_type"=>"offline",
12    "accounts_url"=>"https://accounts.zoho.com",
13    "persistence_handler_class"=>"ZohoOAuthPersistenceHandler",
14    "sandbox"=>"false",
15    "db_port"=>"3306",
16    "db_username"=>"root",
17    "db_password"=>"test");
18    try{
19        ZCRMRestClient::initialize($configuration);
20        $OAuthCli = zohoOAuth::getClientInstance();
21        $refreshToken = "1000. e822a13b6b502eb5ab7dd66885a069d. 1e3c3c3541c6a692e3bd4227b5cccd60";
22        $token = $OAuthCli->generateAccessTokenFromRefreshToken($refreshToken, "rajaprabu26@gmail.com");
23        var_dump($token);
24    }
25    catch(Exception $ex)
26    {
27        var_dump($ex);
28    }
29 }
```

```
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
PHP Notice: Undefined index: token_persistence_path in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrn/php-sdk/src/con/zoho/oauth/client/ZohoOAuth.php on line 99
NULL
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$
```



15. ZCRMException Caused by: 'Unknown ZCRMException'



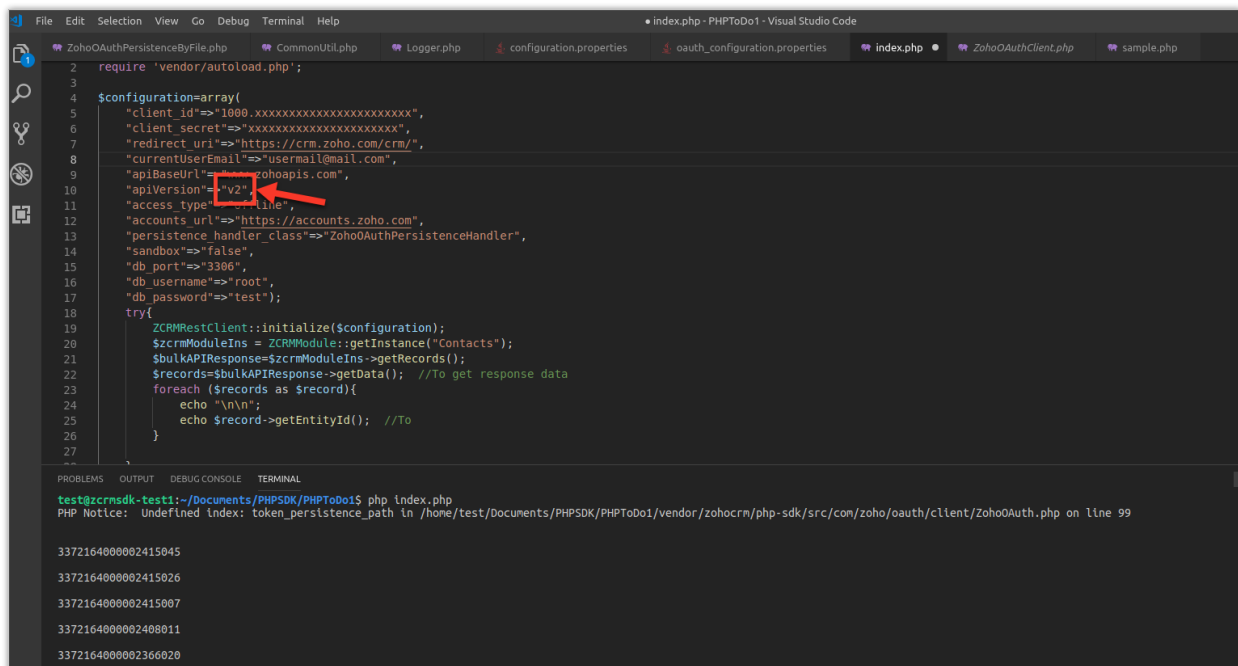
```
File Edit Selection View Go Debug Terminal Help • index.php - PHPToDo1 - Visual Studio Code
ZohoOAuthPersistenceByFile.php CommonUtil.php Logger.php configuration.properties oauth_configuration.properties index.php ZohoOAuthClient.php sample.php
5 "client_id"=>"1000.xxxxxxxxxxxxxxxxxxxxxx",
6 "client_secret"=>"xxxxxxxxxxxxxxxxxxxxxxxx",
7 "redirect_uri"=>"https://crm.zoho.com/crm/",
8 "currentUserEmail"=>"usermail@mail.com",
9 "apiBaseUrl"=>"zohoapis.com",
10 "apiVersion"=>"V2",
11 "access_type"=>"offline",
12 "accounts_url"=>"https://accounts.zoho.com",
13 "persistence_handler_class"=>"ZohoOAuthPersistenceHandler",
14 "sandbox"=>"false",
15 "db_port"=>"3306",
16 "db_username"=>"root",
17 "db_password"=>"test");
18 try{
19     ZCRMRestClient::initialize($configuration);
20     $zcrmModuleIns = ZCRMModule::getInstance("Contacts");
21     $bulkAPIResponse=$zcrmModuleIns->getRecords();
22     $records=$bulkAPIResponse->getData(); //To get response data
23     foreach ($records as $record){
24         echo "\n\n";
25         echo $record->getEntityId(); //To
26     }
27 }
28 catch(Exception $ex){
29     var_dump($ex);
30 }
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
PHP Notice: Undefined index: token_persistence_path in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/con/zoho/oauth/client/ZohoOAuth.php on line 99
PHP Notice: Undefined offset: 1 in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/con/zoho/crm/library/apl/response/CommonAPIResponse.php on line 164
PHP Warning: fopen(/usr/share/php/ZCRMClientLibrary.log): failed to open stream: No such file or directory in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/con/zoho/crm/library/exception/Logger.php on line 15
object(ZCRMException)#11 (1) {
  ["message":protected]=>
  string(21) "Unknown ZCRMException"
  ["string":"ZCRMException":private]=>
  NULL
  ["code":protected]=>
  int(0)
  ["file":protected]=>
  string(112) "/home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/con/zoho/crm/library/exception/ZCRMException.php"
  ["line":protected]=>
  int(17)
  ["trace":"ZCRMException":private]=>
  NULL
  ["exceptionCode":"ZCRMException":private]=>
  string(7) "Unknown"
  ["exceptionDetails":"ZCRMException":private]=>
  array(0) {
  }
  ["previous":"Exception":private]=>
  NULL
  ["string":"Exception":private]=>
  NULL
}
```

Reason

The "apiVersion" key in the configuration dictionary is "V2", with a capital "V".

Solution

Change the value of apiVersion to "v2" in the configuration dictionary



```
File Edit Selection View Go Debug Terminal Help • index.php - PHPToDo1 - Visual Studio Code
ZohoOAuthPersistenceByFile.php CommonUtil.php Logger.php configuration.properties oauth_configuration.properties index.php ZohoOAuthClient.php sample.php
2 require 'vendor/autoload.php';
3
4 $configuration=array(
5     "client_id"=>"1000.xxxxxxxxxxxxxxxxxxxxxx",
6     "client_secret"=>"xxxxxxxxxxxxxxxxxxxxxxxx",
7     "redirect_uri"=>"https://crm.zoho.com/crm/",
8     "currentUserEmail"=>"usermail@mail.com",
9     "apiBaseUrl"=>"zohoapis.com",
10    "apiVersion"=>"v2",
11    "access_type"=>"offline",
12    "accounts_url"=>"https://accounts.zoho.com",
13    "persistence_handler_class"=>"ZohoOAuthPersistenceHandler",
14    "sandbox"=>"false",
15    "db_port"=>"3306",
16    "db_username"=>"root",
17    "db_password"=>"test");
18
19 try{
20     ZCRMRestClient::initialize($configuration);
21     $zcrmModuleIns = ZCRMModule::getInstance("Contacts");
22     $bulkAPIResponse=$zcrmModuleIns->getRecords();
23     $records=$bulkAPIResponse->getData(); //To get response data
24     foreach ($records as $record){
25         echo "\n\n";
26         echo $record->getEntityId(); //To
27     }
28 }
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
test@zcrmsdk-test1:~/Documents/PHPSDK/PHPToDo1$ php index.php
PHP Notice: Undefined index: token_persistence_path in /home/test/Documents/PHPSDK/PHPToDo1/vendor/zohocrm/php-sdk/src/con/zoho/oauth/client/ZohoOAuth.php on line 99
337216400002415045
337216400002415026
337216400002415007
337216400002408011
337216400002366020
```

Namespaces

Starting from PHP SDK version 2 , the namespaces convention (PSR-4) is followed. Hence for a user to access a particular class, the namespace for the class is to be used. The namespaces are:

These methods involve authentications procedures that are to be included in your application, to provide access to Zoho CRM's data.

Class	Namespace
ZCRMAttachment	<code>use zcrmsdk\crm\crud\ZCRMAttachment;</code>
ZCRMCustomView	<code>use zcrmsdk\crm\crud\ZCRMCustomView;</code>
ZCRMCustomViewCategory	<code>use zcrmsdk\crm\crud\ZCRMCustomViewCategory;</code>
ZCRMCustomViewCriteria	<code>use zcrmsdk\crm\crud\ZCRMCustomViewCriteria;</code>
ZCRMEventParticipant	<code>use zcrmsdk\crm\crud\ZCRMEventParticipant;</code>
ZCRMField	<code>use zcrmsdk\crm\crud\ZCRMField;</code>
ZCRMInventoryLineItem	<code>use zcrmsdk\crm\crud\ZCRMInventoryLineItem;</code>
ZCRMJunctionRecord	<code>use zcrmsdk\crm\crud\ZCRMJunctionRecord;</code>
ZCRMLayout	<code>use zcrmsdk\crm\crud\ZCRMLayout;</code>
ZCRMLeadConvertMapping	<code>use</code>



	zcrmsdk\crm\crud\ZCRMLeadConvertMapping;
ZCRMLeadConvertMappingField	use zcrmsdk\crm\crud\ZCRMLeadConvertMappingField;
ZCRMLookupField	use zcrmsdk\crm\crud\ZCRMLookupField;
ZCRMModule	use zcrmsdk\crm\crud\ZCRMModule;
ZCRMModuleRelatedList	use zcrmsdk\crm\crud\ZCRMModuleRelatedList;
ZCRMModuleRelation	use zcrmsdk\crm\crud\ZCRMModuleRelation;
ZCRMNote	use zcrmsdk\crm\crud\ZCRMNote;
ZCRMOrgTax	use zcrmsdk\crm\crud\ZCRMOrgTax;
ZCRMPermission	use zcrmsdk\crm\crud\ZCRMPermission;
ZCRMPickListValue	use zcrmsdk\crm\crud\ZCRMPickListValue;
ZCRMPriceBookPricing	use zcrmsdk\crm\crud\ZCRMPriceBookPricing;
ZCRMProfileCategory	use zcrmsdk\crm\crud\ZCRMProfileCategory;
ZCRMTrashRecord	use zcrmsdk\crm\crud\ZCRMTrashRecord;
ZCRMTax	use zcrmsdk\crm\crud\ZCRMTax;



ZCRMTag	use zcrmsdk\crm\crud\ZCRMTag;
ZCRMSection	use zcrmsdk\crm\crud\ZCRMSection;
ZCRMRelatedListProperties	use zcrmsdk\crm\crud\ZCRMRelatedListProperties;
ZCRMRecord	use zcrmsdk\crm\crud\ZCRMRecord;
ZCRMProfileSection	use zcrmsdk\crm\crud\ZCRMProfileSection;
ZCRMException	use zcrmsdk\crm\exception\ZCRMException;
ZCRMOrganization	use zcrmsdk\crm\setup\org\ZCRMOrganization;
ZCRMRestClient	use zcrmsdk\crm\setup\restclient\ZCRMRestClient;
ZCRMProfile	use zcrmsdk\crm\setup\users\ZCRMProfile;
ZCRMRole	use zcrmsdk\crm\setup\users\ZCRMRole;
ZCRMUser	use zcrmsdk\crm\setup\users\ZCRMUser;
ZCRMUserCustomizeInfo	use zcrmsdk\crm\setup\users\ZCRMUserCustomizeInfo;
ZCRMUserTheme	use zcrmsdk\crm\setup\users\ZCRMUserTheme;



ZohoOAuth	use zcrmsdk\oauth\ZohoOAuth;
ZohoOAuthClient	use zcrmsdk\oauth\ZohoOAuthClient;

Sample Codes

All of Zoho CRM's APIs can be used through the PHP SDK, to enable your custom application to perform data sync to the best degree. Here are the sample codes for all the API methods available in our SDK.

Rest Client Operations

These methods involve authentications procedures that are to be included in your application, to provide access to Zoho CRM's data.

Methods	Description
getOrganizationDetails	To fetch information about your CRM account organization.
getOrganizationInstance	To fetch details of a dummy organization.
getCurrentUser	To fetch information about the user who is currently accessing Zoho CRM's data through your application.
getRecordInstance	To get a dummy record.
getModuleInstance	To fetch details of a dummy module.

Bulk Read Operations

Bulk Read API allows you to fetch a large set of data. This API is very useful whenever you require to export a large amount of data or to take a backup of your data without a big impact on your API limits.

This is an asynchronous API, meaning that the response to your request is not available immediately. You will be notified of the callback URL when the data is ready to download or you can choose to check the job status periodically.

Note

The results are available only as a downloadable CSV file or an ICS file.

You can export the records as an ICS file only for the Events module.

Refer to [Bulk Read API - An Overview](#) for more details.

Refer to [Limitations](#) to know the Bulk Read API limits.

Methods	Description
Create a Bulk Read Job	To schedule a bulk read job to export records that match the criteria
Get Bulk Read Job Details	To know the status of the bulk read job scheduled previously.
Download Result	To download the result of the bulk read job
Download and Get Records	To download the zip file, extract the CSV file, and display the records as instances.
Download and Get Records (for ICS file type)	To download the zip file, extract the ICS file, and display the records as instances.



Get List of Records from the CSV File	To fetch all the records from the CSV file mentioned in the file path.
Get List of Records from the ICS File	To fetch all the records from the ICS file mentioned in the file path.

Bulk Write Operations

Bulk Write API allows you to insert, update, or upsert a large set of data. This is an asynchronous API, meaning that the response of your request is not available immediately. When the records are processed, the system notifies you of job completion in the callback URL or you can check the job status periodically.

This API allows you to insert, update, or upsert a maximum of 25000 records in a single API call.

- For more details, refer to the [Bulk Write API - An Overview](#) page of our API guide.
- For bulk write API limits, refer to the [Limitations](#) page of our API guide.

Methods	Description
Upload File	To upload a CSV file in ZIP format
Upload File as Stream	To upload the zip containing the CSV file as a stream
Create a Bulk Write Job - Bulk Insert	To create a bulk write job to insert records
Create a Bulk Write Job - Bulk Update	To create a bulk write job to update records
Create a Bulk Write Job - Bulk Upsert	To create a bulk write job to upsert records
	To know the status of the bulk write job



Get Bulk Write Job Details	scheduled previously
Download Result	To download the result of the bulk write job
Download the CSV file and Get Records	To download the zip file, extract the CSV file, and display the records as instances.
Get Records from File	To fetch all the records from the file mentioned in the file path.
Download the CSV file and Get Failed Records	To download the CSV from the zip file and fetch only the instances of records that failed getting inserted/updated/upserted.
Get Failed Records	To fetch the list of records that failed getting inserted/updated/upserted from the specified file.

Organization Operations

These methods involve actions that can be performed in your application, to modify the data that pertains to your Zoho CRM's organization. For instance, you can get the list of all the users (employees) that are present in your organization at any point of time.

Methods	Description
getUser	To fetch information about a specific user in your CRM account.
getAllUsers	To fetch the list of all the users from your CRM account.

getAllActiveUsers	To fetch the list of all the active users in your CRM account.
getAllDeactiveUsers	To fetch the list of all the non-active users in your CRM account.
getAllActiveConfirmedUsers	To fetch the list of all the active and confirmed users in your CRM account.
getAllConfirmedUsers	To fetch the list of all the confirmed users in your CRM account.
getAllNotConfirmedUsers	To fetch the list of all the users who are not confirmed in your CRM account.
getAllDeletedUsers	To fetch the list of all the users who were deleted from your CRM account.
getAllAdminUsers	To fetch the list of all the users who have admin level permissions in your CRM account.
getAllActiveConfirmedAdmins	To fetch the list of all the active and confirmed users who have admin level permissions in your CRM account.
createUser	To create a new user in your CRM account.
updateUser	To update details of an existing user in your CRM account.



deleteUser	To delete a user from your CRM account.
getCurrentUser	To fetch information on the user who is currently accessing Zoho CRM's data through your app.
getAllProfiles	To fetch the list of all the profiles that were created in your CRM account.
getProfile	To fetch information about a particular profile in your CRM account.
getAllRoles	To fetch information about a particular role in your CRM account.
getRole	To fetch information about a particular role in your CRM account.
getorgtaxes	To fetch the list of all organization taxes.
getOrganizationTax	To fetch information about a particular organization tax.
createOrganizationTaxes	To create a new organization tax.
updateOrganizationTaxes	To update the details of a particular organization tax.
getRole	To fetch information about a particular role in your CRM account.
	To delete all the taxes associated to the



deleteOrganizationTaxes	organization.
deleteOrganizationTax	To delete a particular tax associated to the organization.
searchUsersByCriteria	To search for records in a module based on a criteria specified by the user.
getNotes	To fetch the list of notes created for your organization.
createNotes	To create notes for your organization.
deleteNotes	To delete notes from your organization.
getVariables	To fetch the list of variables created for your organization.
createVariables	To create variables for your organization.
updateVariables	To update variables created for your organization.
getVariableGroups	To fetch information about the variable groups created for your organization.

Module Operations



These methods involve actions that can be performed in your application, to modify the data in your CRM at the module level. For instance, you can get all the records from a module, search for specific ones, delete them, and do more.

Methods	Description
getAllFields	To fetch the list of all the fields that are available in a module.
getFieldDetails	To fetch information about a particular field available in a module.
getLayoutDetails	To fetch information about a particular layout of a module.
getAllLayouts	To fetch the list of all the layouts that are available for a module.
getCustomView	To fetch information about a particular custom view of a module.
getAllCustomViews	To fetch the list of all the custom views that are available for a module.
updateCustomView	To update a custom view of a module.
getAllRelatedLists	To fetch the list of all the related lists that are available for a module.
getRelatedListDetails	To fetch the list of all the related lists that are available for a module.

updateModuleSettings	To update the settings of a module. Ex: territory, custom view, etc.
getRecords	To fetch the list of all the records that are available in a module.
getRecord	To fetch information about a particular record in a module.
searchRecordsByWord	To search for records in a module based on a Word(text).
searchRecordsByPhone	To search for records in a module based on the Phone number.
searchRecordsByEmail	To search for records in a module based on Email address.
searchRecordsByCriteria	To search for records in a module based on a criteria specified by the user.
updateRecords	To update details of multiple records in a module.
createRecords	To create a new record in a module.
deleteRecords	To delete existing records from a module.
getAllDeletedRecords	To fetch the list of all the records that were deleted from a module.
	To fetch the list of all the records that



getRecycleBinRecords	were deleted from a module and stored in the recycle bin.
getPermanentlyDeletedRecords	To fetch the list of all the records that were permanently deleted from a module.
upsertRecords	To insert/update records in a module.
massUpdateRecords	To update single field value for multiple records. Same value will get updated for all the mentioned records.
getTags	To fetch the list of all the tags that were created for a module.
getTagCount	To fetch total count of the tags that were created for a module.
createTags	To create new tags for a module.
updateTags	To update details of existing tags for a module.
addTagsToRecords	To associate tags to records in a module.
removeTagsFromRecords	To disassociate tags from records in a module.

Record Operations



These methods involve actions that can be performed in your application, to access or modify data that are stored in a particular record. You could fetch the details of a record, create new ones, update existing ones, upload notes, attachments, photos, etc.

Methods	Description
create	To create a new record.
update	To update an existing record.
delete	To delete an existing record.
convert	To convert a record (Leads to Contacts/Deals).
getNotes	To fetch the notes that were attached to a record.
addNotes	To add a note to a record.
addNote	To add a note to a record.
updateNote	To update a note that was previously added to a record.
deleteNote	To delete a note from a record.
getAttachments	To fetch the list of attachments of a record.
uploadAttachment	To upload an attachment to a record.

uploadLinkAsAttachment	To upload a link as an attachment to a record.
downloadAttachment	To download an attachment that was uploaded to a record.
deleteAttachment	To delete an attachment that was added to a record.
uploadPhoto	To upload a photo to a record.
downloadPhoto	To download a photo that was added to a record.
deletePhoto	To delete a photo that was added to a record.
addRelation	To make a relation between two records.
removeRelation	To remove a relation between two records.
addTags	To add tags to a record.
removeTags	To remove tags from a record.

Note Operations

These methods involve actions that can be performed in your application, to access or modify notes of data in your CRM.

Methods	Description
getAttachmentsOfNote	To fetch all attachments of a note.
uploadAttachmentToNote	To upload a note attachment to a record.
downloadAttachmentFromNote	To download an attachment that was attached to a record.
deleteAttachmentFromNote	To delete an attachment that was attached to a record.

Variable operations

These methods allow you to update and delete variables for your organization.

Methods	Description
getVariableofGroup	To fetch information about a specific variable from a group created for your organization.
updateVariable	To update the details of a specific variable.
deleteVariable	To delete a specific variable.

Variable Group operations

These methods allow you to fetch information about a variable group created for your organization.

Methods	Description
getVariableGroup	To fetch information about a specific variable group created for your organization.

Custom View operations

These methods allow you to fetch records in a particular custom view.

Methods	Description
getrecords	To fetch records in a custom view.

Release Notes

Current Version:

1. ZOHO CRM/PHP SDK 2.2.1

Install command

```
1 composer require zohocrm/php-sdk-archive:2.2.1
```

Notes:

- Fixed the inconsistency in the selection of the inventory line items.

Previous Versions

2. ZOHO CRM/PHP SDK 2.2.0

Install command

```
1 composer require zohocrm/php-sdk-archive:2.2.0
```

Notes:

- This version supports the "process" key in the request body for record operations.

3. ZOHO CRM/PHP SDK 2.1.2

Install command

```
1 composer require zohocrm/php-sdk-archive:2.1.2
```

Notes:

- Fixed the error when you retrieve Events using the getRecords method and the participant(s) was invited only through an email.

4. ZOHO CRM/PHP SDK 2.1.1

Install command

```
1 composer require zohocrm/php-sdk-archive:2.1.1
```

Notes:

- The SDK throws an exception if the accounts scope (aaaserver.profile.READ) is not included in the generated grant token or when the user's email cannot be fetched with the generated access token.

5. ZOHO CRM/PHP SDK 2.1.0

Install command

```
1 composer require zohocrm/php-sdk-archive:2.1.0
```

Notes:

Custom parameters and headers supported in the getRecord() method.

6. ZOHO CRM/PHP SDK 2.0.9

Install command

```
1 composer require zohocrm/php-sdk-archive:2.0.9
```

Notes:

- Undefined index error fixed in search record.

7. ZOHO CRM/PHP SDK 2.0.8

Install command

```
1 composer require zohocrm/php-sdk-archive:2.0.8
```

Notes:

- Include path modification removed from file persistence and logging.
- Log file will be generated outside vendor, if not specified.

8. ZOHO CRM/PHP SDK 2.0.7

Install command

```
1 composer require zohocrm/php-sdk-archive:2.0.7
```

Notes:

- Supports Bulk Read and Bulk Write API.
- Supports Remote SQL database.
- You can provide the name of the custom persistence handler class.
- You can specify custom params and custom headers.
- Issue Fixes
- In custom view criteria value.
- Following methods have been changed from the last version under each file.
ZCRMCustomView.php
 - getRecords()ZCRMModule.php
 - getAllCustomViews()
 - searchRecordsByWord() (function name changed from searchRecords())
 - searchRecordsByPhone()
 - searchRecordsByEmail()
 - searchRecordsByCriteria()
 - getAllDeletedRecords()
 - getRecycleBinRecords()
 - getPermanentlyDeletedRecords()ZCRMOrganization.php
 - getAllUsers()
 - getAllActiveUsers()
 - getAllDeactiveUsers()
 - getAllConfirmedUsers()
 - getAllNotConfirmedUsers()

```
-getAllDeletedUsers()
-getAllActiveConfirmedUsers()
-getAllAdminUsers()
-getAllActiveConfirmedAdmins()
-searchUsersByCriteria()
ZCRMRecord.php
-getRelatedListRecords()
-getAttachments()
```

9. ZOHO CRM/PHP SDK 2.0.6

Install command

```
1 composer require zohocrm/php-sdk-archive:2.0.6
```

Notes:

- Handled the change in the OAuth token response.

10. ZOHO CRM/PHP SDK 2.0.5

Install command

```
1 composer require zohocrm/php-sdk-archive:2.0.5
```

Notes:

- Multiple notes API supported.
- Notes attachments supported.
- Taxes can be added to product.

11. ZOHO CRM/PHP SDK 2.0.4

Install command

```
1 composer require zohocrm/php-sdk-archive:2.0.4
```

Notes:

- Undefined index for api_name error fixed in Fields GET method.

12. ZOHO CRM/PHP SDK 2.0.3

Install command

```
1 composer require zohocrm/php-sdk-archive:2.0.3
```

Notes:

- API Constant fix and get instance method changed to static.

13. ZOHO CRM/PHP SDK 2.0.2

Install command

```
1 composer require zohocrm/php-sdk-archive:2.0.2
```

Notes:

- variable and variable api supported.

14. ZOHO CRM/PHP SDK 2.0.1

Install command

```
1 composer require zohocrm/php-sdk-archive:2.0.1
```

Notes:

- Tag names can contain spaces in between them, while associating with records.
- Tag names can be retrieved as "ZCRMTag" objects in records function.

15. ZOHO CRM/PHP SDK 2.0.0

Install command

```
1 composer require zohocrm/php-sdk-archive:2.0.0
```

Notes:

- Configuration details should be passed ONLY as a map (array). Configuration properties files are not supported.
- Current user should be set in the configuration map or by using ZCRMRestClient::setCurrentUser('\$ userEmailId') function.
- PSR-4 standards followed.
- Line tax support provided for Inventory modules.
- Line item can now be added, updated or deleted. (This costs 2 API Credits).
- Org tax API supported.
- Trigger support given for specific(single) create and update operations.

- Lead Assignment rule supported.
- Custom DB support provided.
- Duplicate check fields support provided for upsert record.
- Additional details can be added to Convert Lead operation.
- Criteria pattern and condition can be extracted directly in customview API.
- Multiple clients are supported.
- Documentation for the previous versions can be found here.

16. ZOHO CRM/PHP SDK 1.1.8

Install command

```
1 composer require zohocrm/php-sdk-archive:1.1.8
```

Notes:

- Lead assignment rule support given for single create and bulk create of records.

17. ZOHO CRM/PHP SDK 1.1.7

Install command

```
1 composer require zohocrm/php-sdk-archive:1.1.7
```

Notes:

- Code comments added to improve the readability.
- Setting the list price as 0 for inventory records.

18. ZOHO CRM/PHP SDK 1.1.6

Install command

```
1 composer require zohocrm/php-sdk-archive:1.1.6
```

Notes:

- Warning triggered from getTags() method fixed.

19. ZOHO CRM/PHP SDK 1.1.5

Install command

```
1 composer require zohocrm/php-sdk-archive:1.1.5
```

Notes:

- Regarding TagAPIHandler.php file import in Linux system.

20. ZOHO CRM/PHP SDK 1.1.4

Install command

```
1 composer require zohocrm/php-sdk-archive:1.1.4
```

Notes:

- Regarding count() in php 7.2

21. ZOHO CRM/PHP SDK 1.1.3

Install command

```
1 composer require zohocrm/php-sdk-archive:1.1.3
```

Notes:

- Support given to Tags.

22. ZOHO CRM/PHP SDK 1.1.2

Install command

```
composer require zohocrm/php-sdk-archive:1.1.2
```

Notes:

- Field value for \$approved is not getting set in records create.

23. ZOHO CRM/PHP SDK 1.1.1

Install command

```
1 composer require zohocrm/php-sdk-archive:1.1.1
```

Notes:

In working with configuration map for configurations.

24. ZOHO CRM/PHP SDK 1.1.0

Install command

```
1 composer require zohocrm/php-sdk-archive:1.1.0
```

Notes:

- Support given to provide SDK Configuration details as map.

25. ZOHO CRM/PHP SDK 1.0.4

Install command

```
1 composer require zohocrm/php-sdk-archive:1.0.4
```

Notes:

- Support given to triggers.

26. ZOHO CRM/PHP SDK 1.0.3

Install command

```
1 composer require zohocrm/php-sdk-archive:1.0.3
```

Notes:

- If-Modified-Since header support given in getRecords method.

27. ZOHO CRM/PHP SDK 1.0.2

Install command

```
1 composer require zohocrm/php-sdk-archive:1.0.2
```

Notes:

- Exception in uploadAttachment method.

28. ZOHO CRM/PHP SDK 1.0.1

Install command

```
1 composer require zohocrm/php-sdk-archive:1.0.1
```

Notes:

- Entity id passed as float value(In some 32 bit php Version long gets converted to float).
- User creation.
- getDisplayFieldId method removed from ZCRMModule class.
- Search records is now supported with criteria, phone and email.

29. ZOHO CRM/PHP SDK 1.0.0

Install command

```
1 composer require zohocrm/php-sdk-archive:1.0.0
```

Notes:

- First Release.

30. ZOHO CRM/PHP SDK 0.0.1 - 0.0.3**Notes:**

- Pre-release(beta VERSION).