

# JavaScript SDK Version 1.x.x

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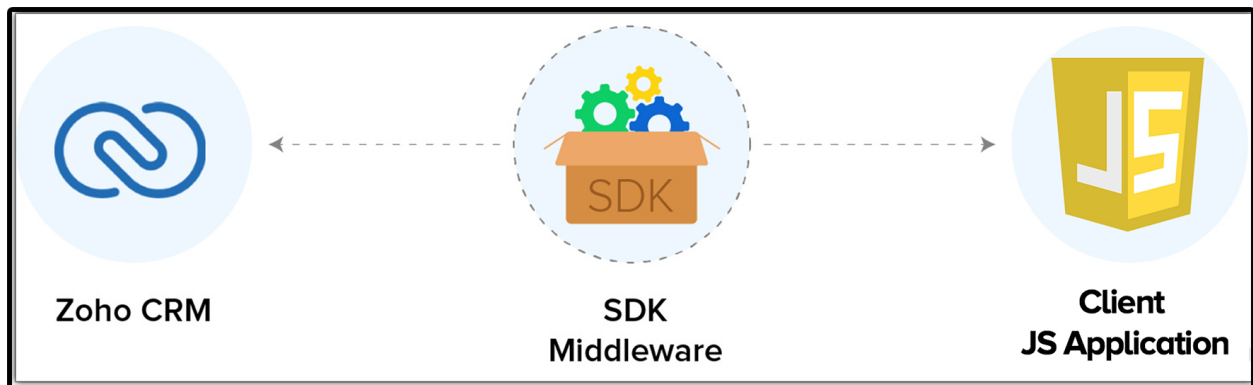
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## Overview

The JavaScript SDK offers a way to create client JavaScript 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.

A point to note would be that the developer of the client application should create programming code elements along with interface implementations, instances or objects. Authentication to access Zoho CRM APIs is through OAuth2.0 authentication mechanism. Invariably, HTTP requests and responses are taken care of by the SDK.

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



## Environmental Setup

You can install any browser as per your preference. JavaScript works on any web browser on any OS.

### **Get Our SDK**

[Download SDK](#)

## Note

It is mandatory for the client to have ZohoCRM.settings.fields.ALL to access all the record operations API. Otherwise, the system returns the OAUTH-SCOPE-MISMATCH error

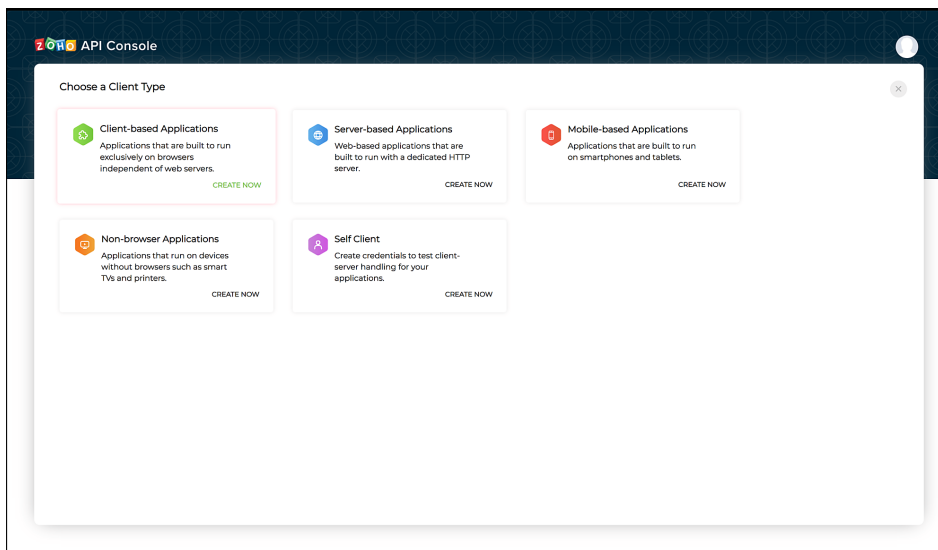
## Register your Application

Before you get started with authorization and make any calls using the Zoho CRM APIs, you need to register your application with Zoho CRM.

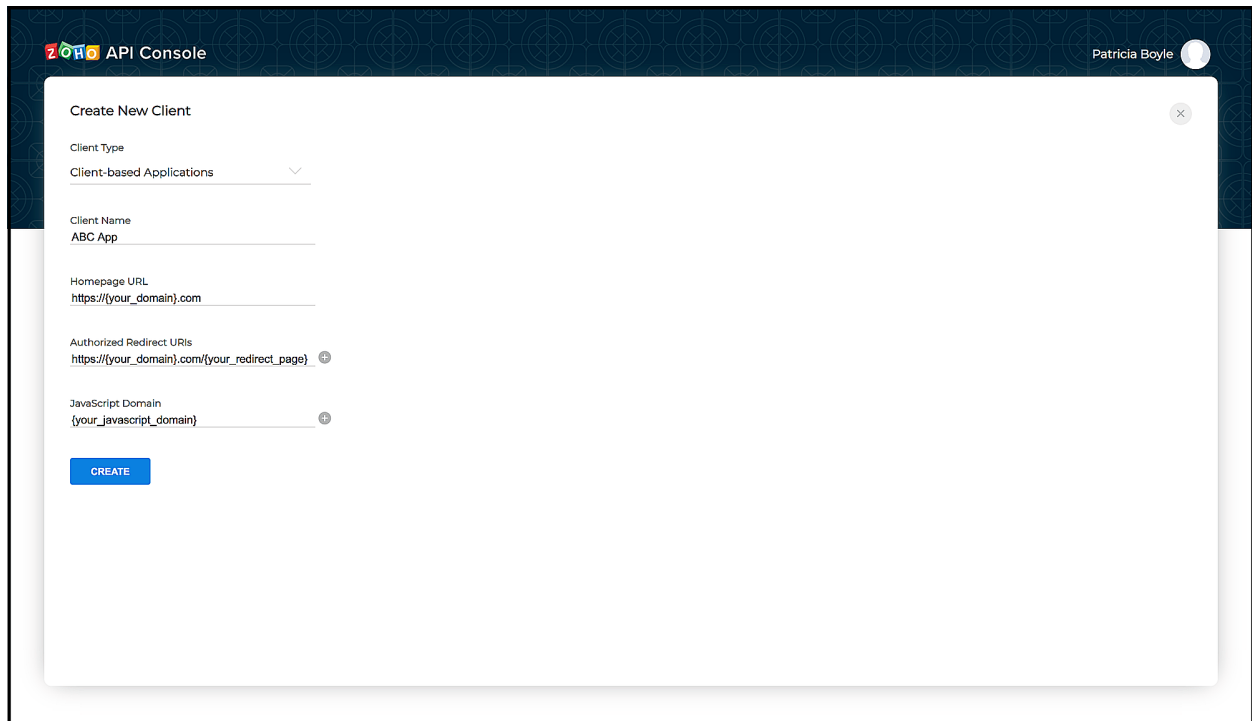
To register,

- Go to [Zoho Developer Console](#).
- Choose a client type:
  - **Client-based:** Applications that are built to run exclusively on browsers independent of web servers.
  - **Server-based:** Web-based applications that are built to run with a dedicated HTTP server.
  - **Mobile:** Applications that are installed on smart phones and tablets.
  - **Non-browser Mobile Applications:** Applications for devices without browser provisioning such as smart TVs and printers.
  - **Self Client:** Stand-alone applications that perform only back-end jobs (without any manual intervention) like data sync.

For more details, refer to [OAuth Overview](#).



- Enter the following details:
  - **Client Name:** The name of your application you want to register with Zoho.
  - **Homepage URL:** The URL of your web page.
  - **Authorized Redirect URIs:** A valid URL of your application to which Zoho Accounts redirects you with a grant token(code) after successful authentication.

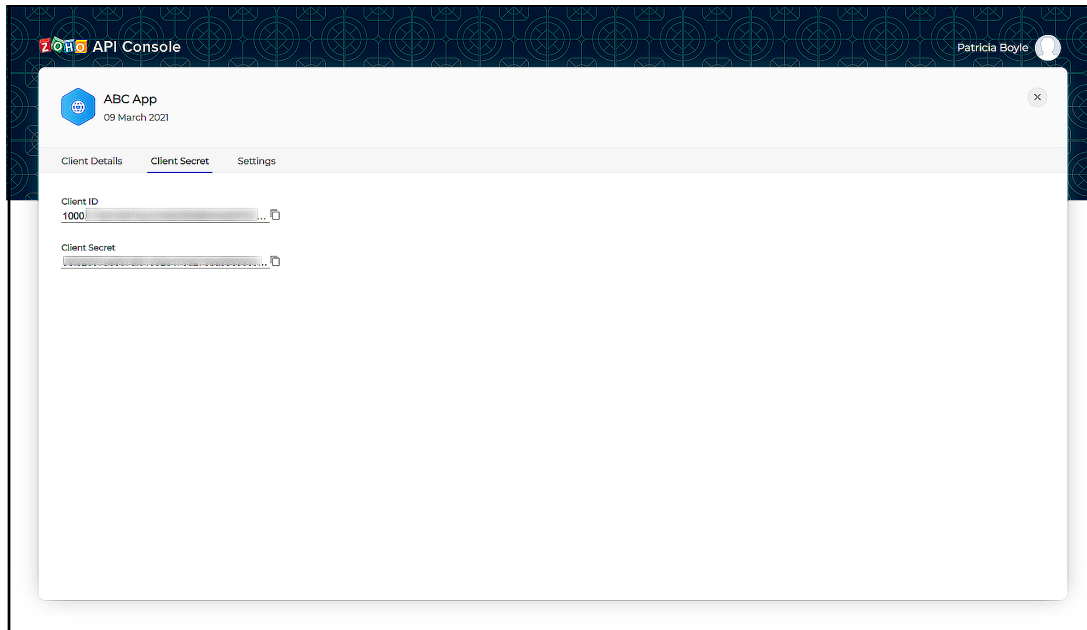


The screenshot shows the 'Create New Client' form in the Zoho API Console. The form is titled 'Create New Client' and has a close button (X) in the top right corner. The form fields are as follows:

- Client Type:** A dropdown menu with 'Client-based Applications' selected.
- Client Name:** A text input field containing 'ABC App'.
- Homepage URL:** A text input field containing 'https://(your\_domain).com'.
- Authorized Redirect URIs:** A text input field containing 'https://(your\_domain).com/(your\_redirect\_page)'.
- JavaScript Domain:** A text input field containing '(your\_javascript\_domain)'.

At the bottom of the form is a blue button labeled 'CREATE'.

- Click **CREATE**.
- You 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.



### Note

If you don't have a domain name and a redirect URL, you can use dummy values in their place and register your client.

## Using JS SDK in 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.

JavaScript SDK can be incorporated in two ways:

1. [Integrating JS SDK via Webapps.](#)
2. Using JS SDK on your own application.

### 1. Integrating JS SDK via Webapps

Follow the given steps for Integrating JS SDK:

- Register the client from CRM UI and note the client ID
- Create a new project using the command `zet init` via terminal/command line. Choose the option Catalyst and give the project name.
- A new folder will be created with the project name. Inside that, there will be a file

plugin\_manifest.json. Update the client ID in that file and the required scopes to be used in the web app.

- Under the project folder, there will be another folder named app. This will act as the base.
- Include the zcrmsdk.js file (available in app folder) and use it in your HTML files.

**a. For Webapps Integration:**

- After the development, run the command `zet pack` from the project base folder and upload it in CRM UI.

**Note** : Only one app can be uploaded for each client. While updating with the new app, the old one has to be deleted. Also, the redirect url will be changed.

- To know the redirect URL, `Initializer.store.getToken(token)` function has to be accessed from web app. It will redirect to `accounts.zoho.com/oauth/v2/auth` along with a parameter `'redirect_uri'`. Configure it in `https://api-console.zoho.com`.

**b. To test it in local machine using web framework:**

- Create a `redirect.html` page within the app folder. The code for `redirect.html` has been provided below.
- Run it using the **zet run** via terminal/command line.>
- Enter **127.0.0.1:{your\_port\_number}** (for eg. `127.0.0.1:5000`) in the browser's address bar and select the `app_file.html`
- It will redirect to **accounts.zoho.com/oauth/v2/auth** along with a **parameter redirect\_uri**. Configure it in `https://api-console.zoho.com/`
- If the page successfully redirects to the `redirect.html` page then the app works as intended.
- Once the token is set for the first time, the page will be reloaded.

**2. Using JS SDK on your own application.**

- Create a `redirect.html` page for your application.
- Set up your own web server and authorize the SDK.
- You can then use the SDK in your own application.

**Note:**

The code for redirect.html

```
1 <!DOCTYPE html>
2 <html lang="en">
3   <head>
4     <meta charset="UTF-8">
5     <meta name="viewport" content="width=device-width,
  initial-scale=1.0">
6     <meta http-equiv="X-UA-Compatible" content="ie=edge">
7     <title>Document</title>
8   </head>
9   <body></body>
10  <script>
11    function getPropertiesFromURL() {
12      var props = {};
13
14      var propertyString = window.location.hash ||
  window.location.search;
15
16      if( propertyString ) {
17
18        propertyString = ( typeof propertyString ===
  'string' ) && propertyString.slice(1);
19
20        if( propertyString ) {
21
22          propertyString
23            .split('&')
24            .forEach(function(prop) {
25
26              var key = prop.split('=')[0], value =
  prop.split('=')[1];
27
28              props[key] = value;
29            });
30        }
31    }
```





```

32
33     return props;
34 }
35
36 function setAccessToken() {
37
38     var hashProps = getPropertiesFromURL();
39
40     if(hashProps) {
41
42         for( var key in hashProps) {
43
44             if( hashProps.hasOwnProperty(key)) {
45
46                 var value = ( key === 'api_domain' ) ?
decodeURIComponent(hashProps[key]) : hashProps[key];
47
48                 localStorage.setItem(key, value);
49             }
50         }
51     }
52
53     setTimeout(function() { window.close(); }, 0);
54 }
55 setAccessToken();
56 </script>
57 </html>

```

**CDN Url** : <https://static.zohocdn.com/zohocrm/sdk/1.0.0/sdk.js>

## Configuration

Before you get started with creating your Javascript application, you need to register your client and authenticate the app with Zoho.

Follow the below steps to configure the SDK.

1. Create an instance of the **Logger** Class to log exception and API information.

```
1 /*
2 * Create an instance of Logger Class that takes parameter
3 * 1 -> Level of the log messages to be logged. Can be configured
  by typing Levels "." and choose any level from the list
  displayed.
4 */
5 let logger = Logger.getInstance(Levels.ALL);
```

2. Configure the **API environment** which decides the domain and the URL to make API calls.

```
1 * Configure the environment
2 * which is of the pattern Domain.Environment
3 * Available Domains: US, EU, IN, CN, AU
4 * Available Environments: PRODUCTION(), DEVELOPER(), SANDBOX()
5 */
6 let environment = DataCenter.US.PRODUCTION();
```

3. Create an instance of **OAuthToken** with the information that you get after registering your Zoho client.

```
1 /*
2 * Create a Token instance
3 * 1 -> OAuth client id.
4 * 2 -> OAuth redirect URL.
5 * 3 -> OAuth scope.
6 */
7 let token = new OAuthToken("clientId", "redirectURL", "scope");
```

4. Create an instance of **SDKConfig** containing the SDK configuration.

```

1      /*
2      * autoRefreshFields
3      * if true - all the modules' fields will be auto-
refreshed in the background, every hour.
4      * if false - the fields will not be auto-refreshed in the
background. The user can manually delete the cache or refresh the
fields using methods from ModuleFieldsHandler
5      *
6      * cacheStore
7      * A boolean field that allows or disallows the storage of
module field information in cache.
8      * True - the SDK stores all the modules' field
information in cache, and refreshes every hour, if
autoRefreshFields is true.
9      * False - the SDK temporarily stores the modules' field
information in a Map.
10     *
11     * if cacheStore true
12     * pickListValidation
13     * A boolean field that validates user input for a pick
list field and allows or disallows the addition of a new value to
the list.
14     * True - the SDK validates the input. If the value does
not exist in the pick list, the SDK throws an error.
15     * False - the SDK does not validate the input and makes
the API request with the user's input to the pick list
16     *
17     * timeout
18     * representing the number of milliseconds a request can
take before automatically being terminated.
19     */
20 let sdkConfig = new
SDKConfigBuilder().setAutoRefreshFields(true).setPickListValidati
on(false).setCacheStore(true).timeout(1000).build();

```

## Initializing the Application

To access the CRM services through the SDK, you must first authenticate your client app.

### Generating the grant token

#### For a Single User

The developer console has an option to generate grant token for a user directly. This option may be handy when your app is going to use only one CRM user's credentials for all its operations or for your development testing.

1. Login to your Zoho account.
2. Visit <https://api-console.zoho.com>
3. Click Self Client option of the client for which you wish to authorize.
4. Enter one or more (comma-separated) valid Zoho CRM scopes that you wish to authorize in the "Scope" field and choose the time of expiry.
5. Copy the grant token that is displayed on the screen.

#### Note

- The generated grant token is valid only for the stipulated time you chose while generating it. Hence, the access and refresh tokens should be generated within that time.
- The OAuth client registration and grant token generation must be done in the same Zoho account's (meaning - login) developer console.

#### For Multiple Users

For multiple users, it is the responsibility of your client app to generate the grant token from the users trying to login.

- Your Application's UI must have a "Login with Zoho" option to open the grant token URL of Zoho, which would prompt for the user's Zoho login credentials.

**Get Started today.**

Email  
\_\_\_\_\_

Password  
\_\_\_\_\_

I agree to the [Terms of Service](#) and [Privacy Policy](#).

**GET STARTED**

or using

**Z** **LOGIN WITH ZOHO**

- Upon successful login of the user, the grant token will be sent as a param to your registered redirect URL.

#### 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

## Initialization

You must pass the following details to the SDK and initialize it before you can make API calls.

1. **environment** - The environment such as Production, Developer, or Sandbox from

which you want to make API calls. This instance also takes the domain (data center) in which the tokens are generated. The format is *USDataCenter.PRODUCTION()*, *EUDataCenter.SANDBOX()* and so on.

2. **token** - The token must be specific to the user that makes the call, and specific to the org and the environment the token was generated in.

Besides the token, the token instance also takes the client ID, scope, and the redirect URI as its parameters.

3. **logger** - To log the messages. You can choose the level of logging of messages through **Logger.Levels**, and provide the absolute file path to the file where you want the SDK to write the messages in.

4. **sdkConfig** - The class that contains the values of autoRefresh and pickListValidation fields.

Initialize the SDK using the following code.

```
1 class SDKInitializer{
2
3     static async initializeSDK(){
4
5         /*
6          * Create an instance of Logger Class that takes parameter
7          * 1 -> Level of the log messages to be logged. Can be configured by
8          * typing Levels "." and choose any level from the list displayed.
9          */
10        let logger = Logger.getInstance(Levels.ALL);
11
12        /*
13         * Configure the environment
14         * which is of the pattern Domain.Environment
15         * Available Domains: US, EU, IN, CN, AU
16         * Available Environments: PRODUCTION(), DEVELOPER(), SANDBOX()
17         */
18        let environment = DataCenter.US.PRODUCTION();
19
20        /*
21         * Create a Token instance
22         * 1 -> OAuth client id.
23         * 2 -> OAuth redirect URL.
24         * 3 -> OAuth scope.
25         */
26        let token = new OAuthToken("clientId", "redirectURL", "scope");
27
28        /*
29         * autoRefreshFields
30         * if true - all the modules' fields will be auto-refreshed in the
```

```

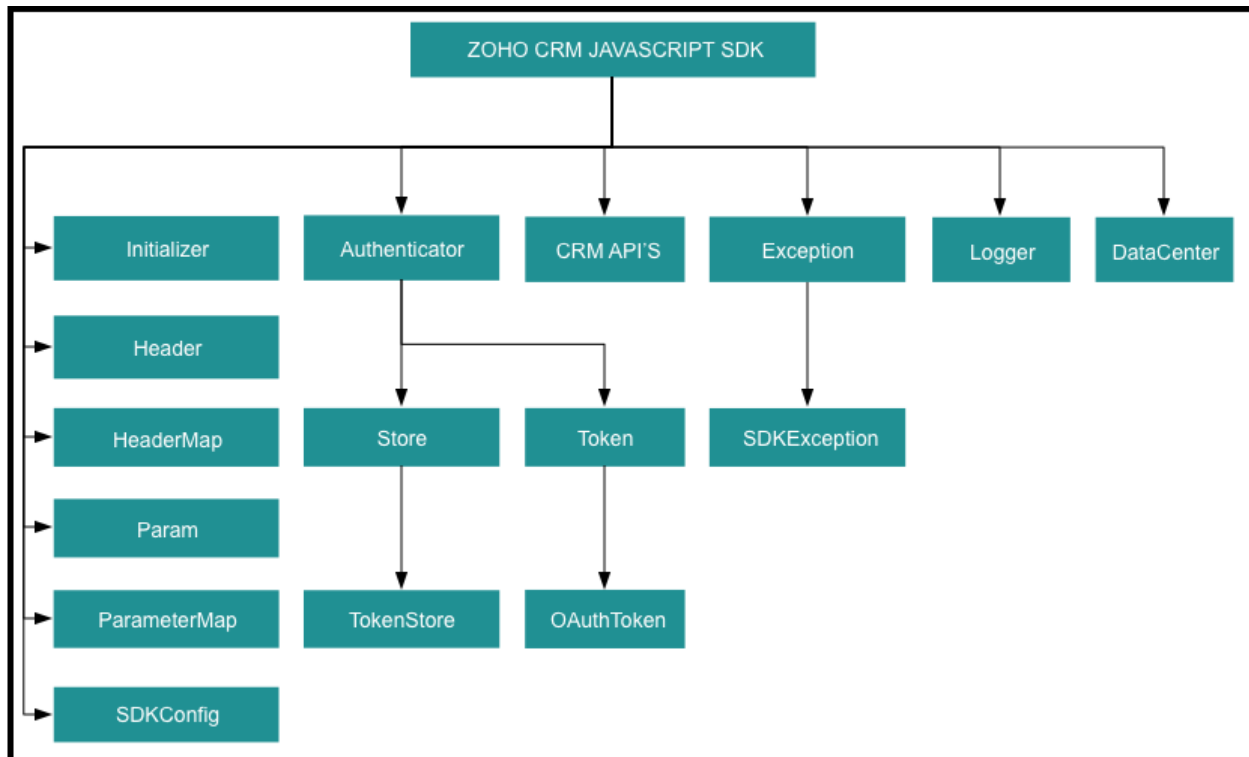
background, every hour.
31     * if false - the fields will not be auto-refreshed in the background.
The user can manually delete the cache or refresh the fields using methods from
ModuleFieldsHandler
32     *
33     * cacheStore
34     * A boolean field that allows or disallows the storage of module field
information in cache.
35     * True - the SDK stores all the modules' field information in cache,
and refreshes every hour, if autoRefreshFields is true.
36     * False - the SDK temporarily stores the modules' field information in
a Map.
37     *
38     * if cacheStore true
39     * pickListValidation
40     * A boolean field that validates user input for a pick list field and
allows or disallows the addition of a new value to the list.
41     * True - the SDK validates the input. If the value does not exist in
the pick list, the SDK throws an error.
42     * False - the SDK does not validate the input and makes the API request
with the user's input to the pick list
43     *
44     * timeout
45     * representing the number of milliseconds a request can take before
automatically being terminated.
46     */
47     let sdkConfig = new
SDKConfigBuilder().setAutoRefreshFields(true).setPickListValidation(false).setC
acheStore(true).build();
48
49     /*
50     * Call the static initialize method of Initializer class that takes
the following arguments
51     * 1 -> Environment instance
52     * 2 -> SDKConfig instance
53     * 3 -> Token instance
54     * 4 -> Logger instance
55     */
56     await initializeSDK(environment, sdkConfig, token, logger);
57   }
58 }

```

## Class Hierarchy

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

The class hierarchy of various Zoho CRM entities in the Javascript SDK is depicted in the following image.



## Responses and Exceptions

All SDK methods return an instance of the **APIResponse** class.

After a successful API request, the **getObject()** method returns an instance of the **ResponseWrapper** (for GET) or the **ActionWrapper** (for POST, PUT, DELETE).

Whenever the API returns an error response, the **getObject()** returns an instance of **APIException** class.

ResponseWrapper (for GET requests) and ActionWrapper (for POST, PUT, DELETE requests) are the expected objects for Zoho CRM API's responses.



However, some specific operations have different expected objects, such as the following:

- Operations involving records in Tags
  - RecordActionWrapper
- Getting Record Count for a specific Tag operation
  - CountWrapper
- Operations involving BaseCurrency
  - BaseCurrencyActionWrapper
- Lead convert operation
  - ConvertActionWrapper
- Retrieving Deleted records operation:
  - DeletedRecordsWrapper
- Record image download operation
  - FileBodyWrapper
- MassUpdate record operations
  - MassUpdateActionWrapper
  - MassUpdateResponseWrapper

## For GET Requests

- The getObject() returns an instance of one of the following classes, based on the return type.
- For application/json responses
  - ResponseWrapper
  - CountWrapper
  - DeletedRecordsWrapper
  - FileBodyWrapper
  - MassUpdateResponseWrapper
  - APIException

- For file download responses
  - FileBodyWrapper
  - APIException

## For POST, PUT, DELETE Requests

- The getObject() returns an instance of one of the following classes, based on the return type.
- For application/json responses
  - ActionWrapper
  - RecordActionWrapper
  - BaseCurrencyActionWrapper
  - MassUpdateActionWrapper
  - ConvertActionWrapper
  - APIException

These wrapper classes may contain one or a list of instances of the following classes, depending on the response.

- **SuccessResponse** Class, if the request is successful.
- **APIException** Class, if the request is erroneous.

For example, when you insert two records, and one of them was inserted successfully while the other one failed, the ActionWrapper will contain one instance each of the SuccessResponse and APIException classes.

All other exceptions such as SDK anomalies and other unexpected behaviors are thrown under the SDKException class.

### SDK Sample code

```

1 class Record{
2
3     static async call(){
4
5         /*
6             * Create an instance of Logger Class that takes
parameter
7             * 1 -> Level of the log messages to be logged. Can be
configured by typing Levels "." and choose any level from the

```

```

list displayed.
8         */
9         let logger = Logger.getInstance(Levels.ALL);
10
11        /*
12         * Configure the environment
13         * which is of the pattern Domain.Environment
14         * Available Domains: US, EU, IN, CN, AU
15         * Available Environments: PRODUCTION(), DEVELOPER(),
SANDBOX()
16         */
17         let environment = DataCenter.US.PRODUCTION();
18
19        /*
20         * Create a Token instance
21         * 1 -> OAuth client id.
22         * 2 -> OAuth redirect URL.
23         * 3 -> OAuth scope.
24         */
25         let token = new OAuthToken("clientId", "redirectURL",
"scope");
26
27        /*
28         * autoRefreshFields
29         * if true - all the modules' fields will be auto-
refreshed in the background, every hour.
30         * if false - the fields will not be auto-refreshed in
the background. The user can manually delete the cache or refresh
the fields using methods from ModuleFieldsHandler
31         *
32         * pickListValidation
33         * A boolean field that validates user input for a pick
list field and allows or disallows the addition of a new value to
the list.
34         * True - the SDK validates the input. If the value does
not exist in the pick list, the SDK throws an error.
35         * False - the SDK does not validate the input and makes
the API request with the user's input to the pick list
36         *
37         * cacheStore
38         * A boolean field that allows or disallows the storage

```

```

of module field information in cache.
39     * True - the SDK stores all the modules' field
information in cache, and refreshes every hour, if
autoRefreshFields is true.
40     * False - the SDK temporarily stores the modules' field
information in a Map.
41     * timeout - representing the number of milliseconds a
request can take before automatically being terminated.
42     */
43
44     let sdkConfig = new
SDKConfigBuilder().setAutoRefreshFields(true).setPickListValidati
on(false).setCacheStore(true).timeout(1000).build();
45
46     /*
47     * Call the static initialize method of Initializer class
that takes the following arguments
48     * 1 -> Environment instance
49     * 2 -> SDKConfig instance
50     * 3 -> Token instance
51     * 4 -> Logger instance
52     */
53     await initializeSDK(environment, sdkConfig, token,
logger);
54
55     await Record.getRecords();
56 }
57
58 static async getRecords() {
59
60     //Get instance of RecordOperations Class
61     let recordOperations = new ZCRM.Record.Operations();
62
63     //Get instance of ParameterMap Class
64     let paramInstance = new ParameterMap();
65
66     /* Possible parameters for Get Records operation*/
67     await
paramInstance.add(ZCRM.Record.Model.GetRecordsParam.APPROVED,
"both");
68     await

```

```

    paramInstance.add(ZCRM.Record.Model.GetRecordsParam.CONVERTED,
"both");
69
70     await
    paramInstance.add(ZCRM.Record.Model.GetRecordsParam.SORT_BY,
"Email");
71     await
    paramInstance.add(ZCRM.Record.Model.GetRecordsParam.SORT_ORDER,
"desc");
72     await
    paramInstance.add(ZCRM.Record.Model.GetRecordsParam.PAGE, 1);
73     await
    paramInstance.add(ZCRM.Record.Model.GetRecordsParam.PER_PAGE,
200);
74
75     //Get instance of HeaderMap Class
76     let headerInstance = new HeaderMap();
77
78     /* Possible headers for Get Record operation*/
79     await
    headerInstance.add(ZCRM.Record.Model.GetRecordsHeader.IF_MODIFIED
_SINCE, new Date("2020-01-01T00:00:00+05:30"));
80
81     //Call getRecords method that takes paramInstance,
headerInstance and moduleAPIName as parameters
82     let response = await
recordOperations.getRecords("Leads");
83
84     if(response != null) {
85
86         //Get the status code from response
87         console.log("Status Code: " +
response.getStatusCode());
88
89         if([204, 304].includes(response.getStatusCode())){
90             console.log(response.getStatusCode() == 204? "No
Content" : "Not Modified");
91
92             return;
93     }

```



```

94
95     //Get the object from response
96     let responseObject = response.getObject();
97     if(responseObject != null){
98         //Check if expected ResponseWrapper instance is
    received
99         if(responseObject instanceof
    ZCRM.Record.Model.ResponseWrapper){
100             //Get the array of obtained Record instances
101             let records = responseObject.getData();
102             for (let index = 0; index < records.length;
    index++) {
103                 let record = records[index];
104                 //Get the ID of each Record
105                 console.log("Record ID: " +
    record.getId());
106                 //Get the createdBy User instance of
    each Record
107                 let createdBy = record.getCreatedBy();
108                 //Check if createdBy is not null
109                 if(createdBy != null)
110                 {
111                     //Get the ID of the createdBy User
112                     console.log("Record Created By User-
    ID: " + createdBy.getId());
113                     //Get the name of the createdBy User
114                     console.log("Record Created By User-
    Name: " + createdBy.getName());
115                     //Get the Email of the createdBy
    User
116                     console.log("Record Created By User-
    Email: " + createdBy.getEmail());
117                 }
118                 //Get the CreatedTime of each Record
119                 console.log("Record CreatedTime: " +
    record.getCreatedTime());
120                 //Get the modifiedBy User instance of
    each Record
121                 let modifiedBy = record.getModifiedBy();
122                 //Check if modifiedBy is not null

```

```

123         if(modifiedBy != null){
124             //Get the ID of the modifiedBy User
125             console.log("Record Modified By
User-ID: " + modifiedBy.getId());
126             //Get the name of the modifiedBy
User
127             console.log("Record Modified By
User-Name: " + modifiedBy.getName());
128             //Get the Email of the modifiedBy
User
129             console.log("Record Modified By
User-Email: " + modifiedBy.getEmail());
130         }
131         //Get the ModifiedTime of each Record
132         console.log("Record ModifiedTime: " +
record.getModifiedTime());
133         //Get the list of Tag instance each
Record
134         let tags = record.getTag();
135         //Check if tags is not null
136         if(tags != null){
137             tags.forEach(tag => {
138                 //Get the Name of each Tag
139                 console.log("Record Tag Name: "
+ tag.getName());
140                 //Get the Id of each Tag
141                 console.log("Record Tag ID: " +
tag.getId());
142             });
143         }
144         let keyValues = record.getKeyValues();
145         let keyArray =
Array.from(keyValues.keys());
146         for (let keyIndex = 0; keyIndex <
keyArray.length; keyIndex++) {
147             const keyName = keyArray[keyIndex];
148             let value = keyValues.get(keyName);
149
150             console.log(keyName + " : " +
value);

```

```

151         }
152     }
153 }
154 }
155 }
156 }
157 }

```

## Sample Codes

All of Zoho CRM's APIs can be used through the Javascript 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.

### Attachment Operations

Constructor	Description
AttachmentsOperations(moduleApiName, recordId)	Creates an AttachmentsOperations class instance with the moduleAPIName and recordId.

Method	Description
<a href="#">getAttachments</a>	To fetch the list of attachments of a record.
<a href="#">uploadAttachments</a>	To upload attachments to a record.
<a href="#">deleteAttachments</a>	To delete the attachments that were



	added to a record.
<a href="#">deleteAttachment</a>	To delete an attachment that was added to a record.
<a href="#">downloadAttachment</a>	To download an attachment that was uploaded to a record.
<a href="#">uploadLinkAttachments</a>	To upload a link as an attachment to a record

### Blueprint Operations

Constructor	Description
BluePrintOperations(recordId, moduleApiName)	Creates a BluePrintOperations class instance with the recordId and moduleAPIName.

Method	Description
<a href="#">getBlueprint</a>	To get the next available transitions for that record, fields available for each transition, current value of each field, and validation(if any).
<a href="#">updateBlueprint</a>	To update a single transition at a time.

## Bulk Read Operations

Method	Description
<a href="#">createBulkReadJob</a>	To schedule a bulk read job to export records that match the criteria.
<a href="#">getBulkReadJobDetails</a>	To know the status of the bulk read job scheduled previously.
<a href="#">downloadResult</a>	To download the result of the bulk read job. The response contains a zip file. Extract it to get the CSV or ICS file depending on the "file_type" you specified while creating the bulk read job

## Bulk Write Operations

Method	Description
<a href="#">uploadFile</a>	To upload a CSV file in ZIP format. The response contains the "file_id". Use this ID while making the bulk write request.
<a href="#">createBulkWriteJob</a>	To create a bulk write job to insert, update, or upsert records. The response contains the "job_id". Use this ID while getting the status of the scheduled bulk write job.
<a href="#">getBulkWriteJob_details</a>	To know the status of the bulk write job scheduled previously.



<a href="#">downloadResult</a>	To download the result of the bulk write job. The response contains a zip file. Extract it to get the CSV or ICS file depending on the "file_type" you specified while creating the write read job
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### Contact Roles Operations

Method	Description
<a href="#">getContactRoles</a>	To get the list of all contact roles.
<a href="#">createContactRoles</a>	To create contact roles.
<a href="#">updateContactRoles</a>	To update contact roles.
<a href="#">deleteContactRoles</a>	To delete contact roles.
<a href="#">getContactRole</a>	To get specific contact role.
<a href="#">updateContactRole</a>	To update specific contact role.
<a href="#">deleteContactRole</a>	To delete specific contact role

### Currencies Operations

Method	Description
<a href="#">getCurrencies</a>	To get the list of all currencies available

	for your org.
<a href="#">addCurrencies</a>	To add new currencies to your org.
<a href="#">updateCurrencies</a>	To update the currencies' details of your org.
<a href="#">enableMultipleCurrencies</a>	To enable multiple currencies for your org.
<a href="#">updateBaseCurrency</a>	To update the base currency details of your org.
<a href="#">getCurrency</a>	To get the details of specific currency.
<a href="#">updateCurrency</a>	To update the details of specific currency

### Custom View Operations

Constructor	Description
CustomViewsOperations(module)	Creates a CustomViewsOperations class instance with the moduleAPIName

Method	Description
<a href="#">getCustomViews</a>	To get the list of all custom views in a module.
	To get the details of specific custom view

<a href="#">getCustomView</a>	in a module
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### Fields Metadata Operations

Constructor	Description
FieldsOperations(module)	Creates a FieldsOperations class instance with the module

Method	Description
<a href="#">getFields</a>	To get the meta details of all fields in a module.
<a href="#">getField</a>	To get the meta details of specific field in a module

### Files Operations

Method	Description
<a href="#">uploadFiles</a>	To upload files and get their encrypted IDs.
<a href="#">getFile</a>	To get the uploaded file through its encrypted ID

### Layouts Operations

Constructor	Description
LayoutsOperations(module)	Creates a LayoutsOperations class instance with the moduleAPIName

Method	Description
<a href="#">getLayouts</a>	To get the details of all the layouts in a module.
<a href="#">getLayout</a>	To get the details (metadata) of a specific layout in a module

### Modules Operations

Method	Description
<a href="#">getModules</a>	To get the details of all the modules.
<a href="#">getModule</a>	To get the details (metadata) of a specific module.
<a href="#">updateModuleByApiName</a>	To update the details of a module by its module API name.
<a href="#">updateModuleById</a>	To update the details of a module by its ID

### Notes Operations



Method	Description
<a href="#">getNotes</a>	To get the list of notes of a record.
<a href="#">createNotes</a>	To add new notes to a record.
<a href="#">updateNotes</a>	To update the details of the notes of a record.
<a href="#">deleteNotes</a>	To delete the notes of a record.
<a href="#">getNote</a>	To get the details of a specific note.
<a href="#">updateNote</a>	To update the details of an existing note.
<a href="#">deleteNote</a>	To delete a specific note

### Notification Operations

Method	Description
<a href="#">enableNotifications</a>	To enable instant notifications of actions performed on a module.
<a href="#">getNotificationDetails</a>	To get the details of the notifications enabled by the user.
<a href="#">updateNotifications</a>	To update the details of the notifications enabled by a user. All the provided details would be persisted and rest of the details

	would be removed.
<a href="#">updateNotification</a>	To update only specific details of a specific notification enabled by the user. All the provided details would be persisted and rest of the details will not be removed.
<a href="#">disableNotifications</a>	To stop all the instant notifications enabled by the user for a channel.
<a href="#">disableNotification</a>	To disable notifications for the specified events in a channel

### Organization Operations

Method	Description
<a href="#">getOrganization</a>	To get the details of your organization.
<a href="#">uploadOrganizationPhoto</a>	To upload a photo of your organization

### Profile Operations

Constructor	Description
ProfilesOperations(ifModifiedSince)	Creates a ProfilesOperations class instance with the value of the If-Modified-Since header



Method	Description
<a href="#">getProfiles</a>	To get the list of profiles available for your organization.
<a href="#">getProfile</a>	To get the details of a specific profile

### Query (COQL) Operation

Method	Description
<a href="#">getRecords</a>	To get the records from a module through a COQL query

### Records Operations

Method	Description
<a href="#">getRecord</a>	To get a specific record from a module.
<a href="#">updateRecord</a>	To update a specific record in a module.
<a href="#">deleteRecord</a>	To delete a specific record from a module.
<a href="#">getRecords</a>	To get all records from a module.
<a href="#">createRecords</a>	To insert records in a module.
<a href="#">updateRecords</a>	To update records in a module.



<a href="#">deleteRecords</a>	To delete records from a module.
<a href="#">upsertRecords</a>	To insert/update records in a module.
<a href="#">getDeletedRecords</a>	To get the deleted records from a module.
<a href="#">searchRecords</a>	To search for records in a module that match certain criteria, email, phone number, or a word.
<a href="#">convertLead</a>	To convert records(Leads to Contacts/Deals).
<a href="#">getPhoto</a>	To get the photo of a record.
<a href="#">uploadPhoto</a>	To upload a photo to a record.
<a href="#">deletePhoto</a>	To delete the photo of a record.
<a href="#">massUpdateRecords</a>	To update the same field for multiple records in a module.
<a href="#">getMassUpdateStatus</a>	To get the status of the mass update job scheduled previously

## Related List Operations

Constructor	Description
RelatedListsOperations(module)	Creates a RelatedListsOperations class instance with the moduleAPIName

Method	Description
<a href="#">getRelatedLists</a>	To get the details of all the related lists of a module.
<a href="#">getRelatedList</a>	To get the details of a specific related list of a module

## Related Records Operations

Constructor	Description
RelatedRecordsOperations(relatedListApi Name, recordId, moduleApiName)	Creates a RelatedRecordsOperations class instance with the relatedListAPIName, recordId, and moduleAPIName

Method	Description
<a href="#">getRelatedRecords</a>	To get list of records from the related list of a module.
<a href="#">updateRelatedRecords</a>	To update the association/relation

	between the records.
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## Roles Operations

Method	Description
<a href="#">getRoles</a>	To get the list of all roles available in your organization.

## Shared Records Operations

Constructor	Description
ShareRecordsOperations(recordId, moduleApiName)	Creates a ShareRecordsOperations class instance with the recordId and moduleAPIName

Method	Description
<a href="#">getSharedRecordDetails</a>	To get the details of a record shared with other users.
<a href="#">shareRecord</a>	To share a record with other users in the organization.
<a href="#">updateSharePermissions</a>	To <ul style="list-style-type: none"> <li>Update the sharing permissions of a record granted to users as Read-Write, Read-only, or grant full access.</li> </ul>

	<ul style="list-style-type: none"> <li>● Revoke access given to users to a shared record.</li> <li>● Update the access permission to the related lists of the record that was shared with the user.</li> </ul>
<a href="#">revokeSharedRecord</a>	To revoke access to a shared record

### Tags Operations

Method	Description
<a href="#">getTags</a>	To get the list of all tags in your organization.
<a href="#">createTags</a>	To create tags.
<a href="#">updateTags</a>	To update multiple tags.
<a href="#">updateTag</a>	To update a specific tag.
<a href="#">deleteTag</a>	To delete a specific tag from the module.
<a href="#">mergeTags</a>	To merge two tags.
<a href="#">addTagsToRecord</a>	To add tags to a specific record.
<a href="#">removeTagsFromRecord</a>	To remove tags from a record.



<a href="#">addTagsToMultipleRecords</a>	To add tags to multiple records.
<a href="#">removeTagsFromMultipleRecords</a>	To remove tags from multiple records.
<a href="#">getRecordCountForTag</a>	To get the record count for a tag.

### Taxes Operations

Method	Description
<a href="#">getTaxes</a>	To get the taxes of your organization.
<a href="#">createTaxes</a>	To add taxes to your organization.
<a href="#">updateTaxes</a>	To update the existing taxes of your organization.
<a href="#">deleteTaxes</a>	To delete multiple taxes from your organization.
<a href="#">getTax</a>	To get the details of a specific tax.
<a href="#">deleteTax</a>	To delete a specific tax from your organization

### Territory Operations

Method	Description
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<a href="#">getTerritories</a>	To get the list of all territories.
<a href="#">getTerritory</a>	To get the details of a specific territory

### Users Operations

Method	Description
<a href="#">getUsers</a>	To get the list of users in your organization.
<a href="#">createUser</a>	To add a user to your organization.
<a href="#">updateUsers</a>	To update the existing users of your organization.
<a href="#">getUser</a>	To get the details of a specific user.
<a href="#">updateUser</a>	To update the details of a specific user.
<a href="#">deleteUser</a>	To delete a specific user from your organization

### Variable Groups Operations

Method	Description
<a href="#">getVariableGroups</a>	To get the list of all variable groups available for your organization.

<a href="#">getVariableGroupById</a>	To get the details of a variable group by its group ID.
<a href="#">getVariableGroupByApiName</a>	To get the details of a specific variable group by its API name

### Variables Operations

Method	Description
<a href="#">getVariables</a>	To get the list of variables available for your organization.
<a href="#">createVariables</a>	To add new variables to your organization.
<a href="#">updateVariables</a>	To update the details of variables.
<a href="#">deleteVariables</a>	To delete multiple variables.
<a href="#">getVariableById</a>	To get the details of a specific variable by its unique ID.
<a href="#">updateVariableById</a>	To update the details of a specific variable by its unique ID.
<a href="#">deleteVariable</a>	To delete a specific variable.
<a href="#">getVariableForApiName</a>	To get the details of a variable by its API name.





[updateVariableByApiName](#)

To update the details of a variable by its API name

## Release Notes

### Current Version

ZCRMSDK -VERSION 1.1.0

CD URL: <https://static.zohocdn.com/zohocrm/sdk/1.1.0/sdk.js>

#### Notes

- Supported Tag-CarryOver and External ID

### Previous Versions

ZCRMSDK -VERSION 1.0.0

Install command: <https://static.zohocdn.com/zohocrm/sdk/1.0.0/sdk.js>

#### Notes

- Introducing Zoho CRM JavaScript SDK
- A new SDK that represents a significant effort to utilize the capabilities of JavaScript in managing your CRM data.
- The SDK is highly structured to ensure easy access to all the components.
- Each CRM entity is represented by an object, and each object contains an Operations Class that incorporates methods to perform all possible operations over that entity.
- **SDKException** - A wrapper class to wrap all exceptions such as SDK anomalies and other unexpected behaviors.
- **StreamWrapper** - A wrapper class for File operations.
- **APIResponse** - A common response instance for all the SDK method calls.