

18.10 Internal REST Webservice Methods

These Web services allow you to do HTTP requests to the specified endpoints (VTE_URL/restapi/v1/vtews/METHOD_NAME).

The requests need POST method, basic authentication (you must set 'Authentication basic' into the header which is calculated through a function based on username* and password*) and their relative parameters.

Each one method will give a JSON response with a status and the data or in case of error an error code and its relative message.

Notes:

- The "id" parameter is always specified as 'moduleid* x recordid' (ex: 2x313)
*: You can get the the moduleid from webservice 'describe' method (idPrefix)

Headers:

- Authorization: Basic base64_encode("username*:password*")
- Content-Type : application/json

username* (VTE) password* (User preferences' Webservice Access Key)

Authorization Example:

'Basic ZmVkZXJpY28ucGVybGluOjB5cm5MRjNhS2RhMDZ2c3E='

Requirements for Apache2:

- Activate apache rewrite module
- Set AllowOverride All into the virtualhost file to the vte path folder.

Example:

```
<Directory /var/www/html/VTE_FOLDER>
Options -Indexes +FollowSymLinks +MultiViews
AllowOverride All
Require all granted
</Directory>
```

Requirements for Nginx + PHP FPM

As Nginx does not handle htaccess file, some special rewrites are needed in order to handle WS requests.

Below an example of nginx conf file:

```
server {  
    listen 80;  
  
    root /var/www/vtenext/  
      
    autoindex off;  
      
    index index.php index.html index.htm;  
  
    # Make site accessible from http://localhost/  
      
    server_name localhost;  
  
    location / {  
        # First attempt to serve request as file, then  
        # as directory, then fall back to index.html  
        try_files $uri $uri/ index.html;  
    }  
  
    # deny access to .htaccess files, if Apache's document root  
    # concurs with nginx's one  
    location ~ /\.ht {  
        deny all;  
    }  
      
    # special folder handling, since .htaccess files are not supported  
      
    # REST API  
      
    location /restapi/v1 {  
        rewrite ^(.+)/vtews/(.*)$ /restapi/v1/index.php/vtews/$2;  
    }  
  
    # PORTAL  
  
    location ~ /portal/v2/(?!public) {
```

```

RewriteEngine On
RewriteRule ^/portal/v2/(.*)$ /portal/v2/public/$1;

}

# STORAGE

location /storage {
    deny all;

    location /storage/uploads_emails_ {
        allow all;
    }

    location /storage/images_uploaded/ {
        allow all;
    }

    location ~* /storage/logo/.+\. (jpg|jpeg|png|gif)$ {
        allow all;
    }

    RewriteRule ^/storage/(.*)$ /getStorage.php?file=$1;
}

# PROTECTED FOLDERS

location /logs {
    deny all;
}

location /plugins/dataimporter {
    deny all;
}

location /cache/sys {
    deny all;
}

location /cache/pdfmaker {
    deny all;
}
```

```

[]
[]location /cache/import {
[]deny all;
[]}
[]
[]location /cache/session {
[]deny all;
[]}
[]
[]location /cache/pdf {
[]deny all;
[]}
[]
[]location /dataimport {
[]deny all;
[]}
[]
[]location /modules/VteSync/VteSyncLib/storage {
[]deny all;
[]}
[]
[]location /modules/Messages/src/attachment_tnef/plugins/attachment_tnef/class/ {
[]deny all;
[]}
[]
[]# SMARTOPTIMIZER
[]
[]# disabled by default, enable it if needed
[]#location ~* \.(gif|jpe?g|png|swf|css|js|html?|xml|txt|ico)$ {
[]#[]rewrite ^(.*)$ /smartoptymizer/?$1;
[]#}

# pass the PHP scripts to FastCGI server listening on 127.0.0.1:9000
[]location ~ [^/]\.php(/|$) {
[]include snippets/fastcgi-php.conf;
[]
[]# With php cgi alone:
[]#fastcgi_pass 127.0.0.1:9000;
[]
[]# With php fpm:

```

```

[[fastcgi_pass unix:/var/run/php/php7.0-fpm.sock;
[[fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;
[]
}
}

```

Web Service Methods:

| Name | Description | Parameters | Response |
|--------------------------|--|--|--|
| create | Create a record of the specified module | elementType (String)element (Encoded) | Return all fields and values of the created record |
| | Ex: Url: VTE_URL/restapi/v1/vtews/create Parameters: {"elementType":"Accounts", "element":{"\accountname\":"account1\","assigned_user_id\":"19x1\"},"} | | |
| update | Update the specified record | id (String)columns (Encoded) | Return all fields and values of the updated record |
| | Ex: Url: VTE_URL/restapi/v1/vtews/update Parameters: {"id":"3x310", "columns":{"\accountname\":"test fede postman\"},"} | | |
| revise | Update the specified record. It's different only for parameters, the result is the same | element (Encoded) | Return all fields and updated values |
| | Ex: Url: VTE_URL/restapi/v1/vtews/revise Parameters: {"element":{"\id\":"3x27\","\employees\":"5\","\industry\":"Banking\"},"} | | |
| retrieve | Illustrate the fields of the specified record and their relative values | id (String) | Return all fields and values of the specified record |
| | Ex: Url: VTE_URL/restapi/v1/vtews/retrieve Parameters: {"id":"3x310"} | | |
| retrieveinventory | Illustrate the fields of the specified inventory record, their relative values and the product block's information | id (String) | Return all fields and values of the specified record and product's block information |
| | Ex: Url: VTE_URL/restapi/v1/vtews/retrieveinventory Parameters: {"id":"16x104"} | | |
| delete | Delete the specified record | id (String) | Return the request status (successful or not) |

Ex: **Url:** VTE_URL/restapi/v1/vtews/delete

Parameters:
{ "id": "3x306" }

| | | | |
|--------------------|--|---|--|
| query | Execute a query and return the result's rows | query (String) | Return all rows of the executed query |
| | Ex: Url: VTE_URL/restapi/v1/vtews/query Parameters: { "query": "SELECT * FROM Accounts WHERE accountname like '%vte%';" } | | |
| listtypes | Describe each one module which contains uitype of the specified format | fieldTypeList (Encoded) | Return module information of the specified fieldtypes |
| | Ex: Url: VTE_URL/restapi/v1/vtews/listtypes Parameters: { "fieldTypeList": "[\"integer\\\", \"file\\\"]" } | | |
| describe | Describe the specified module and their relative fields | elementType (String) | Return all module information and its fields properties(no hidden fields) |
| | Ex: Url: VTE_URL/restapi/v1/vtews/describe Parameters: { "elementType": "Accounts" } | | |
| describeall | The describeall method is different from describe one because it shows hidden fields too | ElementType (Encoded) | Return all module information and its fields properties(hidden fields too) |
| | Ex: Url: VTE_URL/restapi/v1/vtews/describeall Parameters: { "elementType": "Accounts" } | | |
| getlabels | Return all labels and translated ones of the specified module, language | username (String) language (String) module (String) | Return labels and translated ones of the specified module, language |
| | Ex: Url: VTE_URL/restapi/v1/vtews/getlabels Parameters: { "username": "admin", "language": "it_it", "module": "Accounts" } | | |
| getlangs | Return all languages installed into the CRM | | Return all CRM languages |
| loginpwd | Return user webservice access key if username and password are valid | username (String) password (String) | Return user webservice access key |
| | Ex: Url: VTE_URL/restapi/v1/vtews/loginpwd Parameters: { "username": "admin", "password": "123456789" } | | |
| getmenulist | Return all modules information (visibility, tabid, name, sequence, ...) | | Return modules information and properties |

| | | | |
|------------------|--|--|---|
| oldoquery | Return records that contain the searched value into specified module's fields | module (String)search_fields (Encoded)search_value (String) | Return some record basic information where searched value is contained into the specified module's fields |
| | Ex: Url: VTE_URL/restapi/v1/vtews/oldoquery Parameters: { "module": "Accounts", "search_fields": "[\\"accountname\\", \\"website\\"]", "search_value": "vtenext" } | | |

Is possible to register a new custom method with this SDK call:

SDK::setRestOperation(\$rest_name, \$handler_path, \$function_name, \$parameters,\$perm);

- \$rest_name: method name called by REST webservice
- \$handler_path: file path where the funtion is defined
- \$function_name: defined function name
- \$parameters: associative array with parameterName and parameterType
- \$perm: (only from vtenext 23.08) one of “read”, “write” or “readwrite”, describing the kind of operation of this webservice. Used with additional accesskey for the users.

Example

```
SDK::setRestOperation('check_exists','modules/SDK/examples/RestApi/CustomRestApi.php','vtws_check_exists',  
array('id'=>'string'),'read');
```