

SimpleSF1.robot Script

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*** Settings ***

Library SeleniumLibrary
Library ExcelLibrary
Library DataDriver      .xlsx
Library SimpleSF1.py
Resource SSRResource.robot

Documentation      Salesforce Script for object data REST API Testing
#robot -d ARAPI\Results2 ARAPI\SimpleSF1.robot

Suite Setup      Open Salesforce and Launch Excel
Suite Teardown   Stop Excel
Test Template     REST API Scenarios

*** Variables ***

*** Test Cases ***

Test Case - ${testcase} - ${description}

*** Keywords ***
REST API Scenarios
    [Arguments]  ${sObject}  ${operators}  ${value1}  ${value2}  ${value3}
    Define Variables as Global  ${SF}  ${sObject}  ${operators}  ${value1}
    ${value2}  ${value3}
    Run Keyword If  '${operators}'=='Create'  Create Object  ${SF}
    ${sObject}  ${value1}
    Run Keyword If  '${operators}'=='Get'  Get Object  ${SF}  ${sObject}
    ${value1}
    Run Keyword If  '${operators}'=='Update'  Update Object  ${SF}
    ${sObject}  ${value1}  ${value2}
    Run Keyword If  '${operators}'=='Query'  Query Object  ${SF}  ${sObject}
    ${value1}
```

SimpleSF1.py Script

```
from simple_salesforce import Salesforce

import requests
import json

sfdc_user = " "
security_token = " "
psw = " "
sfdc_pass = " "

def assign_security():

    # sfdc_user = your SFDC username
    sfdc_user = 'wallytauriac@gmail.com'

    # Security Token for password
    security_token = 'wVdIhfOUTFCTILuhqFGHgi4n'

    # sfdc_pass = your SFDC password
    psw = 'SummerWT#2021'
    sfdc_pass = psw + security_token

    return sfdc_user, psw, security_token

def login_to_salesforce(sfdc_user, psw, security_token):

    # * username -- the Salesforce username to use for authentication
    # * password -- the password for the username
    # * security_token -- the security token for the username
    # * domain -- The domain to using for connecting to Salesforce. Use
    #               common domains, such as 'login' or 'test', or
    #               Salesforce My domain. If not used, will default to
    #               'login'.

    # Simple Salesforce Login
    sf = Salesforce(username=sfdc_user, password=psw,
security_token=security_token)
    return sf

def create_salesforce_object(sf, subject, object_data):
    o = subject
    sf1 = sf
    object_data2 = convert_object(object_data)

    try:
        subject_data = getattr(sf1, o).create(object_data2)
    except Exception as e:
        #print(e)
        return e

    id = subject_data['id']
    if subject_data['success'] == True:
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        print("Created new " + subject + ": ID= " + id)
        contact_data2 = getattr(sf1, o).get(id)
        return contact_data2
    else:
        return subject_data['errors']

def update_salesforce_object(sf, subject, object_data):
    o = subject
    sf1 = sf
    object_data2 = convert_object(object_data)

    try:
        subject_data = getattr(sf1, o).update(object_data2)
    except Exception as e:
        print(e)
        return e

    id = subject_data['Id']
    if subject_data['success'] == True:
        print(id)
        contact_data2 = getattr(sf1, o).get(id)
        return contact_data2
    else:
        return subject_data['errors']

def query_salesforce_object(sf, subject, query):
    #query = "SELECT Id FROM " + subject
    data = sf.query(query)
    return data

def get_by_id(sf, subject, id):
    o = subject

    try:
        data = getattr(sf, o).get(id)
        return data
    except Exception as e:
        print(e)

def convert_object(object_data):
    object_data2 = []
    object_data3 = []
    list_keys = []
    list_vals = []
    object_data2 = ''.join(object_data)
    object_data2 = object_data2.rsplit(",")
    for i in range(len(object_data2)):
        ndx = object_data2[i].find(":")
        lk = object_data2[i]
        lkk = str(lk[:ndx])
        lkk = lkk.strip()
        list_keys.append(lkk)
        lkk2 = str(lk[ndx + 1:])
        lkk2 = lkk2.strip()
        list_vals.append(lkk2)
    for y in range(len(list_keys)):
        list_keys[y].strip()

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list_vals[y].strip()

object_data2 = zip(list_keys, list_vals)
object_data3 = dict(object_data2)
return object_data3
```

SimpleSF1.xlsx Spreadsheet

\${testcase}	\${sObject}	\${operators}	\${description}	\${value1}	\${value2}
TC001	Opportunity	Create	Create Opportunity	Name:Auto for Sale, Description:Blue Ford Extra 4DR, Amount:30000.00, StageName:Needs Analysis, CloseDate:2021-12-15	
TC002	Opportunity	Get	Get Opportunity	0065e000006d8wLAAQ	
TC003	Contact	Update	Update Contact	0035e000008BsLXAA0	LastName:Smith, FirstName:Wally
TC004	Contact	Query	Query Contact	Select ID from Contact	
TC005	Account	Create	Create Account	Name:North Company, NumberOfEmployees:12, Industry:Oil & Gas	
TC006	Contact	Create	Create Contact	FirstName:Wally, LastName:Johnson2, Email:johnson2@example.com, MailingCity:New City, MailingState:New State	
TC007	Lead	Create	Create Lead	FirstName:Sally, LastName:Jones1, Email:jones1@example.com, Company:North Company	
TC008	Opportunity	Get	Get Opportunity	0065e00000731q4AAA	

SSResource.robot RF Resource File

```
*** Settings ***
Library SeleniumLibrary
Library ExcelLibrary
Library DataDriver .xlsx

*** Variables ***
${username} Salesforce User Name
${password} Salesforce Password
${api_token} Salesforce Security Token

*** Keywords ***
Open Salesforce and Launch Excel
    Open Salesforce
    Launch Excel

Open Salesforce
    ${username} ${password} ${api_token} Assign Security
    ${SF}= Login To Salesforce ${username} ${password} ${api_token}
    Set Global Variable ${SF}

Launch Excel

    Open Excel Document
filename=C:/Users/wally/Documents/Python/Demo/MFRest/ARAPI/SimpleSF1.xlsx
doc_id=docid keep_vba=false
    Get Sheet sheet_name=TCases
    ${sObject}= Read Excel Cell row_num=2 col_num=2 sheet_name=TCases
    ${testcase} Read Excel Column col_num=1 row_offset=0 max_num=0
sheet_name=TCases
    ${description} Read Excel Column col_num=4 row_offset=0 max_num=0
sheet_name=TCases
    ${operators} Read Excel Column col_num=3 row_offset=0 max_num=0
sheet_name=TCases

Stop Excel

    Close All Excel Documents

Define Variables as Global
    [Arguments] ${SF} ${sObject} ${operators} ${value1} ${value2}
    ${value3}
    Set Global Variable ${SF}
    Set Global Variable ${sObject}
    Set Global Variable ${operators}
    Set Global Variable ${value1}
    Set Global Variable ${value2}
    Set Global Variable ${value3}
```

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Get Object
[Arguments] ${SF} ${sObject} ${value1}
${data}= Get By Id ${SF} ${sObject} ${value1}
Log Many "Object Record Data: \n" ${data}

Update Object
[Arguments] ${SF} ${sObject} ${value1} ${value2}
${response}= Update Salesforce Object ${sObject} ${value1} ${value2}
Log Many "Update Request Status: " ${response}
${data1}= Get By Id ${SF} ${sObject} ${value1}
Log Many "Object Updated Record Data: \n" ${data1}

Create Object
[Arguments] ${SF} ${sObject} ${value1}
log Many "Object Data In: " ${value1}
${record}= Create Salesforce Object ${SF} ${sObject} ${value1}

Log Many "New Record Status: " ${record}
${newID}= Set Variable ${record}[Id]

${data1}= Get By Id ${SF} ${sObject} ${newID}
Log Many "Object New Record Data: \n" ${data1}
Set Global Variable ${newID}

Error Bypass
Log Many "Create Failed: Duplicate" ${passed}

Query Object
[Arguments] ${SF} ${sObject} ${value1}
${query}= Query Salesforce Object ${SF} ${sObject} ${value1}
Log Many "Object Query Results: " ${query}

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