Oracle NetSuite Integration Guide

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Introduction

Audience

This document is directed to customers and prospective customers interested in using Tenfold in an Oracle NetSuite environment. Those who will perform the procedures described in this guide should have a basic level of familiarity with NetSuite APIs, NetSuite administration, general networking, and Tenfold.

Goals

The goal of this document is to provide knowledge, reference, and procedural information necessary to understand a proposed NetSuite/Tenfold integration.

This document is NOT intended as a specific system or network design document. If further clarification is needed, consult with your Tenfold Customer Success Manager (CSM) and/or Regional Sales Manager (RSM).

Terminology

To ensure a common frame of reference, this guide uses the following terms in conjunction with this NetSuite integration:

- **Application Programing Interface (API):** A set of clearly defined methods of communication used by Tenfold for reading and writing data.
- **Click to Dial**: A feature in the Tenfold UI which allows agents to click a phone number to dial a contact.
- **Restlet**: Server-side scripts that interact with NetSuite data following RESTful principles. RESTlets extend the SuiteScript API to allow custom integrations with NetSuite and improve performance.
- **Tenfold Cloud:** A set of Web Services that receives events from the telephony system and takes further action such as querying and saving to the CRM.
- **Tenfold User Interface (TUI)**: An agent facing user interface which agents will interact with for identifying callers, viewing recent activities, saving notes, dispositioning calls, etc.

Customer Responsibilities

You are responsible for supplying the physical and/or IP connection(s) to NetSuite and LAN, and for obtaining and loading any licensing required by NetSuite. You are also responsible for configuring Netsuite to support the Tenfold integration. Responsibilities for Netsuite management include, but are not limited to: Maintaining a customized Role within Netsuite with the minimum amount of permissions required for a viable integration, and maintaining the RESTlet scripts loaded into the Netsuite scripts folder.

Integration Overview

NetSuite Requirements

Connection Requirements

Accessible via TCP port 443 (https) to Tenfold Cloud

Dedicated Service Account (i.e. API User)

Version Requirements

NetSuite 2017.2

NetSuite 2018.1

Considerations

If using non-standard forms please consult with Tenfold to understand supportability.

Permissions Requirements

The Netsuite Role that is provisioned for the integration user will require access to specific Lists in Netsuite to ensure a working solution, and that specific actions can be taken via the different series of API calls. The following Lists should be provided “FULL” access to the provisioned role:

Lists
- Contact
- Companies
- Customers
- Phone Calls
- Tasks
- Employee
- Employee Record

Transactions
- Find Transaction
- Opportunity
- Estimate

Installation

Installation Requirements

Service Account Email	The username for the dedicated Tenfold service account (i.e. API User)
Service Account Password	The password for the dedicated Tenfold service account (i.e. API User)
Account ID	Your NetSuite Account ID*
Role ID	Your NetSuite Role ID*
RESTlet Script Endpoints	The endpoint URLs for the (4) provisioned RESTlet scripts deployed in Netsuite environment

** More information on obtaining your Account ID and Role ID can be found at*
https://jcurvesolutions1.zendesk.com/hc/en-us/articles/209987966-Finding-your-NetSuite-Account-Number
https://searchspring.zendesk.com/hc/en-us/articles/201185029-Where-do-I-find-my-NetSuite-account-Role-ID-

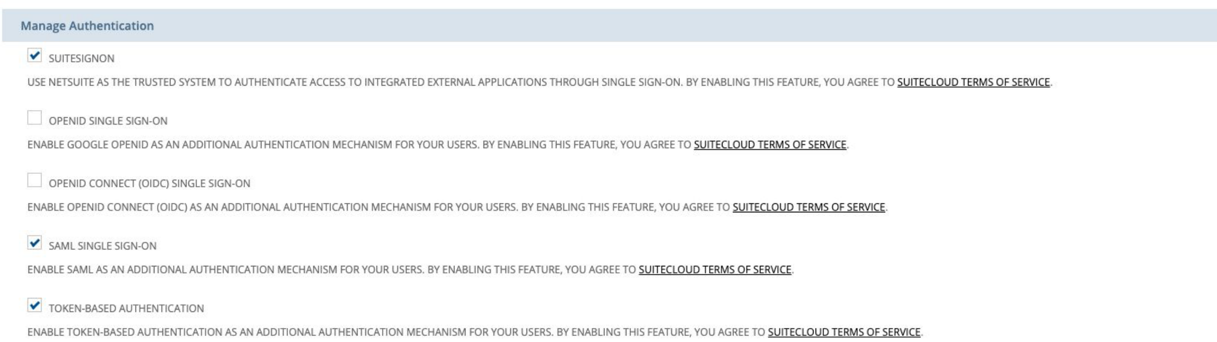
Installation Process

1) Provision Service User in Netsuite for API Connection

Purpose: This section provides the procedural steps to set up token-based authentication in NetSuite to provide a secure connection from Tenfold to NetSuite.

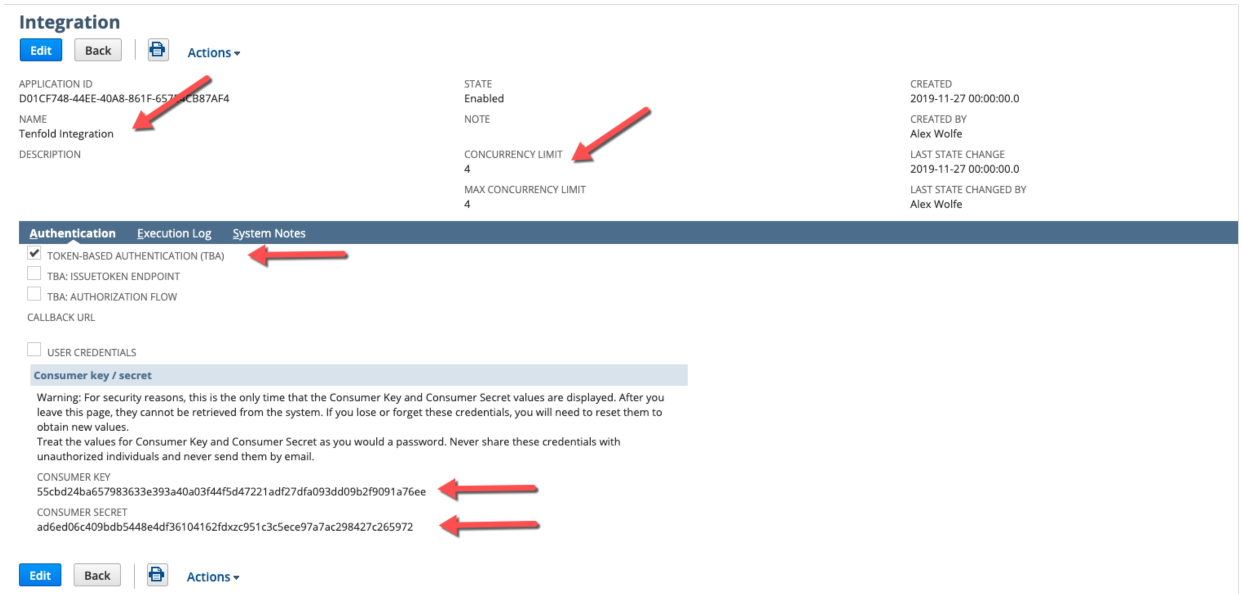
Steps

Enabling the Feature: Token-Based Authentication must first be enabled in the account. Under **Setup** > **Company** > **Enable Features** navigate to the **SuiteCloud** subtab. Enable the required features:



Integration: Before connecting with a token, an integration record is required for authentication. A new integration should be used and can be created by navigating to **Setup** > **Integration** > **Manage Integrations** > **New**.

1. Set the name to "Tenfold Integration". Please make sure to check the Token-Based Authentication option.
2. If you already have an integration record for Tenfold Integration, you can reuse it by editing the integration and checking the Token-Based Authentication option.
3. Please copy Consumer Key and Consumer secret values to be used in the user role configuration.
    a. Please take note that **Consumer Key** and **Consumer Secret** values are displayed only once, so please make sure you copy them before going to another page.



Role: Token-based authentication is a per-user authentication and requires certain permissions in NetSuite. An existing role can be used (recommended) or a new role can be created.

Access Token Management:

- Users with this permission can create, assign, and manage tokens for any user in the company.
- Users with this permission cannot use token-based authentication to log in to the NetSuite UI.

Login using Access Tokens:

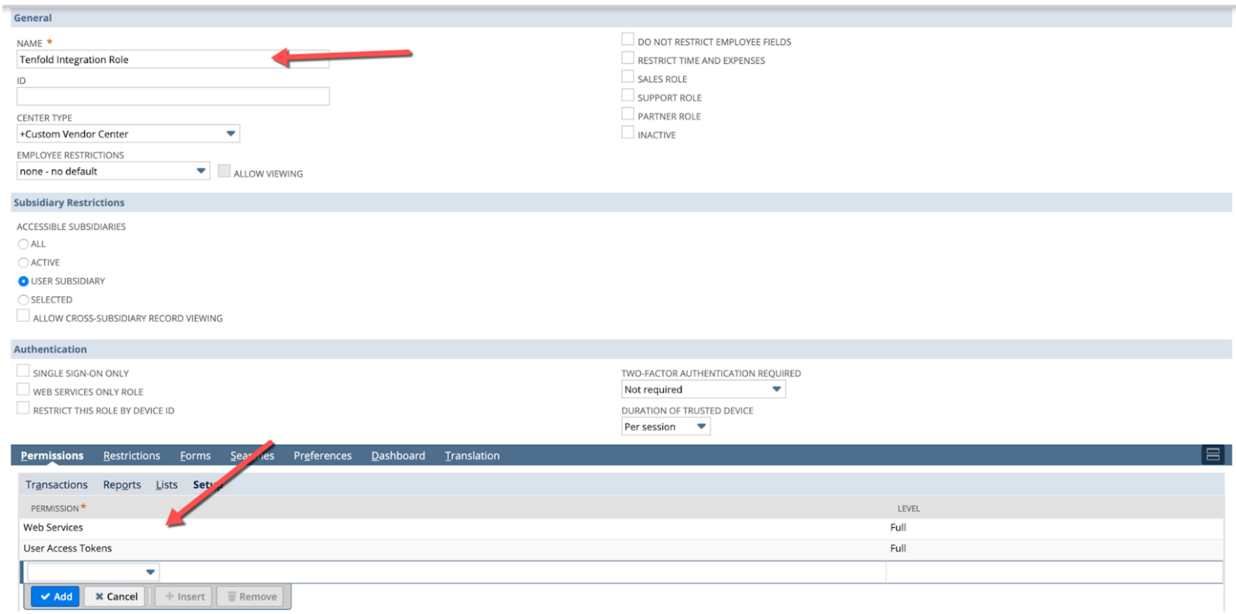
- Users with this permission can manage their own tokens using the Manage Access Tokens link in the Settings portlet, and they can log in using a token.

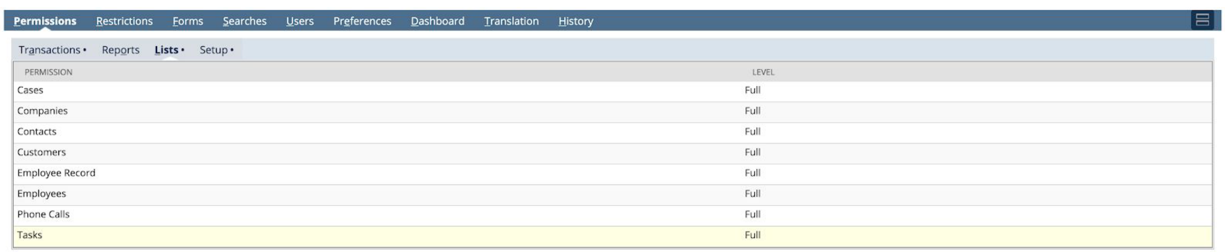
User Access Tokens:

- Users with only this permission can log in using a token, that is, they can to use tokens to call a RESTlet.
- Users with only this permission cannot manage tokens or access pages where tokens are managed.

<u>Steps:</u>

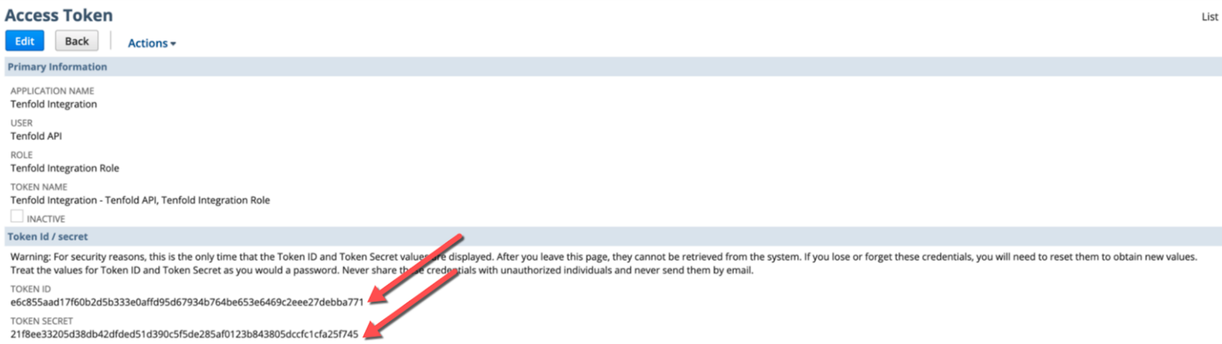
1. Go to **Setup** > **Users/Roles** > **Manage Roles** > **New**.
2. Create a role and assign necessary permission for Tenfold Integration.
    a. Please see the **Mandatory Minimum Permissions Set for "Transactions" and "Lists"** below for the list of permissions required for Tenfold Integration.
3. The role must have "**User Access Tokens"** permission for integration using **TBA**.
4. Assign the Role to the desired user that will be used for integration. Go to **Lists** > **Employees** > **Employees** > **edit user** > **Access** tab > **Roles** subtab.





Create an Access Token for the Integration record, User, and Role:

1. With the integration record created and proper role assigned, a token can be created for authentication. To create a token, have the user with the token authentication role login. Click the ‘Manage Access Tokens’ link available on the home dashboard under settings or go to **Setup** > **Users/Roles** > **Access Token** > **New.**



After the above steps are completed, you can now use the Consumer Key, Consumer Secret, Token ID, and Token Secret in the Tenfold Dashboard to setup your CRM Connection.

Mandatory Minimum Permissions Set for “Transactions” and “Lists”:

Mandatory permissions:

- Lists (Please provide Full access):
  Contact
  Companies
  Customers
  Phone Calls
  Tasks
  Employee
  Employee Record (Yes both)
- Transaction (Please provide full access) Find Transaction
  Opportunity
  Estimate

2) RESTlet Setup

Purpose: This section outlines the procedural steps in provisioning and deploying the Tenfold RESTlet scripts within your Netsuite environment. The completion of this process will allow for you to configure the script endpoints within the Tenfold system, and greatly improve performance for both read and write operations in Netsuite.

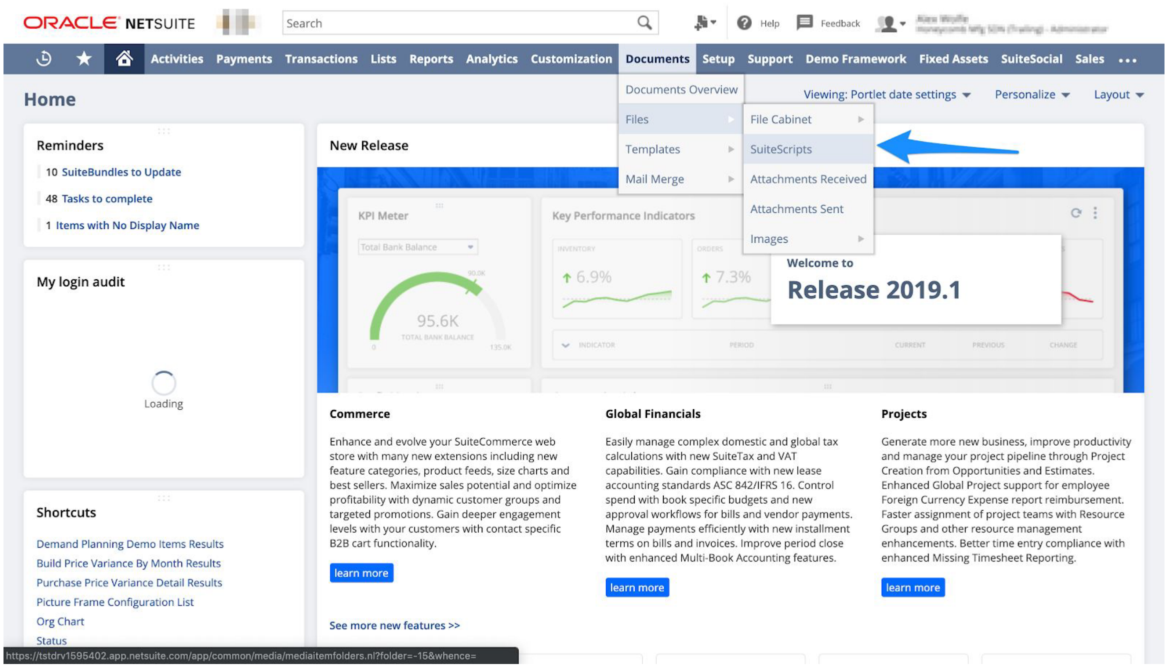
Steps
a) Add Scripts to Netsuite

b) Setup RESTlet Endpoints

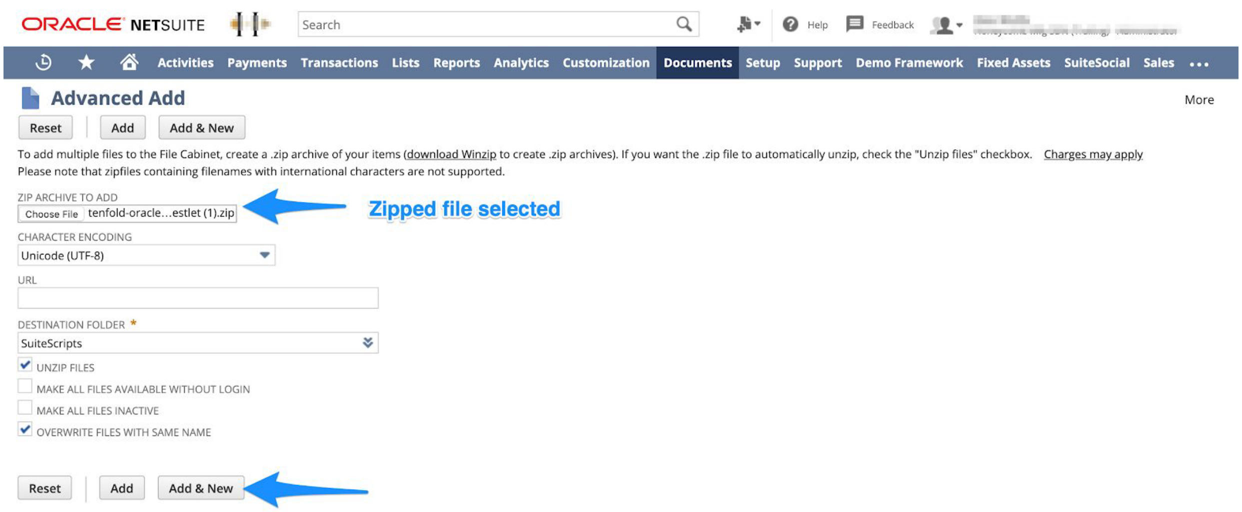
<u>Add Scripts to Netsuite:</u>

1. Download the Netsuite RESTlet scripts. Netsuite RESTlet scripts can be found in the Tenfold Knowledge base [here](#) or via the zipped file at the following URL: https://storage.googleapis.com/tenfold-netsuite-restlet/tenfold-oracle-netsuite-restlet.zip

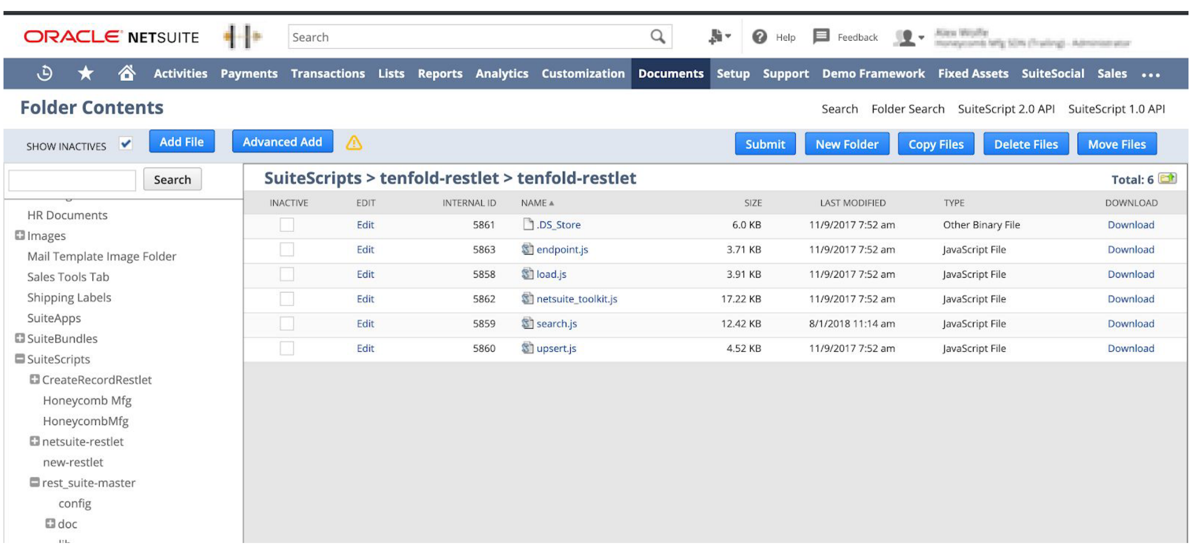
2) Once downloaded, go to “Documents” > “Files” > “Suitescripts” in Netsuite.



3) Click on “Advanced Add.” Under “Zip Archive to Add,” click on the “Choose File” to select the *tenfold-oracle-netsuite-restlet.zip* file that was just downloaded.

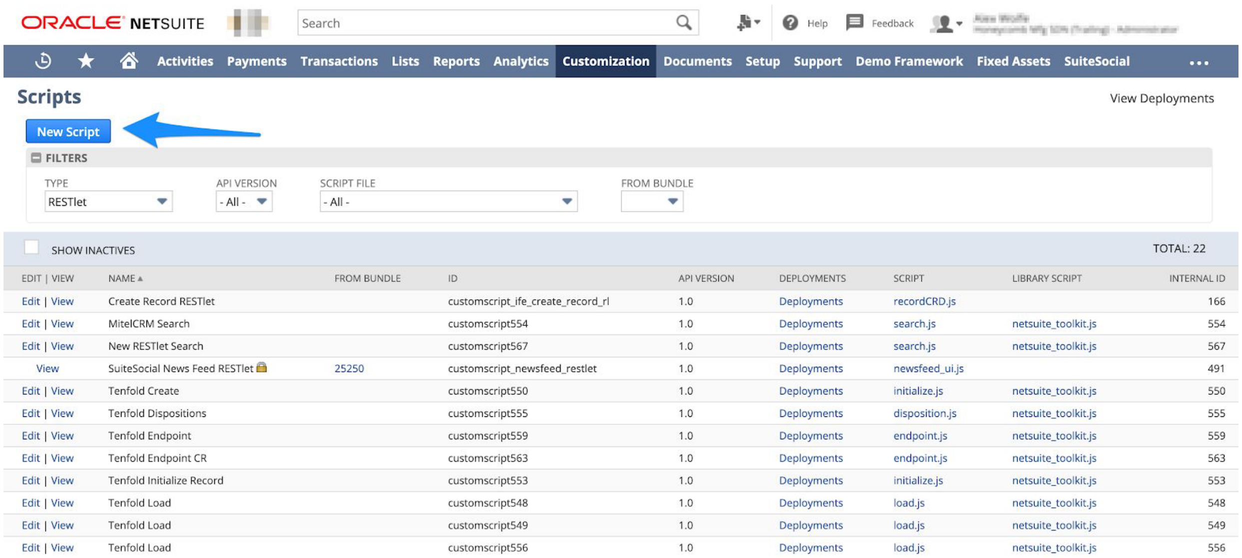


4) Click on “Add & New” button to create a new folder titled “tenfold-restlet.” The upload will take a moment. Navigate back to “Documents” > “Files” > “Suitescripts” to verify the new folder has been created. Make sure that *load.js*, *endpoint.js*, *search.js*, and *upsert.js* are included in the folder.



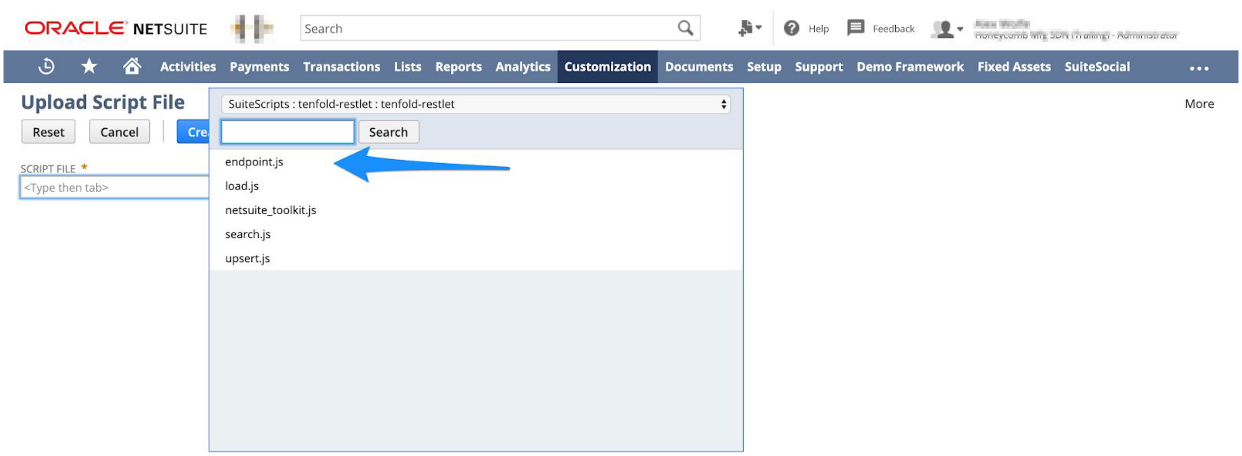
Setup RESTlet Endpoints

1) You will now be generating **four** RESTlet endpoints corresponding to each of the following four uploaded files: *load.js, search.js, upsert.js,* and *endpoint.js.* Navigate to “Customization” > “Scripting” > “Scripts.”

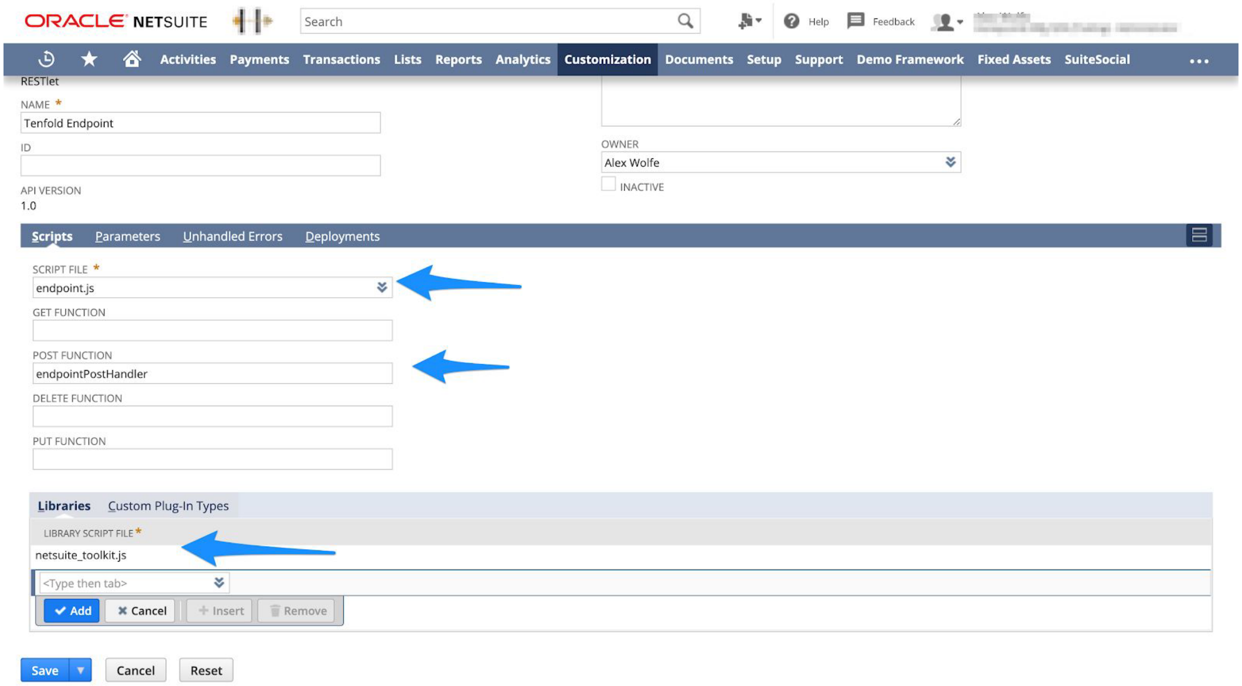


2) Click on the "New Script" button at the top of the page. You will be going through the following process **four** times for each of the **four** scripts.

3) Click on the down arrow in the "Script File" dropdown. Click on "List." within the "-All- dropdown, Select "SuiteScripts - tenfold-restlet." Select the script you are setting up (Will be done once per **four** files.) Click "Create Script Record." Select "RESTlet" 1.0 Script Type.



3) Name the script "Tenfold <script name>" based on the script you are making. That will be Tenfold Endpoint, Tenfold Load, Tenfold Search, and Tenfold Upsert depending on the script you are making. Order does not matter, but all **four** must be created.



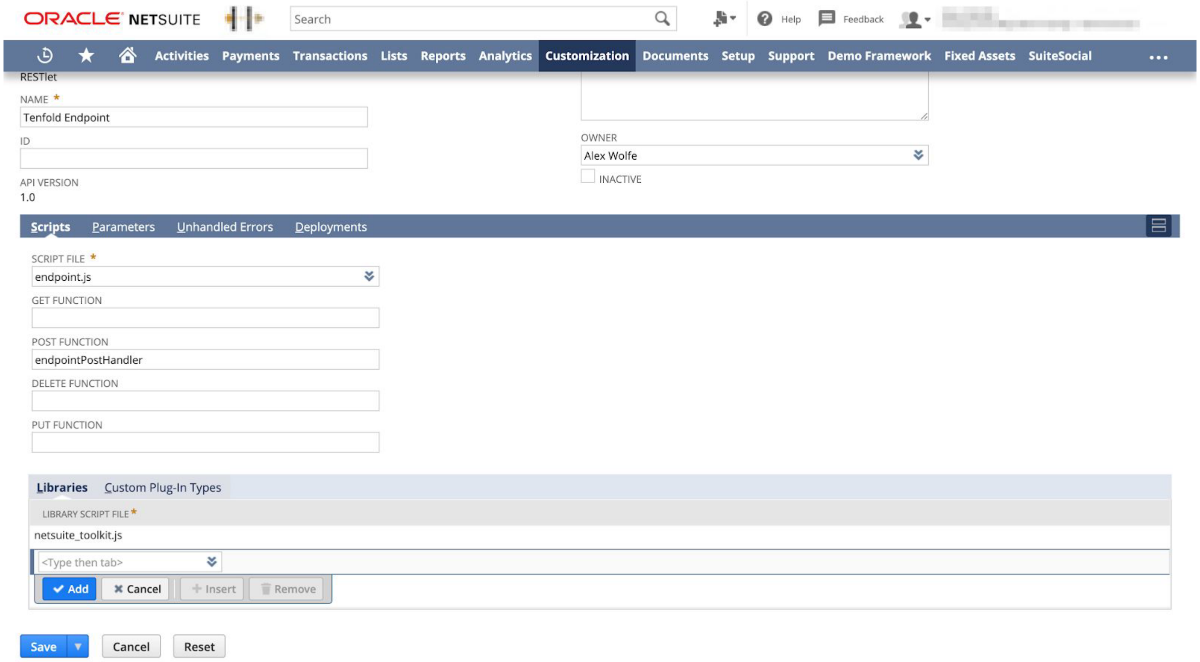
4) In the “POST FUNCTION” field, enter “script name>PostHandler.” The corresponding names are shown below. Under “Libraries” include *“netsuite_toolkit.js”* for each of the four scripts.

load.js -> loadPostHandler

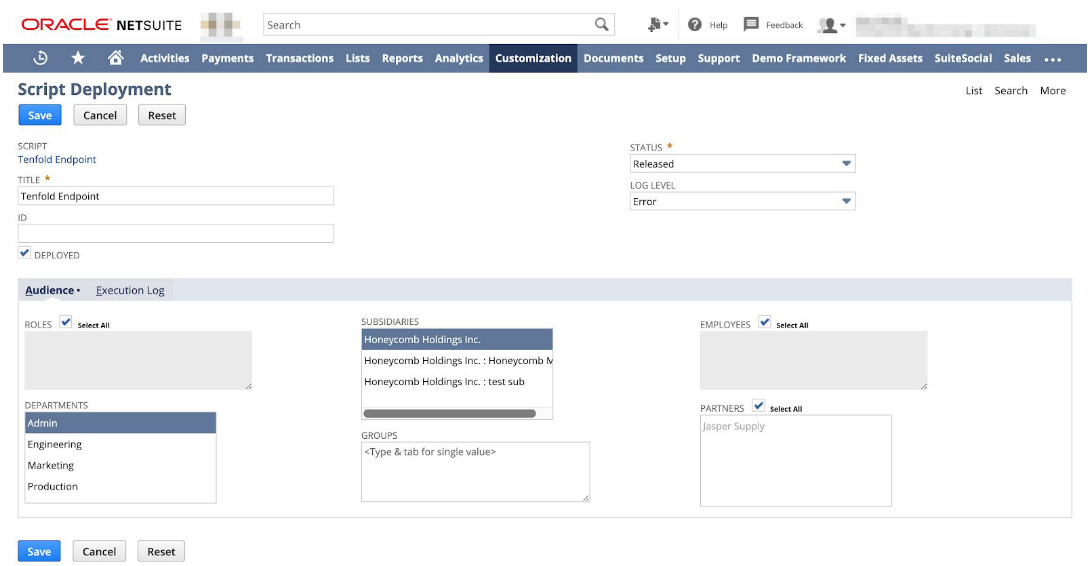
search.js -> searchPostHandler

upsert.js -> upsertPostHandler

endpoint.js -> endpointPostHandler



5) Click "Save" and then "Deploy Script." Setup the deployment in the following page as follows: "**Status - Released.**" "**Departments - Admin.**" "**Employees - All.**" Press "Save."



6) After deploying, copy the "External URL" for the script. This will be configured in the CRM settings of the Tenfold Dashboard. This is also accessible from "Customization" > "Scripting" > "Script Deployments."

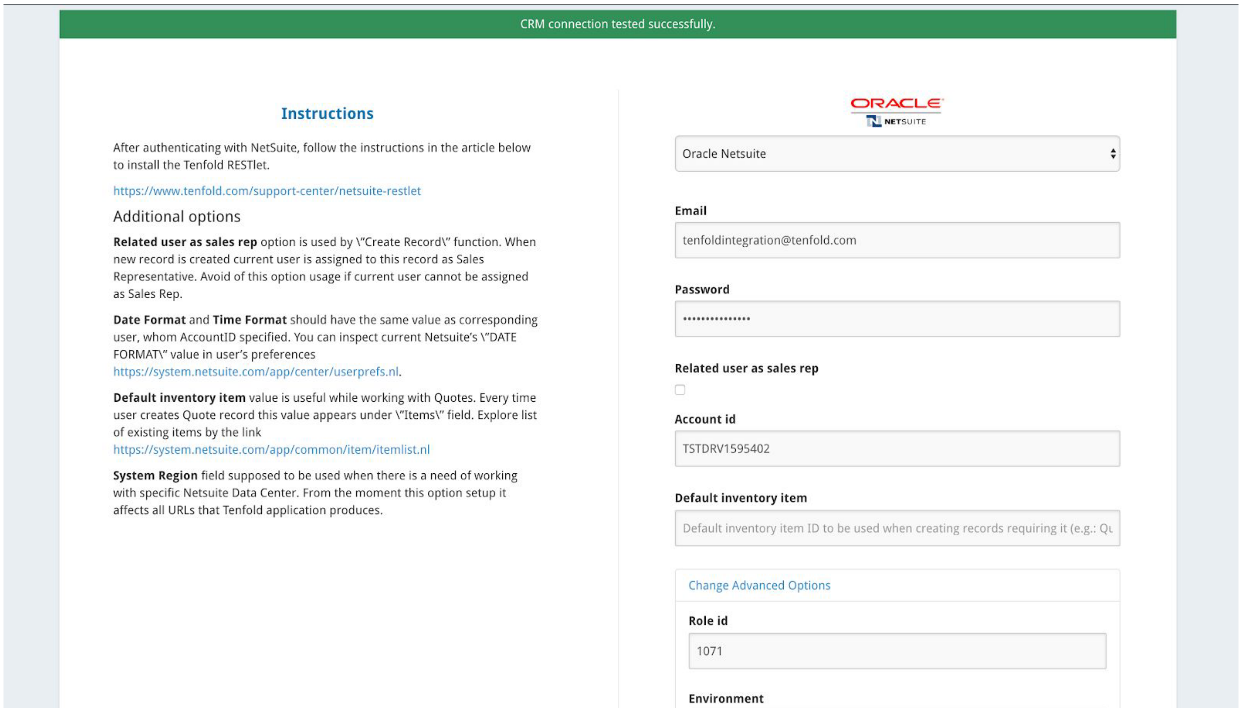
7) Replicate steps for all **four** scripts and copy the "External URL" of each script and proceed to the next section.

3) Tenfold Dashboard Setup

Purpose: This section outlines the procedural steps in connecting Tenfold webservices to your Netsuite environment via the CRM configuration portal in the Tenfold dashboard. Both the API user and RESTlet endpoints will be provided within a single setup pane.

1. Start by navigating to your Tenfold dashboard at https://dashboard.tenfold.com
2. Select the **Company Settings** link in the top navigation
3. In the sub-navigation, select **CRM**
4. Select "Oracle NetSuite" as your CRM.
5. Enter the following information into the form
   - Service Account Username
   - Service Account Password
   - Account ID
   - Role ID (Found in section #1)
   - Load Endpoint, Search Endpoint, Upsert Endpoint, and Main Endpoint URLs (Under Change Advanced Options)
6. Click **Save**.

Upon clicking save, if the information provided is correct, Tenfold will test the connection and present a success message.



Advanced Options

Related user as sales Used by "Create Record" function. When a new record is created the current user is assigned to this record as a Sales Representative.

Date Format and Time Format should have the same value as corresponding user, whose AccountID is specified. You can inspect the current Netsuite's "DATE FORMAT" value in user's preferences https://system.netsuite.com/app/center/userprefs.nl.

System Region is used when there is a need of working with a specific Netsuite Data Center.

Appendix A) Netsuite Fields

The below tables outline the out of the box entities and respective fields that will be interacted with for the core Tenfold integration. Read and/or write permissions for additional fields, both standard and custom, may be required for your Tenfold deployment.

User

Entity - Employee	**Field**	**Required Permissions**
Employee	email	Read
Employee	entityid	Read
Employee	firstname	Read
Employee	lastname	Read
Employee	phone	Read

Customer, Lead, Prospect

Entity - Customer, Lead, Prospect	**Field**	**Required Permissions**
Customer, Lead, Prospect	comments	Read
Customer, Lead, Prospect	companyname	Read / Write
Customer, Lead, Prospect	datecreated	Read
Customer, Lead, Prospect	email	Read / Write
Customer, Lead, Prospect	entityid	Read
Customer, Lead, Prospect	entitystatus	Read
Customer, Lead, Prospect	firstname	Read / Write
Customer, Lead, Prospect	homePhone	Read / Write
Customer, Lead, Prospect	isinactive	Read
Customer, Lead, Prospect	isperson	Read / Write
Customer, Lead, Prospect	lastname	Read / Write

Customer, Lead, Prospect	mobilePhone	Read / Write
Customer, Lead, Prospect	phone	Read / Write
Customer, Lead, Prospect	salesrep	Read / Write
Customer, Lead, Prospect	subsidiary	Read / Write
Customer, Lead, Prospect	userid	Read / Write

Contact

Entity - Contact	**Field**	**Required Permissions**
Contact	comments	Read
Contact	datecreated	Read
Contact	email	Read
Contact	entityid	Read
Contact	firstname	Read / Write
Contact	homePhone	Read / Write
Contact	isinactive	Read
Contact	lastname	Read / Write
Contact	mobilePhone	Read / Write
Contact	phone	Read / Write
Contact	salesrep	Read / Write
Contact	subsidiary	Read / Write
Contact	userid	Read / Write

Phone Call

Entity - PhoneCall	**Field**	**Required Permissions**
PhoneCall	assigned	Read / Write

PhoneCall	company	Read / Write
PhoneCall	company	Read / Write
PhoneCall	completeddate	Read / Write
PhoneCall	contact	Read / Write
PhoneCall	endtime	Read / Write
PhoneCall	id	Read
PhoneCall	message	Read / Write
PhoneCall	phone	Read / Write
PhoneCall	starttime	Read / Write
PhoneCall	status	Read / Write
PhoneCall	supportcase	Read / Write
PhoneCall	timedevent	Read / Write
PhoneCall	title	Read / Write
PhoneCall	transaction	Read / Write

Task

Entity - Task	**Field**	**Required Permissions**
Task	assigned	Read / Write
Task	company	Read / Write
Task	contact	Read / Write
Task	duedate	Read / Write
Task	id	Read
Task	message	Read / Write
Task	title	Read / Write

Opportunity

Entity - Opportunity	Field	Required Permissions
Opportunity	entitystatus	Read
Opportunity	expectedclosedate	Read
Opportunity	probability	Read
Opportunity	projectedtotal	Read
Opportunity	status	Read
Opportunity	title	Read
Opportunity	trandate	Read
Opportunity	tranid	Read

SupportCase

Entity - SupportCase	Field	Required Permissions
SupportCase	assigned	Read
SupportCase	casenumber	Read
SupportCase	company	Read
SupportCase	contact	Read
SupportCase	createddate	Read
SupportCase	id	Read
SupportCase	priority	Read
SupportCase	status	Read
SupportCase	title	Read

Estimate

Entity - Estimate	Field	Required Permissions

Estimate	duedate	Read
Estimate	entitystatus	Read
Estimate	expectedclosedate	Read
Estimate	probability	Read
Estimate	salesrep	Read
Estimate	status	Read
Estimate	total	Read
Estimate	totalcostestimate	Read
Estimate	trandate	Read
Estimate	tranid	Read