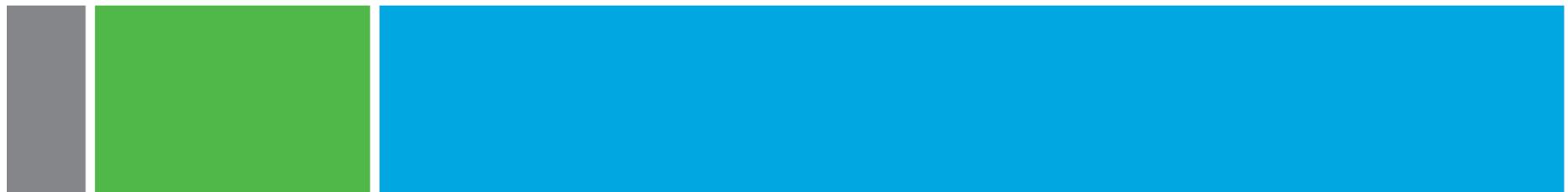


THE POWER OF BEING UNDERSTOOD

AUDIT | TAX | CONSULTING

IMPORTING DATA INTO NETSUITE: TIPS, TRICKS AND BEST PRACTICES



7/19/2017

With you today



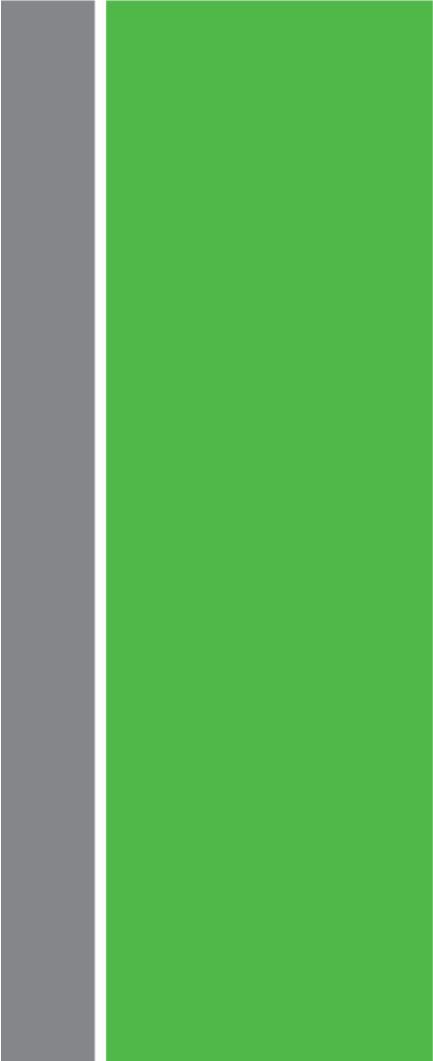
Matthew Sansone
NetSuite Consultant
Boston, MA



John Rush
Manager, Application
Development and
Integration
Denver, CO

Agenda

- Part 1 Importing Records:
 - Accounting and Personal Preferences
 - File Formatting
 - Import Screen Navigation
 - Demo Import Vendor Bill
- Part 2 Scripting:
 - Integration options in NetSuite
 - Benefits and drawbacks of each option
 - Email plugin for scheduled imports



PART I: IMPORTING RECORDS

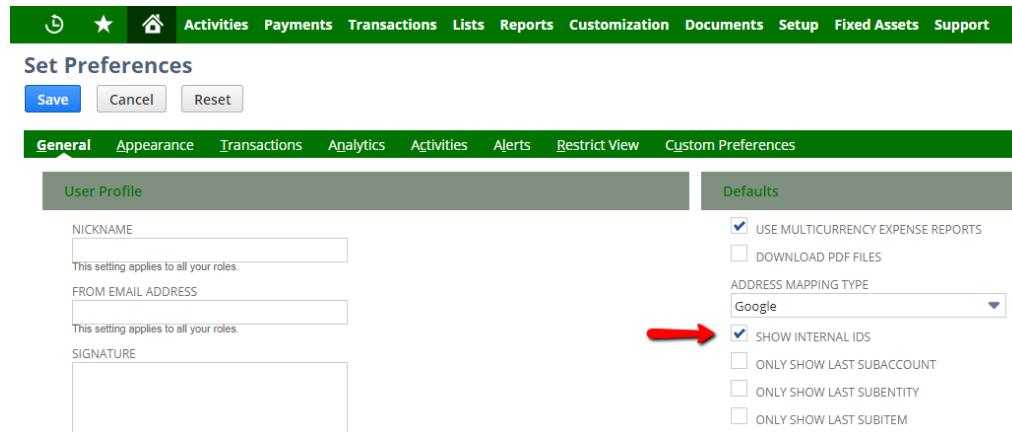
Accounting and Personal Preferences

- CSV Import Preferences:



The screenshot shows the 'CSV Import Preferences' page. At the top, there are three buttons: 'Save' (blue), 'Cancel' (gray), and 'Reset' (gray). Below these are two sections: 'CUSTOM DELIMITER FOR MULTI-SELECT VALUES *' (with a dropdown menu showing '|') and 'LOG SYSTEM NOTES FOR CUSTOM FIELDS' (with two empty checkboxes). To the right, there are two dropdown menus: 'CSV COLUMN DELIMITER' (set to 'Comma') and 'CSV DECIMAL DELIMITER' (set to 'Period').

- Home/Set Preferences:



The screenshot shows the 'Set Preferences' page with the 'General' tab selected. The 'User Profile' section contains fields for 'NICKNAME' (input field) and 'FROM EMAIL ADDRESS' (input field). The 'Defaults' section contains several checkboxes and dropdown menus. A red arrow points to the 'SHOW INTERNAL IDS' checkbox, which is checked. Other options in the 'Defaults' section include 'USE MULTICURRENCY EXPENSE REPORTS' (checked), 'DOWNLOAD PDF FILES' (unchecked), 'ADDRESS MAPPING TYPE' (dropdown menu set to 'Google'), 'ONLY SHOW LAST SUBACCOUNT' (unchecked), 'ONLY SHOW LAST SUBENTITY' (unchecked), and 'ONLY SHOW LAST SUBITEM' (unchecked).

File Formatting

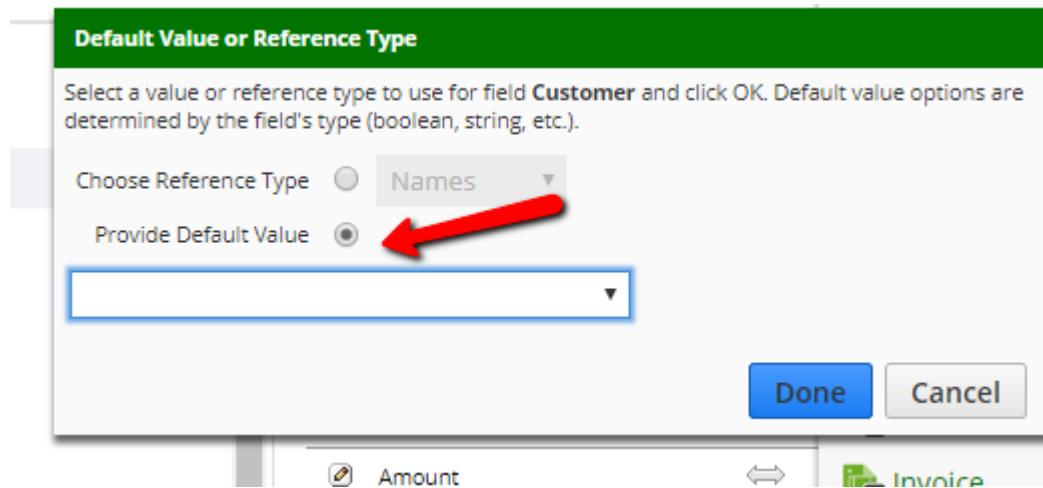
Things to know:

- Best practice is to use internal id's!
- NetSuite doesn't like comma's!
- You can import into almost all list types

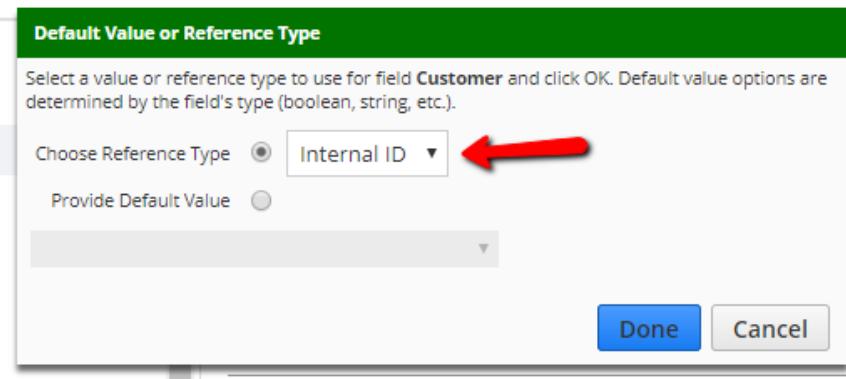
	A	B	C	D	E	F	G	H	I	J	K
1	Date	Invoice Num	Vendors ID	Name	Due Date	Quantity	Rate	Amount	Department	Class	Location
2	6/30/2017	RSM 1		408 Google	7/30/2017	675	1	675	5	12	5
3											

Import Screen Navigation

- You can set default values:

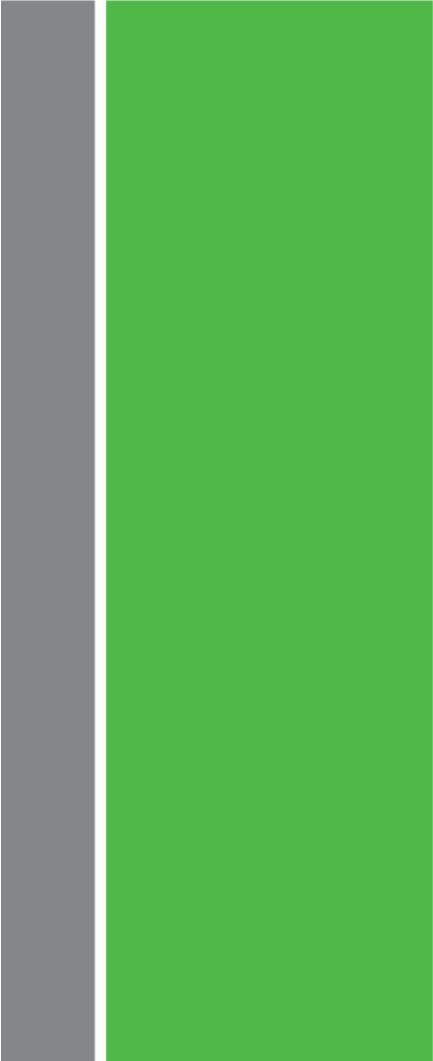


- Set the field to look at internal id's:





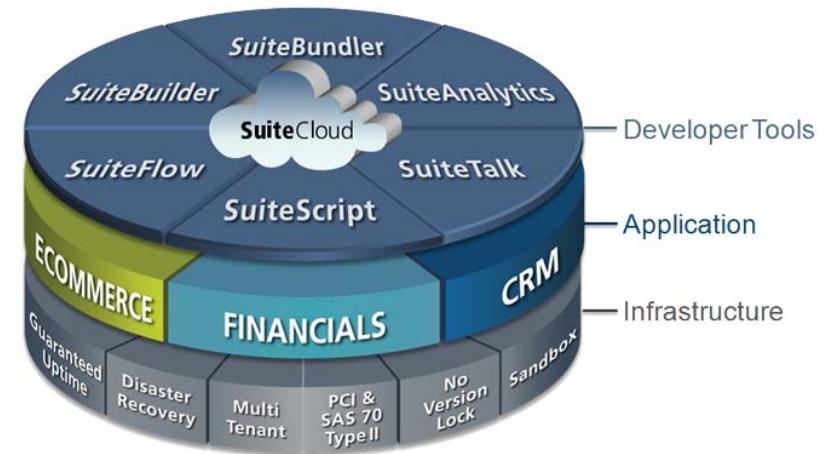
DEMO



PART II: INTEGRATION - SCRIPTING

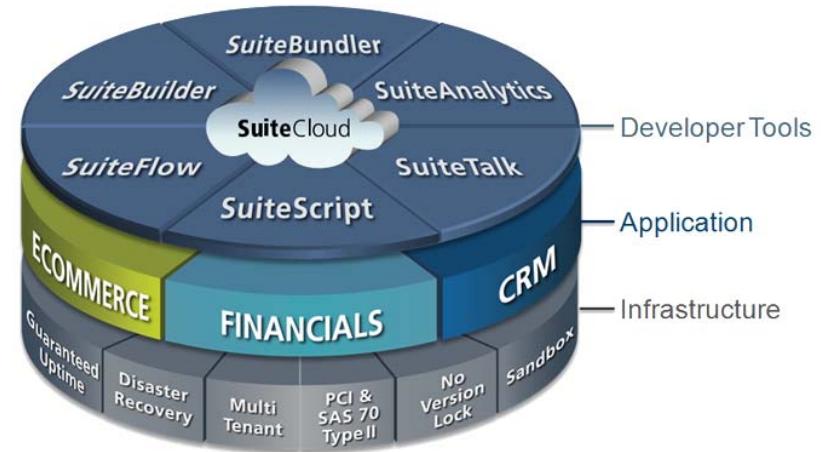
NetSuite Web Services

- SuiteTalk (SOAP API)
 - WSDL Specification/Protocol
 - HTTP Actions
 - POST
 - XML data
 - Java or .Net Client Application
 - Heavy Programming Model
- Things to Consider
 - Batched Transactions
 - Out-of-the box NS Schema
 - IDE Tooling Support (WSDL)
 - Hosted on Windows PC/Server
 - Scheduled - Console App
 - Continuous – Windows Service



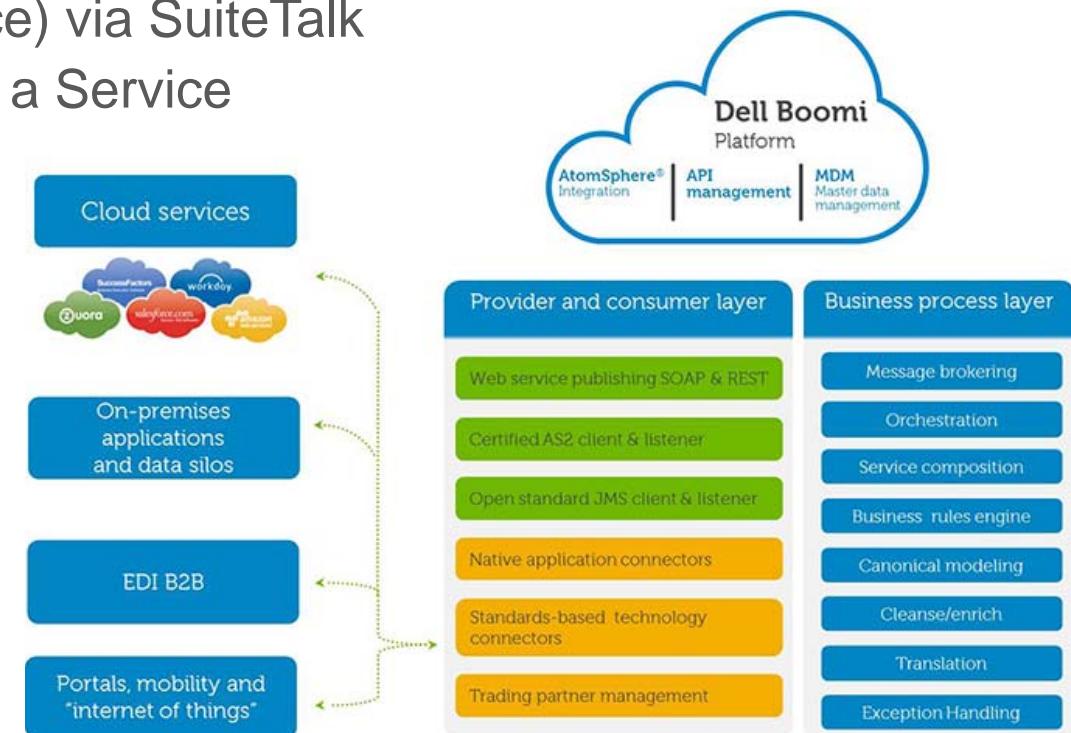
NetSuite Web Services

- SuiteTalk (RESTlet API)
 - REST-based
 - HTTP Actions
 - GET, PUT, POST, DELETE
 - JSON or XML data
 - Custom Request/Response Model
 - Lightweight Model/Environment
- Things to Consider
 - Scripted REST Endpoint
 - Highly Customizable
 - Error Handling & Debugging
 - Detailed & Low-leveled Approach
 - 2 Sides of HTTP Call
 - Custom Request
 - Custom Response



NetSuite Web Services Integration

- PaaS (Platform as a Service) via SuiteTalk
 - Integration Platform as a Service
 - Pre-Built “Connectors”
 - Visio-like IDE
 - Built-in Test Runner
- Things to Consider
 - Content Routing
 - Business Rules
 - Process Flow
 - Minimal Coding
 - Monitoring & Notification
 - Subscription Cost



NetSuite Web Services - Security

- SuiteTalk Security Model
 - 128-bit SSL encryption
 - Role Based
 - User-Based Authentication
 - Username/Password
 - Token-Based Authentication (OAuth 2.0)
 - Integration Management

SuiteScript Replacement for Proprietary System

- SuiteScript
 - JavaScript Custom Records
 - Flexible Business Logic
 - Full-featured application-level scripting
 - Client / User Events
 - Schedule Script
- Things to Consider
 - NetSuite Data Model
 - Leverage Similar Customizations
 - Entirely Dependent on NetSuite
 - Training Required

SuiteScript Replacement for Proprietary System

Double-check Advanced Options on Imports

Import Assistant

STEPS

- 1 Scan & Upload CSV File
- 2 Import Options**
- 3 File Mapping
- 4 Field Mapping
- 5 Save mapping & Start Import

Import Options
ADD OR UPDATE

Select the appropriate option depending on whether you are importing new data or updating existing data.

Advanced Options 

LOG SYSTEM NOTES FOR CUSTOM FIELDS
Enable this option to create system notes during import of custom field data. Impacts performance; recommended only when custom fields require an audit trail.

OVERWRITE MISSING FIELDS
For updates, enable this option to clear NetSuite fields mapped to CSV file fields that do not contain data.

VALIDATE MANDATORY CUSTOM FIELDS
Enable this option to require mandatory custom field data to be present for records to be created.

OVERWRITE SUBLISTS
For updates, enable this option to cause imported sublist data to completely replace existing sublist data, instead of selectively updating or being appended. ... [more](#)

IGNORE READ-ONLY FIELDS
This option, enabled by default, allows you to import CSV files containing values for read-only fields without causing errors.

PREVENT DUPLICATE RECORDS

CUSTOM MULTI-SELECT VALUE DELIMITER
 Enter a single character to be used as a custom delimiter for multi-select fields, instead of the pipe (|).

CSV DECIMAL DELIMITER
Period 

Select the symbol to be used as a decimal mark in the CSV files you import. This setting overrides decimal mark preference specified at Home > Set Preferences.

CUSTOM FORM
 

By default, your preferred form determines NetSuite fields that can be mapped for importing. To vary these fields, select a different form.

RUN SERVER SUITESCRIPT AND TRIGGER WORKFLOWS
Check to specify that any server-side SuiteScripts and workflows should be triggered for the current CSV import. Note that running server SuiteScript slows the save process. ... [more](#)

Buttons

Cancel < Back Next >

Integration Options Summary

	SuiteTalk (RESTlet)	SuiteTalk (SOAP)	SuiteTalk (PaaS)
Scenario	Lightweight & Flexible Integration	Most Common Integration	Cloud & On-Premise Integration
Application Host	Web Service Client	Windows Application	Dell Boomi, Celigo, etc.
Scalability	Low	Medium	High
Key Features	Scripted Extension REST functions Custom Call/Response	Mirrors Schema .Net / Java Object Oriented	Enterprise / iPaaS Mapping Capability Test Runner
Key Value Add	Exposing Search Data	Automated Import	One-way & Bi-Direction Integration

There's another option... Using Email Plugins

- Benefits of Using Email Plugin
 - Lightweight
 - Low level of effort
 - Define behavior based on properties or contents of email
 - Can easily be bundled and distributed between environments
 - Easy for multi-functional development teams to integrate to NetSuite

Email Plug-in Example

Step 1: Create the script file

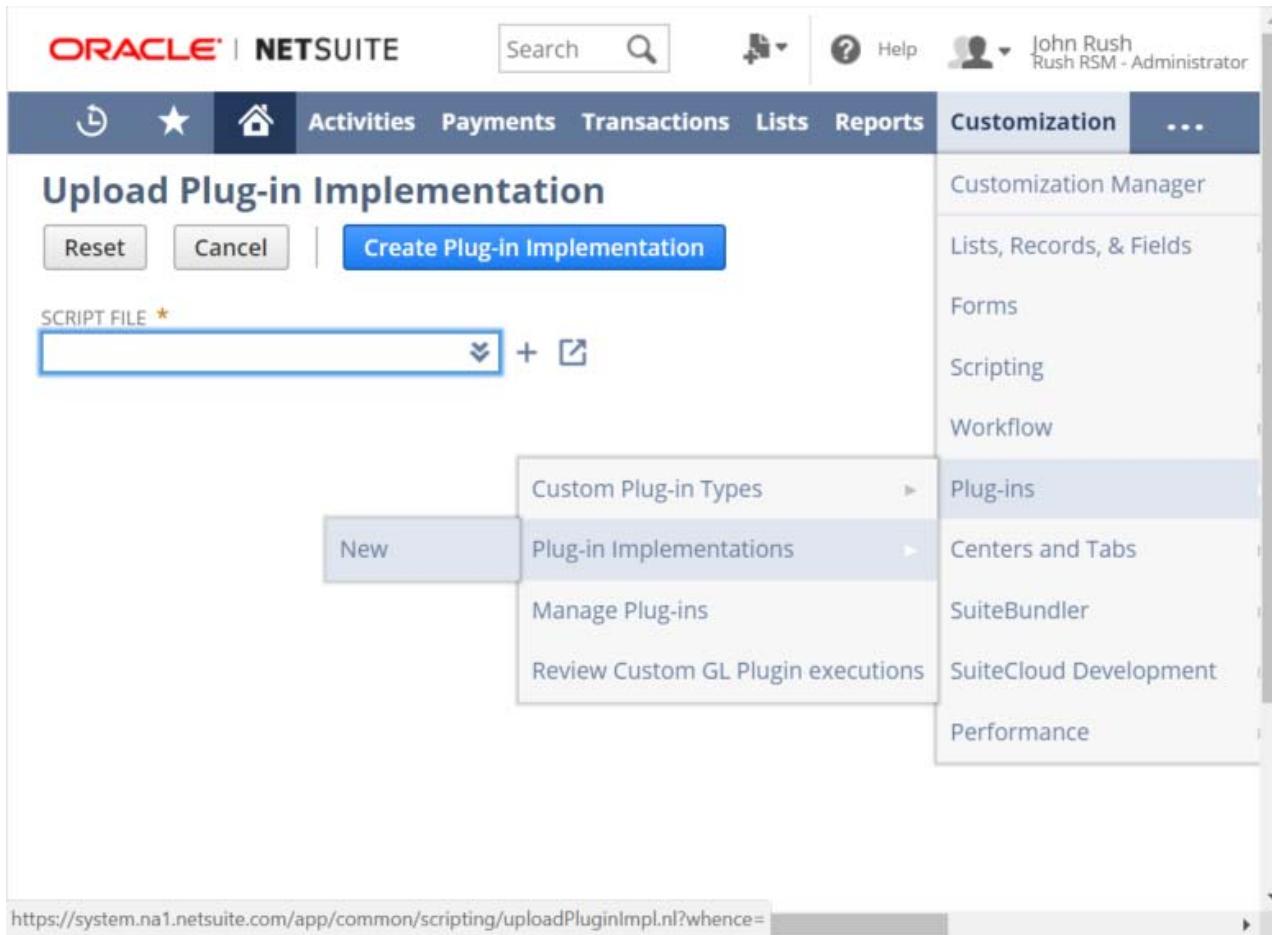
```
/*
*Author: John Rush (RSM)
*Date: 7/16/2017
*Description: This plug-in will take the attached CSV file and kick off a CSV import file.
*/

var ScriptBase;

function process(email) {
  try {
    //Private
    var func = 'Customer Email Capture';
    ScriptBase = new McGladrey.Script.Scheduled();
    var startBench = ScriptBase.Log.StartBenchmark(func, ScriptBase.Client);
    processAttachments(email.getAttachments());
    ScriptBase.Log.EndBenchmark(func, startBench, ScriptBase.Client);
  }
  catch (err) {
    if (err instanceof nlobjError) {
      ScriptBase.Log.ErrorObject('Unknown nlobjError during module: ' + func, err);
    }
    else {
      ScriptBase.Log.Error('Unknown Error Occurred during module: ' + func, err.message);
    }
    //throw err;
  }
}
```

Email Plug-in Example

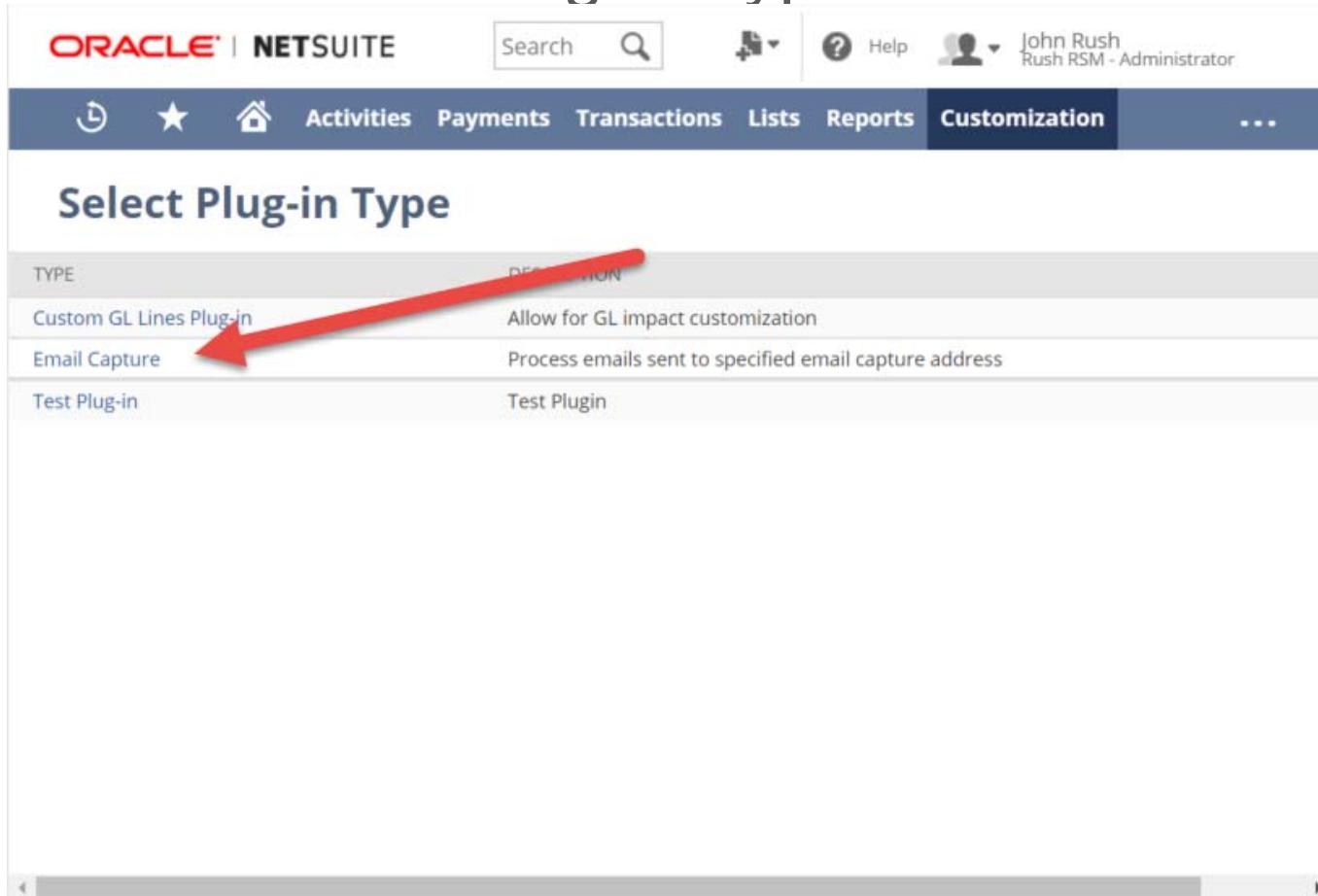
Step 2: Create the Email Plugin Implementation



The screenshot shows the Oracle NetSuite interface. The top navigation bar includes the NetSuite logo, a search bar, and a user dropdown for 'John Rush' (Rush RSM - Administrator). The main menu bar has links for Activities, Payments, Transactions, Lists, Reports, Customization, and an ellipsis. The 'Customization' menu is open, showing options like Customization Manager, Lists, Records, & Fields, Forms, Scripting, Workflow, Plug-ins (which is highlighted), Centers and Tabs, SuiteBundler, SuiteCloud Development, and Performance. A sub-menu for 'Plug-ins' is also open, showing 'Custom Plug-in Types', 'Plug-in Implementations' (which is highlighted), 'Manage Plug-ins', and 'Review Custom GL Plugin executions'. On the left, there is a form titled 'Upload Plug-in Implementation' with 'Reset' and 'Cancel' buttons, and a 'Create Plug-in Implementation' button. Below these buttons is a 'SCRIPT FILE' input field with a file selection button and a '+' icon. The URL in the browser's address bar is <https://system.na1.netsuite.com/app/common/scripting/uploadPluginImpl.nl?whence=1>.

Email Plug-in Example

Step 3: Select the Plug-in Type

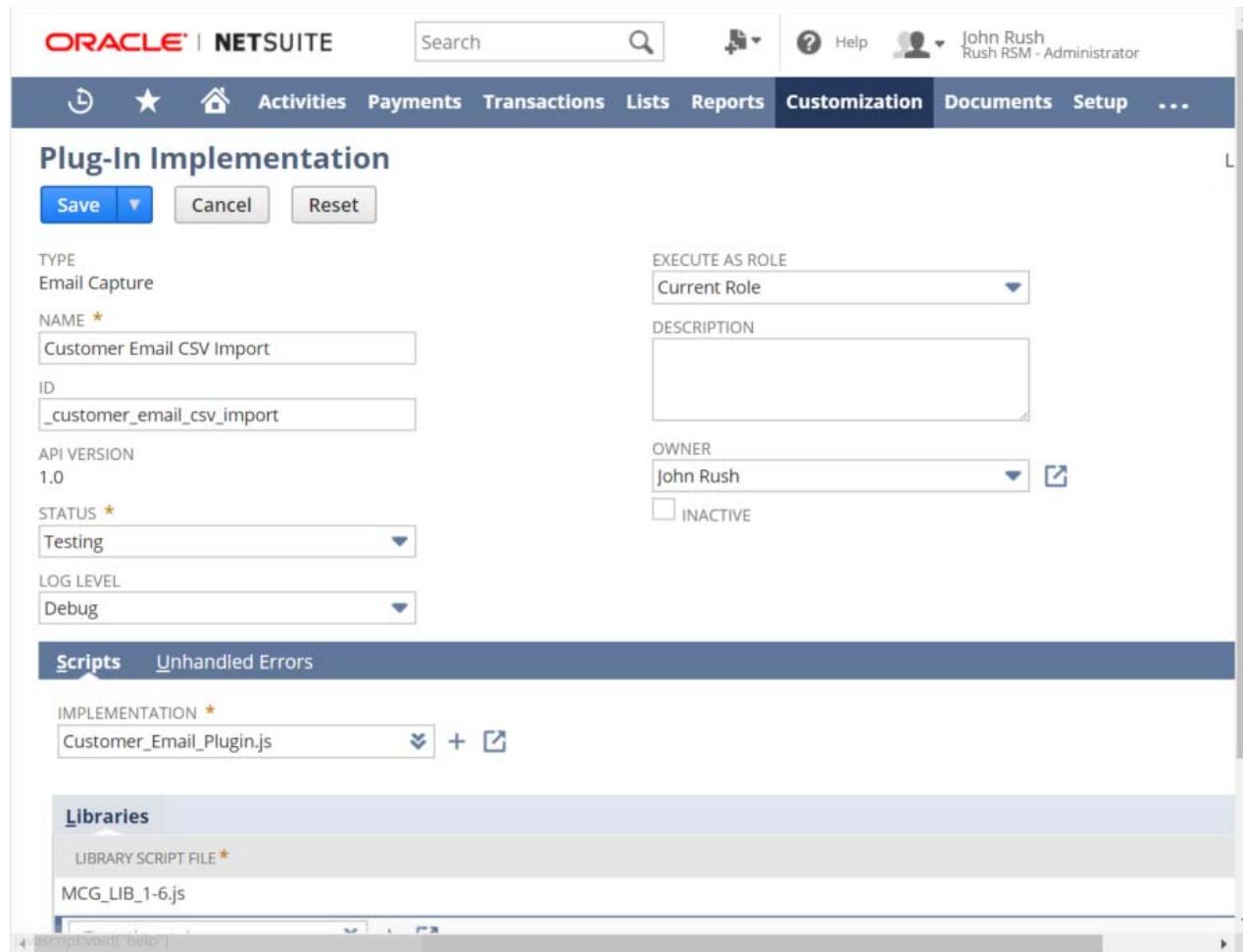


The screenshot shows the Oracle NetSuite interface with a blue header bar. The header includes the 'ORACLE' and 'NETSUITE' logo, a search bar, and a user profile for 'John Rush' (Rush RSM - Administrator). Below the header is a navigation bar with icons for Home, Activities, Payments, Transactions, Lists, Reports, Customization (which is selected), and an ellipsis. The main content area has a title 'Select Plug-in Type'. A table lists three plug-in types: 'Custom GL Lines Plug-in', 'Email Capture', and 'Test Plug-in'. The 'Email Capture' row is highlighted with a red arrow pointing to it. The table has two columns: 'TYPE' and 'DESCRIPTION'.

TYPE	DESCRIPTION
Custom GL Lines Plug-in	Allow for GL impact customization
Email Capture	Process emails sent to specified email capture address
Test Plug-in	Test Plugin

Email Plug-in Example

Step 4: Create the Plug-in Implementation Record



ORACLE | NETSUITE Search Help John Rush - Administrator

Activities Payments Transactions Lists Reports Customization Documents Setup ...

Plug-In Implementation

Save Cancel Reset

TYPE: Email Capture

NAME: Customer Email CSV Import

ID: _customer_email_csv_import

API VERSION: 1.0

STATUS: Testing

LOG LEVEL: Debug

EXECUTE AS ROLE: Current Role

DESCRIPTION:

OWNER: John Rush

INACTIVE

IMPLEMENTATION: Customer_Email_Plugin.js

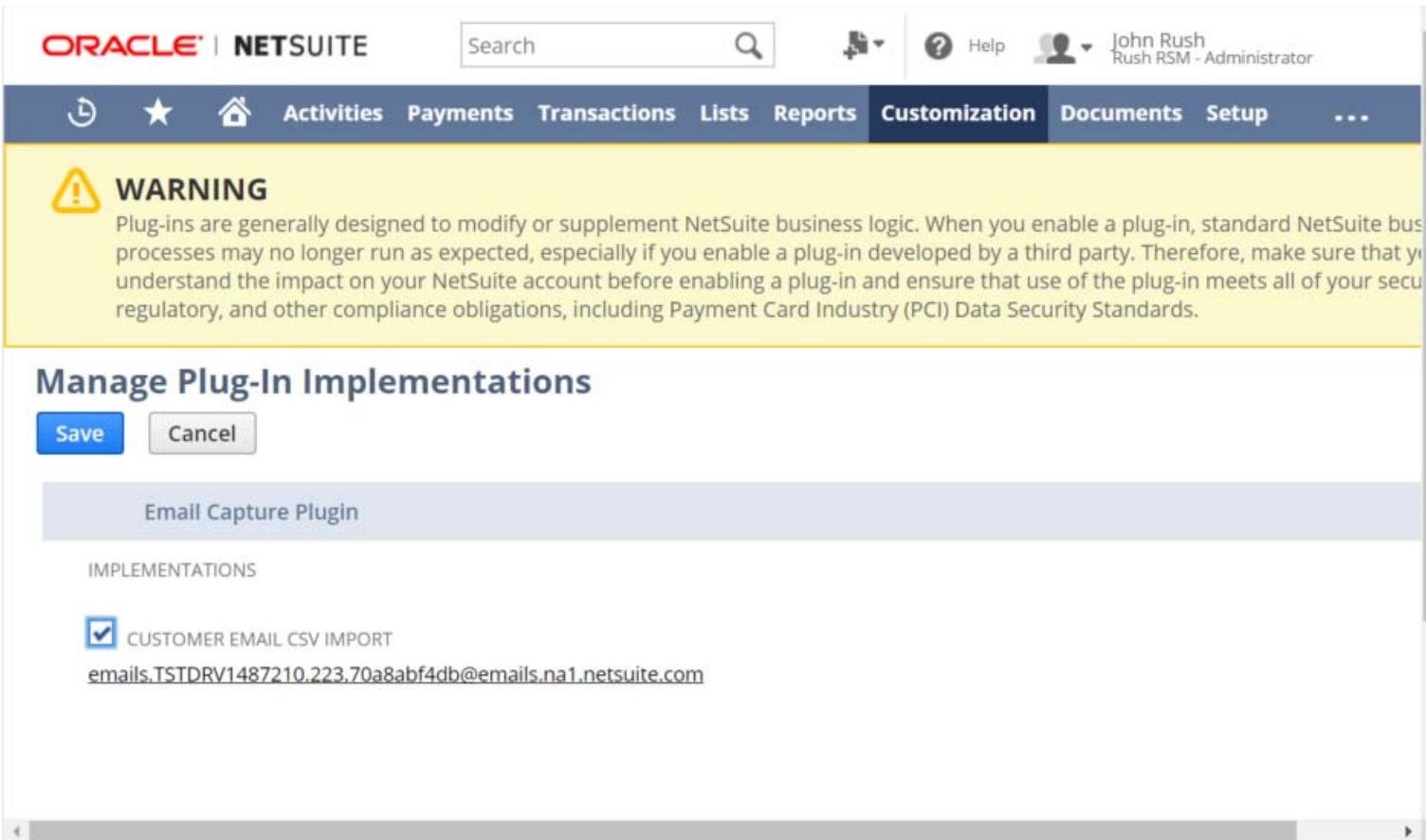
Libraries

LIBRARY SCRIPT FILE: MCG_LIB_1-6.js



Email Plug-in Example

Step 5: Enable the Plug-in

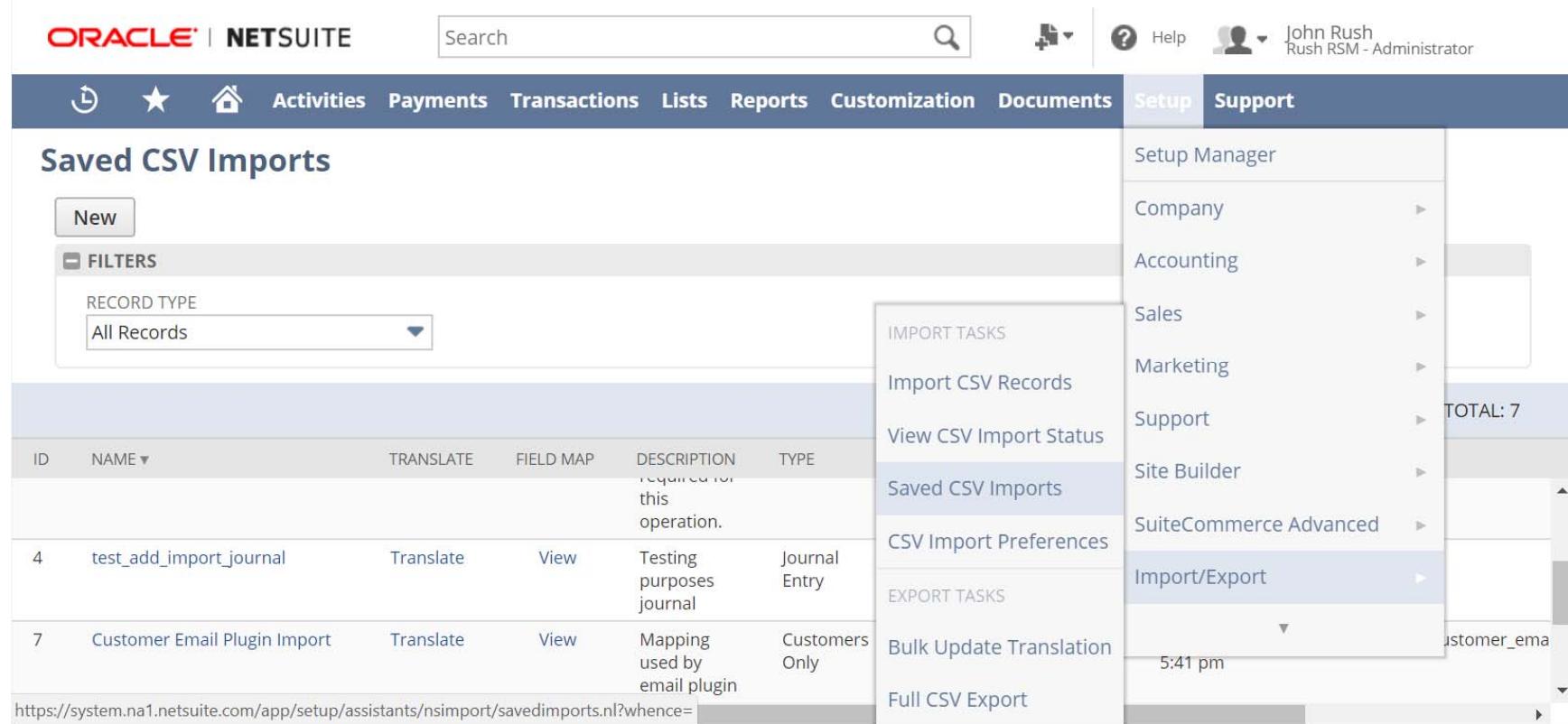


The screenshot shows the NetSuite interface with the following details:

- Header:** ORACLE | NETSUITE, Search bar, Help, and User Profile (John Rush, Rush RSM - Administrator).
- Navigation Bar:** Activities, Payments, Transactions, Lists, Reports, **Customization** (selected), Documents, Setup, and a three-dot menu.
- Warning Message:** A yellow box with a warning icon and the text: "WARNING: Plug-ins are generally designed to modify or supplement NetSuite business logic. When you enable a plug-in, standard NetSuite business processes may no longer run as expected, especially if you enable a plug-in developed by a third party. Therefore, make sure that you understand the impact on your NetSuite account before enabling a plug-in and ensure that use of the plug-in meets all of your security, regulatory, and other compliance obligations, including Payment Card Industry (PCI) Data Security Standards."
- Section Title:** Manage Plug-In Implementations.
- Buttons:** Save and Cancel.
- Section:** Email Capture Plugin.
- Sub-section:** IMPLEMENTATIONS.
- List:** CUSTOMER EMAIL CSV IMPORT (checkbox checked, value: emails.TSTDRV1487210.223.70a8abf4db@emails.na1.netsuite.com).

Automate CSV Import from Email Plug-in

Setup Plugin Mapping



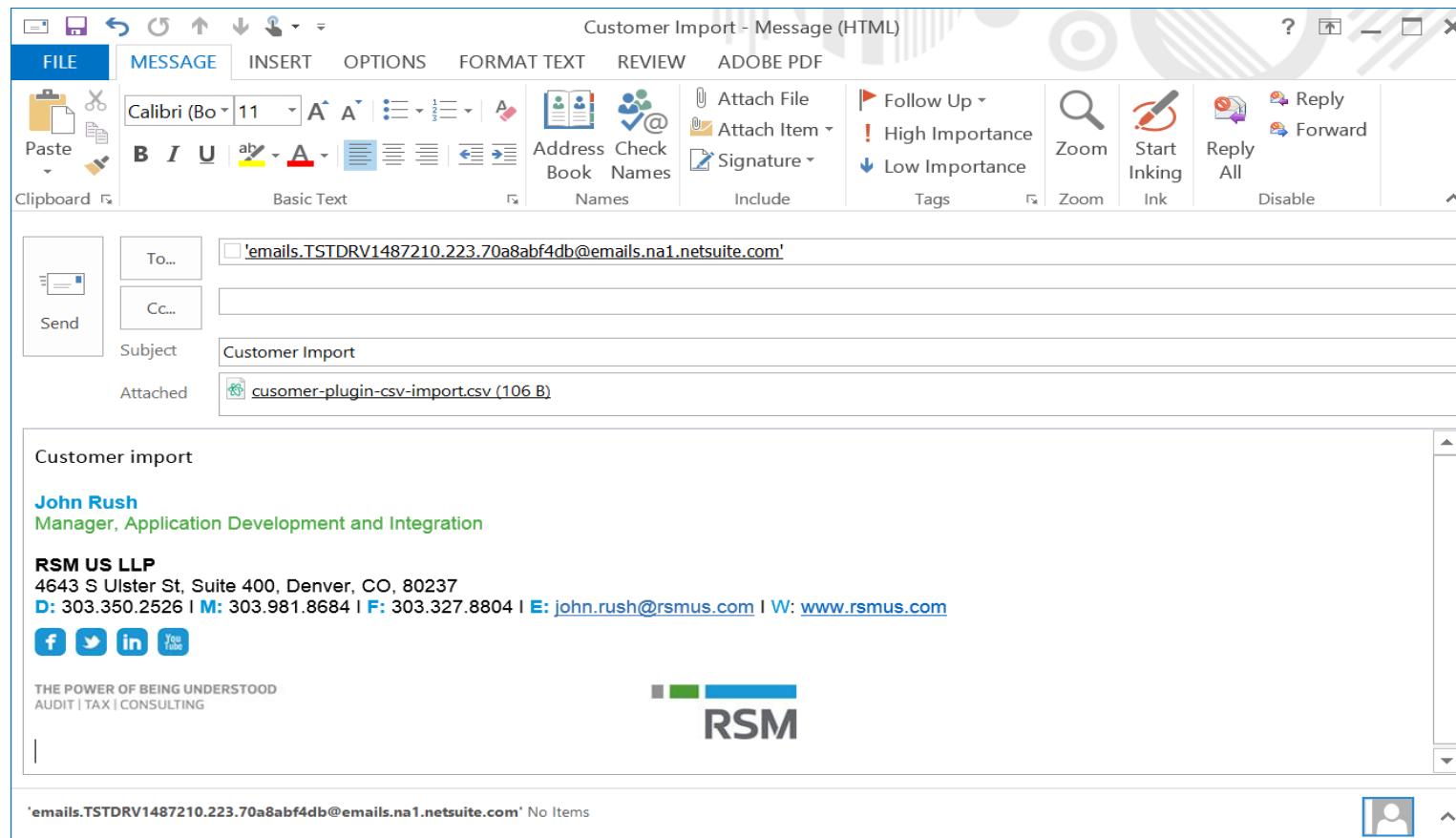
The screenshot shows the Oracle NetSuite interface. The top navigation bar includes links for Activities, Payments, Transactions, Lists, Reports, Customization, Documents, Setup, and Support. The user is logged in as John Rush, RSM - Administrator. The main content area is titled 'Saved CSV Imports' and shows a list of imports. The 'Import/Export' option is selected in the 'Setup' dropdown menu, which also includes options for Company, Accounting, Sales, Marketing, Support, Site Builder, and SuiteCommerce Advanced. The 'Import/Export' menu is expanded to show sub-options: Import CSV Records, View CSV Import Status, Saved CSV Imports (which is highlighted), CSV Import Preferences, Bulk Update Translation, and Full CSV Export. A timestamp of 5:41 pm is visible at the bottom of the expanded menu.

ID	NAME	TRANSLATE	FIELD MAP	DESCRIPTION	TYPE
4	test_add_import_journal	Translate	View	Testing purposes journal	Journal Entry
7	Customer Email Plugin Import	Translate	View	Mapping used by email plugin	Customers Only

<https://system.na1.netsuite.com/app/setup/assistants/nsimport/savedimports.nl?whence=1>

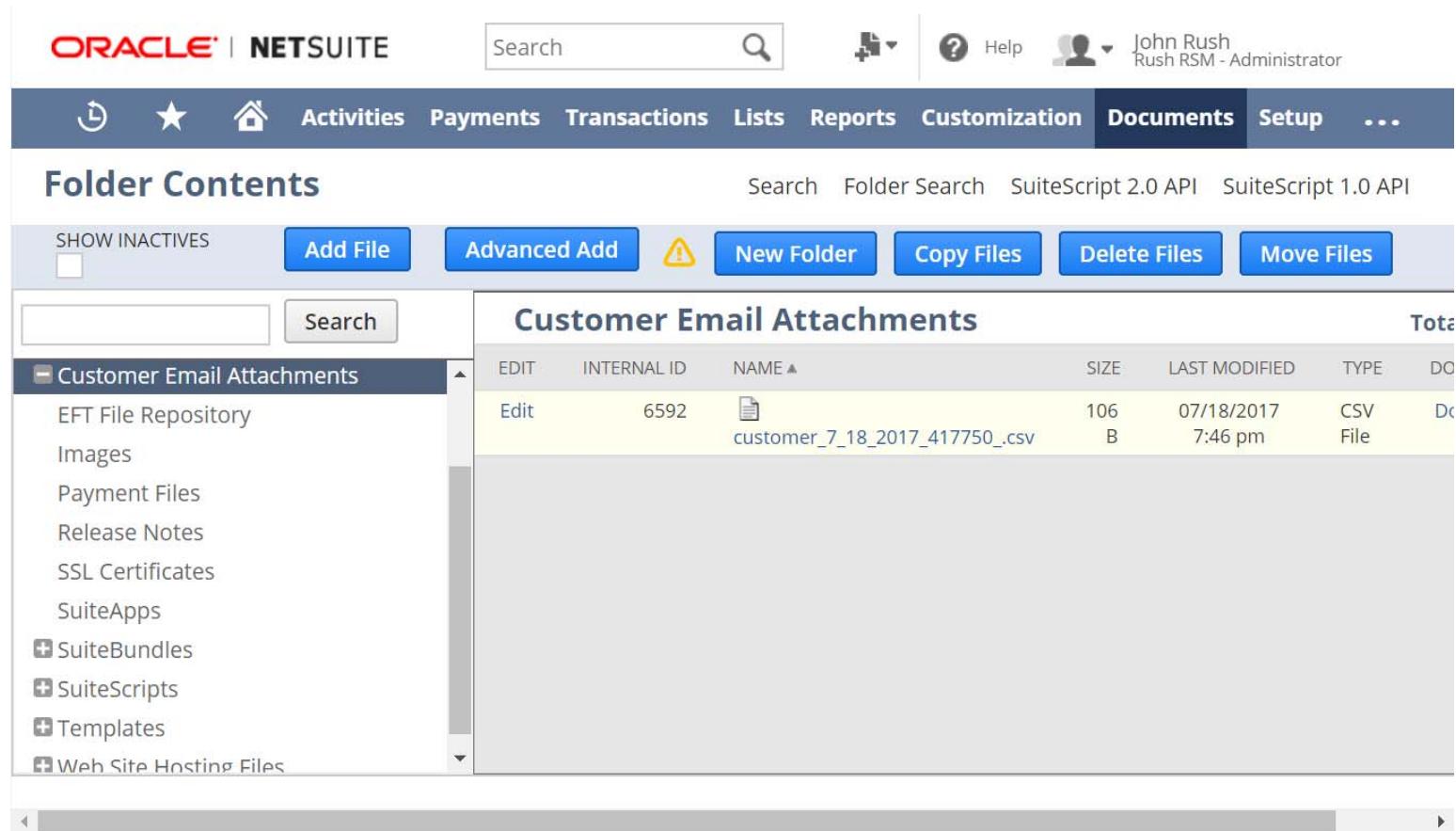
Email Plug-in Example

Send Email



Email Plug-in Example

File Appears in File Cabinet



The screenshot shows the Oracle NetSuite interface. At the top, there is a navigation bar with icons for Home, Activities, Payments, Transactions, Lists, Reports, Customization, Documents (which is selected and highlighted in blue), Setup, and an ellipsis. The top right corner shows the user's name, John Rush, and their role, Rush RSM - Administrator. Below the navigation bar, the main content area has a title "Folder Contents" and a sub-header "Customer Email Attachments". On the left, there is a sidebar with a tree view of folder contents, including "Customer Email Attachments" (which is expanded), "EFT File Repository", "Images", "Payment Files", "Release Notes", "SSL Certificates", "SuiteApps", "SuiteBundles", "SuiteScripts", "Templates", and "Web Site Hosting Files". On the right, there is a table titled "Customer Email Attachments" with the following data:

EDIT	INTERNAL ID	NAME	SIZE	LAST MODIFIED	TYPE	DO
Edit	6592	customer_7_18_2017_417750_.csv	106 B	07/18/2017 7:46 pm	CSV File	Do

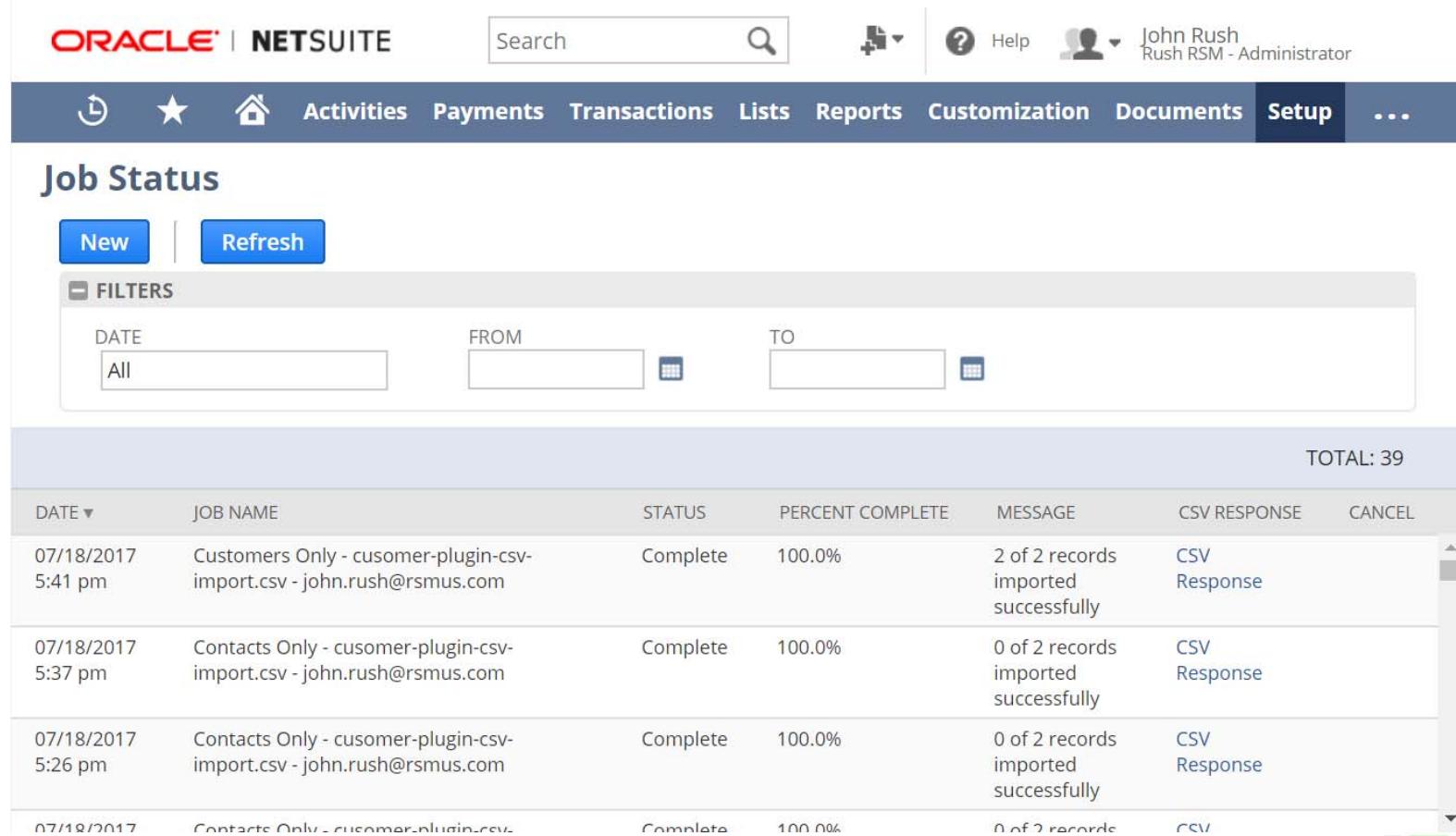
Email Plug-in Example

Email plugin can then schedule a script to run a csv import:

```
/*
 * Call the CSV import process
 */
function KickOffCSVImport() {
    var customerCSVImport = nlapiCreateCSVImport();
    customerCSVImport.setMapping(ScriptBase.Parameters.custscript_csv_mapping_id);
    customerCSVImport.setPrimaryFile(nlapiLoadFile(ScriptBase.Parameters.custscript_csv_file_id));
    customerCSVImport.setOption("jobName", ScriptBase.Parameters.custscript_csv_job_name);
    nlapiSubmitCSVImport(customerCSVImport);
}
```

Email Plug-in Example

Import Status



ORACLE | NETSUITE

Search ?

Help John Rush
Rush RSM - Administrator

Activities Payments Transactions Lists Reports Customization Documents **Setup** ...

Job Status

New Refresh

FILTERS

DATE	JOB NAME	STATUS	PERCENT COMPLETE	MESSAGE	CSV RESPONSE	CANCEL
07/18/2017 5:41 pm	Customers Only - cusomer-plugin-csv-import.csv - john.rush@rsmus.com	Complete	100.0%	2 of 2 records imported successfully	CSV Response	CSV Response
07/18/2017 5:37 pm	Contacts Only - cusomer-plugin-csv-import.csv - john.rush@rsmus.com	Complete	100.0%	0 of 2 records imported successfully	CSV Response	CSV Response
07/18/2017 5:26 pm	Contacts Only - cusomer-plugin-csv-import.csv - john.rush@rsmus.com	Complete	100.0%	0 of 2 records imported successfully	CSV Response	CSV Response
07/18/2017	Contacts Only - cusomer-plugin-csv-	Complete	100.0%	0 of 2 records	CSV	CSV

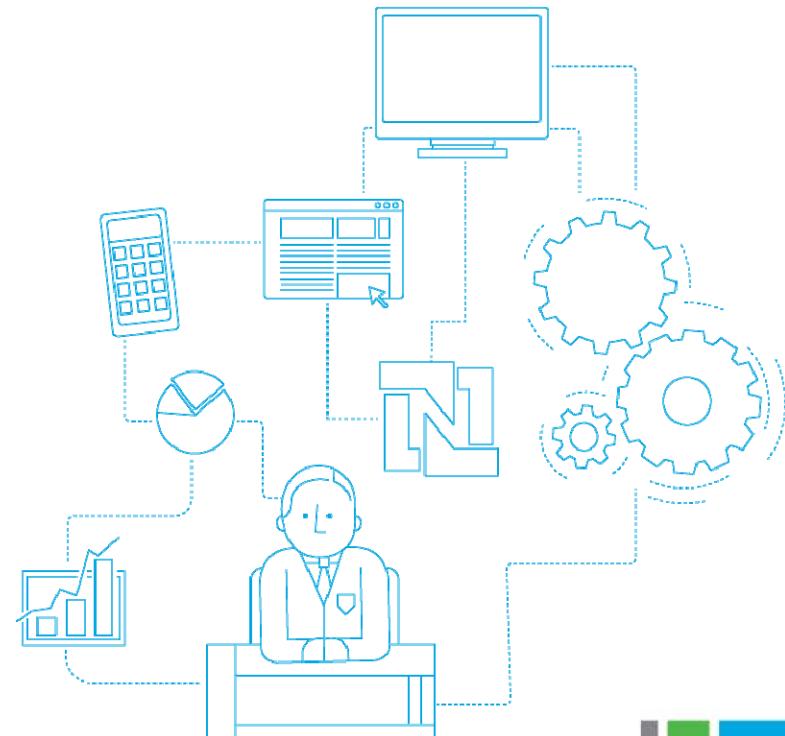
TOTAL: 39

What's next?

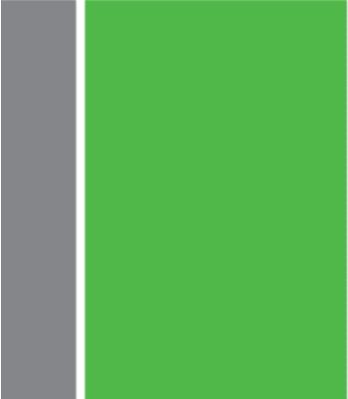
- Follow our blog www.clouderpadvisor.com
- Upcoming RSM NetSuite webcasts:
 - August 29th: Optimize Your Business with NetSuite CRM
 - September 20th: Going global with NetSuite: Subs, Currencies and taxes
 - October 17th: Be a Saved Search Wizard

Optimizing NetSuite for Success – RSM services

- Application Development and Integration
- Advanced Revenue Management (ARM) – ASC 606 & Multi-book
- SuiteCommerce Advanced
- SuiteCloud Developer Network (SDN) solution evaluation
- Reports and saved searches
- Business and system alignment
- Workflow development
- Code upgrades and optimization
- System documentation
- Roles and permissions
- SuiteScript development
- Training
- Support
- And more...



QUESTIONS AND ANSWERS?



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