

THE POWER OF BEING UNDERSTOOD

AUDIT | TAX | CONSULTING

IMPORTING DATA INTO NETSUITE: TIPS, TRICKS AND BEST PRACTICES



7/19/2017

With you today



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Agenda

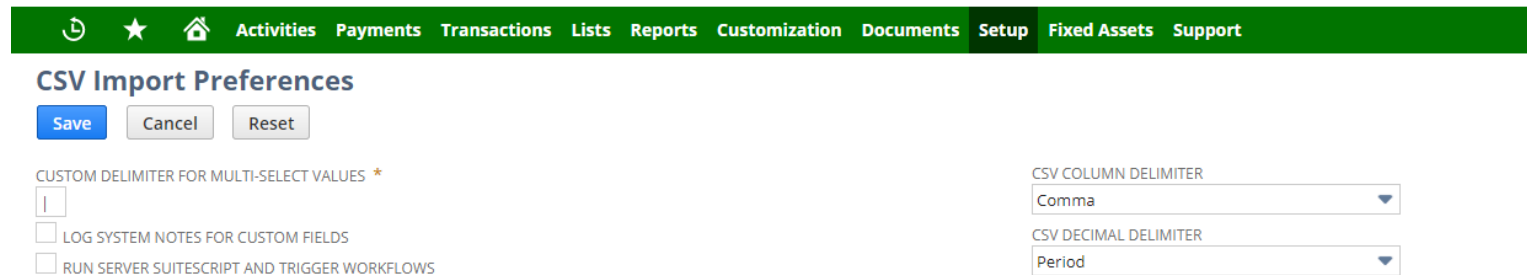
- Part 1 Importing Records:
 - Accounting and Personal Preferences
 - File Formatting
 - Import Screen Navigation
 - Demo Import Vendor Bill
- Part 2 Scripting:
 - Integration options in NetSuite
 - Benefits and drawbacks of each option
 - Email plugin for scheduled imports

PART I: IMPORTING RECORDS



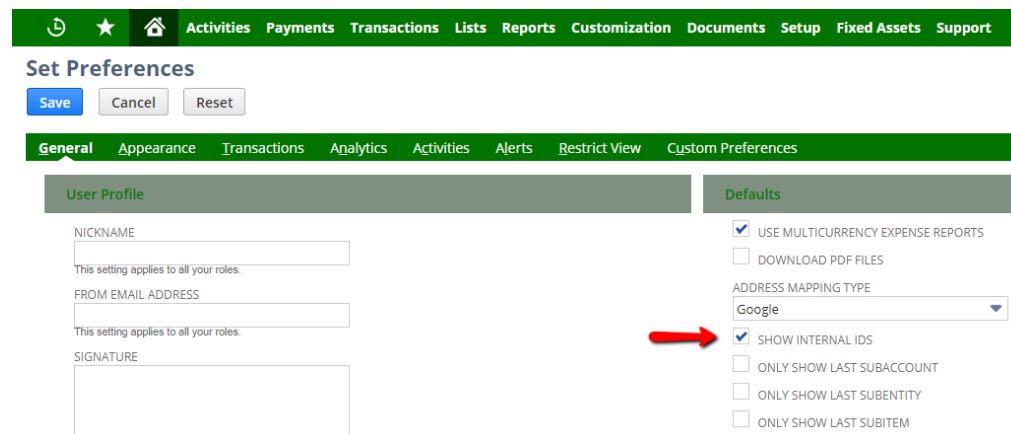
Accounting and Personal Preferences

- CSV Import Preferences:



The screenshot shows the 'CSV Import Preferences' page. At the top is a green navigation bar with icons and labels: Activities, Payments, Transactions, Lists, Reports, Customization, Documents, Setup, Fixed Assets, and Support. Below the navigation bar, the title 'CSV Import Preferences' is followed by 'Save', 'Cancel', and 'Reset' buttons. The main content area includes a text input for 'CUSTOM DELIMITER FOR MULTI-SELECT VALUES' with a star icon, and three checkboxes: 'LOG SYSTEM NOTES FOR CUSTOM FIELDS' and 'RUN SERVER SUITESCRIPT AND TRIGGER WORKFLOWS'. On 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. It has a green navigation bar with icons and labels: Activities, Payments, Transactions, Lists, Reports, Customization, Documents, Setup, Fixed Assets, and Support. Below the navigation bar, the title 'Set Preferences' is followed by 'Save', 'Cancel', and 'Reset' buttons. A sub-navigation bar contains tabs: General, Appearance, Transactions, Analytics, Activities, Alerts, Restrict View, and Custom Preferences. The 'General' tab is active, showing a 'User Profile' section with input fields for 'NICKNAME', 'FROM EMAIL ADDRESS', and 'SIGNATURE', each with a note 'This setting applies to all your roles.' To the right is a 'Defaults' section with several checkboxes: 'USE MULTICURRENCY EXPENSE REPORTS' (checked), 'DOWNLOAD PDF FILES' (unchecked), 'SHOW INTERNAL IDS' (checked), 'ONLY SHOW LAST SUBACCOUNT' (unchecked), 'ONLY SHOW LAST SUBENTITY' (unchecked), and 'ONLY SHOW LAST SUBITEM' (unchecked). A red arrow points to the 'SHOW INTERNAL IDS' checkbox. Below the 'Defaults' section is a dropdown menu for 'ADDRESS MAPPING TYPE' set to 'Google'.

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:

The dialog box has a green header with the title "Default Value or Reference Type". Below the header, it says: "Select a value or reference type to use for field **Customer** and click OK. Default value options are determined by the field's type (boolean, string, etc.)."

There are two radio buttons: "Choose Reference Type" and "Provide Default Value". The "Provide Default Value" radio button is selected, and a red arrow points to it. Below the radio buttons is a dropdown menu that is currently empty. At the bottom right are "Done" and "Cancel" buttons.

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

The dialog box has a green header with the title "Default Value or Reference Type". Below the header, it says: "Select a value or reference type to use for field **Customer** and click OK. Default value options are determined by the field's type (boolean, string, etc.)."

There are two radio buttons: "Choose Reference Type" and "Provide Default Value". The "Choose Reference Type" radio button is selected, and a red arrow points to it. Below the radio buttons is a dropdown menu that has "Internal ID" selected. At the bottom right are "Done" and "Cancel" buttons.

DEMO

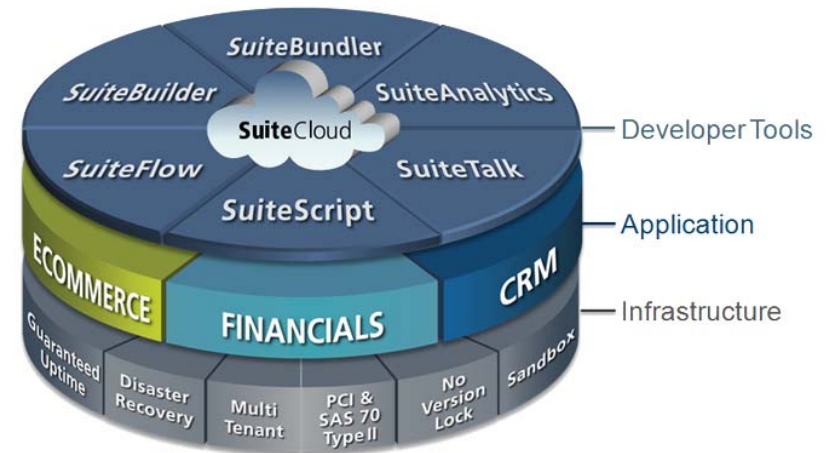


PART II: INTEGRATION - SCRIPTING



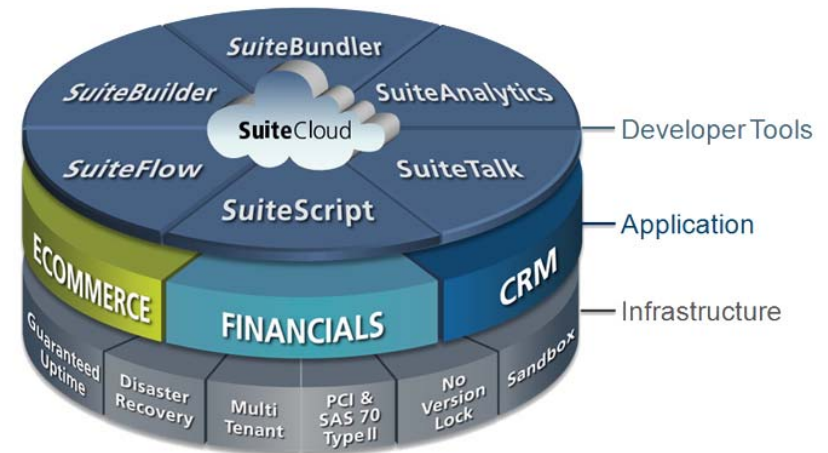
NetSuite Web Services

- 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



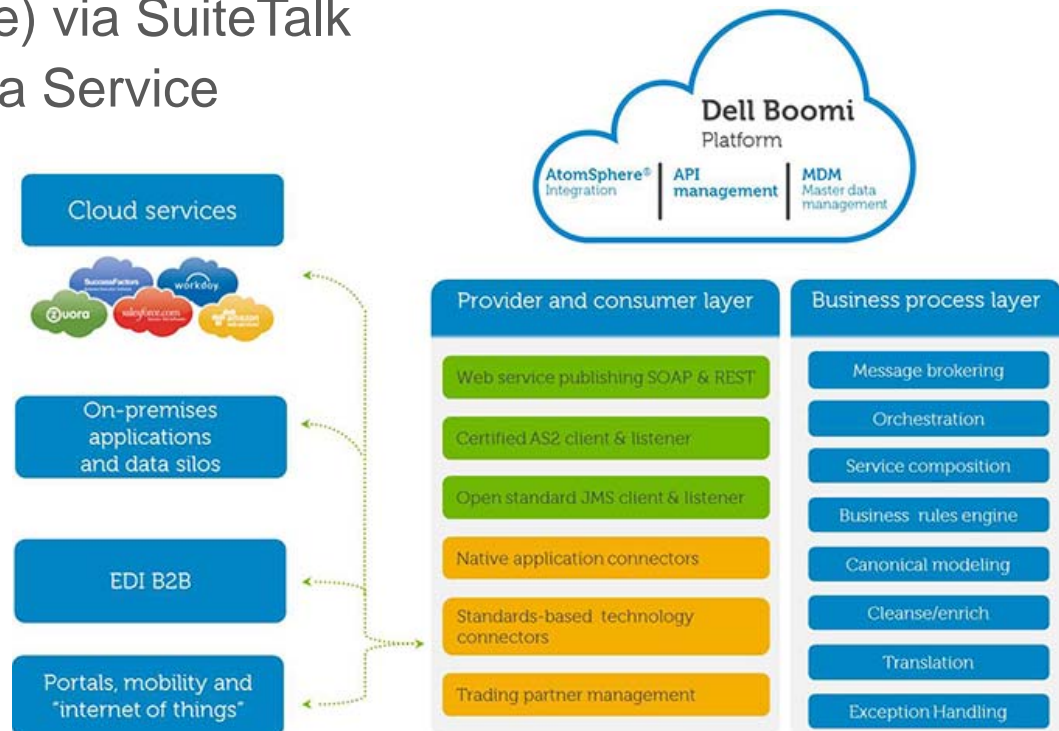
NetSuite Web Services

- 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-level 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
Standard Customer 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](#)

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

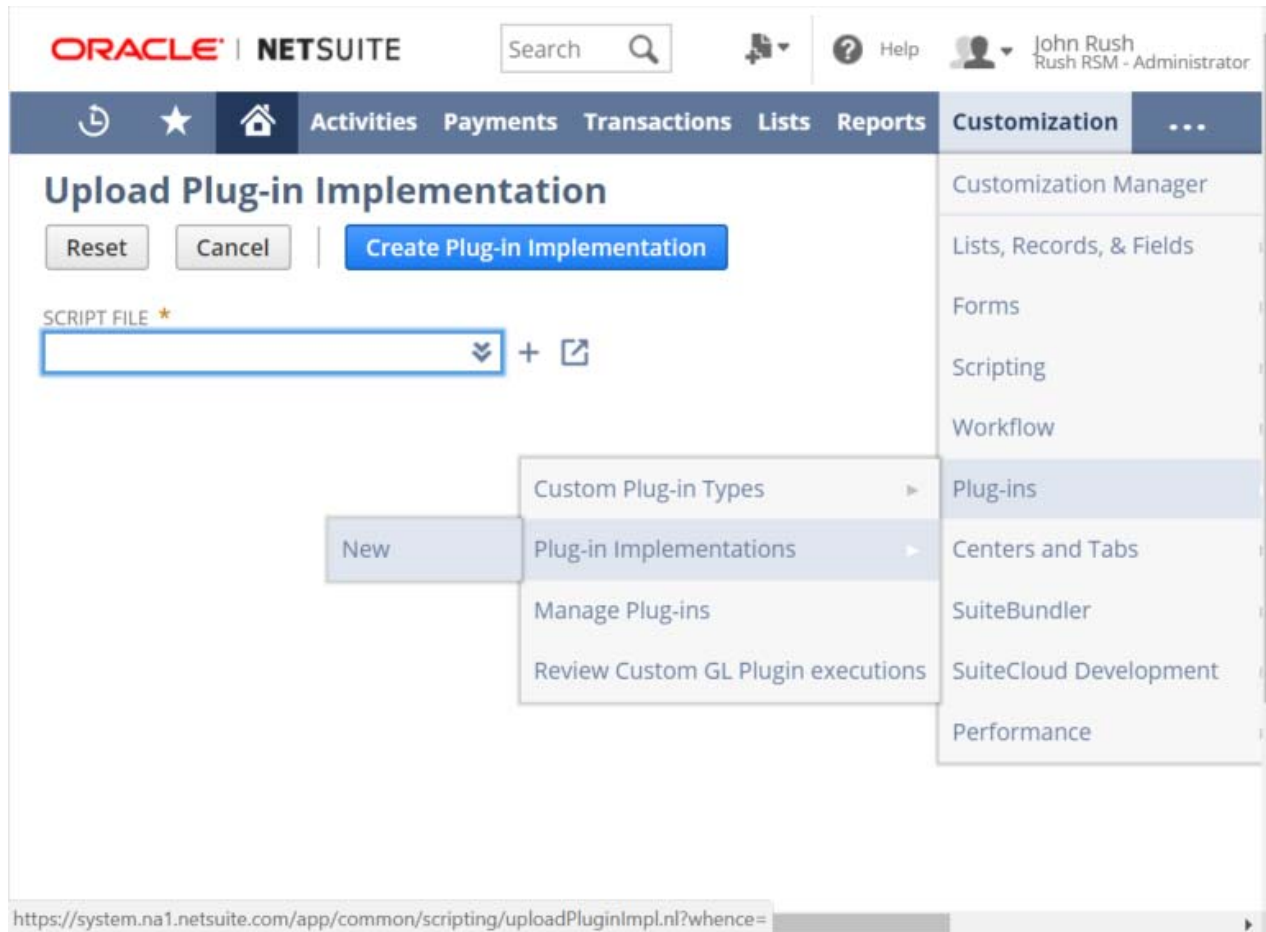
```
/*
 *Author: John Rush (RSM)
 *Date: 7/16/2017
 *Description: This plug-in will take the attached CSV file and kick off a CSV import file.
 */

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



Email Plug-in Example

Step 3: Select the Plug-in Type

The screenshot shows the Oracle NetSuite interface. At the top, the Oracle and NetSuite logos are visible, along with a search bar and user information for John Rush, Rush RSM - Administrator. The navigation bar includes links for Activities, Payments, Transactions, Lists, Reports, and Customization. The 'Customization' tab is selected, leading to the 'Select Plug-in Type' page. This page displays a table with three columns: TYPE, DESCRIPTION, and a third column that is partially obscured. The table lists three plug-in types: Custom GL Lines Plug-in, Email Capture, and Test Plug-in. A red arrow points to the 'Email Capture' row, indicating it is the selected option.

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

The screenshot shows the Oracle NetSuite interface for creating a Plug-In Implementation record. The top navigation bar includes the Oracle NetSuite logo, a search bar, and user information for John Rush (Rush RSM - Administrator). The main navigation menu has tabs for Activities, Payments, Transactions, Lists, Reports, Customization (selected), Documents, and Setup. The 'Plug-In Implementation' form is displayed with the following fields:

- 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:** (Empty text area)
- OWNER:** John Rush
- INACTIVE:** ☐

Below the form fields, there are two tabs: **Scripts** and **Unhandled Errors**. The **Scripts** tab is active, showing an **IMPLEMENTATION** field with a dropdown menu set to 'Customer_Email_Plugin.js'. Below this, there is a **Libraries** section with a **LIBRARY SCRIPT FILE** dropdown menu set to 'MCG_LIB_1-6.js'.

Email Plug-in Example

Step 5: Enable the Plug-in


ORACLE | NETSUITE

Search

Help

John Rush
Rush RSM - Administrator

ActivitiesPaymentsTransactionsListsReportsCustomizationDocumentsSetup...



WARNING
Plug-ins are generally designed to modify or supplement NetSuite business logic. When you enable a plug-in, standard NetSuite bus processes may no longer run as expected, especially if you enable a plug-in developed by a third party. Therefore, make sure that y understand the impact on your NetSuite account before enabling a plug-in and ensure that use of the plug-in meets all of your secu regulatory, and other compliance obligations, including Payment Card Industry (PCI) Data Security Standards.

Manage Plug-In Implementations

SaveCancel

Email Capture Plugin

IMPLEMENTATIONS



☒

CUSTOMER EMAIL CSV IMPORT

emails.TSTDREV1487210.223.70a8abf4db@emails.na1.netsuite.com

Automate CSV Import from Email Plug-in

Setup Plugin Mapping

ORACLE | NETSUITE Search   Help John Rush
Rush RSM - Administrator

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

Saved CSV Imports

New

FILTERS

RECORD TYPE
All Records ▼

ID	NAME ▼	TRANSLATE	FIELD MAP	DESCRIPTION Required for this operation.	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=>

IMPORT TASKS

- Import CSV Records
- View CSV Import Status
- Saved CSV Imports**
- CSV Import Preferences

EXPORT TASKS

- Bulk Update Translation
- Full CSV Export

Setup Manager
Company ▶
Accounting ▶
Sales ▶
Marketing ▶
Support ▶ TOTAL: 7
Site Builder ▶
SuiteCommerce Advanced ▶
Import/Export ▶
5:41 pm

Email Plug-in Example

Send Email

Customer Import - Message (HTML)

FILE MESSAGE INSERT OPTIONS FORMAT TEXT REVIEW ADOBE PDF

Paste Clipboard Basic Text Names Include Tags Zoom Ink Disable

Send

To... 'emails.TSTDRV1487210.223.70a8abf4db@emails.na1.netsuite.com'

Cc...

Subject Customer Import

Attached customer-plugin-csv-import.csv (106 B)

Customer import

John Rush
Manager, Application Development and Integration

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f t in YouTube

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RSM

'emails.TSTDRV1487210.223.70a8abf4db@emails.na1.netsuite.com' No Items

Email Plug-in Example

File Appears in File Cabinet

The screenshot displays the Oracle NetSuite interface. At the top, the Oracle NetSuite logo is on the left, a search bar is in the center, and user information (John Rush, Rush RSM - Administrator) is on the right. Below the header is a navigation bar with icons and labels for Activities, Payments, Transactions, Lists, Reports, Customization, Documents, and Setup. The main content area is titled 'Folder Contents' and includes a search bar and several action buttons: Add File, Advanced Add, New Folder, Copy Files, Delete Files, and Move Files. On the left, a sidebar lists various folders, with 'Customer Email Attachments' selected. The main table, titled 'Customer Email Attachments', shows a single file entry with the following details:

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 FROM  TO 

TOTAL: 39

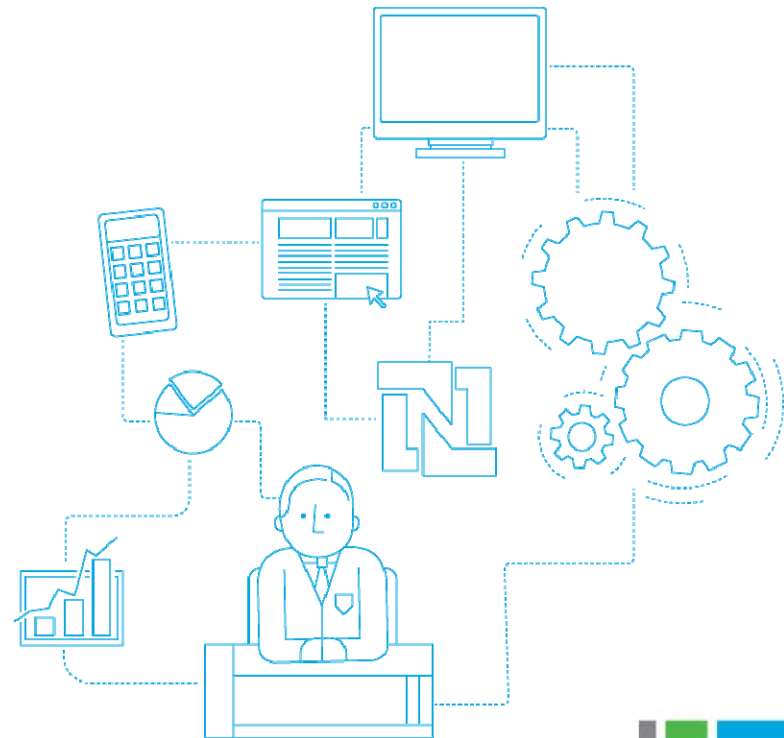
DATE ▼	JOB NAME	STATUS	PERCENT COMPLETE	MESSAGE	CSV RESPONSE	CANCEL
07/18/2017 5:41 pm	Customers Only - customer-plugin-csv-import.csv - john.rush@rsmus.com	Complete	100.0%	2 of 2 records imported successfully	CSV Response	
07/18/2017 5:37 pm	Contacts Only - customer-plugin-csv-import.csv - john.rush@rsmus.com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

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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