

# Scripting for Non-Scripters

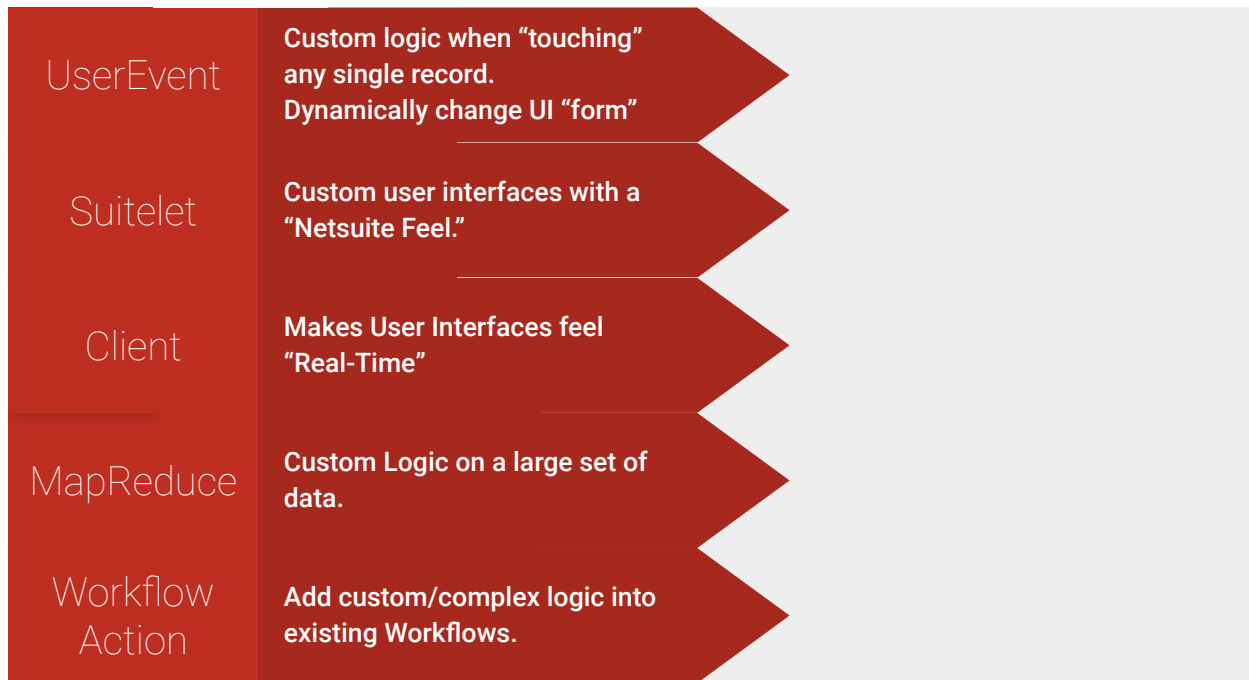
Rocky Mountain Netsuite User Group

# Agenda

- Why use SuiteScript?
- Where are Netsuite “Scripts”?
- Script Execution
  - Enable/Disable Scripts
  - Starting/Stopping Scripts
  - What’s Running?
- Script Permissions
- Script Performance

```
257 function summarize(summary)_
258 {
259     var emailBody = "";
260     var scriptParams = getScriptParams();
261
262     emailBody += "<h2>Script Parameters</h2>";
263     emailBody += "<table>";
264     emailBody += "<tbody>";
265     for(var key in scriptParams) {
266         var value = scriptParams[key];
267         emailBody += "<tr><td>" + key + "</td><td>: " + value + "</td>
</tr>\n";
268     }
269     emailBody += "</tbody>";
270     emailBody += "</table>";
271
272     emailBody += "If needed, more Detailed Logging Exists in the Script Logs,
specifically in the 'Details' result column. Run a Netsuite 'Server Script Log'
search.";
273
274
275
276     try {
277         var emailAttachment = null;
278         if(scriptParams.csvFileID) {
279             emailAttachment = file.load({id:scriptParams.csvFileID});
280         }
281         vlib.sendMapReduceSummaryEmail(summary, "Mass Credit/Rebill Script
Complete", emailBody, scriptParams.ccList, emailAttachment);
282     } catch(e) {
283         log.error({title:"Exception Sending Summary Email:" + e.message,
details:[e.message, e.stack]});
```

# Why use SuiteScript?



Above are most common. There are others too.

# Why use SuiteScript? - User Events

UserEvent

Custom logic when “touching”  
any single record.  
Dynamically change UI “form”

## Example Uses:

- Validating fields prior to saving.
- Send Email after save.
- Custom sublists on forms.
- Added PDF Render capabilities

# Why use SuiteScript? - Suitelets



Suitelet

Custom user interfaces with a  
"Netsuite Feel."

## Example Uses:

- Customer Refunds
- Create, Approve and Send ACH Batches

# Why use SuiteScript? - Client Scripts



Client

Makes User Interfaces feel  
"Real-Time"

## Example Uses:

- Enable/Display a field only when another field is populated.
- Instant feedback for incorrect field values.
- Dynamically populate screen fields based on a user action.

# Why use SuiteScript? - Map/Reduce

MapReduce

Custom Logic on a large set of data.

## Example Uses:

- Small-Balance Write-Off
- Invoice Email Delivery
- Call a web service, import results into Netsuite.

# Why use SuiteScript? - Workflow Action

Workflow  
Action

Add custom/complex logic into  
existing Workflows.

Used to enhance workflows by creating custom “Actions”.

Example Uses:

- Role-Based Approval Workflows
- Call Remote Web Services.



# Why use SuiteScript? - Others

## Scheduled Script

Perform logic on a set of data.  
Also-used to 'task out' work  
from UserEvent or Suitelets.



- Superceded by Map/Reduce
- Single Threaded
- Uses "Queues"

## Mass Update

Perform logic on a set of data.



- Superceded by Map/Reduce
- Single Threaded
- Page: Mass Updates

## Portlets

Create custom  
Portlets/Dashboards. Worth  
considering if you are a heavy  
user of Portlets today.



- "Personalize Dashboard"  
| "Custom Portlet"

## Restlets

Custom "API Endpoint" for  
remote systems to interface  
with.



- "REST" Web Service

# CPE Questions - Why use SuiteScript?

Of the options presented, which script type runs as a "trigger" when a record is viewed/updated/created or deleted?

1. Map/Reduce
2. \* User Event
3. Suitelet

# CPE Questions - Why use SuiteScript?

Can custom scripts be used to enhance Netsuite Workflows?

1. \* Yes
2. No

# CPE Questions - Why use SuiteScript?

Could a script change one record after a different script is updated (eg. Updating SalesOrder after Invoice has been modified.)

1. \* Yes
2. No

# Where are Netsuite “Scripts”?



SuiteScript “Code”

Script Record

Script Deployment

# Where? - “Code”

SuiteScript “Code”

Script Record

Script Deployment

- Page: File Cabinet
  - Typically “SuiteScripts” folder.
  - Sub-folders allowed (and encouraged)
- Text Files
- Javascript
  - Versions “1.0”, “2.0”, “2.1”, “2.x”
- Shared-Code “Libraries” are possible.

## File

MassDeleteJournalEntry\_mu2.js

Save

Cancel

## CONTENT

```
1  /**
2   * @NApiVersion 2.x
3   * @NScriptType MassUpdateScript
4   * @NModuleScope SameAccount
5   */
6  define(['/SuiteScripts/VF 2.0 Scripts/VFDelete_lib'],
7  function(vfdelete) {
8
9      function each(params) {
10         try {
11             if (vfdelete.canDeleteJournalEntry(params)) {
12                 vfdelete.deleteJournalEntry(params);
13             } else {
14                 log.audit({title:"JournalEntry can NOT be deleted
15                 details:params});
16             }
17             catch(e) {
18                 log.audit({title:"canDeleteJournalEntry() exception:
19                 details:[e.message, e.stack, params]});
20             }
21         }
22     }
23 }
```

# Where? - “Script Record”

SuiteScript “Code”

Script Record

Script Deployment

## Scripts

[View Deployments](#)

[Submit](#) [New Script](#)

### FILTERS

TYPE [- All -](#) API VERSION [- All -](#) SCRIPT FILE [- All -](#) FROM BUNDLE [-](#)

☒ SHOW INACTIVES

Add — Apm Spd Sl Main [◀](#) [▶](#) TOTAL: 227

INACTIVE	EDIT   VIEW	NAME *	FROM BUNDLE	ID	TYPE	API VERSION	DEPLOYMENTS	SCRIPT	LIBRARY SCRIPT	INTERNAL ID
<input type="checkbox"/>	<a href="#">Edit</a>   <a href="#">View</a>	Add Event Sponsor		customscript_sponsor_associateevent	Workflow Action	2.0	<a href="#">Deployments</a>	sponsorship-wa-associateevent.js		47
<input type="checkbox"/>	<a href="#">Edit</a>   <a href="#">View</a>	Add Sponsorship Presenter		customscript_sponsor_createpresenter	Workflow Action	2.0	<a href="#">Deployments</a>	sponsorship-wa-addpresenter.js		45
<input type="checkbox"/>	<a href="#">View</a>	APM AH SL Account Overview 📄	67350	customscript_apm_ah_sl_accountoverview	Suitelet	2.0	<a href="#">Deployments</a>	apm_ah_sl_accountoverview.js		192
<input type="checkbox"/>	<a href="#">View</a>	APM AH SL Lists 📄	67350	customscript_apm_ah_sl_lists	Suitelet	1.0	<a href="#">Deployments</a>	apm_ah_sl_lists.js	apm_ss_library.js	193
<input type="checkbox"/>	<a href="#">View</a>	APM AH SL Main 📄	67350	customscript_apm_ah_sl_main	Suitelet	2.0	<a href="#">Deployments</a>	apm_ah_sl_main.js		191

- Page: Scripts
- Requires a single “SuiteScript Code” file.
- Defines a formal “structure” to what the code intends to be/do
- Best place to get to “everything” about this script.

## Script 📄

[Deploy Script](#)

[Actions](#)

TYPE User Event  
NAME SAS Supported Records UE  
ID customscript\_sas\_ue\_supportedrectypes  
API VERSION 2.0

[Scripts](#) [Parameters](#) [Unhandled Errors](#) [Execution Log](#) [Deployments](#) [History](#) [System Notes](#)

SCRIPT FILE WD\_SAP\_UF\_ForsupportedRecordTypes.js

BEFORE LOAD FUNCTION ☒  
BEFORE SUBMIT FUNCTION ☒  
AFTER SUBMIT FUNCTION ☒

### Custom Plug-in Types

CUSTOM PLUG-IN TYPE

No records to show.

[Deploy Script](#)

[Actions](#)

# Where? - “Script Deployment Record”

SuiteScript “Code”

Script Record

Script Deployment

## Script Deployments

FILTERS

TYPE

- All -

STATUS

- All -

RECORD TYPE

- All -

API VERSION

- All -

SCRIPT

- All -

SHOW UNDEPLOYED

Add — Apm Spd SI Main

INTERNAL ID	EDIT   VIEW	ID	SCRIPT	API VERSION	STATUS	TYPE	LAST MODIFIED
60	<a href="#">Edit</a>   <a href="#">View</a>	customdeploy_sponsor_associateevent	Add Event Sponsor	2.0	Released	Workflow Action	5/14/2018 5:19 pm
56	<a href="#">Edit</a>   <a href="#">View</a>	customdeploy_sponsor_createpresenter	Add Sponsorship Presenter	2.0	Released	Workflow Action	11/29/2017 1:48 pm
392	<a href="#">Edit</a>   <a href="#">View</a>	customdeploy_apm_ah_sl_accountoverview	APM AH SL Account Overview	2.0	Released	Suitelet	5/3/2020 8:18 pm
393	<a href="#">Edit</a>   <a href="#">View</a>	customdeploy_apm_ah_sl_lists	APM AH SL Lists	1.0	Released		
391	<a href="#">Edit</a>   <a href="#">View</a>	customdeploy_apm_ah_sl_main	APM AH SL Main	2.0	Released		

Script Deployment

Script

Bank Feeds Audit Trail Cleanup

Title

Bank Feeds Audit Trail Cleanup

ID

customdeploy\_bf\_model\_rs\_audittrailclean

Deployed

☒

Status

Scheduled

See Instances

Status Page

Log Level

Audit

Execute As Role

Administrator

Priority

Standard

Concurrency Limit

Submit All Stages At

☒

Yield After Minutes

60

Buffer Size

1

Schedule

Execution Log

System Notes

SINGLE EVENT

DAILY EVENT

Repeat every 1 day(s)

WEEKLY EVENT

Repeat every weekday

MONTHLY EVENT

YEARLY EVENT

START DATE

10/4/2020

START TIME

8:00 pm

REPEAT

END BY

NO END DATE



# CPE Questions - Where?

Of the choices given, what is the best “starting place” to find details about any script?

1. Page: File Cabinet
2. Page: Script Records
3. Page:Map/Reduce Status

# CPE Questions - Where?

What programming language does SuiteScript Use?

1. Java
2. Javascript
3. Python
4. HTML

# Script Execution

- Enable and Disable Scripts
- Starting and Stopping Scripts
- Script Permissions
- Script Execution Limits

# Enable/Disable - Script Deployment : “Deployed”

**Script Deployment** ← → List Search

**Save** **Cancel** **Change ID** **Actions**

SCRIPT

\* APPLIES TO

ID

**DEPLOYED** ☒

\* STATUS

EVENT TYPE

LOG LEVEL

EXECUTE AS ROLE

**Audience** • **Scripts** • **Context Filtering** • **Execution Log** **System Notes**

**ROLES** ☐ **Select All**

A/P Clerk  
A/R Clerk  
Accountant  
Accountant (Reviewer)

**EMPLOYEES** ☒ **Select All**

Cory Anderson  
Dana Larson  
Margery Komminos  
Mike Kachline

**PARTNERS** ☐ **Select All**

1. Recommended way to disable for any/all script types.
2. “Edit” any Script Deployment Record
3. Uncheck “Deployed” checkbox
4. Save

# Enable/Disable - Page: Scripted Records : “Deployed”

**Scripted Record**

[Save](#) [Cancel](#)

NAME: File Drag and Drop Record Type ID: customrecord\_dad\_enabled\_record\_

**User Event Scripts** • Client Scripts • Custom Forms • Workflows • Localized User Event Scripts • Localized Client Scripts

[Move To Top](#) [Move To Bottom](#)

SCRIPT	OWNER	API VERSION	FROM BUNDLE	BUNDLE NAME	COMPANY NAME OF BUNDLE	STATUS	DEPLOYED	BEFORE LOAD FUNCTION
[[[ DnD Enabled Record Type UE	Marc Scremin	1.0	41309	File Drag and Drop	NetSuite Platform Solutions Group - SuiteLabs File Drag and Drop	Released	<input checked="" type="checkbox"/>	beforeLoad
[[[ DnD Record Page UE	Marc Scremin	1.0	41309	File Drag and Drop	NetSuite Platform Solutions Group - SuiteLabs File Drag and Drop	Released	<input checked="" type="checkbox"/>	beforeLoad
[[[ DnD Record Page Current Role UE	Marc Scremin	1.0	41309	File Drag and Drop	NetSuite Platform Solutions Group - SuiteLabs File Drag and Drop	Released	<input checked="" type="checkbox"/>	
[[[ StickyNotes Record Page User Event	Margery Komninos	1.0	49018	StickyNotes	NetSuite Platform Solutions Group - StickyNotes	Released	<input checked="" type="checkbox"/>	beforeLoad
[[[ StickyNotes User Preference	Margery Komninos	1.0	49018	StickyNotes	NetSuite Platform Solutions Group - StickyNotes	Released	<input checked="" type="checkbox"/>	beforeLoad

UserEvent and Client Scripts only ....

1. Page: Scripted Records
2. Click “Edit” on your record type.
3. Uncheck “Deployed” checkbox
4. Click “Save”

# Noteworthy - Page: Scripted Records : Sequencing

UserEvent and Client Scripts only ....

1. Page: Scripted Records
2. Click “Edit” on your record type.
3. Click and drag “Grab Dots” on left of each script.
4. Click “Save”

The screenshot shows the 'Scripted Record' configuration page. At the top, there are 'Save' and 'Cancel' buttons. Below them, the record name is 'Employee'. A tabbed interface shows 'User Event Scripts' as the active tab, with other tabs for 'Client Scripts', 'Custom Forms', and 'Workflows'. A note states: 'You can specify the order in which user event scripts are executed for this scripted record. Note that'. Below the note are 'Move To Top' and 'Move To Bottom' buttons. A table lists the scripts:

SCRIPT	OWNER	API VERSION	FROM BUNDLE
DnD Record Page UE	Marc Scremin	1.0	41309
DnD Record Page Current Role UE	Marc Scremin	1.0	41309
StickyNotes Record Page User Event	Margery Komninos	1.0	49018
StickyNotes User Preference	Margery Komninos	1.0	49018
SAS Employee UE	Cory Anderson	2.0	203059

A red box highlights the vertical ellipsis (three dots) on the left side of each script name, indicating the 'Grab Dots' used for sequencing.

# Enable/Disable - Script Deployment : “Status”

**Script Deployment**

Save Cancel Change ID Actions

SCRIPT SuiteQL

\* TITLE SuiteQL\_Deployment

ID customdeploy1

DEPLOYED ☒

\* STATUS Released

EVENT TYPE Testing

LOG LEVEL Testing

EXECUTE AS ROLE Released

AVAILABLE WITHOUT LOGIN ☐

- “Status” field on “Script Deployment” record
  - “Testing” vs “Released”
  - “Scheduled” vs “Not Scheduled”
- Not Recommend for “Enable/Disable”. Use “Deployed” checkbox.

# Starting and Stopping Scripts

Scripts are commonly run any of ...

- Manually, On Demand
- On a Schedule
- Anytime a Record is saved or loaded.
- Other Record Triggers (eg. When a PDF is printed)
- Listen for inbound API calls



# Starting/Stopping - UserEvent Scripts

- “Specific Triggers” are found on Script Record
- Earlier notes on “Deployment” of UserEvent scripts.
- Noteworthy: CSV Import “Scripts and Workflows”
  - Found under Import Options | “Advanced Options”
  - Special permission to use this checkbox.
- User Events being triggered from Scheduled or Map/Reduce scripts.

## Script

Deploy Script

Actions

TYPE User Event

NAME SAS Mapping Setup UE

ID customscript\_sas\_ue\_mapsetup

API VERSION 2.0

Scripts

Parameters

Unhandled Errors

Execution

SCRIPT FILE WD\_SAP\_UE\_MapSetup.js

BEFORE LOAD FUNCTION ☒

BEFORE SUBMIT FUNCTION ☒

AFTER SUBMIT FUNCTION ☒

RUN SERVER SUITESCRIPT ☐  
AND TRIGGER WORKFLOWS

Check to specify that any server-side SuiteScript  
save p... [more](#)

# Starting/Stopping - Map/Reduce Scripts

## Script Deployment

Save  Cancel Change ID Actions

Save & New

Save & Copy

Save and Execute

SCRIPT SAS - Email Approval Log Clean-up

TITLE SAS - Email Approval Log Clean-up

ID customdeploy\_sas\_approval\_logs\_cleanup

DEPLOYED ☒

\* STATUS Not Scheduled

SEE INSTANCES Status Page

LOG LEVEL Error

EXECUTE AS ROLE Administrator

## Script Deployment

Edit Back Actions

SCRIPT SAS - Email Approval Log Clean-up

TITLE SAS - Email Approval Log Clean-up

ID customdeploy\_sas\_approval\_logs\_cleanup

DEPLOYED ☒

- Starting ...
  - Script Deployment: “Save and Execute”
  - Script Deployment: Scheduled
- Stopping ...
  - Terrible! But works... File Cabinet | Type junk into source-code file
  - Custom “Stop Flags”

Schedule • Execution Log System Notes

SINGLE EVENT

DAILY EVENT X X

Repeat every 1 day(s)

WEEKLY EVENT

Repeat every weekday

MONTHLY EVENT

YEARLY EVENT

START DATE 8/31/2020

START TIME 5:00 pm

REPEAT

END BY

NO END DATE ☒

# Starting/Stopping - Map/Reduce Scripts

## Map/Reduce Script Status

[Refresh](#)

**FILTERS**

DATE  FROM  TO  SCRIPT

DEPLOYMENT ID

STATUS

☐ SHOW INACTIVES

10/12/2024 — 10/24/2024   TOTAL: 119

SCRIPT	DEPLOYMENT ID	DATE CREATED	DATE	DATE	STATUS	STAGE	PRIORITY	CONCURRENCY	DETAILS	CANCEL
SAS - Approval Rule Evaluation M/R	customdeploy_sas_rule_eval_scheduled	10/12/2024 8:02:07 am	10/12/2024 8:02:08 am	10/12/2024 8:02:13 am	Complete		Standard	1	<a href="#">Details</a>	
SAS - Email Approval Log Clean-up	customdeploy_sas_approval_logs_cleanup	10/12/2024 5:01:59 pm	10/12/2024 5:02:00 pm	10/12/2024 5:02:03 pm	Complete		Standard	1	<a href="#">Details</a>	
SAS - Mirror Approval Clean-up	customdeploy_sas_mirror_approval_cleanup	10/12/2024 6:02:04 pm	10/12/2024 6:02:06 pm	10/12/2024 6:02:09 pm	Complete		Standard	1	<a href="#">Details</a>	
Bank Feeds Audit Trail Cleanup	customdeploy_bf_model_ns_audittrailclean	10/12/2024 8:02:05 pm	10/12/2024 8:02:06 pm		Complete		Standard	2	<a href="#">Details</a>	

- Stopping ...
  - Page: Map/Reduce Status | “Cancel”

# Starting/Stopping - Scheduled Scripts

**Script Deployment**

Save  Cancel Change ID Actions

Save & New  
Save & Copy  
**Save and Execute**

SCRIPT Send Overdue Invoice Notifications  
\* TITLE Send Overdue Invoice Notifications (Ad-hoc)  
ID customdeploy\_sponsor\_overdueinvoice\_ah  
DEPLOYED ☒

\* STATUS Not Scheduled  
SEE INSTANCES Status Page  
LOG LEVEL Debug  
EXECUTE AS ROLE Administrator  
\* PRIORITY Standard

- Starting ...
  - Script Deployment: “Save and Execute”
  - Script Deployment: Schedule
- Stopping ...
  - “Deployed” checkbox
  - Custom “Stop Flags”

**Script Deployment**

Edit Back Remove Queue Actions

SCRIPT RMNSUG\_SCH\_RenewalIndCorp  
TITLE First of every month  
ID customdeploy\_rmnsug\_sch\_renewalindcorp  
DEPLOYED ☒

**Schedule** Execution Log History System Notes

SINGLE EVENT  
DAILY EVENT X Day  
1 of every 1 month(s)  
WEEKLY EVENT The  
first Friday of every 1 month(s)  
MONTHLY EVENT X  
YEARLY EVENT  
START DATE 5/1/2015  
START TIME 12:30 am  
REPEAT  
END BY  
NO END DATE ☒

# Starting/Stopping - Scheduled Scripts

## Scheduled Script Status

Refresh

### FILTERS

DATE  FROM  TO  SCRIPT

DEPLOYMENT ID  STATUS  API VERSION

			Finished							TOTAL: 30
SCRIPT	API VERSION	DEPLOYMENT ID	Unfinished	STATUS	START	END	PRIORITY	% COMPLETE	CANCEL	
Send Overdue Invoice Notifications	2.0	customdeploy_sponsor_overdueinvoice	11/10/2024 8:31.44 am	Complete	8:31.45 am	8:31.46 am	Standard	100.0%		
Send Overdue Invoice Notifications	2.0	customdeploy_sponsor_overdueinvoice	11/9/2024 8:32.12 am	Complete	8:32.13 am	8:32.13 am	Standard	100.0%		
Send Overdue Invoice Notifications	2.0	customdeploy_sponsor_overdueinvoice	11/8/2024 8:32.11 am	Complete	8:32.12 am	8:32.13 am	Standard	100.0%		
Send Overdue Invoice Notifications	2.0	customdeploy_sponsor_overdueinvoice	11/7/2024 8:31.52 am	Complete	8:31.53 am	8:31.54 am	Standard	100.0%		
Send Overdue Invoice Notifications	2.0	customdeploy_sponsor_overdueinvoice	11/6/2024 8:31.46 am	Complete	8:31.47 am	8:31.48 am	Standard	100.0%		
Send Overdue Invoice					8:31.56	8:31.58				

- Stopping ...
  - Page: Scheduled Script Status | "Cancel"

# Starting/Stopping - Mass Update Scripts

Like any other “normal” Mass Update, except, custom logic.

- Starting ...
  - Page: Mass Updates
    - “Custom Updates”
  - Page: Saved Mass Updates
- Stopping ...
  - “Deployed” checkbox.
  - Page: Mass Updates
  - Click “Running Mass Update”

## Mass Updates

### ACTION

- + General Updates
- + Sales Force Automation
- + Contact Management
- + Activities
- + Files
- + Group Records
- + Member/Sponsor Support and Service
- + Transactions
- + Opportunities
- + Marketing
- + Reports
- + Items
- + Special Transaction Updates
- + Individuals
- + Roles & Permissions
- + Web Site Redirects
- + Templates
- + Duplicate Resolution
- + Member/Sponsor Web Site Assignment
- + Item Collection
- + Custom Updates
- + Workflows

# Starting/Stopping - Suitelet

- Starting ...
  - Script Deployment: Links
- Stopping ...
  - “Deployed” checkbox.
  - Terrible! But works... File Cabinet | Type junk into source-code file
  - Custom “Stop Flags”

**Script Deployment**

← →

[Edit](#) [Back](#) [Actions](#)

SCRIPT SuiteQL STATUS Released

TITLE SuiteQL\_Deployment EVENT TYPE

ID customdeploy1 LOG LEVEL Debug

DEPLOYED ☒ EXECUTE AS ROLE Current Role

AVAILABLE WITHOUT LOGIN ☐

URL /app/site/hosting/scriptlet.nl?script=298&deploy=1

Audience	Links	Execution Log	System Notes
CENTER	SECTION	CATEGORY	LABEL
Classic Center	Reports	Custom	SuiteQL Runner

[edit](#) [Back](#) [...](#)

# CPE Question - Starting / Stopping

What is the cleanest, most effective way to stop any script type from running in the future?

1. \* Uncheck “Deployed” on Script Deployment Record
2. Edit Code in FileCabinet, and add junk.
3. Click “Cancel” on either Page:Map/Reduce Status or Page: Scheduled Script Status



# CPE Question - Starting / Stopping

Where can you find and change the sequence in which UserEvent or Client scripts run for a given record?

1. Page: Scripts
2. Page: Script Deployments
3. \* Page: Scripted Records

# Coffee Break!



# What's Running?

- Script Logs
- “Status” pages

# What's Running? - Script Logs

Script Execution log

FILTERS

LOG LEVEL: All DATE: All FROM: TO: SCRIPT

DATE/TIME	LOG LEVEL	SCRIPT	DEPLOYMENT ID	USER	TITLE	DETAIL
3/14/2024 7:47:52 am	DEBUG	Prevent Duplicate RSVP	CUSTOMDEPLOY_RSVP_DUP_DETECTION		RSVP	Duplicate C
3/14/2024 7:47:52 am	AUDIT	Prevent Identical RSVP	CUSTOMDEPLOY_RSVP_IDENT_DETECTION		RSVP	Attempting
3/14/2024 7:47:52 am	DEBUG	Prevent Identical RSVP	CUSTOMDEPLOY_RSVP_IDENT_DETECTION		RSVP	(comment
3/14/2024 7:47:52 am	DEBUG	Prevent Identical RSVP	CUSTOMDEPLOY_RSVP_IDENT_DETECTION		RSVP	Identical Cc
3/14/2024 8:32:14 am	AUDIT	Send Overdue Invoice Notifications	CUSTOMDEPLOY_SPONSOR_OVERDUEINVOICE	-System-	Starting Overdue Invoice Notifications...	
3/14/2024 8:32:14 am	AUDIT	Send Overdue Invoice Notifications	CUSTOMDEPLOY_SPONSOR_OVERDUEINVOICE	-System-	Finding overdue invoices...	
3/14/2024 12:40:33 pm	AUDIT	Prevent Duplicate RSVP	CUSTOMDEPLOY_RSVP_DUP_DETECTION		RSVP	Attempting

Script Deployment

Save Cancel Change ID Actions

SCRIPT SuiteQL

TITLE SuiteQL\_Deployment

ID customdeploy1

DEPLOYED ☒

STATUS Released

EVENT TYPE

LOG LEVEL Debug

EXECUTE AS ROLE Current Role

AVAILABLE WITHOUT LOGIN ☐

URL /app/site/hosting/scripte script=298&deploy=1

New Saved Search

Role

Save SS Data To File Cabinet

Saved Search

Scheduled Script Instance

Script

Script Deployment

Sent Email List

Server Script Log

Shipment Package

- Page: Script Execution Logs
- “Execution Logs” from Script Record
- “Execution Logs” from Script Deployment Record
- Searches & Datasets: “Server Script Log”
- Noteworthy: Script Deployment “Log Level”

# Favorite Logging Search: “Recent Script Errors”


Most developers use log files to “follow” how their script is doing and log cases where the script experienced an error. These errors can easily be lost. Here, we show a way to surface up script errors.

- Type: Server Script Logs
- Criteria: “Type=Error”
- Results: Sort by date, desc
- Results can go back approximately 30 days.

## Saved Server Script Log Search

### Recent Script Errors (Detail)

Save & Run Reset Cancel Preview New Template Change ID

SEARCH TITLE   
Recent Script Errors (Detail)


ID  
customsearch8160

OWNER  
Mike Kachline

☒ PUBLIC


☐ AVAILABLE AS LIST VIEW


CriteriaResultsHighlightingAvailable FiltersAudienceRolesEmailAudit Trail

 Use this tab to specify criteria that narrow down your search.

☐ USE EXPRESSIONS

StandardSummary

FILTER 

DESCRIPTION 

Typeis Error

▼ Add✕ Cancel✚ Insert🗑 Remove

# What's Running? - Map/Reduce

## Page: Map/Reduce Script Status

- Shows active and recently finished scripts.
- Allows cancelling “queued up / not yet started” scripts.
- You CANNOT stop an already started script here.

Map/Reduce Script Status

[Refresh](#)

**FILTERS**

DATE: today FROM: 8/23/2020 TO: 8/23/2020 SCRIPT: - All -

DEPLOYMENT ID: - All - STATUS: - All -

☒ SHOW INACTIVES 8/23/2020(1) TOTAL: 139

SCRIPT	DEPLOYMENT ID	DATE CREATED	START DATE	END DATE	STATUS	STAGE	PRIORITY	CONCURRENCY	DETAILS	CANCEL
V4 Add ZAB Link onto Project	customdeploy_v4mr2_zablinkonprj_sched	8/23/2020 4:01:43 pm	8/23/2020 4:01:45 pm	8/23/2020 4:04:44 pm	Complete		Standard	2	Details	
V4 Mass Render Snapshots	customdeploy_v4mr2_modified_payments	8/23/2020 4:01:43 pm	8/23/2020 4:01:45 pm	8/23/2020 4:02:42 pm	Complete		Standard	15	Details	
V4 Mass Render Snapshots	customdeploy_v4mr2_modified_invoices	8/23/2020 4:01:42 pm	8/23/2020 4:01:45 pm	8/23/2020 4:02:49 pm	Complete		Standard	15	Details	
ZAB Automation MR	customdeployzab_automation_mr_sch	8/23/2020 4:01:40 pm	8/23/2020 4:01:45 pm	8/23/2020 4:02:22 pm	Complete		Standard	25	Details	
V4 Mass Render Snapshots	customdeploy_v4mr2_modified_credits	8/23/2020 4:01:40 pm	8/23/2020 4:01:42 pm	8/23/2020 4:02:39 pm	Complete		Standard	15	Details	

# What's Running? - Scheduled Status

Page: Scheduled Script Status

- Shows active and recently finished scripts.
- Allows cancelling “queued up / not yet started” scripts.

# CPE Questions - What's Running?

Is it possible for a script to run, and log nothing?

1. \* Yes
2. No



# Script Permissions

- “Execute as Role”
  - As User, As Admin
  - Always “Admin” for Map/Reduce, Scheduled
- “Audience”
- System Information Fingerprints
  - “Bulk Processing”
  - “Script”

The screenshot displays the 'Script Deployment' interface, specifically the 'Map/Reduce Script Deployment' section. The top navigation bar includes 'Edit', 'Back', and 'Actions' buttons. The main content area shows details for a script named 'V4 Snapshot Transactions', including its title, ID, and a 'DEPLOYED' status. A sidebar on the right contains various settings: 'STATUS' (Not Scheduled), 'SEE INSTANCES' (Status Page), 'LOG LEVEL' (Debug), 'EXECUTE AS ROLE' (Administrator, highlighted with a red box), 'PRIORITY' (Standard), and 'CONCURRENCY LIMIT' (20). A 'SUBMIT ALL STAGES' checkbox is also present.

Below this, another 'Script Deployment' section is visible, showing details for a script named 'SuiteQL'. It includes a 'Save' button, a 'Cancel' button, and a 'Change ID' button. The script details include 'SCRIPT SuiteQL', 'TITLE SuiteQL\_Deployment', 'ID customdeploy1', and a 'DEPLOYED' status with a checked checkbox.

The bottom section of the interface is titled 'Audience' (highlighted with a red box) and contains two tabs: 'Audience' and 'Links'. The 'Audience' tab is active, showing a list of roles and groups. The 'ROLES' section includes a 'Select All' button and a list of roles: 'A/P Clerk', 'A/R Clerk', 'Accountant', 'Accountant (Reviewer)', 'Current Board Members', and 'Margie Test Group'. The 'EMPLOYEES' section includes a 'Select All' button and a list of employees: 'Cory Anderson', 'Dana Larson', 'Margery Komminos', and 'Mike Kachline'.

# CPE Questions - Permissions

Can scripts modify records on behalf of a user, even if that user does not have edit permission to that record type?

1. \* Yes
2. No

# Performance - Script Execution Limits

- Time Limits
  - NS Help: “Script Execution Time Limits”
- “Units” Limits
  - NS Help: “Script Type Usage Unit Limits”
- Map/Reduce is the closest to “limit-less”
- UserEvent is quite limited

## Script Type Usage Unit Limits

The following table lists the maximum allowable usage units for each SuiteScript (1.0 and 2.x) script type. You can use the [Script Type Usage Unit Limits](#) page to see how many usage units you have remaining for a particular script.

Script Type	Total usage units Allowed per Script	Notes
Bundle Installation Scripts (SuiteScript 1.0) <a href="#">SuiteScript 2.x Bundle Installation Script Type</a>	10,000	The limit is 10,000 usage units per execution.
Client Scripts (SuiteScript 1.0) <a href="#">SuiteScript 2.x Client Script Type</a>	1,000	Client scripts are metered on a per-script basis. If an account has one form-level client script attached to a form, each client script can total 1,000 usage units. Usage units are reset when the script is updated. For information about record- and form-level client scripts, see <a href="#">Client Scripts</a> .
<a href="#">SuiteScript 2.x Map/Reduce Script Type</a>	—	Map/reduce scripts are available only in SuiteScript 2.x. There are no limits imposed on the full duration of a map/reduce script. However, usage units used by a single method invocation, are regulated.
Mass Update Scripts (SuiteScript 1.0) <a href="#">SuiteScript 2.x Mass Update Script Type</a>	1,000	The limit is 1,000 usage units per record or execution of the script.
Portlet Scripts (SuiteScript 1.0) <a href="#">SuiteScript 2.x Portlet Script Type</a>	1,000	—
RESTlets (SuiteScript 1.0) <a href="#">SuiteScript 2.x RESTlet Script Type</a>	5,000	The SuiteScript governance model for RESTlets tracks usage units. For more information, see <a href="#">RESTlet Governance and Security</a> .
Scheduled Scripts (SuiteScript 1.0) <a href="#">SuiteScript 2.x Scheduled Script Type</a>	10,000	Within one scheduled script, all actions combined cannot exceed 10,000 usage units. This includes record.transform(options) and one call to email.send(options). If you have a scheduled script with potentially long execution time, you can use the yield() method to allow you to set recovery points or provide a yield built-in yielding and can be submitted for processing in the background.

# Performance - Map/Reduce Concurrency

- Map/Reduce run in parallel!
- Use “SuiteCloud Plus” Processors
- Script Deployment “Priority”
- Script Deployment “Concurrency Limit”

**Script Deployment**

Save Cancel Change ID Actions

SCRIPT SAS - Mirror Approval Clean-up

\* TITLE SAS - Mirror Approval Clean-up

ID customdeploy\_sas\_mirror\_approval\_cleanup

DEPLOYED ☒

\* STATUS Scheduled

SEE INSTANCES Status Page

LOG LEVEL Error

EXECUTE AS ROLE Administrator

\* PRIORITY Standard

CONCURRENCY LIMIT 1

SUBMIT ALL STAGES AT ONCE 1

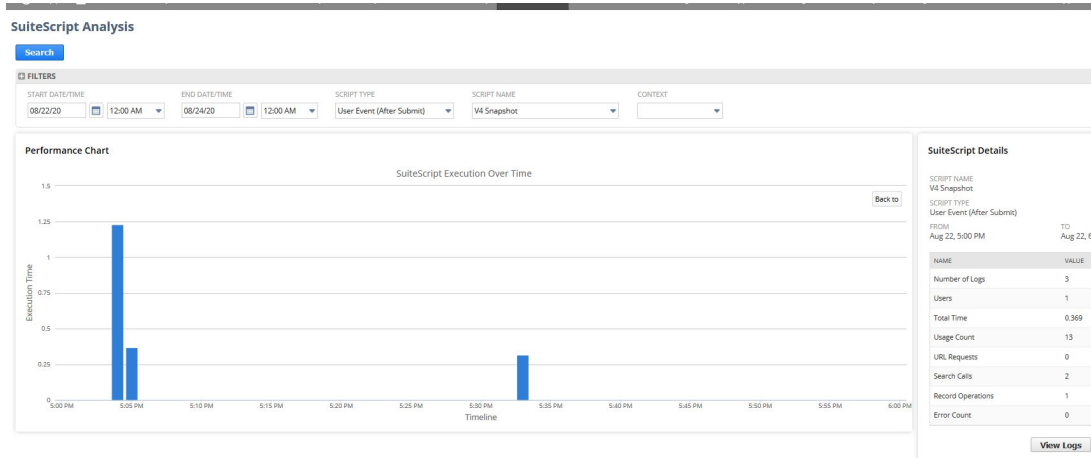
\* YIELD AFTER MINUTES 2

\* BUFFER SIZE 1

# Performance - Netsuite “APM” SuiteApp

- Gives decent “summary level” performance metrics.
- Covers scripts and searches
- Difficult to “dive into details.”

# Performance - Netsuite “APM” SuiteApp

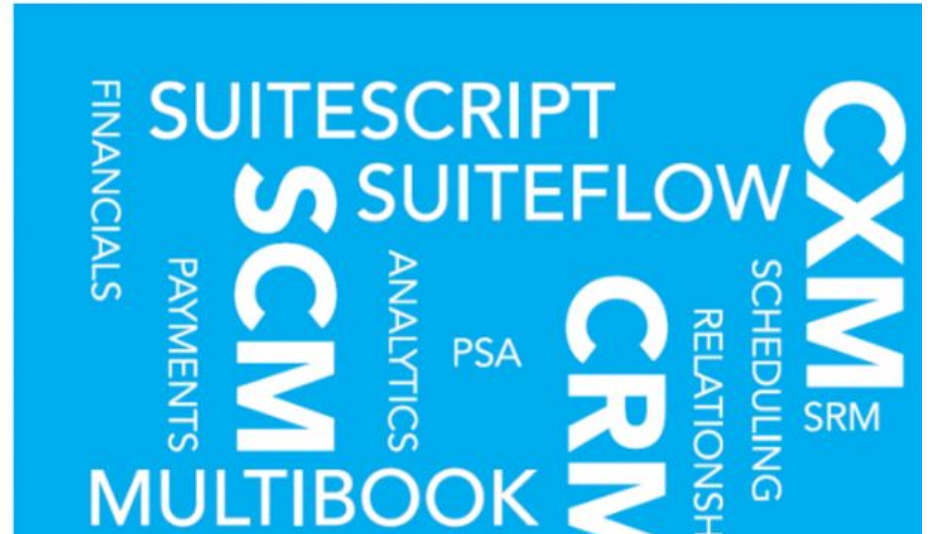


- Free Netsuite bundle ID=67350 “Application Performance Management”
- Identify which scripts are running slow, and why.
- Gives good high level summaries.
- Includes Searches as well as Scripts

# Learning More

- Netsuite User Guide: “SuiteScript Developer 2.0 Guide”
- Netsuite Help “SuiteScript 2.1”

## SuiteScript Developer Guide



# Learning More - “Recently Changed Scripts” Search

The screenshot shows the Netsuite Criteria search interface. At the top, there are tabs: Criteria, Results, Highlighting, Available Filters, Audience, Roles, Email, Audit Trail, Execution Log, and Search. Below the tabs, there is a blue information box that says "Use this tab to specify criteria that narrow down your search." and a checkbox labeled "USE EXPRESSIONS". Below this, there is a table with two tabs: "Standard" and "Summary". The table has three columns: FILTER, DESCRIPTION, and FORMULA. The table contains the following rows:

FILTER	DESCRIPTION	FORMULA
Date	is on today	
Type	is Change	
Field	is File Content Hash	
Formula (Text)	contains .js	{record}
Formula (Numeric)	is greater than 0	REGEXP_INSTR({record}, 'js\$')

Below the table, there is a dropdown menu and three buttons: Add, Cancel, and Insert. There is also a Remove button with a trash icon.

Netsuite does not have a good “change control” process for scripts. However, this search trick is very useful in notifying you if any of your scripts have changed.

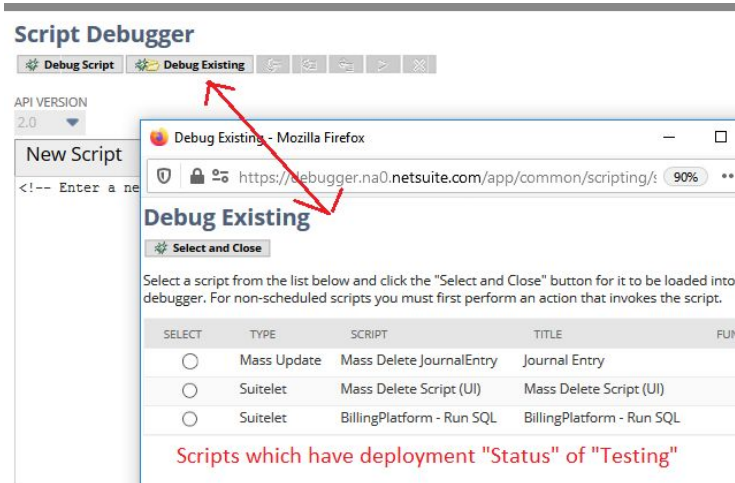
- “System Note” Search
- Criteria: “Field is ‘File Content Hash’” / Date is today.
- Tells which script files have changed in the past day.



# Learning More - Script Debugger

Useful developer tool which allows devs to “step through” code as it is running real-time.

- Page: Script Debugger
- Offers standard debugger functionality (step in/over, viewing of variables real-time.)
- Does NOT work with Map/Reduce scripts.
- Can be used for “Ad-Hoc” scripts.
- “Existing” scripts must be in “Testing” status.



# Thank You! - Questions?

RMNSUG - Scripting for Non-Scripters

CPE Credits?