RMNSUG

ROCKY MOUNTAIN NETSUITE USER GROUP

SuiteScript for Non-Scripters

Rocky Mountain NetSuite User Group | November 18, 2026 | Mike Kachline

Agenda

- Part 1: SuiteScript fundamentals
- Coffee break
- Part 2: Transitioning to SuiteScript 2.1

By the end of this session

- Know the key script types and what each one is for
- Know how to tell which scripts are installed and running
- Know where to find script logs for troubleshooting
- Know how to enable and disable scripts
- Know which tools show script performance
- Have observed a conversion from SuiteScript 1.0 to 2.1

SuiteScript Fundamentals

What is it? Why Use it? Where is it?

What is SuiteScript?

SuiteScript is NetSuite's built-in scripting language. It lets you extend NetSuite to search, customize, and process your data in ways the standard screens cannot.

Why use SuiteScript : User Facing

Suitelet

- Custom screens that feel like NetSuite
- Runs when a user opens its link

Client

- Makes forms respond in real time
- Runs as the user interacts with the form

UserEvent / Event Subscriber

- Logic when a single record is loaded or saved
- Runs on record load or save; Event Subscriber runs after create, update, or delete
- Can enrich PDF rendering

Custom Tool

- Custom AI MCP functions
- Runs when an AI calls the custom MCP endpoint

Why use SuiteScript : Back-End

Map/Reduce

- Capable of handling large sets of data
- Useful for pulling or scraping data from external REST endpoints
- Starts on demand, or on a schedule
- Workhorse for batch processing

RESTlet

- Custom REST endpoint for outside systems
- Callable by external systems and LLMs
- Runs on each inbound API call

CPE Question

Which script type can handle large sets of data, and can start on demand or on a schedule?

1. Suitelet
2. Client
3. UserEvent
4. Custom Tool
5. Map/Reduce

Why use SuiteScript : Other Script Types

Type	What it does	Notes
Scheduled Script	Runs on a schedule; queues work from other scripts	Mostly superseded by Map/Reduce
Mass Update	Changes a set of records; can run on a schedule	Mostly superseded by Map/Reduce
Workflow Action	Adds custom actions to workflows	Retrofits existing workflows with sophisticated logic, concisely

Where are Scripts?

Code File

- Page: File Cabinet | SuiteScripts
- JSDoc header declares details

Script Record

- Page: Scripts
- Requires one SuiteScript code file
- Defines the structure and intent

Script Deployment

- Page: Script Deployments
- Defines when the script runs
- Sets priority, CPU usage, and permissions

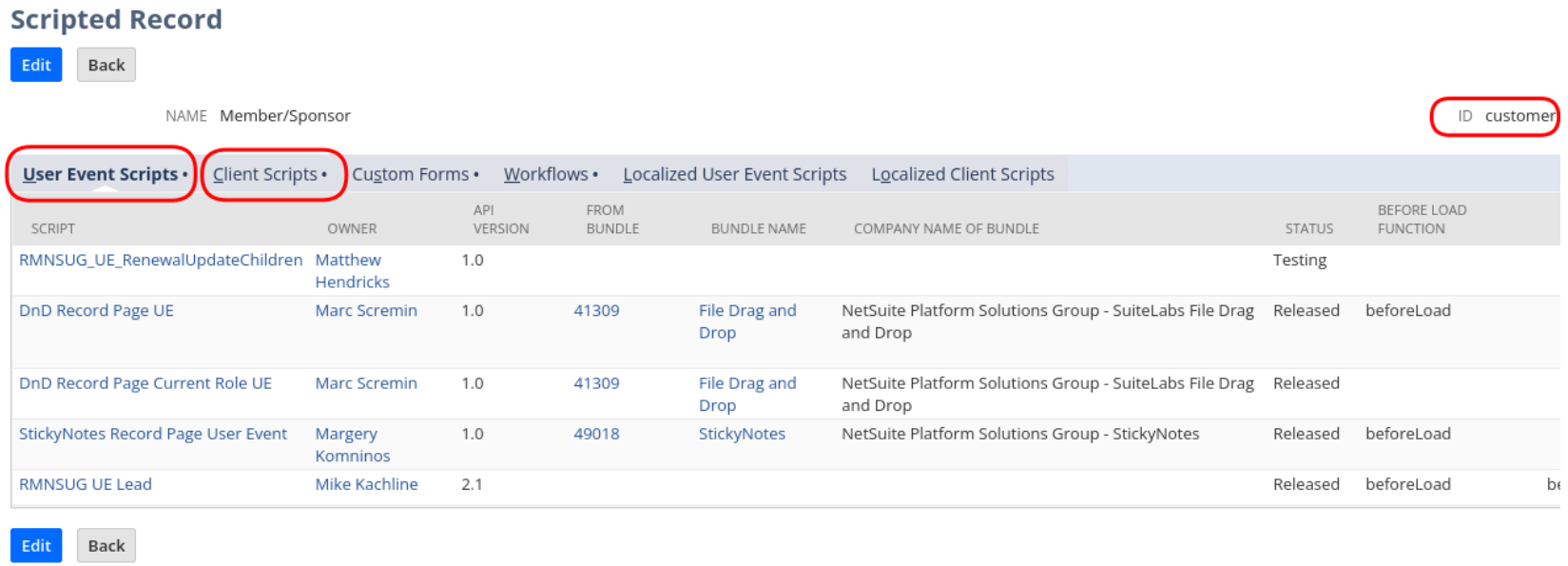
Start with the Script record. It links to everything else.

CPE Question

Which part of a script defines when the script runs?

1. Script Deployment
2. Code File
3. Script Record
4. Scripted Records page
5. File Cabinet

Where are Scripts : Scripted Records

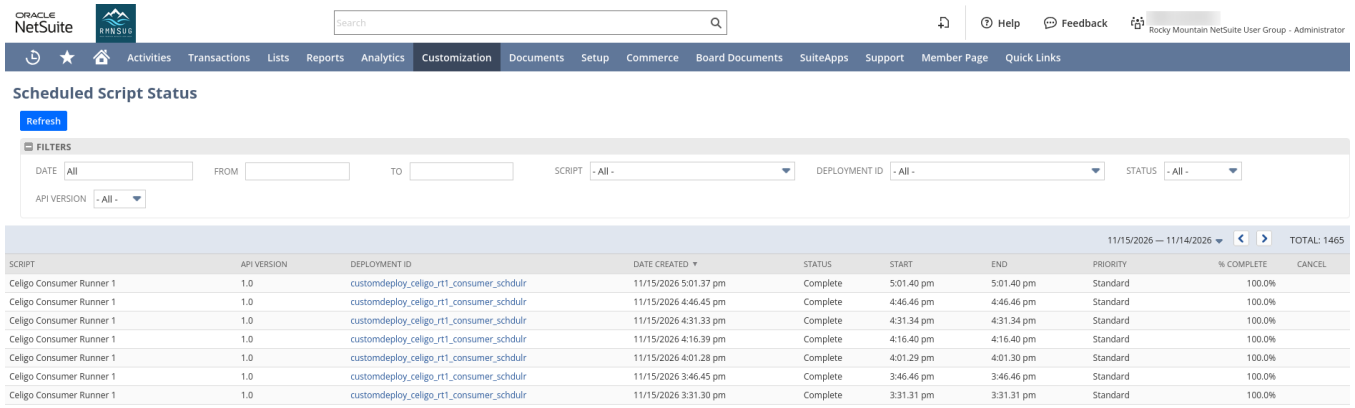


- Get to this page via Page: Scripted Records
- User Event Scripts tab: every UserEvent script deployed (or not) on this record
- Client Scripts tab: every Client script deployed (or not) on this record
- Scripts run top to bottom. Re-order them by editing this screen.

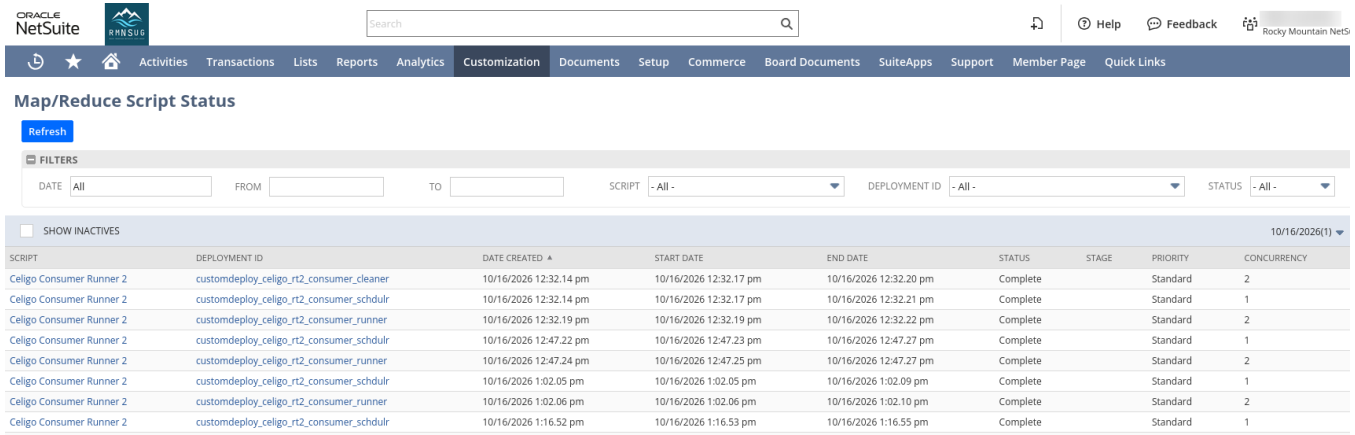
What's Running?

What's Running : Status Pages

Page: Scheduled Script Status



Page: Map/Reduce Script Status



- Two different pages: Scheduled Script Status and Map/Reduce Script Status
- Shows active and recent runs
- Cancel removes queued runs that have not started
- A run that has already started cannot be stopped here
- Each script type has its own status page. Check the one that matches your script

What's Running : Script Logs

Script record

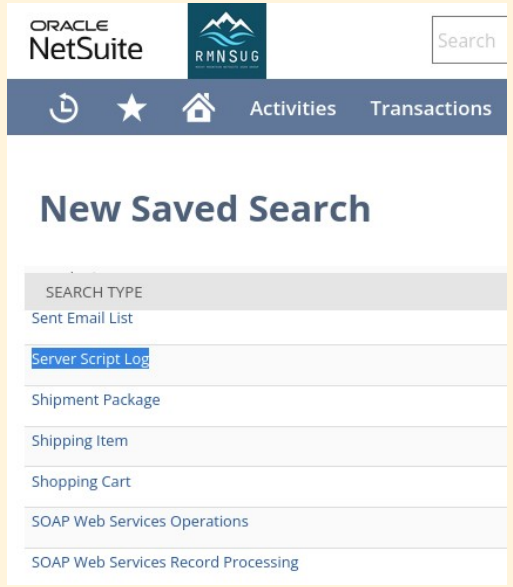
Logs from every deployment in this Script

Script deployment

Logs from this specific deployment

Searches (most useful)

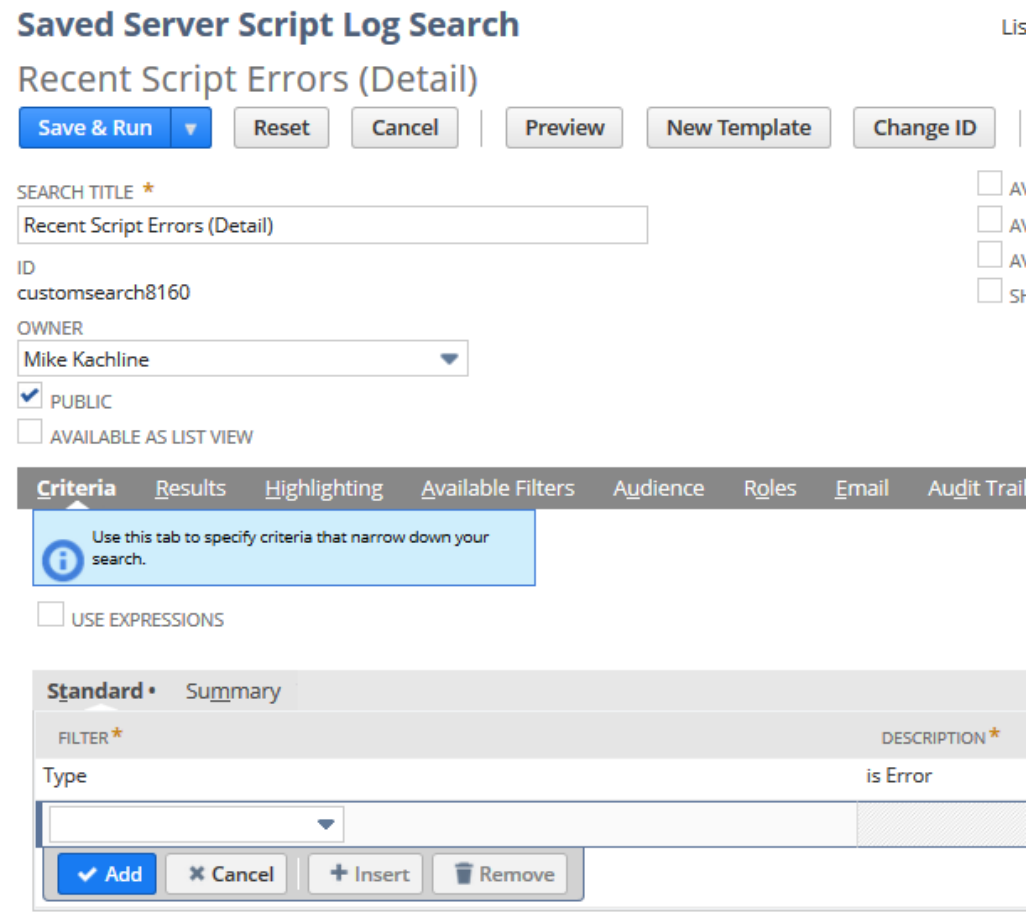
Search of type 'Server Script Log'



Log 'Filters' include from selected value, and 'up'.

Favorite Search : Recent Script Errors

- Search type: Server Script Logs
- Criteria: Type = Error
- Sort by date, descending



No logs at all?

Check the deployment's Log Level

CPE Question

Which saved search type lets you search your script logs?

1. Transaction
2. Script Deployment
3. File
4. Server Script Log
5. Employee

Controlling Scripts

What starts a script, and how to turn one off

Controlling Scripts : Starting and Stopping

Script type	How to start	How to stop
Suitelet	Script Deployment: Links	Deployed checkbox
Client	Runs in the browser on record activity	Deployed checkbox, or Scripted Records
UserEvent / EventSubscriber	Runs on record activity	Deployed checkbox
Custom Tool	Called through the AI	Deployed checkbox
Map/Reduce	Script Deployment: Save and Execute	Map/Reduce Script Status: Cancel (queued runs only)
RESTlet	Called through the RESTlet URL	Deployed checkbox
Scheduled	Script Deployment: Save and Execute, or its schedule	Scheduled Script Status: Cancel (queued runs only)

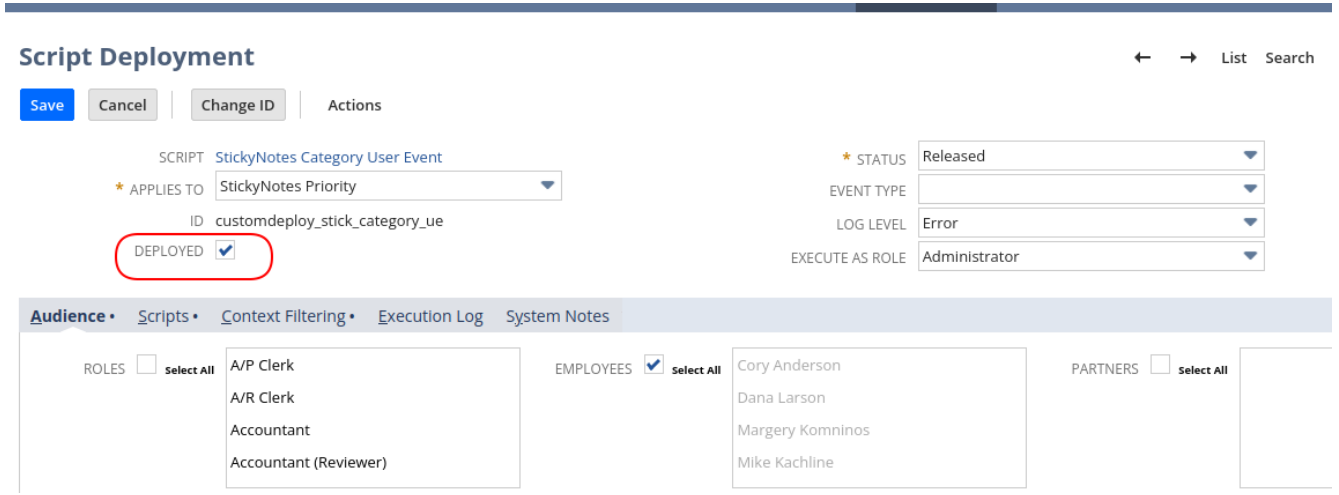
Controlling Scripts : The "Deployed" Checkbox

Where to find it

- Script Deployment record: all script types
- Scripted Records page: UserEvent and Client scripts

How to use it

- Edit the Script Deployment record
- Uncheck Deployed
- Click Save



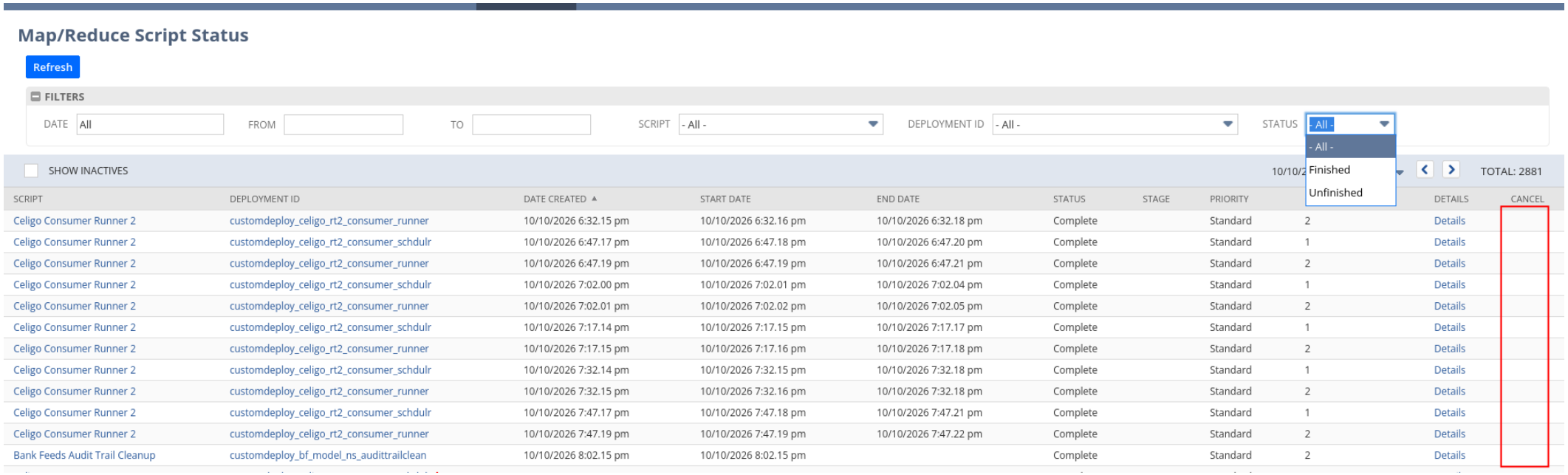
Deployed only stops future executions of the script.

CPE Question

What does unchecking the Deployed checkbox do?

1. Deletes the script file
2. Stops future executions of the script
3. Cancels runs that have already started
4. Converts the script to SuiteScript 2.1
5. Removes the Script record

Controlling Scripts : Cancelling Map/Reduce



- Page: Map/Reduce Script Status
- Click any 'Cancel' link in the 'Cancel' column
- You can only cancel scripts that have not started yet

Controlling Scripts : Stopping Scripts with Code

Stop files (the elegant way)

- Code looks for a file in the File Cabinet
- If the file is present, the script stops at a chosen point
- Intentional, but requires code changes

Syntax error (last resort)

- Edit the code file and add a deliberate syntax error
- NetSuite fails to run the script
- Works on any script, but is a workaround

Script Performance

Script Performance : Execution Limits

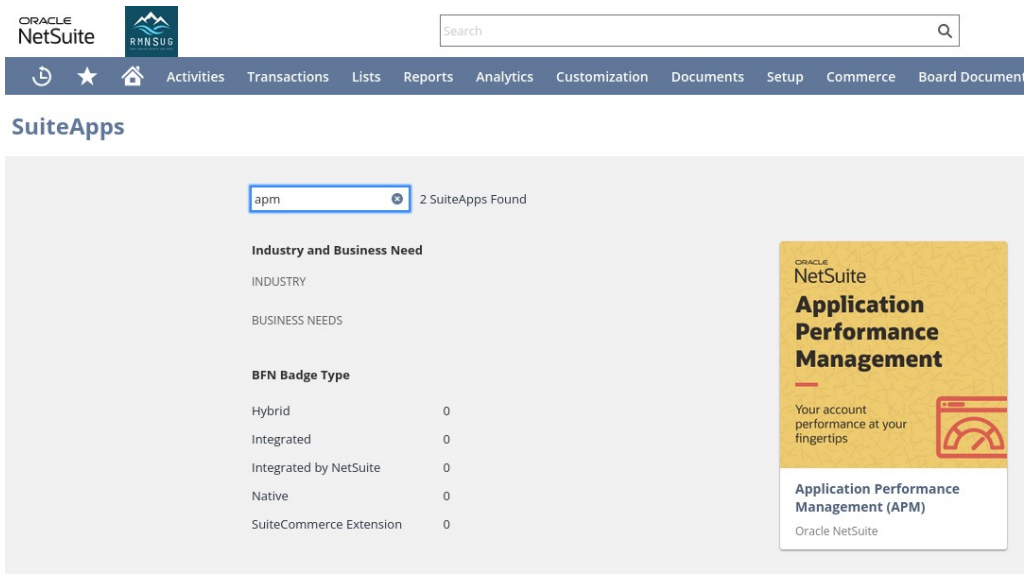
- Usage Limits
- Runtime Limits
- Map/Reduce is the most flexible
- UserEvent scripts are the most limited
- Limits are documented in NetSuite Help

Rule of thumb

Move heavy work out of UserEvent and into Map/Reduce.

Script Performance : The APM SuiteApp

- Free NetSuite bundle, ID 67350
- Application Performance Management
- Shows which scripts run slowly, and why



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Coffee Break

SuiteScript 2.1 Transition Fundamentals

Timeline, backup, and bundles

SuiteScript 2.1 Migration Timeline



Dates are from Oracle's SuiteScript 2.1 transition page. They are planned, and may change.

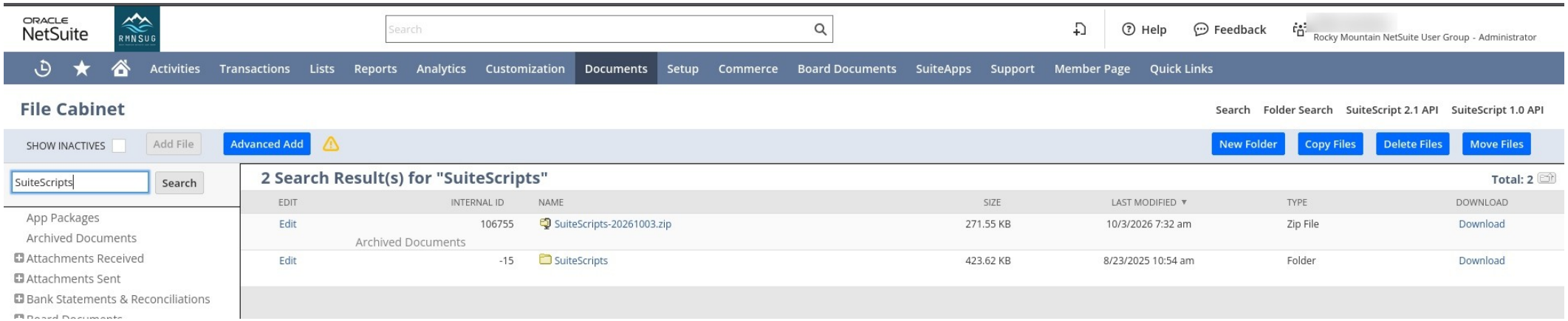
Source: Oracle, Transitioning to SuiteScript 2.1 - https://docs.oracle.com/en/cloud/saas/netsuite/ns-online-help/article_7161922360.html

CPE Question

In which release must all new and existing scripts use SuiteScript 2.1?

1. 2026.2
2. 2027.1
3. 2028.1
4. 2028.2

Backup Your Scripts : Download SuiteScripts



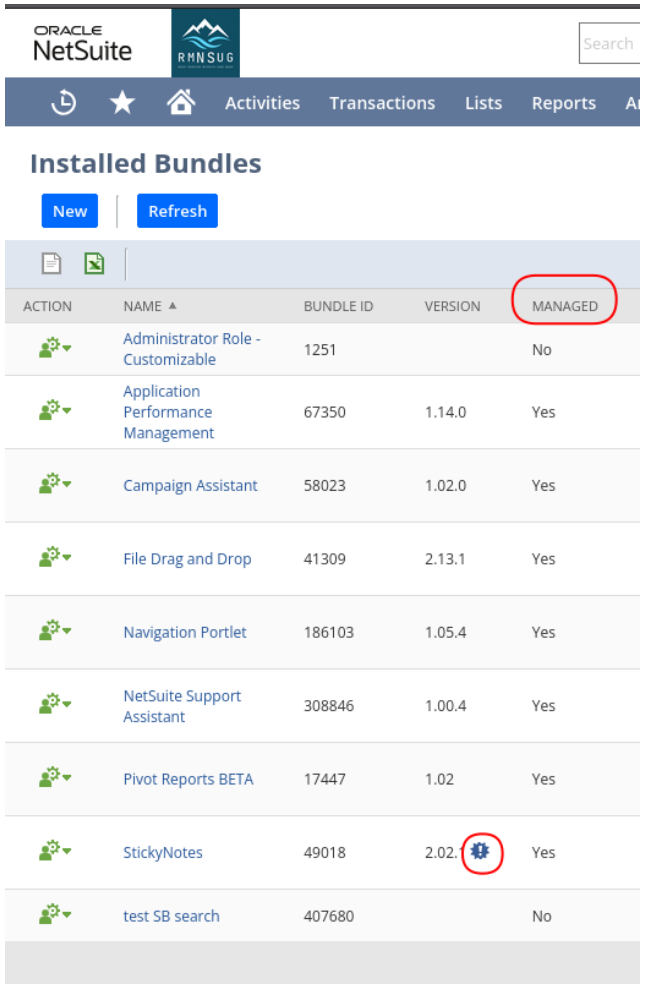
- Page: File Cabinet
- Search the left-side search box for "SuiteScripts"
- On the row whose Type is Folder (not the .zip file), click the "Download" link
- A .zip downloads, containing every one of your SuiteScript files

CPE Question

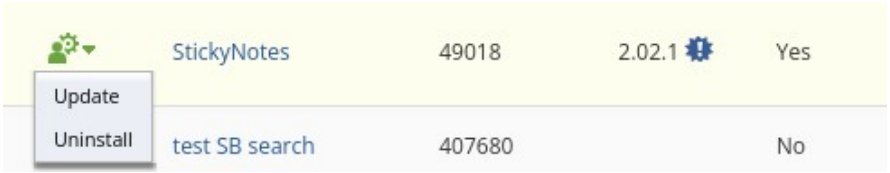
In the File Cabinet, what do you search for to find the folder that holds your scripts?

1. Scripts
2. Backup
3. SuiteScripts
4. Bundles
5. Deployments

Start with Bundles



- Do this first, before transitioning any script files
- Page: Installed Bundles
- Find bundles with Managed = "No" and the icon next to the version
- Hover over the green icon on the left, then choose "Update"

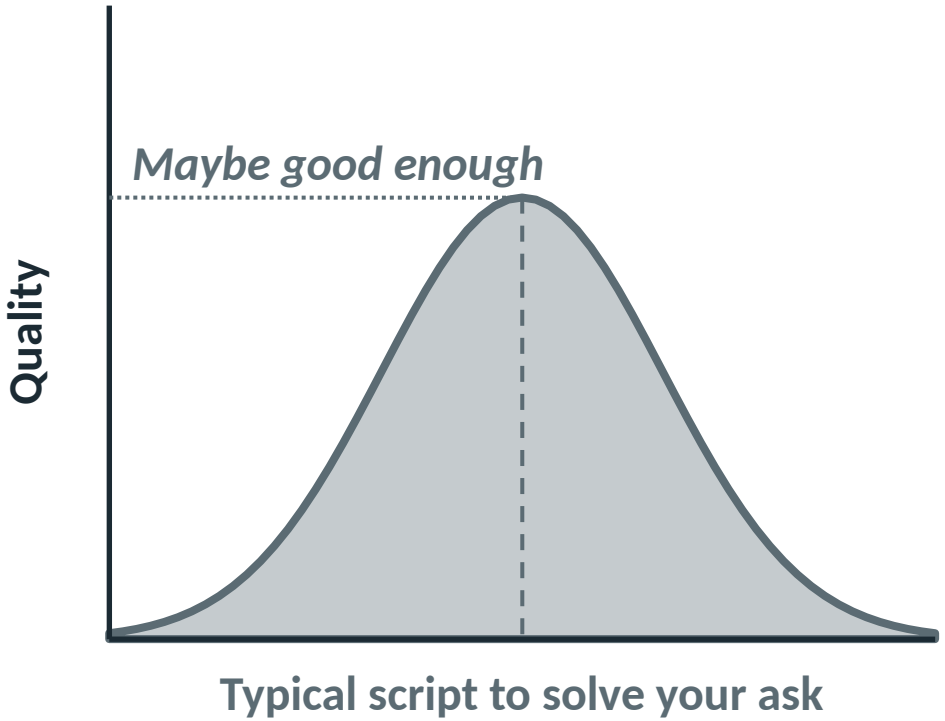


Fundamentals : The AI Coding Loop

How to create better quality AI output

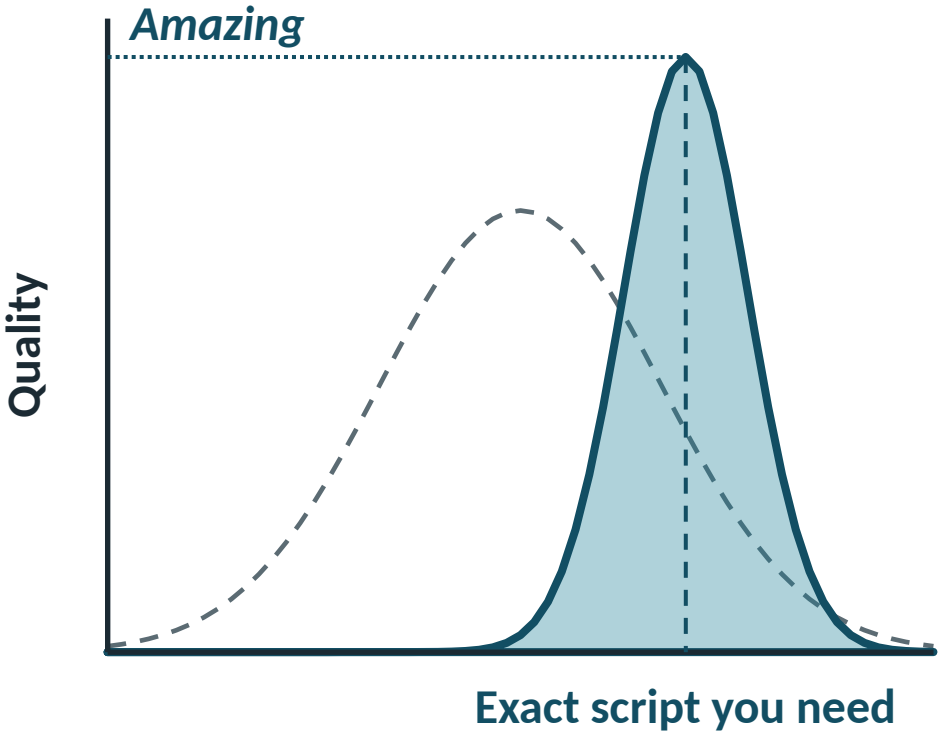
AI Coding Loop : Tightening the Curve

With little guidance



The AI Coding Loop

With the AI Coding Loop



Create higher quality results by clarifying intent

AI Coding Loop : Ask, Answer, Agree, Test

Your first chat

- **Your goal, in plain English**
- *"Search the web and learn SuiteScript 2.1"*
- Add related documentation: Emails, SuiteScripts.zip, Screenshots, Word Docs, etc.
- *"Do not write code until we agree."*

Use a "Project"

The Loop

AI Thinking
Asks you questions

Questions →

← *Answers*

You Thinking
Answer, clarify, *"any other questions for me?"*

Both agree →

Build and Test
AI writes the code. You run it

Works →

Done!

Doesn't work: back to the loop

End every chat with:
"Do you have any other questions for me?"

CPE Question

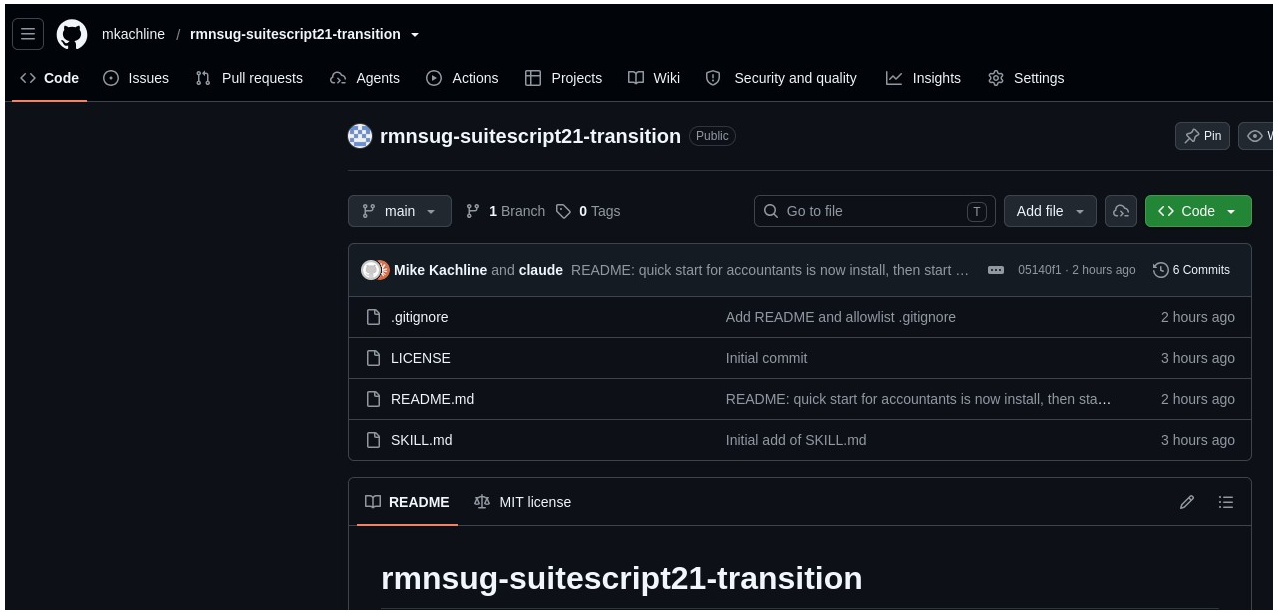
In the AI coding loop, what should you end each of your answers with?

1. A request for the final code
2. A thank you
3. "Do you have any other questions for me?"
4. A zip file of your scripts
5. The word "Done"

Transition to SuiteScript 2.1 : Example

https://github.com/mkachline/rmnsug-suitescript21-transition

Consider My Skill

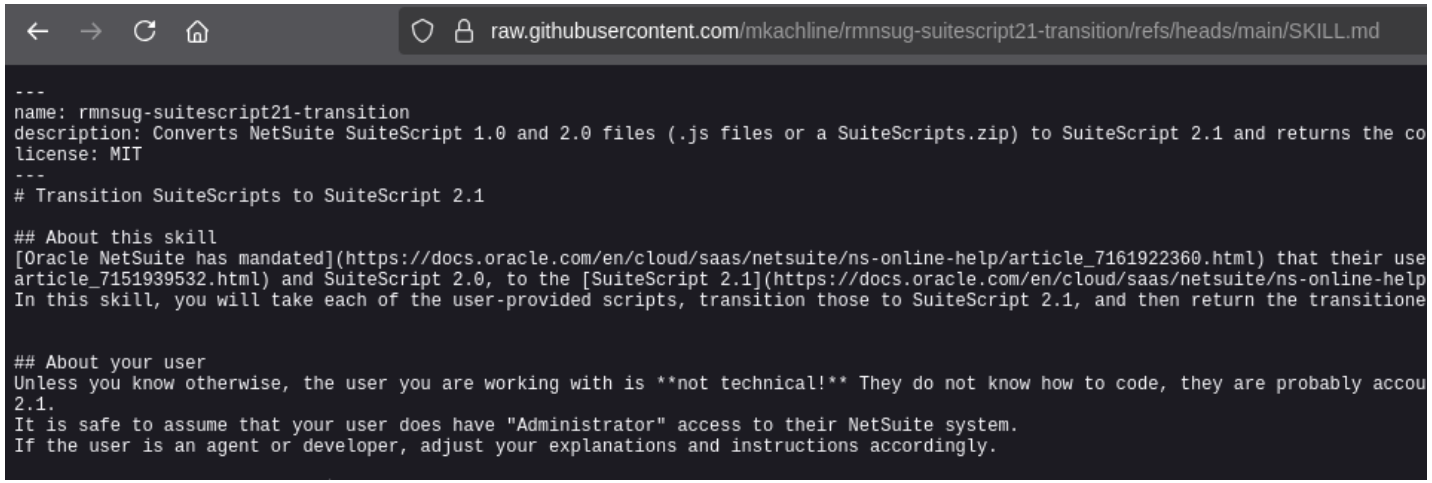


- This skill helps create context for the AI
- You do not have to use it
- Skills work with any AI, not just Claude
- Oracle publishes a skill for this too

Oracle's NetSuite skill for transitioning SuiteScript:

https://github.com/oracle/netsuite-suitecloud-sdk/blob/master/packages/agent-skills/netsuite-suitescript-upgrade/SKILL.md

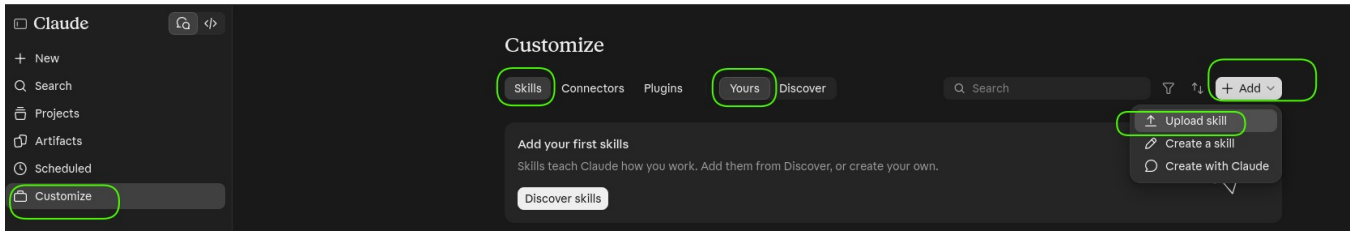
Example : Get the Skill File



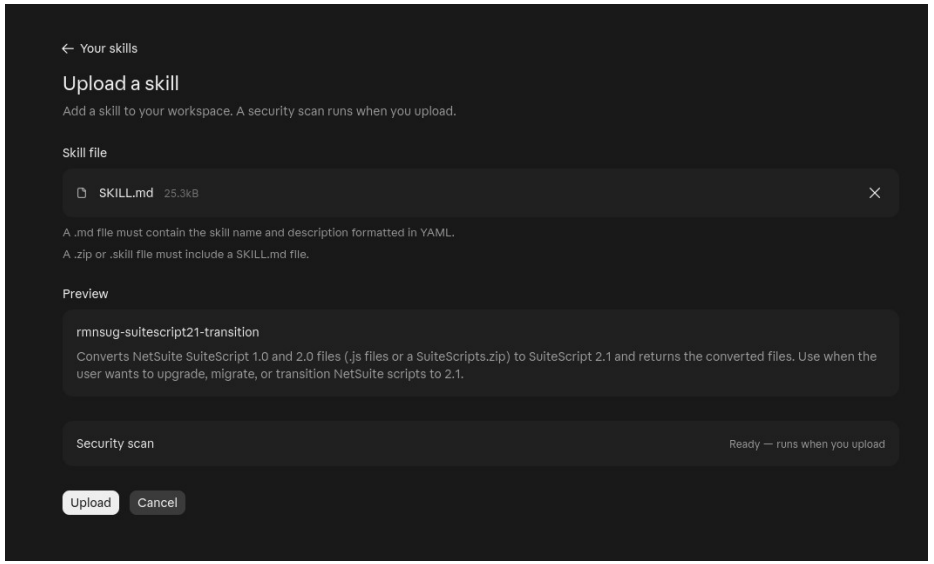
- Open the URL below in your browser
- Right-click anywhere on the page
- Choose Save As, and name the file SKILL.md (not SKILL.md.txt)

```
https://raw.githubusercontent.com/mkachline/rmnsug-suitescript21-transition/refs/heads/main/SKILL.md
```

Example : Add the Skill

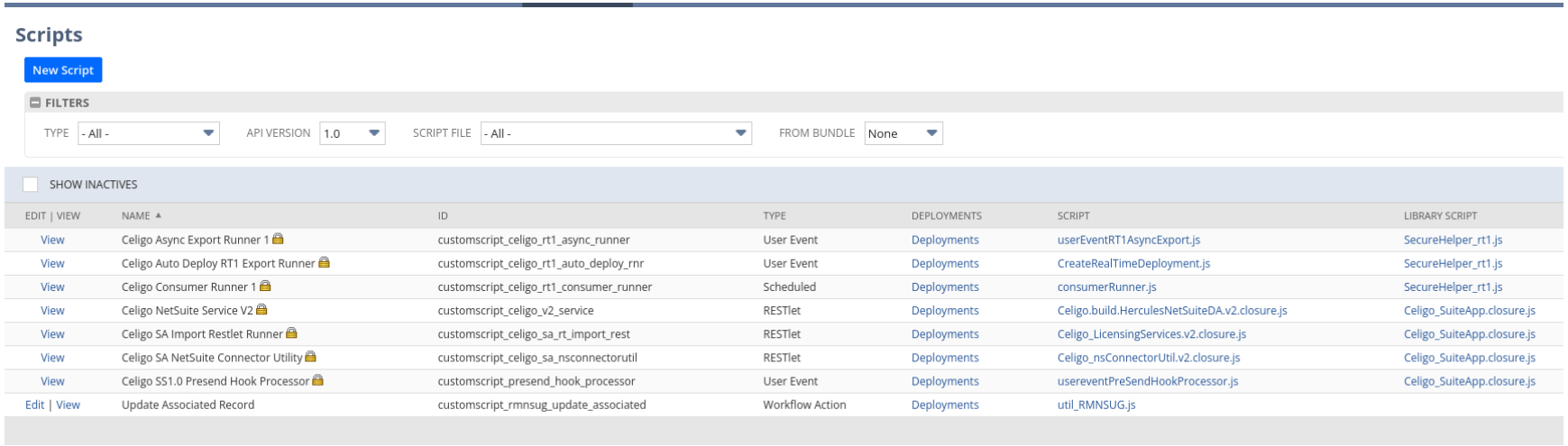






- Customize > Skills > Yours > Add > Upload skill
- Choose your saved SKILL.md, then click Upload
- A blue toggle means the skill is on

Find Script Transition Candidates



Scripts

New Script

FILTERS

TYPE - All - | API VERSION 1.0 | SCRIPT FILE - All - | FROM BUNDLE None

SHOW INACTIVES

EDIT | VIEW	NAME	ID	TYPE	DEPLOYMENTS	SCRIPT	LIBRARY SCRIPT
View	Celigo Async Export Runner 1	customscript_celigo_rt1_async_runner	User Event	Deployments	userEventRT1AsyncExport.js	SecureHelper_rt1.js
View	Celigo Auto Deploy RT1 Export Runner	customscript_celigo_rt1_auto_deploy_rnr	User Event	Deployments	CreateRealTimeDeployment.js	SecureHelper_rt1.js
View	Celigo Consumer Runner 1	customscript_celigo_rt1_consumer_runner	Scheduled	Deployments	consumerRunner.js	SecureHelper_rt1.js
View	Celigo NetSuite Service V2	customscript_celigo_v2_service	RESTlet	Deployments	Celigo.build.HerculesNetSuiteDA.v2.closure.js	Celigo_SuiteApp.closure.js
View	Celigo SA Import Restlet Runner	customscript_celigo_sa_rt_import_rest	RESTlet	Deployments	Celigo_LicensingServices.v2.closure.js	Celigo_SuiteApp.closure.js
View	Celigo SA NetSuite Connector Utility	customscript_celigo_sa_nsconnectorutil	RESTlet	Deployments	Celigo_nsConnectorUtil.v2.closure.js	Celigo_SuiteApp.closure.js
View	Celigo SS1.0 Presend Hook Processor	customscript_presend_hook_processor	User Event	Deployments	usereventPreSendHookProcessor.js	Celigo_SuiteApp.closure.js
Edit | View	Update Associated Record	customscript_rmnsug_update_associated	Workflow Action	Deployments	util_RMNSUG.js	

- Page: Scripts
- Type: "- All -"
- API Version: 1.0, then again for 2.0
- Script File: "- All -"
- From Bundle: "None"

Lock icon

- Contact your SuiteApp vendor. You cannot update these scripts.
- Look for entries with no Lock icon.

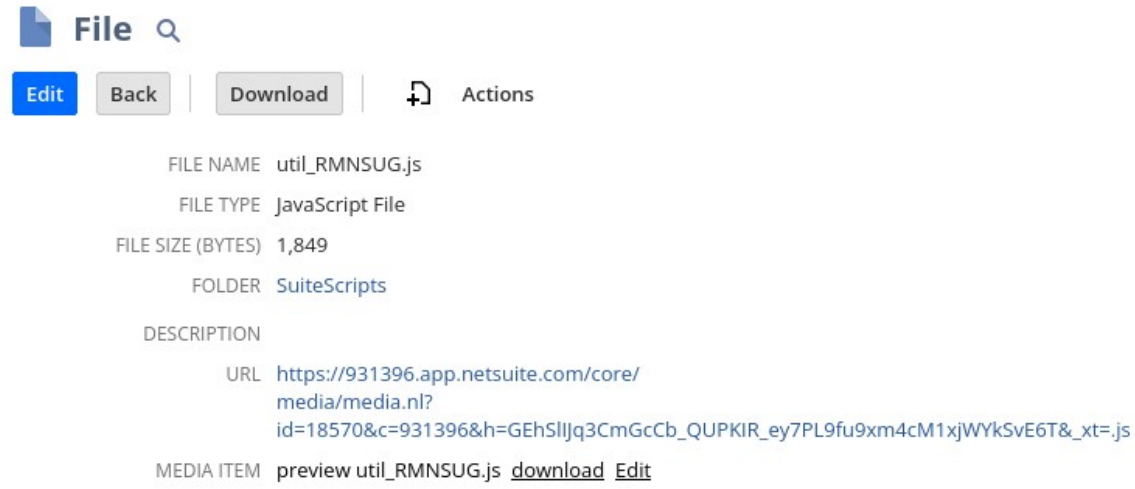
CPE Question

What does a Lock icon next to a script on the Scripts page mean?

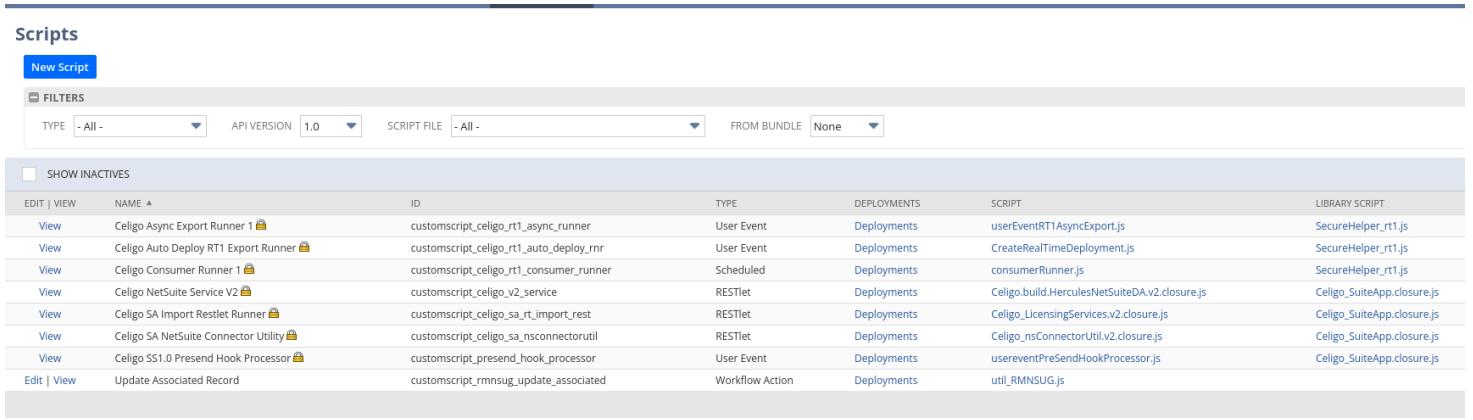
1. The script has a bug
2. You cannot update it; contact the SuiteApp vendor
3. The script is already SuiteScript 2.1
4. The script is inactive
5. The script is deployed

Example : Download the Original Script File

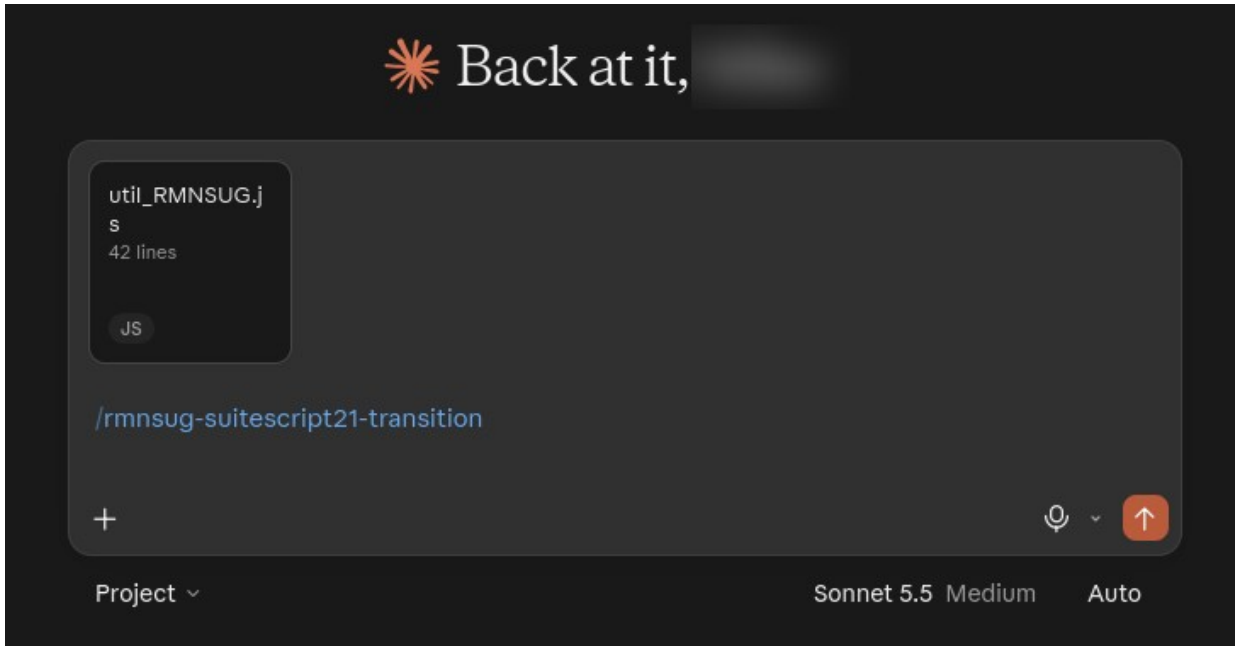
- Page: Scripts, using the filters from the Find Script Transition Candidates slide
- Find an entry with no Lock icon
- Click the file name. It opens the file page
- On the file page, click Download



Start here: Page: Scripts



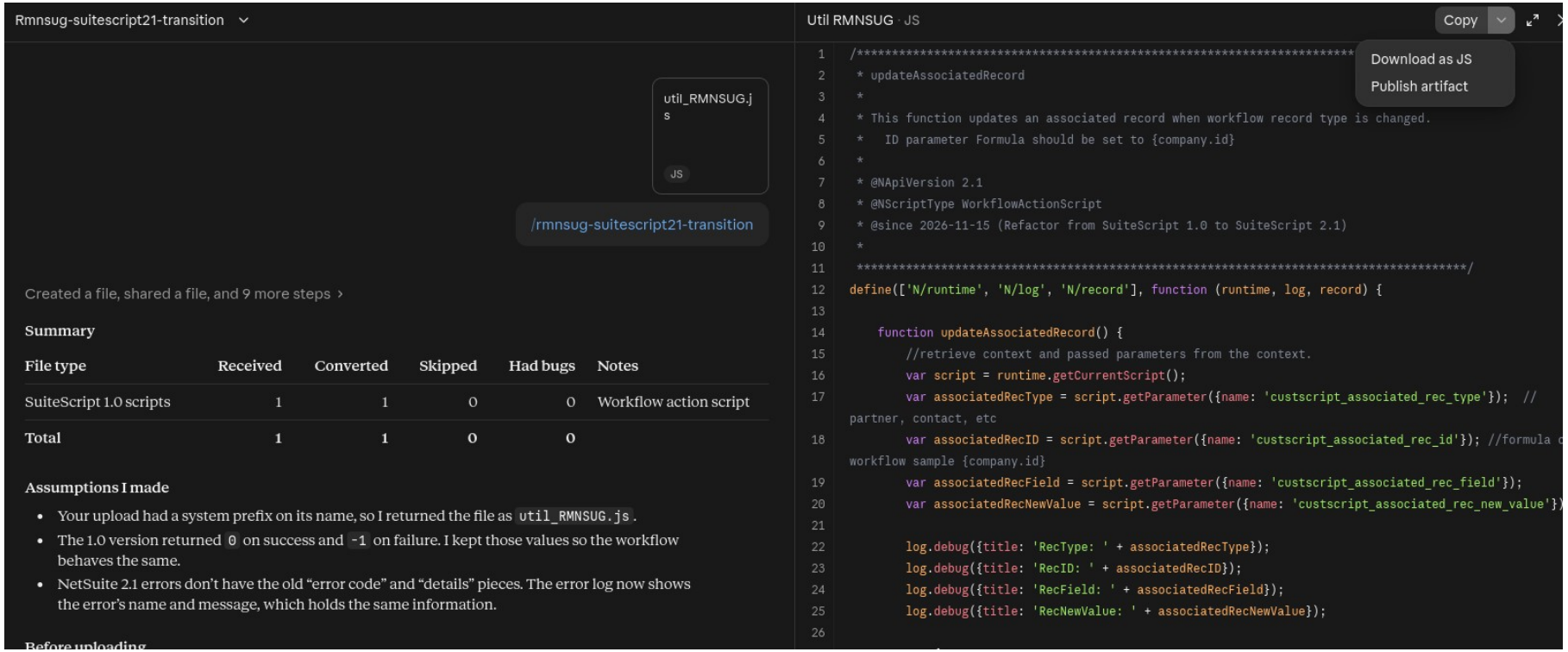
Example : Start the Skill



- Start a new chat
- Attach or drag and drop your script file
- Make sure you see "rmnsug-suitescript21-transition". If not, type "/rmnsug-suitescript21-transition" to use the skill

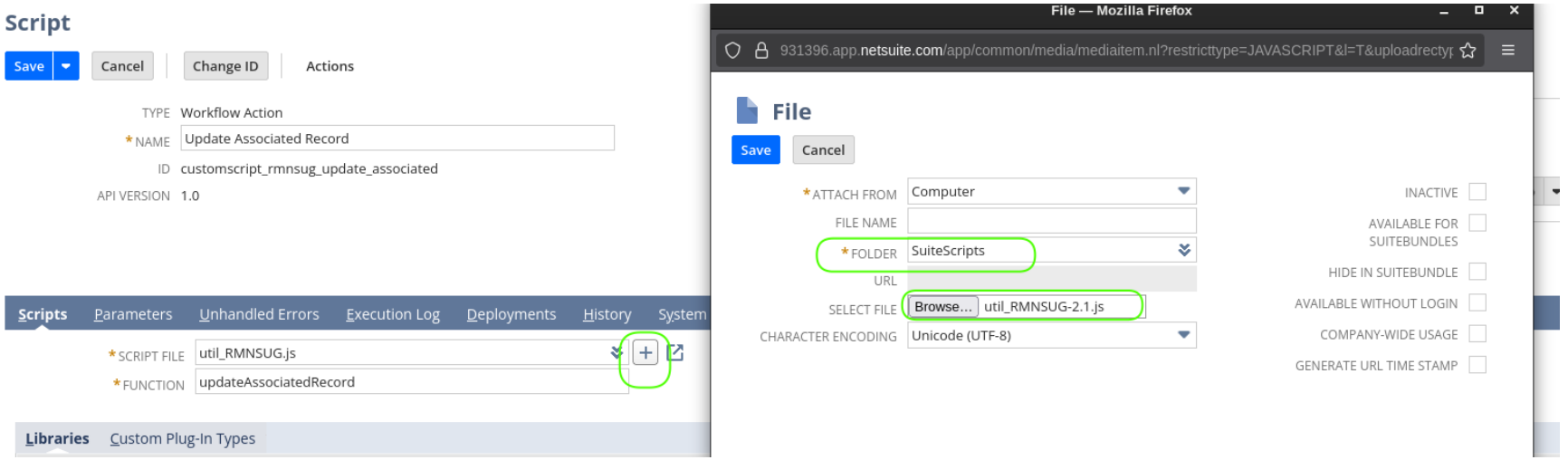
Suggested Models (Nov 2026): Opus 5.5, OpenAI 6.1 Sol, or Gemini 4 Argon

Example: Wait for Results



- Download the converted file, which ends in -2.1.js
- The result also lists any bugs and sensitive information. This example had none

Example : Upload the New File

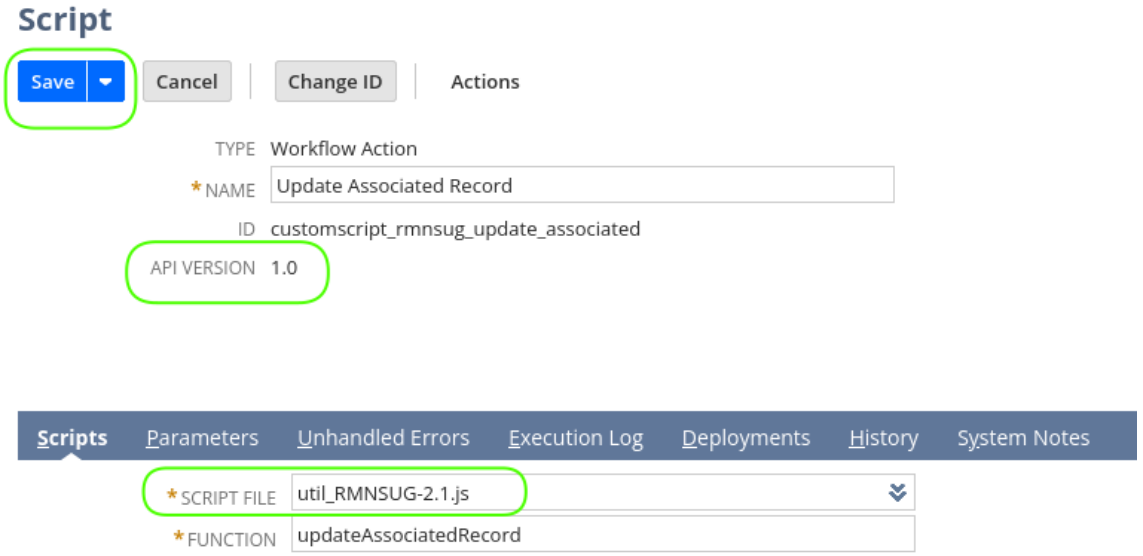


- On the Script record, click Edit, then the + next to Script File
- Attach From: Computer
- Folder: the same folder as the original file (SuiteScripts is a good default)
- In the File dialog, click Save

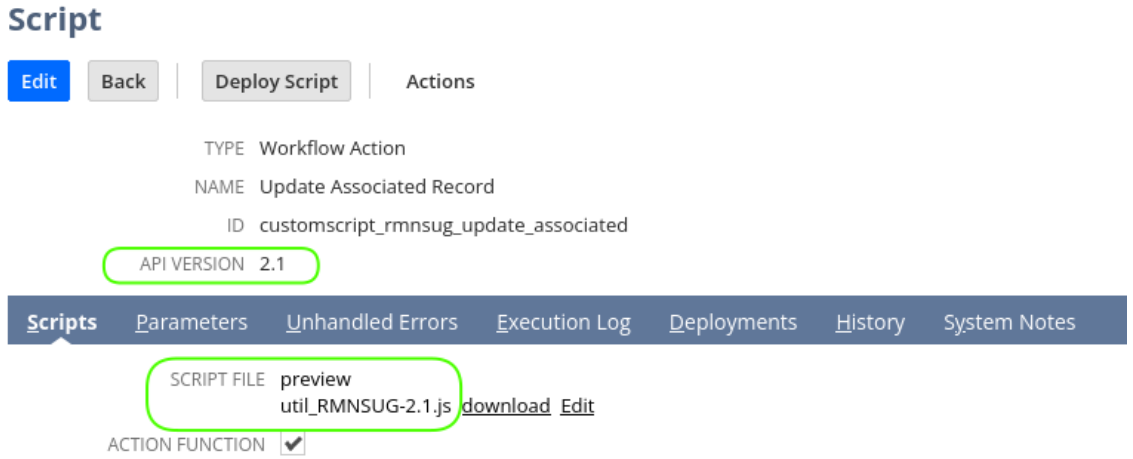
Select YourScript-2.1.js. Choose YourScript-2.1-WithBugFixes.js only if you also want the bugs fixed.

Example : Save Your Changes

Before saving



After saving



- Script File now shows YourScript-2.1.js. On the Script record, click Save
- API Version changes from 1.0 to 2.1

Example : Testing Your Changes

Found bugs?
It doesn't work as expected

Quality is "Meh"?
It works, but it's only average

Either way

Use the
"AI Coding Loop"
to keep improving

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Thank You : Questions?

Mike Kachline | mkachline@gmail.com