ORACLE
NETSUITE

SuiteFlow: Advanced Workflows

Student Workbook

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TABLE OF CONTENTS

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COURSE INTRODUCTION

Required Exercises	
01	Enabling SuiteFlow in your Training Account
02	Adjusting NetSuite Preferences

01: Enabling SuiteFlow in your Training Account

Scenario: To create workflows in NetSuite, you must first verify that the SuiteFlow feature has been enabled in your SuiteDreams training account.

Enabling SuiteFlow in your Training Account

1. Navigate to **Setup > Company > Enable Features**.
2. Select the **SuiteCloud** subtab, locate the **SuiteFlow** section, and verify that SuiteFlow is checked.
3. Click **Save** (if necessary).

02: Adjusting NetSuite Preferences

Scenario: In this exercise, you will adjust some basic user preferences that will be beneficial as you work through this course.

1 Navigate to **Home > Set Preferences**.

2 On the **General** subtab, adjust the following preferences:

Localization	
Language	English (U.S.) or English (International)
Time Zone	Adjust to your local time zone. This will be particularly important when we discuss the workflow scheduler and when viewing date/time stamps associated with workflow logging events.
Formatting	
Date Format	Adjust to your desired date format. This will be important when viewing date/time stamps associated with workflow logging events.
Defaults	
Show Internal IDs	Checked Enabling this option displays field IDs when viewing field-level help. It is also required to see workflow IDs in the Workflow Execution Log when troubleshooting workflow execution.

3 On the **Analytics** subtab, enable the Show List When Only One Result checkbox (if not already enabled).

This will display a list when there is only a single record rather than opening the record in View mode.

Set any other preferences, as desired, and click **Save**

WORKFLOW TRIGGERS REVIEW

Required Exercises	
01	Inspect the Furniture Request Custom Record
02	Inspect the Furniture Request Entry Workflow
03	Inspect the Furniture Request Load Workflow
04	Inspect the Furniture Request Save Workflow
05	Inspect the Furniture Request Approval Workflow

In this series of exercises, you will familiarize yourself with the Furniture Request custom record and the pre-configured workflows delivered as part of your training account. You will inspect the states, actions, and transition configurations in the Furniture Request *Entry*, *Load*, *Save*, and *Approval* workflows, which will serve as the foundation for additional workflows created during this course.

As you review each workflow's configuration, pay particularly close attention to the specified triggers (both client and server) that are configured for each workflow's initiation, action, and transition configurations.

01: Inspect the Furniture Request Custom Record

Scenario: In this exercise, you will familiarize yourself with the Furniture Request record type and the fields on the Furniture Request entry form. First you will inspect the SuiteDreams Furniture Request record type, which will be used as the foundation for developing workflows in this course.

Inspect the Furniture Request Record Type

1 Navigate to **Customization > List, Records, & Fields > Record Types**. A list of all custom record types will be displayed.

2 Click on the **Furniture Request** link to open the record type definition.

Note the record fields on the **Fields** subtab. You will see that there are joins out to the Customer and Employee records. You will be adding additional fields to this Furniture Request record in future exercises.

3 Hover over the **More** link in the upper-right corner of the page and click the **View Types** link to return to the list of custom record types.

4 Click the **New Record** link in the Furniture Request row. A new Furniture Request entry form will be displayed.

   Inspect the fields on the entry form. Notice that there are some fields with defaulted values but there are currently no field validations configured on the form.

5 Click the **List** link in the upper-right corner of the record page to return to the list of Furniture Request records.

> You can also view a list of all Furniture Request records by navigating to **Lists > Custom > Furniture Request**.

You will be creating several Furniture Request records during workflow testing.

Enter a New Furniture Request

6 Navigate to **Lists > Custom > Furniture Request > New**.

7 Enter a name for the furniture being requested in the Furniture Project Name field.

8 Notice that Larry Nelson (you) has been defaulted into the Project Manager field.

9 (**Optional**) Select a sales rep from the sales rep dropdown list.

10 (**Optional**) There is no reason to check the Custom checkbox. It is provided for general testing purposes and select action conditions later in this course.

11 Select a customer from the Customer sublist, such as "ABC Marketing Inc".

12 Enter 1000 in the Estimated Project Cost field.

13 Enter 500 in the Raw Materials Cost field.

14 Enter 3000 in the Desired Sale Price field.

15 Click **Save**. The Furniture Request record will be saved and the selected customer's Customer record will be opened in Edit mode.

16 Navigate back to **Lists > Custom > Furniture Request** to view the list of all Furniture Request records.

17 To edit a record, click the **Edit** link next to the record you want to modify.

Now you will examine each of the workflows that were executed on the Furniture Request record.

02: Inspect the Furniture Request Entry Workflow

Scenario: In this exercise, you will inspect the "Furniture Request Entry" workflow, the first of several pre-built workflows running on the custom Furniture Request record. This single-state workflow contains several actions all configured on client triggers.

1. Navigate to **Customization > Workflow > Workflows** and filter on "Furniture Request" from the Record Type dropdown list.

2. Edit the "Furniture Request Entry" single-state workflow.

   Edit the workflow definition and note the following configuration parameters:

   - Release Status: Released (logging is enabled for testing purposes)
   - Initiation: Event Based
   - Event Definition: On Create
   - Trigger Type: Before Record Load

   The Entry workflow is initiated during the creation of new Furniture Request records.

3. Select State 1: Furniture Request Entry and review the following actions configured on client triggers:

Before User Edit	
Set Field Value	Defaults Estimated project Cost = $1000.
After Field Edit	
Set Field Mandatory	Makes the Customer field mandatory when Custom is checked and optional when Custom is unchecked.
Before User Submit	
Return User Error (Currently Inactive)	Returns an error to the user if Estimated project Cost > $20,000.
Return User Error	Returns an error to the user if Employee Type != "Regular Employee" and SALES REP is not empty.

4. Create a new Furniture Request record and verify each of the configured actions.

> The Entry workflow is initiated at Before Record Load but it contains only client-side actions. Therefore, no workflow logging will occur.

03: Inspect the Furniture Request Load Workflow

Scenario: In this exercise, you will inspect the "Furniture Request Load" single-state workflow, which contains several actions configured on record load on both client and server triggers.

1. Return to the list of workflows (**Customization > Workflow > Workflows**) and edit the "Furniture Request Load" workflow. Like the Entry workflow, this is also a single-state workflow.

   Note the following workflow definition parameters:

   - Release Status: Released (logging is enabled for testing purposes)
   - Initiation: Event Based
   - Event Definition: On Create, On View Or Update
   - Trigger Type: Before Record Load

2. Select State 1: Furniture Request Load and review the following configured actions:

Entry	
Set Field Value	Defaults the current user (in most cases this is Larry Nelson…you) as the Project Manager.
Before Record Load	
Set Field Mandatory	Makes the Customer field mandatory when Custom is checked to ensure action display persistence when viewing Furniture Request records.
Set Field Display Label	Sets the field label of the Customer field to Furniture Client to ensure action display persistence when viewing Furniture Request records.
Return User Error (Currently Inactive)	Returns an error to the user stating they are not authorized to create Furniture Request records because they are not an administrator or member of the "Installation/Fitout" department.

3. Open a previously created Furniture Request record (or create a new Furniture Request record) and verify each of the configured actions.

4. Use the **Workflow History** subtab and the Workflow Execution Log to verify the execution of each action.

04: Inspect the Furniture Request Save Workflow

Scenario: In this exercise, you will inspect the "Furniture Request Save" workflow, which is a multi-state workflow that executes during the save of a record. It contains several actions configured across multiple states using a variety of client and server triggers.

1 Return to the list of workflows and edit the "Furniture Request Save" multi-state workflow.

Note the following workflow definition parameters:

- Release Status: Released (logging is enabled for testing purposes)
- Initiation: Event Based
- Event Definition: On Create
- Trigger Type: Before Record Submit

2 Select State 0: Project Cost Validation and review the following configured actions:

Before Record Submit	
Return User Error	Returns an error to the user if Estimated project Cost > $20,000. This action uses a custom workflow field called "Maximum Project Cost" to validate the condition.

3 Select the transition arrow between State 0 and State 1.

Notice that it is configured at After Record Submit. This ensures the remaining actions in each state execute successfully by setting the appropriate active trigger.

4 Select State 1: Create Phone Call and review the following configured actions:

Entry	
Create Record	Creates a new Phone Call record (**Activities > Scheduling > Phone Calls**) for the selected customer on the Furniture Request record.

5 Select State 2: Notify Customer and review the following configured actions:

Entry	
Send Email	Sends the selected customer an email notification welcoming them to SuiteDreams.

6 Select State 3: Go To Customer Record and review the following configured actions:

Entry	
Go To Record	Navigates the user to the Customer record selected when creating a new Furniture Request record.

7 Open a previously created Furniture Request record (or create a new Furniture Request record) and verify each of the configured actions and transitions.

8 Use the **Workflow History** subtab and the Workflow Execution Log to verify the execution of each action and transition.

05: Inspect the Furniture Request Approval Workflow

Scenario: In this exercise, you will inspect the "Furniture Request Approval" multi-state approval workflow which is executed after the successful save of a record. It contains multiple states, transitions, and actions configured on both client and server triggers.

1. Edit the "Furniture Request Approval" workflow. Once again, it is also a multi-state workflow supporting the approval of Furniture Request records.

   Note the following workflow definition parameters:

   - Release Status: Released (logging is enabled for testing purposes)
   - Initiation: Event Based
   - Event Definition: On Create
   - Trigger Type: After Record Submit

2. Select State 1: Waiting for Approval and review the following actions:

Entry	
Set Field Value	Sets a custom workflow field called "Current Approver" to the value of the Project Manager field, but only when empty.
Set Field Value	Sets the value of the Approval Status field to "Pending Approval".
Send Email	Sends an email notification to the Current Approver notifying them that they have a Furniture Request to approve. The action is protected by a condition that verifies that the sender/recipient both have an email address on their associated Entity records. This is a best practice when configuring Send Email.
Set Field Value	Sets a custom workflow field called "Submitter" to the current user upon the creation of a new Furniture Request record, but only when empty.
Before Record Load	
Group Actions	Contains two Add Button actions—one for the "Approve" button and another for the "Reject" button. Each button transitions the record to its respective end states (State 2/State 3).
Lock Record	Locks the record from further modification by all users, except the Current Approver and Submitter.
Add Button	Allows only the Submitter to recall the Furniture Request record.

3 Select the transition arrow between State 1 and State 1A: Check for More Approvers.

Notice that it is configured to occur when the "Approve Request" button is clicked.

4 Select State 1A: Check for More Approvers and review the actions.

The first two Set Field Value actions check to see if there are additional approvals required based on the supervisor hierarchy.

The third Set Field Value action sets the Current Approver to the next approver in the hierarchy.

5 Select the transition from State 1A back to State 1.

This transition is executed when more approvals are required, which is verified by the status of the "More Approvers" custom state field.

6 Select the transition from State 1A to State 1B.

This transition is executed when there are no additional approvals required (*More Approvers = F*).

7 Select State 1B: Project Cost > $8000? and review the following transitions:

To State 1C
Sales Manager approval required when Estimated Project Cost is greater than $8000.
To State 2
Furniture Request approved when Estimated Project Cost is less than or equal to $8000.

8 Select State 1C: Sales Manager Approval and review the following actions:

Before Record Load	
Add Button	Allows the Sales Manager to approve the Furniture Request.
Add Button	Allows the Sales Manager to reject the Furniture Request.
Lock Record	Locks the record from further modification by all users, except the Sales Manager.

9 Review the outgoing transitions from State 1C:

To State 2
Transitions on Sales Manager approval (Approve button).
To State 3

Transitions on Sales Manager rejection (Reject button).

10 Select the State 2: Request Approved end state and review the following actions:

Entry	
Set Field Value	Sets the value of the Approval Status field to "Approved".
Send Email	Sends an email notification to the selected customer indicating that their Furniture Request has been approved.
Before Record Load	
Lock Record	Locks the record from further modification by all users.

11 Select the State 3: Request Rejected end state and review the following actions:

Entry	
Set Field Value	Sets the value of the Approval Status field to "Rejected".
Send Email	Sends an email notification to the selected customer indicating that their Furniture Request has been rejected.
Before Record Load	
Lock Record	Locks the record from further modification by all users.

12 Select the State 4: Request Recalled end state and review the following actions:

Entry	
Set Field Value	Sets the value of the Approval Status field to "Recalled".
Before Record Load	
Lock Record	Locks the record from further modification by all users.

13 Open a previously created Furniture Request record (or create a new Furniture Request record) and verify each of the configured actions and transitions.

14 Use the **Workflow History** subtab and the Workflow Execution Log to verify the execution of each action and transition.

SCHEDULING ACTIONS AND TRANSITIONS

Required Exercises	
01	Add Reminder Notifications to Approval Workflows
02	Reject After Waiting Too Long for Approval
03	Escalate to Current Approver's Supervisor
Optional Exercises	
04	Configure a Lead Nurturing Campaign

Overview: In this series of exercises, you will configure a basic Service-level Agreement (SLA) using scheduled actions and transitions. As part of SuiteDreams' furniture project approval process, they would like to enforce and automate specific approval tasks as part of a SLA associated with the management of custom Furniture Requests. This will be accomplished through the configuration of scheduled actions and transitions.

In this module's exercises, you will configure the following SLA business requirements:

- Send a reminder email to the Current Approver every 3 days until approved/rejected.
- Automatically transition to the "Rejected" state after 2 weeks if not approved/rejected.
- Escalate to the Current Approver's supervisor after 1 hour of inactivity.

01: Add Reminder Notifications to Approval Workflows

Scenario: As part of SuiteDreams' Furniture Request approval SLA, all custom Furniture Requests should be either approved or rejected within 2 weeks of entry. During that time, they would like to send reminder emails to the current approver every 3 days until approval has been completed.

> Reminder emails should be sent out every 0 hours. The workflow scheduler runs every 30 minutes, so setting to 0 hours means it will execute between 0 and 30 minutes from the time the schedule is entered. This is something to keep in mind during your own workflow development. Initially set a low unit of time during testing. When satisfied things are processing correctly, increase the units of time based on your specific business requirements.

Modify the Furniture Request Approval Workflow

1. Navigate to **Customization > Workflow > Workflows** and edit the "Furniture Request Approval" workflow.

Configure the Email Reminder

2. Per SuiteDreams' business requirements, the Current Approver should be reminded to approve/reject any unapproved Furniture Requests.

   What is the correct state in the workflow to place the email notification action?

   Answer: ___________________________________

3. Based on your answer, select the state and add a **Send Email** action with the following configuration:

Basic Information		
Trigger On	Scheduled	
Parameters		
Sender (From Field)	Record (Join Field): Current Record Field: Current Approver (Workflow) **Note**: You must select "Current Approver (Workflow)" since the concept of "User" is not valid in a scheduled context. The whole idea of scheduling actions is to eliminate user intervention.	
Recipient (From Field)	Record (Join Field): Current Record Field: Current Approver (Workflow)	
Content (Custom)	Subject: Furniture Request Approval Reminder Body: The following furniture request is still waiting for your approval. Include View Record Link: Checked	
Condition		
Record	Field	Compare Type
Current Approver (Workflow)	E-mail	not empty

4 How should the **Schedule** be configured, given that you want to send out the reminder email as soon as possible (to enable the quickest testing)?

Use	
Delay	
Recurrence	
Unit	

Execute the Workflow and Test

5 Create a new Furniture Request record.

Note: You may need to wait up to 30 minutes to fully test this action because of how often the workflow scheduler runs. It is good practice to perform one initial test of the email action without it being scheduled, just to verify the configuration of the action is correct. When satisfied, re-configure it for scheduled execution.

6 Check **Workflow History** to determine if the scheduled Send Email action has been executed. The log should show something similar to the following:

Running SCHEDULED trigger (Event: PROCESS; Context: null)		6/25/2015 - 08:43:08.182
SENDEMAIL	Executed	6/25/2015 - 08:43:08.198
Condition: Workflow : Current Approver : E-mail Is Not Empty	True	6/25/2015 - 08:43:08.215
From = -5 To = -5		6/25/2015 - 08:43:08.228

02: Reject After Waiting Too Long for Approval

Scenario: Building on the SLA requirements implemented in *Exercise 01*, SuiteDreams would like to auto-reject all custom Furniture Requests that are in a "Pending Approval" status after the specified 2-week period. This can be accomplished by configuring a scheduled transition with a delay.

> The automatic rejection is to take place after **2 hours**, not 2 weeks. The reminder email will still be sent after 0 hours (~30 minutes), as configured in the previous exercise.

Configure Automatic Rejection

1 Edit Furniture Request Approval, create a scheduled transition from State 1: Waiting for Approval to State 3: Request Rejected, and configure it with a delay of 2 weeks (or 2 *hours* in the case of our exercise).

(**Alternative Implementation**) In situations where you want to differentiate the rejection based on whether the Current Approver rejected manually or the system automatically rejected based on a scheduled action, you can create a separate end state called "State 3A: Auto-Rejected" and have the scheduled transition move the record to that state. Creating two separate rejected end states allows for the customization of each Send Email action and the ability to set the appropriate approval status.

Execute the Workflow and Test

2 Create and save a new Furniture Request record and verify the following using **Workflow History**:

- **Before auto-rejection**: Approval Status is set to "Pending Approval" and the record is waiting in State 1: Waiting for Approval.
- **After auto-rejection**: You should see the reminder email, followed by the scheduled transition to State 3: Request Rejected after the configured delay has passed.

Keep in mind that during the delay, the current approver could choose to click the **Reject Request** button to force the immediate transition to State 3: Request Rejected.

03: Escalate to Current Approver's Supervisor

Scenario: In this exercise, you will complete the implementation of SuiteDreams' SLA requirements by routing all Furniture Requests to the Current Approver's supervisor after 1 hour. This keeps records moving through the approval process.

Route to Current Approver's Supervisor

1. Edit the Furniture Request Approval workflow once again and add a scheduled **Set Field Value** action in State 1: Waiting for Approval that automatically sets the Current Approver to the Current Approver's supervisor (when the Current Approver has a supervisor) after 1 hour if no action has been taken on the record (such as approval/rejection/auto-rejection).

   How should Recurrence be set to only escalate to the current approver's supervisor only once?

   Answer: ___________________________________

Execute the Workflow and Test

2. Create a new Furniture Request record and select "Willheim Schueler" or "John Rittman" as the Project Manager. This will ensure the record is routed to Larry Nelson (you) for approval. Larry Nelson is at the top of the supervisor hierarchy and does not have a supervisor.

   You will have to wait 1 hour for the escalation to occur, then verify the following using **Workflow History**:

   - **Before auto-escalation**: The Current Approver should be Willheim Schueler (or John Rittman) and the record should be waiting in State 1: Waiting for Approval.
   - **After auto-escalation**: The Current Approver should be you (Larry Nelson) and the record should still be waiting in State 1: Waiting for Approval.

Note: If configured properly, the workflow should route the record to the Current Approver's supervisor prior to the scheduled rejection after the delay configured in the previous exercise.

04: Configure a Lead Nurturing Campaign (Optional)

Lead nurturing, also known as *"drip marketing"*, is a sales lead generation strategy that sends, or "drips", canned email messages to sales prospects or existing customers over time. Often part of a broader corporate marketing initiative, lead nurturing and drip marketing campaigns allow organizations to turn sales leads into customers over time.

Using SuiteFlow, you can create workflows to support drip marketing and lead nurturing campaigns that send out emails to prospects and then follow up with additional emails based on whether the initial emails were opened, links were clicked, or no activity occurred over some period of time.

Like service-level agreements, lead nurturing campaigns are implemented in SuiteFlow using scheduled actions and transitions.

Configuring lead nurturing campaigns in SuiteFlow is all about the following:

- Sending campaign emails using the Send Campaign Email action.
- Responding to click events by subscribing to the Campaign Response record. Click events are recorded when a lead clicks a link in the campaign email.
- Taking appropriate action when there is no response, such as executing a scheduled transition.

Send Campaign Email	Generates an email with special links where click events can be recorded. The configuration of this action is associated with a specific marketing campaign. **Note**: The Send Email action does not generate emails with click event links, but you might use it once the lead becomes a customer and there is no longer a need to "drip" them.
Subscribe To Record	If you do not use this action, then there is not a way for the workflow to know when click events occurred from the emails sent by Send Campaign Email. Configure the Subscribe To Record action to execute after each Send Campaign Email action.
Scheduled Transitions	Can be used to move to the next stage in the drip marketing campaign. For example, if there is no click event after 5 days, transition to a state that has another Send Email Campaign action to send out a second follow-up campaign email.

Note: Another action that may be used is the Create Record action, which creates and assigns a Task or Phone Call record so users are able to follow-up with each sales lead.

Configuring a Marketing Campaign

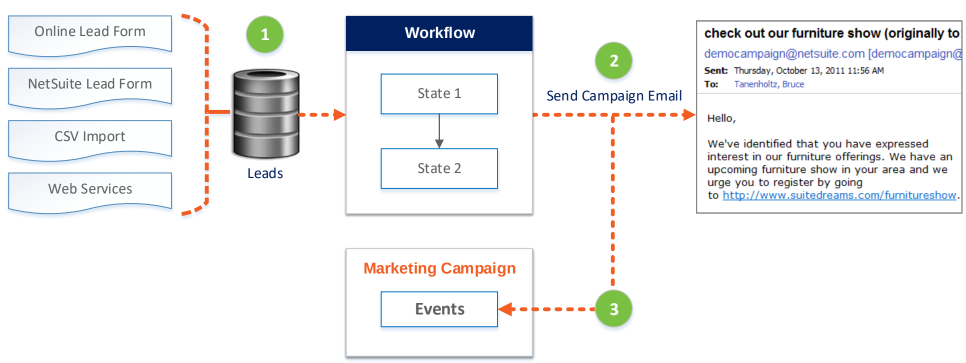
The implementation of a lead nurturing campaign begins with the creation of a *Marketing Campaign* in NetSuite, which represents a series of campaign *events*. The Send Campaign Email action points to this lead nurturing event on the Campaign record. Marketing campaigns are accessed at **Lists > Marketing > Marketing Campaigns**.

Each campaign event configured in a Marketing Campaign points to a *Marketing Template* (**Lists > Marketing > Marketing Templates**), which is used to define the content of the campaign email.

Lead nurturing workflows are typically initiated during entry of a Lead record. This can be done through a standard lead form inside of NetSuite, an online lead form, or lead form components embedded in other web pages.

Note: The Lead record is a sub-type of the Customer record type.

The diagram below illustrates the **beginning** of the lead nurturing process:



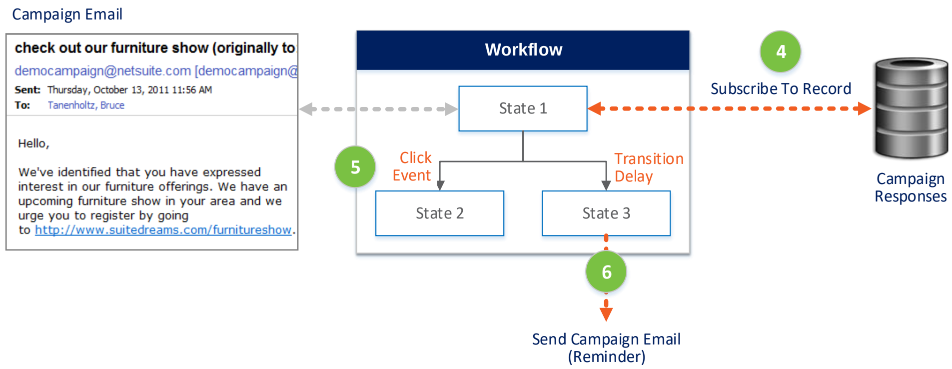
1 A lead comes in. This can be from an online lead generation form, customer service inquiry, or any other means by which a sales lead can be entered. It could even be from a CSV import or SuiteTalk integration. A workflow can then be initiated (at After Record Submit) upon the creation of a new Lead record.

2 The workflow executes a Send Campaign Email action.

3 The Send Campaign Email action references the associated Marketing Campaign event and template to generate the proper email format. A Marketing Campaign has an

Events subtab followed by a **Lead Nurturing** sublist, which has a list of different events, each event associated with a Marketing Template.

The diagram below illustrates the **continuation and completion** of the lead nurturing process:



4 The Send Campaign Email action is followed by the execution of a Subscribe To Record action on the Campaign Response record (Store Result In = "Campaign Response").

5 When a lead clicks a link in the campaign email, it is communicated to the Campaign Response record—the one being subscribed to by the workflow. The click event is always recorded on the Marketing Campaign record (**Statistics > Event Responses** subtab).

In this example, there might be a condition on the transition between State 1 and State 2 that is based on a click event occurring. The condition evaluates against the subscribed Campaign Response record.

6 A scheduled transition between State 1 and State 3 occurs after *x* number days of no lead activity. State 3 might then send out another email by having Send Campaign Email refer to a different lead nurturing event.

State 2 may also execute another Send Campaign Email action which sends a different email than the one sent in State 3. While this is possible, it would be better to have a scheduled transition from State 2 to another state which executes the Send Campaign Email action. This would allow for the system to send another campaign email 2 days after the lead initially clicked on the link, for example.

An alternative would be to combine the condition that checks for the click event with Transition On = <*blank*>, for all transitions coming out of State 2. The click event occurs and the condition immediately evaluates as *true*, but the transition delay causes the system to wait before moving to the next state.

Note: It is perfectly acceptable to combine Delay values with a Transition On configuration using a trigger other than Scheduled.

Exercise Scenario and Business Requirements

New sales leads gathered by SuiteDreams are invited to a furniture show using a lead nurturing marketing campaign. These leads may eventually become customers that place orders for furniture or request the manufacture of custom furniture. SuiteDreams would like to leverage SuiteFlow to coordinate this lead nurturing campaign.

The required lead nurturing components are as follows:

- Marketing campaign with two lead nurturing events.
- Two pre-built marketing templates linked to the lead nurturing events. These define the content of the emails.
- A new workflow that coordinates the steps of the lead nurturing campaign. The additional configuration in this exercise associates the workflow with the lead nurturing events.

SuiteDreams has provided the following business requirements:

- The lead nurturing workflow will begin upon the creation of a new Lead record (Customer record, Lead sub-type).
- The workflow will send a campaign email to the lead with an invitation to attend the furniture show. It contains a link that the lead can use to register for the event.
- If the lead clicks the registration link in the email within 2 days of receipt, another email notification will be sent thanking them for registering.
- If 2 days has passed without the registration link being clicked, a reminder campaign email will be sent to the lead with another invitation to attend the furniture show. This time they are enticed by offering them a special offer if they register.
- If the lead clicks the registration link in the reminder email any time in the future, an email notification will be sent thanking them for registering.

Create a Marketing Campaign

1. Navigate to **Lists > Marketing > Marketing Campaigns > New**.

2 Configure the details of the Marketing Campaign in the **Primary Information** section as follows (keeping all other fields at their defaults unless otherwise specified):

Primary Information	
ID	_sdr_furn_req_show
Title	Furniture Show
Category	Trade Show

3 Select the **Events** subtab and then select the **Lead Nurturing** sublist.

4 Configure two lead nurturing campaign events using the following templates:

Campaign Event #1

Template	Furniture Show Invitation
Title	Register now to attend our furniture show!
Subscription	Marketing
Channel	Lead Nurturing Email

Campaign Event #2

Template	Furniture Show Invitation Reminder
Title	Register now and receive a free gift!
Subscription	Marketing
Channel	Lead Nurturing Email

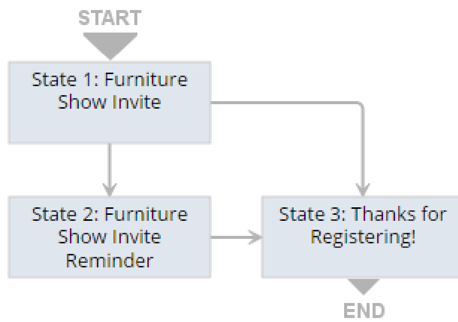
Note: The Title entered for these events are associated with the workflow via the Send Campaign Email action.

5 Save the record.

Create the Lead Nurturing Workflow

Refer back to the "Business Requirements" section above for workflow, action, and transition configuration details.

6 Create a new workflow called "Lead Nurturing Furniture Show" with a Release Status of "Testing" and build it out according to the workflow diagram below:



Create the Necessary State Fields

7 Create two workflow state fields in State 1 and State 2 using the details below:

State 1: Furniture Show Invite

Label	Invite Response
ID	_sdr_invite_response
Type	List/Record
List/Record	Campaign Response
Store Value	Checked

State 2: Furniture Show Invite Reminder

Label	Reminder Response
ID	_sdr_reminder_response
Type	List/Record
List/Record	Campaign Response
Store Value	Checked

Configure Actions to use Campaign Events

Actions in State 1

8 Add a **Send Campaign Email** action in State 1: Furniture Show Invite that stores the returned Campaign Response record in state field "Invite Response".

Note: This also sets the Campaign Event field to "Furniture Show: Register now to attend our furniture show." This refers to the combination of the marketing campaign Title and Template Title for each lead nurturing event.

9 Now add a **Subscribe To Record** action that subscribes to the Campaign Response record returned by the campaign email. This allows the workflow to sense when the campaign email has been received, opened, or clicked.

Configure the action so it stores the response in "Invite Response (State)".

Actions in State 2

10 Add a **Send Campaign Email** action in State 2: Furniture Show Invite Reminder that stores the returned Campaign Response record in state field "Reminder Response".

Note: This also sets the Campaign Event field to "Furniture Show: Register now and receive a free gift!"

11 Configure a **Subscribe To Record** action that stores the response in "Reminder Response (State)".

Configure Transitions

12 Configure a transition from State 1 to State 3 to execute when the Response field in "Invite Response (State)" is set to "Clicked Through", indicating that the recipient of the campaign email has clicked the response link in the email.

Note: This transition requires no scheduling.

13 Configure a scheduled transition from State 1 to State 2 to execute if there has been no click-through after 2 days (or 2 *hours* to facilitate testing).

Add an additional condition that checks to see if the Response field in "Invite Response (State)" is set to "Received" or "Sent".

Note: If you look at the other possible values of the Response field in the Campaign Response record, you will see that sending a follow-up email when the Response field is set to any other values makes no sense.

14 Configure a transition from State 2 to State 3 to execute when the recipient clicks through on the reminder email.

Note: This transition requires no scheduling. However, there should be a scheduled transition from State 2 to some other state that ends the workflow. Leaving the workflow waiting for a click-through from the reminder email is not ideal.

Execute the Workflow and Test

15 Create a new Lead record by navigating to **Lists > Relationships > Leads > New**:

- Enter a Name.
- Select "US – West" as the Subsidiary (**Classification** section).
- Enter an Email Address.

16 View the **Workflow History** subtab:

- You should see that the campaign email was sent. Your training account does not allow the emails to be sent to a real email account other than those with "@netsuite.com". Therefore, you will not be able to click on a link in the email.
- You may need to wait between 1 and 1 ½ hours for the scheduled transition to take place.
- The workflow should automatically navigate to State 3 if the email link is clicked prior to the scheduled transition taking place.

When the campaign email is sent, links are automatically embedded with information that enables the link to communicate back to the associated marketing campaign and then to SuiteFlow.

If you create a link in the template as follows:

http://www.suitedreams.com/furnitureshow

It will be dynamically translated to something like:

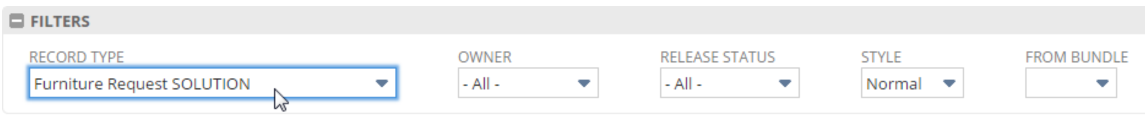
*https://forms.netsuite.com/app/crm/marketing/campaignlistener.nl?_lstr=cl&c=TSTDRV890670&_h=8d876e1c8c62750addd0&_r=1028&eou=aHR0cDovL3d3dy5zdWl0ZWRyZWFtcy5jb20vZnVybml0dXJlc2hvdw**&url=http%3A%2F%2Fwww.suitedreams.com%2Ffurnitureshow*

This campaign email link is for example purposes only.

EXERCISE SOLUTIONS

Having trouble with this module's workflows?

1. Navigate to **Customization > Workflow > Workflows**.
2. Change the Record Type filter to "Furniture Request SOLUTION".



3. Click **Edit** next to the workflow you would like to analyze:
   - SOL Furniture Request Approval 03 (*Exercises 01-03*)
   - SOL Lead Nurturing Furniture Show 03-4 (*Optional Exercise 04*)
     Note: You will need to change the Record Type filter to "Customer" to see this solution workflow.

01: Add Reminder Notifications to Approval Workflows

2. What is the correct state in the workflow to place the email notification action?

   Answer: "State 1: Waiting for Approval", as this is the state where you are waiting for the Current Approver to approve or reject.

4. How should the **Schedule** be configured, given that you want to send out the reminder email as soon as possible (to enable the quickest testing)?

   Answer:

Use	Delay
Delay	0
Recurrence	*<blank>*
Unit	Hour

02: Reject After Waiting Too Long for Approval

1 Configuration of scheduled auto-rejection:

To	State 3: Request Rejected
Transition On	Scheduled
Schedule	Delay: 2 Unit: Hour

03: Escalate to Current Approver's Supervisor

1 Configuration of scheduled Set Field Value action that sets the Current Approver to the Current Approver's supervisor:

Trigger On	Scheduled
Condition	Record: Current Approver (Workflow) Field: Supervisor Compare Type: not empty
Schedule	Delay: 1 Recurrence: *<blank>* Unit: Hour
Field	Current Approver (Workflow)
Value (From Field)	Record (Join Field): Current Approver (Workflow) Field: Supervisor

How should Recurrence be set to only escalate to the current approver's supervisor once?

Answer: *<blank>*

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USING SAVED SEARCHES IN CONDITIONS

Required Exercises	
01	Send an Email Notification based on Expired Credit Card
02	Reject based on Outstanding Customer Balance
Optional Exercises	
03	Initiate a Scheduled Workflow

01: Send an Email Notification based on Expired Credit Card

Scenario: In this exercise, SuiteDreams would like to notify customers who have one or more expired credit cards upon approval of their Furniture Request. An effective way of notifying customers of expired credit cards is by configuring a saved search as the condition on a Send Email action that returns *true* when the current record is returned in the result set.

To implement this business rule, a saved search will be created that selects Furniture Request records where the selected customer has an expired credit card(s). A sublist of credit cards can be found on the Customer record by navigating to the **Financial** subtab, **Credit Cards** sublist.

Configure an Expired Credit Card

1. Edit customer "B&B Design" and enter a fake email address, such as *info@bbdesign.com*.
2. Navigate to the **Financial** subtab, **Credit Cards** sublist.
3. Add an expired credit card with the following information:

Credit Card Number	4408 0412 3456 7893
Expiration Date	Select any date in the previous month.
Cardholder Name	Enter a name.
Credit Card Type	Visa

Create a Saved Search for Customers with Expired Credit Cards

4. Navigate to **Lists > Search > Saved Searches > New**.
5. Select "Furniture Request" as the Search Type.

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Search Title	Customers with Expired Credit Cards
ID	_sdr_furn_req_cust_exp_cc
Public	Checked

A saved search that is not "Public" will not be accessible to the workflow when any users other than the owner of the saved search is executing the workflow. An error message will be returned by the workflow when an inaccessible saved searched is being processed.

6 Configure a filter in the **Criteria** subtab, **Standard** sublist as follows:

Criteria subtab (**Standard** sublist)	
Filter	Description
Customer : CC Expire Date	is **before** today

Keep all the default columns on the **Results** subtab.

7 Click **Save**.

Notify the Customer of Expired Credit Card

8 Edit the Furniture Request Approval workflow, select State 2: Request Approved and configure a **Send Email** action as follows:

Parameters	
Sender (From Field)	Record (Join Field): Current Record Field: User
Recipient (From Field)	Record (Join Field): Current Record Field: Customer
Content (Custom)	Subject: Notification of Credit Card Expiration Body: Our records indicate that at least one of your credit cards has expired. Please update your payment information so you are able to process your custom furniture request.

Condition	
Add a condition to ensure the action is executed only when sender/recipient emails exist.	
Saved SearcH COndition	Customers with Expired Credit Cards

Execute the Workflow and Test

9. Create a new Furniture Request and select the customer edited earlier that has an expired credit card on file.

   Note: To expedite testing, select "Larry Nelson" (you) as the Project Manager. That way you can approve the record immediately.

10. Approve the record as Larry Nelson (you). The record transitions to State 2: Request Approved.

11. Navigate to the selected Customer record. You should see an expired credit card email in the **Communication** subtab, **Messages** sublist.

12. Click **View** to see the details.

13. (**Optional**) Modify another Customer record so all credit cards have valid expiration dates by adding/changing the Expiration Date field of each credit card to a date in the future.

14. Create another Furniture Request record, select the customer with a valid credit card, and verify that the expired credit card email is not sent.

02: Reject based on Outstanding Customer Balance

Scenario: SuiteDreams has decided to enforce a hard limit into their approval process so Furniture Requests are automatically rejected if the selected customer's outstanding balance grows to more than $20,000 at any time prior to final approval. Using a saved search, you will search for all Furniture Request records where the selected customer's Balance is greater than $20,000.

> To **increase** a customer's balance.
>
> - Create an invoice at **Transactions > Sales > Create Invoices**.
> - Select the desired customer from the Customer dropdown list.
> - Select "US – West Coast Warehouse" from the Location dropdown list.
> - Select a number of items from the **Items** subtab, **Items** sublist that creates an amount greater than $20,000. Use the Quantity field to increase the balance, as necessary.
>   The Balance will be increased based on the specified amount of all the selected items. Refresh the Customer record to view the customer's new balance.
>
> To **decrease** a customer's balance
>
> - Using the Invoice record, click the **Accept Payment** button when viewing the invoice (not available when editing).
> - Click **Save** on the New Payment page. That will decrease the balance by the amount of the invoice payment.
>
> You can increase the balance once more by re-opening the invoice and adding more items or by creating a new invoice.

Identify Customers with Balances over $20,000

1. Navigate to **Lists > Search > Saved Searches > New**.
2. Select "Customer" as the Search Type.
3. Restrict the results to where Balance is greater than $20,000. Keep all the default columns on the **Results** subtab.
4. Click **Save & Run**.

   All customers with a balance between $10,000 and $20,000 will be displayed in the search results.

   Select one of these customers when creating the new Furniture Request record in the next step.

Create a New Furniture Request

5 Create a new Furniture Request record and select the customer above from the Customer dropdown list.

This record will be verified in the saved search results below.

Create a Saved Search to Identify Customer Balances over $20,000

6 Navigate to **Lists > Search > Saved Searches > New**.

7 Select "Furniture Request" as the Search Type.

8 Enter the following saved search information:

Search Title	Customers with High Outstanding Balance
ID	_sdr_furn_req_cust_high_bal
Public	Checked

9 Restrict the results to where Balance is greater than $20,000. Keep all the default columns on the **Results** subtab.

10 Click **Save & Run**.

All Furniture Request record(s) containing a customer with a balance greater than $20,000 will be displayed in the search results.

If you do not see any results, refer to the steps above to adjust the Balance field of select customers, accordingly.

Configure Transition to State 3B

11 Edit the Furniture Request Approval workflow and create a new non-exiting end state called "State 3B: Rejected–High Balance" to represent rejection based on too high of a balance.

12 Configure a transition from State 1 to this new state and select the saved search you created above from the Saved Search Condition dropdown list in the **Condition** section of the transition.

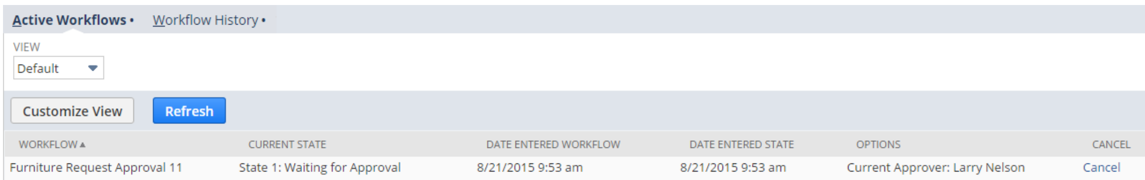
13 Add a new Furniture Approval Status called "Rejected-High Balance" and set the status on entry into the new state.

14 Lock the record.

Execute the Workflow and Test

15 Create a new Furniture Request record and select any customer that has a balance <u>less than</u> $20,000. You will increase their open balance in a moment.

16 Open the record and verify that it is waiting in State 1: Waiting for Approval:

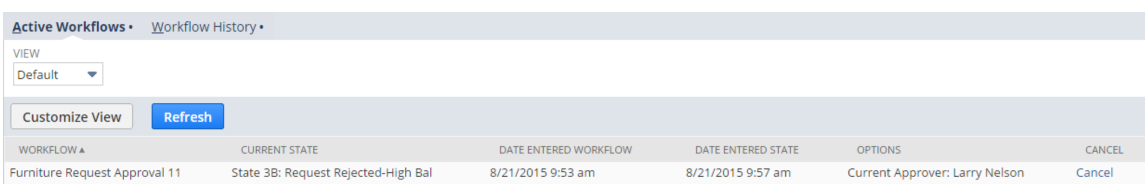


17 Keep the record open from this point forward and click the **Refresh** button on the **Workflow History** subtab shown above.

> **Note**: Do not reload the entire record by pressing **CTRL+F5**/**CMD+R** as this can give you a false result once you increase the customer's balance. The condition will be automatically evaluated on reload of the record, but what you want to test is the ability of the workflow to automatically reject without interaction from the user.

18 Complete the steps in Step 1 to increase the customer's balance to over $20,000.

19 Periodically refresh the **Workflow History** subtab using the **Refresh** button. The workflow should move to State 3B: Rejected–High Balance during the next schedule run:



20 Finally, create another Furniture Request record and select a customer that has a balance greater than $20,000.

The record should immediately transition to State 3B: Rejected–High Balance.

03: Initiate a Scheduled Workflow (Optional)

Scenario: Sales representatives play an important role on furniture projects. SuiteDreams would like to substitute another sales rep in the event that the selected sales rep has gone on an extended leave of absence. In these cases, the sales rep should be automatically changed to the sales rep's supervisor (if one exists), regardless of the project's approval status.

SuiteDreams would like to allow this change to take place at multiple points during the approval process. To implement this inside of the approval workflow would require scheduled actions across multiple states. Therefore, you will create a simple, single-state workflow that executes a saved search to determine if any Furniture Request records have a sales rep on extended leave.

Create a Custom Field to Represent an Employee on Extended Leave

1. Navigate to **Customization > Lists, Records, & Fields > Entity Fields > New** and create a custom Entity field representing an employee being on extended leave:

Label	On Extended Leave
ID	_sdr_furn_req_on_ext_leave
Type	Check Box
Store Value	Checked
Employee (**Applies To** subtab)	Checked
Subtab (**Display** subtab)	Main

2. Verify the new field displays by opening up an Employee record. You should see the On Extended Leave checkbox displayed in the main area of the form under the **Classification** field group. Do not worry about the formatting or positioning of the field.

Note: You may notice a SOLUTION On Extended Leave checkbox displayed as well. This is only used by the solution workflow, *SOL Sales Reps On Leave 04-3*.

Create a New Furniture Request

3. Edit the record of the employee you intend to select as the sales rep and check On Extended Leave. For example, "Caitlin McGyver".

4 Create a new Furniture Request record and select Ms. McGyver from the Sales Rep dropdown list.

Create a Saved Search for Sales Reps on Extended Leave

5 Navigate to **Lists > Search > Saved Searches > New** and create a new Furniture Request saved search by entering the following information:

Search Title	Sales Reps on Extended Leave
ID	_sdr_furn_req_on_ext_leave
Public	Checked

6 Select the **Criteria** subtab and configure two new filters:

Condition
Sales Rep : On Extended Leave (Custom) is *true* (Yes)
Approval Status is any of Approved, Pending Approval

7 Select the **Results** subtab, **Columns** sublist and add the "Sales Rep : On Extended Leave (Custom)" field.

8 Click **Save & Run**. Furniture Request record(s) containing sales reps on extended leave should be displayed in the search results.

Create a Scheduled Workflow

9 Create a new workflow with the following information (leaving all other fields at their defaults unless otherwise noted):

Basic Information	
Name	Sales Reps On Leave
ID	_sdr_furn_req_on_ext_leave
Record Type	Furniture Request
Description	Enter a description of the workflow.
Release Status	Released
Keep Instance and History	Always
Enable Logging	Checked

Initiation	
Scheduled	Checked
Schedule	
Saved Search Filter	Sales Reps on Extended Leave **Note**: If the search does not show in the dropdown list, make sure it has at least one filter. Searches must have at least one filter to be used in scheduled workflows.
Repeat	Unchecked
Execution Date	Should default to today's date.
Execution Time	Enter a time about 30 minutes in the future. **Remember!** Workflows are initiated based on the time zone of the user that creates the schedule. The time zone is established in User Preferences.

Modify the Default State

10 Rename the default state to "State 1: Update Sales Rep".

Note: Do not enable Do Not Exit Workflow as you want the workflow to start up again in case other employees go on extended leave in the future.

Configure Actions

11 Add an action to update the sales rep to the selected sales rep's supervisor based on the following conditions:

- A sales rep has been selected
- The selected sales rep has a supervisor
- The selected sales rep is on extended leave

Execute the Workflow and Test

12 Make sure you have one (or more) Furniture Request records with an Approval Status of "Pending Approval" or "Approved" and a Sales Rep that meets the saved search criteria above.

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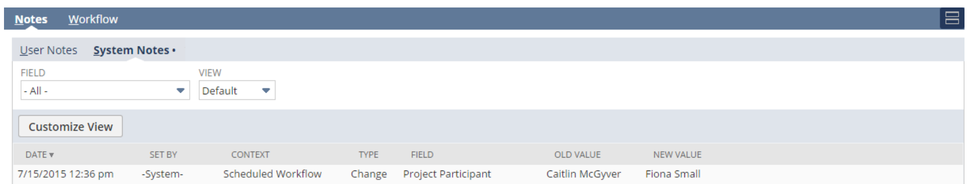
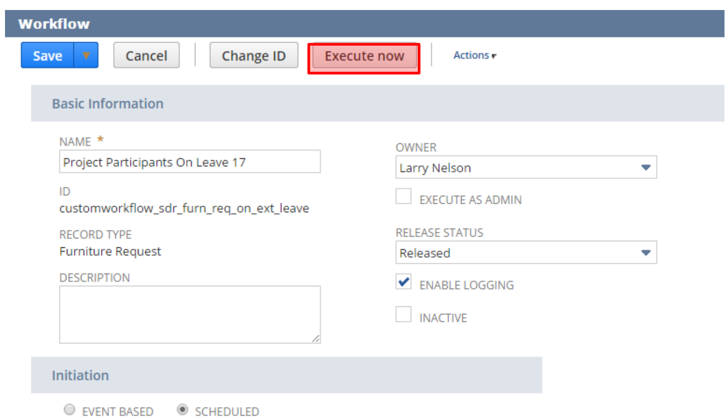
Remember! The scheduler runs every 30 minutes, so you may need to wait to see the sales rep change.

13 Consult **Workflow History** to verify execution of the scheduled workflow. You may need to periodically click **Refresh** until the scheduler initiates the workflow.

Tip #1: Whenever changes occur via scheduled workflows or workflows executed through user events, information about those updates can be viewed in the **Notes** subtab, **System Notes** sublist. System Notes are turned off by default for the Furniture Request record, but you can enable them on by checking Show Notes on the custom record definition. Once enabled, the Set By column will display "-System-" when an update originates via a scheduled workflow.



Tip #2: Whenever you schedule workflow execution, an **Execute Now** button is added to the Workflow Definition form. This allows you to execute the workflow immediately, rather than waiting for the scheduled date/time to occur, which can be useful during testing.



EXERCISE SOLUTIONS

Having trouble with this module's workflows?

1 Navigate to **Customization > Workflow > Workflows**.

2 Change the Record Type filter to "Furniture Request SOLUTION".

3 Click **Edit** next to the workflow you would like to analyze:

- SOL Furniture Request Approval 04 (*Exercises 01-02*)
- SOL Sales Reps On Leave 04-3 (*Optional Exercise 03*)

WORKING WITH SUB-WORKFLOWS

Required Exercises	
01	Sequence the Save and Approval Workflows
02	Create a New Standalone Contract Review Workflow
03	Integrate the Contract Review Workflow
Optional Exercises	
04	Configure Parallel Approvals – All Approvals Complete

01: Sequence the Save and Approval Workflows

Scenario: In this exercise, you will configure an initiating *parent* workflow that manages the execution of sequential workflows that ensures record save processing is completed prior to approval processing. The only way to make sure workflows are sequenced properly is to execute them as *sub-workflows*.

In the next module, *Configuring Transitions on Related Records*, the Phone Call record created in the Save workflow will be evaluated in the Approval workflow, making the sequencing of each workflow even more important.

> Enabling Do Not Exit Workflow in State 2 is not required. This allows the sub-workflow to return to the initiating parent and perform additional processing on the record. *Exercise 02* illustrates how you can affect transitions in the parent based on the processing results of the sub-workflow.

Turn Off Initiation on Existing Workflows

Workflows initiated as sub-workflows always initiate based on their **Event Definition** settings. However, workflows that have both On Create and On View or Update unchecked can only be initiated using the Initiate Workflow action.

1 Edit both the Furniture Request Save and Furniture Request Approval workflows and uncheck On Create in the **Event Definition** section.

2 Note each workflow's Trigger Type below. You will need them later in this exercise.

Workflow	TRIGGER TYPE
Furniture Request Save	
Furniture Request Approval	

Create a New Workflow

Now let's configure the initiating *parent* workflow that will be used to initiate each workflow above.

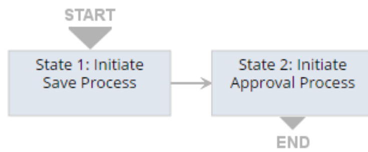
3 Create a new workflow with the following information (leaving all other fields at their defaults unless otherwise noted):

Basic Information	
Name	Furniture Request Create
ID	_sdr_furn_req_create
Record Type	Furniture Request
Description	Enter a description of the workflow.
Execute As Admin	Checked **Note**: The workflow Owner is ignored when the workflow is executed as a sub-workflow but Execute as Admin is not.
Release Status	Released
Keep Instance and History	Always
Enable Logging	Checked
Event Definition	
On Create	Checked
Trigger Type	This should match the trigger of Furniture Request Save.

Create the Necessary States

4 Create the following states and add a transition between them:

- State 1: Initiate Save Process
- State 2: Initiate Approval Process



Configure Actions

5 Configure an **Initiate Workflow** action in State 1: Initiate Save Process that executes the Save workflow upon entry into the state. There are no conditions required.

6 Configure a second **Initiate Workflow** action in State 2: Initiate Approval Process that executes the Approval workflow upon entry into the state. There are no conditions required.

Configure Transitions

7 Configure the transition from State 1 to State 2 to only occur once the Furniture Request Save workflow has completed processing.

Execute the Workflow and Test

8 Create a new Furniture Request record and select Larry Nelson from the Project Manager dropdown list (which should be the default).

Note: When configuring sub-workflows, the Owner of each sub-workflow is ignored, and the Owner of the parent workflow is used instead.

The only workflows that should be listed in **Active Workflows** are Furniture Request Approval (waiting in State 1), Furniture Request Entry, and Furniture Request Load.

Workflow History should resemble the following:

WORKFLOW	STATE NAME INFO	DATE ENTERED STATE ▾	DATE EXITED STATE	OPTIONS
Furniture Request Approval	State 1: Waiting for Approval	3/21/2018 12:39 pm		Current Approver: Larry Nelson Submitter: Larry Nelson
Furniture Request Create 05	State 2: Initiate Approval Process	3/21/2018 12:39 pm	3/21/2018 12:39 pm	
Furniture Request Save	State 3: Go To Customer Record	3/21/2018 12:39 pm	3/21/2018 12:39 pm	Maximum Project Cost: 20000.00
Furniture Request Save	State 2: Notify Customer	3/21/2018 12:39 pm	3/21/2018 12:39 pm	Maximum Project Cost: 20000.00
Furniture Request Save	State 1: Create Phone Call	3/21/2018 12:39 pm	3/21/2018 12:39 pm	Maximum Project Cost: 20000.00
Furniture Request Save	State 0: Project Cost Validation	3/21/2018 12:39 pm	3/21/2018 12:39 pm	Maximum Project Cost: 20000.00
Furniture Request Create 05	State 1: Initiate Save Process	3/21/2018 12:39 pm	3/21/2018 12:39 pm	
Furniture Request Load	State 1: Furniture Request Load	3/21/2018 12:39 pm		
Furniture Request Entry	State 1: Furniture Request Entry	3/21/2018 12:39 pm		

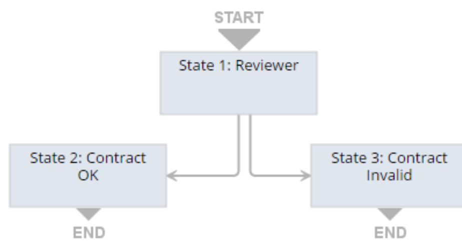
Notice how the Furniture Request Save workflow is initiated first, followed by Furniture Request Approval.

02: Create a New Standalone Contract Review Workflow

Scenario: SuiteDreams would like to perform a separate contract review of custom Furniture Requests. This review can take place simultaneously (in parallel) with the existing supervisory approvals, rather than waiting for the approvals to be completed. All contract reviews will be completed by Ruby Soriano (Contract Manager).

More details on the interactions between this workflow and the approval workflow are provided in *Exercise 03*, when the two are integrated. In this exercise, the contract review process will occur as a standalone process for initial testing purposes.

The contract review is a simple, 3-state approval workflow depicted in the diagram below:



The additional components that will be configured are as follows:

- Workflow field to identify the reviewer in State 1.
- Buttons **Contract OK** and **Contract Invalid** in State 2 and State 3, respectively.

Create a New Workflow

1. Create a new workflow with the following information (leaving all other fields at their defaults unless otherwise noted):

Basic Information	
Name	Contract Review
ID	_sdr_furn_req_contract_rev
Record Type	Furniture Request
Description	Enter a description of the workflow.
Release Status	Released
Keep Instance and History	Always
Enable Logging	Checked

Event Definition	
On Create	Checked **Note**: This is temporarily enabled so this sub-workflow can be tested as a standalone workflow. The workflow is integrated as a sub-workflow in *Exercise 03* and will be disabled then.
Trigger Type	After Record Submit

Create the Necessary States

2 Add the three states as depicted in the diagram above:

- State 1: Reviewer
- State 2: Contract OK
- State 3: Contract Invalid

Note: Do <u>not</u> select Do Not Exit Workflow for any of the states. You want the workflow to return to its initiating parent regardless of the review's outcome.

Configure Buttons and Transitions

3 Add two Add Button actions to State 1 and configure each as follows:

Script ID* (Basic Information)	Label
_sdr_furn_req_btn_contr_ok	Contract OK
_sdr_furn_req_btn_cont_inv	Contract Invalid

** The Script ID allows one to automatically click on a button via SuiteScript. It is always a good idea to enter a unique value rather than let the system generate a default. This makes the value more readable should a SuiteScript ever be created to click on the button.*

4 Configure each transition based on the appropriate button clicks.

Create a Workflow Field to Store Reviewer

5 With no state selected in the Workflow Manager, click on the **Fields** subtab in the **Workflow** tab of the Context Panel.

6 Click **New Workflow Field** to add a workflow field and configure as follows:

Label	Reviewer
ID	_sdr_furn_req_reviewer
Type	List/Record
List/Record	Employee
Store Value	Checked
Default Selection (**Validation & Defaulting** subtab)	Ruby Soriano (SuiteDreams' Contract Manager)

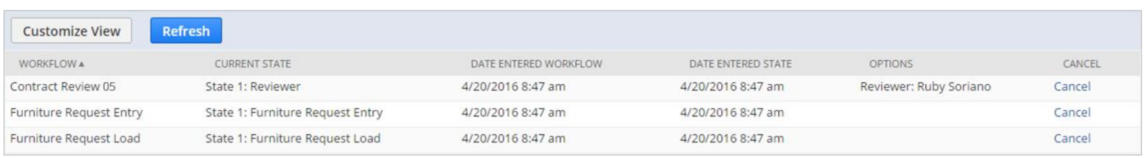
7 Restrict the display of the **OK/Invalid** buttons to when the reviewer is the current user.

Execute the Workflow and Test

8 Temporarily <u>disable</u> On Create in the **Event Definition** section of the Furniture Request Create workflow.

9 Create two new Furniture Request records logged in as Larry Nelson.

The only active workflows should be Furniture Request Entry, Furniture Request Load, and Contract Review, with Ruby Soriano as the current reviewer:



Customize View | Refresh

WORKFLOW ▲	CURRENT STATE	DATE ENTERED WORKFLOW	DATE ENTERED STATE	OPTIONS	CANCEL
Contract Review 05	State 1: Reviewer	4/20/2016 8:47 am	4/20/2016 8:47 am	Reviewer: Ruby Soriano	Cancel
Furniture Request Entry	State 1: Furniture Request Entry	4/20/2016 8:47 am	4/20/2016 8:47 am		Cancel
Furniture Request Load	State 1: Furniture Request Load	4/20/2016 8:47 am	4/20/2016 8:47 am		Cancel

Configure Login Access

10 Edit Ruby Soriano's Employee record and grant her login access by entering the following:

Email	*rsoriano@TSTDRVnnnnnnnn* Where *TSTDRVnnnnnnnn* is your unique NetSuite training account.	
Access subtab		
Give Access	Checked	
Password/Confirm Password	*training1*	
Role	Administrator	

11 Repeat the step above to grant "John Rittman" login access. Make sure to grant him the "Sales Manager" role (in addition to his VP WW Sales – HQ role) in the **Roles** sublist.

> When logging in as each of these users, you will be prompted to "Set Password Security Questions". You can click **Remind Me Later** when prompted.

12 Logout as Larry Nelson, login as Ruby Soriano, and edit each of the records created above to test the **Contract OK** and **Contract Invalid** buttons.

Use **Workflow History** to verify that each button transitions to the proper OK/Invalid end states.

Prepare the Furniture Request Create Workflow

13 Return to the Furniture Request Create workflow (still logged in as Ruby Soriano) and enable On Create in the **Event Definition** section.

14 Edit the Contract Review workflow and disable On Create.

It will no longer initiate on its own, but only when called from Furniture Request Create via the Initiate Workflow action, which will be configured in the next exercise.

Remain logged into NetSuite as Ruby Soriano.

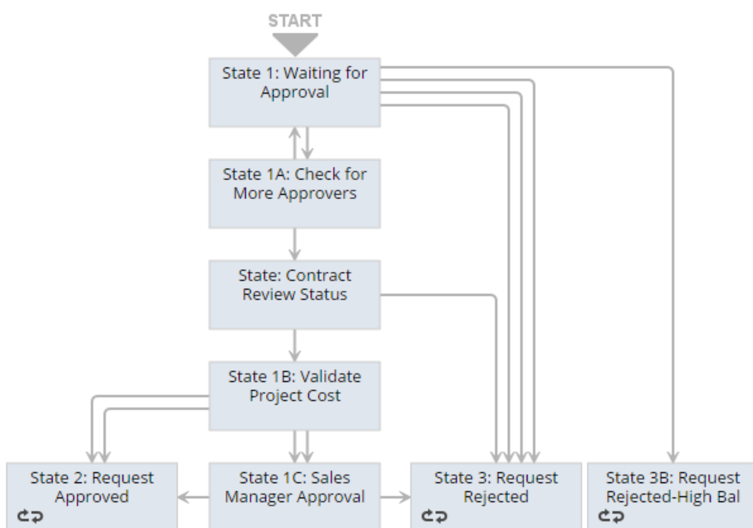
03: Integrate the Contract Review Workflow

Scenario: In this exercise, you will fully integrate the Contract Review workflow with the Furniture Request Approval workflow by initiating it as a sub-workflow.

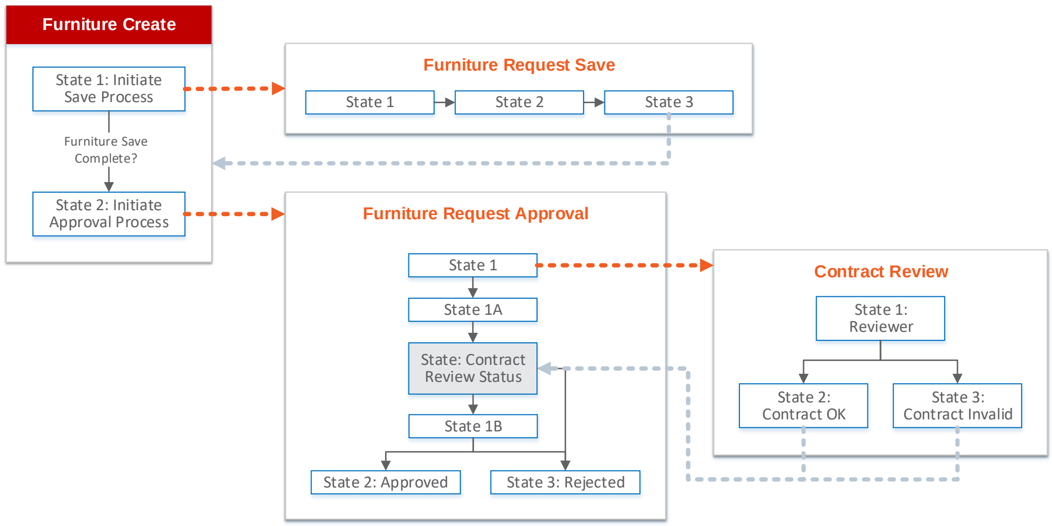
This configuration ensures the supervisory approvals in State 1: Waiting for Approval (Furniture Request Approval) and the contract review in State 1: Reviewer (Contract Review) occur at the same time.

> **Note**: Approvals in both workflows must be completed in order for the Furniture Request approval process to continue.

Here is the completed Furniture Request Approval workflow with an additional state called "State: Contract Review Status" that checks for completion of the Contract Review workflow:



The diagram below illustrates how each of the workflows interrelate:



Initiate the Contract Review Workflow

1 Edit the Furniture Request Approval workflow and add an action to initiate the Contract Review workflow upon first entry into the workflow.

Note: Be sure to order the action so it executes before the Current Approver is set so it will initiate based on Current Approver being empty. If this restriction is not in place, you could end up in a situation where Contract Review ends and then re-initiates at the next level of supervisory approval.

Auto-Reject Furniture Requests based on Contract Review Status

2 Add a transition from State 1: Waiting for Approval to State 3: Request Rejected based on Contract Review ending in State 3: Contract Invalid.

Check Completion of Contract Review

3 Add a state called "State: Contract Review Status" and move the state between State 1A and State 1B.

4 Modify the transition out of State 1A so it transitions to "State: Contract Review Status".

5 Create two transitions from "State: Contract Review Status" based on each result:

- Transition to State 1B if the workflow ends in "Contract OK".
- Transition to State 3 if the workflow ends in "Contract Invalid".

Auto-Reject Contract Reviews based on Supervisory Approval Status

6 Edit the Contract Review workflow and add another transition from State 1: Reviewer to State 3: Contract Invalid when Furniture Request Approval has ended in State 3: Request Rejected.

Note: To simplify the implementation, this exercise does not address automatic or forced approvals or transitions to other reject/recall states. Additional transitions and/or states may be required to support these scenarios.

Execute the Workflow and Test

To expedite testing of this exercise, you should still be logged into NetSuite as Ruby Soriano. Ms. Soriano has an Administrator user role which allows her to create and approve Furniture Requests and complete the contract review process.

Testing the Contract Invalid Button

7 Create a new Furniture Request record:

- Furniture Request Approval should transition to State 1: Waiting for Approval.
- Contract Review should transition to State 1: Reviewer.

8 Complete supervisory approval (click **Approve Request**):

- Furniture Request Approval should transition to State: Contract Review Status.
- Contract Review should remain in State 1: Reviewer.

9 Click **Contract Invalid**:

- Furniture Request Approval should transition to State 3: Request Rejected.
- View **Workflow History** and verify Contract Review has transitioned to State 3: Contract Invalid.

Testing the Contract OK Button

10 Create another Furniture Request record:

- Furniture Request Approval should transition to State 1: Waiting for Approval.
- Contract Review should transition to State 1: Reviewer.

11 Complete supervisory approval (click **Approve Request**):

- Furniture Request Approval should transition to State: Contract Review Status.
- Contract Review should remain in State 1: Reviewer.

12 Click **Contract OK**:

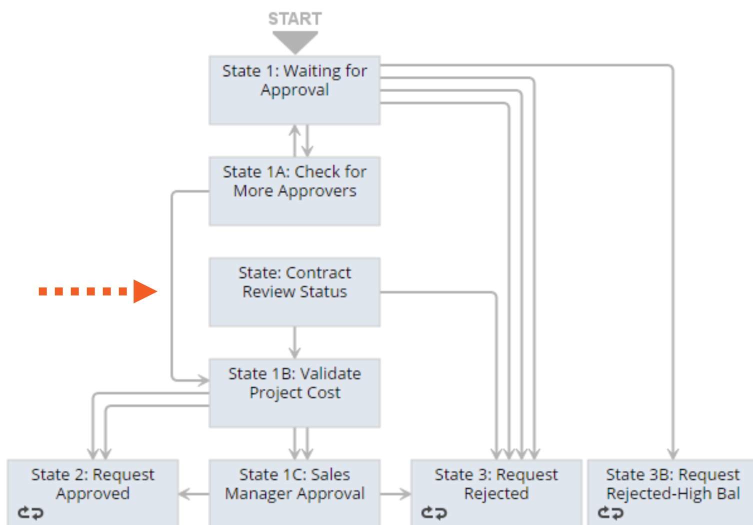
- Furniture Request Approval should transition to State 2: Request Approved (or State 1C: Sales Manager Approval depending on the value entered for Estimated Project Cost).
- Contract Review should end in State 2: Contract OK (**Workflow History**).

13 Logout as Ruby Soriano and log back in as Larry Nelson once again.

Upon completion of this module's exercises, you may wish to perform the following steps to allow for easier exercise testing for the remaining module exercises:

- Inactivate the Initiate Workflow action in State 1 of the Approval workflow and modify the transition from State 1A so it transitions to State 1B (by-passing State: Contract Review Status). Otherwise, the workflow will get hung up at this state.

Here's the updated workflow diagram:



Once you have made the changes above, create a new Furniture Request record and verify that only the Furniture Request Entry, Furniture Request Load, and Furniture Request Approval workflows are listed in **Active Workflows**:

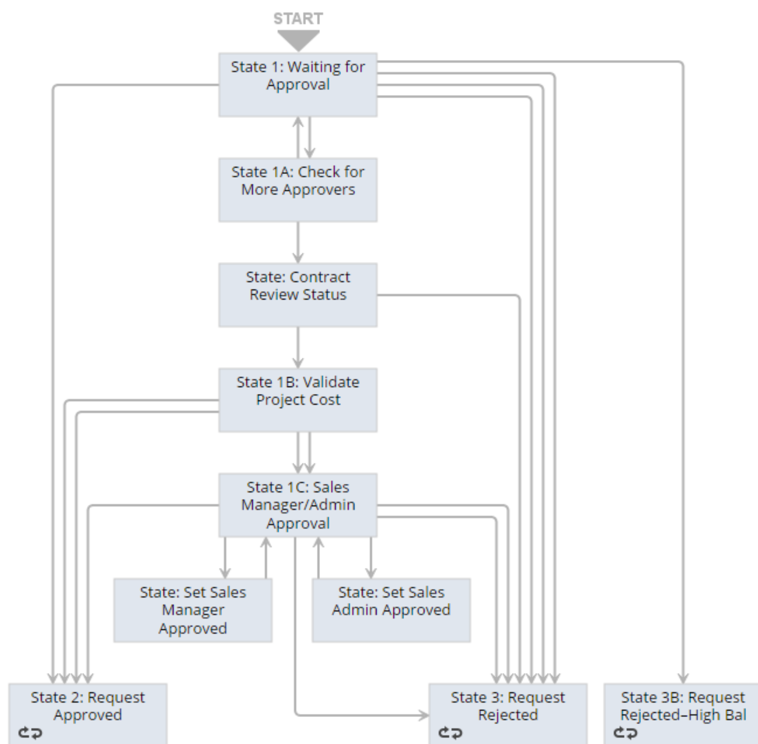
Customize View | Refresh

WORKFLOW	CURRENT STATE	DATE ENTERED WORKFLOW	DATE ENTERED STATE ▾	OPTIONS	CANCEL
Furniture Request Approval	State 1: Waiting for Approval	4/20/2016 9:27 am	4/20/2016 9:27 am	Submitter: Ruby Soriano Current Approver: Ruby Soriano	Cancel
Furniture Request Load	State 1: Furniture Request Load	4/20/2016 9:27 am	4/20/2016 9:27 am		Cancel
Furniture Request Entry	State 1: Furniture Request Entry	4/20/2016 9:27 am	4/20/2016 9:27 am		Cancel

04: Configure Parallel Approvals – All Approvals Complete (Optional)

Scenario: In addition to the existing Sales Manager approvals, users with a "Sales Administrator" role must also approve Furniture Requests. Both can approve at the same time, and both approvals are required for the workflow to move forward in the business process.

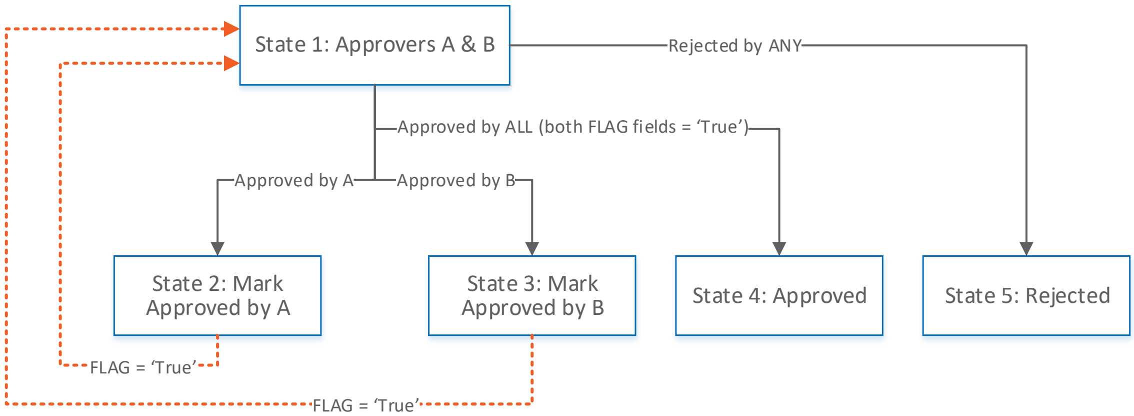
The steps in this exercise will use a simple design of allowing two or more approvers to approve at the same time. This is an alternative approach to implementing a parallel approval process that was configured in *Exercise 03*. The workflow diagram below builds upon the existing State 1C: Sales Manager Approval, which will be renamed to "State 1C: Sales Manager/Admin Approval":



***Note**: Your workflow may look slightly different from the diagram above.*

Parallel approval processing will be implemented using a simple design where a single state represents both approvers (Sales Manager/Sales Admin). Each click of an "Approve" button by either approver transitions to another state that sets the value of a checkbox field to *true*.

- When the value of either checkbox is *true*, control is returned to the state representing all approvers.
- When all checkboxes evaluate *true*, control is moved to the "Approved" state.
- Anytime a "Reject" button is clicked, control is moved to the "Rejected" state.



Before starting this optional exercise:

Set the Release Status of the following workflows to "Not Initiating" to prevent conflicts during testing:

- Furniture Request Approval
- Furniture Request Create
- Contract Review

Enable On Create for the following workflows:

- Furniture Request Save

Create a New Workflow using "Make Copy"

1 Make a copy of the Furniture Request Approval workflow and enter the following information (leaving all other fields at their defaults unless otherwise noted):

Basic Information	
Name	Furniture Request Parallel Approvals
Description	Enter a description of the workflow.
Release Status	Released
Keep Instance and History	Always
Enable Logging	Checked
Event Definition	
On Create	Checked

Create New Workflow Fields (TYPE = Checkbox)

2 Add two new workflow fields and configure them as follows:

Label	Sales Manager Approved
ID	_sdr_furn_req_smgr_appr
Type	Check Box
Store Value	Checked

Label	Sales Admin Approved
ID	_sdr_furn_req_sadmin_appr
Type	Check Box
Store Value	Checked

Rename Existing Sales Manager Approval State

3 Rename State 1C to "State 1C: Sales Manager/Admin Approval".

Add and Restrict Buttons based on Value of Checkbox Fields

4 Add two new buttons to State 1C to support Sales Administrator approval:

Script ID	Label
_sdr_furn_req_sadmin_appr	Sales Admin Approve
_sdr_furn_req_sadmin_rej	Sales Admin Reject

5 Configure the conditions on each new Sales Admin button like the existing **Sales Manager Approve/Reject** buttons.

Create the Necessary States

6 Add two new states to represent the setting of the checkbox fields:

- State: Set Sales Manager Approved
- State: Set Sales Admin Approved

Position each state per the workflow diagram above.

Configure Actions and Transitions

7 Configure actions in each new state that sets the value of the Sales Manager Approved and Sales Admin Approved checkboxes to *true* upon entry to each state.

8 Configure transitions out of State 1C:

> You may already have an existing transition from State 1C to State 2 when the **Sales Manager Approve** button is clicked. You must delete this transition since it will conflict with our new business requirement.

- Transition to each new state based on the corresponding button clicks.
- Transition to State 3: Request Rejected when either reject button is clicked.
- Transition to State 2: Request Approved when the Sales Manager and the Sales Administrator have both approved.

9 Create a transition from each new state setting the value of the checkbox fields to the state evaluating approval by both the Sales Manager and Sales Admin.

Grant Login Access

10 Grant login access to Matt Nolan and assign him the "Sales Administrator" role.

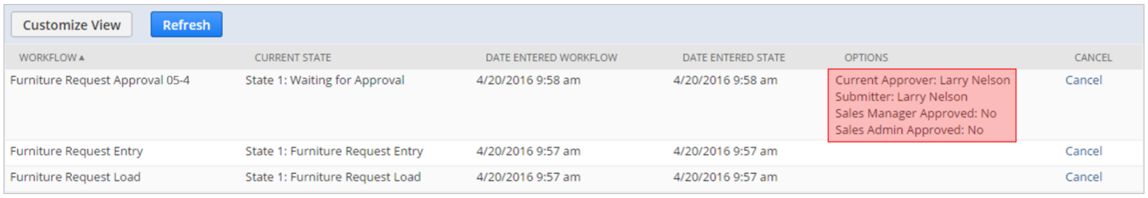
Execute the Workflow and Test

Note: Depending on the workflow initiation configuration of the Contract Review workflow, you may still need to log in as the Contract Reviewer (Ruby Soriano) and click the **Contract OK** button to move the workflow along.

> Use **Workflow History** to check the value of the Sales Manager/Admin Approved checkbox fields and see the movement from the approver state to a checkbox setting state, and back again to the approval state.

11 Create a new Furniture Request with an Estimated Project Cost greater than $10,000. You can simplify your testing of this exercise by selecting your user account (Larry Nelson) as the Project Manager.

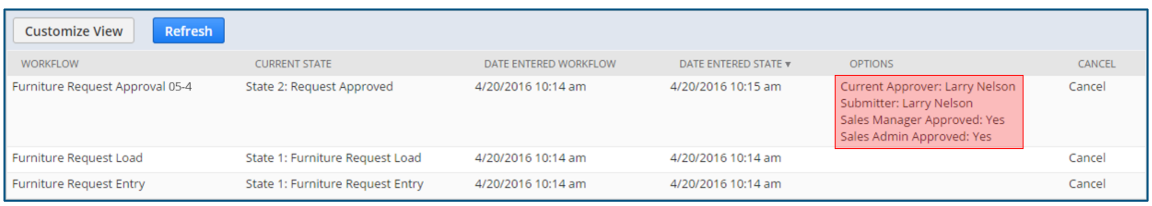
Notice that the value of both workflow fields (Sales Manager Approved and Sales Admin Approved) are both currently 'false':



Customize View | Refresh

WORKFLOW ▴	CURRENT STATE	DATE ENTERED WORKFLOW	DATE ENTERED STATE	OPTIONS	CANCEL
Furniture Request Approval 05-4	State 1: Waiting for Approval	4/20/2016 9:58 am	4/20/2016 9:58 am	Current Approver: Larry Nelson Submitter: Larry Nelson Sales Manager Approved: No Sales Admin Approved: No	Cancel
Furniture Request Entry	State 1: Furniture Request Entry	4/20/2016 9:57 am	4/20/2016 9:57 am		Cancel
Furniture Request Load	State 1: Furniture Request Load	4/20/2016 9:57 am	4/20/2016 9:57 am		Cancel

- Approve as Larry Nelson (and Ms. Soriano for the Contract Review, if necessary).
- Upon approval, the record should transition to State 1C.
- Login as John Rittman (Sales Manager) and click **Sales Manager Approve**.
- The record should remain in State 1C and the Sales Manager Approved workflow field will be set to *true*.
- Login as Matt Nolan (Sales Administrator) and click **Sales Admin Approve**.
- The record should transition to State 2: Request Approved and the value of both the Sales Manager and Sales Admin Approved workflow fields will be set to *true*:



Customize View | Refresh

WORKFLOW	CURRENT STATE	DATE ENTERED WORKFLOW	DATE ENTERED STATE ▾	OPTIONS	CANCEL
Furniture Request Approval 05-4	State 2: Request Approved	4/20/2016 10:14 am	4/20/2016 10:15 am	Current Approver: Larry Nelson Submitter: Larry Nelson Sales Manager Approved: Yes Sales Admin Approved: Yes	Cancel
Furniture Request Load	State 1: Furniture Request Load	4/20/2016 10:14 am	4/20/2016 10:14 am		Cancel
Furniture Request Entry	State 1: Furniture Request Entry	4/20/2016 10:14 am	4/20/2016 10:14 am		Cancel

Optional tests:

- Repeat the above test, but approve as Matt Nolan first, followed by John Rittman.
- Reject as Larry Nelson before anyone approves. The workflow should immediately transition to State 3: Request Rejected.
- Reject after only one approval. The workflow should transition to State 3: Request Rejected.

Reset Release Statuses

Before continuing, set the Release Status of the following workflows as indicated:

- Furniture Request Approval (Released)
- Furniture Request Parallel Approvals (Not Initiating)

Re-enable On Create for the following workflows:

- Furniture Request Approval

The only workflows that should be active are Furniture Request Entry, Furniture Request Load, Furniture Request Save, and Furniture Request Approval (and perhaps Sales Reps On Leave).

EXERCISE SOLUTIONS

Having trouble with this module's workflows?

1. Navigate to **Customization > Workflow > Workflows**.
2. Change the Record Type filter to "Furniture Request SOLUTION".
3. Click **Edit** next to the workflow you would like to analyze:
    - SOL Furniture Request Create 05 (*Exercise 01*)
    - SOL Contract Review 05 (*Exercises 02*)
    - SOL Furniture Request Approval 05-3 (*Exercise 03*)
    - SOL Furniture Request Parallel Appr 05-4 (*Optional Exercise 04*)
    - SOL Furniture Request Save 05-4 (*Optional Exercise 04*)

TRANSITIONING ON CHANGES TO RELATED RECORDS

Required Exercises	
01	Approve upon Phone Call Completion
02	Reject when Estimated Project Cost > Customer's Credit Limit

01: Approve upon Phone Call Completion

Scenario: Currently, Furniture Requests move to the "Approved" state only when the Project manager, supervisors, contract reviewers, and possibly sales managers, have all provided approval. Despite these multi-level approvals, Furniture Requests are often approved before the Project Manager has had a chance to reach out to the customer by phone to discuss the specifics of their project.

SuiteDreams would like to ensure the customer phone call takes place before final approval. All Furniture Requests will not be approved until the Phone Call record (created in State 1 of the Save workflow) has been marked "Completed". Project managers, supervisors, and contract reviewers can still approve requests prior to the phone call taking place, but the Furniture Request should remain in the "Pending Approval" status until the phone call has been completed.

This creates a situation where the Phone Call record is created in one workflow (Save) and evaluated in another (Approval). As a result, the order of action execution will be very important when testing this exercise to avoid a false-positive result.

> **Remember!** You can create a related record from one workflow and subscribe to that record from another workflow. However, the Subscribe To Record action must be executed within the same workflow, but not necessarily the same state, in which the subscribed record's data will be evaluated.

Create a Custom Record Field to Store the Phone Call

You will begin by creating a custom record field to store the subscribed Phone Call record.

1. Navigate to **Customization > Lists, Records, & Fields > Record Types** and select the "Furniture Request" record type.

2 Create a custom record field with the following configuration:

Label	Phone Call
ID	_sdr_furn_req_phone_call
Type	List/Record
List/Record	Call
Store Value	Checked
Display Type (**Display** subtab)	Hidden (or Inline Text if you want to view the field on the form)

This creates a join on the related Phone Call (Call) record and allows us to pass the value of the Phone Call field to another workflow when the record is subscribed to.

Modify the Furniture Request Save Workflow

Currently, the Furniture Request Create workflow should be initiating both the Save and Approval workflows using Initiate Workflow actions. **This will be important when testing this exercise**!

3 Edit the Furniture Request Save workflow and modify the existing Create Record action in State 1 and select the custom "Phone Call" field from the Store Result In dropdown list.

Modify the Furniture Request Approval Workflow

The Approval workflow should be initiating after the Save workflow has finished processing. **Again, this will be important when testing this exercise**.

4 Edit the Furniture Request Approval workflow and add a **Subscribe To Record** action to the workflow's entry state that subscribes to the Phone Call record created by the Save workflow. This will allow you to monitor the status of the record.

5 Create a new state called "State: Phone Call Status" and move it between State: Contract Review Status and State 1B.

6 Modify the transition out of State 1A so the record transitions to State: Phone Call Status. This skips the contract review process, which is no longer initiated in State 1 (Initiate Workflow action disabled).

7 Add a transition out of State: Phone Call Status to State 1B and configure it so it executes only when the related Phone Call record has been completed.

Execute the Workflow and Test

8 Create a new Furniture Request record. To simplify your testing, select "Larry Nelson" (you) as the Project Manager and enter an Estimated Project Cost less than $10,000.

This skips additional approvals so you can focus on testing phone call completion.

9 Open the new record and test the following scenario using **Workflow History** to monitor the approval workflow and its transitions:

Scenario A	State of approval workflow
Create a new Furniture Request record (as Larry Nelson)	State 1: Waiting for Approval
Login as Ruby Soriano and approve the Contract Review (if necessary)	State 1: Waiting for Approval
1. Login as Larry Nelson and set the call status to "Completed". 2. Click **Refresh** in A**ctive Workflows**.	State 1: Waiting for Approval
Approve the Furniture Request	State 2: Request Approved

10 Create another Furniture Request record and test the following scenario:

Scenario B	State of approval workflow
Create a new Furniture Request record (as Larry Nelson)	State 1: Waiting for Approval
Approve the Furniture Request	State: Contract Review Status **Note**: If the Contract Review workflow has been disabled, the workflow will transition to "State: Phone Call Status".
Login as Ruby Soriano and approve the Contract Review (if necessary)	State: Contract Review Status
1. Login as Larry Nelson and set the call status to "Completed". 2. Click **Refresh** in A**ctive Workflows**.	State 2: Request Approved

If Scenario B does not work as expected, verify the order (and execution trigger) in which the Phone Call record is being created and when it is being subscribed to.

Remember that the Create Record action must be executed before the data in the related record can be evaluated. **Workflow History** and the Workflow Execution Log can be helpful to identify when various actions are executed.

02: Reject when Estimated Project Cost > Customer's Credit Limit

Scenario: SuiteDreams would like Furniture Requests to be automatically rejected when the customer's available credit limit is less than the Estimated Project Cost. The rejection should occur as the workflow enters State 1: Waiting for Approval.

If the customer's credit limit is satisfactory upon entry into State 1: Waiting for Approval, the Furniture Request should still be rejected if their credit limit becomes less than the Estimated Project Cost at any time before approval.

This can be accomplished by subscribing to the related Customer record and monitoring the Credit Limit field. You can update a customer's credit limit by navigating to the **Financial** subtab, **Account Information** section.

> **Note**: Related records are not automatically subscribed to just because the relationship may exist on the parent record. You must explicitly subscribe to each related record to have their changes cause the workflow to wake up and evaluate the transitions.

Modify the Furniture Request Approval Workflow

1. Create a new non-exiting end state called "State 3C: Request Rejected–Cred Limit".
2. Add a **Subscribe To Record** action on the Customer field upon initiation of the workflow.
3. Add a transition to State 3C and configure the condition when Estimated Project Cost is greater than the customer's credit limit.
4. Create and set the appropriate approval statuses.
5. Configure the appropriate actions to make the record read-only.

Execute the Workflow and Test

6. Open the record of the customer you plan to use during your test and note their credit limit (**Financial** subtab, **Account Information** section).
7. In a new browser tab/window, create a new Furniture Request with an Estimated Project Cost less than the selected customer's credit limit, and view the record.

   Active Workflows should show the record in State 1: Waiting for Approval.
8. Edit the selected Customer record and update the credit limit field to be less than the entered Estimated Project Cost.

9 Return to the Furniture Request record and click the **Refresh** button on the **Active Workflows** subtab.

The workflow automatically transitions to State 3C: Request Rejected–Cred Limit.

EXERCISE SOLUTIONS

Having trouble with this module's workflows?

1. Navigate to **Customization > Workflow > Workflows**.
2. Change the Record Type filter to "Furniture Request SOLUTION".
3. Click **Edit** next to the workflow you would like to analyze:
    - SOL Furniture Request Save 06 (*Exercises 01-02*)
    - SOL Furniture Request Approval 06 (*Exercises 01-02*)

WORKING WITH FORMULAS

Required Exercises	
01	Stop Sequential Approvals after 2 Levels
02	Validate Desired Sale Price (using a SQL formula)
03	Make the Phone Call Subject Dynamic
Optional Exercises	
04	Associate the Furniture Request with the Phone Call

01: Stop Sequential Approvals after 2 Levels

Scenario: This exercise builds on the existing approval loop in the Furniture Request Approval workflow. The current implementation has the workflow loop through all approvers until the top of the supervisor hierarchy is reached. SuiteDreams has determined that approvals should only be routed 2 levels up the hierarchy, to avoid approvals by C-level approvers.

To implement this business requirement, you will construct a formula to create a counter that can be used anytime you want to control the number of times the workflow loops.

Add a New State Field

1 Edit the Furniture Request Approval workflow and create a new state field in State 1A: Check for More Approvers with the following configuration:

Label	Number of Approvers
ID	_sdr_furn_req_num_approvers
Type	Integer Number
Store Value	Checked
Default Value (**Validation & Defaulting** subtab)	0 **Note**: This initializes the counter to zero.

This field will be used to track the number of approvers that have already approved.

Note: You can only evaluate a state field within the state it is defined, but the field's value is preserved if you exit the state and re-enter the state later.

Create/Modify Actions

2. Add an action that increments Number of Approvers by 1 upon entry into State 1A using a formula based on the following pseudo-code:

```
Number of Approvers = Number of Approvers + 1
```

3. Replace the condition on the Set Field Value action that sets Current Approver to the Current Approver's supervisor using a formula based on the following pseudo-code:

```
Number of Approvers < 2
```

4. Order the actions in State 1A so the above condition is evaluated after incrementing Number of Approvers.

Modify Transitions

5. Construct a formulaic condition on the transition from State 1A back to State 1 so it only occurs when Number of Approvers is less than 2.

6. Modify the existing transition from State 1A so it skips the phone call completion check and transitions directly to State 1B.

7. Construct a formulaic condition on the transition from State 1A to State 1B so it occurs only when the required approval limit has been reached or there are no more approvers.

Grant Login Access

8. Navigate to **Setup > Custom > Configure Login Access**. The Setup Login Access page will be displayed.

9. Select the following employees in the Employees list on the left side of the page by pressing the **CTRL** key and apply the "Sales Person" role in the Roles list on the right side of the page:

   - Aubrey Pober
   - Edwin Goldwasser

10. Click the **Generate Employee Access** button. The Setup Login Access page re-displays with links to the IDs containing login access.

    Make a note of the unique number for your training account that follows *TSTDRV*:

    *TSTDRV*____________________

    Copy them to Notepad for use later.

11 Select the following employees in the Employees list on the left side of the page by pressing the **CTRL** key and apply the "Sales Manager" role in the Roles list on the right side of the page:

- Fiona Small
- James Rollings

12 Click the **Generate Employee Access** button. The Setup Login Access page re-displays with links to the IDs containing login access.

13 Copy them to Notepad for use later. You should have these user account logins.

apober@TSTDRVnnnnnnn.com
egoldwasser@TSTDRVnnnnnnn.com
fsmall@TSTDRVnnnnnnn.com
jrollings@TSTDRVnnnnnnn.com

Note: The password for all users is *training1*.

The rest of the email address is always based on first name initial + last name, as follows:

Aubrey Pober	*apober@TSTDRVnnnnnnn.com*
Edwin Goldwasser	*egoldwasser@TSTDRVnnnnnnn.com*
Fiona Small	*fsmall@TSTDRVnnnnnnn.com*
James Rollings	*jrollings@TSTDRVnnnnnnn.com*

Execute the Workflow and Test

You will use the following supervisor hierarchy to perform your test:

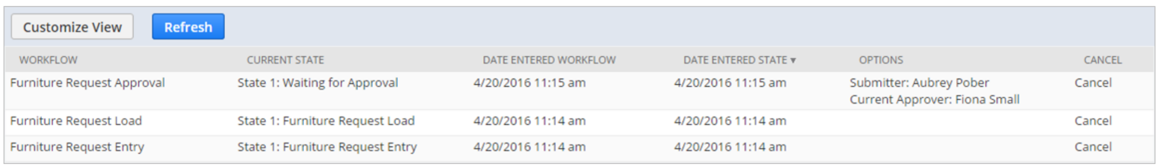
Aubrey Pober > Fiona Small > James Rollings (approvals should stop here even though James is not the top of the supervisor hierarchy)

14 Login as Aubrey Pober and create a new Furniture Request:

Note: Users logged in under the "Sales Person" role can find Furniture Request records by navigating to **Customers > Other > Furniture Request**.

- Select "Fiona Small" as the Project Manager. She will be the first approver.
- You are restricted to choosing customers whose Sales Rep is Aubrey Pober. For this test, select customer "Best Buy Software".
- Complete the remaining fields and save the record.

You should see the following in **Active Workflows**:



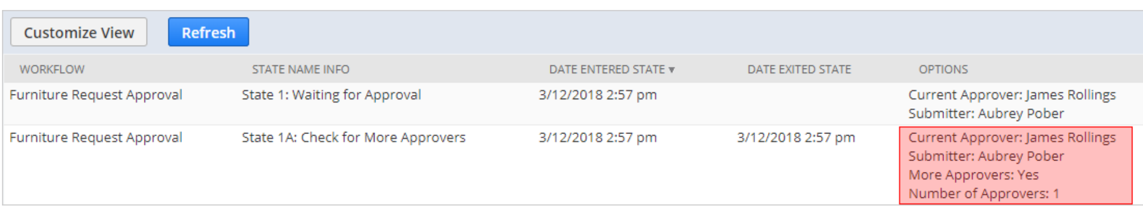
Customize View | Refresh

WORKFLOW	CURRENT STATE	DATE ENTERED WORKFLOW	DATE ENTERED STATE ▾	OPTIONS	CANCEL
Furniture Request Approval	State 1: Waiting for Approval	4/20/2016 11:15 am	4/20/2016 11:15 am	Submitter: Aubrey Pober Current Approver: Fiona Small	Cancel
Furniture Request Load	State 1: Furniture Request Load	4/20/2016 11:14 am	4/20/2016 11:14 am		Cancel
Furniture Request Entry	State 1: Furniture Request Entry	4/20/2016 11:14 am	4/20/2016 11:14 am		Cancel

15 Logout as Aubrey Pober and login as Fiona Small.

16 Open and approve the request.

After approval by Ms. Small, **Workflow History** for State 1A should show that approval routing has moved to James Rollings and the Number of Approvers has been set to 1:



Customize View | Refresh

WORKFLOW	STATE NAME INFO	DATE ENTERED STATE ▾	DATE EXITED STATE	OPTIONS
Furniture Request Approval	State 1: Waiting for Approval	3/12/2018 2:57 pm		Current Approver: James Rollings Submitter: Aubrey Pober
Furniture Request Approval	State 1A: Check for More Approvers	3/12/2018 2:57 pm	3/12/2018 2:57 pm	Current Approver: James Rollings Submitter: Aubrey Pober More Approvers: Yes Number of Approvers: 1

17 Logout as Fiona Small and login as James Rollings.

18 Edit the request, but do not approve quite yet.

Approvals should stop after Mr. Rollings as a result of Number of Approvers reaching a value of 2, as indicated in the Workflow Execution Log:


Customize View Refresh

WORKFLOW	STATE NAME INFO	DATE ENTERED STATE ▾	DATE EXITED STATE	OPTIONS
Furniture Request Approval	State 2: Request Approved	3/12/2018 3:06 pm		Current Approver: James Rollings Submitter: Aubrey Pober
Furniture Request Approval	State 1B: Project Cost > $8000?	3/12/2018 3:06 pm	3/12/2018 3:06 pm	Current Approver: James Rollings Submitter: Aubrey Pober
Furniture Request Approval	State 1A: Check for More Approvers	3/12/2018 3:06 pm	3/12/2018 3:06 pm	Current Approver: James Rollings Submitter: Aubrey Pober More Approvers: Yes Number of Approvers: 2
Furniture Request Approval	State 1: Waiting for Approval	3/12/2018 2:57 pm	3/12/2018 3:06 pm	Current Approver: James Rollings Submitter: Aubrey Pober
Furniture Request Approval	State 1A: Check for More Approvers	3/12/2018 2:57 pm	3/12/2018 2:57 pm	Current Approver: James Rollings Submitter: Aubrey Pober More Approvers: Yes Number of Approvers: 1

Notice that the value of Current Approver in State 1A is now "John Rittman" (James Rollings' supervisor). Mr. Rittman does, in fact, have a supervisor (Larry Nelson), but it does not matter in this case since you have reached the maximum number of approvals.

19 Approve the request. The record should transition to State 2: Request Approved.

20 Logout as James Rollings and log back in as Larry Nelson (Administrator).

ORACLE NETSUITE

02: Validate Desired Sale Price

Scenario: SuiteDreams would like to ensure that the Desired Sale Price entered for new custom Furniture Requests is greater than the Raw Materials Cost to ensure profitability. In this exercise, you will configure a SQL formula to display an error message when Desired Sale Price is less than or equal to Raw Materials Cost.

Modify the Furniture Request Save Workflow

1. Edit the Furniture Request Save workflow and add a new state called "State: Validate Desired Sale Price".
2. Move it between State 0: Project Cost Validation and State 1: Create Phone Call.
3. Change the transition out of State 0 so it transitions to State: Validate Desired Sale Price.
4. Create a transition out of State: Validate Desired Sale Price to State 1.
5. Change the transition trigger between State 1 and State 2 to After Record Submit to ensure the successful execution of the Send Email and Go To Record actions.
6. In the new state, add a **Return User Error** action with the following configuration:

Parameters	
Text	Desired Sale Price must be greater than the Raw Materials Cost.

7. Configure a formulaic condition based on the following pseudo-code:

```
Desired Sale Price less than or equal to Raw Materials Cost
```

Execute the Workflow and Test

8. Test your formula by creating a new Furniture Request record and entering the following values:

Estimated Project Cost	1000
Raw Materials Cost	3000
Desired Sale price	2000

You should receive an error upon save of the record.

9 Now enter the following values:

Estimated Project Cost	1000
Raw Materials Cost	600
Desired Sale price	2000

The error should not be displayed.

03: Make the Phone Call Subject Dynamic

Scenario: In this exercise, you will dynamically enter the Subject field of the Phone Call record. This refers to the Phone Call record already being created in the Furniture Request Save workflow.

The dynamic text should include the name of the project manager and the customer's phone number as follows:

> Customer call with *<project_manager>*, Phone: *<customer_phone>*

In addition, SuiteDreams would also like to make it conditional. When the customer's phone number has been entered:

> Customer call with *<project_manager>*, Phone: *<customer_phone>*

When the customer's phone number has not been entered:

> Customer call with *<project_manager>*, Phone: TBD

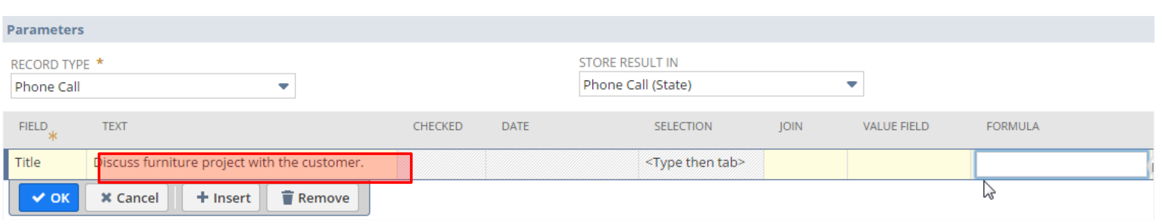
There are two ways to configure the conditions on the dynamic Subject field:

- **Option #1**: Create two versions of the Create Record action. Add conditions to each one. One version executes when there is a phone number, and the other executes when there is no phone number.
- **Option #2**: Have one version of the Create Record action but add conditional logic inside the formula that sets the phone call subject.

Option #2 will be implemented in this exercise. One advantage of this option is you do not need to duplicate the Create Record action, which reduces unnecessary complexity.

Construct a Formula on the "Title" Field

1. Edit the Furniture Request Save workflow and edit the existing Create Record action in State 1.
2. Remove the existing text in the Text field (highlighted below) where you are assigning the Title.



Syntax notes for the formula you are about to construct:

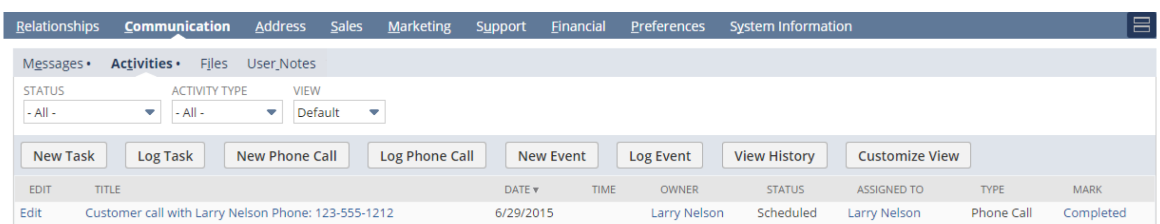
- Enclose strings in single quotes, ' '.
- Appends/concatenates two or more strings and NetSuite fields together using two pipes, ||.
- Enclose NetSuite fields in curly braces, { }, but do not enclose in single quotes, ' '.

3 Click the Formula Builder icon located next to the Formula field in the Title field row and construct the formula as follows:

- Begin with the string with, 'Customer call with '
- Enter two pipes, ||
- Use the Value field to select the Project Manager
- Enter two more pipes, ||
- Enter the string, ' Phone: '
- Enter two pipes, ||
- Use the Join and Value field lists to select the customer's phone

4 Copy the formula you just created to the Text field in the Title row.

5 Create a Furniture Request record and view the Phone Call record to make sure the subject is displaying correctly. The example below is from the selected customer record:



Modify the Formula to Manipulate the Phone Number

Now let's modify the formula to perform additional manipulation of the phone number. Syntax notes for the formula you are about to construct is provided below:

```
CASE
   WHEN <A> IS NULL THEN <B>
   ELSE <C>
END
```

Note: In formulas, *null* identifies an empty field value.

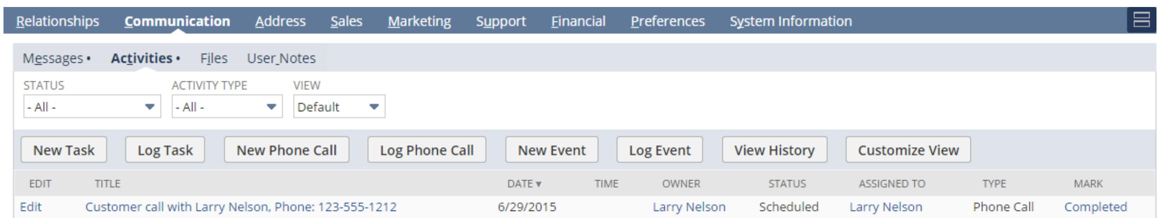
6 Enter the CASE statement shown above as a formula to set the phone call subject as follows:

- Replace *<A>* with the field ID representing the customer's phone number
- Replace *<B>* with the text to set when there is no phone number
- Replace *<C>* with the text to set when there is a phone number

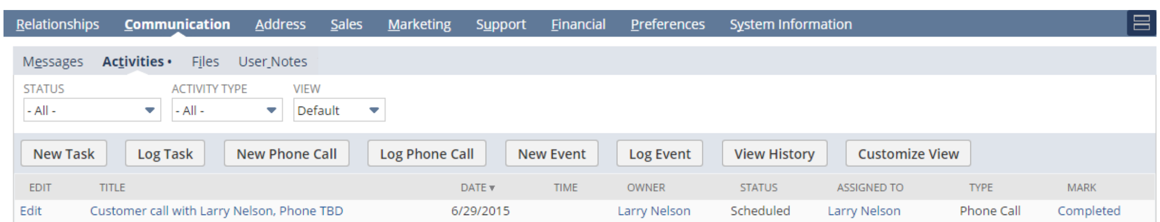
7 Create two new Furniture Request records—one with a customer that has a phone number (such as "ABC Marketing") and another with a customer that does not (such as "Apeture").

View each Phone Call record to make sure the Subject is displaying correctly.

Example with phone number:



Example without phone number:



04: Associate the Furniture Request with the Phone Call (Optional)

Scenario: When creating Furniture Requests, the selected customer is already associated with the Phone Call record based on the join to the related Customer record. In this exercise, you will create an additional relationship by directly associating the Furniture Request record with the Phone Call record.

You often cannot find the Internal ID of the current record in the SuiteFlow pick lists when associating it with another record, such as during the Create Record action, but it is easy to access the identity of the current record by using this formula, *{id}*.

Create a Custom CRM Field to Store the Requested Furniture

First, let's create a custom CRM field to display on the Phone Call record that represents the related Furniture Request record.

1 Navigate to **Customization > Lists, Records, & Fields > CRM Fields > New** and enter the following information:

Label	Requested Furniture
ID	_sdr_furn_req_furniture
Type	List/Record
List/Record	Furniture Request
Store Value	Checked
Phone Call (**Applies To** subtab)	Checked
Subtab (**Display** subtab)	Main
Display Type (**Display** subtab)	Inline Text **Note**: You will not see this field displayed on a new Phone Call form. It will only display when the Phone Call record has been created and populated with the name of the requested furniture.

You are creating this field to see how to associate the current record to another related record.

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Set the Requested Furniture Field during Phone Call Creation

2. Edit the Furniture Request Save workflow, and once again, modify the Create Record action in State 1.

3. Set the Requested Furniture field to the current record by entering this simple formula into the Formula field:

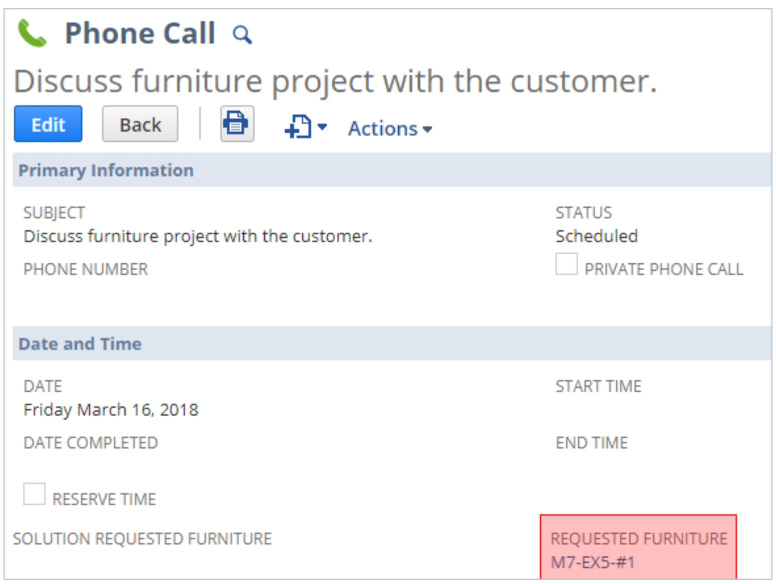
```
{id}
```

Note: Enter the formula directly into the Formula field. The Value Field list is empty. This is the reason a formula is used to implement this use case.

You may need to clear your browser cache and/or close and reopen your browser to find the new Requested Furniture field in the Field dropdown list.

Execute the Workflow and Test

4. Create a new Furniture Request record and then view the Phone Call record to make sure the Requested Furniture field has been associated to the current Furniture Request record, as shown below:



Note: You will also see the SOLUTION Requested Furniture version of the field displayed on the form.

EXERCISE SOLUTIONS

Having trouble with this module's workflows?

1 Navigate to **Customization > Workflow > Workflows**.

2 Change the Record Type filter to "Furniture Request SOLUTION".

3 Click **Edit** next to the workflow you would like to analyze:

- SOL Furniture Request Approval 07 (*Exercise 01*)
- SOL Furniture Request Save 07 (*Exercise 02-03*)
- SOL Furniture Request Save 07-4 (*Optional Exercise 04*)

01: Stop Sequential Approvals after 2 Levels

5
```
{custwfstate_sdr_furn_req_num_approvers} < 2
```

7
```
{custworkflow_sdr_furn_req_more_appr} = 'F' OR {custwfstate_sdr_furn_req_num_approvers}
= 2
```

02: Validate Desired Sale Price

7
```
{custrecord_sdr_furn_req_des_sale_price} <= {custrecord_sdr_furn_req_raw_mat_cost}
```

03: Make the Phone Call Subject Dynamic

3
```
'Customer call with ' || {custrecord_sdr_furn_req_pm} || ', Phone: ' ||
{custrecord_sdr_furn_req_customer.phone}
```

6
```
CASE
  WHEN {custrecord_sdr_furn_req_customer.phone} IS NULL THEN
       'Customer call with ' || {custrecord_sdr_furn_req_pm} || ', Phone: TBD'
  ELSE 'Customer call with ' || {custrecord_sdr_furn_req_pm} || ', Phone: ' ||
{custrecord_sdr_furn_req_customer.phone}
END
```

USING SUITESCRIPT IN WORKFLOWS

Required Exercises	
01	Validate Desired Sale Price (using a SuiteScript formula)
02	Embed Expired Credit Card Details in Notification Email
03	Update the Related Customer Record
Optional Exercises	
04	Update the Sales Rep on the Related Customer Record

01: Validate Desired Sale Price

Scenario: SuiteDreams would like to ensure that the Desired Sale Price entered for new custom Furniture Requests is greater than the Raw Materials Cost to ensure profitability. You have already configured this validation using a server-side SQL formula.

In this exercise, you will re-configure the validation to use a SuiteScript formula that displays an error message when Desired Sale Price is less than or equal to Raw Materials Cost.

Modify the Furniture Request Save Workflow

1. Edit the Furniture Request Save workflow and inactivate the existing Return User Error action in "State: Validate Desired Sale Price" that is using a SQL formula.

Modify the Furniture Request Entry Workflow

2. Edit the Furniture Request Entry workflow and add a **Return User Error** action with the following configuration:

Basic Information	
Trigger On	Before User Submit
Parameters	
Text	Desired Sale Price must be greater than the Raw Materials Cost.

3 Select **Custom Formula** and click on the icon to open the Formula Builder.

4 In the Formula field, configure the following condition using a SuiteScript formula based on the following pseudo-code:

```
Desired Sale Price <= Raw Materials Cost
```

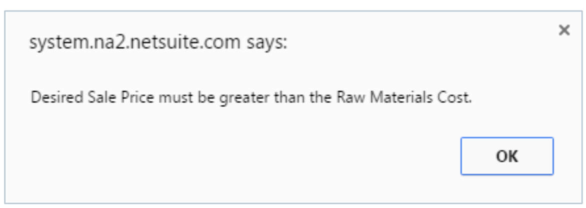
> The creation of this SuiteScript formula requires the use of the `parseFloat()` function. `parseFloat` is necessary because client-side SuiteScript 1.0 API functions such as `nlapiGetFieldValue` return strings, not numeric values. In order to compare the values in the condition, they must be converted to a numeric value.

Execute the Workflow and Test

5 Test your formula by creating a new Furniture Request record and entering the following values:

Estimated Project Cost	1000
Raw Materials Cost	3000
Desired Sale price	2000

You should receive an error message dialog box during save of the record:



6 Now enter the following values:

Estimated Project Cost	1000
Raw Materials Cost	600
Desired Sale price	2000

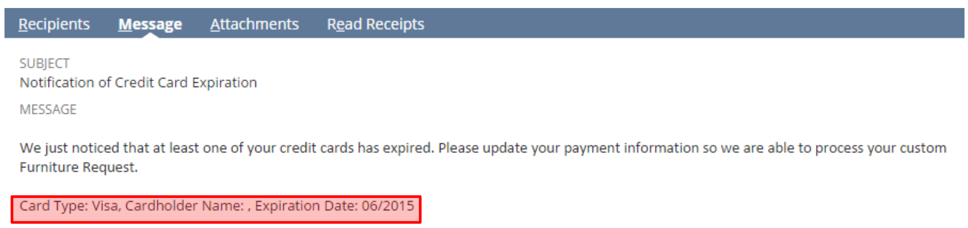
No error message should be displayed.

02: Embed Expired Credit Card Details in Notification Email

Scenario: In this exercise, you will add non-sensitive credit card data to the credit card expiration email configured in *Using Saved Searches in Conditions*, *Exercise 01*. This will be accomplished using a Workflow Action Script and custom action.

A Workflow Action Script must be used because SuiteFlow does not support the direct retrieval of a record's sublist data. Using a Workflow Action Script, you are able to pass data from the script back to the workflow.

Example email containing expired credit card information:



Review the Pre-built SuiteScript File

Let's review the pre-built script that has been pre-loaded into your SuiteDreams training account.

1 Navigate to **Documents > Files > SuiteScripts**. Open **Advanced Workflows** > **Furniture Request** and select "`SuiteDreams_WAS_GetCreditCardInfo.js`".

Refer to the inline comments for an explanation of each line of code.

Create the Script Record and Deploy the Script

In this series of steps, you will create the Script record and deploy the script in the same step.

2 Navigate to **Customization > Scripting > Scripts > New**.

3 Select the `SuiteDreams_WAS_GetCreditCardInfo.js` script from the Script File dropdown list and click **Create Script Record**.

Note: Because this script is a SuiteScript 2.0 script, you will not be prompted to select the script's type, as is the case with SuiteScript 1.0 scripts. This is due to the presence of the `@NScriptType` parameter at the top of the script.

4 Enter the details of the Script record as follows:

Name	WAS Get Credit Card Info
ID	_sdr_furn_req_was_cc_info
Description	Enter a description of the script's functionality.
Parameters subtab	
Return Type	Free-Form Text

5 Now begin the deployment of the script on the **Deployments** subtab:

Deployments subtab	
Applies To	Furniture Request
ID	_sdr_furn_req_was_cc_info
Deployed	Yes
Status	Released **Note**: This is required since you will be logging in as Ruby Soriano to test this exercise. Remember, scripts only execute based on the script OWNER, which in this case, is Larry Nelson.
Log Level	Debug **Note**: When selecting STATUS = "Released", LOG LEVEL defaults to "Error". Changing it to "Debug" allows entries to the execution logs to verify script processing.

6 Save the Script record.

7 To complete the Script Deployment record, navigate to **Customization > Scripting > Script Deployments**, and set the following filters:

- Type: Workflow Action
- API Version: 2.0

8 Edit the "WAS Get Credit Card Info" entry and enable the **Select All** checkbox next to Roles in the **Audience** subtab.

This deploys the script to all users interacting with the Furniture Request record type.

Create a State Field to Store the Result of the Workflow Action Script

9 Edit the Furniture Request Approval workflow and create a state field in State 2: Request Approved to store the credit card information returned by the script code below:

```
// The data type of the data returned is identified by the
// Return Type on the Parameters subtab of the script deployment.
//
// This is linked to the Store Result In field in the Parameters
// section of the workflow action defined in the workflow.
return creditCardInfo;
```

Label	Credit Card Info
ID	_sdr_furn_req_cc_info **Note**: This represents the Script Deployment ID above but they do not need to be the same.
Type	Free-Form Text
Store Value	Checked

Configure the Workflow Action Script

10 Add the "WAS Get Credit Card Info (Custom)" action to State 2 and select the state field created above from the Store Result In dropdown list in the **Parameters** section.

11 Restrict its execution to custom furniture requests and only when there are expired credit cards.

12 Make sure the custom workflow action executes before the expired credit card email notification.

Update the Send Email Action

13 Update the Send Email action that notifies the customer of expired credit cards by embedding the credit card information stored by the state field into the email message.

Hint: You can embed the value of the state field in the message body by enclosing the field's internal ID in curly braces.

Execute the Workflow and Test

14 Configure an expired credit card on the customer record you intend to select in your test (such as B&B Design).

Refer to the first 3 steps of *Using Saved Searches in Conditions*, *Exercise 01*, if needed.

15 Create a new **custom** Furniture Request record and select the updated customer above and select "Edwin Goldwasser" as the sales rep. Mr. Goldwasser is the default sales rep for B&B Design.

16 Update the status of the associated Phone Call record to "Completed" and approve the Furniture Request record.

17 Examine **Workflow History**. You should see the following entries in the State 2 log:

ENTRY	RESULT	DATE/TIME
Running ONENTRY trigger (Event: BUTTON; Context: null)		**7/16/2020 - 10:09:45.363**
SETFIELDVALUE	Executed	7/16/2020 - 10:09:45.366
custrecord_sdr_furn_req_appr_status = 2		7/16/2020 - 10:09:45.367
SENDEMAIL	Executed	7/16/2020 - 10:09:45.371
Condition: User : E-mail Is Not Empty And Customer : E-mail Is Not Empty	True	7/16/2020 - 10:09:45.385
From = -5 To = 285		7/16/2020 - 10:09:45.388
CUSTOMACTION	Executed	7/16/2020 - 10:09:45.486
Condition: Custom = T	True	7/16/2020 - 10:09:45.494
Saved search: 207	True	7/16/2020 - 10:09:45.499
Script: WAS Get Credit Card Info		7/16/2020 - 10:09:45.500
Script result value: Card Type: Visa, Cardholder Name: John Smith, Expiration Date: 06/2019;		7/16/2020 - 10:09:45.580
SENDEMAIL	Executed	7/16/2020 - 10:09:45.587
Condition: Customer : E-mail Is Not Empty And User : E-mail Is Not Empty	True	7/16/2020 - 10:09:45.598
Saved search: 207	True	7/16/2020 - 10:09:45.602
From = -5 To = 285		7/16/2020 - 10:09:45.605

***Note**: Your log entry may differ slightly from the screenshot above.*

The corresponding email message to the selected customer should resemble the following:

Recipients **Message** Attachments Read Receipts

SUBJECT
Notification of Credit Card Expiration

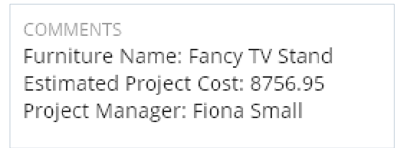
MESSAGE
Our records indicate that at least one of your credit cards has expired.
Please update your payment information so we are able to process your custom furniture request.

Card Type: Visa, Cardholder Name: John S Smith, Expiration Date: 02/2018

***Note**: Your email notification may differ slightly from the screenshot above.*

03: Update the Related Customer Record

Scenario: In this exercise, you will update a field on the related Customer record using SuiteScript. This is only possible through the creation of a custom action using a Workflow Action Script.



SuiteDreams would like the Customer record updated with a notation in the Comments field that contains the name of the furniture project, the estimated cost of the project, and optionally, the name of the Project Manager, as shown at right.

SuiteFlow does not support the direct update of data in related records. To do so, a Workflow Action Script must be used. The purpose of this exercise is to demonstrate how data can be passed between a workflow and a script.

Review the Pre-built SuiteScript File

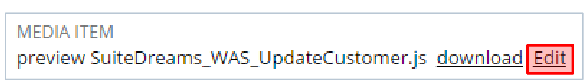
Your training account contains a partially completed script file that requires additional modification for it to function properly. Let's review the pre-built script that has been pre-loaded into your SuiteDreams training account.

1. Navigate to **Documents > Files > SuiteScripts**. Open **Advanced Workflows** > **Furniture Request** and select "`SuiteDreams_WAS_UpdateCustomer.js`".

   Refer to the inline comments for an explanation of each line of code.

2. Update the script file accordingly—replacing the placeholder values *<enter the appropriate…>* with the correct script, record, and/or field definitions.

   Hint! To edit the script, click on the **Edit** link next to the script's name in the File Cabinet, and then click on the **Edit** link under Media Item, as shown below:

3. Save your script updates when you are finished.

Create the Script Record

4. Navigate to **Customization > Scripting > Scripts > New**.

5. Select the `SuiteDreams_WAS_UpdateCustomer.js` script from the Script File dropdown list and click **Create Script Record**.

6 Enter the details of the Script record as follows:

Name	WAS Update Customer
ID	_sdr_furn_req_was_updatecust
Description	Enter a description of the script's functionality.

7 Select the **Parameters** subtab and enter the following information:

Label	Add Project Manager
ID	_sdr_furn_req_add_proj_mgr
Type	Checkbox

Deploy the Script

8 Select the **Deployments** subtab and begin the script deployment process:

Applies To	Furniture Request
ID	_sdr_furn_req_was_updatecust
Deployed	Yes
Status	Released
Log Level	Debug

9 Save the Script record.

10 Navigate to **Customization > Scripting > Script Deployments** and edit the "WAS Update Customer" entry.

Note: You may need to adjust your filters.

11 Enable the **Select All** checkbox next to Roles in the **Audience** subtab and save the Script Deployment.

Configure the Workflow Action Script

12 Using the Furniture Request Save workflow, where is the most appropriate place to configure this action?

Hint: The action should execute just prior to the Go To Record action. You can add the action to an existing state or create a new state.

13 Once you have decided where you want to configure the custom action, click **+ New Action** in the desired state and select the "WAS Update Customer (Custom)" custom action from the list of actions.

14 Configure the condition so the custom action only executes for **custom** Furniture Requests.

15 Check the Value checkbox next to the Add Project Manager field in the **Parameters** section to include the name of the Project Manager in the Comments field. This value will be passed to the script as an input parameter.

Leaving it unchecked excludes the Project Manager from the Comments field.

Execute the Workflow and Test

16 Create a new Furniture Request record and click **Save**.

The Comments field should be visible on the selected Customer record:

Comments
Furniture Name: Fancy TV Stand
Estimated Project Cost: 8000.00
Project Manager: Fiona Small

Comments
Furniture Name: Fancy TV Stand
Estimated Project Cost: 8000.00

ADD PROJECT MANAGER checked (L) and unchecked (R).

17 Clicking on the **System Information** subtab, **System Notes** sublist lists the Workflow Action Script and the new value of the Comments field.

04: Update the Sales Rep on the Related Customer Record (Optional)

Scenario: SuiteDreams has decided that they want to make sure that the selected sales rep on the Furniture Request is also updated on the related Customer record. Just like in the previous exercise, this is only possible through the creation of a custom action using a Workflow Action Script.

Your mission (if you choose to accept it!) is to create, configure, and deploy a Workflow Action Script from scratch to meet these basic requirements.

Create the Script File

1. Create a new SuiteScript file called `SuiteDreams_WAS_UpdateSalesRep.js`. This can be a simple text file created in Notepad or similar text editor with the *`.js`* extension.
2. Write the appropriate SuiteScript code using the following pseudo-code:
   - Return all the fields for the record currently in the workflow.
   - Set a variable that stores the value of the selected sales rep.
   - Set a variable that stores the value of the selected customer.
   - Load the related Customer record selected in the Furniture Request.
   - Set the value of the Sales Rep field on the related Customer record to the sales rep selected in the Furniture Request.
   - Commit the Customer record to the database.
3. Upload the script file to the following path in the File Cabinet:

   SuiteScripts > Advanced Workflows > Furniture Request

Create the Script Record

4. Navigate to **Customization > Scripting > Scripts** and create a new Workflow Action Script using your custom script file.

Deploy the Script

5. From the Script record above, select the **Deployments** subtab and create a Script Deployment record.
6. Complete the configuration of the Script Deployment record by specifying the target audience for the script.

Configure the Custom Action

7 Modify the Furniture Request Save workflow and configure your custom action. You can either add your custom action to an existing state or create a new state.

Execute the Workflow/Script and Test

8 Open the Customer record of the customer you plan to select in your new Furniture Request.

Note the currently assigned sales rep (**Primary Information** section).

9 In a new browser window/tab, create a new Furniture Request record for the customer above and select a different sales rep from the Sales Rep dropdown list.

10 Verify that the customer's sales rep has been updated with the sales rep selected on the Furniture Request record.

EXERCISE SOLUTIONS

Having trouble with this module's workflows?

1 Navigate to **Customization > Workflow > Workflows**.

2 Change the Record Type filter to "Furniture Request SOLUTION".

3 Click **Edit** next to the workflow you would like to analyze:

- SOL Furniture Request Entry 08 (*Exercises 01-02*)
- SOL Furniture Request Approval 08-2 (*Exercise 02*)
- SOL Furniture Request Save 08-3 (*Exercise 03*)
- SOL Furniture Request Save 08-4 (*Optional Exercise 04*)

01: Validate Desired Sale Price

4 Configuration of SuiteScript formula:

```
parseFloat(nlapiGetFieldValue('custrecord_sdr_furn_req_des_sale_price')) <=
parseFloat(nlapiGetFieldValue('custrecord_sdr_furn_req_raw_mat_cost'))
```

02: Embed Expired Credit Card Details in Notification Email

13 Update the Send Email action that notifies the customer of expired credit cards by embedding the credit card information stored by the state field into the email message.

"We just noticed that at least one of your credit cards has expired. Please update your payment information so we are able to process your custom Furniture Request."

```
{custwfstate_sdr_furn_req_cc_info}
```

03: Update the Related Customer Record

2 Refer to the `SuiteDreams_WAS_UpdateCustomer_SOL.js` file in the File Cabinet.

12 Using the Furniture Request Save workflow, where is the most appropriate place to configure this action?

Answer: You can do a couple things: 1) Configure the action on *exit* from State 2: Notify Customer, or 2) create a new state between State 2 and State 3 to initiate the Workflow Action Script.

04: Update the Sales Rep on the Related Customer Record

2 Refer to the `SuiteDreams_WAS_UpdateSalesRep_SOL.js` file in the File Cabinet.

For comparison purposes, here is the same script written in SuiteScript 1.0:

```
function updateSalesRep()
{
    var recFurnitureReq = nlapiGetNewRecord();
    var stSalesRep = recFurnitureReq.getFieldValue('custrecord_sdr_furn_req_salesrep');
    var stCustomer = recFurnitureReq.getFieldValue('custrecord_sdr_furn_req_customer');
    var recCustomer = nlapiLoadRecord('customer', stCustomer);

    recCustomer.setFieldValue('salesrep', stSalesRep);

    nlapiSubmitRecord(recCustomer);
}
```

SuiteScript 1.0

EXECUTING WORKFLOWS IN DIFFERENT CONTEXTS

Required Exercises	
01	Initiate a Workflow on Record Creation via CSV Import
02	Initiate a Workflow on Record Creation via User Event Script
03	On-Demand Processing via Suitelet
Optional Exercises	
04	Force Approvals via Mass Update

01: Initiate a Workflow on Record Creation via CSV Import

1 Navigate to the list of workflows and filter on the "Customer" record type.

2 Open the "CUSTOMER – CSV Import" workflow and examine its configuration:

ON CREATE	Checked
CONTEXTS	CSV Import

3 Navigate to **Lists > Relationships > Customers > New** and enter a new Customer record.

4 Open the record you just created and select the **Workflow History** subtab. Notice that the workflow did not execute on the record.

5 Navigate to **Setup > Import/Export > CSV Import Preferences** and verify that Run Server SuiteScript and Trigger Workflows is disabled. Click **Save** (if necessary).

6 Navigate to **Setup > Import/Export > Import CSV Records** and enter the following:

Scan & Upload CSV File

Import Type	Relationships
Record Type	Customers Only
CSV Column Delimiter	Comma
CSV File(s)	One File To Upload: *csv-import-customers.csv* **Note**: You can download this file from the File Cabinet in the *SuiteScripts > Advanced Workflows* folder.

Import Options

7 Select Add as the data handling type.

File Mapping

8 Open **Advanced Options** and verify that Run Server SuiteScript and Trigger Workflows is disabled.

Field Mapping

9 Map the "Type" field from the CSV import file with the "Company : Individual (Req)" field.

Save Mapping & Start Import

10 Enter an Import Map Name and click **Save & Run**.

11 Navigate to **Lists > Relationships > Customers** and you should see several new Customer records imported as "Test Company XX".

12 Edit one or more of these new Customer records created during the import.

Note that the Comments field was not updated since the workflow was not initiated on each new Customer record. You might also view the Workflow Execution Log for additional insight.

13 Once again, navigate to **Setup > Import/Export > Import CSV Records** and enter the same information as above.

Scan & Upload CSV File

Import Type	Relationships
Record Type	Customers Only
CSV Column Delimiter	Comma
CSV File(s)	One File To Upload: *csv-import-customers.csv*

Import Options

14 Select Update as the data handling type.

File Mapping

15 Open the **Advanced Options** and enable Run Server SuiteScript and Trigger Workflows.

This overrides the company-wide setting under **CSV Import Preferences**.

Field Mapping

16 Map the "Type" field from the CSV import file with the "Company : Individual (Req)" field.

Save Mapping & Start Import

17 Enter another Import Map Name and click **Save & Run**.

18 Navigate to **Lists > Relationships > Customers** and edit one or more of the new Customer records created during the initial import.

The Comments field should now be populated as a result of workflow processing, and the Workflow Execution Log should show the workflow's initiation in the CSV context.

02: Initiate a Workflow on Record Creation via User Event Script

Scenario: SuiteDreams has decided to allow customers to submit Furniture Requests using an online Furniture Request form, in addition to Customer Service Representatives entering them on behalf of customers in the NetSuite user interface.

SuiteDreams would like to have a Task record created during the submission of the Furniture Request regardless of the source of the Furniture Request record. However, they want the Task record assigned a different priority level depending on the source of the Furniture Request.

Source of Furniture Request	Priority
Online Furniture Request Form	High
NetSuite User Interface	Low

Verify the Save Workflow

1 Open the Furniture Request Save workflow and verify that Execute As Admin is enabled and the workflow has a status of "Released".

Modify the Furniture Request Record Definition

SuiteDreams would like to expose a very basic online version of the Furniture Request entry form to customers. This simplified form will simply allow them to select their customer name from a dropdown list and enter a brief description of the requested project. The remaining fields will populate accordingly.

Note: Some fields will not be populated via the online form. To expedite the testing of the exercise, you will modify several of these fields below.

2 Edit the custom Furniture Request record, select the **Fields** subtab, and make the following fields **optional** (**Validation & Defaulting** subtab of each field definition):

- Project Manager
- Estimated Project Cost
- Raw Materials Cost
- Desired Sale Price

3 Edit the Sales Rep field and modify its definition as follows:

Display subtab	
Display Type	Inline Text
Sourcing & Filtering subtab	
Source List	Customer
Source From	Sales Rep

4 Edit the Project Manager field and modify its definition as follows:

Display subtab	
Display Type	Inline Text
Sourcing & Filtering subtab	
Source List	Sales Rep
Source From	Supervisor

5 Add a new custom record field:

Label	Project Description
ID	_sdr_furn_req_proj_desc
Type	Free-Form Text
Store Value	Checked
Display subtab	
Display Type	Normal
Display Width	50
Validation & Defaulting subtab	
Default Value	This is a summary of the project.

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Create the Online Customer Furniture Project Request Form

6 Select the **Online Forms** subtab, click on **New Online Form**, and enter the following information:

Title	Online Customer Project Request Form

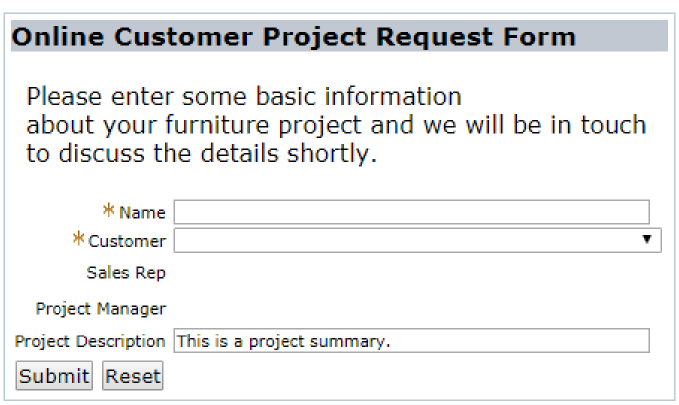
Message	*Please enter some basic information about your furniture project and we will be in touch to discuss the details shortly.*
	Or use the Code Editor to style the text using HTML:
	`<html>`
	`<body>`
	`<p style="margin: 20px 10px; font-size: 12pt";>Please enter some basic information about your furniture project and we will be in touch to discuss the details shortly.</p>`
	`</body>`
	`</html>`

Select Fields subtab				
Field	Label	Width	Mandatory	Select
Name	Name	50	Yes	
Customer	Customer		Yes	Yes
Sales Rep	Sales Rep			Yes
Project Manager	Project Manager			Yes
Project Description	Project Description	50		

7 Save the new online form and re-open it from the **Online Forms** subtab.

8 Select the **External** subtab and click on the Publishable Form URL link to preview your online form.

Tip: You might consider bookmarking this URL prior to testing this exercise.



9 Test the online form by selecting "ABC Marketing", "B&B Design", or "Best Buy Software" from the **Customer** dropdown list.

The **Sales Rep** and **Project Manager** fields will default automatically.

10 Click **Submit**. A new browser window/tab will be opened and a SuiteDreams web site will be displayed. You can close this window/tab.

11 Verify that a Furniture Request record was created and that it is currently waiting for approval in State 1.

There is no need to approve/reject the record.

Create the Workflow

Now you will create the workflow that will be initiated on all new Furniture Request records created from either the online form or the user interface.

12 Create a new workflow called "Online Customer Furniture Request" (`_sdr_furn_req_online_req`) and configure it to execute on the creation of a new Furniture Request record (After Record Submit).

13 Make sure the workflow has Execute As Admin enabled, the status is "Released", and logging is enabled.

Configure States, Actions, Transitions, and Conditions

Configure State 1

14 Rename the default state to "State 1: Create Task".

15 Add a standard Workflow Action Group (*Group 1*) a and configure it so its actions will only be executed in the User Event Script context (Contexts = "User Event Script").

16 Add a **Create Record** action to Group 1 with the following configuration:

Parameters		
Record Type	Task	
Field	Text	Selection
Title	Please follow up with the customer.	
Priority (Task/Call)		High

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17 Add a **Send Email** action that notifies the assigned Sales Rep that they have a Task record waiting for completion.

Sender | Specific Sender: Larry Nelson
Recipient | **From Field**: Current Record > Sales Rep
Subject: *Please follow up with the customer ASAP.*

18 Add a second Action Group (*Group 2*) and configure it so its actions will only be executed in the "User Interface" context.

19 Add a **Create Record** action to Group 2 with the following configuration:

Parameters		
Record Type	Task	
Field	Text	Selection
Title	Please follow up with the sales rep.	
Priority (Task/Call)		Low

Execute the Workflow and Test

Note: Depending on whether you are displaying the Custom Form field on the Furniture Request entry form, you may be able to toggle between the original form and the modified "online" form.

20 Create a new Furniture Request record via the user interface. Enter a project name and select "ABC Marketing", "B&B Design", or "Best Buy Software" as the customer.

21 Select the **Workflow History** subtab and examine the log file associated with the Online Customer Furniture Request workflow:

ENTRY	RESULT	DATE/TIME
Workflow initiated		**7/15/2020 - 10:37:04.225**
Running ONENTRY trigger under AFTERSUBMIT (Event: CREATE; Context: USERINTERFACE)		**7/15/2020 - 10:37:04.226**
ACTIONGROUP	Considered	7/15/2020 - 10:37:04.229
Context: [USEREVENT]		7/15/2020 - 10:37:04.229
Check: Action allowed for execution context USERINTERFACE?	False	7/15/2020 - 10:37:04.229
CREATERECORD: Task (TASK)	Considered	7/15/2020 - 10:37:04.236
Context: [USEREVENT]		7/15/2020 - 10:37:04.236
Check: Action allowed for execution context USERINTERFACE?	False	7/15/2020 - 10:37:04.236
SENDEMAIL	Considered	7/15/2020 - 10:37:04.236
Context: [USEREVENT]		7/15/2020 - 10:37:04.236
Check: Action allowed for execution context USERINTERFACE?	False	7/15/2020 - 10:37:04.236
ACTIONGROUP	Executed	7/15/2020 - 10:37:04.236
CREATERECORD: Task (TASK)	Executed	7/15/2020 - 10:37:04.250
Record type: Task (TASK)		7/15/2020 - 10:37:04.250
title = Please follow up with the sales rep.		7/15/2020 - 10:37:04.297
priority = LOW		7/15/2020 - 10:37:04.297
New record ID: 726		7/15/2020 - 10:37:04.363

***Note**: The log above is displaying Rejected Actions/Transitions.*

Now enter a new Furniture Request record using your new online form.

22 Navigate to the bookmark you created earlier (*you bookmarked that URL, right?*) and select "ABC Marketing", "B&B Design", or "Best Buy Software" as the customer.

The **Sales Rep** and **Project Manager** fields will, once again, default accordingly.

23 Click **Submit**, return to NetSuite, and view the new record.

24 Select the **Workflow History** subtab and examine the log file associated with the Online Customer Furniture Request workflow:

ENTRY	RESULT	DATE/TIME
Workflow initiated		**7/16/2020 - 14:24:17.347**
Running ONENTRY trigger under AFTERSUBMIT (Event: CREATE; Context: USEREVENT)		**7/16/2020 - 14:24:17.349**
ACTIONGROUP	Executed	7/16/2020 - 14:24:17.353
CREATERECORD: Task (TASK)	Executed	7/16/2020 - 14:24:17.393
Record type: Task (TASK)		7/16/2020 - 14:24:17.393
title = Follow up with this customer.		7/16/2020 - 14:24:17.553
priority = HIGH		7/16/2020 - 14:24:17.553
New record ID: 744		7/16/2020 - 14:24:17.663
SENDEMAIL	Executed	7/16/2020 - 14:24:17.667
From = -5 To = 15		7/16/2020 - 14:24:17.669
ACTIONGROUP	Considered	7/16/2020 - 14:24:18.122
Context: [USERINTERFACE]		7/16/2020 - 14:24:18.123
Check: Action allowed for execution context USEREVENT?	False	7/16/2020 - 14:24:18.123
CREATERECORD: Task (TASK)	Considered	7/16/2020 - 14:24:18.125
Context: [USERINTERFACE]		7/16/2020 - 14:24:18.125
Check: Action allowed for execution context USEREVENT?	False	7/16/2020 - 14:24:18.125
Workflow finished		**7/16/2020 - 14:24:18.126**

Note*: The log above is displaying Rejected Actions/Transitions.*

03: On-Demand Processing via Suitelet

Scenario: In this exercise, you will work with a pre-built Suitelet script that performs the following functions:

- Initiates a pre-built "Furniture Request On-Demand" workflow using a SuiteScript 2.0 Suitelet script by initiating the `workflow.initiate()` function.

  A real-world use case would be any type of "run once" processing that needs to be performed, such as ad-hoc emails, special calculations, or one-time field data updates.
- Approves outstanding Furniture Request records by triggering the click of an **Approve** button from code in a pre-built "Furniture Request Approval 09" workflow by initiating the `workflow.trigger()` function.

  A real-world use case would be to support a mass approval capability or custom user interface allowing people to push the workflow through the approval process. An alternative option would be to use a Mass Update (*Optional Exercise 04*).
- Updates the value of Estimated Project Cost for select records.

Note: The code in the Suitelet could easily be inside other script types, such as a scheduled script or Portlet script.

Process an On-Demand Suitelet Request

Analyze the Pre-built Script/Script Deployment Records

1. Navigate to **Customization > Scripting > Scripts** and select "Suitelet" from the Type filter dropdown list.
2. Open the "Furniture Request On-Demand" Script record and examine its configuration.
3. Select the **Deployments** subtab, click on "Process Furniture Requests", and examine its configuration.

Modify the Pre-built Script

4. Navigate to **Documents > Files > SuiteScripts**, select **Advanced Workflows > Furniture Request**, and open the "`SuiteDreams_Suitelet_FurnReq.js`" script for editing.

   Review the inline comments to get an idea of the script's functionality.
5. Update the script file accordingly—replacing the placeholder values *<enter the appropriate…>* with the correct script, record, and/or field IDs.

Modify the 'Outstanding Approvals' Saved Search

6 Navigate to **Lists > Search > Saved Searches** and edit the "Furniture Requests with Outstanding Approvals" saved search.

7 Set the Workflow : Workflow criteria to "is Furniture Request Approval 09".

8 Set the Workflow : Button criteria to "Is Furniture Request Approval 09: State 1: Waiting for Approval : Approve".

This allows you to set criteria against a button for any external process that needs to find records that have buttons to click.

9 Save the saved search.

Analyze the Pre-Built "Furniture Request On-Demand" Workflow

10 Edit the pre-built workflow, "Furniture Request On-Demand".

11 Set the Release Status to "Testing" and enable logging.

12 Edit the transition between State 1 and State 2. Notice that it is restricted to the "Suitelet" context.

This workflow has no configured actions. You simply want to see the workflow transition from State 1 to State 2 upon initiation of the workflow via the Suitelet.

Execute the Workflow and Test

13 Enter a new Furniture Request record.

14 Navigate to **Setup > Custom > Process Furniture Requests**.

15 Select **Initiate On-Demand Workflow** from the Action dropdown list.

16 Select a Furniture Request record from the All Furniture list and click **Take Selected Action**.

Here is some of the relevant Suitelet code for this action. Note the `workflow.initiate()` function and the ID of the on-demand workflow:

```
if (action == '1') { // Initiate On-Demand Workflow

    // intiate the Furniture Request On-Demand workflow on records selected by the user
    for ( var i in allFurnitureArray) {
        workflow.initiate({
            recordType : 'customrecord_sdr_furn_req',
            recordId : allFurnitureArray[i],
            workflowId : 'customworkflow_sdr_furn_req_on_demand'
        });
    }
}
```

17 View **Workflow History** and note that the Furniture Request On-Demand workflow has been executed and automatically transitioned from State 1 to State 2.

18 (**Optional**) Change the context of the transition between State 1 and State 2 in the Furniture Request On-Demand workflow to something other than "Suitelet".

19 Re-execute the steps above to initiate Furniture Request On-Demand.

This time, the transition should not be executed due to the change of context, and the record should still be waiting in State 1.

Process Approve Button Click from the Suitelet

Disable the Furniture Request Approval Workflow

In this part of the exercise, you will be using a pre-built approval workflow in lieu of the currently released "Furniture Request Approval" workflow.

20 Edit the Furniture Request Approval workflow and set the Release Status to "Not Initiating" and save the workflow definition.

Modify the Pre-Built "Furniture Request Approval 09" Workflow

21 Edit the pre-built workflow "Furniture Request Approval 09".

This is a simplified approval workflow with two states: State 1: Waiting for Approval and State 2: Approved.

22 Set the Release Status to "Testing" and enable logging.

Execute the Workflow and Test

23 Enter one (or more) new Furniture Request records to ensure the Furniture Request Approval 09 workflow is initiated on at least one record.

24 Navigate to **Setup > Custom > Process Furniture Requests**.

25 Select the **Trigger Approval of Outstanding Records** action.

26 Select one or more Furniture Request records in the Furniture to Approve list.

27 Click **Take Selected Action**.

Here is some of the relevant Suitelet code for this action. Note the `workflow.trigger()` function and the ID of the on-demand workflow:

```
// trigger the Approve button of the Furniture Request Approval 09
// workflow on records selected by the user
for ( var i in btnFurnitureArray) {
    workflow.trigger({
        recordType : 'customrecord_sdr_furn_req',
        recordId : btnFurnitureArray[i],
        workflowId : 'customworkflow_sdr_furn_req_approval_09',
        actionId : 'workflowaction_sdr_furn_req_btn_approve'
    });
}
```

The above code also refers to `workflowaction_sdr_furn_req_btn_approve`. This is the Script ID of the "Approve" button configured in State 1.

28 Examine **Workflow History** for the affected record.

Furniture Request Approval 09 has processed the **Approve Request** button click as if it had occurred through the user interface.

Note: If you wanted to restrict the visibility of a particular button to the Suitelet context, you could set the context on the Add Button action itself.

Update Estimated Project Cost

29 Enter one (or more) new Furniture Request records and verify they are waiting for approval in State 1 of the Furniture Request Approval 09 workflow.

30 Navigate to **Setup > Custom > Process Furniture Requests**.

31 Select the **Update Estimated Project Cost** action.

32 Select one (or more) of the Furniture Request records created above from the All Furniture list.

33 Enter a different Estimated Project Cost and click **Take Selected Action**.

Some of the relevant Suitelet code for this action is noted below. Note the `record.submitFields()` function and the ID of the Estimated Project Cost field:

```
// get the parameter containing the Estimated Project Cost provided by the user
var estimatedProjectCost = request.parameters.custpage_sdr_est_proj_cost;
// update the Estimated Project Cost field on records selected by the user
for ( var i in allFurnitureArray) {
    var id = record.submitFields({
        type : 'customrecord_sdr_furn_req',
        id : allFurnitureArray[i],
        values : {
            'custrecord_sdr_furn_req_est_proj_cost' : estimatedProjectCost
        }
    });
}
```

34 Open the affected Furniture Request record and verify that Estimated Project Cost was updated to the new value.

35 (**Optional**) Return to the **Process Furniture Requests** Suitelet and approve all outstanding records.

04: Force Approvals via Mass Update (Optional)

Scenario: Furniture Requests that are waiting for approval by the project manager or their supervisors may be forced to the "Approved" status for a variety of reasons. This will be implemented using the *Mass Update* tool.

While there are other implementation options available (such as a special button that might be available to someone with a specific role), SuiteDreams has decided to allow forced approvals for users with access to the Mass Update tool, rather than always allowing specific user roles to perform the approvals.

In this optional exercise, you will add a special button that will only be available to the Mass Update tool.

> You can use the original Furniture Request Approval workflow or the currently initiating Furniture Request Approval 09 workflow during this exercise.
>
> If you decide to use the original approval workflow, you must toggle the Release Status of both workflows accordingly.

Add Force Approval Button

1 Edit the desired approval workflow and add a button in State 1: Waiting for Approval that will be used to force approvals:

Basic Information	
ID	_sdr_furn_req_btn_force
Contexts	Custom Mass Update
Parameters	
Label	Force Approve

Note: Setting the Contexts to "Custom Mass Update" restricts the button to the Mass Update tool only. The button will not be displayed when viewing or editing a Furniture Request record from the user interface.

2 Add a transition from State 1 to the next state in the workflow when the **Force Approve** button is clicked.

Note: You should have two transitions from State 1 to State 2.

Execute the Workflow and Test

Via the User Interface

3 Create a new Furniture Request record.

4 Make sure the approval workflow is waiting in State 1: Waiting for Approval.

The **Force Approve** button should not be displayed on the record.

Via the Mass Update Tool

5 Navigate to **Lists > Mass Update > Mass Updates**.

6 Expand the **Workflows** section.

7 Locate the **Furniture Request** sub-section and select "Process <*workflow_name*>".

Note: The Mass Update tool allows you to *initiate* new workflows, *process* existing workflows, *cancel* existing workflows, and *transition* existing workflows.

8 Configure the following on the Mass Update page:

Title of Action	Force Approve Furniture Requests
Execute On Button	Select the state/button that you configured above. **Note**: The selections are based on the combination of state name and button name. Only states with buttons will be displayed in this list.

Note: The Button selection acts as additional criteria. Your selection is restricting the results as follows: *"Return Furniture Request records where the Furniture Request Approval workflow is currently waiting in State 1, and the Force Approve button is available to the Mass Update tool".*

- You can add additional criteria on the **Criteria** subtab just as with a saved search, but this is not necessary for this exercise.
- There is a **Schedule** subtab that allows the mass update to run on an automated basis, but this is also not necessary for this exercise.
- If you do not select a button, the mass update will process all transitions with a Transition On = <*blank*> configuration.

9 Click **Preview**. If no results display on the Mass Update Preview Results page, check your button configuration and make sure there is at least one Furniture Request record currently waiting for approval in State 1.

Your options from the Mass Update Preview Results page include:

- Check Apply (set by default) on records you wish to update.
- Click **Return To Criteria** to update how the search results are generated.
- Click **Save** to save the mass update based on Title of Action. This allows you to re-execute the mass update at a later time without having to re-enter all the criteria.

Note: You can open saved mass updates by navigating to **Lists > Mass Update > Saved Mass Updates**.

10 Perform the update by clicking **Perform Update**.

11 Click **OK** to acknowledge the update has been performed.

12 Examine **Workflow History** for the affected records and verify that it has transitioned to the next state in the approval workflow.

ENTRY	RESULT	DATE/TIME
Workflow initiated		**7/16/2020 - 15:19:09.865**
Running ONENTRY trigger under BEFORESUBMIT (Event: CREATE; Context: USERINTERFACE)		**7/16/2020 - 15:19:09.867**
SETFIELDVALUE	Executed	7/16/2020 - 15:19:09.870
custrecord_sdr_furn_req_appr_status = 1		7/16/2020 - 15:19:09.872
Running AFTERSUBMIT trigger (Event: CREATE; Context: USERINTERFACE)		**7/16/2020 - 15:19:11.265**
Running BEFORELOAD trigger (Event: VIEW; Context: USERINTERFACE)		**7/16/2020 - 15:19:24.022**
ADDBUTTON: Approve	Executed	7/16/2020 - 15:19:24.035
ADDBUTTON: Force Approve	Considered	7/16/2020 - 15:19:24.037
Context: [CUSTOMMASSUPDATE]		7/16/2020 - 15:19:24.038
Check: Action allowed for execution context USERINTERFACE?	False	7/16/2020 - 15:19:24.038
Workflow triggered to process transitions by click on button 'Force Approve' (id = 5473)		**7/16/2020 - 15:21:11.233**
Transition to State 2: Approved	Executed	7/16/2020 - 15:21:11.242
Button = 'Force Approve' (id = 5473)		7/16/2020 - 15:21:11.242
Running ONEXIT trigger (Event: BUTTON; Context: null)		**7/16/2020 - 15:21:11.243**

***Note**: The log above is displaying Rejected Actions/Transitions.*

EXERCISE SOLUTIONS

Having trouble with this module's workflows?

1. Navigate to **Customization > Workflow > Workflows**.
2. Change the Record Type filter to "Furniture Request SOLUTION".
3. Click **Edit** next to the workflow you would like to analyze:
   - CUSTOMER – CSV Import (*Exercise 01*)
     Note: You will need to change the Record Type filter to "Customer".
   - SOL Online Customer Furniture Request (*Exercise 02*)
   - SOL Furniture Request On-Demand 09 (*Exercise 03*)
   - SOL Furniture Request Approval 09-3 (*Exercise 03*)
   - SOL Furniture Request Approval 09-4 (*Optional Exercise 04*)