

# Linked Steps in a Flow

Many work flows often involve a number of people filling out different sections of a single form. So when you're designing this type of flow, you're most likely dragging the same form into the flow designer repeatedly to create the different steps in the flow.

Another way to create this type of flow is to use the Linked Steps feature of the flow designer. In this method, you create a linked version of a form for each step you want in your flow. One great advantage of this method is that if you need to make changes to the form step(s) after you've created your flow, you only have to edit the "parent" form — the editing changes are automatically propagated to its linked forms in the flow. Conversely, if you drag multiple copies of the same form into a flow to create steps, you'd have to make any changes to each copy of the form in each step.

If you want to show or hide different parts of a form depending on which user is filling it out, you can easily do this in a flow designed with linked steps using the [Security](#) tab or [Business Rules](#).

One circumstance in which you might not want to use linked forms is a flow in which each user is filling out a different form.

1. To create linked forms in a flow, add a step to the flow by dragging a form into the flow designer.
2. Click on the step and then click



Link icon to create a linked form.

3. Continue clicking



Link icon to create as many of the linked forms as you want.

## On This Page:

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- [Linked Steps Workflow Examples](#)

The example below shows the parent *Lodging-Meal Selections* form and its two linked forms. Notice that the parent form and its linked forms initially all have the same name, but the linked forms are represented by a double box. Remember, a linked step is a copy of the parent form. Note also that the parent step shows five icons while the linked steps display only the !80bluedeleteRemove icon.

- Click the  Link Icon to create a linked step.
- Click the  pencil icon to open a step in the Form Designer to edit it.
- Click the  delete icon to remove a linked step.
- Click the  download icon on the parent step as a standalone form.
- Click the  Edit Step Properties to access the Property tabs for the flow step.

PALETTE

- New Form
- Summary
- HTTP
- UserDetail..
- TIP-22186..
- Form 109 ..
- Copy of F..
- Geo Locat..
- Police In..
- Radiology..
- Bensenvil..
- Lodging-M..

PROPERTIES

Lodging-Meal Selection

**General Settings**

Continue: Continue

- Printable
- Save/Load
- Save To Role
- Save To User
- Fast Finish
- Allow Sign Pad

**(Task) Assignment**

No Task Assignments

**Messages**

Task Info:

Pending Msg: Your request is being process...

**Precondition**

Step always executes (no precondition).

**Rejection**

- Reject to Here
- Reject from Here

**Escalations**

Lodging-Dinner Flow v4

You must re-define Searchable, Saved & Summary fields after you have finished editing all steps in your flow.

Page Help

Start

Lodging-Meal Selection

Lodging-Meal Selection

Lodging-Meal Selection

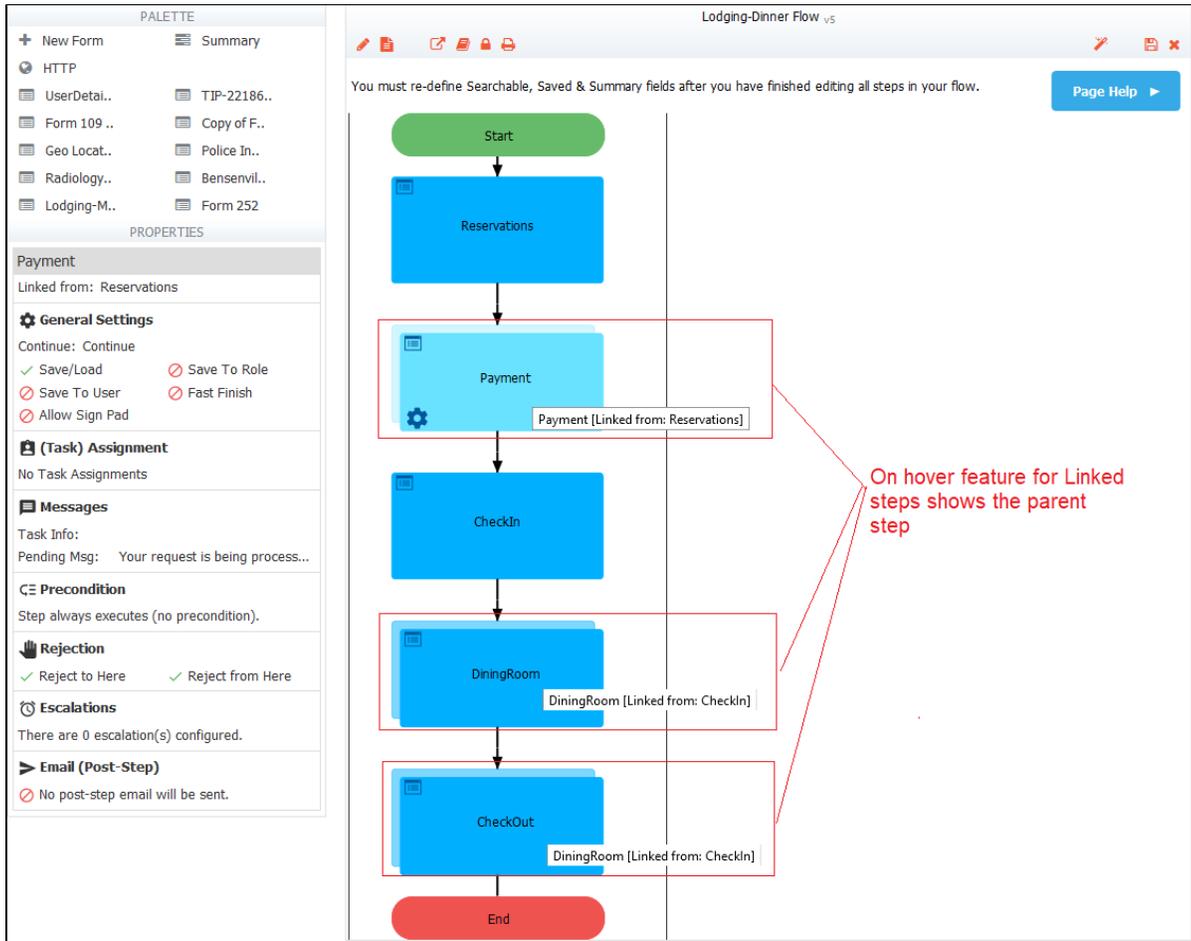
End

Parent step

Linked steps

## Finding the Name of the Parent Step

Hovering over the flow step name on a linked step shows the name of the Parent form it was copied from. This is useful when you have a flow with more than one step that has additional linked steps.



## Linked Steps Workflow Examples

Approval workflows lend themselves to a Flow Design pattern that uses Linked Steps. You can route your steps via the Security tab or Business Rules. Either way, if flow steps require modification, changes made to the parent form propagate to the linked steps. In general, the steps to create an Approval Workflow with Linked steps are:

1. Create the workflow in the Flow Designer.
2. Drag a New Form or a form from your Forms library into the flow as the first step.
3. Edit Step 1 by accessing the Forms Designer inside of the Flow Designer.
4. Add Sections in Step 1 for the subsequent steps. Save the flow step.
5. Click the  Link icon on Step 1 to create linked steps for the additional steps in the flow. Save the flow.
6. Edit Step 1 in the flow and use the Visual Rule Builder to write Business Rules to show the sections in Step 1 when the flow is routed to the associated step i.e. show the Manager section on the Manager step, show the Finance section on the Finance step.
7. Save and test the workflow.

Continue reading for more details.

### Example 1 - Linked Steps using Business Rules



Consider an Expense Report with 3 steps:

- Step 1 is filled in by an employee
- Step 2 is approved/rejected by a Manager
- Step 3 goes to the Finance department for final processing.

Drag a New Form step onto the flow canvas. Click on it.

Click the



Edit icon to open the Forms Designer.

Create [Sections](#) in the first step of the flow for the Expenses, Manager and Finance. Design the sections using any of the [Palette Controls](#). Minimally, you can use a table to collect the Expenses and a [Signature](#) control for the employee to sign in the Expense section, a [TextArea](#) control and a [Signature](#) in the Manager section and a Paid on Date and Reference Number field with a [Signature](#) on the Finance step. Save Step 1.

The screenshot shows a form builder interface for an "Expense Report" form. On the left is a "PALETTE" of controls including Dropdown, Radio, Checkbox, Section, Repeat, Tabs, Panel, Table, Message, Link, Trigger, Upload, Signature, Form Viewer, Text, TextArea, Date, EMail, Money, Phone, Quantity, Number, T/F, Image, Submit, PageBreak, and ComboBox. Below the palette are "CUSTOM PROPERTIES" and "DATA SOURCES" sections. The main form preview on the right includes a header for "California Unified School District", a "Hidden Fields" section, an "Instructions" section, and a main "Expenses" section. The "Expenses" section contains fields for Employee Name, Employee Email, Report Date, Period From, Period To, and IRS Mileage Rate. It also features a table with columns for Date, Category, Miles, Amount, and Description. Below the table are fields for Grand Total, Cash advanced or on Corp Card, and Balance due to Employee. There is an "Expense by Category" section and an "Attach Receipts Here" section with an "Add Files" button. At the bottom of the form preview are three sections: "Manager" with a "Comments" text area, and "Finance" with "Paid On Date" and "Reference #" fields. Each of these three sections has a "Sign this section" button. A footer at the bottom of the form preview says "Drop controls from the palette to add to the form." Three red arrows on the left point to the "Expense section", "Manager section", and "Finance section" respectively.

Click on Step 1. Open the **Settings** tab in one of 3 ways:

- Click the  Edit Step Properties icon on the step then click the **Settings** tab.
- Click the icon in the **Properties Navigator** on the left side of the screen. This takes you directly to the **Settings** tab.
- Click anywhere in the **General Settings** section of the Properties Navigator. This takes you directly to the **Settings** tab.
- Type the name of the flow step in the Name field on the **Settings** tab. For this example, the name of the first step is Employee. Click **Submit**.

Click the



Link icon twice to create linked steps for the Manager and Finance steps. The linked steps are copies of Step 1. Note they are represented by a

double box in the Flow Designer.

Click on the second step.

Open the **Settings** tab in one of 3 ways:

- Click the



Edit Step Properties icon on the step then click the **Settings** tab.

- Click the icon in the **Properties Navigator** on the left side of the screen. This takes you directly to the **Settings** tab.
- Click anywhere in the **General Settings** section of the Properties Navigator. This takes you directly to the **Settings** tab.
- Type the name of the flow step in the Name field on the **Settings** tab. For this example, the name of the second step is Manager.
- Click on the **Assignment** tab. Add the Manager role to the **Assign to Role** field. You can begin typing the role name in the field to filter the dropdown choices. Click **Submit**.

Click on the third step.

Open the **Settings** tab in one of 3 ways:

- Click the



Edit Step Properties icon on the step then click the **Settings** tab.

- Click the icon in the **Properties Navigator** on the left side of the screen. This takes you directly to the **Settings** tab.
- Click anywhere in the **General Settings** section of the Properties Navigator. This takes you directly to the **Settings** tab.
- Type the name of the flow step in the Name field on the **Settings** tab. For this example, the name of the third step is Finance.
- Click on the **Assignment** tab. Add the Finance role to the **Assign to Role** field. You can begin typing the role name in the field to filter the dropdown choices. Click **Submit**.

Save the workflow.

Edit Step 1 of the workflow. Click the



Rules icon on the Form toolbar. Write the Show/Hide rules and any other **Business Rules** you might need.

PROPERTIES

Help

Settings
Style

Docs

Form Name: Expense Report

Description:

FORM OUTLINE

Expense Report v3

Create New Rule
View All

**On Manager Step**

Rules can be used to dynamically modify form behaviour

Name
Enabled

On Manager Step

Description

Rules can be used to dynamically modify form behaviour

Rule Builder	Rule Code
<div style="display: flex; align-items: center; margin-bottom: 2px;"> <span style="background-color: #007bff; color: white; padding: 2px 5px; font-size: 0.7em; margin-right: 5px;">When</span> <span style="font-size: 0.8em;">Current Step is Manager</span> </div> <div style="display: flex; align-items: center; margin-bottom: 2px;"> <span style="background-color: #28a745; color: white; padding: 2px 5px; font-size: 0.7em; margin-right: 5px;">Set</span> <span style="font-size: 0.8em;">Manager as visible</span> </div> <div style="display: flex; align-items: center; margin-bottom: 2px;"> <span style="background-color: #007bff; color: white; padding: 2px 5px; font-size: 0.7em; margin-right: 5px;">Else</span> </div> <div style="display: flex; align-items: center;"> <span style="background-color: #28a745; color: white; padding: 2px 5px; font-size: 0.7em; margin-right: 5px;">Set</span> <span style="font-size: 0.8em;">Manager as hidden</span> </div>	

**On Finance Step**

Rules can be used to dynamically modify form behaviour

Name
Enabled

On Finance Step

Description

Rules can be used to dynamically modify form behaviour

Rule Builder	Rule Code
<div style="display: flex; align-items: center; margin-bottom: 2px;"> <span style="background-color: #007bff; color: white; padding: 2px 5px; font-size: 0.7em; margin-right: 5px;">When</span> <span style="font-size: 0.8em;">Current Step is Finance</span> </div> <div style="display: flex; align-items: center; margin-bottom: 2px;"> <span style="background-color: #28a745; color: white; padding: 2px 5px; font-size: 0.7em; margin-right: 5px;">Set</span> <span style="font-size: 0.8em;">Finance as visible</span> </div> <div style="display: flex; align-items: center; margin-bottom: 2px;"> <span style="background-color: #007bff; color: white; padding: 2px 5px; font-size: 0.7em; margin-right: 5px;">Else</span> </div> <div style="display: flex; align-items: center;"> <span style="background-color: #28a745; color: white; padding: 2px 5px; font-size: 0.7em; margin-right: 5px;">Set</span> <span style="font-size: 0.8em;">Finance as hidden</span> </div>	

This rule shows the Manager Section when the flow navigates to the Manager step.

This rule shows the Finance section when the flow navigates to the Finance step.

Save and test the flow.

### Example 2 - Linked Steps using the Security Tab

The parent step in this example is a form that contains a **Tab** control consisting of three tabs: Room Information, Guest Information and Payment Method.

Because the parent forms and its linked forms represent steps, you'll want to give them unique names. The parent form in this example has three tabs used for hotel check in, dinner selection, and hotel check out.

Room Information	Guest Information	Payment Method
<p>Name <input style="width: 90%;" type="text"/></p>	<p>Name <input style="width: 90%;" type="text"/></p>	<p>Name <input style="width: 90%;" type="text"/></p>
<p>Room Number <input style="width: 90%;" type="text"/></p>	<p>Table No: <input style="width: 90%;" type="text"/></p>	<p>Room Number <input style="width: 90%;" type="text"/></p>
<p>Number of Guests <input style="width: 90%;" type="text"/></p>	<p>Entree <input style="width: 90%;" type="text"/></p>	<p>Payment Method</p> <p><input type="radio"/> Cash</p> <p><input type="radio"/> Credit</p> <p><input type="radio"/> Debit</p>
<p>Arrival <input style="width: 90%;" type="text"/></p>	<p>Preference <input style="width: 90%;" type="text"/></p>	<p>Card Name <input style="width: 90%;" type="text"/></p>
<p>Departure <input style="width: 90%;" type="text"/></p>		<p>Card Number <input style="width: 90%;" type="text"/></p>
		<p>Expiration Date <input style="width: 90%;" type="text"/></p>

To rename the parent step and its linked steps:

- Click on a workflow step
- Open the **Settings** tab in one of 3 ways:



Edit Step Properties icon on the step then click the **Settings** tab.

- Click the icon in the **Properties Navigator** on the left side of the screen. This takes you directly to the **Settings** tab.
- Click anywhere in the **General Settings** section of the Properties Navigator. This takes you directly to the **Settings** tab.
- Type the name of the flow step in the Name field on the **Settings** tab.

As with other forms you use to create steps, you can assign a linked-form step to a **Role**, so that the step is performed by someone with that role, or even by a specific **user**. In this example, we rename all three steps and assign each to a different role.

- **CheckIn** is assigned to the *Reservations* role.
- **DiningRoom** is assigned to the *MaitreDHotel* role.
- **CheckOut** is assigned to the *Billing* role.

Th Reservations, MaitreDHotel and billing roles must exist in your tenant. Create 3 users and assign one role to each of them.

Click on a workflow step

Open the **Assignment** tab in one of 3 ways:

- Click the



Edit Step Properties icon on the step then click the **Assignment** tab.

- Click the icon in the **Properties Navigator** on the left side of the screen. This takes you directly to the **Assignment** tab.
- Click anywhere in the **Task Assignment** section in the Properties Navigator. This takes you directly to the **Assignment** tab.
- Add the role name to the **Assign to Role** field. You can begin typing the role name in the field to filter the dropdown choices. Click **Submit**. For this example, add the Reservation role to the CheckIn step, the MaitreDHotel role to the DiningRoom step and the Billing role to

the Checkout step.

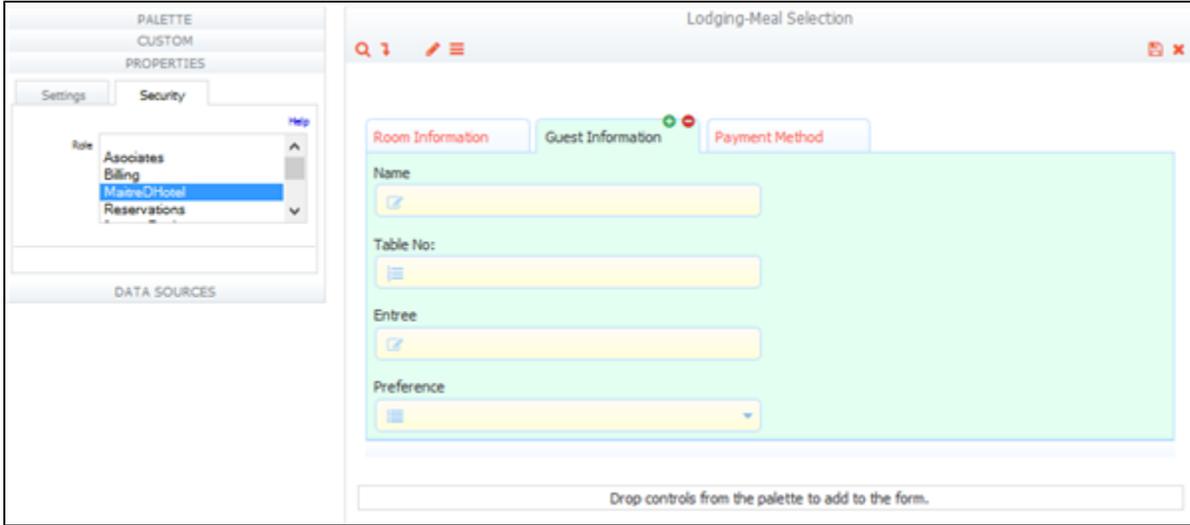
You may also want only certain sections of the form to be visible in an specific step so that only users in a certain role see those sections. For example, in this flow, perhaps only the dining room staff needs to see the form's Guest Information tab.

To do this, you can edit the the form via the Flow Designer and use the Security Tab in the Forms Designer to assign a role to sections of the form. Click the form, and then click

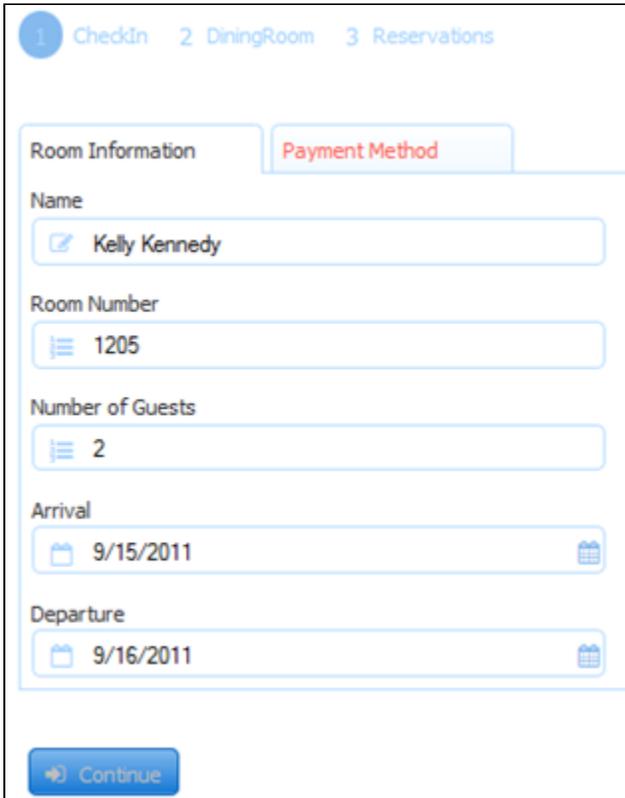


Edit icon to open the form in the Form Designer.

In this example, we assign the *Guest Information* tab to the *MaitreDHotel* role.



When the flow runs, the first step, *CheckIn*, is performed by a user with the *Reservations* role, so that user does not see the form's Guest Information tab, which is only visible to a user with the *MaitreDHotel* role.



The next step in the flow, *DiningRoom*, is assigned to the *MaitreDHotel* role, so that user sees the Guest Information tab. The third step is assigned to the Billing role so the user sees the Payment Method tab.

You can also use rules to show or hide parts of a form in a step. For example you could write a [Business Rule](#) using the [Visual Rule Builder](#) to

show the Guest Information tab only when a MaitreDHotel role is using the form.

The screenshot displays the 'Create New Rule' interface for the 'Lodging-Meal Selection' form. On the left, a 'PROPERTIES' panel shows the form name and description. The main area lists three rules, each with a 'Rule Builder' section showing logic for when a tab is visible or hidden based on the current step.

**Rule 1:** 'Show the Room Information tab on the CheckIn step. Hide otherwise.' The logic is: When Current Step is CheckIn, Set RoomInformation as visible; Else, Set RoomInformation as hidden.

**Rule 2:** 'Show Guest InformationTab on the Dining Room step. Hide otherwise.' The logic is: When Current Step is DiningRoom, Set GuestInformation as visible; Else, Set GuestInformation as hidden.

**Rule 3:** 'Show the Payment Method tab on the Billing step. Hide otherwise.' The logic is: When Current Step is CheckOut, Set Payment as visible; Else, Set Payment as hidden.

Red text annotations on the left side of the image, with arrows pointing to the corresponding rule builders, explain the behavior of each rule:

- Rule 1:** This rule shows the Room Information tab on the CheckIn step. It is hidden on the DiningRoom and CheckOut steps.
- Rule 2:** This rule shows the Guest Information tab on the DiningRoom step. It is hidden on the CheckIn and CheckOut steps.
- Rule 3:** This rule shows the Payment tab on the CheckOut step. It is hidden on the Dining Room and CheckIn steps.

## Linked Forms and the Submissions PDF

If you check the [Save PDF](#) property on the flow properties panel, a PDF image of the flow is saved in the Live Forms' submission repository. It is no longer necessary to uncheck the printable property for all but one of the steps to prevent the form from being printed more than once in the default pdf. This was required in previous versions of Live Forms. Refer to the [Printable](#) property for more information.