RLDatix™

- Roam & Roam Script Builder -

FOR RISKMAN VERSION 18.07

Last reviewed December 2019

CONTENTS

Introduction 5
How does it all work? 5
About the Roam app 11
Registering to use the app 11
Roam Script Builder: Defining your users' experience 12
Which field types are supported in the Roam app? 13
The Script Builder interface 16
Script Versions page 16
Creating a basic, linear path 17
Script Properties 18
The Path Builder screen 21
Working with the first step 22
1.1.1 Removing a register from the Start screen 22
1.1.2 Adding the first step to your path 23
Ways you can modify a step 25
Properties common to every step 26
1.1.3 The ID field 26
1.1.4 Changing the title of a step 26
1.1.5 What happens when the title of a step is very long? 28
1.1.6 Making a step optional 29
Properties unique to free text fields 29
1.1.7 Modify the field label 29
1.1.8 Put multiple text entry fields in the one step 30
Properties unique to a text area fields 33
1.1.9 Make the text area take up the entire space on the screen 33
Properties unique to list fields 34
1.1.10 Make a list field single-select or multi-select 34
1.1.11 Change the way the list is presented to the user 35

1.1.12 Add a search box to a list field 37
Allowing the user to attach photos to the record 38
Once you have finished creating paths 40
Save the script 40
Publish your script 40
Test your script 41
1.1.13 Download the script to your device 41
1.1.14 Enter a new record 42
1.1.15 Review the transmitted record(s) in RiskMan 43
1.1.16 Deleting a record from the app 44
Prompting users to complete a record after submitting via Roam 45
1.1.17 Alert Details 45
1.1.18 Alert Rules 46
1.1.19 Alert Conditions 47
1.1.20 Alert Recipients 47
1.1.21 Alert Email 48
1.1.22 Alert Schedule 48
Nonlinear paths 49
Copy a path 50
Create a new navigation path 50
Paste the path 50
Editing a script in Advanced Mode 51
Switching between Basic and Advanced modes 51
The Path Builder screen in Advanced Mode 52
Creating steps for your path which aren't fields in your RiskMan system 53
1.1.23 Create a Flow Field 53
1.1.24 Specifying List Values 54
1.1.25 Add the flow field to your path 56
1.1.26 Creating a flow field using your own custom list values 58

Further functionality that RiskMan can help you with 60
1.1.27 Filtering Lists 60
1.1.28 Sets 60
1.1.29 Additional properties displayed in Advanced mode 61

INTRODUCTION

How does it all work?

The RiskMan **Roam app** has been designed to allow users to easily capture data using mobile devices.

In order to facilitate this, you need to determine exactly which data you want them to collect.

For example, you may wish to enable your users to capture incidents using the app. However, your incident entry form (presumably for default users) might have a large number of fields – more than 50, depending on your system configuration and Template settings. Obviously it would be impractical to force users to fill in so many fields using their mobile device; after all, the intent is generally to enable *quick* data capture.

What you need to do is create a **script**, using the **Roam Script Builder** – the administrative component of the overall process. A script contains **paths**, which in turn contain the fields you want your users to complete when they use the Roam app, and also all of the settings required; in this scenario, you could look at the script as a simplified version of your “Default” incident User Template.

So far, we have:

A user’s **mobile device** with the **Roam app** installed (we’ll just refer to this as the **app** from now on for simplicity).

The **Roam Script Builder**, which is a feature in your RiskMan system.

A **Script**, which defines what data you want your users to collect when they use the **app**. The data is arranged into **paths**.

The next step is to get the **script** you create into the hands of your users, so they can start recording data.

To do this, a user needs to open the **app**, and register their current device. Once registered, the **app** will automatically download your **script**. The user can then start recording data. We’ll explain more about registration later.

Exactly how the app downloads the script you create is important, and we'll try to explain that now in terms which (hopefully) aren't too technical.

When you create a **script**, you will also define a **passkey**. The passkey is usually just a logical name for your script, for example "CompanyNameRoam2018". Once you're happy with the script you've created, its **passkey** is then stored on the **RiskMan Verification Server** (or RVS for short). The **RVS** is a secure server which is accessible via the internet. When a user installs the Roam app on their device, they will use the **passkey**, along with their RiskMan username and password, in order to determine that they are a valid user, and that their device should download the specific **script** that you created for them.

Now we also have:

The **RiskMan Verification Server** (**RVS**), which authenticates **app users** as being part of your organisation

The **passkey**, which is a property of the script you create. You will need to communicate the passkey to your users to allow them to use the app.

The final piece of the puzzle is **RoamConnect**, which is a function that runs on your organisation's servers. This is a secure service that acts as the go-between for your RiskMan system and your app users.

Ordinarily, a system such as RiskMan would be contained on your internal network, and never exposed to the internet. **RoamConnect** is the bridge that allows your users to send data via the internet, and safely pass that into your RiskMan system as a new record, thereby keeping your RiskMan system safe and private.

Finally:

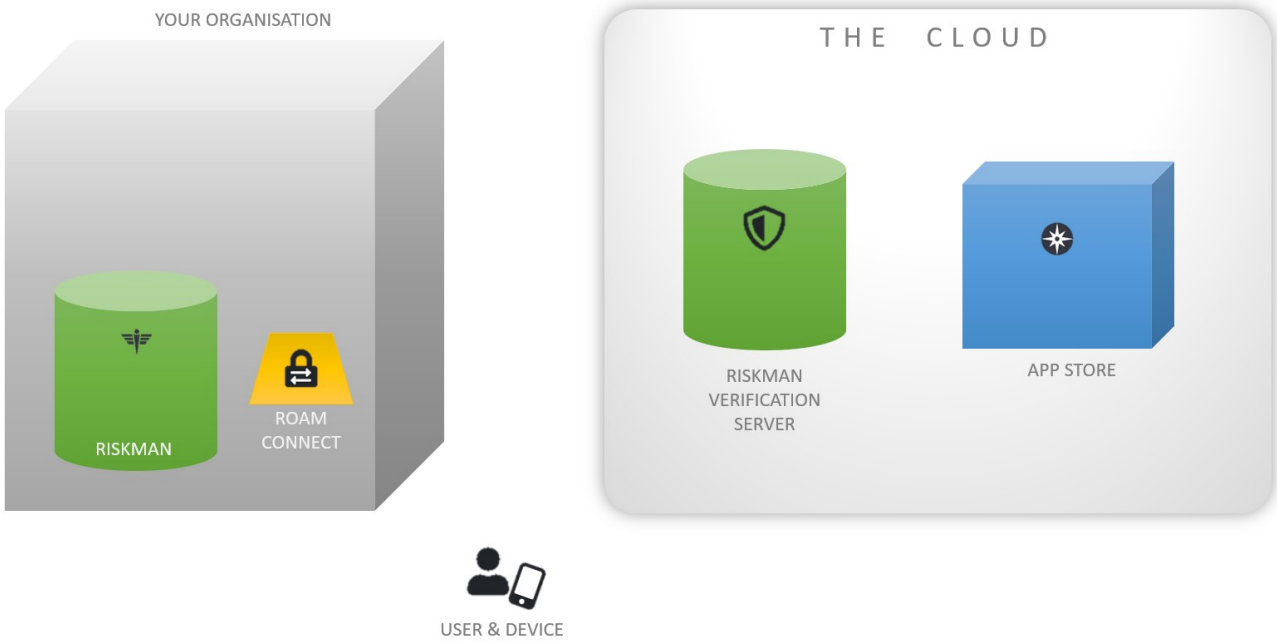
RoamConnect, which allows your users to safely and securely transmit data from the **app** to your RiskMan system.

You need to supply the **passkey** to your **app users** so that they can register their devices. One way to do this might be by sending it in an email, along with instructions of what the users need to do.

Once a user has the passkey, they will use that, plus their usual RiskMan username and password to verify their identity. The app then talks directly to RoamConnect to download your script to the Roam app, and your users are now ready to go!

Let's look at all of that information diagrammatically:

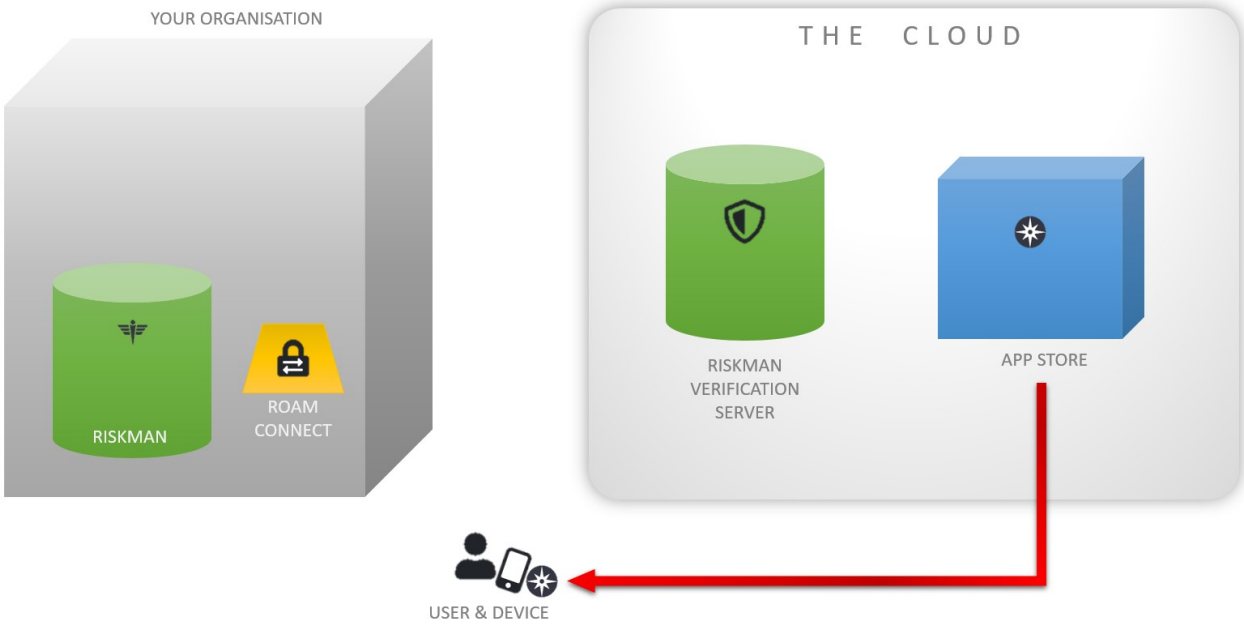
Step 1



Above, we can see your organisation. Within your organisation is your **RiskMan system**, and **RoamConnect**.

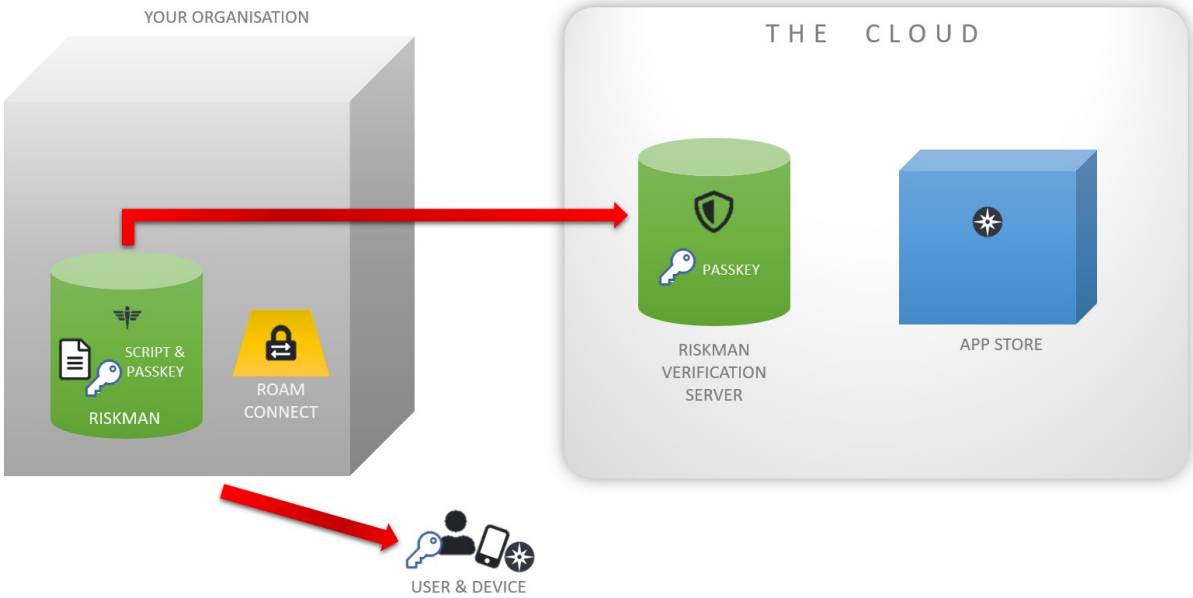
In the cloud, you can see the **RVS**, and **app store**. Finally, there is a **user** with their **device**.

Step 2



The user needs to get **Roam** on to their device; they can either download it themselves from the respective **app store**, or your IT team can deploy it to company-owned devices.

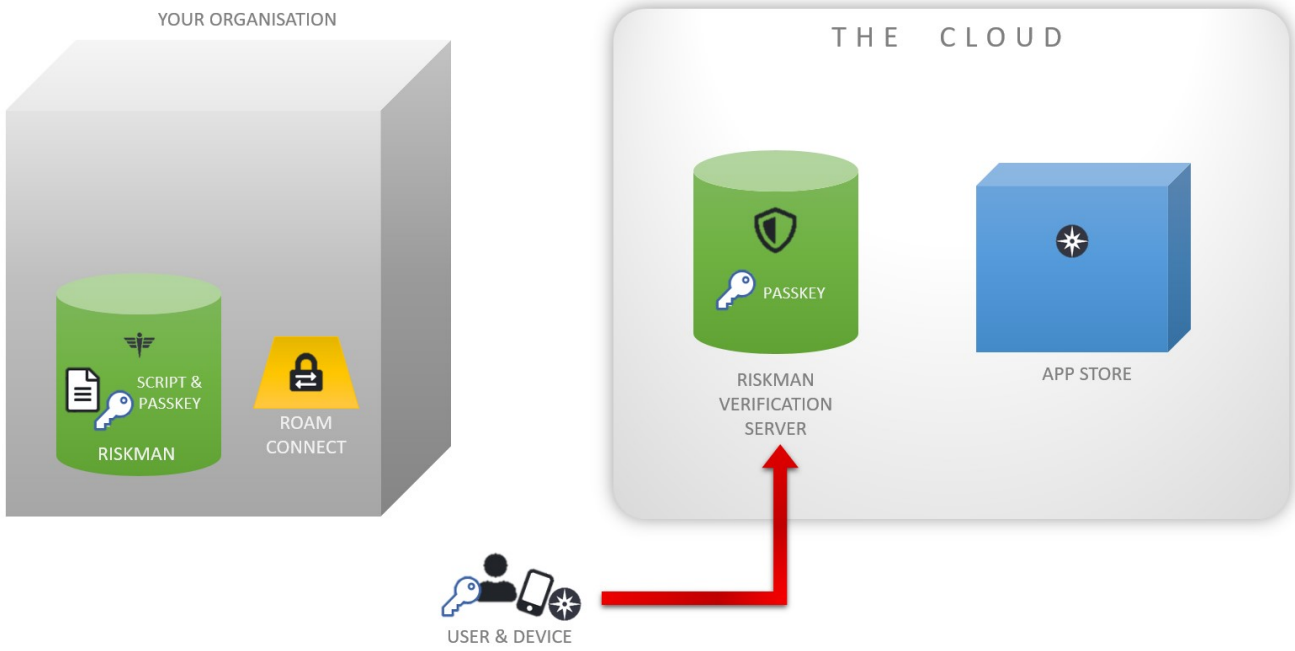
Step 3



Once you have created your **script**, along with its **passkey**, you will publish it. The **passkey** will be sent to the **RVS**.

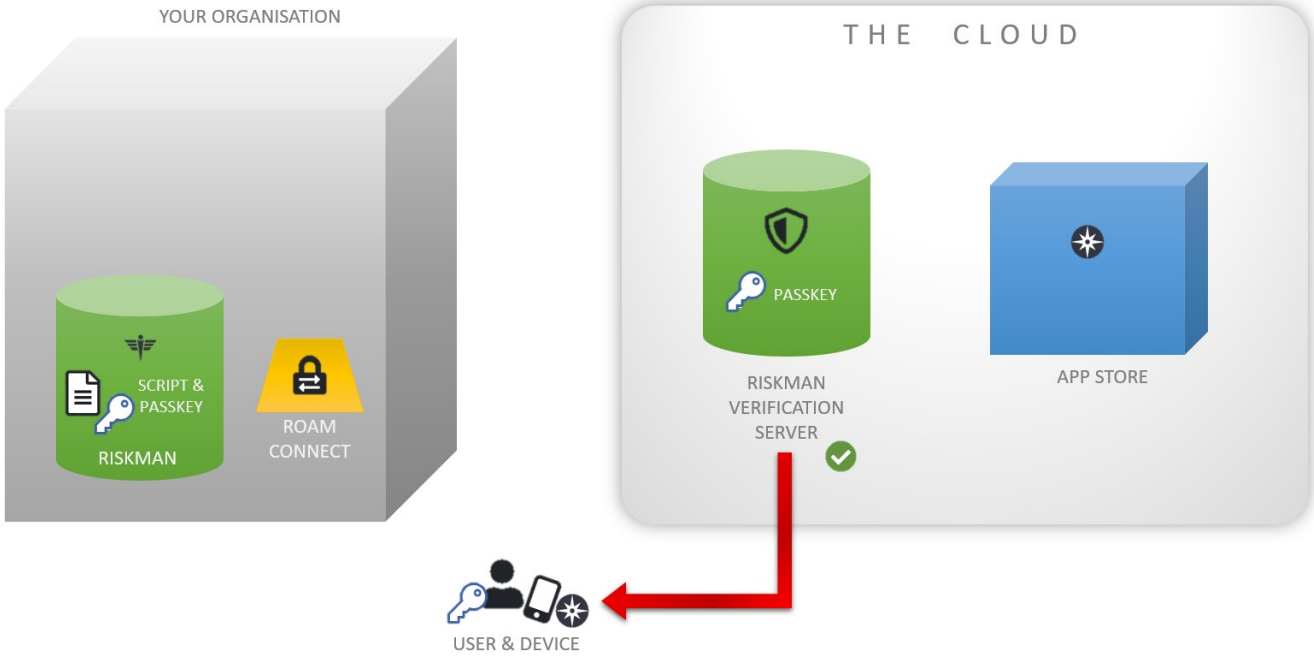
You will also need to send the passkey to the user.

Step 4



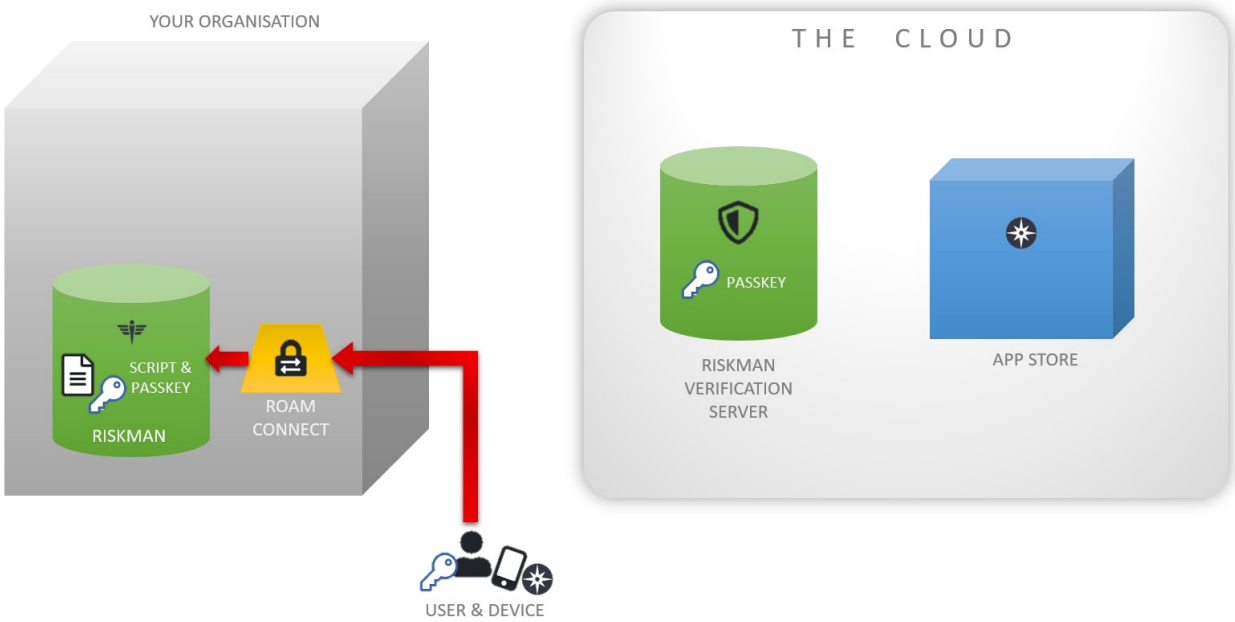
The user will then enter the **passkey** and their login details into the **Roam app**. The app talks to the **RVS** to check that the passkeys match.

Step 5



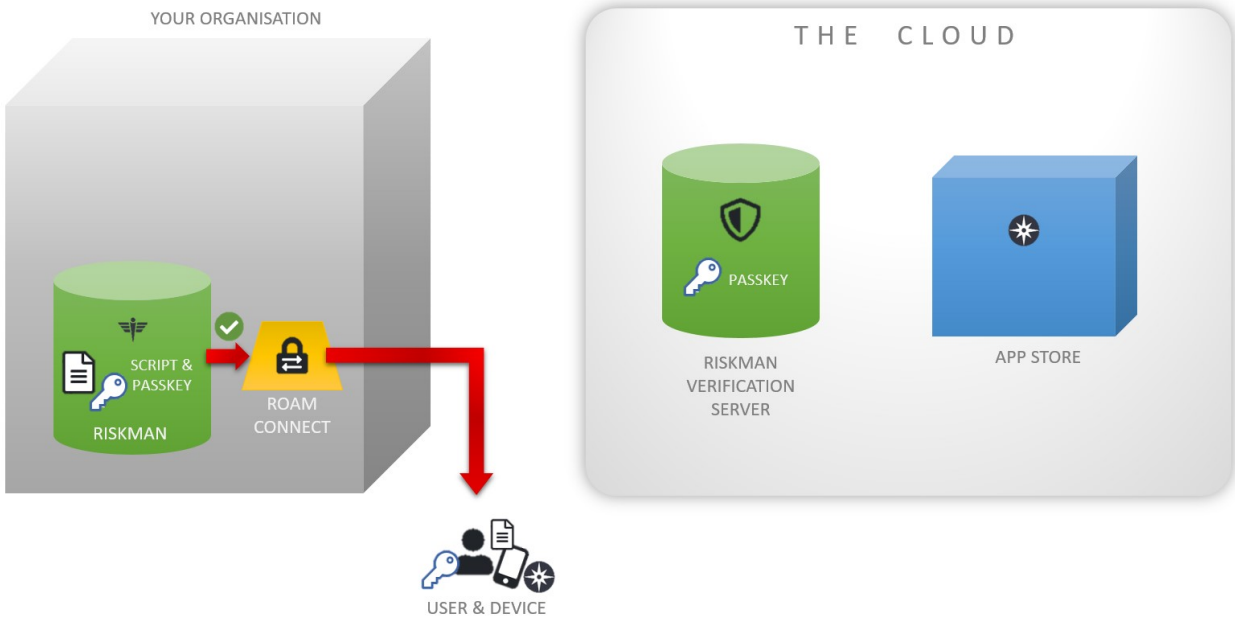
Once verified, the **RVS** sends the app on the user's device the information required to talk to **RoamConnect** in your organisation.

Step 6



The **app** then talks to **RoamConnect** in your organisation to verify their username and password.

Step 7



Once the credentials are verified, the **script** is downloaded to the **user's device** and they are ready to go.

Please note that steps 4 to 7 usually take just a few seconds to complete!

When the user has new records to transmit, the app will talk to RoamConnect securely to send that information to your RiskMan system. Users can capture new records when they are offline; they will be stored on their device, and transmitted when they next have an active data connection (be it WiFi or cellular).

About the Roam app

The Roam app is available for iOS (Apple) and Android devices. The app can be found and downloaded to your device by searching for “riskman roam” or even just “roam” in your preferred app marketplace. There is no charge to download and use the app.

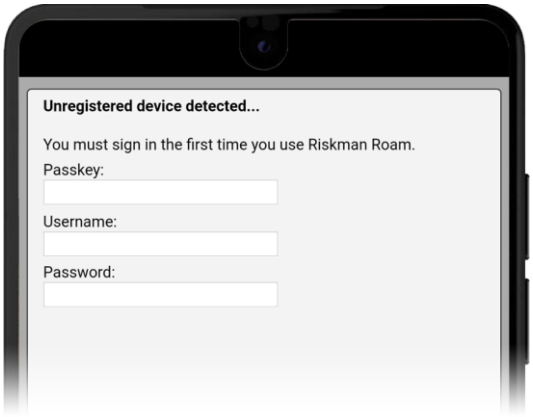
The app is designed so that the user experience between iOS and Android devices is essentially identical.

The minimum operating system requirements to use Roam on a mobile device are:

- **iOS 10** for Apple devices
- **Marshmallow (Version 6.0)** for Android devices

Though the app can be freely downloaded and installed on a device, users will not be able to capture any data until you have setup and deployed your required script(s) using the Roam Script Builder.

Registering to use the app



After Roam is installed on a mobile device, users will need the following in order to authenticate themselves before they can capture data:

- **Passkey** – a unique text string that identifies a user as belonging to your organisation, and subsequently allows the app to use your **RoamConnect** service via the internet. The passkey is defined by you and needs to be provided to all staff who wish to use the app.
- **Username & Password** – the user’s existing username and password to login to RiskMan.

Once a user has successfully registered their device, they no longer need to sign in when they want to use the app.

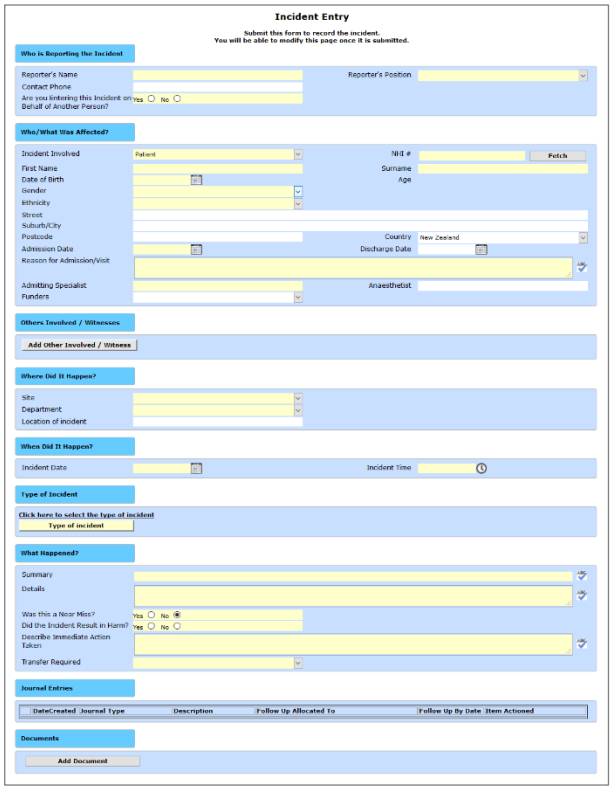
Roam Script Builder: Defining your users' experience

You are in total control of what users will see when they use the app – you can make the experience a good one, or you can make it a poor one.

We're going to use a reasonably simple incident register throughout this document to explain how to use the Roam Script Builder.

As mentioned earlier in this document, in many situations you will not want to force the users to capture *all* of the fields they would need to complete if they were entering data via a computer.

The incident entry form, as seen by Default users, is shown to the right. With almost 40 fields being shown, and the majority of them mandatory, it can be argued that forcing the user to complete all of them on a mobile device would be onerous and/or time-consuming.



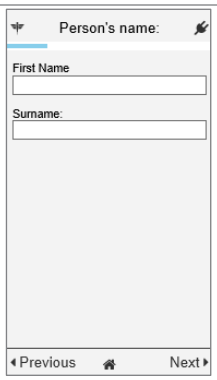
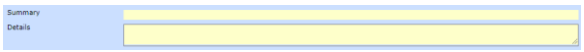
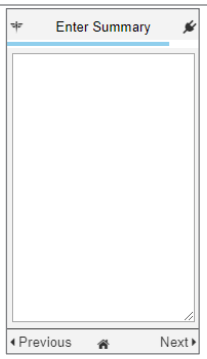
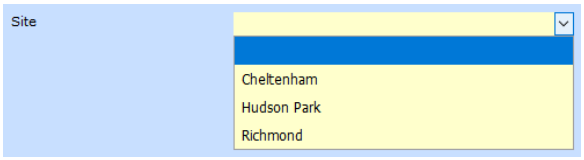
Instead, we want to specify that only certain fields need to be entered via the app - therefore, preparation is key.

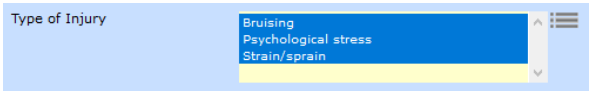
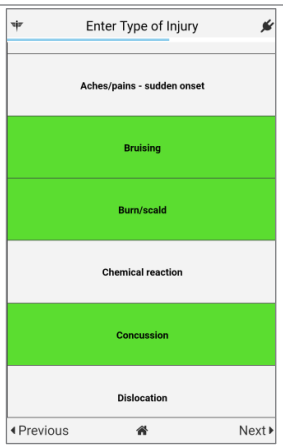
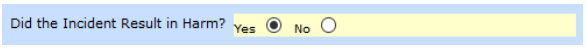
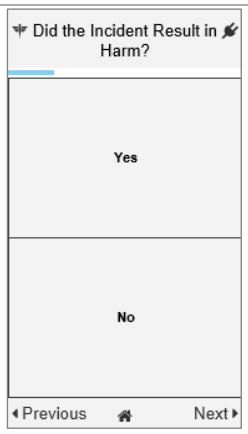
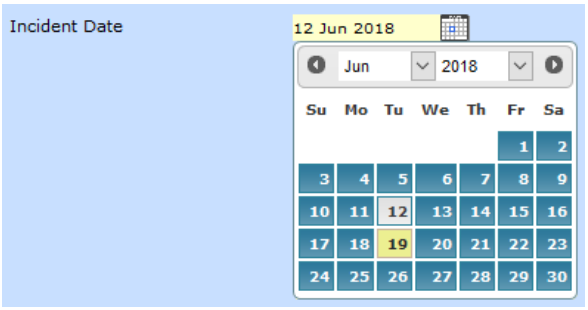
In situations like this, we'd strongly recommend that you do not start in the Script Builder; rather, start with the actual data entry form. Scan through all of the fields and make a list of the fields that you want in the app.

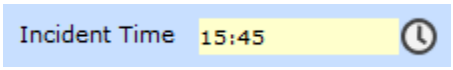
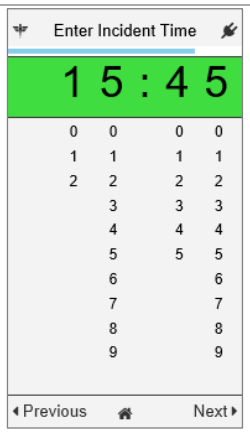
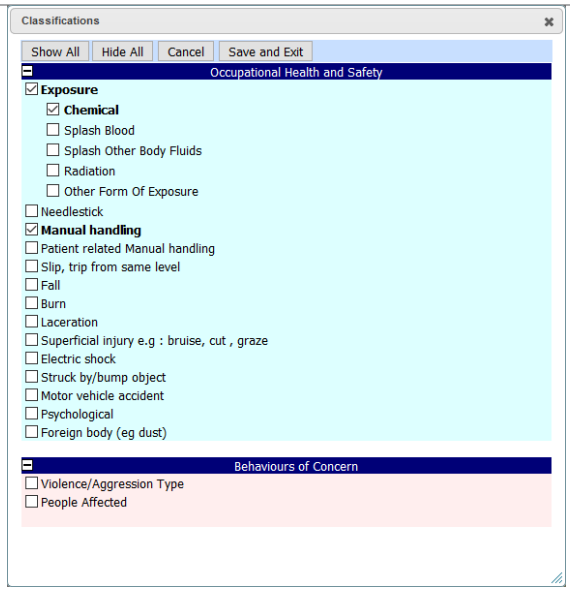
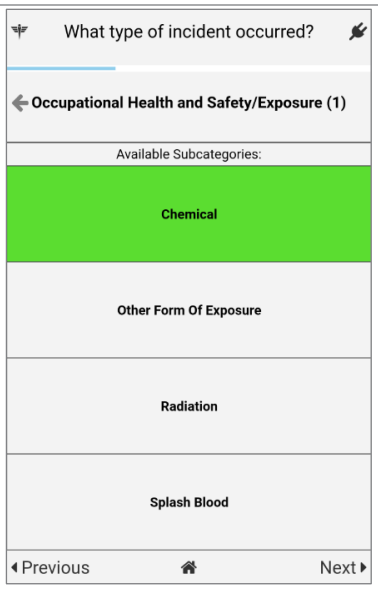
Having a goal to work towards will make the process of using the Script Builder *much* easier.

Which field types are supported in the Roam app?

The following fields can be included in scripts that you create:

FIELD TYPE	APPEARANCE IN RISKMAN	APPEARANCE IN ROAM
Free text		
Text area		
Drop down list		

Multi-select		
Yes / No and radio buttons		
Date		

Time		
Classification		

The following field types currently can't be utilised in a Roam script:

- Subforms
- Journals
- Associated risks
- Any other multi-select pop up screens
- Visual selection tools, e.g. the body part selector

THE SCRIPT BUILDER INTERFACE

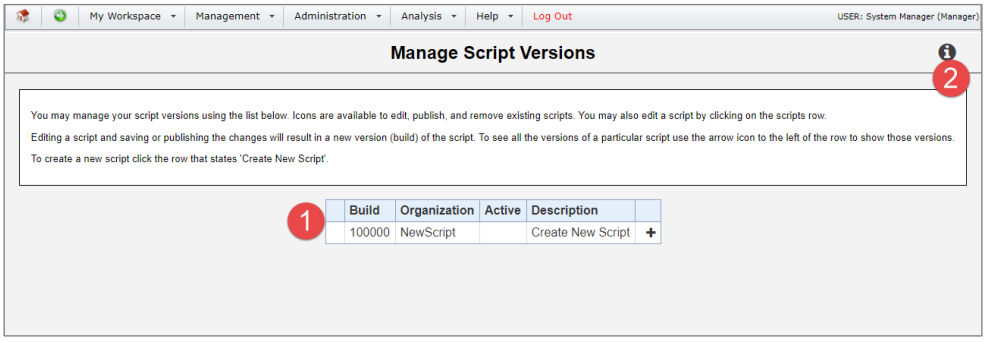
Script Versions page

To access the Roam Pathbuilder, a user must have the following user permission:

- General > Administrative Permissions > **Can manage Roam Script Builder**

Access the Roam Script Builder by navigating to *Administration* > *Roam* > *Roam Script Builder*.

The first thing you will see is the Script Versions Page:

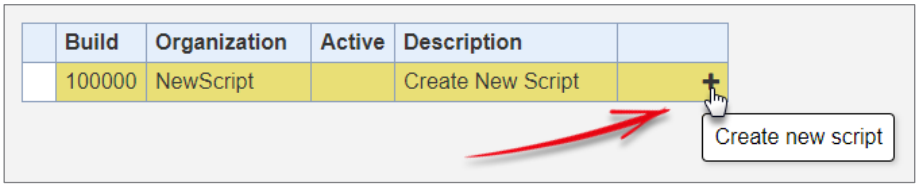


❶ This table is empty in the beginning, but is where the scripts you create will be stored. We'll explain the meaning of each column in the table after we've created a basic script.

❷ The info icon shows and hides the help text in the white box at the top of the page.

Later, once we have at least one script saved, there will be further options available on this page.

To create a new script, click the + icon in the first row of the table:



CREATING A BASIC, LINEAR PATH

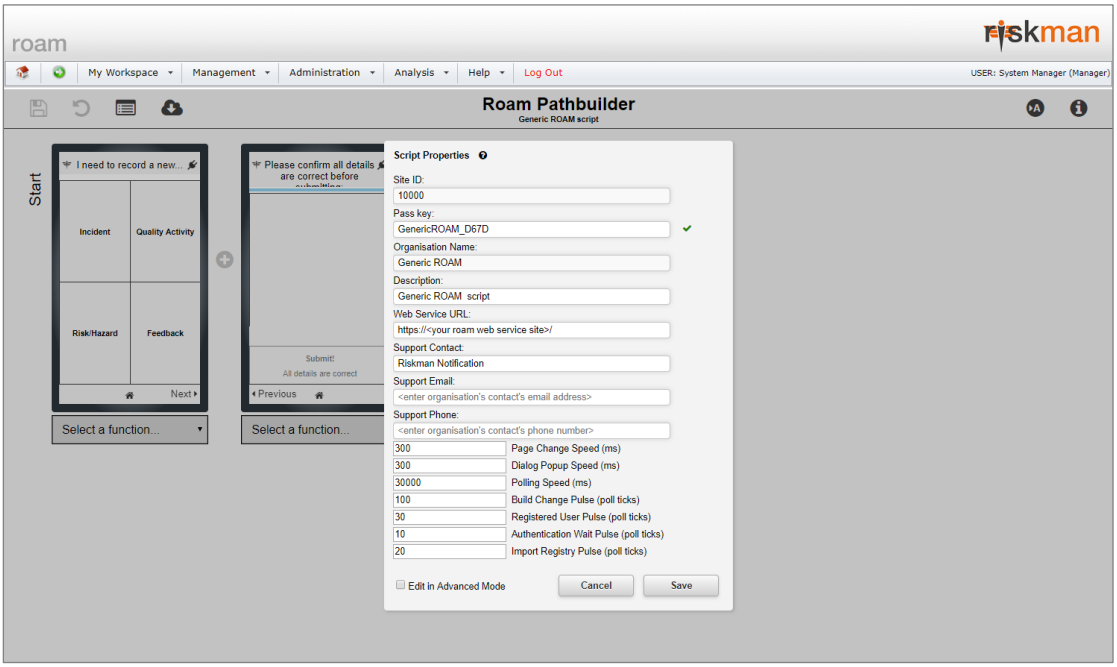
We're now going to look at creating a basic path to introduce you to the interface and basic functionality. Remember, we strongly recommend you only start using the Script Builder tool once you have identified all the fields that you want users to complete!

We're going to create a script, containing a path, which will allow users to capture **incidents**.

After reviewing the fields on the incident entry form, we've decided that we want the users to capture the following data:

- Reporter's name
- Incident Involved
- First name & Surname
- Site
- Department
- Location of incident
- Incident date, Incident time
- Type of incident
- Summary
- Ability to attach photographs

After clicking Create new script, the screen will appear as follows:



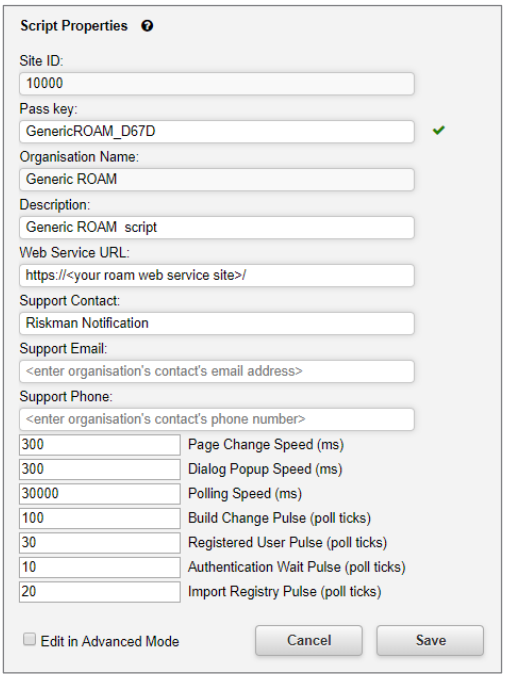
As you can see, the first thing we need to do before we can start creating paths is fill in the relevant **Script Properties**.

Script Properties

All properties are mandatory unless stated otherwise.

Site ID

This is automatically populated based on a setting in your system.



Pass key

This is the code that you will need to communicate to your users. A generic passkey is automatically populated, however you can create your own. The passkey is **not** case-sensitive.

Organisation Name

Automatically populated from a Global Setting in your system.

Description

A short description of the purpose of this script. This description is shown on the Script Versions page.

Web Service URL

This is the URL the app needs to connect to in order for your users to transmit their data. This URL should be provided to you by your IT team after they have finished setting up all required modifications on your server.

Support Contact, Email, and Phone

These properties are not yet implemented in the app, but once they are, they will form the basis of what happens when a user asks for help via the app. These details will be displayed so that the user can take action.

Note

The following properties will generally be fine with their default values. It's only likely you will need to change them when advised to by RiskMan.

Page Change Speed

The speed in milliseconds for the ‘page change’ effect (when moving from one screen to the next). The default value of 300ms should be fine in most circumstances. A lower value will make the page change quicker.

Dialog Popup Speed

The speed in milliseconds for a dialog box to animate. The default value of 300ms should be fine in most circumstances. A lower value will make the dialog popup effect appear quicker.

Polling Speed

“Polling” is when the app and RoamConnect will periodically talk to each other to see if a user is connected. The Polling Speed is the speed in milliseconds between checks. A higher value will decrease the server load. The optimal value is around 30000 (30 seconds). A lower value (i.e. more frequent polling) could affect the battery usage of a user’s device. If you get feedback from users saying that Roam is using a high amount of battery, you can consider increasing this value. Please note that the subsequent settings rely on the polling speed, so for example setting polling speed to 60000 (60 seconds) means that the functionality attached to the following settings will take twice as long to execute.

Build Change Pulse (poll ticks)

If you make changes to a script, users will need to update their app. The Build Change Pulse is the setting that tells the app how frequently it should check with RoamConnect to see if the script on the user’s phone is up to date. A higher value will decrease server load. The optimal value is around 1200.

Registered User Pulse (poll ticks)

The app will periodically check with RoamConnect to see if a user is still registered – that is, their RiskMan user profile is active (not deleted or expired). This is an important check to perform, as a user might have left your organisation, however may still have the app, and your script, on their device. The Registered User Pulse is the setting that tells the app how frequently it should check with RoamConnect to verify if a user is registered or not. A higher value will decrease the server load. The optimal value is around 120.

Authentication Wait Pulse (poll ticks)

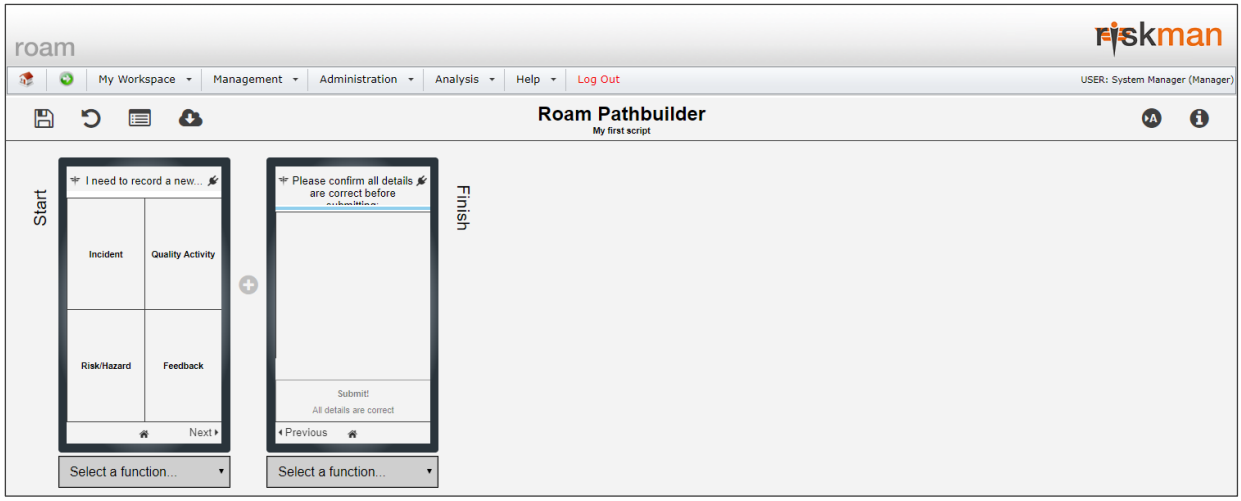
Roam will periodically request the user to authenticate their username and password. When asked to do this, the user can opt to tap “Later” if they didn’t want to do it right then. This setting controls how long it will take to ask the user to authenticate after tapping “Later”.

Import Registry Pulse (poll ticks)

This setting controls how often the app will attempt to transmit new records saved on the device to RoamConnect, so that the data can be added as new records in your RiskMan system. A higher value will decrease the server load. The optimal value is around 600.

Once you have entered all the required script properties, click the **Save** button to start creating a path!

The Path Builder screen



This is the Path Builder screen. Like many other parts of RiskMan, you'll notice there is a toolbar up the top, with functionality icons on the left and right hand sides. The most essential ones are:

Save the script

Undo your last action

Return to the **Script Versions** page

Switch to **Advanced** mode (covered later in this guide)

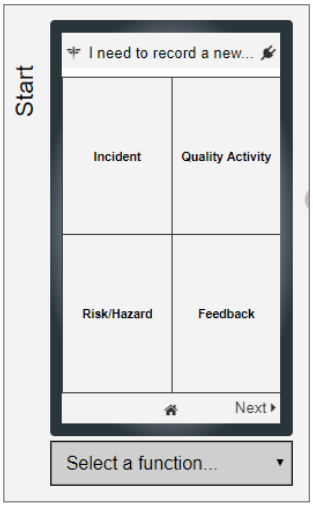
Show some basic **Information** about the script

We'll explain the other icons as they become relevant to what we're doing.

Beneath the toolbar, you can see there are two simulated Roam screens, to give you an idea of what each step in your path will look like. These are the first and last screens in your path – the register selection screen, and the final step, asking the user to confirm that all details are correct before submitting a new record. As you add new steps in your path, you will see more simulated screens representing each step, which will be displayed horizontally.

Under each simulated screen, you can see a drop down box. This contains various functionality to modify each step in some way.

Working with the first step



You may notice a small floating label which asks you to select a register to get started.

Before doing so, notice that in our example there are 4 registers to choose from.

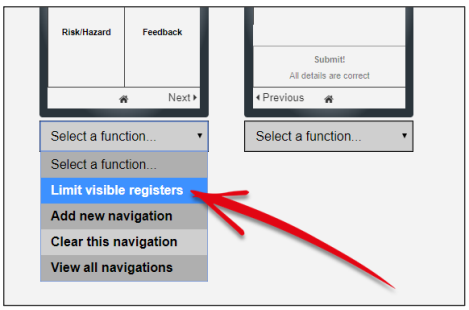
What if you weren't intending to use Roam to record quality activities? Or any of the other registers?

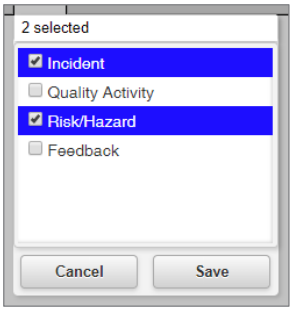
Fortunately, you can remove registers from this screen if you aren't going to use Roam to capture data for them. Let's say we only want to use Roam to record incidents, and risks and hazards.

1.1.1 Removing a register from the Start screen

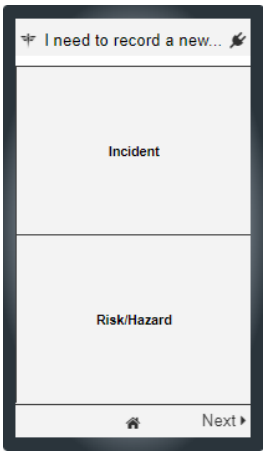
Click the **Select a function…** drop down under the Start screen and select **Limit Visible Registers**.

A small dialog will appear:





Use this multi-select list to specify which registers should be available to users when they use Roam. The result:



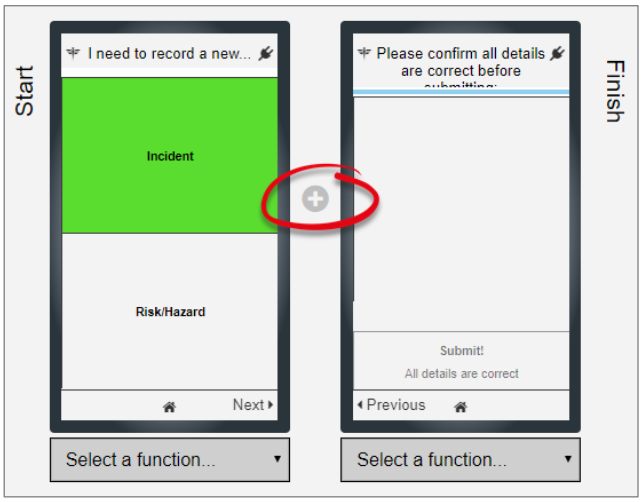
It should also be noted that the list of available registers will also be filtered based on a user's individual profile permissions. For example, if you opted to show the quality activity register, but a user didn't actually have permission to that register in RiskMan, then that same rule will be obeyed by Roam and user will not see it.

We'll now click on the **Incident** value to start the path for the incident register:

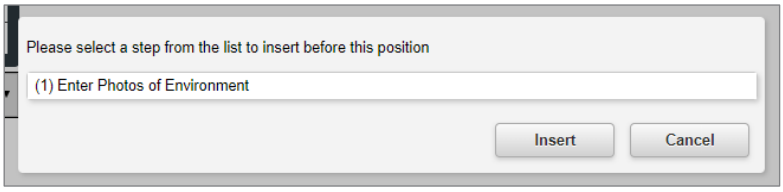
Now that we've selected the incident register, every subsequent step we add to the path will be for the incident register.

1.1.2 Adding the first step to your path

To add a step to your path, click the **plus** icon in between the two screens:

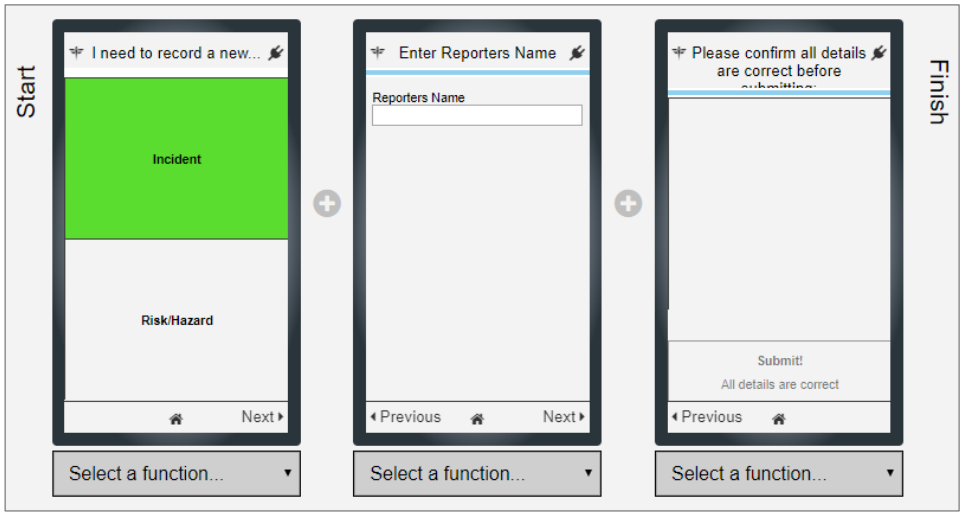


This will show you a drop down box with all of the fields that can be added to your path:

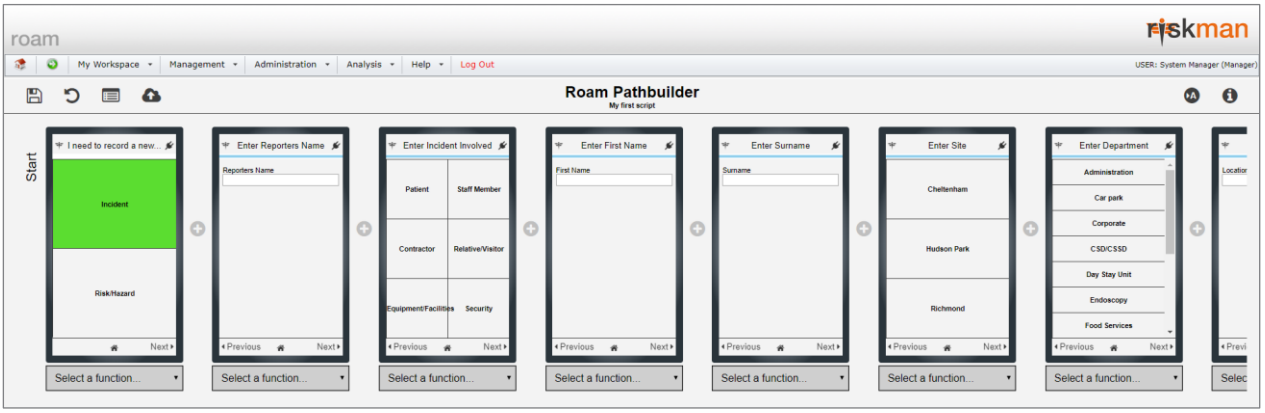


Open the drop down box to find the field you want to add. You can also type the name of a field, and the list will be filtered as you type. Select your desired field and click the **Insert** button.

The first field we'll add in this example will be **Reporter's Name**. Now, the screen looks like this:

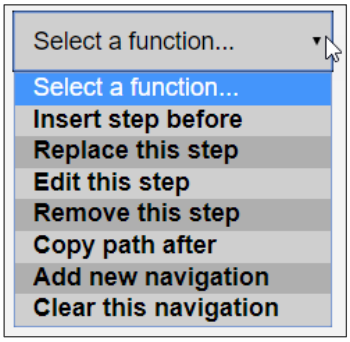


Repeating this to add all the fields we listed on page 9, our complete path looks like this:



We can scroll horizontally to see the entirety of our linear path.

Ways you can modify a step



The following options are available in the drop down box beneath each step:

Insert step before inserts a new step to the left of the selected one.

Replace this step allows you to replace the current step with a new one, without affecting the rest of the path.

Edit this step provides you with a variety of options, depending on the type of field in question. We'll look at examples of this on the next page.

Remove this step removes the current step without affecting the rest of the path.

Copy path after copies the rest of the steps in the path after the selected one, which allows you to paste it in an alternative path.

Add new navigation and **Clear this navigation** will be explained later.

Properties common to every step

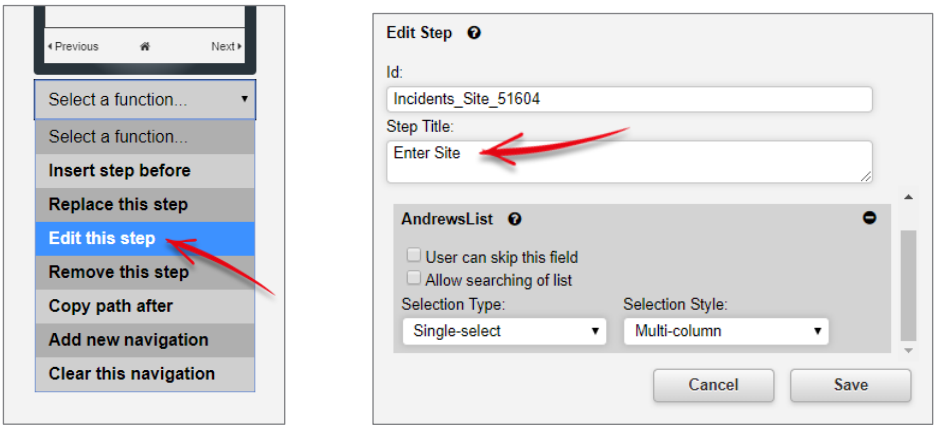
1.1.3 The ID field

Every step that you add to every path needs to have an individual ID number. As you can see, an ID number is generated by default, which follows the pattern of [Register name]_[Field name]_[Random number]. There generally should be no need to replace this ID value.

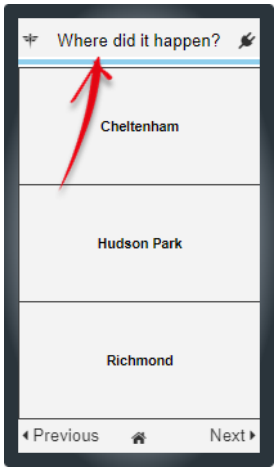
1.1.4 Changing the title of a step

The default title for each step in your path is simply “Enter [field name]”. In some cases, you may wish to modify the title, either because it doesn’t make sense, or perhaps to shorten the length of the title.

To edit the title of a step, click its respective dropdown box and select **Edit this step**. We’re going to change the title for our Site step. The **Edit Step** dialog box appears:

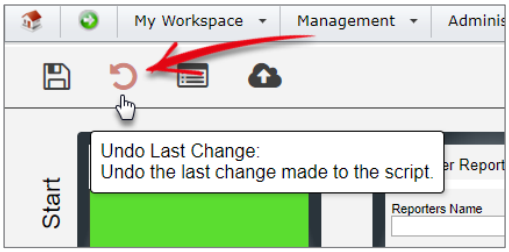


In the **Question** field, you can modify the text that appears at the top of a step. We’re going to change the text to read *Where did it happen?* Then click **Save** to see your changes:



Note

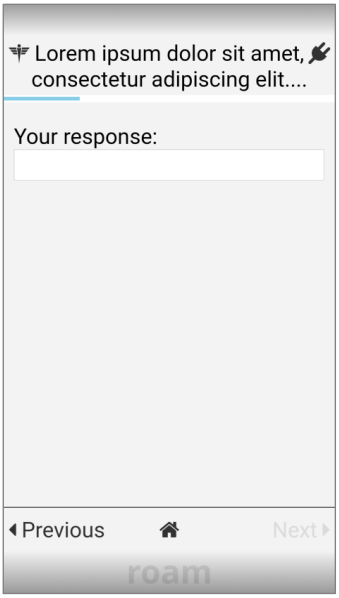
*Did you make a mistake? If you do, notice that one of the icons on the left toolbar is an **undo** function. There is no limit to the number of steps that can be undone.*



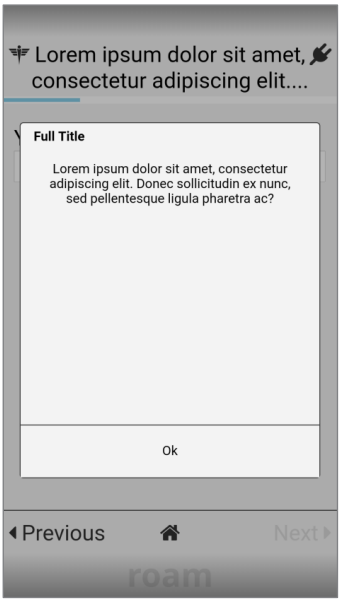
1.1.5 What happens when the title of a step is very long?

Sometimes it isn't possible to shorten the title of a step; for example, an audit question.

The space for a step title can expand, but only to a certain point. If there are more characters in a step than can be displayed, the remainder of the characters will be truncated:

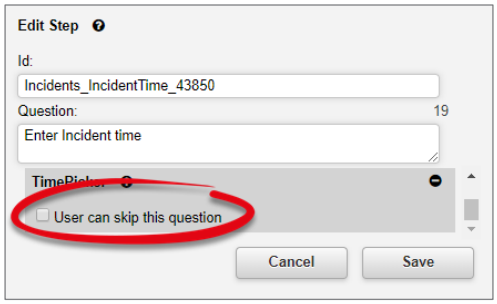


The presence of the ellipsis lets you know that there is more text in the title. **Tap** the title itself to see the whole thing:



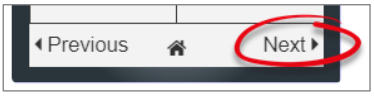
There is no practically enforced maximum number of characters for a step title.

1.1.6 Making a step optional

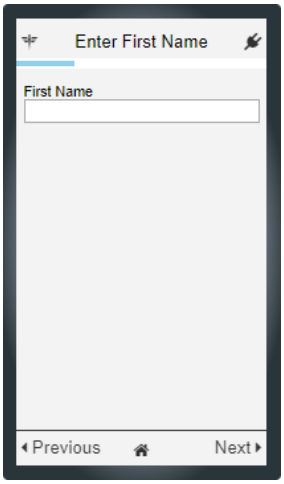


By default, every step that you add to a path is mandatory. If desired, you can make a step optional. To do this, check the box marked **User can skip this question**.

This will allow the user to tap the **Next** button at the bottom of their screen without having completed the question:

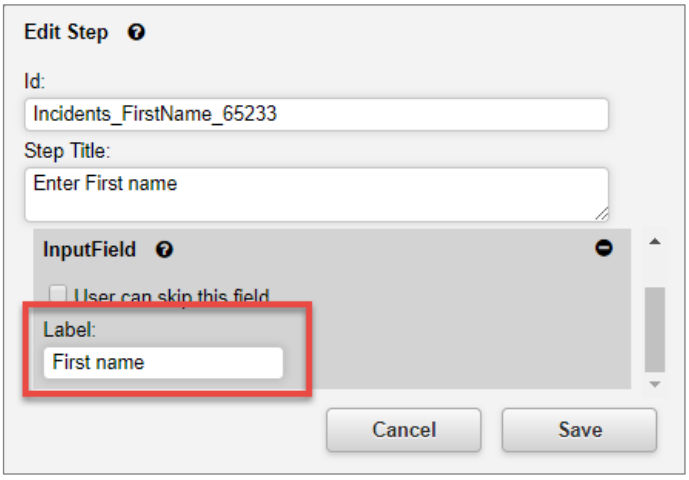


Properties unique to free text fields

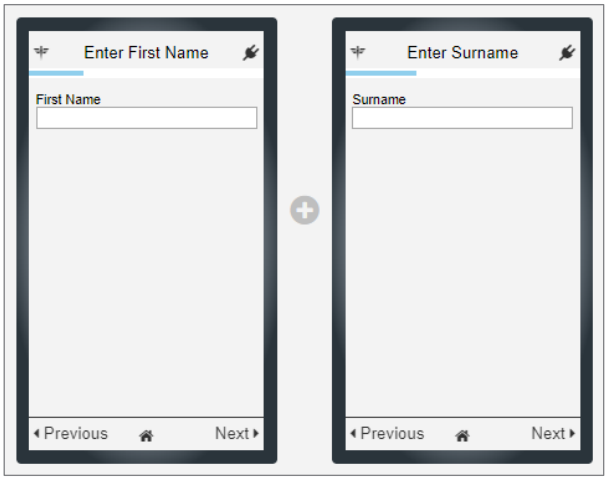


1.1.7 Modify the field label

Every step has a title, but when your step contains a free text field, there is also a field label. In the example above, you can see the label reads “First Name”. This text can be modified as shown here:

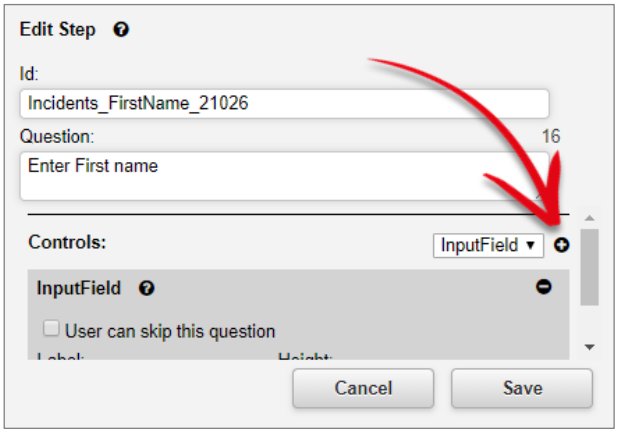


1.1.8 Put multiple text entry fields in the one step

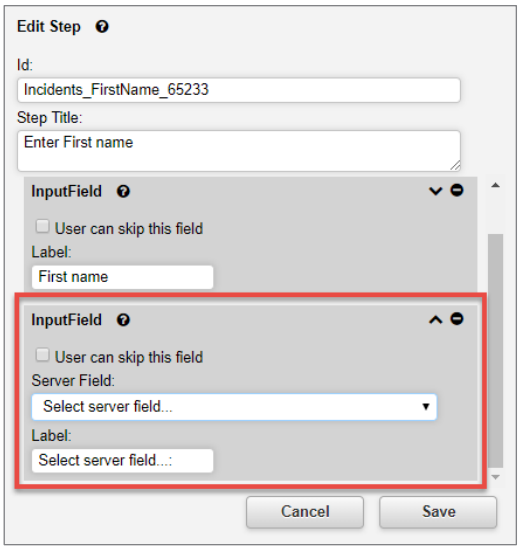


In the current path, we have added two steps – First Name and Surname. Instead of having two steps with single free text fields, you are able to add multiple free text fields to the one step.

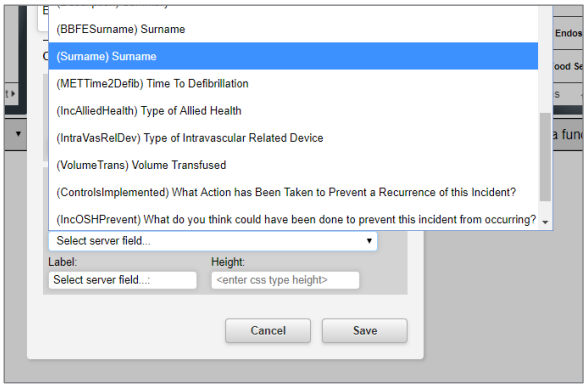
To do this, we're going to **edit** the **First Name** step, and click the **(+)** icon indicated:



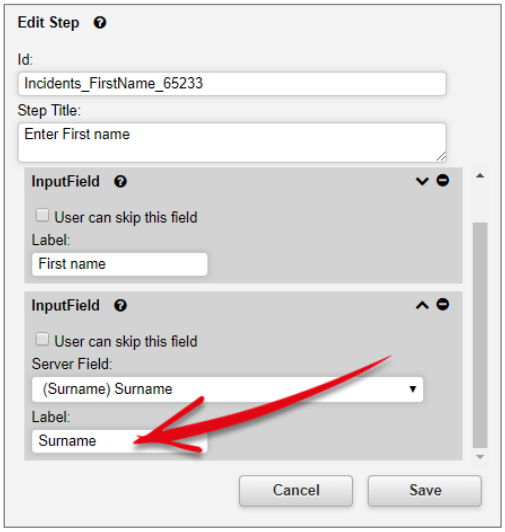
This adds a second dark grey area, where we can specify another free text field that we want included in this step:



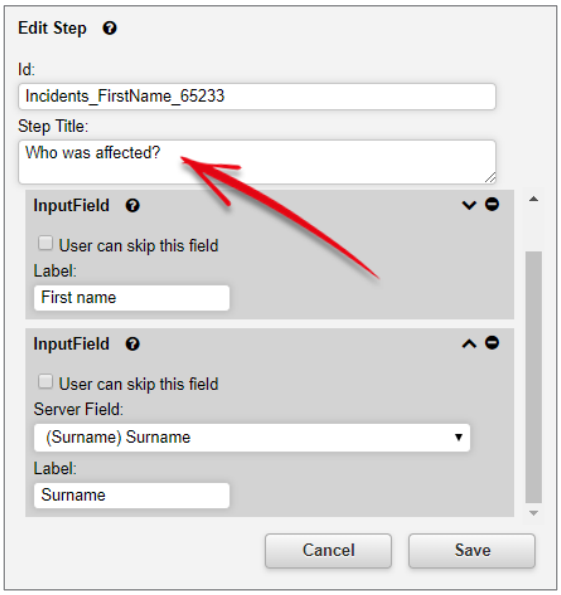
From the **Server Field** drop down box, we'll find the correct **Surname** field:



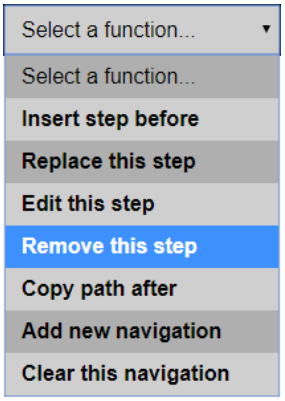
And, we'll leave the label as its default of **Surname**:



To make this step complete, we'll modify its **Question** to be something more appropriate:



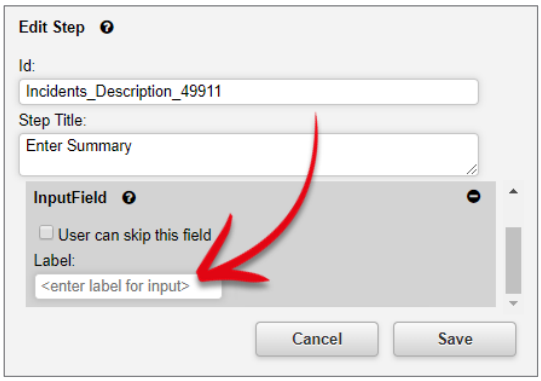
The final result is shown here. Now we can remove the **Surname** step altogether, seeing as it is no longer needed.



Properties unique to a text area fields

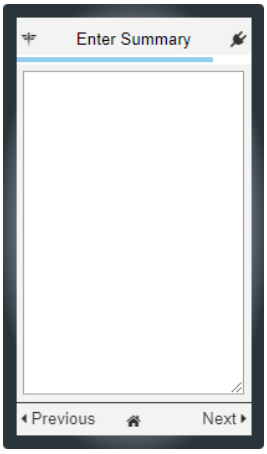
1.1.9 Make the text area take up the entire space on the screen

In the example above, the title of the step is “Enter Summary”, followed by a field label of “Summary” above the actual text input area. This appears to be redundant. If you were to delete the **Field Label** (i.e. Leave it blank), the text area will take up the entire space available.



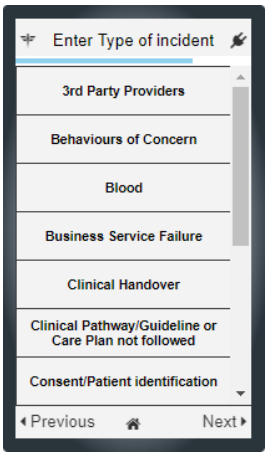
In the above example, we’ve removed the “Summary” text from the label field.

Once we save the step, it looks like this:

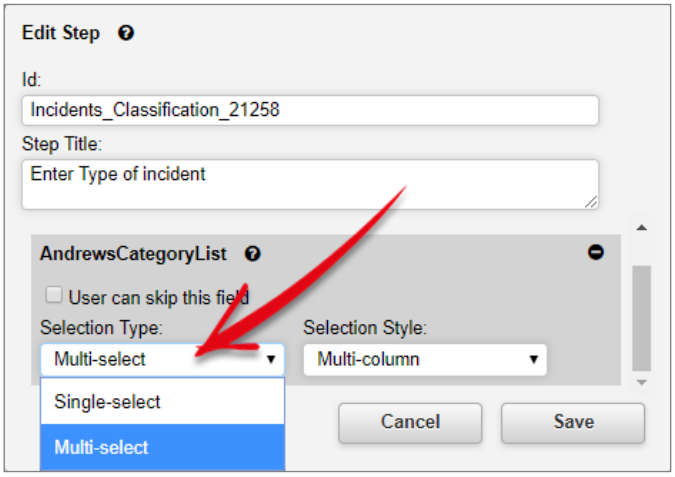


Properties unique to list fields

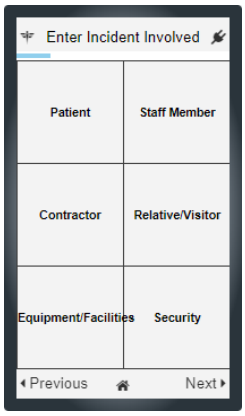
1.1.10 Make a list field single-select or multi-select



You have the ability to set whether a user can chose only one, or multiple values in list fields. In the **Edit Step** dialog, you will see a drop down list called **Selection Type**:

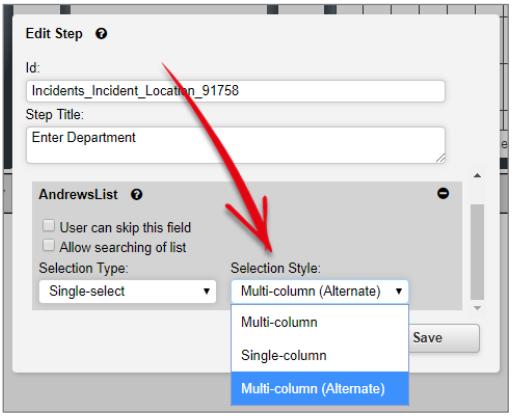


1.1.11 Change the way the list is presented to the user

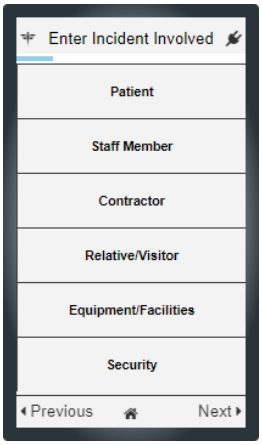


As you may have noticed, Roam will change the layout of a list to make the best use of the device's screen, depending on whether the screen is in portrait or landscape orientation.

The default method of showing lists with 4 or more values is to use multiple columns when there is an even number of values in that list, as shown in the example above. Sometimes, depending on the content of the list (in particular the text length of the values in that list), you can opt to force the list to be displayed in a single column at all times. In the Edit this step dialog, you will find a drop down list called **Selection Style**:

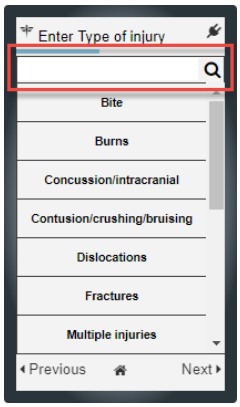


The default is **Multi-column**, however if you change it to **Single-column**, the values will appear in one column:



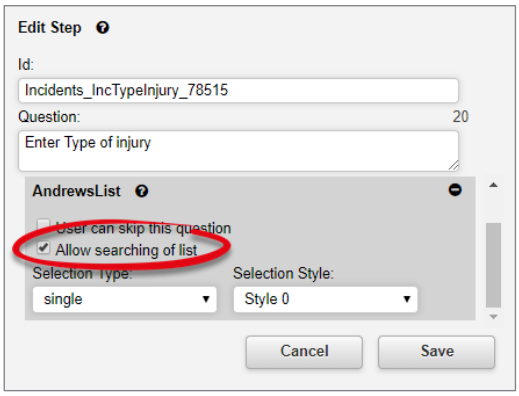
There is also another value, **Multi-column (Alternate)**, which may be suited to use on larger devices like tablets; a bit of experimentation might be in need to see which you prefer.

1.1.12 Add a search box to a list field

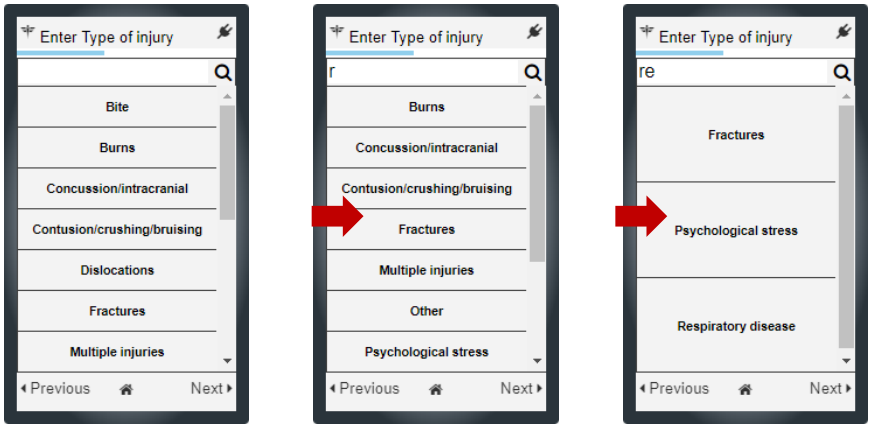


Sometimes, a list field that you select might have many values in it. In order to improve the user experience, you can add a search box to a step, so that the user does not need to scroll through a long list of values.

To do this, in the **Edit Step** dialog, check the box labelled **Allow searching of list**:



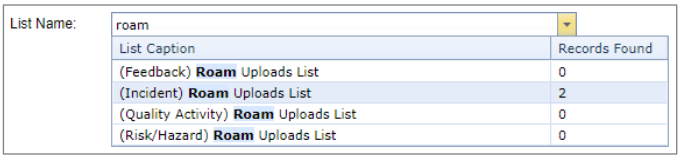
This enables a search box at the top of the step, under the question. The list will be filtered as the user types:

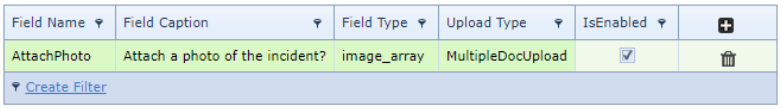


Allowing the user to attach photos to the record

There is a step available to add to a path which allows the user take a photo and attach it, or upload an existing photo from their device. Roam will automatically compress or resize image files which are too large (because mobile devices are capable of taking photos at increasingly high resolutions, meaning very large file sizes). At present it is not possible to take and attach video, however we will be exploring this for a future release.

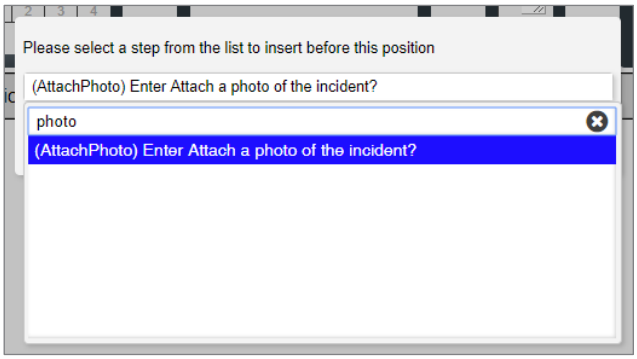
This feature must be configured in List & Code Maintenance before you can use it in Roam. To do this:

1. Navigate to *Administration > List & Codes Maintenance.*
2. Search for **roam** in the search box.
   - 

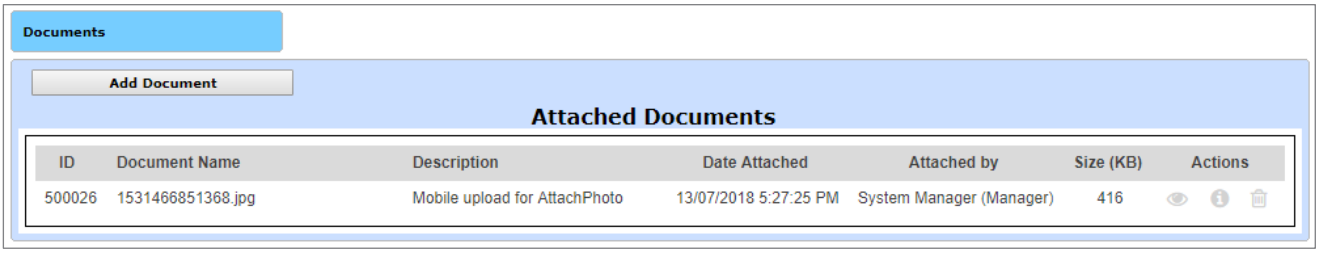
3. Select the register that you want attachments to be enabled for. In our case, we chose the Incident upload list.
4. Click the ➕ icon in the toolbar to add a new row.
5. There are 5 properties that need to be configured:
   - **Field Name**: You must create a unique name in the database for your attachment step here.
   - **Field Caption**: This is the step title as it will appear in the Roam editor.
   - **Field Type**: There is only one value in this drop down list (image_array). You must select this.
   - **Upload Type**: Here you can determine if the user should be able to attach multiple images, or just one.
   - **IsEnabled**: Makes the step visible in Roam.
   - Our completed entry looks like this:
   - 

6. Click the ✔ icon in the toolbar to save your changes.

You will now be able to add this as a step in Roam. To do so, click the ⊕ icon as you usually would. Search for the caption you set in step 5 and your entry will appear:



You can then modify the step properties as with any other step. Image attachments will appear in the **Documents** section of the form when you view the record on a computer:

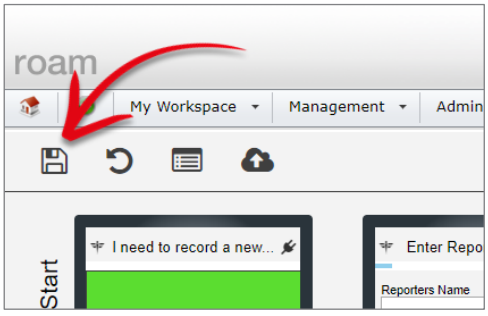


ONCE YOU HAVE FINISHED CREATING PATHS

Once you have finished creating all of the various paths you want, follow these steps to get the script on to your device.

Save the script

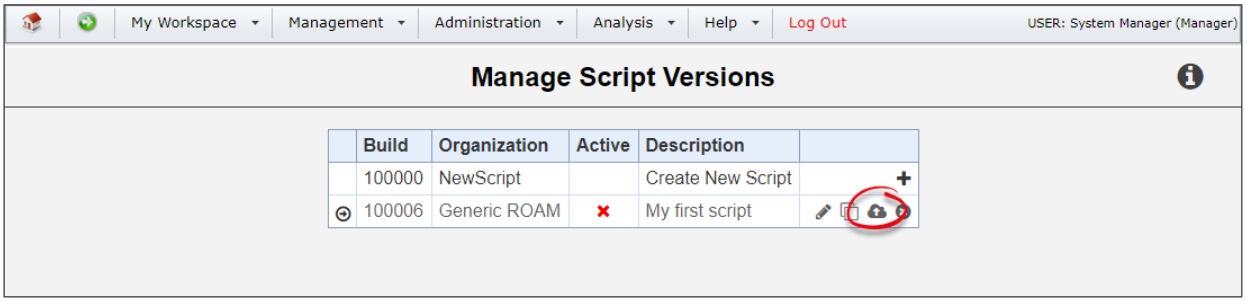
Click the 🖫 icon in the toolbar to save your script. You will then be taken back to the **Manage Script Versions** page.



Publish your script

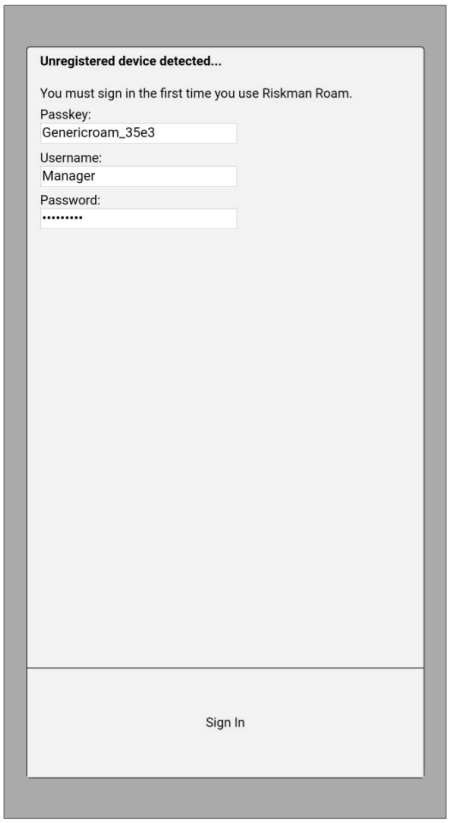
Publishing your script means it will be available to users to download to their devices.

To do so, click the ☁ icon in the toolbar.



(If you need to remove the script for any reason, just click its ☁ icon to **unpublish** it.)

Test your script



It is a good idea to test your script prior to informing users that it is available to download. If possible, perhaps even create a script on your test or training environment for this purpose.

1.1.13 Download the script to your device

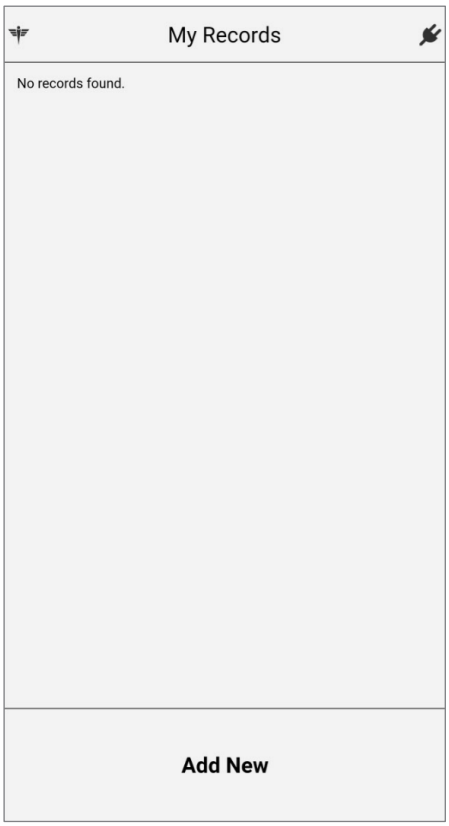
The first time you open the Roam app, you will be prompted to enter your credentials. After entering your credentials, tap **Sign In**.

Roam will attempt to authenticate your credentials; when this is successfully completed, Roam will download your script.

There are many variables which will affect how quickly the script takes to be downloaded to your device.

Generally it will be quite fast (2 or 3 seconds), however it wouldn’t be unusual for it to take 10 seconds or so.

1.1.14 Enter a new record



Once the script has been successfully downloaded to your device, you will land on the **My Records** screen.

This contains a list of records you have created using Roam, which is of course empty at this point.

Tap **Add New** to try out your new script!

We recommend entering several new records, testing all of the different fields in the path you created, ensuring everything behaves as you would expect.

If possible, test your script on different devices.

As you use the app with your script, you might realise that you want to do things such as change the way certain lists are displayed, change the order of the steps to flow more logically, or remove unwanted steps altogether.

When you submit your first record, you will land back on the My Records screen.

You'll notice your record is listed now, and there is also a column in the list named **Status**.

This column contains a colour-coded tick icon, and lets you know when your record has successfully been transmitted to your actual RiskMan system.

If the tick is grey, the record has not yet been transmitted to your RiskMan system.

The tick will turn green to indicate that the record has been transmitted to your RiskMan system.

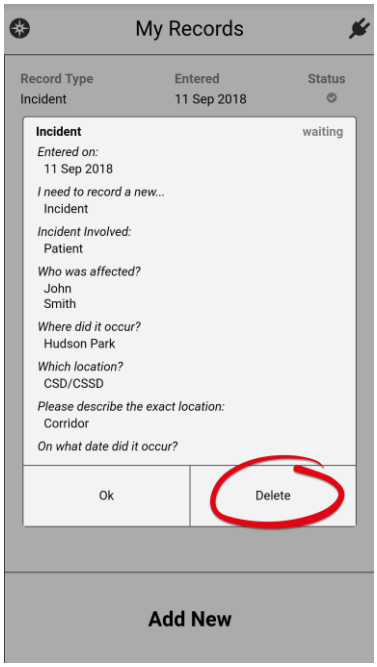
1.1.15 Review the transmitted record(s) in RiskMan

Log in to your RiskMan system to review the data you recorded via Roam.

Notice that in the **Review History** of the record, the first entry states that it was originally submitted via Roam:

1.1.16 Deleting a record from the app

If you tap a record in your My Records list, you can view (but not edit) its contents. There is also a delete button.



If you delete a record from the app which has already been transmitted to your RiskMan system, **the record in your RiskMan system will not be affected**.

If you delete a record from the app which has not yet been transmitted, **it is permanently lost**.

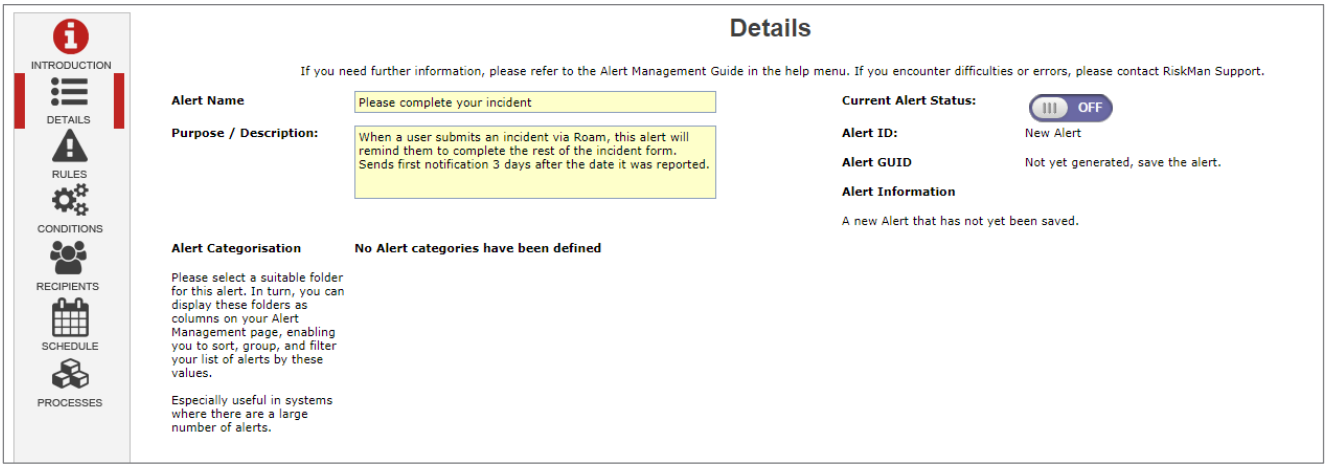
Prompting users to complete a record after submitting via Roam

Remember that in our example script, we ended up with 11 steps in our path. However, in reality, a default user would need to complete several more mandatory fields than this if they submitted an incident by using RiskMan on a computer (In other cases, all relevant fields might be completed via the app, eg. an audit).

If this is the situation you find yourself in, we would recommend configuring an alert which prompts the original reporter to log in to RiskMan via computer and complete the remaining mandatory fields on the form.

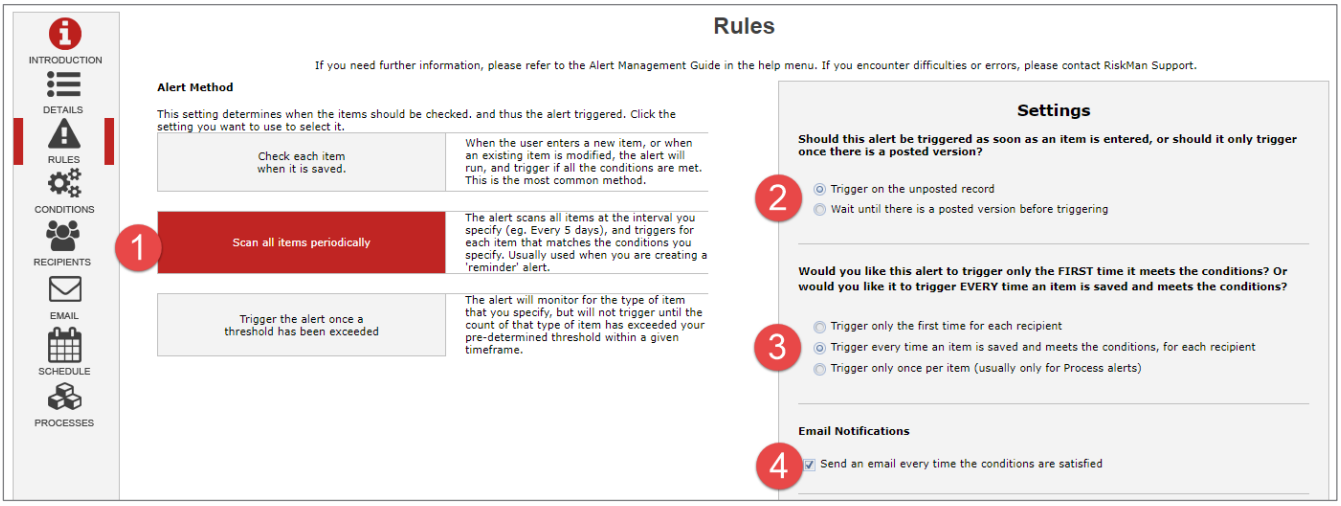
Let's take a look at how the alert setup would be done over the next few pages (Any setting that is not explicitly mentioned can be assumed to be left at its default setting).

1.1.17 Alert Details



As always, enter a meaningful name and description for the alert so that other administrators know exactly what the alert is designed to do.

1.1.18 Alert Rules



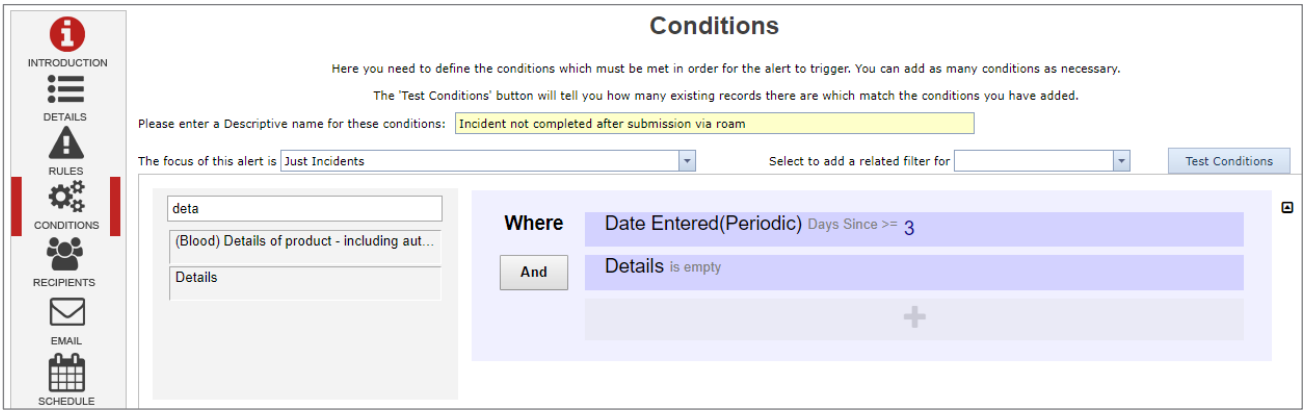
❶ The Alert Method needs to be set to **Scan all items periodically**.

❷ If the target register uses posting, we recommend setting the alert to **Trigger on the unposted record**.

❸ Because we want the user to be reminded more than once to complete the record, we will set the alert to **Trigger every time an item is saved and meets the conditions, for each recipient**.

❹ We definitely want to **Send an email**!

1.1.19 Alert Conditions

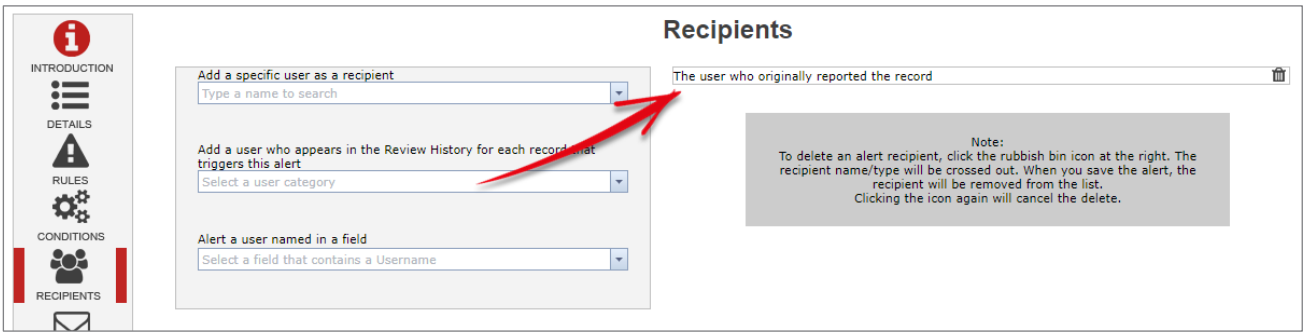


Here we will state what needs to happen for the alert to trigger.

As with every reminder alert, the first thing we need to define is *when do we want to start reminding the user?* In this case, we have said we want to start reminding the user 3 days after the incident was entered.

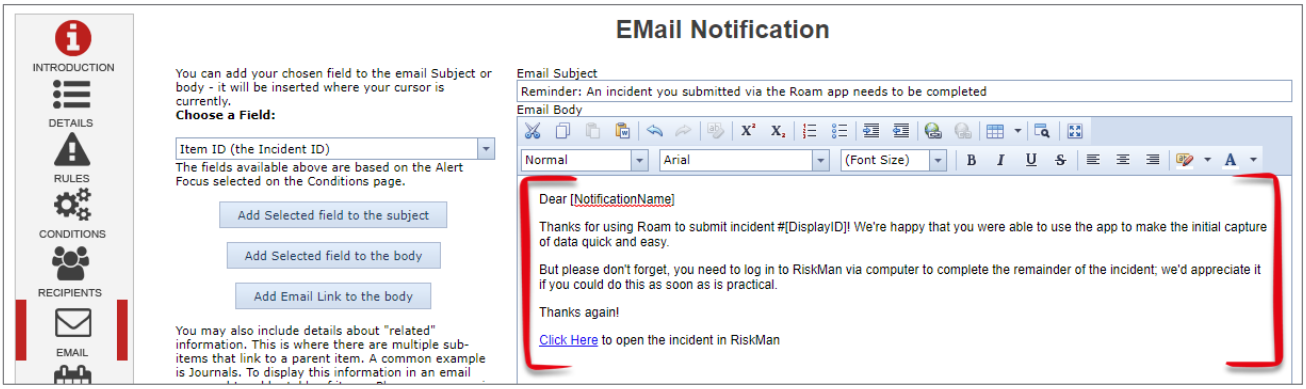
As well as that, we need another condition which looks for a field which is mandatory for default users, but was not one of the fields included in the app. If that field is empty, we know the default user has not yet completed the incident.

1.1.20 Alert Recipients



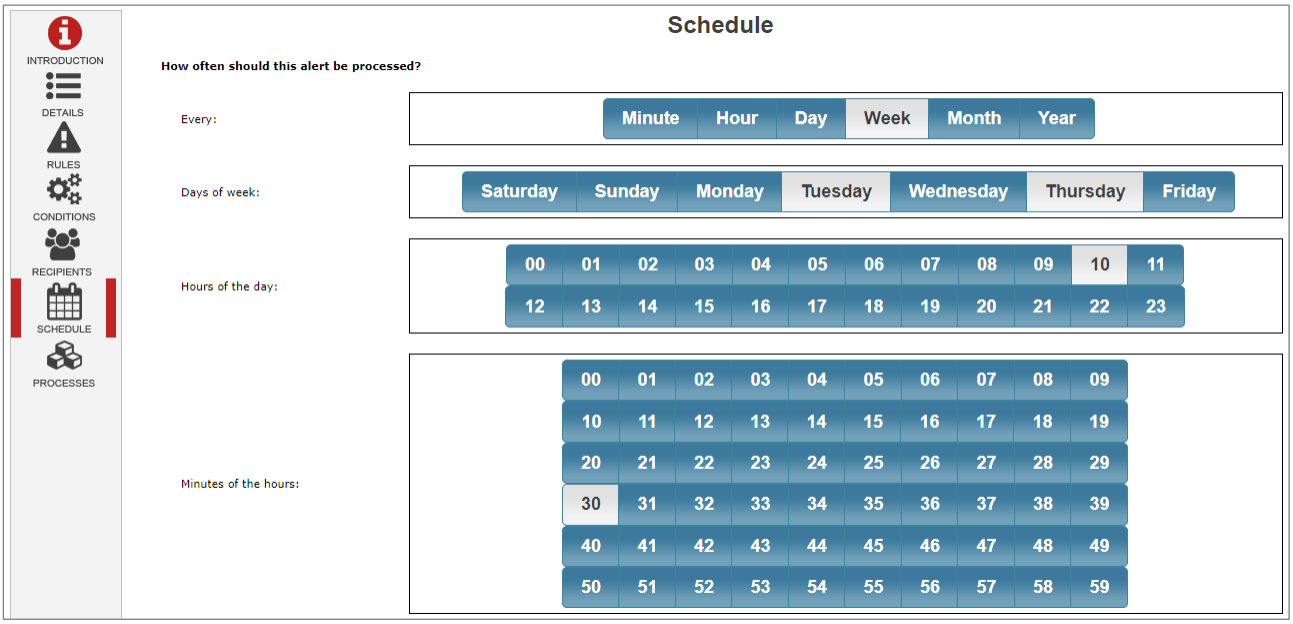
This part is simple; we need to select **The user who originally reported the record** from the field **Add a user who appears in the Review History for each record that triggers this alert**

1.1.21 Alert Email



Compose the email you want the users to receive, such as we've done in this example.

1.1.22 Alert Schedule

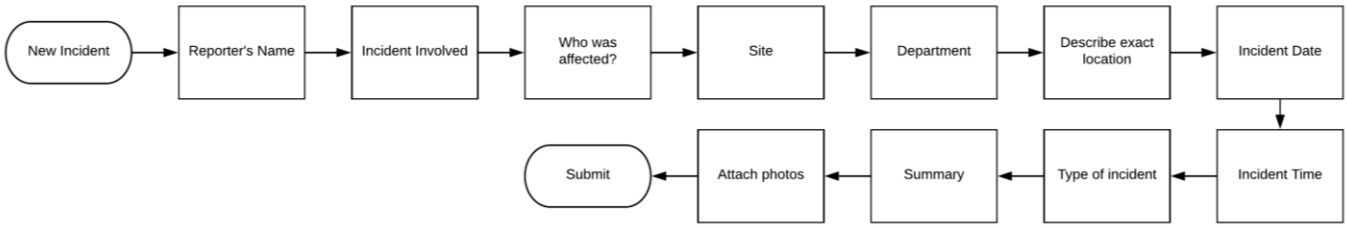


The final step is to determine how often we want the user to receive a reminder email about an incomplete incident.

In the example above, we've set the schedule up so that the user is reminded twice a week (on Tuesdays and Thursdays), and the email should be sent at 10:30am.

NONLINEAR PATHS

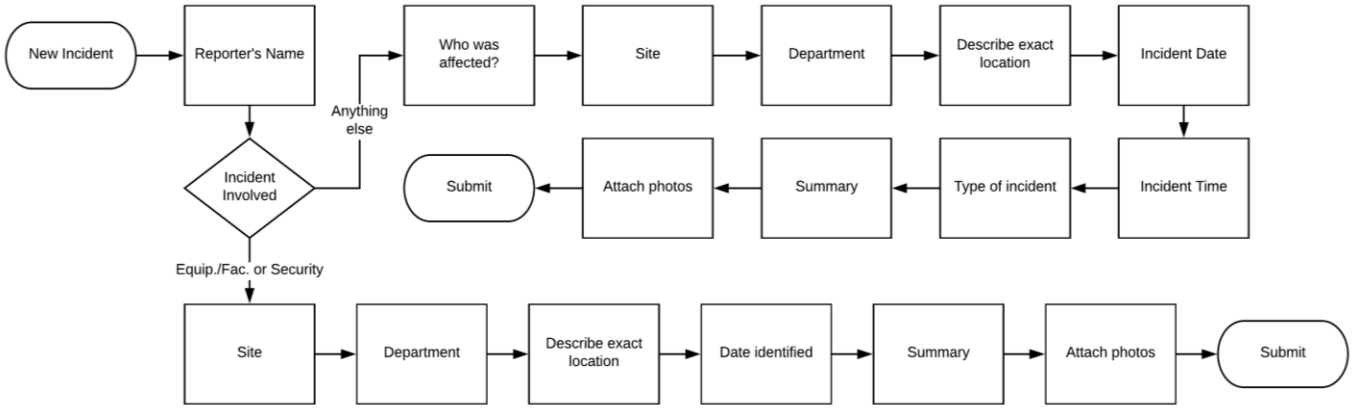
So far, we have kept things simple and just created a linear path – meaning that irrespective of the choices the user makes, they will always see the same fields in the same order.



But what if you wanted the user to collect different information based on different choices they make?

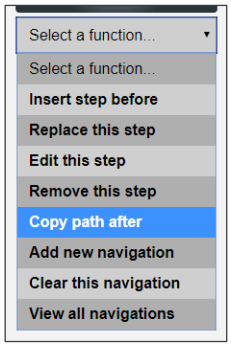
In our script, we ask the user to choose who was affected. In that list, we have two non-person values; Equipment/Facilities and Security. Because we created a fixed path, when the user selects either, they will be asked to choose the name of the person affected, which of course makes no sense. So, in much the same way as your incident form shows and hides various fields depending on the type of person or thing affected, you are able to create alternate paths, based on the values they choose when recording data.

With that in mind, we are going to create multiple paths which collect different information depending on the value selected in Incident Involved:



As you can see, we'll collect different information when the user is capturing a security or equipment/facilities-related incident.

Copy a path

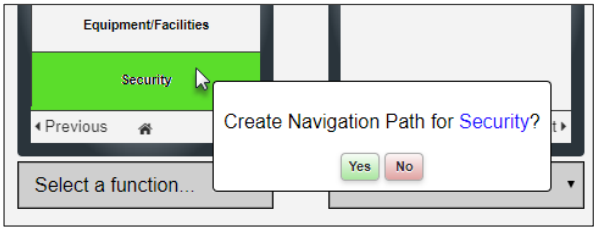


In our current circumstances, where we have two different paths which vary only slightly, one of the quickest ways to achieve our goal is to literally copy and paste the path, and modify the new path as required.

The first step is to determine which step we want to copy from, which in this case, is **Incident Involved**. Click its drop down box and select **Copy path after** (as shown to the right).

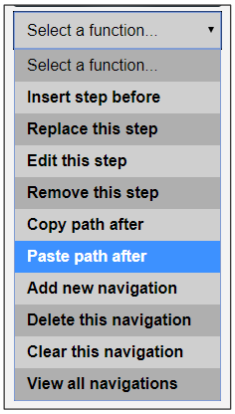
What you have just done is literally copied every step in the path after the Incident Involved step.

Create a new navigation path



The next step is to determine which value(s) will present the user with an alternate path. In our case, we're going to start with Security, and click on it. When you do, you will be asked if you want to create a new navigation for that value:

Paste the path

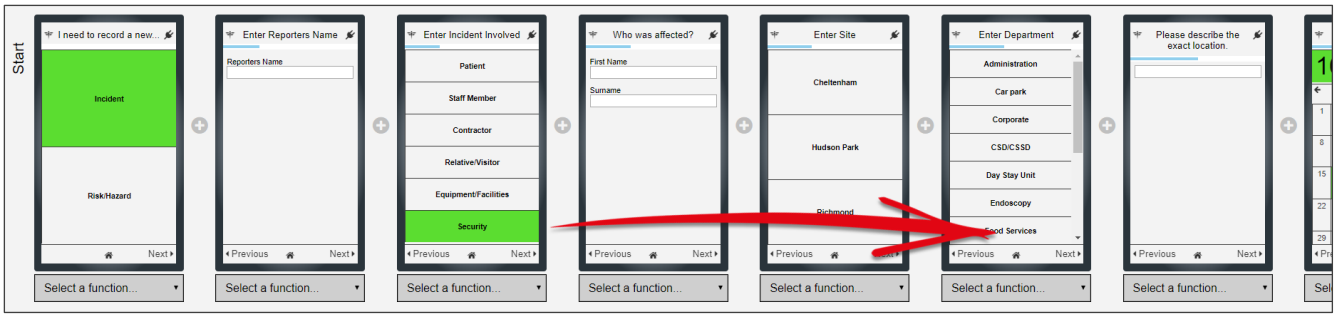


After clicking **Yes**, you will see all of the subsequent steps are removed, and only the Submit screen will follow.

Now you are free to go and add the fields you want the user to see when they tap **Security**, but in our case, we've copied the path, so let's paste it.

Click on the drop down box for Incident Involved, and select **Paste path after**:

All of the steps you copied before will be inserted after Incident Involved:



Now we can go and remove the steps that we don't need when the user is entering a security incident, and also add any steps required for this path.

After defining the fields that should show for a security incident, we can go ahead and use the same copy and paste technique to add the same path when Equipment / Facilities is selected.

The other values for Incident Involved will all follow the original path.

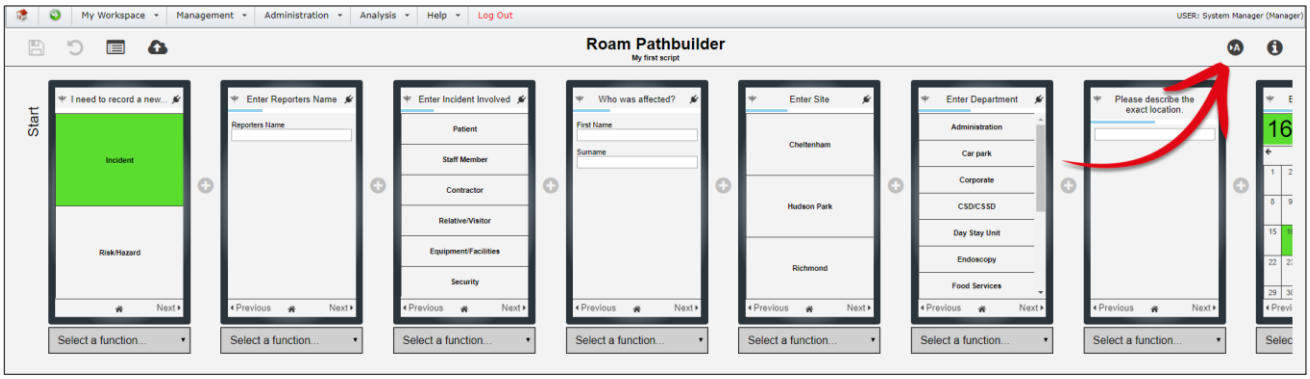
As you can probably tell, this means there are myriad ways you could define different paths depending on the selections the user makes. Because of this, we strongly recommend you define all of this *before* you attempt to build your script.

EDITING A SCRIPT IN ADVANCED MODE

Additional functionality is available when editing your script in advanced mode. However, we do recommend that you switch to advanced mode once you are comfortable editing scripts in basic mode, and you determine that you need to use some of the advanced functionality we're about to describe.

Switching between Basic and Advanced modes

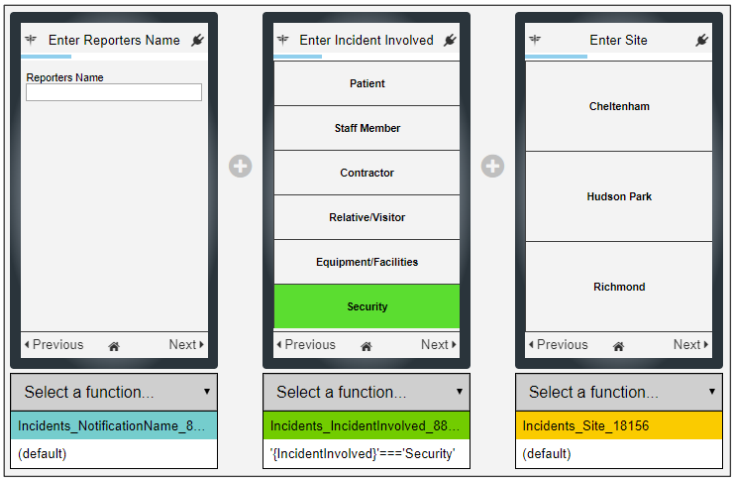
To switch to advanced mode, click the icon on the toolbar:



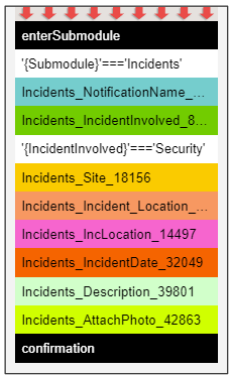
That icon now changes to this one: Click the icon again when you want to return to basic mode.

The Path Builder screen in Advanced Mode

The first and most obvious difference you will see when in advanced mode is the present of more information under each step in your path. This information shows the step ID, and denotes if nothing is selected, or if a value is selected:



In the example above, in the white space underneath the Reporter's Name step, you can see the text reads "(default)".

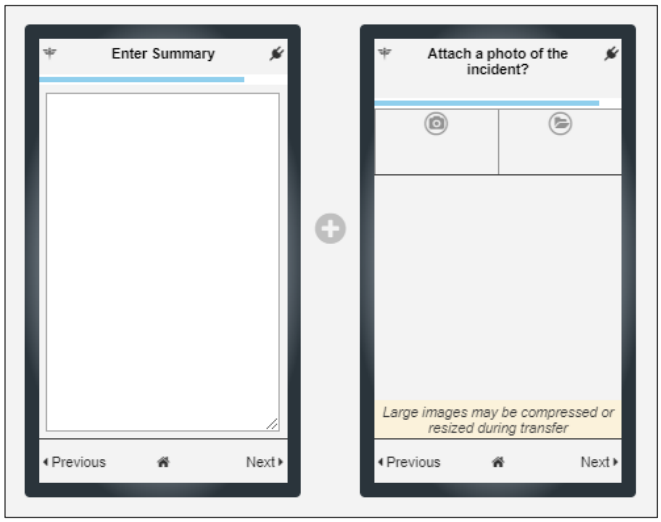


However, in the Incident Involved step, it states that the currently selected value is Security, and thus the path for Security is being shown after it. This can be useful when used with one of the new icons being displayed in the left toolbar: **Show all paths**.

Clicking this icon will show you all of the various paths you have configured based on the step ID. If you hover your mouse over a step ID, the name of the step will be shown as a tooltip.

Creating steps for your path which aren't fields in your RiskMan system

In advanced mode, you have the ability to add steps to a path which are not fields from your RiskMan system. This allows you added flexibility; you can include more complex navigation choices.

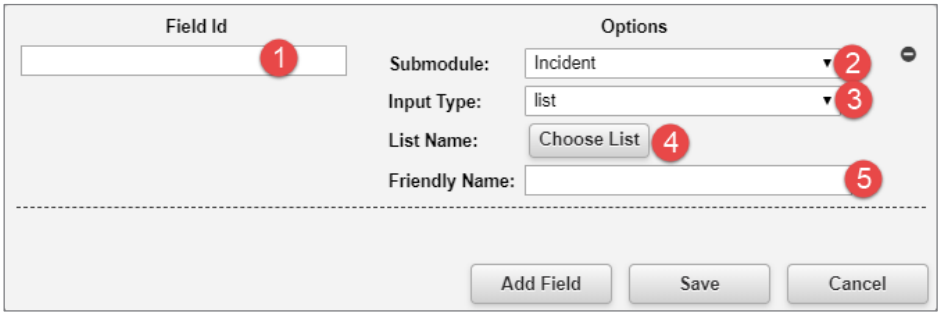


Alternatively, it can help the user make sense of your path. In the example to the right, we go from Summary, straight to attach photos. This could potentially confuse some users – they might think that they *must* attach a photo (even though the step is not mandatory - they could simply tap Next). To remove any ambiguity, we can create a **Flow Field** which asks the user if they want to attach a photo. If yes, next will be the attach photo step. If no, we'll skip the attach photo step.

1.1.23 Create a Flow Field

To create a flow field, click the ∓ icon on the right side of the tool bar. A dialog will pop up telling you that there are no fields found. Click the **Add Field** button:

You're then presented with the following dialog:



❶ **Field Id** is the unique name for the flow field you're creating. We'll name ours **addaphoto**.

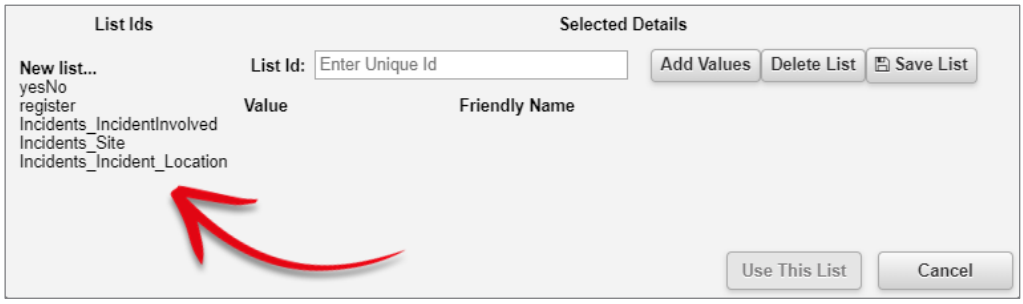
❷ Choose the register you want this flow field to refer to. This is because you are also able to create a flow field that uses the values from an existing field from that register, but we'll look at that concept a little later.

❸ At this stage the only value in the **Input Type** is **list**.

❹ Click **Choose List** to create or configure the content of your flow field. We go into detail on this over the page.

❺ Create a **friendly name** for your flow field. We'll call ours **Do you want to add a photo?** and then we'll click **Add Field**.

1.1.24 Specifying List Values



This dialog lets you specify the values that will be in your flow field. Highlighted above are some of the preset and existing list fields could use in your list:

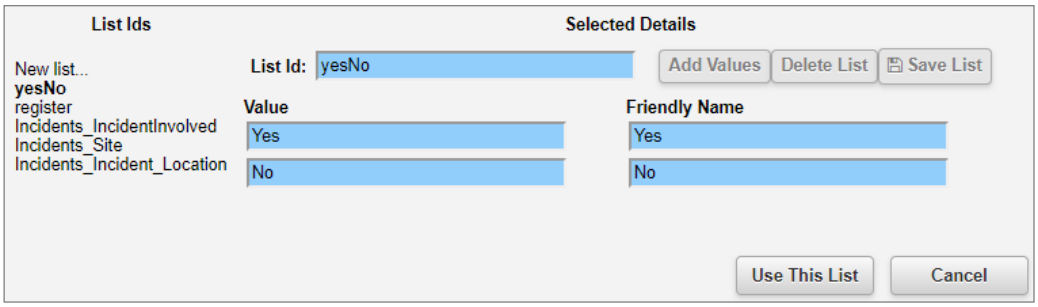
New list… allows you to create your own list, with the values you require.

yesNo: This is your standard Yes / No question.

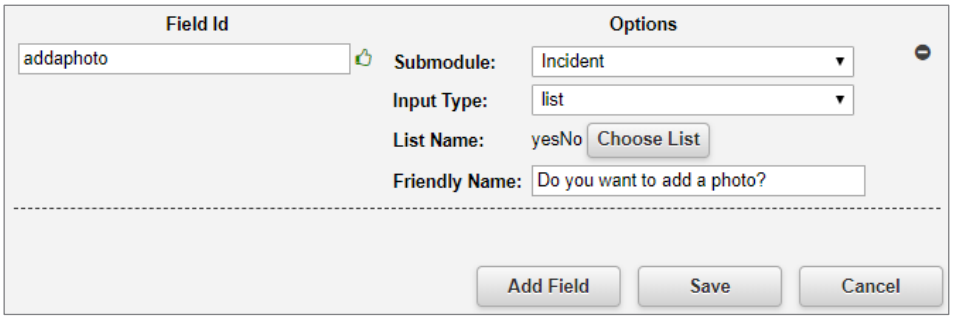
register: Is the list of registers in your system.

After that are all of the list fields which are already present on your existing path(s).

For the purpose of this example, we'll select **yesNo**, which is a hard-coded list that cannot be modified:



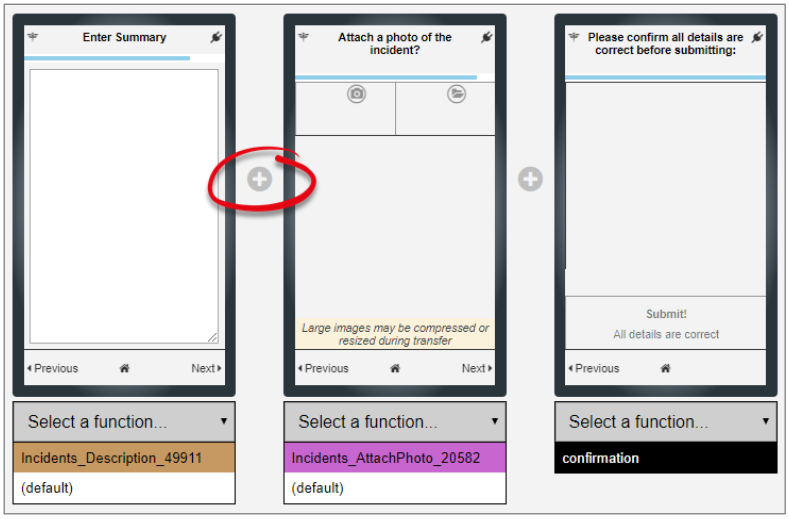
Click **Use This List**, which will take you back to the previous screen:



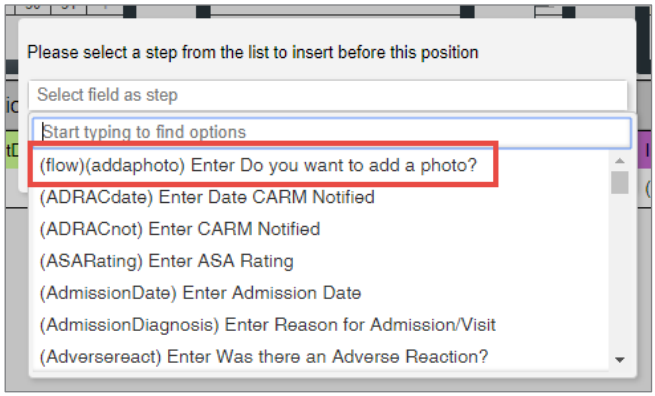
This dialogue will contain all of the flow fields you create. Click **Save** to finish the process. If you want to create another flow field, click the **Add Field** button. We'll look at more examples of flow fields a little later.

1.1.25 Add the flow field to your path

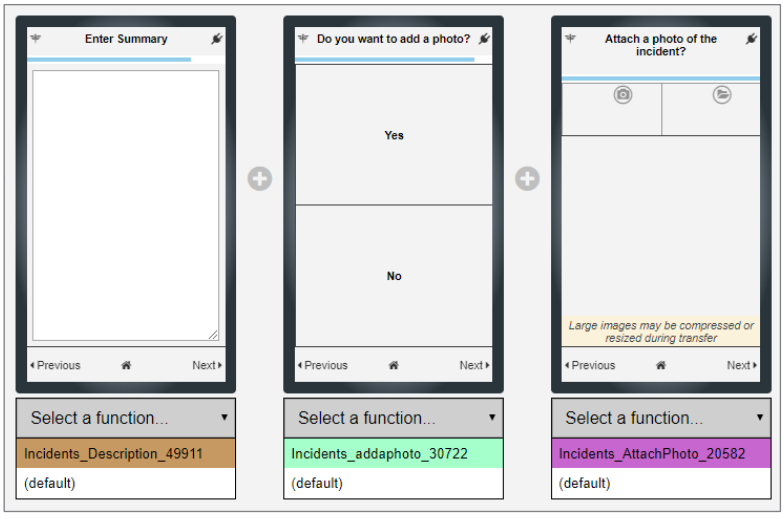
Now you can add your flow field to the path. Click the (+) icon:



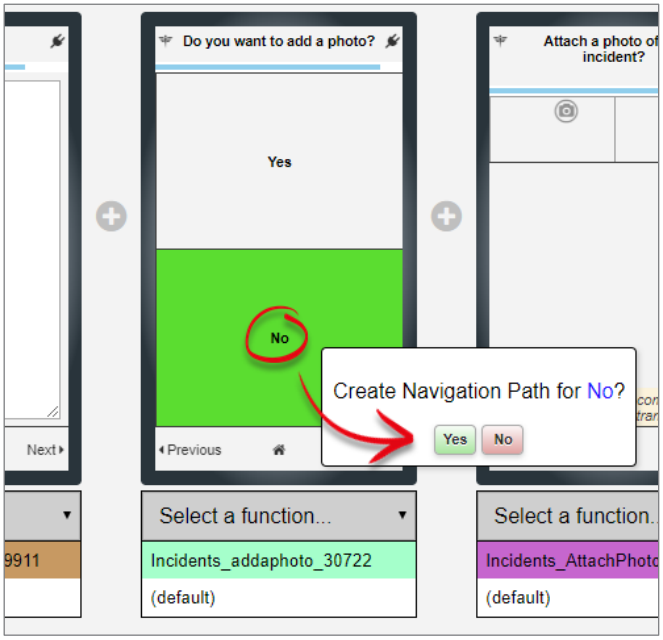
Your flow field now appears in the list with the rest of the fields from that register:



Add the field to your path:



Remember, the behaviour we want is that the user will see the **Attach Photo** step if they answer **Yes**, and if they answer **No**, they will be taken straight to the **Confirmation** step. Click **No** to start your alternate navigation:



When you click **Yes**, all steps after this one will be removed – which in this case is just the **Attach Photo** step. That means the **Confirmation** step is left, and that just happens to be what we want as the end of this path.

Switch between **Yes** and **No** to verify that there is a difference. In this scenario, you do not need to create a new navigation path for Yes, as it already does what we want it to do.

Good to know

You can add the same flow field anywhere in your script, multiple times. Such as in this example, you now have a generic yes / no question you can add anywhere to direct the user down a different path; just change the name of the step when you add it.

1.1.26 Creating a flow field using your own custom list values

You can create a flow field that contains any list values you want – just keep in mind that the value the user selects will not be in the saved record in your RiskMan system (hence the name “flow” field: they are usually used to send the user off down different paths).

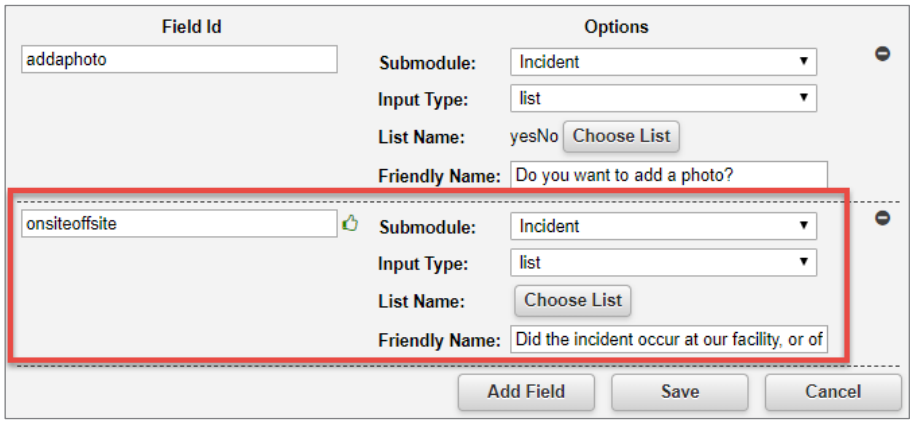
We’re going to use the example of whether an incident occurred at one of our sites, or if it occurred offsite.

If the user says that the incident occurred at one of our sites, the next steps they will see will be **Site** and **Department**.

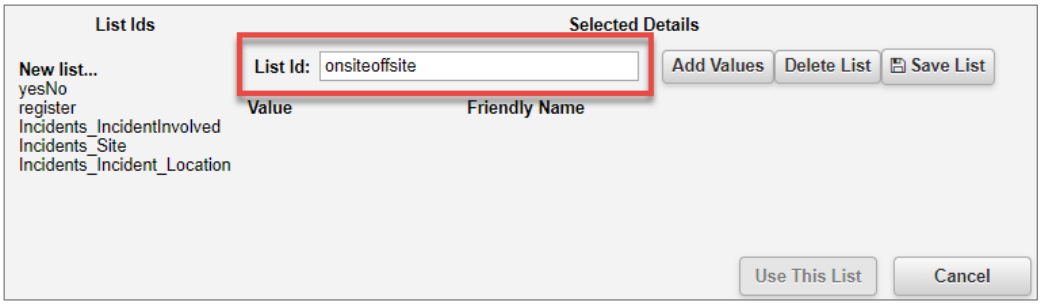
If they indicate the incident happened offsite, they will be taken straight to the **Location** step.

Click the ⫩ icon in the toolbar to bring up your list of flow fields.

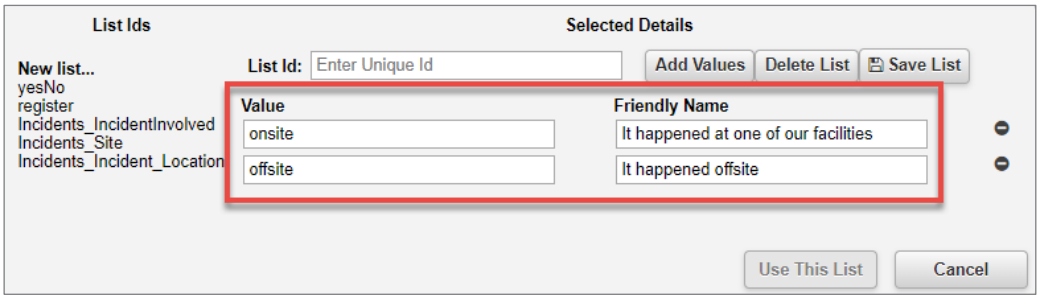
We’re going to enter onsiteoffsite as the **Field ID**, and the **Friendly Name** will be Did the incident occur at our facility, or offsite?



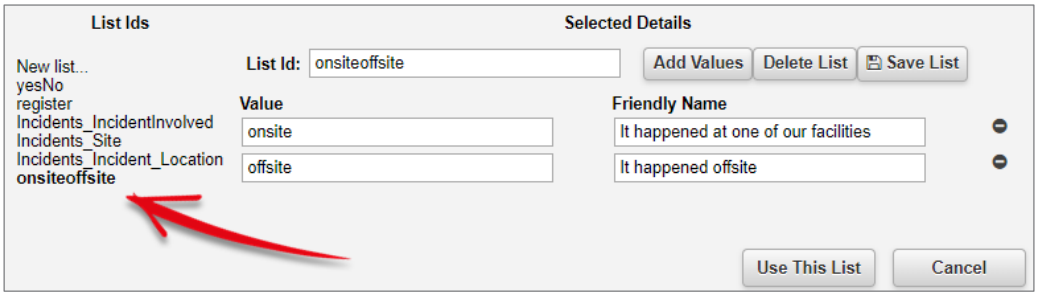
Now we’ll click **Choose List**, and give our new list a unique ID:



Next we’ll add the values we want in our list by clicking the **Add Values** button, enter the details we want, and then click the **Add Values** button again for the second value. It will now look something like this:

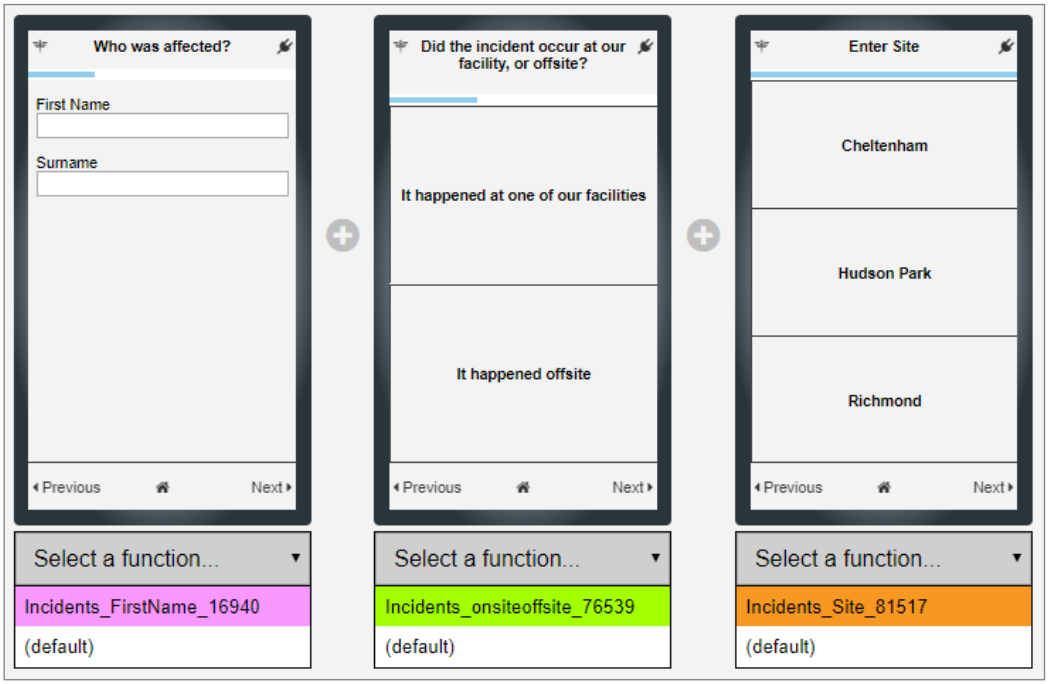


Note that the **Value** should be the unique property, and **Friendly Name** is what the user will see. Once we have all the values we need, click **Save List**. Note that your new list is now one of those listed on the left:



Click the **Use This List** button, and then click the **Save** button on the next dialog.

You can then add your new flow field in the appropriate place, and then configure the paths after it accordingly:



Further functionality that RiskMan can help you with

When editing a script in advanced mode, there is some additional functionality that we have exposed, but we cannot expect you to understand how to do them as it's literally the programming language. The two key areas of functionality are **filtering lists** and defining **sets**.

1.1.27 Filtering Lists

Allows us to restrict the values visible in a list. For example, you might have a site list containing the values:

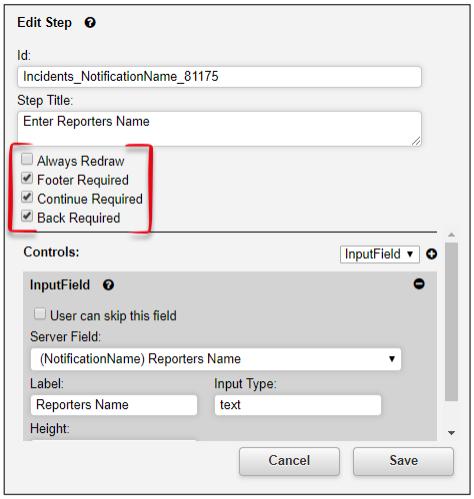
- Site A
- Site B
- Site C
- Site D

We have the ability to add a filter to that field, if, for example you didn't want Site C to be available to choose.

1.1.28 Sets

A Set (verb) is quite literally setting a property for a step in your path. For example, if you have "Reporter's Name" in your path, you might want to auto-populate the logged in **user's** or **display name** (Reporters Name is restricted at this time) to save time. This can be achieved by creating a Set.

1.1.29 Additional properties displayed in Advanced mode



When editing a step in advanced mode, there 4 properties visible:

- Always Redraw
- Footer Required
- Continue Required
- Back Required

These properties should only be modified on advice from RiskMan.