Location Intelligence
Infrastructure Asset Management

Confirm®

ConfirmConnect® Administration Guide

v26.30a.AM

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October 02, 2026

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ConfirmConnect®

ConfirmConnect® is the 'in the field' offering for Confirm. It provides the ability to perform 'in the field' tasks quickly and easily.

This documentation will take Administrators through the requirements to install and configure the web server and Confirm host aspects of Confirm-Connect®. It will also provide users basic information required to install and use ConfirmConnect.

Accessibility

ConfirmConnect is tested for accessibility using automated tool(s). However, we recognise that automated tools are not always sufficient and we are therefore committed to working with customers to resolve any specific issues that affect the accessibility of our applications for their users.

In this section

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User Guide

The User Guide section will help users to both Install and get started with using ConfirmConnect®.

How to Install and Sign In to ConfirmConnect

All details required for URL's, QR codes and login details will be provided by your Confirm Administrator.

How do I install for the first time?
Android and iOS

ConfirmConnect can be installed onto devices via the iTunes App Store or Google Play Store by searching for ConfirmConnect in the relevant store.

Windows

ConfirmConnect can be installed to a Windows 7 and above devices/desktops by performing the following steps:

1. Download and install the **Microsoft Visual C++ 2010 Redistributable**(vcredist_x86.exe)
2. Download the ConfirmConnect.zip file from the supplied URL
3. Extract the Contents of the Zip file to a folder of your choice
4. Double click the ConfirmConnect.exe contained within your chosen folder.

How do I Sign In?

Tap on the ConfirmConnect icon to launch the application which will then present you with a Sign In screen.



Enter Connect Service **URL**, **tenant** and **username**. Click on Continue button, this will display the password field. Enter the password to login to Confirm Connect.

Note: Tenant was historically referred to as database profile.

Note: Password change will be required whenever a user's password is reset by System Administrator in Confirm user security screen password expires.

Sign In when Single Sign-On has been enabled

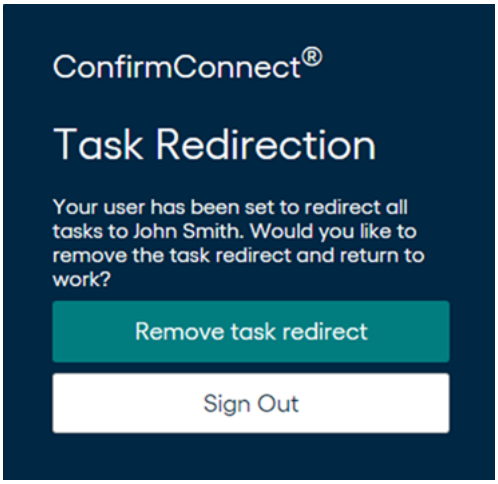
Enter Connect Service **URL**, **tenant** and User's **corporate credentials**. Click on Continue button.

User will be redirected to configured Identity Provider of the organisation for authentication.

Note: Please refer to **Single Sign-on** page for more information on Federated Security.

Sign In when Task Redirect has been enabled

Confirm allows tasks to be temporarily assigned to another officer should you be absent from work for a period of time. When signing back in you may be greeted with the message shown below:



- **Remove task redirect** will turn off task redirect and continue signing in as normal. A contact number may be shown for the Officer currently assigned to your tasks allowing you to contact them if needed.
- **Sign out** return to the sign in screen leaving the task redirection enabled for the officer specified.

How do I upgrade?

Upgrading to v3.10.0 from any earlier version

Follow the instructions below for your chosen platform:

1. Android
   - Install from the Google Play Store. Either browse the store or use the Android QR Code from the supplied URL.
2. Windows
   - Ensure that you complete any outstanding transfers, sign out and close ConfirmConnect.
   - Use the QR code from the supplied URL to download the ConfirmConnect.zip file.
   - Replace the contents of the previous install with the contents of this zip file.
3. iOS

   Versions pre-v3.10.0 are not compatible with the iTunes App Store release of ConfirmConnect. Follow the steps below:

   - Go to Menu > About and make a note of the **Installation ID**, pass the installation ID to your Confirm administrator.
   - Ensure that you complete any outstanding transfers and sign out.
   - Browse the iTunes store for ConfirmConnect and install.

     Note: This will install a second copy of ConfirmConnect on your device.

   - Remove the old version of ConfirmConnect.

Note: Uninstalling ConfirmConnect should only ever be done if advised to do so by Confirm as it can cause a device licence to be made redundant in Confirm.

Upgrading from v3.10.0 and above

Upgrading from version 3.10.0 to any later versions will be driven by the web service, unless otherwise specified. Once the web service has been updated, devices will react in one of the following ways:

ConfirmConnect will notify you once your server has been upgraded, follow the steps below:

1. When a user is already logged in.
   - A warning message will appear on the transfer screen indicating an update is available.
   - Complete any outstanding transfers and sign out.
   - Refer to "When a user is signed out" below.
2. When a user is signed out.
   - On the sign in screen, when you tap away from the URL field or when the sign in button is pressed a version check will occur and ConfirmConnect will be updated to the same version as the web service if required.
   - Once the update completes, the sign in screen will be displayed again with an updated version number displayed below the sign in button.
   - Sign in once more to continue working.

Menu and Refresh

This section covers the Menu and the Refresh buttons.



Menu

The Menu button will show a list of available actions and will vary depending on which modules your User has been granted. It also displays the number of unread Risks identified for the Tasks contained on your task list.



Risks	The count displays the number of unread Risks. Tapping on this option will display a list, alphabetically ordered, of all the Risks associated with the Tasks on your task list. Once you have viewed a Risk, the number will be updated
{Inspection Type Name}	If the 'Start of Day: Inspection Type' setting is set on the ConfirmConnect® Settings screen then an extra option will appear on the menu, which will be named as per the specified Inspection Type Name. Once selected, this option will display all Inspection Routes applicable to the User and, on selecting a Route, will display Features within the Route so that a Condition Survey of this Feature can be performed. **Note:** If only one Inspection Route is applicable to the User then this stage in the process will be omitted and the list of Features in the single Route will be displayed straight away.

Start of Day / End of Day	(Requires **Cost Capture** on page 43) **Start of Day** is used to set the Gang members and which Plant items are required for the day's work. **End of Day** is used to at the end of the working day, to track travel time back to the depot. **Note:** End of day replaces Start of Day in the menu once the first Task of the day has been started or when a Start of Day has been sent to Confirm. **Note:** A warning icon will appear on the End of Day option if a Task needs to be completed / paused before the End of Day information can be logged
Edit Gang / Plant	(Requires **Cost Capture** on page 43) The Gang members and Plant items can be altered at any time using this option. If there are changes to either the Gang or Plant, if any Jobs are in progress then the outstanding cost data, up to this point, is uploaded for all Jobs in progress. From this point on, the new values will be used ready for the next Cost Capture event. If there are changes to either the Gang or Plant and no Jobs are in progress then the outstanding cost data, up to this point, is uploaded for the non-productive time. From this point on, the new values will be used ready for the next Cost Capture event.
New SW Inspection	Create a new unattributable Street Works Inspection (requires ConfirmConnect® module 7040). **Note:** This option will also be available if you have access to the Enquiry or Condition Survey modules but will be limited to Defective Apparatus category types.
New Enquiry	Create a new Enquiry (requires ConfirmConnect® module 7000).
New Defect	Create a new Defect (requires either Enquiry or Condition Survey ConfirmConnect® modules 7000, 7010).
New Feature	Create a new Feature (requires Asset Survey module 7020).
Add Routine Occasion	Create an additional occasion on an existing Routine Works.
Refresh Lookups	Will re-download all lookups applicable to the user. This can be used if lookup information has been changed within the Confirm host software. Note: When you sign in to ConfirmConnect®, the lookups are downloaded automatically.
Select Routes	Allows an Action Officer to assign all live and unassigned features on an entire Inspection Route to themselves (requires either Condition 7010 or Asset Survey 7020 ConfirmConnect® modules).
Change Password	Change password allows a user to change their password. They may do this because they wish to, or their password has expired. **Note:** If Active Directory authentication is used, User Password will use the Current and New Password values to change the Active Directory password of the user.

Settings / About

Settings

- Text Size: Use the + or - buttons to increase or decrease the font size used by ConfirmConnect®.
- Allow Map Rotation: On by default, turn off to prevent maps from rotating.
- Use Imperial: Off by default, turn on to show imperial units when using the measuring tool on the locate map.
- Auto Refresh What's Going On: Off by default, turn on to automatically refresh What's Going On Here when the main map auto-pans to a new location.
- What's Going On Pan Tolerance %: When Auto Refresh What's Going On is enabled, this is the tolerance in percent that you can move before the map will automatically pan.
- What's Going On Bounding Buffer %: When Auto Refresh What's Going On is enabled, this is the additional area beyond the current bounds in percent that will refresh tasks when What's Going On is automatically refreshed.
- Send application logs: Clicking the button will send any error logs recorded on the device to the ConfirmConnect® web server.
- Custom Maps: Clicking the uninstall button will remove any maps installed by ConfirmConnect®
- Copy Confirm DB: (Android Only) To be used only when requested by Siemens Asset Management Software.

Note: Custom Maps will only appear if maps have been downloaded by ConfirmConnect®.

About ConfirmConnect® Displays information pertaining to ConfirmConnect, used for support purposes.

Sign Out

Sign out of ConfirmConnect, any outstanding task transfers will be completed first before the sign out.

This can be used to :-

- free up module licenses in the Confirm host software.
- sign in as a different user (sharing of devices).
- upgrade to a new version.
- Apply new module access. If you have been granted access to a new ConfirmConnect® module, you will need to sign out and sign in again to receive these changes.

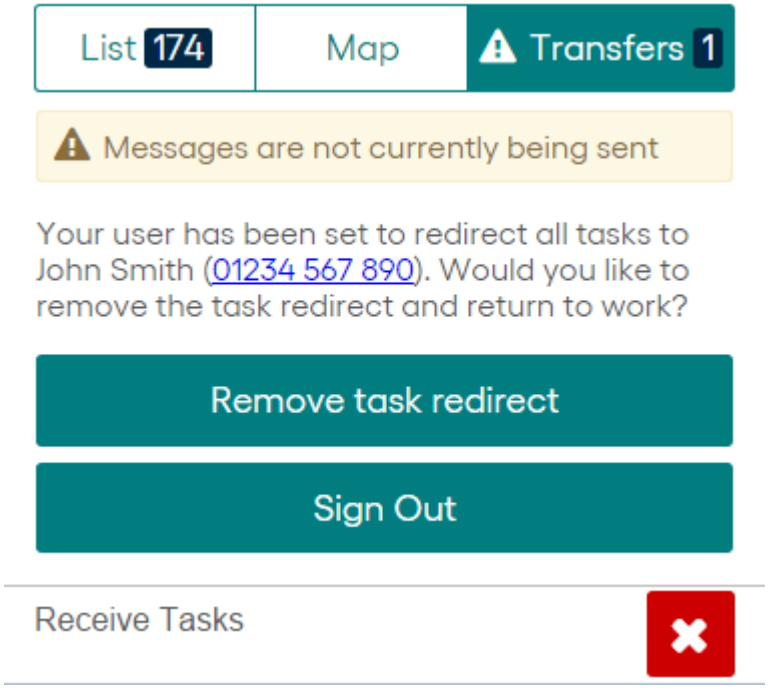
Note: There is no need to sign out of ConfirmConnect® unless the above is required.

Refresh Button

The refresh button will download all tasks associated to the user. This should be used when a fresh list of tasks is required.

Task Redirect

Refreshing your task list, when has been enabled, will present a message indicating the tasks have been redirected to the specified officer.



- **Remove task redirect** will turn off task redirection and download your tasks.
- **Sign out** return to the sign in screen leaving the task redirection enabled for the officer specified.
- Tapping **X** on the Recieve Tasks transfer message will cancel the Receive Task request and remove the task redirect message.

Note: When the Task Redirect message is the top most message, tasks below it will not transfer until the message is resolved by using one of the options mentioned above.

New SW Inspection

If you need to record a Street Works Inspection but cannot find the works in Confirm using the **What's Going On Here** on page 47 functionality, you can create an unattributable works by selecting **Menu** then **New SW Inspection**.

A list of Inspection Categories to choose from will be displayed.

Filling in a New Street Works Inspection

Works

Locate	**Locate / Relocate** on page 56 allows you to specify the location of the Works against which you are logging the Inspection. **Note:** Once an Inspection has been located, this option will be renamed to Relocate.
Select Site (required)	Presents a list of Sites within 100 metres of the located Inspection. **Note:** This list is only populated once a **Locate / Relocate** on page 56 action has been performed. **Note:** This will send a query to the server to get a list of possible Sites. If the Site you need isn't already in the list and you have no connectivity then you may need to save the task as a draft and come back to it later once the query has completed.

Select Promoter	Choose the promoter who you believe is responsible for the works you are inspecting.

Inspection

Category	Set to the chosen category when creating the Works and can be changed if required. Changing the Category will also re-validate the specified Outcome or Inadequacy.
Outcome	You need to make sure that the outcome selected is consistent with the Inspection Item results that have been recorded. If there is a problem then this will be explained in a warning above the Complete button.
Inadequacy	The list of options will vary with the selected outcome. Again, the item selected must match this Inspection Item results.
Inspection Items	A list of all applicable Inspection Items will be shown allowing you to mark each one as Pass, Fail or Unseen. The All Acceptable button will set all items as Acceptable.
Photo	Camera (left) button - Activates the camera allowing a photo to be linked with the Street Works Inspection. **Note:** On Windows devices, the Camera button does not launch the devices camera, it will act as the Folder button instead. Folder (right) button - Allows the selection of a photo from the device's gallery.

Save Draft

At any time you may save the Inspection and return to your tasks by using this button.

Complete

Send the completed Inspection Confirm. This option will be disabled if any of the required fields have not been populated or the Outcome / Inadequacy is inconsistent with the Inspection Item results.

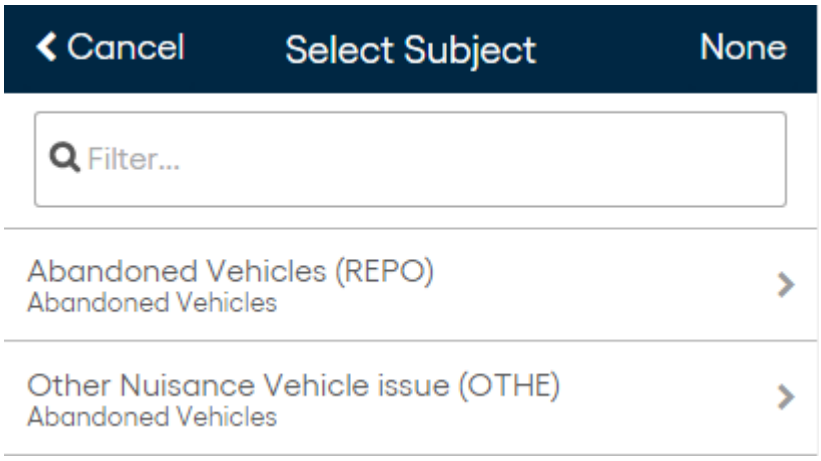
Delete

This will remove the inspection if it was raised in error.

New Enquiry

To create a new Enquiry select **Menu** then **New Enquiry**.

A list of Enquiry subjects to choose from will be displayed, select the required subject to continue.



Note: The **None** button will cancel the New Enquiry and return to the previous screen.

Filling in a New Enquiry

The New Enquiry form will be displayed allowing you to enter details of the Enquiry.

Enquiry Subject	Can be changed from the default Enquiry Subject chosen when creating the New Enquiry. **Note:** The **None** button will delete the New Enquiry and return to the Task, Map or Transfer screen (depending on which screen you were on when raising the New Enquiry).
Locate	**Locate / Relocate** on page 56 allows you to specify the location of the Enquiry. **Note:** Once an Enquiry has been located, this option will be renamed to Relocate.
add location... and add description...	Free text fields to enter information on the Enquiry.
Select Feature (required)	Presents a list of Features within range. Please see **Locating Features** for further details. **Note:** This list is only populated once a Locate action has been performed. **Note:** This will send a query to the server to get a list of possible features. If the Feature you need isn't already in the list and you have no connectivity then you may need to save the task as a draft and come back to it later once the transfer has completed
Select Status	Drop down list of available Enquiry Statuses. You only need to specify a status if you know that the default status for the Subject is not the one you want.
add notes...	Free text field to enter information on the Enquiry.
Photo	Camera (left) button - Activates the camera allowing a photo to be linked with the Enquiry. **Note:** On Windows devices, the Camera button does not launch the devices camera, it will act as the Folder button instead. Folder (right) button - Allows the selection of a photo from the device's gallery.

	Users can now tag the documents and photos on creating new Enquiries to Public or Private when attaching documents in Confirm Connect. The purpose of tagging documents as Public or Private in Confirm is to allow our customers to set this flag on documents, enabling third-party systems using API responses to provide the necessary context, such as determining which photos should be used and which should not. These tags are for informational purposes only and do not impose any security restrictions on document visibility in Confirm Connect This setting has been defaulted to Private, but can be overridden at a Tenant level via Confirm Web Settings -> Document Visibility (General Web Settings screen). The Tenant level setting can be overridden for individual Users via the General User Settings screen placed in Confirm Enterprise. If both the settings are populated, the User level setting will take precedence over the Tenant level. It is also possible to set the Document Classification. Default classification will be set according to the User or Tenant level setting.
Assign To	Assign this Enquiry to your chosen user.
Attributes	Tapping the Add Attributes button will display a list of All Operational Attribute Types. • Attributes specified against the Enquiry Subject will be automatically added to the Enquiry. • Mandatory Attributes will be shown with an *. • The value will be shown in yellow if the default value must be changed. **Note:** You will not be able to complete the Enquiry until the default value has been changed. • Attributes may only be deleted if they have been added to the Enquiry, those which are linked to the Enquiry Subject may not be deleted.
Offences	Create one or more Offences against the Enquiry. Select the appropriate Offence Type and enter the details. Fields highlighted in Yellow are mandatory. The "set offender email..." field must be in a valid email format, e.g. examplename@exampleemail.com

Save Draft

At any time you may save the Enquiry and return to your tasks by using this button.

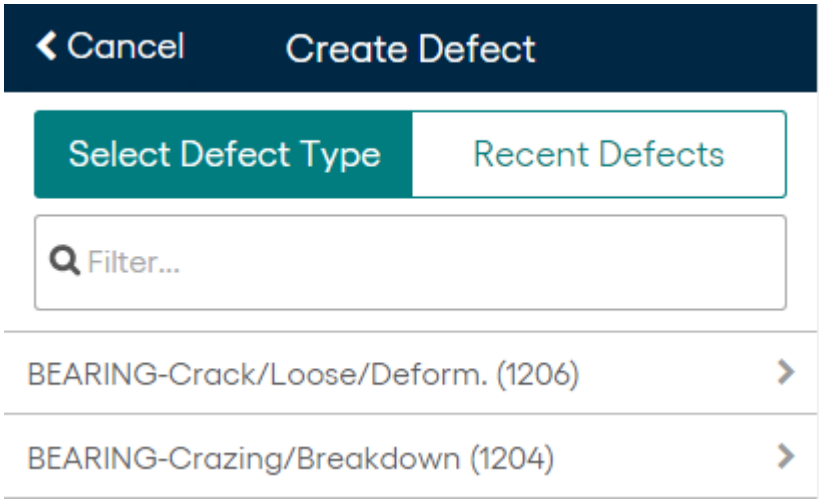
Send

Send the completed Enquiry to Confirm. This option will be disabled if any of the required fields have not been populated.

New Defect

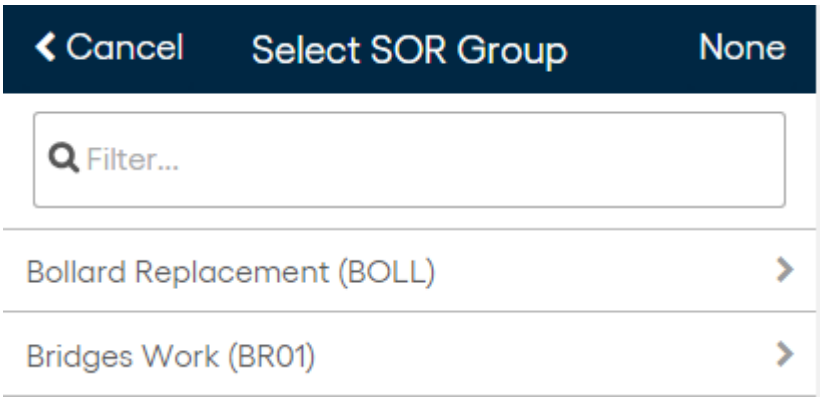
To create a new defect select **Menu** then **New Defect**.

A list of Defect Types to choose from will be displayed, select the required Defect Type to continue.



Note: External Defect Types are displayed with (E) appended to the Defect Type name.

A second list may appear allowing you to select one of the available SOR groups. Tapping the None button will not include any SOR Groups.



Note: The SOR Group list will only present itself if the Defect Type you selected contains one or more SOR Groups. Additional SOR Groups/Items may be added later. Also, should you change the defect type at a later time, this action will not display the SOR Group list and you will need to change the SOR Items as required.

Recent Defects

Once you have created other defects, the Recent Defects tab will be populated with up to 20 of these previous defects. This allows you to create multiple similar defects without needing to manually populate all of the defects details.

Filling in a New Defect

The New Defect form will be displayed allowing you to enter details of the Defect.

Locate	**Locate** top right of the summary map, allows you to specify the location of the Defect. This can be drawn as a point, line or polygon. **Note:** Once a Defect has been located, this option will be renamed to Relocate.
Defect Type	Can be changed from the default Defect Type chosen when creating the New Defect.
Select Feature (required)	Presents a list of Features within range. Please see **Locating Features** for further details. The selected Feature will be displayed on the New Defect Map along with the Defect task. **Note:** This list is only populated once a Locate action has been performed. **Note:** This will send a query to the server to get a list of possible features. If the Feature you need isn't already in the list and you have no connectivity then you may need to save the task as a draft and come back to it later once the transfer has completed
add location... add description...	Free text fields, enter location and description details.
Attributes	Tapping the Add Attributes button will display a list of All Operational Attribute Types. • Attributes specified against the Defect Type will be automatically added to the Defect. • Mandatory Attributes will be shown with an *. • The value will be shown in red if the default value must be changed. **Note:** You will not be able to send the Defect until this value has been changed. • Attributes may only be deleted if they have been added to the Defect, those which are linked to the Defect Type may not be deleted.
Select Priority	Sets the Priority for the Defect and subsequent Job, which is raised when uploaded and entered into Confirm. The Priority is automatically populated based on the Feature and the Defect Type, and potentially modified by Defect Attribute values, depending on rules configured in the system. A different Priority can be selected if required. The user may then be required to enter a comment justifying why the value has been altered.
Traffic Management	ConfirmConnect® now allows users to set or override traffic management while creating new defects. When a Job is created from this Defect, the Traffic Management value on the Job will be referenced from the Defect. To enable Traffic Management for New Defect in ConfirmConnect®, 'Display Traffic Management for Defect on Device' option should be ticked in the Condition Survey system settings
Photo	Camera (left) button - Activates the camera allowing a photo to be taken and linked with the Defect. **Note:** On Windows devices, the Camera button does not launch the devices camera, it will act as the Folder button instead.

	Folder (right) button - Allows the selection of a photo from the device's gallery. Users can now tag the documents and photos on creating new Defect to Public or Private when attaching documents in Confirm Connect. The purpose of tagging documents as Public or Private in Confirm is to allow our customers to set this flag on documents, enabling third-party systems using API responses to provide the necessary context, such as determining which photos should be used and which should not. These tags are for informational purposes only and do not impose any security restrictions on document visibility in Confirm Connect This setting has been defaulted to Private, but can be overridden at a Tenant level via Confirm Web Settings -> Document Visibility (General Web Settings screen). The Tenant level setting can be overridden for individual Users via the General User Settings screen placed in Confirm Enterprise. If both the settings are populated, the User level setting will take precedence over the Tenant level. It is also possible to set the Document Classification. Default classification will be set according to the User or Tenant level setting.
Assign To	This will assign the Job raised for this Defect to the chosen Action Officer. Leave this blank to assign the Job to yourself.
Select Contract	Sets the Contract on the Job raised for this Defect.
Select Cost Code	Sets the Cost Code on the Job raised for this Defect. You do not need to specify this if you want the default Feature / Overriding Cost Code to be used
SOR Items	Add any required SOR items or Groups to the Defect. The list of available Items or Groups are filtered based on the chosen **Feature**, **Priority** and **Contract**. If the Defect contains existing SOR Items, changing the Feature, Priority or Contract can cause these items to be invalid for the defect. A message will indicate they are invalid and these items will need to be discarded prior to sending the defect or parent task.

Mandatory Photos

If the Defect Type has been configured to require photos then Send Now will be disabled until a photo has been taken and the parent Enquiry or Survey will have the Send disabled.

Fix Now

(requires ConfirmConnect® Job module 7030)

Closes and Sends the Defect as well as immediately creating a Job Task based on the Defect details. After the Defect is closed the new Job task will be opened automatically. See **Job tasks**for more details on "Fix Now".

Send

Sends the completed Defect to Confirm. This option will be disabled if any of the required fields have not been populated.

New Feature

To create a new Feature select **Menu** then **New Feature**.

A list of Feature Types to choose from will be displayed, select the required Feature Type to continue.

Recent Features

Once you have created or edited other Features, the Recent Features tab will be populated with up to 20 of these previous Features. This allows you to create multiple similar Features without needing to manually populate all of the Feature details.

Filling in a New Feature

The New Feature form will be displayed allowing you to enter details of the Feature.

Feature Type	Can be changed from the initial Feature Type chosen, but only to another Feature Type in the same Feature Group. **Note:** The **None** button will delete the New Feature and return to the Task, Map or Transfer screen (depending on which screen you were on when raising the New Feature).
Locate	**Locate** allows you to specify the location and create a digitization of the Feature. From Confirm v14.00 this can be a Point, Line or Polygon. **Note:** Once a Feature has been located, this option will be renamed to Relocate.
Select Site (required)	Presents a list of Sites within 100 metres of the located Feature. **Note:** This list is only populated once a Locate action has been performed. **Note:** This will send a query to the server to get a list of possible Sites. If the Site you need isn't already in the list and you have no connectivity then you may need to save the task as a draft and come back to it later once the transfer has completed
Start Date	Can be changed from today's date if the Feature was installed in the past or will be installed or come into use at a future date.
Contract Area	When a Site is selected this value will default to match the Site Contract Area. **Note:** If Contract Area has already been set then changing the Site will not update the Contract Area to match. **Note:** If the option is not set then the Site Contract Area will be used.
Photo	Camera (left) button - Activates the camera allowing a photo to be taken and linked with the Feature. **Note:** On Windows devices, the Camera button does not launch the devices camera, it will act as the Folder button instead. Folder (right) button - Allows the selection of a photo from the device's gallery.

Users can now tag the documents and photos on creating new Feature to Public or Private when attaching documents in Confirm Connect.

The purpose of tagging documents as Public or Private in Confirm is to allow our customers to set this flag on documents, enabling third-party systems using API responses to provide the necessary context, such as determining which photos should be used and which should not. These tags are for informational purposes only and do not impose any security restrictions on document visibility in Confirm Connect

This setting has been defaulted to Private, but can be overridden at a Tenant level via Confirm Web Settings -> Document Visibility (General Web Settings screen).

The Tenant level setting can be overridden for individual Users via the General User Settings screen placed in Confirm Enterprise. If both the settings are populated, the User level setting will take precedence over the Tenant level.

It is also possible to set the Document Classification. Default classification will be set according to the User or Tenant level setting.

Inspection Route	Can be used to add the feature to one or more live Inspection Route(s). If the selected Inspection Route is a Route Survey then the feature will be automatically assigned to the Action Officer of the Route Survey else the feature will be unassigned. **Note:** Inspection Routes that belong to the Work Group of logged in user are available for selection.

All other details the same as when completing an Asset / Condition Survey on an existing Feature

Save Draft

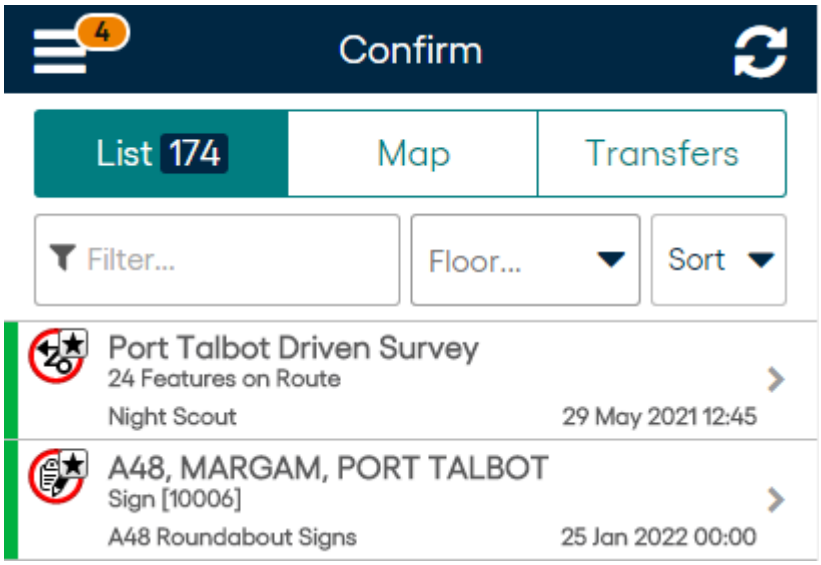
At any time you may save the Feature and return to your tasks by using this button.

Complete

Send the completed Feature to Confirm. This option will be disabled if any of the required fields have not been populated.

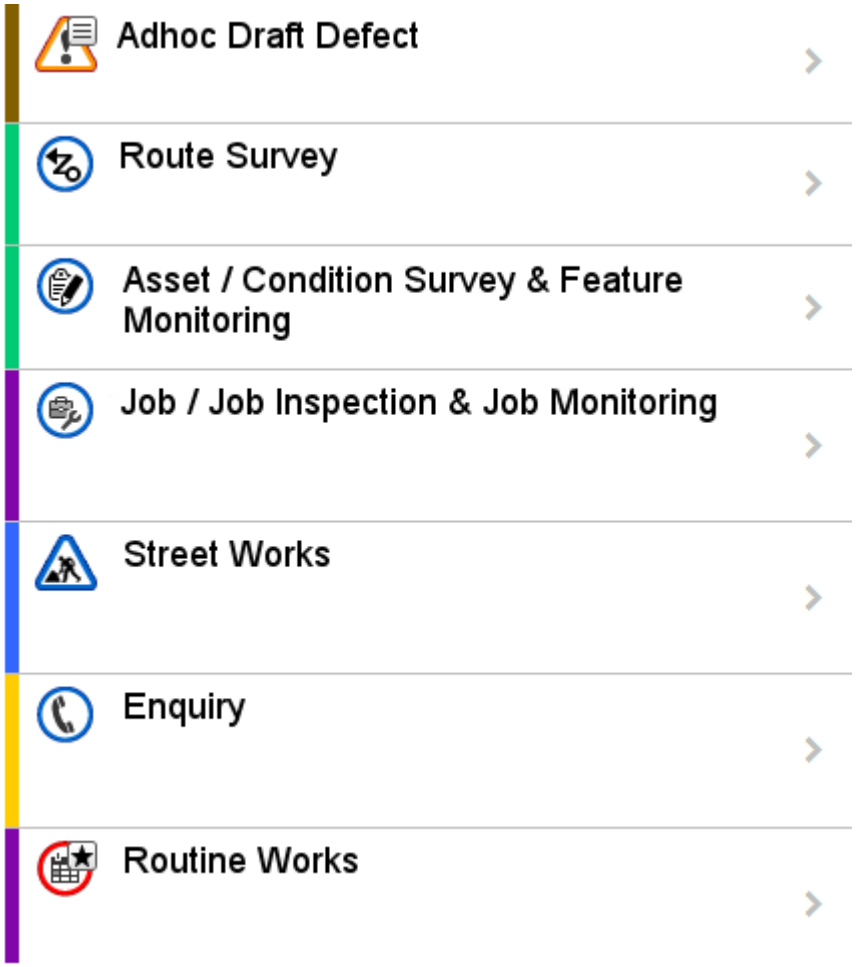
List

The Task list view displays a list of all tasks currently assigned to you and is the first screen you see when you login for the first time.



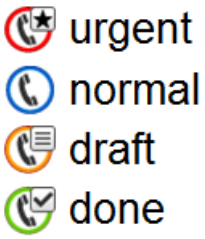
Identifying Task types

All task types are uniquely displayed to help distinguish between the different types. They are identified as follows:



Task Progress and Priority

In addition to the icons identifying the task type they also indicate the priority and current progress of the task by changing the colour of the icon and also by adding a symbol. Possible values are:



Filter...

Filters the tasks shown in the task **List** on page 22 and the **Map** on page 44 using both the text contained in the task, the task type, Feature Group, Feature Type and any retrieved What's Going on here tasks.

For example:

- Using the filter of "Job" will show all Job tasks and any other task type containing the text "Job".
- Using the filter of "Job 200" will filter the list so that only the Job (numbered 200) and any task containing the text of both "Job" AND "200" will remain in the list.

Attribute Filter...

When Confirm has been setup to use **Filter Features by Attribute Type**, this filter will be shown and allows you to further filter your Tasks and Features returned by What's Going on Here results. By default the attribute name will be shown and no filtering will be applied. Only Tasks and What's Going On Here results from the Features option associated with Features with the Attribute Value selected will be shown, other What's Going On Here results will not be shown when the Attribute filter is applied.

Setting an attribute value will filter your Tasks and Features returned by What's Going on Here, to show only those which are linked to Features containing the chosen attribute value.

Note: Attribute filtering will always filter any new Enquiry or new Defect which have been saved as a draft. To see these draft tasks, remove the filter. It will always filter an existing Enquiry when the Feature has been changed.

Note: Routine works are filtered if any of the Features contain the attribute at the chosen value. This can result in the Routine Task appearing even when switching the value entered in the filter.

Sort

Allows you to sort:

- Alphabetically - By Site name.
- By Due Date - The Due date (target completion) will be shown. Order will be tasks without dates and then oldest to newest.

- By Route Order - Tasks which have no route order will be shown at the top of the list, ordered by due date. Survey tasks are ordered by route name and then order number.
- By Schedule Date - The Estimated Start Date will shown. Order will be the Estimated Start Date for Jobs and scheduled Enquiries. Other tasks and Jobs/Enquiries without an Estimated Start Date will be sorted by Due date.

Street Works

Tasks with the Street Works icon relate to **Programmed Inspection**. Inspections are only shown if they are due in the next 7 days.

There are two general types of inspections, **Trench** based inspections (e.g. Category C) and whole **Works** inspections (e.g. category A).

Trenches	These are displayed for trench based inspections only. The top trench is the "primary" trench for the inspection and must have a result recorded against it. Recording results against other trenches is optional.
Inspection History	This shows previous inspections of any kind that have taken place for that works.

Trench

With Trench based inspections the Outcome, Inadequacy and inspection items are listed against each individual trench.

Works

With whole Works based inspections the Outcome, Inadequacy and inspection items are listed on the main screen.

Outcome	You need to make sure that the outcome selected is consistent with the Inspection Item results that have been recorded. If there is a problem then this will be explained in a warning above the Complete button.
Inadequacy	The list of options will vary with the selected outcome. Again, the item selected must match this Inspection Item results.
Photo	Camera (left) button - Activates the camera allowing a photo to be linked with the Inspection. **Note:** On Windows devices, the Camera button does not launch the devices camera, it will act as the Folder button instead. Folder (right) button - Allows the selection of a photo from the device's album. **Note:** If you also have an Offence on this Inspection, photos taken on the Inspection will also be linked to the Offence.
Offence	Create one or more Offences against the Inspection. Select the appropriate Offence Type and enter the details. Fields highlighted in Yellow are mandatory. The "set offender email..." field must be in a valid email format, e.g. examplename@exampleemail.com.
Follow Up From and To dates	The Follow Up **From** and **To** dates will take their default values from Confirm. Changing the **From** date will retain the Inspection window and the **To** date will move accordingly. Changing the **To** date allows you to increase duration of the Inspection window and the **From** date field will not change.

Save Draft

At any time you may save the Inspection and return to your tasks by using this button.

Complete

Send the completed Inspection Confirm. This option will be disabled if any of the required fields have not been populated or the Outcome / Inadequacy is inconsistent with the Inspection Item results. For Trench based inspection, the complete button will remain disabled until at least one Trench has been inspected.

Enquiries

Selecting an Enquiry from the task list will launch the Enquiry form which gives you the Enquiry details, status history, any commitments, customer details and any **Linked documents**. If the Enquiry has a Feature associated with it then any Defects not yet actioned for that Feature will be shown.

You will be able to perform the following: -

Relocate

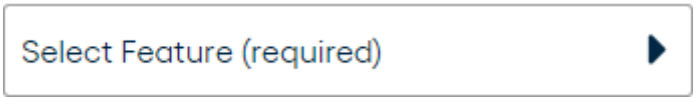
If the Enquiry is in the wrong location you can use the **Relocate** button (located in the top right corner of the map) to locate it in the correct position.

Update Enquiry

Enquiry Subject	Change the Subject as required. Note the following: - • Changing the Subject will automatically update the Service accordingly. • If the Enquiry is linked to a defect, you may only change the subject type to one which allows defects to be created. • Changing the Subject to one which doesn't allow creation of defects will remove the defect section from the Enquiry form.
Select New Status	Update the status of the Enquiry. You don't have to set this if the status hasn't changed
add notes...	Free text field to enter information on the status change.
Photo	Camera (left) button - Activates the camera allowing a photo to be linked with the Enquiry. **Note:** On Windows devices, the Camera button does not launch the devices camera, it will act as the Folder button instead. Folder (right) button - Allows the selection of a photo from the device's album. **Note:** If you also have an Offence on this Enquiry, photos taken on the Enquiry will also be linked to the Offence. It is possible to mark documents on Enquiries as Public or Private when attaching documents in ConfirmConnect. The purpose of tagging documents as Public or Private in Confirm is to allow our customers to set this flag on documents, enabling third-party systems

	using API responses to provide the necessary context, such as determining which photos should be used and which should not. These tags are for informational purposes only and do not impose any security restrictions on document visibility in Confirm Connect This setting has been defaulted to Private, but can be overridden at a Tenant level via Confirm Web Settings -> Document Visibility (General Web Settings screen). The Tenant level setting can be overridden for individual Users via the General User Settings screen placed in Confirm Enterprise. If both the settings are populated, the User level setting will take precedence over the Tenant level.
Reassign To	Assign this Enquiry to your chosen Action Officer. You do not need to set this field to keep the Enquiry assigned to you.
Attributes	Update any existing Attributes. You may not add further attributes. Click the info button to show the Description associated with the Operational Attribute Type, to aid in the setting of the value.
Custom Forms	Displays list of forms configured for Connect Enquiry workflow in Confirm Web Settings -> Custom Forms. Users can click on the Form names to open the form URL.

Select Feature



The rules for selecting or changing the Feature are as follows:

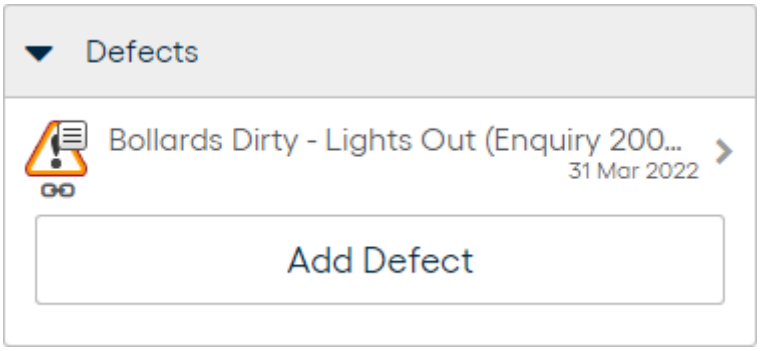
- Defaults to the Feature currently linked to the Enquiry, and the Defects list will show all Defects to be actioned for that Feature. When "Select Feature" is displayed the Enquiry is not linked to a Feature and Defects list will be disabled.
- If the Enquiry is linked to an existing Defect it will not be possible to change the Feature (the ... icon will not be visible).
- Changing the Feature will cause the Defect list to display those Defects applicable to the selected Feature.

Note: The Feature on the Enquiry will only be updated if the Enquiry is sent with a link to a new Defect.

Defects

Displays existing and new Defects for the Enquiry Feature.

Users can now search and filter Defects by number, type, description, or location when linking a Defect to an Enquiry, allowing for quick and efficient identification of the correct Defect.



- If no Defects exist against the Enquiry Feature, the first new Defect raised will be automatically linked to the Enquiry.
- If no Defect is already linked to this Enquiry, it's possible to select an existing Defect and link it to the Enquiry.
- Subsequent new Defects can be raised on the Enquiry but they will not be linked. You may change which Defect is linked to the Enquiry prior to uploading to Confirm assuming no Defects were linked prior to downloading the Enquiry.
- An Enquiry may only be linked to a single Defect.
- If the Enquiry Feature already contains a linked Defect, it will not be possible to change the linked Defect.
- It is possible to supersede the linked Defect, in this scenario the superseded defect will be linked to the Enquiry.
- The Defect linked to the Enquiry will be positioned at the top of the list and displays a chain icon.
- For more information see **Superseding Defects** and **New Defect.**

Offences

Create one or more Offences against the Enquiry.

Select the appropriate Offence Type and enter the details. Fields highlighted in Yellow are mandatory. The "set offender email..." field must be in a valid email format, e.g. examplename@exampleemail.com.

Save Draft

At any time you may save the Enquiry and return to your tasks by using this button.

Send

Send the Enquiry to Confirm. This option will be disabled until changes have been made.

Job tasks

Opening a Job task will present you a Job screen displaying all the details of that Job and if applicable Street Works details including Permit Status. The Map shows the geometry of any Defects linked to the Job, as well as that of the Feature.

Feature Attributes Any Attributes applicable to the Feature will be shown in this list.

	You are able to edit these Attributes but it is not possible to delete them or add any further Attributes.
Feature Conditions	Any Conditions applicable to the Feature will be shown in this list. You are able to edit these Conditions but it is not possible to delete them or add any further Conditions.
Meter Reading	All Observation Types specified as Meter and linked to the Feature will be displayed in the Meter Reading section. Mandatory Observation Types linked to a regime are highlighted when displayed in the list. You are able to edit these Conditions but it is not possible to delete them or add any further Conditions. User cannot enter a value that exceeds the maximum limit of the observation parameter.
Attributes	Any Attributes applicable to the Job will be shown in this list. Attributes may be grouped into Categories by the Confirm Administrators, if done, the Category name/s will be displayed in the Attribute panel instead and, on selecting one, all the Attributes within this Category will be displayed in a separate screen. The number of Attributes within each Category is shown against each one in the list. You will also be able to add more Attributes and delete those which you have added but you are not able to delete attributes which were downloaded with the Job. Additional 'Dependent' Attributes may be added automatically on selection of certain options on 'Pick' or 'Inline' Attributes, as per the configuration by the Confirm Administrators. If the 'Dependent' Attribute(s) are in another Category then they will be added within that Category's section. These additional attributes will be automatically removed if the 'Parent' Attribute's value is then changed to an option where these are no longer applicable, provided the Attributes have not been uploaded yet.
Reassign To	Assign this Job to a different Action Officer. You do not need to set this field to keep the Job assigned to the current Action Officer. After choosing the Officer and confirming the action, the Job will be removed from the device. **Note:** This field is only available for users with the *Job -> Reassign in ConfirmConnect* User Security option switched on, and if the Job is assigned to them as the Job Officer. Also, the field is only enabled if the Job is not in progress.
Sub-allocate Job	Sub-allocate the Job to a different Officer in the Gang. After choosing the Officer and confirming the action, the Job will be removed from the device. The list of Officers that can be selected is controlled by Device Data Keys, and will only contain Officers linked to a User with a ConfirmConnect profile. **Note:** This option is only available to the Device Action Officer of the Gang to which the Job is allocated. The Job must also have been allocated in ConfirmWorkzone. **Note:** This field is only available for users with the *Job -> Reassign in ConfirmConnect* User Security option switched on. Also, the field is only enabled if the Job is not in progress.
Return to Supervisor	When the Job is sub-allocated this option allows the Officer to return the Job to the Supervisor, the Job will be removed from the device.

Note: For this option to be available the Job must also have been allocated in ConfirmWorkzone and then sub-allocated to the Officer.

Note: This field is only available for users with the *Job -> Reassign in ConfirmConnect* User Security option switched on. Also, the field is only enabled if the Job is not in progress.

Select New Status — Update the Status of the Job. You don't have to set this if the status hasn't changed.

Note: This field is available only if the Job is reassigned to another Action Officer.

Add notes — Free text field to enter information on the status change.

Note: This field is available only if the Job is reassigned to another Action Officer.

Photo — Camera (left) button - Activates the camera allowing a photo to be linked with the Enquiry.

Note: On Windows devices, the Camera button does not launch the devices camera, it will act as the Folder button instead.

Folder (right) button - Allows the selection of a photo from the device's album.

Users can now tag the documents on Jobs to Public or Private when attaching documents in Confirm Connect.

The purpose of tagging documents as Public or Private in Confirm is to allow our customers to set this flag on documents, enabling third-party systems using API responses to provide the necessary context, such as determining which photos should be used and which should not. These tags are for informational purposes only and do not impose any security restrictions on document visibility in Confirm Connect

This setting has been defaulted to Private, but can be overridden at a Tenant level via Confirm Web Settings -> Document Visibility (General Web Settings screen).

The Tenant level setting can be overridden for individual Users via the General User Settings screen placed in Confirm Enterprise. If both the settings are populated, the User level setting will take precedence over the Tenant level.

It is also possible to set the Document Classification. Default classification will be set according to the User or Tenant level setting.

Note: If you also have an Offence on this Enquiry, photos taken on the Enquiry will also be linked to the Offence.

SOR Items — Any SOR Items applicable to the Job will be shown in this list. You will also be able to add more SOR Items and amend or delete existing Items.

Custom Forms — Displays list of forms configured for Connect Job workflow in Confirm Web Settings -> Custom Forms. Users can click on the Form names to open form URL.

Jobs raised via Fix Now

Where the Job has been raised via the "Fix Now" button on a new Defect:

- The title will display "TBA" where the job number would normally be displayed.
- Attributes are available and value of any matching Defect attribute will be copied to the corresponding Job attribute.
- Feature Conditions will not be available.
- Linked Documents will not available

Note: If the Officer is the Officer for a Work Crew the Job will have already been allocated to that Work Crew

Note: If **Cost Capture** on page 43 is enabled for both Jobs and Surveys and you create a Defect from the Survey and use Fix Now then the Survey will be automatically paused while the Job is worked on. In this scenario, when you start the Job you will be prompted to enter the time spent so far on the Survey as it is assumed there is no Travel / Break time between pausing the Survey and starting the Job

Status Buttons

There are four Status buttons at the bottom of the Job screen. When there are more than one Statuses associated with a button, a pop up screen will allow you to choose the appropriate status. Tapping on a status will immediately send the chosen Status update.

Note: Tapping a button except for the "Other" button when only one status is associated with it, will immediately send that Status and a pop up will not be displayed. A pop up will always be displayed for the "Other" button

Note: Ensure you enter any notes required in the notes field before tapping the chosen status button.

Note: The four status buttons are replaced by Send and Save Draft buttons if the Job is reassigned to another Action Officer using the 'Reassign To' option.

Start / Pause / Resume

The Start button will send a start status update and will change to "Pause" after it has been tapped. The Job screen will remain open and the Job remains on the device. A warning to take a before photo is displayed until a photo is taken or the Start button is first tapped.

Pause is displayed if the Job is already in progress and tapping this button will show statuses that stop the Job from being in progress but leave the Job on your device. Once this button has been tapped it's text will change to Resume.

Resume behaves in the same way as Start except that the Actual Start Date of the Job will not be changed.

If any Attributes are set to 'On Start' on the 'Mandatory on ConfirmConnect® Jobs' setting on the Operational Attribute Type screen in Confirm Client then these will be blanked when the Job is first downloaded and you will be prompted to set a value before the Job is first Started or Resumed. If the setting is 'On Start and Resume' then these will also be blanked whenever the Job is Started or Resumed, e.g. after a Pause.

If **Cost Capture** on page 43 is enabled for Travel / Breaks then clicking Start / Resume will prompt you to record what you were doing up to the point that you started / resumed work on this Job. Clicking Pause will prompt you to enter the costs incurred to date on the Job

Other

The Other button is linked to those Job Statuses which will leave the Job on the device and assigned to you but will not change the In Progress state of the Job. The Job screen will remain open when a status update is sent using this button.

Remove

The Remove button is linked to those Job Statuses that are not Completing Statuses but will remove the Job from the device. The Job screen is closed and the Job is removed from the device after a Remove status has been sent.

If **Cost Capture** on page 43 is enabled and you have started the Job you will be prompted to enter the costs incurred to date on the Job. No costs are recorded if the Job is removed without being started.

Complete

The Complete button is linked to the Job Complete Statuses and is disabled until the Job has been Started (a start status has been sent). The Job screen is closed and the Job is removed from the device after a Complete status has been sent. A warning to take an after photo is displayed once the Start Status has been sent. This is displayed until a photo is taken or the Job has been Completed.

If any Job Attributes are set to 'On Complete' on the 'Mandatory on ConfirmConnect® Jobs' setting on the Operational Attribute Type screen in Confirm Client then these will be blanked when the Job is downloaded, started or resumed. User will be prompted to set a value before the Job is completed. If the Attribute is set to "On Pause and Complete' then user has to set a value before Job is Paused and re-enter when Job is Completed.

If **Cost Capture** on page 43 is enabled you will be prompted to enter the costs incurred on the Job.

If the "Automatically Reduce Stock on Consumption" Stock Management setting is ticked then Confirm will reduce the Stock Levels by the material amounts connected to the Job.

If Job Costing is switched on and the Action Officer is linked to a Labour Type then material entered by the user will be used to as the quantity of each material to reduce stock levels.

If Job Costing is switched off or the Action Officer is not linked to a Labour Type, then for each SOR Item on the Job, the Materials Cost Details breakdown records will be assessed to calculate the quantity of each material to reduce stock levels.

The Stock at the single location will be reduced; if more than one Material record is found, the Stock quantity will be reduced from the record with the greatest quantity, even if this goes negative. If no Material record is found at all then no stock reduction takes place for this Material Type.

Job Inspection tasks

Opening a Job Inspection task will present you a Job screen displaying all the details of that Job. The Map shows the geometry of any Defects linked to the Job, as well as that of the Feature.

Feature Attributes	Any Attributes applicable to the Feature will be shown in this list. You are able to edit these Attributes but it is not possible to delete them or add any further Attributes.

Feature Conditions	Any Conditions applicable to the Feature will be shown in this list. You are able to edit these Conditions but it is not possible to delete them or add any further Conditions.
Attributes	Any Attributes applicable to the Job will be shown in this list. Attributes may be grouped into Categories by the Confirm Administrators, if done, the Category name/s will be displayed in the Attribute panel instead and, on selecting one, all the Attributes within this Category will be displayed in a separate screen. The number of Attributes within each Category is shown against each one in the list. You will also be able to add more Attributes and delete those which you have added but you are not able to delete attributes which were downloaded with the Job.
Reassign To	Assign this Job to your chosen Action Officer. You do not need to set this field to keep the Job assigned to you.
Status	Update the Status of the Job. You don't have to set this if the status hasn't changed
add notes...	Free text field to enter information on the status change.
SOR Items	Any SOR Items applicable to the Job will be shown in this list. You will also be able to add more SOR Items and amend or delete existing Items but only on Jobs that are not linked to an Order.

Save Draft

At any time you may save the Job Inspection and return to your tasks by using this button.

Send

Sends the updated Job to Confirm. This option will be disabled if no changes have been made. The Job will remain on the Task List if the update eaves the Job Inspection assigned to you and the Job still requires inspecting.

Job Monitoring tasks

Opening a Job Monitoring task will present you a Job screen displaying all the details of that Job.

Outstanding Payment Requests	The Payment Request Reference, Request Header Notes and Request Job Notes are displayed for all Payment Requests that are not included on a committed Payment Batch
Feature Attributes	Any Attributes applicable to the Feature will be shown in this list. You are able to edit these Attributes but it is not possible to delete them or add any further Attributes.
Feature Conditions	Any Conditions applicable to the Feature will be shown in this list. You are able to edit these Conditions but it is not possible to delete them or add any further Conditions.

Attributes	Any Attributes applicable to the Job will be shown in this list. Attributes may be grouped into Categories by the Confirm Administrators, if done, the Category name/s will be displayed in the Attribute panel instead and, on selecting one, all the Attributes within this Category will be displayed in a separate screen. The number of Attributes within each Category is shown against each one in the list. You will also be able to add more Attributes and delete those which you have added but you are not able to delete attributes which were downloaded with the Job.
SOR Items	Any SOR Items applicable to the Job will be shown in this list but are not editable. The Quantity displayed in this list is the Completed Quantity, which is the total of all committed Payments plus the total of all outstanding Payment Requests for the Item.
Failures	Failures can be added to the Monitoring Task

Save Draft

At any time you may save the Monitoring Job and return to your tasks by using this button.

Send

Sends the completed Monitoring task to Confirm.

Asset / Condition Survey

Selecting an Asset / Condition Survey task list will launch the Feature form. The list of options available then depends on whether the task is an Asset or Condition Survey:

Asset Survey

Relocate	Allows you to **relocate** the Feature. You are also able to change the overall shape of the Feature.
Feature Type	You can change this to another Feature Type that is within the same Feature Group as the current Feature Type
Select Classification	You can change the Feature Classification as required. **Note:** Changing the Classification will not alter the priority on any existing defects on this Feature.
Attributes	Mandatory attributes are flagged with a "*" and will have a yellow background if set to a default value which must be changed. Click the info button to show the Description associated with the Attribute Type, to aid in the setting of the value. **Note:** Attributes matching the IoT Device Id Attribute Type instead of showing a free text field, instead will show a button that allows the tag to be read from the IoT device, validated in AWS and the device to be provisioned in AWS on completion of the survey.

Note: If the IoT Device Id Attribute Type is flagged as Mandatory this means the survey can only be completed on an NFC enabled device.

Inventory References	Inventory Types that allow Features to be linked will be displayed. References to the current Feature are also shown. Only Current and Future references are shown. For Asset Surveys only, all applicable Inventory Types are shown, whether existing links are present or not and an add button is available to allow new links and references to be created. On clicking Add, Features matching the Inventory Type Linked Feature Group will be listed. A request to retrieve Features nearby is also sent and a spinner is shown to indicate when the request is still in progress. In cases where a Feature might be listed under multiple Inventory Types, you will be asked to selected the Inventory Type to which the link or reference should be added. **Note:** Inventory Types with a blank Linked Feature Group cannot be captured in Connect. This is a mandatory field used to enable linking and referencing in Connect. **Note:** The Linked Feature Group must be present in the downloaded Feature Group lookup data, in order for a new link or reference to be added, and so is subject to the Device Data Key access associated with this Feature Group.
Custom Forms	Displays list of forms configured for Connect Asset Survey workflow in Confirm Web Settings -> Custom Forms. Users can click on the Form names to open form URL.

Note: If you only have the Condition Survey module, and not the Asset Survey module, then the Attributes, Feature Type and Classification will be shown but will be read only. It will not be possible to Relocate the Feature without the Asset Survey module.

Condition Survey

Defects	General Defects against the Feature can be logged, which will not be linked to any particular Observation Type. Existing Defects against the Feature are displayed and can be linked to an Enquiry or **Superseded** if required. Users can now search and filter Defects by number, type, description, or location when carrying out Inspections/Surveys, allowing for quick and efficient identification of the correct Defect.
Conditions	The previous condition from the last inspection will be shown. Make sure you check that all of the Conditions are valid before completing the task. Click the info button to show the Description associated with the Observation Type & Observation Parameter, to aid in the setting of the value.
Condition linked Defects	A Defects option will be available under each Observation Type to which Defect Types have been linked. Existing Defects against the Observation Type are displayed and can be **Superseded** if required.
Custom Forms	Displays list of forms configured for Connect Condition Survey workflow in Confirm Web Settings -> Custom Forms. Users can click on the Form names to open form URL.

Any Defects raised as part of a Survey task, by default, will only be sent to Confirm when the whole task is completed.

Note: If you only have the Asset Survey module, and not the Condition Survey module, then the Conditions will be shown but will be read only. Defects will only be shown if you have the Condition Survey module.

Note: Asset/Condition survey cannot be performed on dead Features.

Start / Pause / Resume

Start, Pause and Resume is only enabled on Surveys if **Cost Capture** is enabled.

The Start button will trigger **Cost Capture** and the button will change to "Pause" after it has been tapped.

Pause is displayed if the Survey is already in progress and tapping this button will again trigger **Cost Capture**. Once this button has been tapped it's text will change to Resume.

Resume behaves the same way as Start.

If **Cost Capture** on page 43 is enabled for Travel / Breaks then clicking Start / Resume will prompt you to record what you were doing up to the point that you started / resumed work on this Survey. Clicking Pause will prompt you to enter the costs incurred to date on the Survey

Note: You cannot start / resume one Survey if another Task has already been started for Cost Capture

Inventory References

Where Feature Inventory References exist, as defined in the Inventory tab of the Feature in Confirm Client, then these are displayed against each Asset/Condition Survey task. It shows the Features linked to the Inventory of the Feature associated with the Task and also shows Features that reference this Feature by Inventory. these are navigate-able so that it is easy to move between the different components of the same overall Feature.

Save Draft

At any time you may save the Survey and return to your tasks by using this button.

Complete

Send the completed Survey to Confirm. This option will be disabled if any of the required fields have not been populated.

Fix Now on Defects

Closes and Sends Defects as well as immediately creating a Job Task based on the Defect details. After the Defect is closed the new Job task will be opened automatically. See **Job tasks**for more details on "Fix Now". Also available for **Superseded Defects** which are not linked to an existing Job.

Send Now on Defects

The Send Now button on Defects raised from an Inspection Survey can be used to immediately send the Defect back to the office so it can be actioned. This will not send the Survey back to Confirm. Using the Save Draft button will save the Defect against the Survey and will be sent when the Survey has been Completed. Also available for **Superseded Defects**.

Note: Using the Send Now button on the Defect will remove the Defect from the device. An active connection is required for the Defect to be sent immediately.

Feature Monitoring

Selecting a Feature Monitoring task from the task list will launch the Feature form.

Relocate	Allows you to **relocate** the Feature. You are also able to change the overall shape of the Feature. **Note:** The ability to change the shape of a Line or Polygon Feature is only available with Confirm v14.00 or above. Prior to this version all Features will appear as points.
Defects	General Defects against the Feature can be logged, which will not be linked to any particular Observation Type. Existing Defects against the Feature are displayed and can be **Superseded** if required.
Conditions	The previous condition from the last inspection will be shown. Make sure you check that all of the Conditions are valid before completing the task
Condition linked Defects	A Defects option will be available under each Observation Type to which Defect Types have been linked. Existing Defects against the Observation Type are displayed and can be **Superseded** if required.

Any Defects raised as part of a Feature Monitoring task, by default, will only be sent to Confirm when the whole task is completed.

Save Draft

At any time you may save the Survey and return to your tasks by using this button.

Complete

Send the completed Survey to Confirm. This option will be disabled if any of the required fields have not been populated.

Fix Now on Defects

Closes and Sends Defects as well as immediately creating a Job Task based on the Defect details. After the Defect is closed the new Job task will be opened automatically. See **Job tasks**for more details on "Fix Now". Also available for **Superseded Defects** which are not linked to an existing Job.

Send Now on Defects

The Send Now button on Defects raised from an Inspection Survey can be used to immediately send the Defect back to the office so it can be actioned. This will not send the Survey back to Confirm. Using the Save Draft button will save the Defect against the Survey and will be sent when the Survey has been Completed. Also available for **Superseded Defects**.

Note: Using the Send Now button on the Defect will remove the Defect from the device. An active connection is required for the Defect to be sent immediately.

Route Survey

Selecting a Route Survey from the task list will launch the Route Survey form which will display the details of the Inspection Route including any defects you may have already logged.

You will be able to quickly survey the entire route and raise "Fast" defects on any of the Features on the Route.

Start

Using the Start button will launch the Route Survey Drive screen that, by default, will show all of the features contained on the route and your current location (requires GPS to be enabled). See below for further details on the Route Survey Drive screen.

Defects

Displays a list of all existing and newly created Defects.

Newly created defects, those raised via the Route Drive screen, can be edited by tapping on the **New Defect** on page 17 in this list.

Existing defects may not be deleted but they can be reviewed and **superseded** by tapping on them in this list.

Users can now search and filter Defects by number, type, description, or location during a Route Survey, allowing for quick and efficient identification of the correct Defect.

Note: You may change the feature, on a new defect, to a feature which exists on the route. You may not change the feature on an existing defect.

Emergency Defects

Defects raised on a Route Survey can be sent immediately using the **Send Now** button, which is enabled when all the required fields on the defect are populated.

If you do not need to send defects immediately you can use the **Save Draft** option which will leave the defect on the survey until the survey is completed.

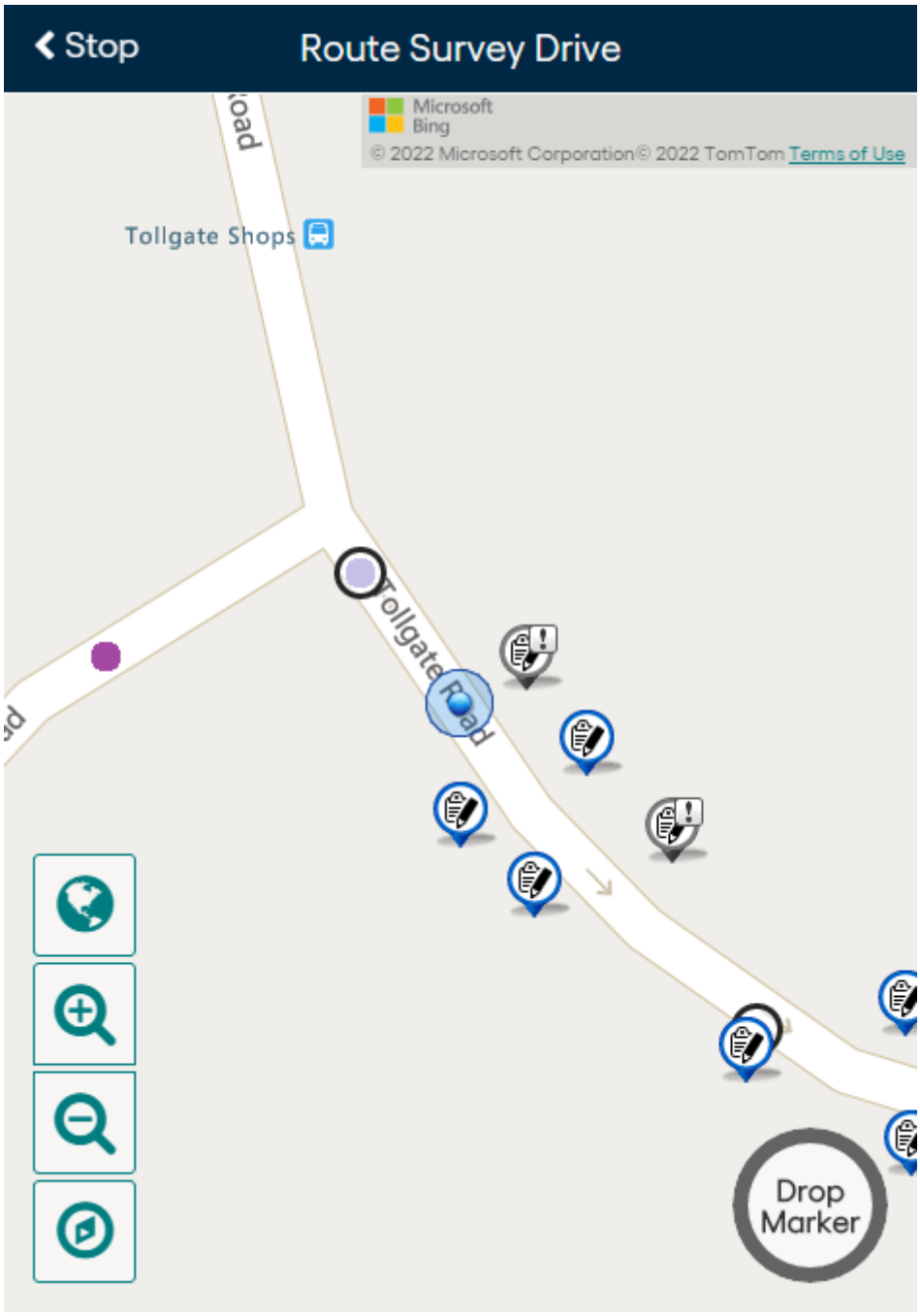
Fix Now

(requires ConfirmConnect® Job module 7030)

Closes and Sends the Defect as well as immediately creating a Job Task based on the Defect details. After the Defect is closed the new Job task will be opened automatically. See **Job tasks**for more details on "Fix Now".

Route Survey Drive Screen

The Route Survey Drive screen will allow you to raise Defects against a feature on the route. It will also track your GPS location keeping you in the center of the map.



You can raise defects in two ways:

1. **Raise a defect on a feature**. Typically used for point features like streetlights and trees where the location of the defect can be accurately determined from the feature location.



A feature which does not contain existing defects.



A feature containing existing defects.

Tap to display the feature and a list of all existing defects.

- Tap the feature from the list to create a new defect.
- Tap any defect from the list to review and **supersede** that defect.



A feature containing a new defect.

To edit the details of a new defect you must stop the driven survey and tap on the draft defect in the list of defects.

2. **Raise a defect at a point on the map**. Typically used for features such as road sections where the defect needs to be located within the bounds of the feature. Tap anywhere on the map and tap on the required fast defect type to create the defect at that location.

   Inline Defect for Route Survey controls the behavior of the defect creation.The behaviour depends on the Inline Defect Creation setting.This setting is introduced in Inspection Route under Inspections.

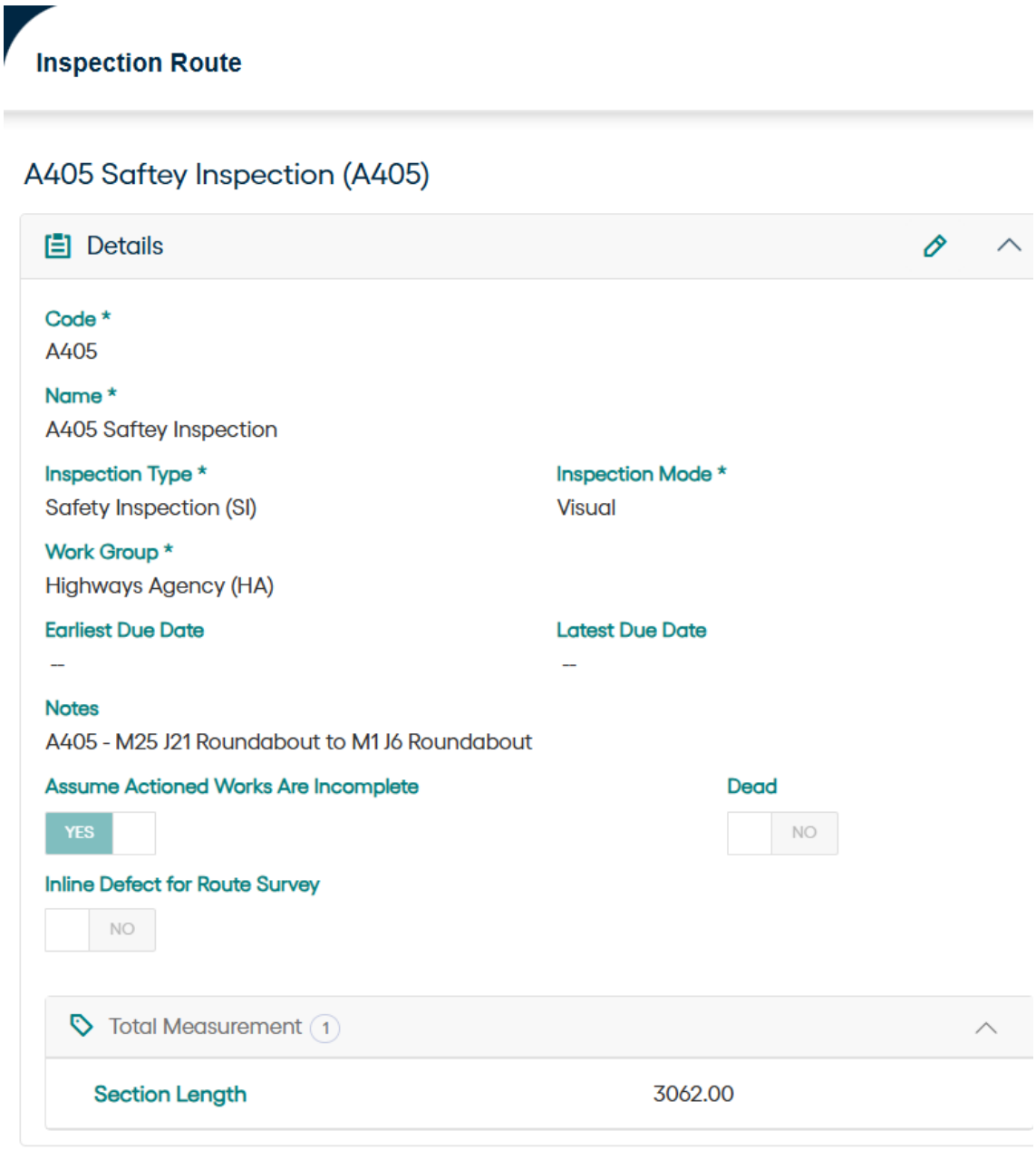
   When this Setting is Enabled

   The defect details can be entered inline during the Route Survey.

   - Tap on the map and select the required Fast Defect Type.
   - The defect can be created inline during the route survey, allowing the defect to be completed without stopping the survey.

   When this Setting is Disabled

   - Tap on the map and select the required Fast Defect Type.
   - The defect is created as a Draft.
   - To edit the defect details, stop the route survey and navigate to the defect.



Note: Panning, pinch zoom or raising a defect will stop the GPS location from being tracked. You can restart the GPS tracking by tapping on the GPS button on the left of the screen.



High Speed Surveys and Drop Marker

With high speed surveys it is very difficult to provide the details of a defect when travelling at speed.

The drop marker button, shown above, allows you to place a marker on the map, at your current GPS location.

This allows you to pull over at a later time and fill in the details of the defect by tapping on the marker.



Note: The marker may or may not display the purple dot of the GPS breadcrumb, this simply depends when the marker was placed.

Route Survey Breadcrumb

Route Survey Drive screen will display a breadcrumb trail of GPS points as a series of purple dots which fade to a lighter shade over time. This allows you to see where you have previously been.

ConfirmConnect® will begin recording the breadcrumb trail once you have signed in.

Signing out of ConfirmConnect® will remove any existing breadcrumb trails.

A maximum of 1000 points will be recorded, once you reach 1001 the oldest point will be removed from the Route Survey Drive screen.

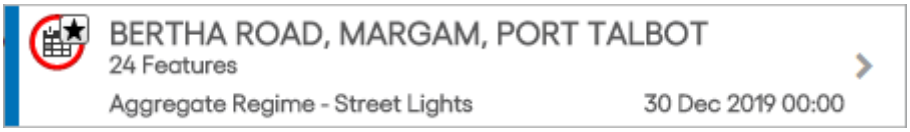
Save Draft

At any time you may save the Route Survey and return to your tasks by using this button.

Complete

Complete the Route Survey. This option will complete the route and create an inspection batch in the host software setting the last inspection date to todays date for every feature, it will also submit all defects you have logged during the survey.

Routine Works

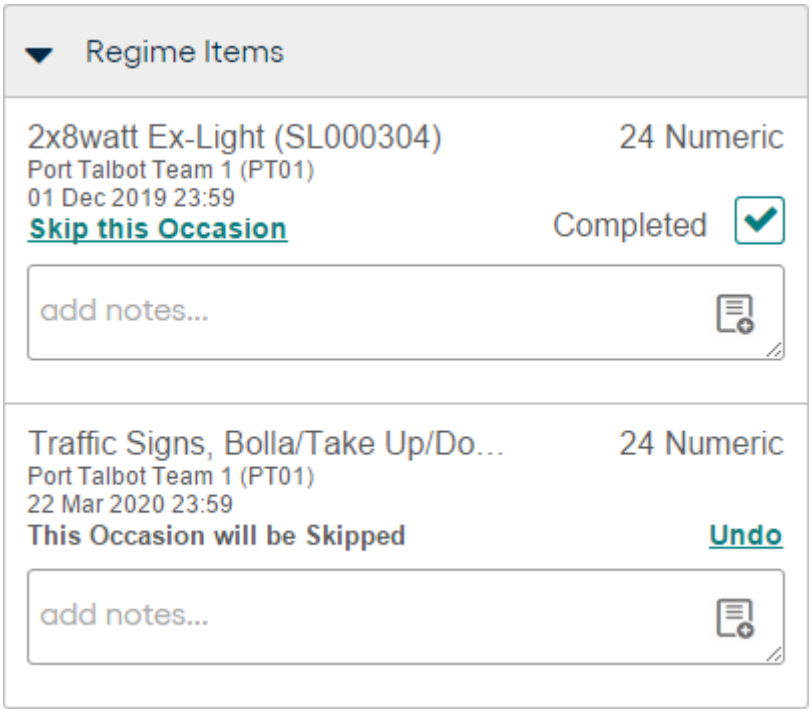


The task list will display any Routine Works that are currently assigned to you, which fall within the date range defined by the 'Show Tasks in Advance' setting found on the ConfirmConnect® Settings screen in Confirm Client.

Displaying the Site, number of Features and Regime name. The date displayed is the current due date of the earliest Regime Item.

Selecting a Routine Works from the task list will launch the form which displays the details of each Regime Item applicable to the Feature/s and giving you 2 options to choose from for each Item.

Note: The Notes field is only available for each regime item when it is either skipped or completed.



Skip this Occasion
When Skip has been selected: The Completed checkbox and its label will be hidden

Note: Next to the message there will be a link with the words: Undo: When Undo is selected the Item displayed will revert to having the Completed checkbox and Skip link

Complete

Use to complete the work.

Complete will be defaulted to selected on Regime Items, which are due within the Routine Works earliest Due Date Tolerance.

Add Routine Occasion

The 'Add Routine Occasion' option is available on the main Connect menu, to add any Routine Works that is not currently shown in the Task List (only available if there are any Routine Maintenance tasks on the device).

Cost Capture

This section describes the workflow changes to Tasks when Cost Capture is enabled.

Starting the Day the **Menu** option "Start of Day" will be available and allows you to define your Gang members and Plant items to be used for the day.

The **Task status** buttons will now allow you to record productive and non-productive time as follows:

- **Start and Resume** allows recording of **non-productive** time prior to starting or resuming work against the current Task, for example: Travel time and going on a break.

- **Pause, Remove and Complete** allows recording of **productive** time against the current Task, for example: Actual time spent by the gang with plant and materials prior to going on a break or completing work.

Plant Items

When recording time for plant items you have the option to check or uncheck specific items. Checking the item indicates that it was used during the work. Having an item unchecked indicates that the item is with your Gang but wasn't used on the Task, so would not suffer any wear and tear.

Ending the Day

Once the first Task has been completed or paused the "Start of Day" option will change to "End of Day", this option allows you to specify non-productive travel time against the last Task being worked on. Adding Materials at this stage could cover things like tipping costs and disposal of unused perishables.

Note: You cannot complete the End of Day process if any Task is still in progress. You will need to pause all outstanding Tasks before you can enter the End of Day details

Parallel Tasks

The number of parallel tasks currently in progress is shown when Parallel Jobs has been enabled. It displays the total number of Jobs currently in progress on the device.

Note: When Parallel Jobs has been enabled then Gang Members and Plant Items are altered using the Edit Gang/Plant button on the Cost Capture screen.

Updating Gang Members or Plant Items

Should you have the need to add or remove Gang members or Plant Items during a Task, then use the Edit Gang/Plant screen, on the menu, to make the required alterations.

Map

The Map view displays all tasks currently assigned to you and, the first time you use it, will position itself to show your current location (requires GPS/Wireless functionality) and all of the tasks assigned to you.

Identifying Task types

The Map view will show each task with the same Icons you have seen on the Task list view with some minor differences. These are as follows: -



Accurate Location

If the task has coordinates stored in Confirm the icon will display a shadow and a small pin or arrow at its base.



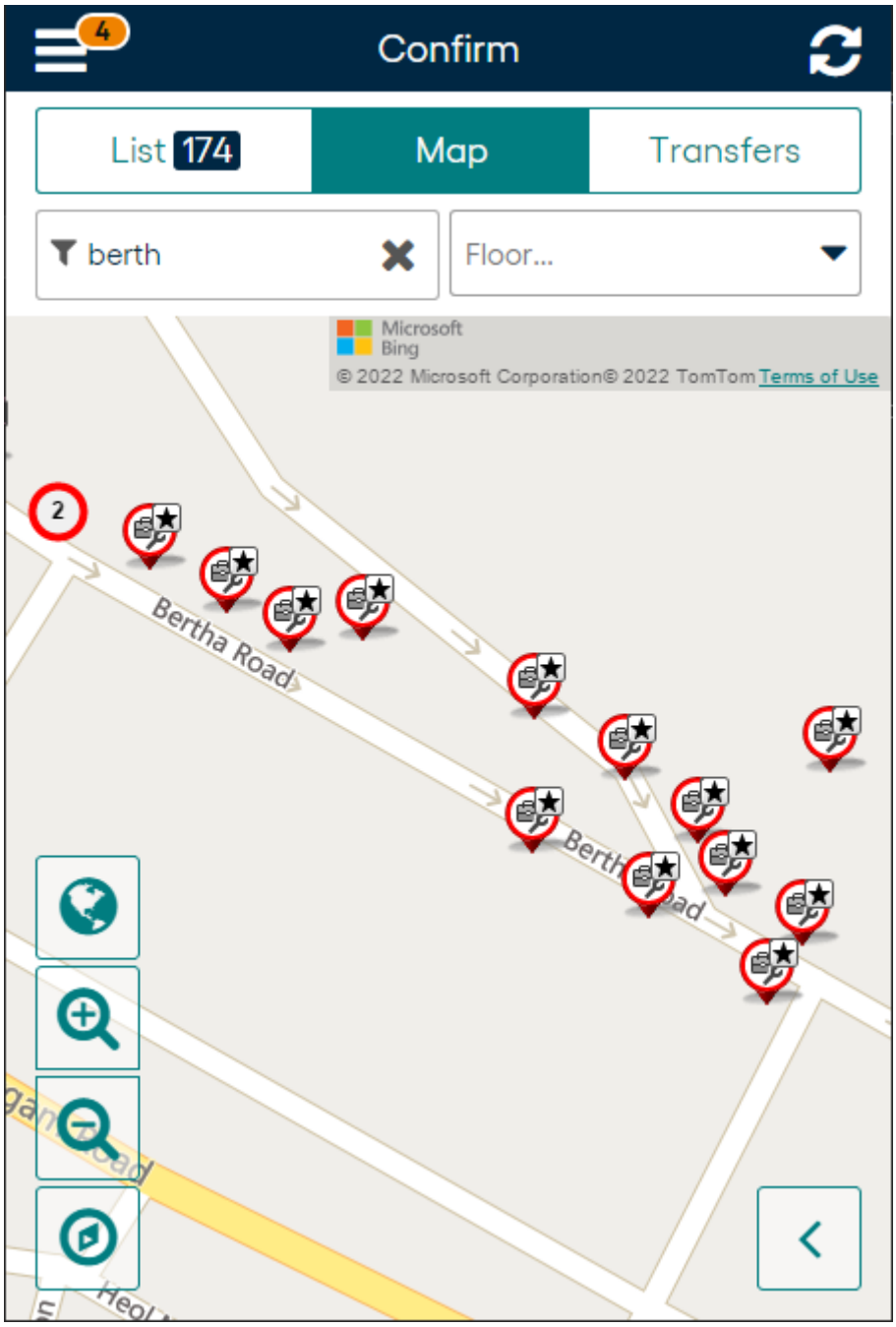
Approximate Location

If the task does not have coordinates stored against it in Confirm, the approximate icon is used to show the position based on its associated site or feature location.

Note: Panning, pinch zoom or raising a defect will stop the GPS location from being tracked. You can restart the GPS tracking by tapping on the GPS button on the left of the screen.

Task Clustering

When you have multiple tasks assigned to you and your map extent is zoomed out far enough, these tasks will be shown as a clustered icon displaying the total number of tasks within that area.



The colour of the cluster icon will match the task, it believes, takes priority. The following list shows the priority order:

- Draft (orange) - one or more incomplete tasks in this cluster has been edited.

- Urgent (red) - one or more incomplete tasks in this cluster is urgent but there are no draft tasks.
- Normal (blue) - there are multiple incomplete tasks in this cluster and none of them are urgent or draft tasks.
- Done (green) - all tasks in this cluster have been completed (sent to Confirm).

Filter...

Filters the tasks shown in the task **List** on page 22 and the **Map** on page 44 using both the text contained in the task, the task type, Feature Group, Feature Type and any retrieved What's Going on here tasks.

For example:

- Using the filter of "Job" will show all Job tasks and any other task type containing the text "Job".
- Using the filter of "Job 200" will filter the list so that only the Job (numbered 200) and any task containing the text of both "Job" AND "200" will remain in the list.

Attribute Filter...

When Confirm has been setup to use **Filter Features by Attribute Type**, this filter will be shown and allows you to further filter your Tasks and Features returned by What's Going on Here results. By default the attribute name will be shown and no filtering will be applied. Only Tasks and What's Going On Here results from the Features option associated with Features with the Attribute Value selected will be shown, other What's Going On Here results will not be shown when the Attribute filter is applied.

Setting an attribute value will filter your Tasks and Features returned by What's Going on Here, to show only those which are linked to Features containing the chosen attribute value.

Note: Attribute filtering will always filter any new Enquiry or new Defect which have been saved as a draft. To see these draft tasks, remove the filter. It will always filter an existing Enquiry when the Feature has been changed.

Note: Routine works are filtered if any of the Features contain the attribute at the chosen value. This can result in the Routine Task appearing even when switching the value entered in the filter.

Map Tools
In addition to the map tools such as Zoom in and out, it is also possible to rotate the map using multi-touch (pinch and rotate) on handheld devices. For Windows machines without touch, you can use Shift+Alt, hold left-click and move the mouse to rotate the map.

Create New from the Map

It is possible to create new Street Works Inspections, Enquiries, Defects and Features directly from the Map.

Creating a new Street Works Inspection, Enquiry, Defect or Feature from the Map

Tap on a location where you wish to create the new SW Inspection, Enquiry, Defect or Feature.

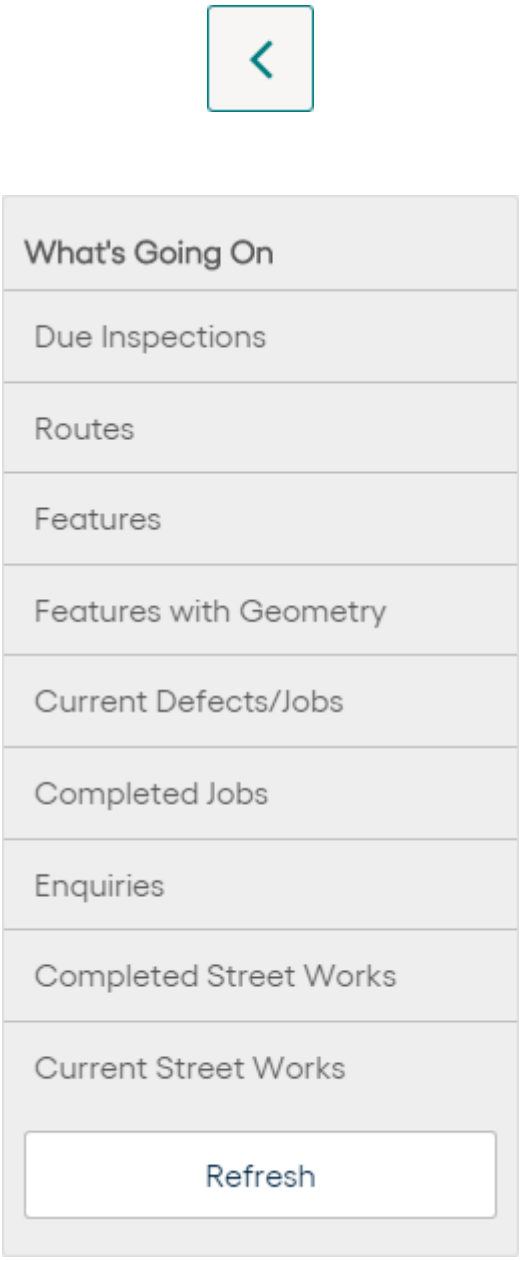
Creating a new SW Inspection, Enquiry, Defect or Feature from the map is the same as creating them from the **Menu** button with the following differences:

- The location at which you tap on the map will be used, preventing the need to **Locate** the task. You may still relocate as required.
- Tapping on a single existing task (map icon) will set the Feature field for a new Defect or Enquiry and the Site field for a new SW Inspection or Feature.
- Tapping on a cluster of existing tasks will automatically set the Feature fields for a new Defect or Enquiry and the Site fields for a new SW Inspection or Feature if all of those tasks contain the same Feature/Site.

Note: The options are displayed beneath existing tasks, you may need to pan down when tapping on a large cluster.

What's Going On Here

What's going on here allows you to view information on tasks already recorded in the local area. Tapping the what's going on here button will pop out a list of items to choose from.



Due Inspections

Show all unassigned features that are due for inspections up to a maximum of 1 kilometre from the center of the map view.



Due Inspections



Overdue Inspections

Note: You may only select from Due Inspections or Routes, you may not perform both.

You can assign a Due Inspection by tapping on the appropriate icon and then tapping on the desired Route displayed in the information panel.

Routes

Show Inspection Routes that have live and unassigned features that are due for inspection in the current map view.



Route containing one or more live and unassigned features and no overdue unassigned features.



Route containing one or more live and overdue unassigned features.

Note: If the map icon appears with a number (clustered), more than one Route has been found.

Note: It is possible that the icon for the route will appear off screen, this is because it will be placed in the centre of all live and unassigned features found for that Route.

You can assign a Route by tapping on the appropriate icon and then tapping on the displayed information panel.

User can also view more Feature and Defect details from the Asset and Condition Survey.

If the User has System Configuration -> 'Open Confirm Web in ConfirmConnect (Security)' User Security option switched on.

Features

Show all features logged in Confirm up to a maximum of 1 kilometre from the center of the map view.



You can raise an Adhoc Asset/Condition Survey by tapping on the appropriate icon and then tapping on the displayed information panel.

Note: This default icon is shown for all Features which have no custom symbol specified. Custom symbols can be specified by the Confirm administrator for each Feature Type.

User can also view more Feature details from the Condition Survey.

If the User has System Configuration -> 'Open Confirm Web in ConfirmConnect (Security)' User Security option switched on.

Feature Group filter

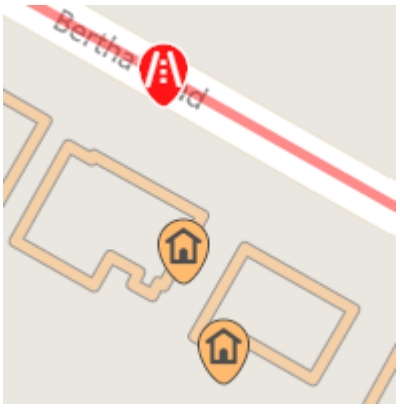
Upon selecting Features or Features with Geometry, a Feature Group filter window will appear. This list displays all non-inventory Feature Groups which can be selected or de-selected and will filter the results retrieved when the Refresh button is tapped.

Filter... enter text to filter the list of Feature Groups.

Note: Select All option will only apply to the current displayed list of Feature Groups. It will not apply to any Feature Groups that are not shown in the list.

Features with Geometry

Show as per Features but, if available, also shows Geometry.



Feature Group filter

See Features description above.

Current Defects/Jobs

Show all current Defects not linked to a Job, and all Jobs which have not been completed, up to a maximum of 1 kilometre from the center of the map view. Geometry of the Defect or Job will also be shown, if available.

Job details can be viewed by tapping on Job information panel. Details of the Job include: Job Attributes, SOR Item, Documents, Status History, Priority,etc.

If the User has Job -> 'Allow Edit Jobs in ConfirmConnect (Security)' User Security option switched on, Location and Description on the Uncommitted Job can be edited.

User can also view more Job details and Feature details from the Job form.

If the User has System Configuration -> 'Open Confirm Web in ConfirmConnect (Security)' User Security option switched on.

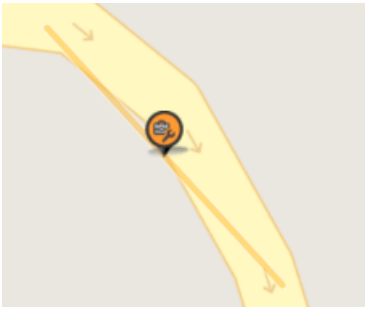


Defects.





Current Jobs.



Note: For Contractor users, only Jobs that are at a Job Status that has the 'Available to Contractor' flag ticked will be shown.

Note: When more than 100 Job/Defect Linear and/or Polygon geometries are found, the geometry is hidden. Tapping the Job/Defect icon will display the corresponding geometry if available.

Users can now view full Defect record details directly by selecting the Defect on the map.

Users can also supersede Defects (where permitted), save changes as a draft, or submit updates immediately without leaving the map view.

The Defect icon on the map dynamically reflects the current status of the Defect.

Note: Access is controlled by existing security permissions.

Completed Jobs

Show all completed Jobs up to a maximum of 1 kilometre from the center of the map view. Geometry of the Job will also be shown, if available.

Job details can be viewed by tapping on Job information panel. Details of the Job include: Job Attributes, SOR Item, Documents, Status History, Priority,etc.

If the User has Job -> 'Allow Edit Jobs in ConfirmConnect (Security)' User Security option switched on, Location and Description on the Uncommitted Job can be edited.

User can also view more Job details and Feature details from the Job form.

If the User has System Configuration -> 'Open Confirm Web in ConfirmConnect (Security)' User Security option switched on.

Job completion dates are displayed on records retrieved from the map search. This provides clearer context and improves decision-making when reviewing completed work.



Completed Jobs.



Note: For Contractor users, only Jobs that are at a Job Status that has the 'Available to Contractor' flag ticked will be shown.

Note: When more than 100 Job/Defect Linear and/or Polygon geometries are found, the geometry is hidden. Tapping the Job/Defect icon will display the corresponding geometry if available.

Enquiries

Show all Enquiries that are up to a maximum of 1 kilometre from the center of the map view and have had a status update in the last 180 days.

User can also view more Defect details from the Defects which are linked to an Enquiry.

If the User has System Configuration -> 'Open Confirm Web in ConfirmConnect (Security)' User Security option switched on,



Completed Enquiries.



Outstanding Enquiries.

Note: When more than 100 Enquiry Linear and/or Polygon geometries are found, the geometry is hidden. Tapping the Enquiry icon will display the corresponding geometry if available.

Completed Street Works

Show all completed Street Works containing Sites which are within their guarantee date, not older than 12 months and up to a maximum of 1 kilometre from the center of the map view.

If the guarantee date is not specified and the completion notice was sent within 12 months then the Street Works will be shown. If the completion date is outside of 12 months, the Street Works will not be shown.



Note: Existing Unattributable works can appear as both completed and current Street Works notice.

You can create an ad-hoc inspection on a trench by tapping on an existing completed Street Works icon and then tapping on the displayed panel.

Current Street Works

Show all current and Proposed Street Works up to a maximum of 1 kilometre from the center of the map view.



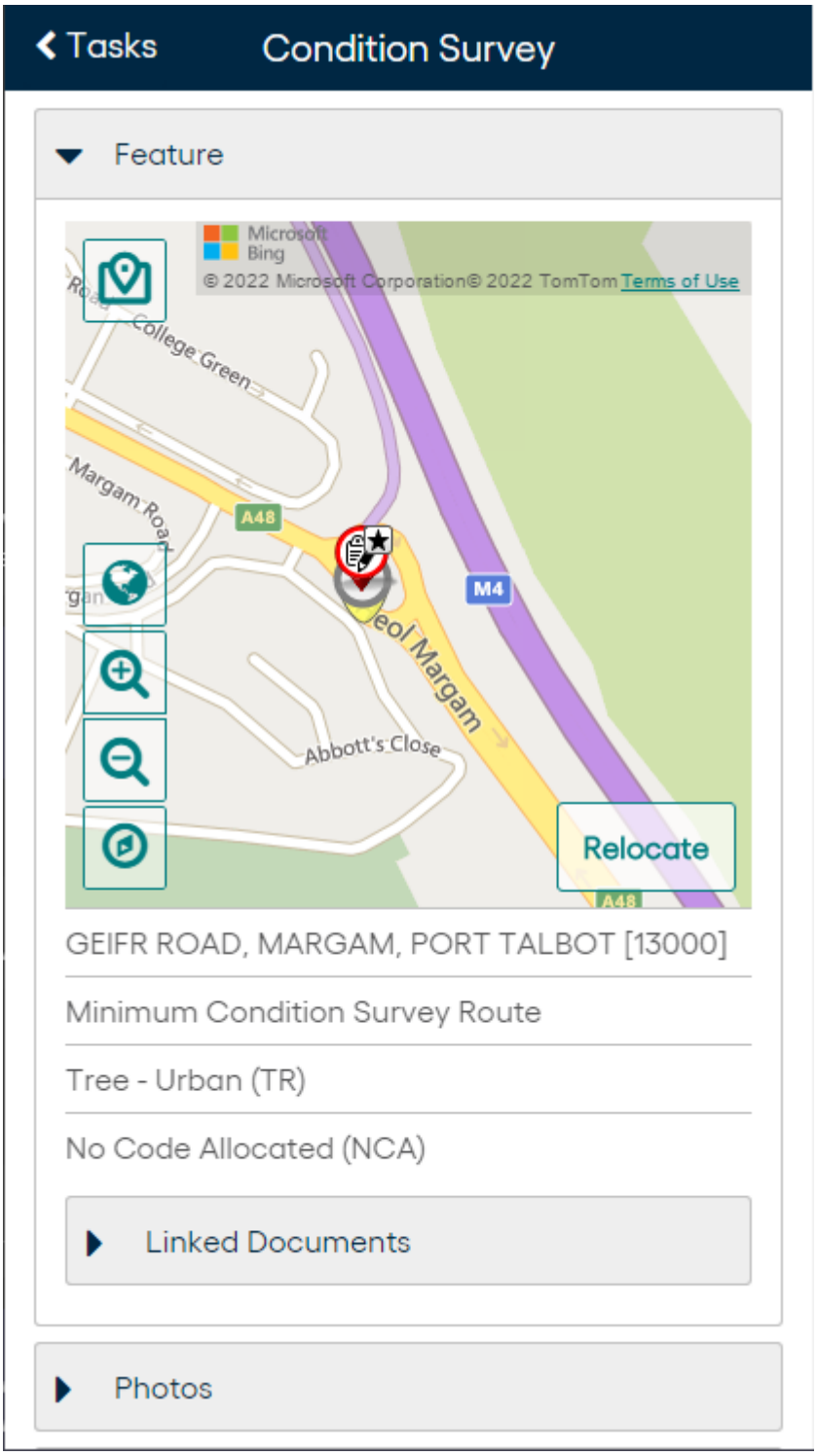
Note:
- Proposed works will not appear if the planned start date is more than 1 calendar month ago.
- Only current and Proposed Street Works that have been updated in the last three months or are estimated to complete in the future are displayed.
- Defective Apparatus notices raised in the last 12 months will only appear as current works.

You can create an ad-hoc inspection on an existing current Street Works by tapping on the appropriate icon and then tapping on the displayed information panel.

If you select a trench based Inspection Category the inspection will be recorded against the primary trench for the works (site number 1)

Task Map

Most Tasks include a map at the top of the form. This is designed to show where you currently are and where the Task is.



Navigate to Task



Clicking this icon will launch the navigation app on your device to give turn-by-turn directions to the Task location. Once navigation has completed you can return to ConfirmConnect® using the appropriate method for your device:

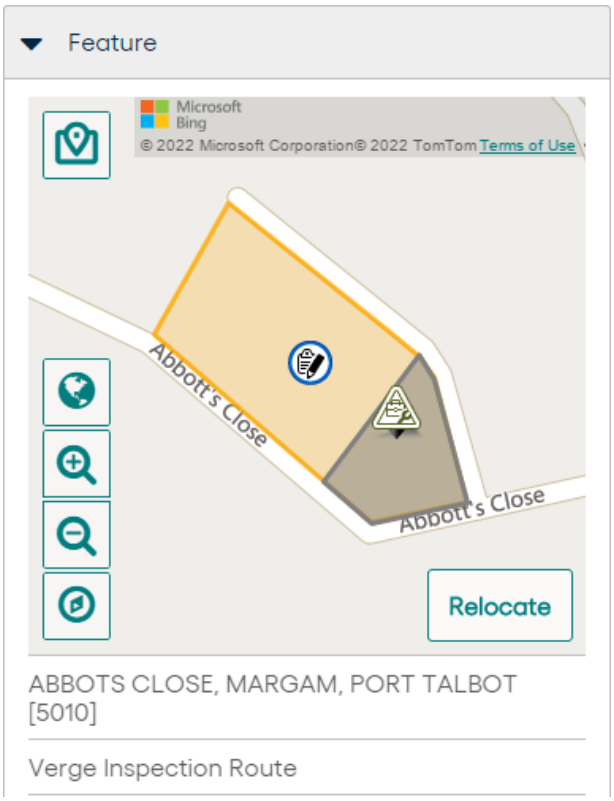
- iPad / iPhone: Click on the "Return to Confirm" message in the notification area
- Android: Use the back button, switch applications or by closing the navigation app

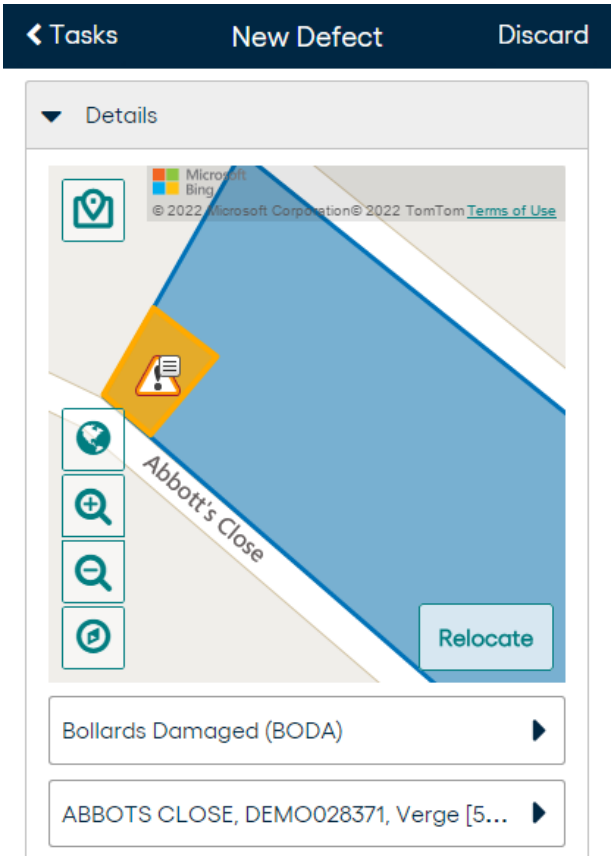
- Windows: Close the navigation app

Spatial Data

If a task has any spatial data available then this is displayed on the task map. The colour of an item depends on its relationship to the task:

Surveys	The Feature is displayed in orange. Defects are displayed in grey.
Defects	The Defect is displayed in orange. The Feature is displayed in blue.

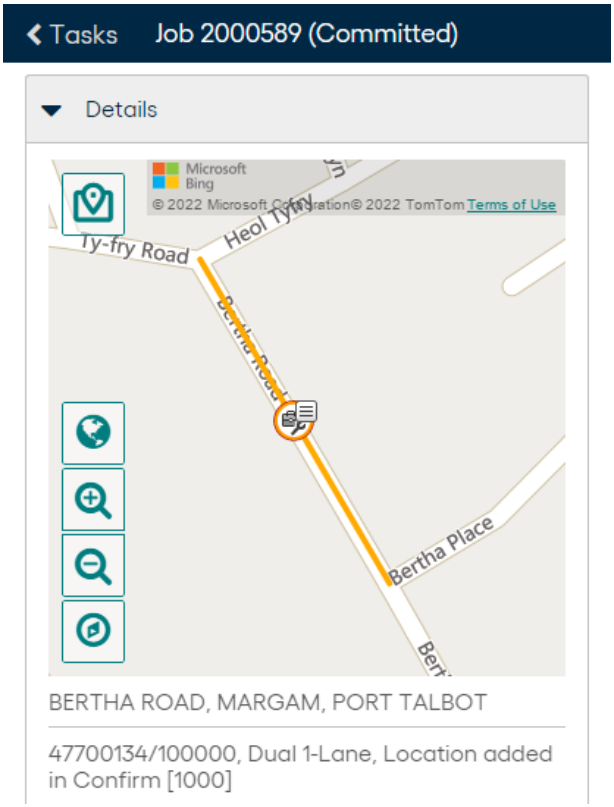




Jobs

Jobs are displayed in orange.

Defects are displayed in grey.

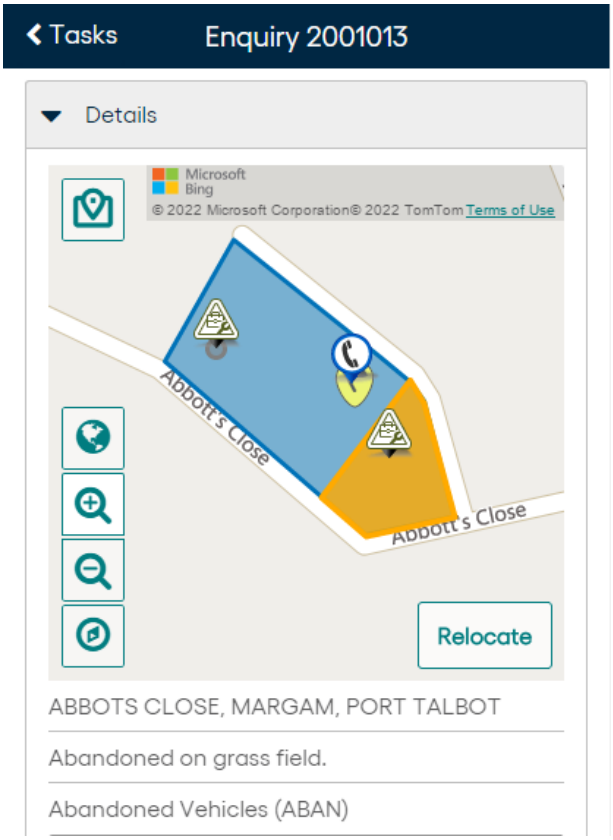


Enquiries

Defects linked to enquiries are displayed in orange.

Features are displayed in blue.

Feature defects are displayed in grey.

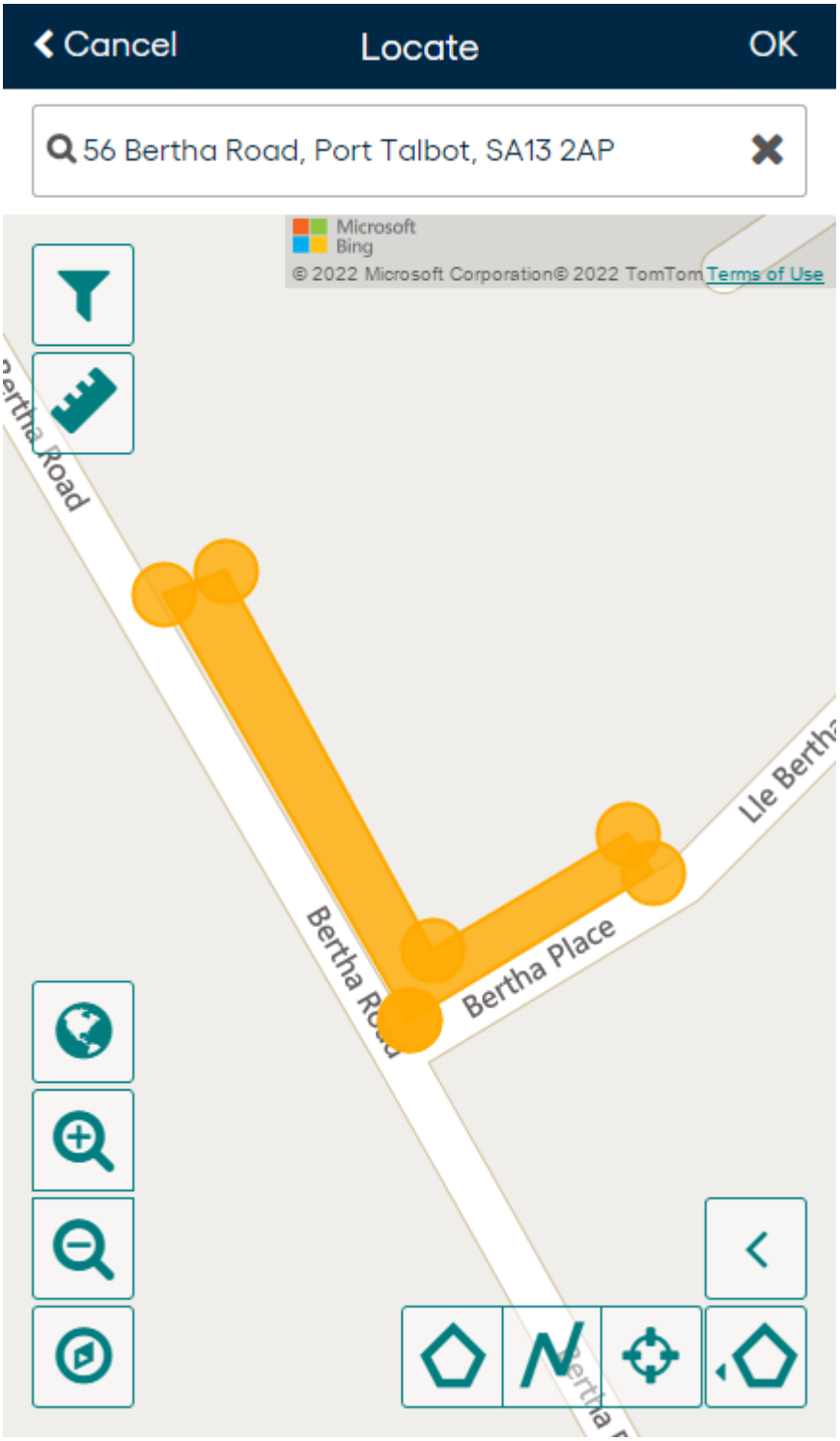


Note: Where a Defect has no geometry itself then it will be shown using the geometry of its Feature, or if not set then a Point geometry representing its Site's centroid, if set.

Locate / Relocate

Locate your task using the map.

- For point features, placing the cross-hair on your chosen location and tapping the OK button will then use those coordinates for the task and return to the task form.
- Use the address field to zoom to a location by typing in an address (street name) and selecting from the options provided.
- Switch between Road and Aerial views.
- Locating / Relocating defects will also display the linked feature in blue.



Filter



Clicking this will display the Textual and Attribute Filters.

- **Textual Filter**

  Entering text into this Filter will show any What's Going on Here results that match the filtered text.

- **Attribute Filter**

  Setting an attribute value will filter all What's Going on Here results to show only those which are linked to Features containing the chosen attribute value.

  When relocating a Feature, the filter will default to the attribute value of that Feature. Also, if the filter value is changed and the map's OK button is clicked, the value will be saved back to that attribute on the Feature.

If a filter is being applied, a tick will appear on the Filter button.

Measurements



Measurement visibility for the current geometry can be toggled on and off by clicking on the ruler icon.

Note: The units of measurement can be configured at a user level via the Settings/About screen, or at a system level via the Confirm Web General Web Settings page.

GPS Location



Will be shown as a blue dot on the map and is your current approximate location. If you zoom/pan away from your current location, you can tap the GPS button on the left to return to your current approximate location.

Note: GPS Location functionality (blue dot) requires GPS to be enabled on the device.

What's Going on Here



The What's Going on Here tool allows you to view information on tasks already recorded in the local area. See **What's Going on Here** for more information.

Draw Tools



Allows the digitization of a feature, enquiry or defect. Select from Point, Line or Polygon. The left most icon shows the currently selected tool.

•



Point, will show a crosshair allowing you to pan the map to place the crosshair where you wish the feature to be located. Tap OK to complete the location.

- 

Line, draw a line by tapping once to place the first point on the map, tapping further will create a line by joining each point you tap. To finish, either double tap on the final point or tap OK. Tapping OK will close the locate/relocate screen and return you to the task form.

- 

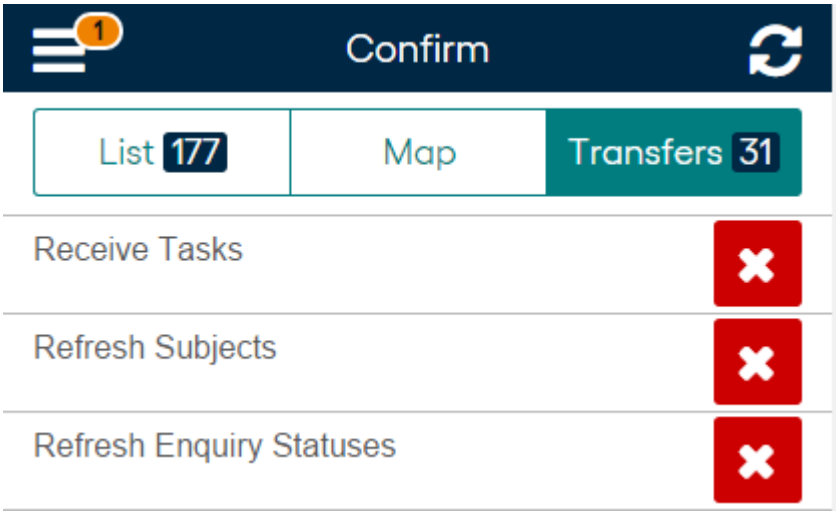
Polygon, draw a polygon by tapping once to place the first point on the map, once a third tap has been performed a polygon will be drawn. To finish, either double tap on your final point or tap OK. Tapping OK will close the locate/relocate screen and return you to the task form.

Note: Selecting a different draw tool will clear the current digitization, if this was done in error you can tap the Cancel button to return to your task and undo any edits made.

Transfer

Transfer Tab

The Transfer tab displays all tasks currently being performed. It can include the following transfer message types:-



- **Lookups** - these can be seen once you have signed in or when a **Refresh from the Menu** has been performed.
- **Tasks** - Tasks are transfered upon sign in and when the **Refresh** button is used.
- **Photos** - A message will appear for each photo being uploaded.

- **Map Caching** - When online via wireless connectivity only. Message indicates that it is caching maps for use when offline. See **Offline vs Online (caching)** for further details.
- **Get Features at Task Locations** - (Feature Caching) will cache all features for use when offline. See **Offline vs Online (caching)** for further details.
- **Officer Location** - GPS Tracking will create an Officer Location message for each update.
- **Warnings** - See the Warning messages section below for further details.
- **Errors** - These can occur if communication with the Web Service is lost. These messages and underlying tasks will automatically be resent once the service is accessible again.

Deleting Task Transfers

Tapping on the red delete button will remove the task from the transfer list and prevent the completion of that task. Should the transfer task be an update, a confirmation warning will appear indicating that deleting this task will cause loss of data. An exception to this update rule are the Officer Location tasks. Download tasks such as Receive Tasks and Lookups will not prompt for confirmation.

Photo Messages

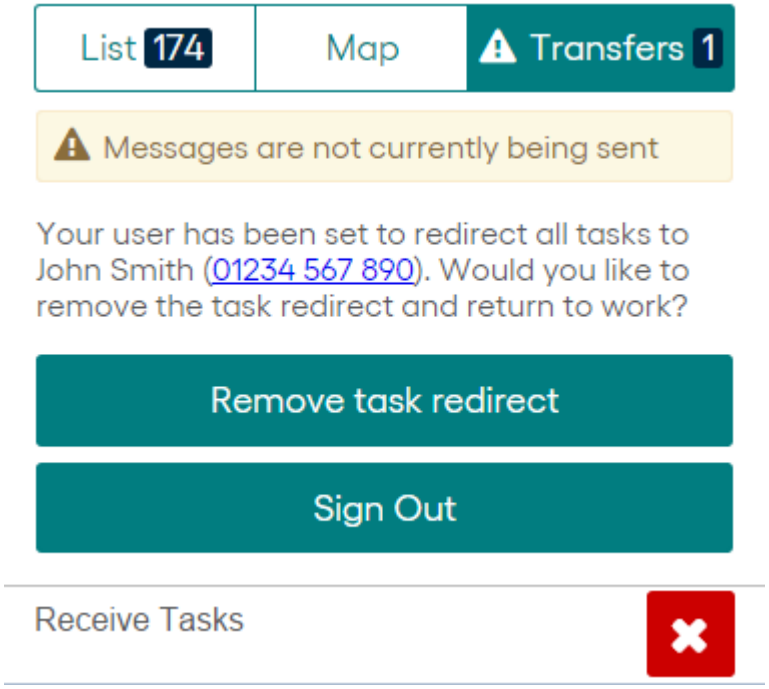
Photo Messages will display the Task Type they blonged to as well as the document link name. There is one additional line of information with 3 possible results:

1. **Gallery Filename: 123456789.jpg** - Android Only: Indicates the photo was taken using the Photo button. This filename may still be found in the device's gallery.
2. **Taken on 10 Feb 2015 at 16:26** - iOS Only: Indicates the photo was taken using the Photo button and the date/time in which the photo was added to the task.
3. **Taken from Gallery on 10 Feb 2015 at 16:26** - iOS and Android: Indicates the photo was added to the task using the Folder button at the specified time.

Note: For points 2 and 3, we are unable to obtain the actual filename.

Task Redirect

Refreshing your task list, when has been enabled, will present a message indicating the tasks have been redirected to the specified officer.



- **Remove task redirect** will turn off task redirection and download your tasks.
- **Sign out** return to the sign in screen leaving the task redirection enabled for the officer specified.
- Tapping **X** on the Recieve Tasks transfer message will cancel the Receive Task request and remove the task redirect message.

Note: When the Task Redirect message is the top most message, tasks below it will not transfer until the message is resolved by using one of the options mentioned above.

Warning messages

Warning messages are shown on the Transfer tab with an exclamation icon to the left of Transfer.

Each warning message will display text indicating what has occurred during the transfer process.

It is recommended to check this text and inform your Confirm administrator before removing them as they may indicate that a correction is needed in the main system.

Note: It is possible to continue working whilst these messages are displayed.

Examples

Below are some examples of the types of warnings that may occur.

- A Duplicate Job.
- A Defect which has been uploaded with a Cost Code that is invalid for the Contract.
- A Defect being uploaded where the defect type has it's dead flag checked.
- Photos may also produce a warning message in cases where their associated task failed to be created in Confirm.

Note: Should this occur, the task and photos will have been removed from the device.

- In order to sign in to ConfirmConnect, the user needs to supply their current password (stored in Confirm).
- Once signed in, the user is granted a 30 day lease/session. During this 30 day period the user will not be prompted to re-enter their password even if the password has changed in Confirm. At the end of the 30 day period, the user will be prompted to re-authenticate by entering their

current password (stored in Confirm), entering their password will extend the lease for another 30 days.

- If, during this 30 day period, the users account has been locked out, transfers will cease to work until the lock is removed.
- Once the lock is removed, the user will be able to continue to work without re-authenticating IF the 30 day period has not yet expired. This is true even if the password has changed in Confirm whilst the account was locked out.

Note: Should the Lock be released after the 30 day period has expired, then the user will be prompter for their password to re-authenticate their session and be granted another 30 day lease.

Linked Documents

If a task contains one or more linked documents such as a photo or a pdf document, these will be shown in the Linked Document section of each task.

Image documents will be displayed as a thumbnail version of the full sized image and other documents will show a thumbnail image of a blank document.

If the document was not retrievable an "Access Denied" or "File not Found" thumbnail image will be shown.

- 

  Access Denied - ConfirmConnect® is unable to access the location specified in the document store location.

- 

  File not Found - ConfirmConnect® has access to the location specified in the document store location but is unable to locate the document.

-

  Non-image document - ConfirmConnect® will display this icon when a document has been found and identified as a non image document. The file extension will be added to the background image shown.

- 

  URL document - ConfirmConnect® will display this icon when a document has been stored on a Web based document management system.

Note: Document links can only be viewed while online as the full document is only retrieved when selected for viewing.

Job Documents

Job document links and any associated Defect or Enquiry document links will be displayed on Job tasks. The associated Defect or Enquiry document links will be displayed under separate panels (one each for every associated Defect or Enquiry). Any duplicated document links will only be displayed once, showing the Job document links in preference to the Defect document links. Enquiry documents will only be displayed if the action officer has access to the Enquiries.

Risk Attributes

If a task is linked to a Feature and this has Risk Attributes then these will be shown alongside the details of the Feature.

A summary of all the different Risk Attributes that are on any downloaded tasks can be viewed by opening the Start of Day page or by selecting the Risks button at the top of the Task List and Map (Risk button will only be displayed if there is at least one Risk Attribute downloaded).

A total of all unique Risk Attributes downloaded to ConfirmConnect® is shown on the Risks button at the top of the Task list and Map.

Superseding Defects

Available for Condition Survey module (7010).

This functionality allows you to view the details of any existing Defects and supersede (update) them if required.

Superseding an existing Defect

To supersede a Defect tap on an existing Defect in the Defect list on your task. You can now view the defect details and use the edit option to make any changes required.

If you make a mistake, and haven't yet sent the Defect back to Confirm, tap the discard button to return to the original Defect details.

Defect Icons

Each Defect in the list will have an icon to represent its current status.



An existing Defect which has a Job linked to it.



An existing Defect which has a Job linked to it that has been superseded (edited).



An existing Defect



A Defect which has been superseded (edited).



A Defect has been superseded and sent back to Confirm.

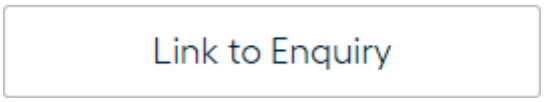
Note: A superseded Defect is no longer editable once it has been sent back to Confirm.



A New Defect which has been added but not sent to Confirm.

Note: Draft Defects are only visible on the task they were created on. They will no longer be shown once they have been sent to Confirm.

Link to Enquiry



The Link to Enquiry button allows you to link a Defect to an Enquiry which has been assigned to you (on your task list). Enquiries which already have a linked defect will not be available as you may only link one defect to an Enquiry.

Note: It is not possible to Link Adhoc Defects (those raised from the Menu > New Defect option).

Document Links and Superseding Defects

Any document link which exists for the Defect being superseded will be displayed on the superseding Defect. Should a superseded Defect be linked to a Job, the Job document links will also be displayed.

Defects linked to existing Jobs

When a Defect is linked to an existing Job it is still possible to supersede the Defect. The superseding Defect allows you to view and update the current status of the Job.

The following fields will not be available when the Defect is linked to a Job:

- Assign To
- Contract
- Cost Code
- SOR Items

The "Job X" (X = Job number) section will contain the following fields:

- Priority (read only)
- Preferred Contract (read only, if applicable)
- SOR Items (read only, if applicable)
- Current Status
- Notes
- Current assigned Officer (can be re-assigned)

Note: The "Fix Now" option will not be available when the Defect already has a Job.

Superseding a Defect that exists on multiple tasks

Changes can be made to a superseding Defect from any parent task. However, the superseding Defect can only be sent or discarded from the task it was originally created against.

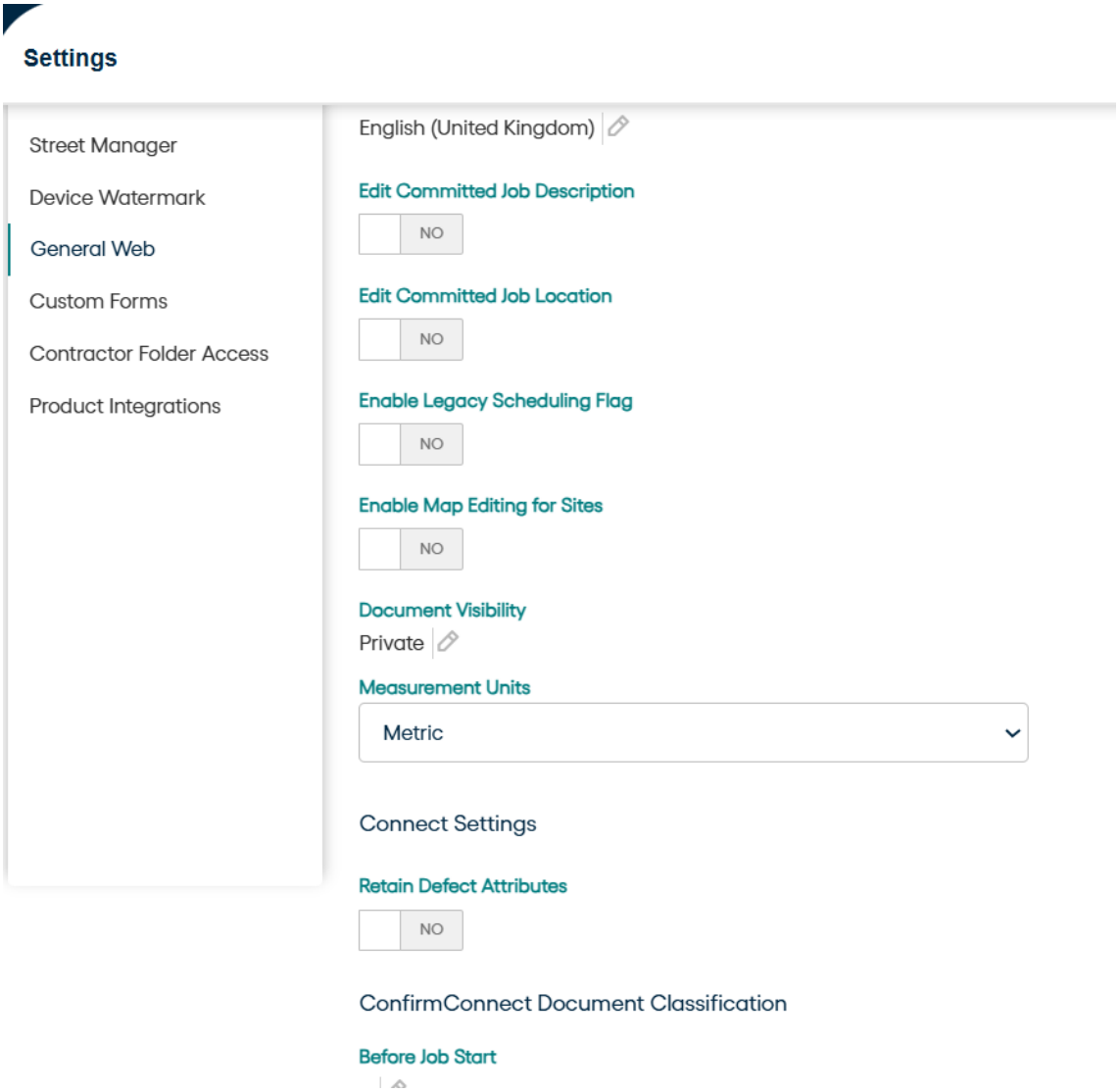
Retain Defect Attributes Setting is introduced in Configuration under General Web settings.

When this setting is set to No:

- During Defect type superseding, only the attributes linked to the updated defect type will be saved.
- All the old attributes linked to the previous defect type will be removed from the defect.

When this setting is set to Yes (Default):

- During Defect type superseding, all existing attributes, including those linked to the old defect type, will be retained on the defect.



Mandatory Photos

If the Defect Type has been configured to require photos then Send Now will be disabled until a photo has been taken and the parent Enquiry or Survey will have the Send disabled.

Comment Library

The Confirm Comment Library can be used in ConfirmConnect® to insert predefined or template text when editing text fields.

Tapping on the following Comment Library icon on any text field will display a list of Comments that can be inserted:-



Note: The Comment Library icon will only be present if there is at least one Comment in the library.

See **Comment Library** for more information on creating and maintaining the Comment Library

Administration Guide

The Administration section will cover how to both setup your web server and Confirm host so that your users will be able to sign in and use ConfirmConnect® on their devices.

Single Sign On

Confirm supports Federated Single Sign-On, a common approach for an application to rely on an external identity provider. It provides one stop solution to access all the applications User want to use.

Traditionally, enterprise applications are deployed and run within the company network. To obtain information about users such as user profile and group information, many of these applications are built to integrate with corporate directories. More importantly, a user's credentials are typically stored and validated using the directory.

However, with increased collaboration and the move towards the cloud, many applications have moved beyond the boundaries of a company's domain. Federated Authentication is the solution to this problem.

Note: For SAML configuration refer page **Installation, Configuring and Upgrading the Confirm Configuration Service**

Supported Platforms and Device Minimum Specifications

Android Support Policy for older devices

Confirm device support policy will include support for the last 4 years of Android releases. See the following **list of Android versions** for details on release dates. This will typically provide devices with a 3 year lifespan before replacement devices would be recommended.

Android devices require Google Play Services 14.7.99 or higher.

Future Device Operating System Support

ConfirmConnect® will support new Android and iOS versions automatically, should any issues arise as a result of a new Android or iOS version, we aim to resolve them with the next Confirm-Connect® release. For critical issues caused by a new Android or iOS version, we will use our best endeavours to release a solution as quickly as possible.

Minimum Specification

Over time changes to operating system, especially with iOS, and changes to the ConfirmConnect® application does increase demand on devices. This can have a negative impact to older devices as resources become stretched causing devices to experience reduced performance.

Confirm recommends the following minimum specifications for all Android and iOS devices:

Platform	RAM
iOS	4GB (2GB free)

Platform	RAM
Android	4GB (2GB free)
Windows	4GB

Devices with lower RAM than shown may encounter reduced performance and, in some cases, ConfirmConnect® being closed by the operating system due to the device running out of available RAM.

ConfirmConnect® version against Confirm Client

ConfirmConnect® is supported with the Confirm version it was released with and the last 2 major versions.

Note: The v21.10 ConfirmConnect iOS App store release requires a Webservice at v21.10 or higher to remain compatable with iOS security changes.

Installing the ConfirmConnect® Web Server

There are two methods to deploying ConfirmConnect® onto a Web Server. These are "de-coupled" (preferred method) and "Integrated".

- **Integrated** - installs ConfirmConnect® with the Confirm Connector. All versions must be kept in sync.
- **de-coupled** - allows the installation of ConfirmConnect® to be kept independent of Confirm versions, in other words there is no need to upgrade Confirm host systems to use this version.

Pre-requisites

Below is a list of pre-requiste steps required for ConfirmConnect®, these are required for both **Integrated** and **de-coupled** installations.

- IIS Web Server role is installed with the ASP.NET Role Service installed.
- A supported version of the Confirm Connector Installed. This can be installed on a different server.
- Confirm Access Code with ConfirmConnect® device licenses enabled. Please request an access code from your Confirm Project Manager.
- Ensure that .NET Framework 4.8 is installed.
- Create an application pool (named as you wish) configured to use .NET 4 with the Managed pipeline mode: set to Integrated.

  Note: For 64bit machines only: Once the application pool has been created, ensure you have the "Enable 32-Bit Applications" option set to True via the advanced settings.

  Note: This application pool must be separated from the one used by the Confirm Connector.

- Roles and Features: HTTP Activation feature is required for both .NET Framework 3.5 and 4.5. These can be added via the Server's Add Roles and Features Wizard.
- Install Visual C++ 2013 Redistributable by navigating to **http://www.microsoft.com/en-gb/download/details.aspx?id=40784** and downloading the 'vcredist_x86.exe'. If you are running ConfirmConnect® on a 64bit machine you must also download and install 'vcredist_x64.exe'.
- Install Visual C++ 2015 Redistributable by navigating to **http://www.microsoft.com/en-gb/download/details.aspx?id=48145** and downloading the 'vc_redist.x86.exe'. If you are running ConfirmConnect® on a 64bit machine you must also download and install 'vc_redist.x64.exe'.

- Install MapXtreme 9.1, this can be obtained with the Confirm product download from Digital River. Please contact the Confirm technical support team for details.

Web Server Installation

- **Integrated** - installed with the Confirm Connector installation.
  - Run the Confirm Connectors setup.exe provided on the installation media.
  - Once installed, run the IISConfigurationUtility.exe from the Confirm Connectors application directory (e.g. C:\Program Files\Confirm\Conncetor). This utility will configure all components required for a Confirm Connector Web Service which can also be used with ConfirmConnect®.
  - Provide the URL to your device users. The URL will be in the following format https://Server-Name/VitrualDirectoryName
- **de-coupled** - installed using the ConfirmConnectWebService.exe installer package which can be obtained with the Confirm product download from Digital River. Please contact the Confirm technical support team for details.
  - Run the ConfirmConnectWebService.exe and specify a location to install the web service. Default location is set to "C:\inetpub\wwwroot\confirm\ConfirmConnect".
  - Enabling Confirm UEIP will allow both Web Service and all devices to send anonymous usage information to Confirm to help us improve our products and services.

Active Directory Configuration

To enable Active Directory authentication for ConfirmConnect®, set the registry values to the below mentioned path:

O/S Type	Registry Location
32 bit Machines	HKEY_LOCAL_MACHINE\SOFTWARE\Confirm
64 bit Machines	HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Confirm

Registry Key	Description
AuthProviderType	• Confirm - To Use Confirm Authentication. • ActiveDirectory - To Use ActiveDirectory.

Mixed Mode Authentication

Mixed mode is a combination of Active Directory(AD) and Confirm authentication i.e. AD users will be authenticated using their AD credentials and non-AD users will be authenticated using their Confirm credentials.

Confirm Configuration Service is required for configuring mixed mode authentication. Refer page **Installation, Configuring and Upgrading the Confirm Configuration Service** for more details.

Web Server Configuration

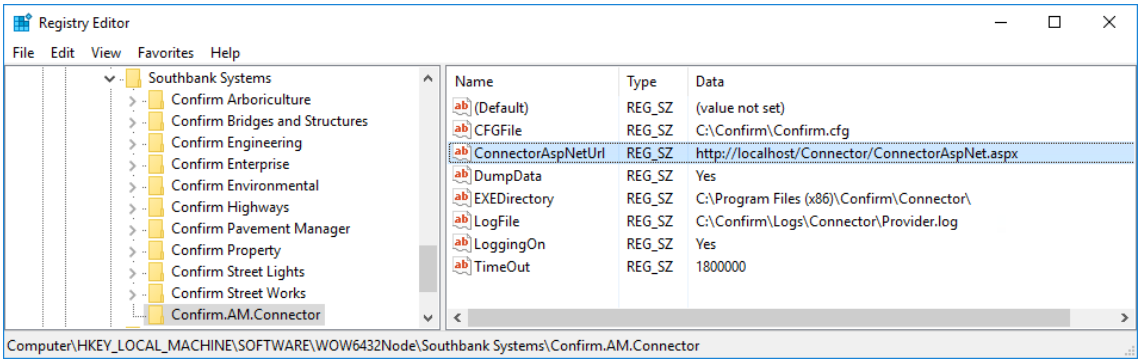
Follow the steps below for both **Integrated** and **de-coupled** installs: -

- Within IIS, navigate to Default Web Site and use 'Add Application...'

- Enter an Alias name of 'ConfirmConnect' and set the Application Pool to the one created in the pre-requisite steps. Set the 'Physical path:' to the location you installed ConfirmConnect® to.

  Note: It is advised to use a separate application pool from the one being used by the Confirm Connector.

- ConfirmConnect® needs to know where the Confirm Connector is running so that it can process data into the Confirm database. To enable this, launch the registry editor and navigate to the Confirm.AM.Connector folder and add a 'New > String Value' called 'ConnectorAspNetURL'.
- Set the value to the url for the ConnectorAspNet.aspx file (located in the Connectors published application location) e.g. http://localhost/Connector/ConnectorAspNet.aspx.



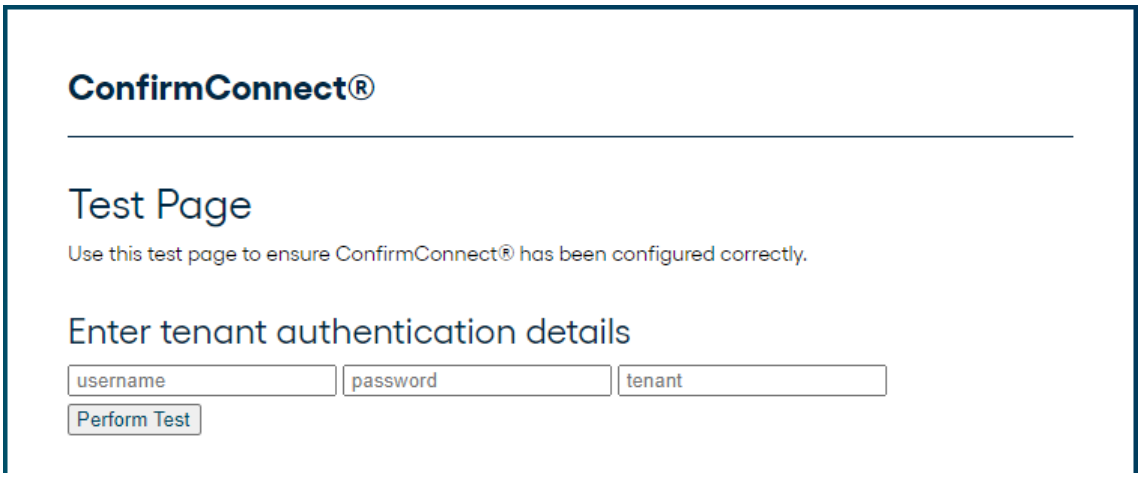
- Double check that the CFGFile and LogFile settings are correct and the latter should point to a directory the Application Pool's user has write access to.

  Note: ConfirmConnect® log files are created prefixed with "MS_".

Testing

This section covers how to test the installation of the ConfirmConnect® web service.

- Within IIS, browse to the TestConnection.dita file located in the root of the ConfirmConnect® web site. e.g. https://ServerName/VitrualDirectoryName/TestConnection.dita
- When this page loads you will be presented with the following screen.



- Enter a username, password and tenant (profile) and click the Test button. You may use either Http or Https.
- Review the results to help diagnose any problems encountered.

Registration

This section requires a new Access Code to be provided by Confirm

ConfirmConnect® Registration

All of ConfirmConnect® Licensing is controlled through the Confirm Registration screen. This allows device licenses to be controlled centrally without needing to manually enter access codes on each device.

Once the new Access Code has been applied, you can then create **ConfirmConnect® Profiles** and assign them to your users to enable them to login with their devices.

It is possible to monitor device and module licenses in use and suspend devices via the **ConfirmConnect® Registration** screen.

Setting up a Confirm user

This section will list the requirements to enable a Confirm user to login to ConfirmConnect®

Licences and User configuration

In order to enable users to login to ConfirmConnect® you must have the following setup in the Confirm host:-

- A **Confirm Licence** with ConfirmConnect® Devices and **Module/s** enabled.
- A **ConfirmConnect® Profile** with the required ConfirmConnect® Modules enabled.
- A **User** with an appropriate ConfirmConnect® profile enabled.
- An Action Officer assigned to the user. It is not possible to login ConfirmConnect® with an Action Officer. The Action Officer must be associated to a user.

User Login

In a scenario where the device has been compromised :

- Lock the account first.
- Change the accounts password.
- Locate and remove the device registration from the ConfirmConnect registration screen. This will cause ConfirmConnect on the device to force a sign out.
- Unlock the account so officer can continue to work on another device using their new password.

Setting up Confirm data

This section list the requirements needed to view the various lookups and tasks for your users.

How to setup your data to appear on your user's devices

Ensure that you have read through and applied a ConfirmConnect® Profile to your user as instructed by the **Setting up a Confirm user** page.

Review the relevant sub section of the help for the different areas of ConfirmConnect® functionality.

Filtering by Feature Attribute

Filtering by a Feature's attribute value, allows users to further filter both their Task List and What's Going on Here results.

The following need to be configured for the filtering option to appear:

- The **ConfirmConnect Settings** screen needs to have **Filter Features by Attribute Type** set to a pick list attribute type.
- The user needs to have Data Securty access to the chosen attribute type.

Enabling Task Redirect

It is possible to redirect tasks from one Officer to another, please see **Task Redirect Officer**.

Risks

Setting up ConfirmConnect® to display Risks

ConfirmConnect® will display a total number of Risks on the Menu button and will display a list of all Risks (in Alphabetical order) identified on all of the tasks contained on the users task list. When the following has been configured: -

Feature Attribute Values	• Any Task with a Feature containing one or more Attributes with their values specified and where that value has its 'Risk Warning' field populated.

Street Works

Setting up ConfirmConnect® with Street Works data

There are no specific Data Key restrictions for Street Works Inspection Lookup tables.

Note: Only inspections that are due in the next seven days are uploaded to the device.

The following considerations apply to the general tables used in Street Works inspections:

Select Site (new SW Inspections only)	Sites will be displayed if the following conditions are met: - • Sites have **coordinates** where the rectangle formed by the minimum and maximum Eastings and Northings is within 100m of the Inspection location. • The Site's **Street Record Type** has **Applicable to Street Works/Addressing** enabled.
Promoter	These are Organisations that are live (not dead and where their To date has not passed) and your **user's Data Security Group** must have access to the **Organisation's Device Data Key**.
Offence	Offence Types will be available if the following conditions are met: - • At least one **Offence Type** is part of a **Penalty Scheme** which has its **Related Entity** set to Street Works. • Confirm "Fixed Penalty Notices" (2700) and ConfirmConnect® "Street Works" (7040) modules are enabled.

Enquiries

Setting up ConfirmConnect® with Enquiry data

Enquiry Rules

The following rules must be met before an Enquiry will be available to the User.

- The Enquiry must be at an **Enquiry Status** that is set to Send to Device.

The following rules also apply if the Work is being carried out by an Officer.

- The Enquiry is assigned to the Action Officer.
- The Enquiry is not currently allocated to any gang.

The following rules also apply if the Action Officer is also linked to a Gang.

- The Enquiry is allocated to the gang.
- The scheduled start date is within the setting.

Additional Enquiry Information

Various elements of the Enquiry form require lookups from the host to be available to the user, this involves setting up various data securities. Review the below information for what is required on each field.

Note: Linked (underlined) items refer to the Confirm screen and **bold** items refer to a field on the linked screen.

Note: Contractor access rules are applied.

Enquiry Subject	Enquiry Subjects appear in this list if the following conditions are met: - • Your **user's Data Security Group** must have access to the **Enquiry Subjects Data Key**.
Select Feature (required)	Features will only appear if the following conditions are met: - • Your **user'sWork Group** has **Contract Area** security on the **Feature**. • The Features **Feature Group** has **Select for Adhoc Inspections** enabled. • The Feature is within range. Please see **Locating Features** for further details.
Select Status	Enquiry Statuses appear in this list if the following conditions are met: - • Your **user's Data Security Group** must have access to the **Enquiry Status Device Data Key**. • The **Send to Device** option must be enabled for the status on the **Enquiry Status** screen.
Assign To	Action Officers appear in this list if the following conditions are met: - • Your **user's Data Security Group** must have access to the **Action Officers Device Data Key**.
Offence	The Offence section will only appear if the following conditions are met: • Confirm Fixed Penalty Notices module (2700) enabled in your Confirm **System Registration**.

- At least one Offence Type is a part of a **Penalty Scheme** which has its **Related Entity** set to Enquiry.

Defects

Setting up ConfirmConnect® with Defect data

Various elements of the Defect form require lookups from the host to be available to the user, this involves setting up various data securities. Review the below information for what is required on each field.

Note: Linked (underlined) items refer to the Confirm screen and **bold** items refer to a field on the linked screen.

Defect Type	Defect Types appear in this list if the following conditions are met: - • Your **user's Data Security Group** must have access to the **Defect Types Device Data Key**.
Select Feature (required)	Features will only appear if the following conditions are met: - • Your **user's Work Group** has **Contract Area** security on the **Feature**. • The Features **Feature Group** has the **Select for Adhoc Inspections** flag checked or the Feature exists on the task list. • The Feature is within range. Please see **Locating Features** for further details.
Select Priority	Priorities appear in this list if the following conditions are met and is Mandatory: - • Your **user's Data Security Group** must have access to the **Priority Device Data Key**.
Assign To	Action Officers appear in this list if the following conditions are met: - • Your **user's Data Security Group** must have access to the **Action Officers Device Data Key**.
Select Contract	Contracts will appear in this list if the following conditions are met: - • Your **user's Work Group** has **Contract Area** security on the **Contract**. • Your **user's Data Security Group** must have access to the **Contracts Device Data Key**. • **Contract** has it's **Works Inspected** check box enabled. • **Contract** is still in date **(Finish Date)** and is not marked as **Dead.**
Select Cost Code	Cost Codes will appear in this list if the following conditions are met: - • Each required **Cost Code** has it's **Send to Device** option enabled. • Your **user's Data Security Group** must have access to the **Cost CodeDevice Data Key**. • Your **user's Work Group** has **Contract Area** security on the **Cost Code**. **Note:** This is only applicable if you have the **Site System Defaults** field **Enable Cost Code Segregation** is enabled.
Photo	It may be neccesary to ensure a photo has been taken prior to submitting the Defect. This can be done by setting the **Mandatory Photo** field on the **Defect Type**.

Note: Photos will be uploaded into the Confirm database as a "blob". They are not automatically loaded into an external document management system. This is done via the existing Photo Upload Agent within Task Processor.

Attributes	Add Attributes will display a list of All **Operational Attribute Types**. Click the info button to show the Description associated with the Operational Attribute Type, to aid in the setting of the value.
SOR Items	All SOR Items are downloaded to the device if the following conditions are met: - • Your **user's Data Security Group** must have access to the SOR **Schedule Device Data Key** for each **SOR Item**. • Your **user's Data Security Group** must have access to the **Device Data Key** on a **Contract** with the SOR Item in its BoQ. This only applies if the **Restrict Device SORs by Contract** option is enabled in the **Condition Survey System Settings** screen. The SOR Item List is filtered based on: - • Contract BoQ: **Contract** and the **Priority's Price Factor**. • Site level BoQ: **Contract**, **Priority's Price Factor** and the Feature's Site. **Note:** This also requires the **Contract** to have the **Site Billing** and the required **Site/s** to have **Allow Site Rates** enabled. SOR Groups with at least one filtered SOR Item will be displayed. **Note:** Adding the SOR Group will only add the SOR Items which meet the filtering defined above.

Defects on Enquiries

Enquiries may have a defect raised against them. This requires the **Enquiry Subject** to have the **Defect** option enabled. If this option is not enabled you will not be able to raise a defect against an Enquiry of this Enquiry subject type.

There is a **ConfirmConnect® System Setting** to cater for defaulting the Defect Description and Location from the Enquiry Subject, Number and Location.

Defect Priority

Defect priority can be determined or adjusted automatically based on Defect Attributes.

The defect priority calculation is two-step process:

Step 1, **Priority Calculation**: A numeric value for Defect Priority is calculated as below -

```
Defect Priority = Defect Default Priority Nominal Value * Attribute 1
 Priority multiplier * Attribute 2 Priority multiplier *.....* Attribute
 N Priority multiplier
```

The Attribute(s) Priority multiplier comes from the **Operational Attribute Value** screen. It is a numeric value that is multiplied with the default priority.

The Defect Default Priority Nominal Value is a numerical value of the priority and comes from the **Priority** screen. The Default Priority is derived from either **Defect Default Priorities** screen or General System Settings screen, depending on how the system has been configured.

Note: Defect Default Priority Nominal Value is required for the calculation to trigger in and if missing the Default Priority won't be adjusted automatically.

Step 2, **Priority Selection**: Defect Priority populated is the one where numeric value for Defect Priority (calculated above in Step 1) falls within the minimum and maximum values (numeric range) for a priority.

The Minimum/Maximum for a priority need to be configured in the **Priority** screen which will act as the range of the Defect priority.

Two lookups – Operational Attribute Value (for priority multiplier) and Priority (for numeric range and nominal value) need to be configured for automatic Defect Priority calculation.

Jobs / Job Inspections / Performance Monitoring

Setting up ConfirmConnect® with Job data

Job Rules

The following rules must be met before Jobs will be available to the User.

- The Job must not be Archived.
- The Start Date (Estimate) of the Job is blank.
- The Start Date (Estimate) is set and is within the **Device Job Future Start Date Tolerance** set in **Job System Settings**.

  Note: If a task refresh is requested after the end of the working day (specified in the **Working Day** values in the **General System Settings** screen) Jobs for the following day will be included.

  Example: The **Device Job Future Start Date Tolerance** is set to 1 day with the **Working Day** set to end at 16:00. An update request is made at 16:30 on Friday evening, only Jobs which are currently overdue and those with a start date up to midnight of Saturday evening will be included. Any Jobs with a start date specified after midnight on Saturday will not be included.

The following rules also apply if the Work is being carried out by an Officer.

- The Job is assigned to the Action Officer.
- The **Job's Status** has **Send Jobs to Device for Officer** ticked.
- The Action Officer is linked to the ConfirmConnect® user.

The following rules also apply if the Action Officer is also linked to a Gang.

- The Job is allocated to the Gang
- The **Job's Status** has **Send Jobs to Device for Gang** ticked.
- The Gang has the same Contractor as the Job's Contract. The Contractor is specified on the Gang Lookup.

Note: From v21.10 tasks assigned in ConfirmWorkzone will be stored on the allocated_task table and will take precedence of any other allocation method.

Note: Contractor access rules are applied.

Raising Variations

ConfirmConnect can create Variations when Device Job Update on the **Contract** is configured to Raise Variations.

Note: If Confirm is v21.10 or above and ConfirmConnect version is older, then it is possible that dimensional SOR Items (those with any of Length, Width or Depth), may not capture this information. Instead, variations will record the full quantity against one dimension, the remaining configured dimensions will record 1. This has been addressed in ConfirmConnect v21.10. When switching to use Variations, we recommend ensuring all users have signed out and upgraded to at least v21.10.

Safety first with Mandatory Photos

It is sometimes neccesary to ensure fresh photos have been taken prior to progressing the status of a Job. This can be done by using a **Job's Hazard Type** and setting the **Mandatory Photo on Start** and/or **Mandatory Photo on Complete** fields.

Job Inspection Rules

(ConfirmConnect® Condition Survey module 7010 or Jobs module 7030)

The following rules must be met before Jobs will be available for Inspection.

- The Job must not be Archived.
- The Job is assigned to the Action Officer.
- The **Job's Status** has **Needs Inspecting** ticked.
- The Action Officer is linked to the ConfirmConnect® user.

Fix now Jobs, auto-committing and auto-allocate to a Gang

The following rules must be met for the fix now Job to be automatically committed:

- The Defect's **Priority** must be set to commit.
- A Contract must be selected.
- The Defect must have one or more SOR Items.
- The currently signed in Officer is set as the **Device Action Officer** for only one Gang.

Note: If the Officer belongs to more than one Gang or does not belong to a Gang, the Job does not get automatically allocated.

Performance Monitoring Rules

(ConfirmConnect® Condition Survey module 7010) Only applicable to Non-routine Works.

ConfirmConnect® requires the same prerequisites as outlined in **Monitoring Inspections - Step-by-step**

Additional Job Information

Various elements of the Job form require lookups from the host to be available to the user, this involves setting up various data securities. Review the below information for what is required on each field.

Note: Linked (underlined) items refer to the Confirm screen and **bold** items refer to a field on the linked screen.

Feature Attributes	Displays a list of all Feature Attributes applicable to this feature if the following conditions are met: - • **Download Feature Conditions and Attributes with Jobs** on the**Job System Settings** is checked. • Your **user's Data Security Group** has access to the **Device Data Key** on the **Attribute Type**, **Measurement Type** and **Date Type**. • Your **user's ConfirmConnect® Profile** has access to the Asset Survey (7020) module.
Feature Conditions	Displays a list of all Feature Conditions applicable to this feature if the following conditions are met: - • **Download Feature Conditions and Attributes with Jobs** on the**Job System Settings** is checked. • Your **user's ConfirmConnect® Profile** has access to the Condition Survey (7010) module. • Your Ad hoc Inspection Route's **Inspection Type** must contain the required **Observation Types**.
Job Attributes	Add Attributes will display a list of All **Operational Attribute Types**. Attributes can be grouped into **Categories** which help to reduce the number of Attributes listed on the Job form making scrolling through a Job with hundreds of attributes much simpler. **Note:** Mandatory rules will still apply and the Category, in which the mandatory attribute resides, will be highlighted. Any Dependent Attributes that have been configured against the Operational Attribute Value (using the Lookup Manager in the Confirm web interface) will be automatically added when the applicable Value has been selected. See **Dependent Attributes** for more information on how to configure Dependent Attributes.

Job Statuses available on device	Statuses will be available if the following conditions are met: -
	• Your **user's Data Security Group** must have access to the **Job Status Device Data Key**.
	• If your Officer is a Contractor Officer (as determined by being listed on the **Contractor Officer** Tab for any Contractor) this list will be filtered to show only those **Statuses** where the **Available to Contractor** checkbox has been checked .
	• **Send Buttons on the Job Form (only applicable to work crews)**
	  • Start / Resume - Statuses with In Progress and Send to Officer or Send to Gang checked are associated with this button
	  • Pause - Statuses with In Progress unchecked and Send to Officer or Send to Gang checked are associated with this button
	  • Other - This shows Start / Resume statuses if the Job is already in progress and Pause statuses if the Job is not in progress, i.e. all statues with Send to Officer or Send to Gang checked that do not change the in progress state of the Job are associated with this button

- Remove - Statuses without Complete, Send to Officer and Send to Gang checked are associated with this button
- Complete - Statuses with Complete checked and without Send to Officer and Send to Gang checked are associated with this button

Add Attributes	Will display a list of All **Operational Attribute Types**.
SOR Items	SOR Items will be available if the following conditions are met: - • Your **user'sData Security Group** must have access to the SOR **Schedule's Device Data Key**. The SOR Item List is filtered based on: - • Contract BoQ: **Contract** and the **Priority's Price Factor**. • Site level BoQ: **Contract**, **Priority's Price Factor** and the Feature's Site. **Note:** This also requires the **Contract** to have **Site Billing** and the required **Site/s** to have **Allow Site Rates** enabled. SOR Groups with at least one filtered SOR Item will be displayed. The **Contract Device Payment Flag** setting is used to determine whether Payment Requests or Variation Orders are created. **Note:** Adding the SOR Group will only add the SOR Items which meet the filtering defined above.

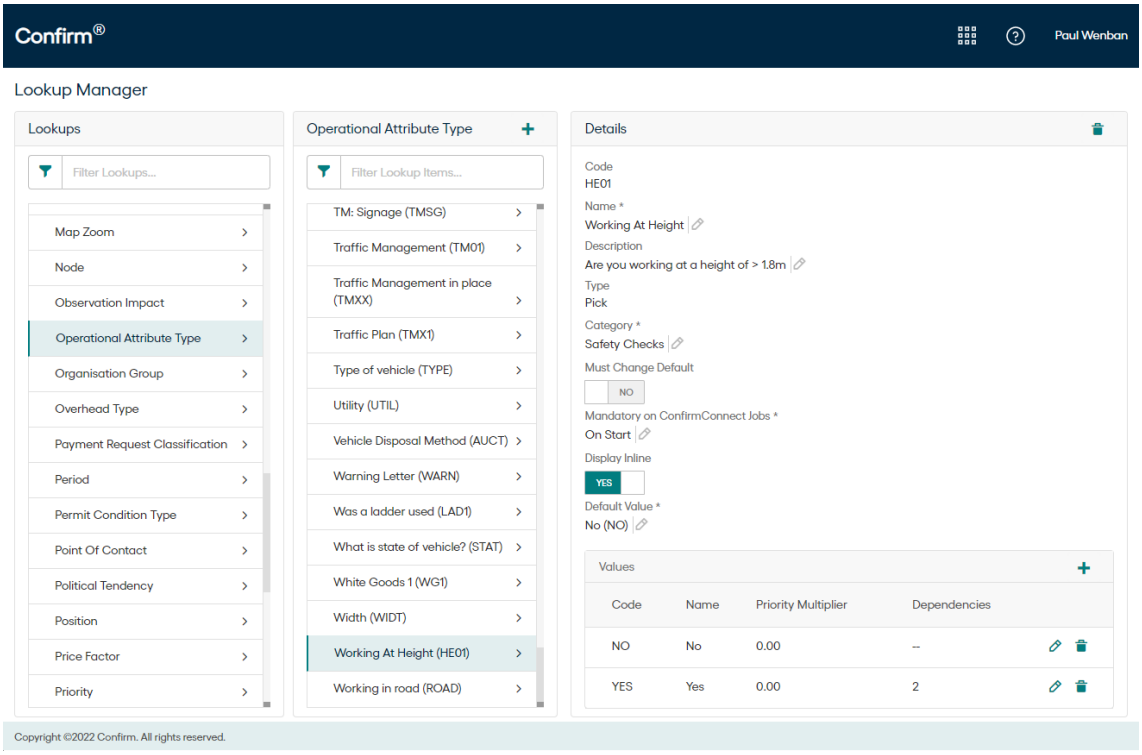
Dependent Attributes

Dependent Attributes are where Attributes are displayed or hidden depending on the Value chosen for another Attribute. For example, when a Job Attribute is a safety related question and where further, more detailed, questions are only applicable to particular answers.

Dependent Attributes can be configured on the Operational Attribute Type section of the Lookup Manager in the Confirm web interface.

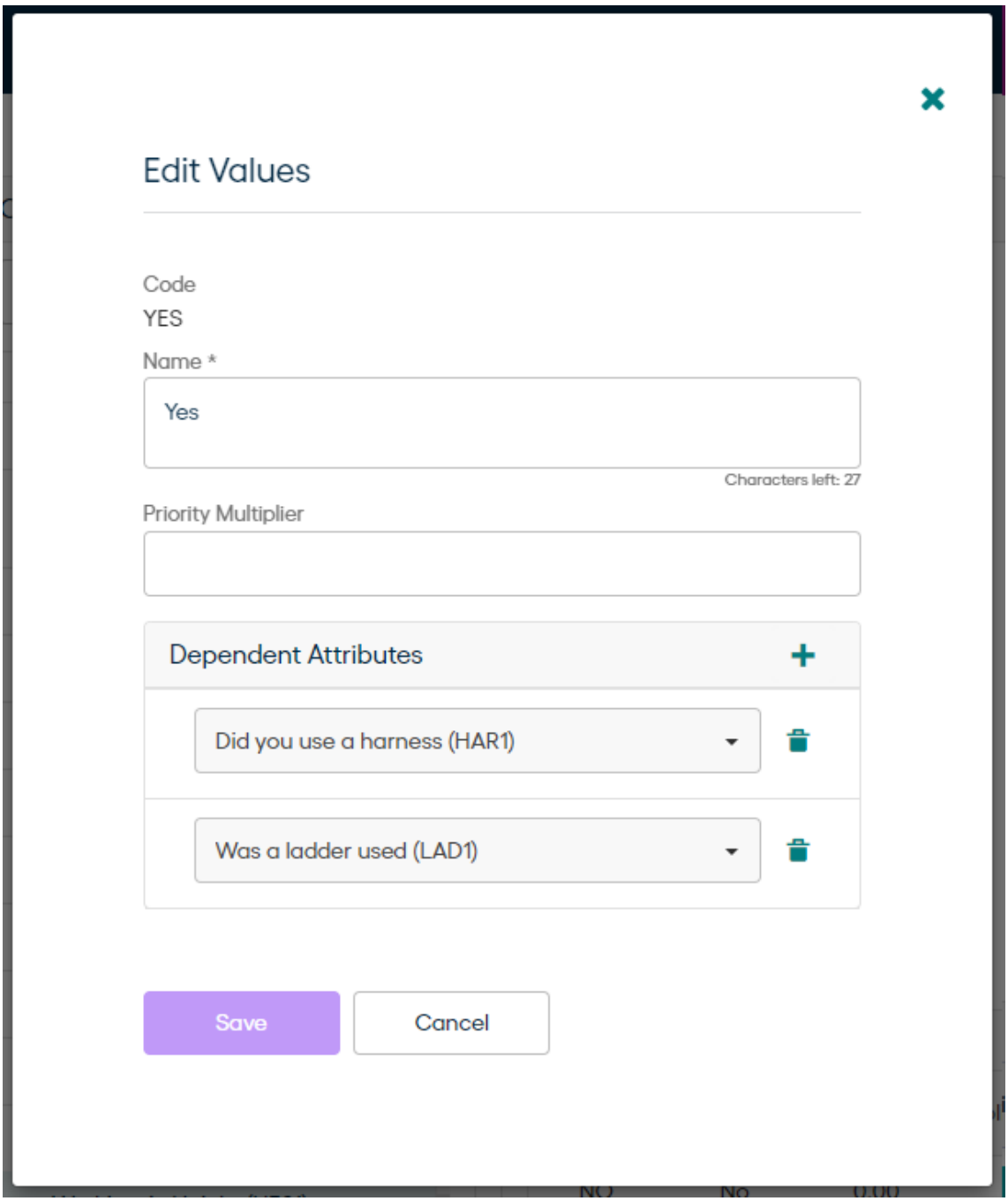
Select the Operational Attribute Type to be the 'Parent' Attribute.

Note: Only *Pick* Attributes can be Parent Attributes, but the Child Attributes may be of any type.



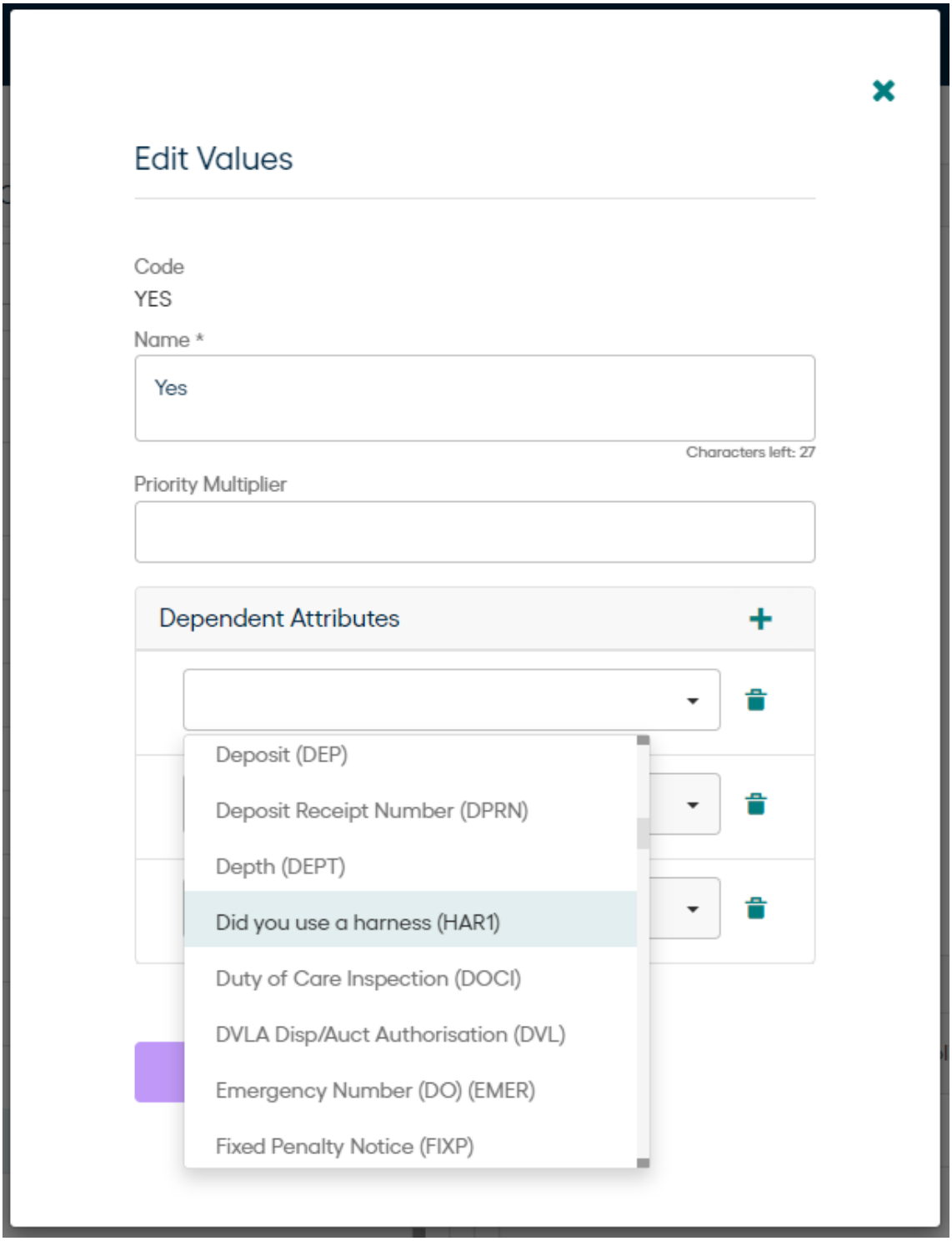
Note: The number of Dependent Attributes configured against each Value is displayed in the *Dependencies* column on the *Values* panel.

Next, select the Attribute Value upon which the 'Child' Attribute(s) will be dependent. Clicking on the pencil icon next to an Attribute Value will display Attributes dependent on that Value and allow new ones to be added.



In the above example, when selecting 'Yes' for the 'Working At Height' Attribute on a Job in ConfirmConnect® two further Attributes will be added to the Job: 'Did you use a harness' and 'Was a ladder used'.

Click on the '+' icon at the top of the *Dependent Attributes* panel to add a new Child Attribute.



It is possible to configure multiple Child Attributes for a single Parent.

It is also possible to set up a Child of a Child, so that a series of Attributes will be displayed based on the value given for previous Attributes.

Dependent Attributes can be used on Jobs, Defects and Enquiries in ConfirmConnect®

Cost Capture

Cost Capture on page 43 allows Gangs to capture time against their work which includes Travel, Breaks and changes to Gang members and equipment.

Activation

Cost Capture is only enabled where the **Action Officer** linked to the device User is linked to a **Labour Type**. **Capture Job Costs** and / or **Capture Survey Costs** need to be enabled.

There are two options available for both Jobs and Surveys:

- Record only productive time. Time spent working on the Task.
- Record both productive and non-productive time. Both time spent working on the Task and Travel times and any breaks.

Gang Members

In order for individuals to appear in the list of available Gang members, their **Action Officer** must be linked with a **Labour Type**.

SOR Items

Costs can optionally be tagged against an SOR Item for analysis purposes. This can be enforced by checking the "SOR Required for Cost Capture" option on the ConfirmConnect® Settings screen.

Jobs in Parallel

Allows one officer (Team lead) to log costs against multiple team members working on different Jobs at the same time.

To enable this functionality, launch the **User Security** screen and retrieve the desired user, enable the "Allow Parallel Jobs in ConfirmConnect" option. When the officer associated with this user next signs into ConfirmConnect, they will be able to record costs against multiple Jobs without needing to complete the first Job.

How costs are logged for Jobs In Parallel

The Labour costs are always split evenly between all Jobs in progress, regardless of the exact Job that individuals may have been working on. Similarly, Plant costs will be split evenly across all Jobs in progress regardless of the actual Job they were used for. This makes logging Cost Capture data in the field easier, less time-consuming, and less error-prone.

For example:

- Team members are assigned at the start of the day.
- Starting Job 1 will begin recording costs for all team members working on Job 1.
- Job 2 is started, costs will be saved for Job 1. Costs for Jobs 1 and 2 will begin for all team members and time will be split evenly between each Job.
- Job 3 is started, costs will be saved for Jobs 1 & 2. Costs for Jobs 1, 2 and 3 will begin for all team members and time will be split evenly between each Job.
- Job 2 is completed or paused, costs will be saved for all Jobs. Costs for Jobs 1 and 3 will begin for all team members and time will be split evenly between each Job.
- If the team needs to go on a break and there is a need to record Break time, all of the Jobs must be paused to allow a non-productive time to be recorded.
- All Jobs must be completed or paused before an End of day can be performed.

Material Costs are recorded when a Job is paused, removed or completed, they're not recorded when a Job is started. Materials are recorded against the individual Job they were uploaded against, these costs are not split.

Asset / Condition Survey & Feature Monitoring

Setting up ConfirmConnect® with Feature data

Various elements of the Feature form require lookups from the host to be available to the user, this involves setting up various data securities. Review the below information for what is required on each field.

Note: Linked (underlined) items refer to the Confirm screen and **bold** items refer to a field on the linked screen.

Feature Type	Feature Types appear in this list if the following conditions are met: - • Your **user's Data Security Group** must have access to the **Feature Group's Device Data Key**. • Your **user's Data Security Group** must have access to ALL Mandatory attributes on the **Feature Group**. **Note:** Not used by Feature Monitoring
Select Site (required)	Sites will only appear if the following conditions are met: - • Your **user's Work Group** has **Contract Area** security on the Site (only applies if the Show Sites by Workgroup General System Setting is set. • A "Site" has been created (not just a Central Site) and the Street Record type is applicable to Feature Creation. • The Site has coordinates (on the Additional tab) and that the rectangle formed by the minimum and maximum Eastings and Northings is within 100m of the Feature location. **Note:** Not used by Feature Monitoring
Site Classification	Your **user's Data Security Group** must have access to the Site **Classification Device Data Key.** **Note:** Not used by Feature Monitoring
Attributes	Attributes will only appear if: - • Your **user's Data Security Group** has access to the **Attribute Type**, **Measurement Type** and **Date Type Device Data Keys**. • Attributes will be shown if the Inspection Type associated with the tasks is set to Asset Survey and the user has the Asset Survey or Condition Survey modules. To be editable the Asset Survey module is required. **Note:** Creating a new feature: If a user does not have data security access to a mandatory attribute within a feature group, that feature group will not be available to the user. **Note:** If a user does not have data security key access to an attribute (including mandatory attributes) on an already assigned survey feature the attribute will not be available to the user. **Note:** Not used by Feature Monitoring
Conditions	Conditions will only appear if: - • Your **user's Data Security Group** must have access to the **Observation Type Device Data Key.**

- Only the Observation Types that are listed on the Inspection Type that also currently occur on the Feature being inspected are listed. To be editable the Condition Survey module is required.

Note: ConfirmConnect® does not use the **Export all Observation Types** setting on the **Condition Survey System Settings** screen.

Note: For Adhoc Inspections, you must specify the Observation Type against the Adhoc Inspection Type.

Note: It is possible to set the Notes field to be mandatory if the Condition has been left at a Not Assessed state. This can be done from the **ConfirmConnect® Settings** screen.

Defects	Lists Defects that the user has logged against this Feature during the survey. Also includes all Existing 'Internal' Defects without a Job that are at a Status of 'Action Required' and all Existing Defects that have a Job where the Job is still outstanding but not complete (no actual completion date set)
Condition linked Defects	A Defect option will only appear under an individual Observation Type if one or more Defect Types have been linked to that Observation Type and if the user's Data Security Group has access to the Device Data Key of that Defect Type. Existing Defects will be shown in this list if they were originally logged against the corresponding Observation Type.
Inventory Links and References	The Add button on the Inventory Type and Referenced By panels will appear if the following conditions are met: - • Your **user's Data Security Group** must have access to the Inventory Type's **Feature Group's Device Data Key**. • The Task is an Asset Survey or a New Feature.

Feature Monitoring

(ConfirmConnect® Condition Survey module 7010)

ConfirmConnect® requires the same prerequisites as outlined in **Monitoring Inspections - Step-by-step**

Emergency Defects and Inspection Batches

When an Officer sends an Emergency Defect via the **Send Now on Defect** option, the Defect will create an incomplete inspection batch on the Inspection Route of the Feature.

The following rules are used to determine if the inspection batch is marked as complete or incomplete for Asset and Condition Surveys Tasks:

- If a Defect is raised on a Task and the Send Now button is used, ConfirmConnect® will send that Defect immediately and a new incomplete inspection batch will be created. The Defect will be removed from the Device.
- If a second or subsequent Defects are raised on the same Task and the Send Now button is used, the original inspection batch will be updated with the additional Defect and the inspection batch will remain incomplete because the inspection still has not been completed. The Defect will be removed from the device.
- If a Defect is raised on a Task but the Send Now button is not used, the Defect will remain on the Task and will remain on the device.

- Once the Inspection is completed and the officer uses the Complete button, all conditions and all remaining Defects will be sent. If there is a previous Inspection batch for this inspection feature the batch will be updated with the new details and will be marked as Complete. If there isn't an existing Inspection batch for this Inspection feature then an Inspection batch will be created and completed.

The following rules are used to determine if the inspection batch is marked as complete or incomplete for Route Surveys:

- If a Defect is raised on a Route Survey Inspection feature and the Send Now button is used, ConfirmConnect® will send that Defect immediately and a new incomplete inspection batch will be created.
- If a second or subsequent Defects are raised on the same Route Survey Inspection feature and the Send Now button is used, the original inspection batch will be updated with the additional defect and the inspection batch will remain incomplete because the inspection still has not been completed.
- If a Defect is raised on a different Inspection feature on the same Route Survey and the Send Now button is used, a new incomplete inspection batch will be created containing this Defect and the first inspection batch will remain untouched.
- If a Defect is raised on a Route Survey Inspection task but the Send Now button is not used, the Defect will remain on the Route Survey Inspection on the device.
- Once the Route Survey Inspection is completed and the officer uses the Complete button, all remaining Defects which are still on the device will be sent. If there are any previous incomplete Inspection batches for this Route Survey they will be completed and any additional Defects on those features will be included. Any additional Defects on different Inspection features will be logged in a separate Inspection batch which will also be completed.

Route Surveys

Setting up ConfirmConnect® with Route Surveys

For an Inspection Route to be valid as a Route Survey task you must setup the Route in the following way: -

Inspection Route	• All features on the Route must be assigned to a single **Action Officers** • The **Inspection RoutesInspection Type** must be set to **Condition Survey**. • The **Inspection Type** must not have any **Observation Types** against it. • It is advised that Route Surveys have no more than 3000 features to avoid long delays when the task is uploaded from ConfirmConnect devices. **Note:** Dead features cannot be included in an Inspection Route.
Fast Defects	Only Fast Defects will appear in the list of defects available to users, they use the following rules: - • The **Defect Type Classification** must be set to Internal. • The **Defect Type** Fast Defect checkbox should be ticked. • The SOR Item download conditions listed on **Defects** also apply for Fast Defects. **Note:** For the Defect Type which are linked with SOR Groups, SOR Items are automatically added to the Fast Defect if your **user's Data Security Group** has access to the SOR **Schedule Device Data Key**.

Start of Day Inspection

Setting up ConfirmConnect® with Start of Day Inspections

For the Start of Day Inspection Type to be listed on the menu: -

Inspection Type	• Configure an **Inspection Type** with a Survey Type of 'Condition Survey', for the Start of day Inspections. • Configure one or more **Inspection Routes** which contain the Features that require Start of Day inspection.
ConfrmConnect Settings in Confirm Client	'Start of Day: Inspection Type' set to the above Inspection Type.

Routine Works

Setting up ConfirmConnect® with Routine Works data

Requires Confirm host "AM - Routine Maintenance 0720" & "ConfirmConnect® Jobs 7030".

Several steps are required in order to see Routine Works appear on ConfirmConnect®. The steps below detail what is needed:

- A Routine **Maintenance Regime** has been created.
- Your chosen **Regime** has been applied to One or more Features on one or more Sites. This can be done using the **Regime Allocation** tools.
- The **Set Regime Due Date** has been used to set an initial due date on each Regime Item retrieved from chosen filter criteria.
- Now that you have applied a regime to one or more features, you need to Allocate a Gang to each SOR Item required on that Regime. This can be done by using the **Default Gang Allocation** tool.
- Finally, you need to specify a **Device Action Officer** for your chosen **Gang/s**.
- Routine Works are due within the **Routine Works earliest Due Date Tolerance**.

This officer will receive the Routine Work tasks. Each task will contain a Feature on a Site with all of the applicable Regime Items for each Gang this officer is specified for and which are applicable to that feature.

Document Upload Process

This section describes the process of uploading a Document Link into Confirm.

When a document is uploaded into Confirm, it is stored using one of the following methods:

- FTP Site
- Document Management System (DMS)
- File Store
- Database

The document upload process is configured based on the **Document Links System Settings**. Further to this, the process of uploading documents for Street Work Inspections is also configured through a combination of the **Street Works Initiation System Settings** and **Organisation**.

The upload process will attempt to upload documents into Confirm working through each method in turn until it is successful.

FTP Site

Note: This applies to documents uploaded for Street Work Inspections only.

Document Links will attempt to be uploaded to an FTP site if the following prerequisites are true:

- The **Document Link FTP** has been configured within the**Street Works Initiation System Settings** screen.
- a valid **Attachment URL** has been specified for the Initiating **Organisation**.

Document Management System (DMS)

Document Links will attempt to be uploaded to the DMS when the following prerequisites are true:

- The DMS must be accessed via a service that conforms to Document Management Web Application Interfacing Specification (CHA18373).
- The **Document Store** field has been set to Web (PUT/POST) on the **Document Links System Settings** screen.
- The **Web Service URL** has been configured within **Document Links System Settings** screen.

Note: Documents uploaded via Street Works will not use this step if FTP settings are in use. Instead, the document will be passed on to the **Document Store Folder** location. If FTP settings are not in use then the Street Works document link will attempt to be uploaded to the DMS.

Document Store Folder

If the **Document Store Folder** has been configured within the **Document Links System Settings** screen then the process will attempt to save the document to the specified location if the following condition is true:

- ConfirmConnect® web service has been given read/write permissions to the **Document Store Folder** location. These permissions must be granted to the user assigned to the application pool running the ConfirmConnect® web service.

Database

If attempts to save to other locations fail or are not configured, then the document will be saved within the database.

What's Going On Here and Select Routes

Select Routes

Select Routes functionality (from the Menu) uses the **Earliest Follow Up** field on the **Inspection Type** to determine which features qualify to be assignable to the officer.

What's Going on Here

Due Inspections and Routes	The **Earliest Follow Up** field on the **Inspection Type** is used to determine which features qualify to be assignable to the officer.

Features	All **Features** with a **Contract Area** available to the **User's Work Group** will be retrieved. It is also possible to change the default icon so that each Feature can appear with a different symbol and background colour. See **Web Map Symbol Settings** for details.
Features with Geometry	Applies the same rules as Features but will also display the Features Geometry on the map if the Geometry is stored in Confirm. **Note:** Features Geometry shapes can be displayed on top of one another. This can be ordered by applying an **Attribute Type** and setting this Attribute Type on the **Order Features on What's Going on Here by Attribute Type.** field on the **ConfirmConnect Settings** screen.
Completed Jobs	Completed Jobs will appear if the following conditions are met: - • **Contractor Officers** will only see those **Jobs** which have the **Preferred Contract** set to a Contract awarded to their Contractor. • The Jobs **Actual Completion** It will also display Completed Jobs geometry on the map if geometry is stored in Confirm. date has been set to any date. **Note:** If a Job has been re-opened and assigned to an officer, it may still appear as a Completed Job if the Actual Completion date is still set. The Actual Completion Date can be cleared on the Confirm Job screen.
Current Defects/Jobs	Current Jobs will appear if the following conditions are met: - • The **Job Status** has its **Outstanding** flag checked • **Contractor Officers** will only see those **Jobs** which have the **Preferred Contract** It will also display Current Defects/ Jobs geometry on the map if geometry is stored in Confirm. set to a Contract awarded to their Contractor. Current Defects will appear if they are not linked to a Job.

Filter Features by Attribute Type

What's Going on Here results for Features or Features with Geometry can be further filtered by enabling the **Filter Features by Attribute Type** option on the **ConfirmConnect Settings** screen.

GPS Tracking

GPS tracking for ConfirmConnect® uses the existing GPS tracking settings detailed below. It will create an **Officer Location Transfer Tab**" each time the officer's location is due to be sent to Confirm.

In order for GPS tracking to update Confirm with the officer's current location, an active connection on the officer's device is required.

Configuration

1. Set the **Frequency of storing GPS information**, **Distance Tolerance for logging GPS information** and **Tracking Frequency** settings on the **ConfirmConnect® System Settings** screen.
2. Specify the tab file name and location that will be updated by the Referential Integrity Agent. This is set in the **GPS Logging RI Tab File** setting on the **Map Settings** screen.
3. Setup and configure the Referential Integrity Agent to run periodically to update the GPS Position Map Layer tab file.
4. Add the GPS Logging Layer to the Map so that the Action Officer current locations are shown.

Can GPS Tracking be turned off?

Yes, entering 0 in the **Tracking Frequency** setting on the **ConfirmConnect® Settings** screen will prevent the device from sending the officer location data up to Confirm.

Tracking in the Foreground

Foreground operation applies only when ConfirmConnect® is the active application on the device.

ConfirmConnect® will use the **Frequency of storing GPS** to track Officer's location on the device and upload to the server at the **Tracking Frequency** interval.

Tracking in the background

Background operation applies when any of the following applies:

- A different application is active (e.g. taking a phone call, reading emails)
- After pressing the home key
- When the device goes to sleep or is in standby mode

For Android and iOS devices, a combination of the **Frequency of storing GPS** and the **Distance Tolerance** settings are used. In background mode activity, i.e. movement, is used as the trigger for tracking, rather than being time based.

At walking speeds ConfirmConnect® only uses the **Distance Tolerance** and will upload to the server whenever the Officer has travelled that distance.

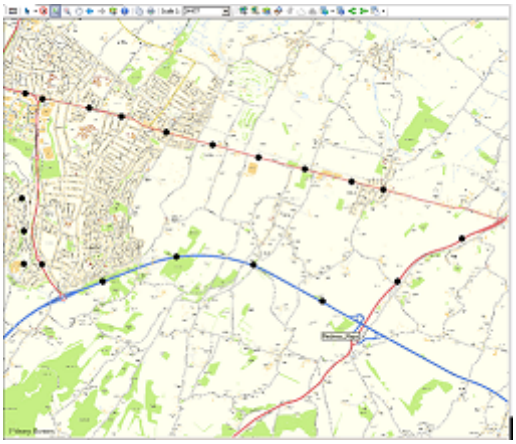
At driving speeds ConfirmConnect® uses an elastic distance filter that approximates the **Frequency of storing GPS** setting. If the Officer's speed is variable this may compress or extend the timing, however at a constant speed the timing will be evenly spaced.

The **Tracking Frequency** is not used in this mode, whenever the distance filter triggers the location will be sent to the server.

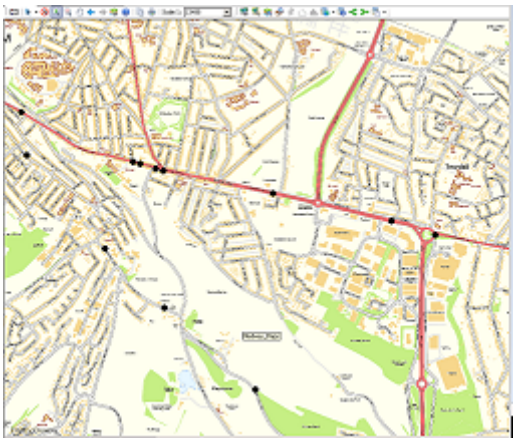
Note: When an iOS devices has been stationary for 2 or more minutes the Operating System will impose a 200 metre movement boundary before activity tracking is resumed, at which point ConfirmConnect® will behave in the background as above.



Walking survey - tracking based on distance only.



Driven survey - at constant speed the gaps are consistent



Driven survey - at variable speeds the gaps are variable. Closer in traffic and slower speeds, spread out at speed.

Note: Andorid Devices: Some Android manufacturers override the default behaviour of shutting applications down in order to conserve battery life. The folllowing site details options to mitigate these overrides by changing power saving options the manufacturers provide **https://dontkillmyapp.com**

Setting up Mapping data

ConfirmConnect® can support a single, user-specified, background map which can be used to replace the default bing maps. This is done by configuring some Map Settings that will read from any of the following Mapping Services:

- **Bing**
- **Tile Services**
- **Web Mapping Service (WMS)**
- **Local GeoPackage Maps**

Note: Local SQLite Maps are no longer supported. Current SQLite layers can be converted to Geopackage format, please refer to the **GeoPackage** section of the help for details.

Please refer to each section on how to configure the Map Settings required for ConfirmConnect® to use your chosen mapping service.

I have my own Map Service, how do I get ConfirmConnect® to use it?

There are two ways to store the Map Settings required for your mapping service, these are: -

- **Settings.js** file. This allows each device to be configured independently from each other.

  Note: Removing ConfirmConnect® from the device will also remove the settings.js file. The presence of a settings.js file will override any settings stored in the database.

- Confirm Database. This applies to all users of ConfirmConnect® who do not currently have a settings.js file loaded on their device. Database settings are applied using the Web Map Layer Settings screen in the Confirm Client. You will need a settings.js which has been configured and tested with the service you require.

We suffer from black spots, can we use maps locally on devices?

Yes, ConfirmConnect® can be configured to hold maps locally on the device so there is no reliance on an active Internet connection in order to see them. This is available using one or more local GeoPackage databases, for more details see the section on configuring **Local GeoPackage Maps**.

Note: This is not the same as map caching.

Multiple Map Layers

When you need to use map layers from one or more mapping sources please refer to the **Multiple Map Layers** section of the help.

Aerial Map Layers

When you need to use map layers from one or more mapping sources please refer to the **Aerial Maps**.

Bing™ Maps

Web Mapping uses Bing maps by default, the only requirement is to have an active connection to the Internet.

If there is no Internet connection, the maps will not be displayed.

Caching Bing maps (ConfirmConnect® only)

Bing maps can be cached on ConfirmConnect® for a 24 hour period, after which ConfirmConnect® must have an active connection to the Internet in order to update the cached mapping data.

Note: Map Caching only occurs when ConfirmConnect® has a wireless network connection due to the quantity of data downloaded.

Note: Map Caching is disabled for the Win32 version of ConfirmConnect®. This has been done as there is currently no method to identify if the Win32 client has a Wireless or 3G/GPRS connection.

Tile Services

Overview of a Tile Server

Tile services provide a grid of uniformly sized images (typically 256x256 pixels) with a different set of images for each zoom level / resolution.

Each tile is uniquely identified by the combination of row (y) and column (x) of that tile in the grid for the zoom level (z).

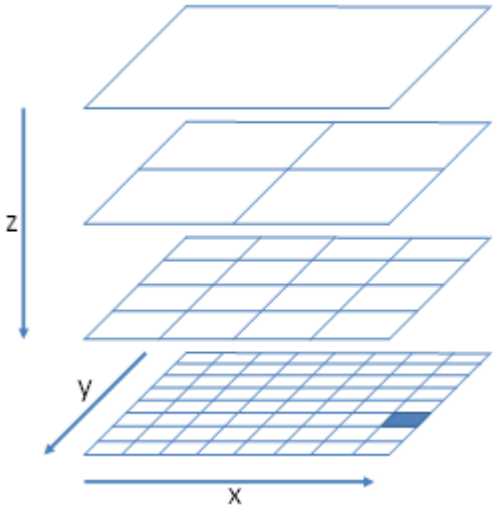
The URL for a tile is found by taking these values and substituting them into a placeholder in the "url" parameter provided in the map layer setting. For example, if the url in the setting is set to:

"http://stratus.ondemand.eu/connect/gettile?mapcfg=Main&name=
Base&level=${z}&row=${y}&col=${x}&output=image/gif"

Then the URL generated for zoom level 3, row 5 and column 7 would be:

"http://stratus.ondemand.eu/connect/gettile?mapcfg=Main&name=
Base&level=3&row=5&col=7&output=image/gif"

Note: For tile services the row starts at the top (north) and increases going south, which is the opposite from the way that coordinates typically go. This is depicted in the following diagram:



In order to work out the column, row and zoom of the tile that need to be specified for a particular map coordinate (x,y) it goes through the following process:

- The zoom is set to the zoom level. Zero is the most zoomed out level.
- The resolution is determined from the zoom level.
- The distance of the x and y from the tile origin is determined (top left corner of the maximum extent of the map).
- These distances are converted to pixels by dividing them by the resolution
- The distances in pixels are then divided by the tile size and rounded down to determine the row and column.

For example, if a Tile server had an origin of 0,1000000 a tile size of 256x256 pixels and resolutions 1000,500,250,125 then the row and column for point 400000,300000 at the second most detailed zoom level would be calculated as follows:

- Zoom is 1 (as the least detailed zoom level is zero).
- The resolution is 500 (second item in the list of resolutions).
- Distance from origin is 400000 for x and 700000 for y (1000000 – 300000).
- These distances in pixels are 800 for x and 1400 for y.
- The column is therefore 3 (800 / 256, is 3.125 rounded down) and the row is 5.

In the above example, this would generate the following URL:

"http://stratus.pbondemand.eu/connect/gettile?mapcfg=Main&name=Base&level=1&row=5&col=3&output=image/gif"

ArcGIS Tile Cache

The below is an example setting for using an ArcGIS Tile Cache.

```
{
 "roads":{
  "type": "ArcGISCache",
  "url": "Server Name/ArcGIS/rest/services/Map Name/MapServer",
  "resolutions" : [
   92.6043518753704,
   26.4583862501058,
   13.2291931250529,
   6.61459656252646,
   5.29167725002117,
   3.96875793751588,
   2.64583862501058,
```

```
   1.32291931250529,
   0.661459656252646,
   0.264583862501058],
  "tileSize": [512, 512],
  "tileOrigin" : [-5220400, 4470200],
  "projection": "EPSG:27700",
  "projectionDef": "+proj=tmerc +lat_0=49 +lon_0=-2 +k=0.9996012717
+x_0=400000 +y_0=-100000 +ellps=airy +datum=OSGB36 +units=m +no_defs
",
  "units": "m",
  "restrictedExtent": [230000,629267,320000,704092],
  "maxExtent": [230000,629267,320000,704092]
 }
}
```

How do I obtain the settings required for the above?

Most of the required settings can be determined by querying the map layer to get its properties, by appending "?f=json&pretty=true" to the end of the url in a browser, e.g.:

http://server name/ArcGIS/rest/services/map name/mapserver?f=json&pretty=true

This will return a JSON description of the map from which the settings can be obtained:

"type":	this value must be set to "ArcGISCache"
"url":	This is the base URL for the ArcGIS Tile Cache.
"resolutions":	Enter a list of all the resolutions required. Find the section that begins with "lods" under "tileInfo" and list the resolution values separated by commas. e.g. "resolutions" : [42.3334180001693, 21.1667090000847, 10.5833545000423],
"tileSize":	This is in the "tileInfo" section. List the values for "rows" and "columns" separated by a comma. e.g. [256, 256] or [512, 512].
"tileOrigin":	List the "x" and "y" found under "tileInfo" > "origin"
"projection":	Refer to **Projections** page for details.
"projectionDef":	Refer to **Projections** page for details.
"units":	must be entered as "m", as shown in the example. m = metres.
"restrictedExtent":	List the xmin, ymin, xmax, ymax values. These are shown under the "fullExtent". It is specified as a comma separated list of coordinates inside the square brackets as follows: Minimum X,Minimum Y,Maximum X,Maximum Y
"maxExtent":	Set to the same as the "fullExtent" entered in the "restrictedExtent" entry. It is specified as a comma separated list of coordinates inside the square brackets as follows: Minimum X,Minimum Y,Maximum X,Maximum Y

Spatial Server

The below is an example setting for configuring a Web Map Service.

```
{
    "roads":{
        "type": "Tile Service Layer",
        "url": "Server name/rest/EnterpriseMapping/MapTilingService",

        "mapName": "Map Folder/Map Name",
        "maxResolution": Maximum resolution,
        "projection": "Projection Code",
        "projectionDef": "Projection Definition",
        "units": "m",
        "maxExtent", [Maximum extent]
    }
}
```

"type":	this value must be set to "TileServiceLayer"
"url":	This is the base URL for the Spatial Server named tile service.
"mapName":	Map Folder/Map Name - as configured in your mapping service.
"maxResolution":	Maximum resolution - as configured in your mapping service.
"projection":	Refer to **Projections** page for details.
"projectionDef":	Refer to **Projections** page for details.
"units":	must be entered as "m", as shown in the example. m = metres.
"maxExtent":	This is the minimum and maximum northings and eastings that the map covers. It is specified as a comma separated list of coordinates inside the square brackets as follows: Minimum X,Minimum Y,Maximum X,Maximum Y

Stratus

The below is an example setting for configuring a Stratus service containing a Base and Business layer.

```
{
    "roads":{
        "type": "Group",
        "projection":"EPSG:27700",
       "projectionDef":"+proj=tmerc +lat_0=49 +lon_0=-2 +k=0.9996012717
 +x_0=400000 +y_0=-100000 +ellps=airy +datum=OSGB36 +units=m +no_defs
 +nadgrids=ostn02 ",
        "attribution":"(c) Crown Copyright",
        "maxResolution" : 390.625,
        "maxExtent": [531000.0, 161000.0, 631000.0, 261000.0],
        "layers": {
            "Base": {
                "type":"StratusLayer",
                "url": "Servername/folder/controller/tiling/gettile?
mapcfg=Configuration%20Name&name=Map%20Name
&level=${z}&row=${y}&col=${x}&output=image/gif",
```

```
            },
            "Business": {
                "order": 1,
                "type": "StratusLayer",
              "url": "Servername/folder/controller/mapping/getmap?lay-
ers=/foldername1/foldername2/Lay-
er%20Name&width=${tw}&height=${th}&x=${bx}&y=${by}&zoom=${bw}&srs=EPSG:27700&out-
put=image/png"
            }

        }
    }
}
```

"type":	this value must be set to "StratusLayer"
"url":	This is the base URL for the Stratus service.
"maxResolution":	Maximum resolution - as configured for your map service.
"projection":	Refer to **Projections** page for details.
"projectionDef":	Refer to **Projections** page for details.
"units":	must be entered as "m", as shown in the example. m = metres.
"maxExtent":	This is the minimum and maximum northings and eastings that the map covers. It is specified as a comma separated list of coordinates inside the square brackets as follows: Minimum X,Minimum Y,Maximum X,Maximum Y

The following settings are only required for Stratus Business layers:

"tw" and "th":	These are the tile Width and Height.
"bx" and "by":	These are the coordinates of the tile bounds.
"bw":	The width of the tile bounds in Map units.

Generic Tile Server

There are various different Tile Services options available, if you are using one which is not mentioned previously then you can configure the map using the details here.

```
{
 "roads":{
  "type": "xyz",
  "url": "URL with placeholders for ${z}, ${y}, and ${z}",
  "resolutions" : [Resolution list],
  "tileSize": [Tile Size],
  "tileOrigin" : [Tile Origin],
  "projection": "Projection Code",
  "projectionDef": "Projection Definition",
  "units": "m",
  "restrictedExtent": [Restricted extent],
  "maxExtent": [Maximum Extent]
 }
}
```

"type":	Set this value which is applicable to your Tile Service.

Note: If your tile service is one based, rather than zero based (i.e. the most zoomed out zoom level is 1 and the first row and column is 1 rather than 0), then use a "type" of "StratusLayer" rather than "XYZ".

"url":	This is the full URL for an individual tile. Use the placeholders ${z}, ${y} and ${x} to specify the relevant zoom, row and column in the URL.
"resolutions":	Enter a list of all the resolutions required. e.g. "resolutions" : [42.3334180001693, 21.1667090000847, 10.5833545000423],
"tileSize":	This is the width and height of an individual tile, in pixels. e.g. [256, 256] or [512, 512].
"tileOrigin":	This is the coordinates of the top left hand corner of the tile at row zero, column zero. This is only needed if it is different from the maxExtent
"projection":	Refer to **Projections** page for details.
"projectionDef":	Refer to **Projections** page for details.
"units":	must be entered as "m", as shown in the example. m = metres.
"restrictedExtent":	This is the maximum extent of the map that a user would be allowed to see. Does not need to be supplied if this is the same as the maxEtent below.
"maxExtent":	This is the minimum and maximum northings and eastings that the map covers. It is specified as a comma separated list of coordinates inside the square brackets as follows: Minimum X,Minimum Y,Maximum X,Maximum Y

Web Map Service (WMS)

The below is an example setting for configuring a Web Map Service.

```
{
    "roads":{
        "type": "WMS",
        "url": "Service URL",
        "projection": "Projection Code",
        "projectionDef": "Projection Definition",
        "units": "m",
        "maxExtent": [Maximum extent],
        "parameters": {
            "layers": ["Layer name"]
        }
    }
}
```

"type":	this value must be set to "WMS"
"url":	This is the base URL for the WMS service. e.g. "http://www.os-mgb.org.uk/ogc/wms": To test this in a browser, enter the base URL followed by "?Service=WMS&REQUEST=GetCapabilities", e.g. if the base URL was "http://www.os-

mgb.org.uk/ogc/wms" then enter : -**http://www.osmgb.org.uk/ogc/wms?REQUEST=GetCapabilities**

This should return an XML document describing the capabilities of the service.

Note: Do not include anything after the "?" in the Service URL setting.

"projection": Refer to **Projections** page for details.

"projectionDef": Refer to **Projections** page for details.

"units": must be entered as "m", as shown in the example. m = metres.

"maxExtent": This is the minimum and maximum northings and eastings that the map covers.

It is specified as a comma separated list of coordinates inside the square brackets as follows: Minimum X,Minimum Y,Maximum X,Maximum Y

"parameters": You can add other parameters to this list in the format "name":"Value". These will be added to the end of the URL that is sent to the WMS service in the format "&NAME=Value".

The following parameters are currently supported (all in lower case):

- "format":
- "transparent":
- "login":
- "password":
- "country":
- "key":
- "product":
- "url":
- "tiled":
- "resolutions":
- "tileOrigin":
- "maxExtent":
- "layers":

Note: "layers": - You may specify a single layer in this list. Multiple layers are currently not supported.

Note: All parameters are passed in plain text, so be aware of this when passing passwords and other secure information over the network.

Cached WMS

Some WMS services, such as Geoserver, pre-cache data on the assumption that the client will always ask for discrete ranges of data. If this is the case then you may also need to provide other tile-related parameters in the settings, such as the list of "resolutions" and the "tileOrigin" or "maxExtent". Most vendors provide OpenLayers examples of how to access their services, so you can obtain most of the settings you need from these examples.

Local GeoPackage Maps

ConfirmConnect® can access local vector and raster maps stored in GeoPackage format.

The steps involved in getting local GeoPackage maps onto your device are as follows:

- Convert your maps into the GeoPackage format
- Prepare the map settings
- Getting the settings and GeoPackage files onto your device

Converting Maps to GeoPackage Format

We recommend using the tools provided in the Geospatial Data Abstraction Library (GDAL) to convert map data into the GeoPackage format. You will need to use a version of this tool that supports GeoPackage databases, which can be obtained from:

- https://www.gisinternals.com/release.php
- Select a package for your environment. e.g. release-1900-gdal-2-3-0-mapserver-7-0-7
- From the available list, download the file with the description “Generic installer for the GDAL core components”. e.g. gdal-203-1900-core.msi

Note: "The GDAL tools, in theory, can also extract data from spatial databases such as Oracle / SQL Server Spatial or ArcSDE. However, Siemens Asset Management Software is not able to offer support on using the tools in this way.

Converting Existing SQLite Layers and Configuration to GeoPackage

Vector maps can be converted to the GeoPackage format using the "ogr2ogr" utility provided with the GDAL tools. A typical command line might look like this:

```
ogr2ogr -nlt GEOMETRY mmarea.gpkg mmarea.sqlite
```

Raster maps can be converted to the GeoPackage format using the "gdal_translate" utility provided with the GDAL tools. A typical command line might look like this:

```
gdal_translate 10k.sqlite 10k.gpkg
```

The settings.js file must also be updated to replace all occurrences of:

- **"type": "RasterLite"** with **"type": "GeoPackageTile"**
- **"type": "SpatiaLite"** with **"type": "GeoPackageFeature"**
- **"url": "*{filename}*.sqlite"** with **"url": "*{filename}*.gpkg"**

Note: All other existing settings within settings.js can remain the same i.e. for Styling and Zoom Levels etc. Be aware that Table and Column names may change case when converting from existing SQLite and any Settings using these values will need to match.

Converting Vector Maps

Vector mapping formats include MapInfo TAB files and ESRI SHP files. Vector maps can be converted to the GeoPackage format using the "ogr2ogr" utility provided with the GDAL tools. A typical command line might look like this:

```
ogr2ogr -f "GPKG" -nlt GEOMETRY -simplify 1 -select featcode,labeltext
 -gt 65536 mydb.gpkg mymap.TAB
```

Some of the most commonly used options are described below:

-f "GPKG"	This setting tells the ogr2ogr utility to translate into GeoPackage format and must always be specified when converting vector maps.
-append	Use this option to add a new table to an existing database.
-overwrite	Use this option to replace the content of an existing table, e.g. if newer versions of the map become available.
-nlt GEOMETRY	The ogr2ogr utility will attempt to determine the geometry type (e.g. point, line, polygon, multi-polygon, etc.) from the source data. However, in some cases where there is a mixture of types in the source table this isn't reliable. The "-nlt GEOMETRY" option ensures that the created table is able to support all geometry types.
-simplify	If you are using maps that might be used at wide zoom levels then performance can be significantly improved by using the "-simplify" option. This takes a tolerance parameter which is in map units (typically metres) and summarises all of the coordinates from a geometry that are less than this distance apart into a single coordinate.
-select	By default, all of the attribute data in the source layer will be copied into the GeoPackage table. If you have a particularly large layer with lots of attributes than you may be able to save some space on the device by limiting the number of attributes that are copied into the GeoPackage database. If specified, you will need to ensure that any attributes that you want to use for styling, labelling or information are included in this list.
-gt	This option determines how many features will be loaded into memory at a time before being written to the GeoPackage database. Most modern computers have sufficient memory to support a large value here, which will significantly speed up the conversion process. **Note:** This has no impact on the end result or the amount of memory needed on the actual device.
mydb.gpkg	This is the name of the GeoPackage database that will be produced
mymap.TAB	This is the name of the source file from which the vector data is being copied.

Preparing map settings for GeoPackage maps

A GeoPackage map can be configured in the settings.js file using settings similar to the following:

```
{
    "mapSettings":{
        "roads":{
            "type": "GeoPackageFeature",
            "url": "mydb.gpkg",
            "table": "mymap",
            "column": "geometry",
            "projection": "EPSG:27700",
            "projectionDef": "+proj=tmerc +lat_0=49 +lon_0=-2
+k=0.9996012717 +x_0=400000 +y_0=-100000 +ellps=airy +datum=OSGB36
+units=m +no_defs +nadgrids=ostn02 ",
            "attribution": "(c) Crown Copyright",
            "maxExtent": [290000,190000,510000,410000],
            "numZoomLevels" : 25,
            "style": {
              "fillColor": "orange",
```

```
            "fillOpacity": 0.5,
            "strokeOpacity": 0.2,
            "strokeWidth": 1
          },
          "styleBy": "featurecode",
          "styles": {
            "10021": {"fillColor": "red"},
            "10053": {"fillColor": "brown"},
            "10172": {"fillColor": "grey"},
            "10111": {"fillColor": "green"}
          },
          "info": "Feature Type: ${featurecode}"
        }
    }
}
```

"type": this value must be set to "GeoPackageFeature"

"url": This is the name of the GeoPackage database. ConfirmConnect® will search for the database in the normal "root" location for your device.

Note: This value is case sensitive and must include the file extension e.g. "mydb.gpkg".

"table": The name of the GeoPackage table in the database.

Note: Only one table can be specified here. To view data from multiple layers, you will need to use a **Group Layer**. This value is case sensitive.

"column": This is the name of the column in the GeoPackage table that contains the geometry of the feature. This is normally called "geometry". This value is case sensitive.

"projection": Refer to **Projections** page for details.

"projectionDef": Refer to **Projections** page for details.

"maxExtent": This is the minimum and maximum northings and eastings that the map covers.

It is specified as a comma separated list of coordinates inside the square brackets as follows: Minimum X,Minimum Y,Maximum X,Maximum Y

"numZoom-Levels": Specify how many zoom levels will be supported. Zoom levels start at the maximum extent and increase by a factor of two at each step.

"style": This is a style definition in the format described below.

"styleBy": You can style map features based on an attribute by using the styleBy setting with a list of styles definitions, where each style name corresponds with the value of the styleBy attribute, e.g.

```
"style": {"fillColor": "orange", "fillOpacity": 0.5,
"strokeOpacity": 0.2},
"styleBy": "featurecode",
"styles": {
  "10021": {"fillColor": "red"},
  "10053": {"fillColor": "brown"},
  "10172": {"fillColor": "grey"},
  "10111": {"fillColor": "green"}
}
```

"info": ConfirmConnect® is able to display basic information from GeoPackage layers when the user clicks on the map. To enable this, include an "info" setting which should contain the text you want to show with placeholders for the various data fields you want to include from the map, e.g.:

"info": "Feature Type: ${featurecode}"

Vector Style Definition

Styles are defined using a number of different properties surrounded by curly brackets {}. For example:

```
{
    "fillColor": "#ff8800",
    "fillOpacity": 0.5,
    "strokeOpacity": 0.2,
    "strokeWidth": 1
}
```

The following style properties are supported:

"fillColor": The color in which polygons and the inside of symbols will be filled. Can be supplied as a Red-Green-Blue (RGB) hex value, e.g. "#ffffff" is white, or a colour name, e.g. "blue", "black", etc. Note that not all colour names may be supported on all devices, so it is safest to use an RGB value.

"fillOpacity": 1 is fully opaque, 0 is fully transparent

"fill": Whether to draw polygons. Defaults to "true". Set this to "false" if you want to have a layer that just shows labels without the associated feature

"strokeColor": The RGB color used for lines and the outline of polygons and symbols

"strokeOpacity": 1 is fully opaque, 0 is fully transparent

"strokeWidth": The width of outlines in pixels

"stroke": Whether to draw lines. Defaults to "true". Set this to "false" if you want to have a layer that just shows labels without the associated feature

"graphic": Whether to draw points for certain features when using styleBy. Defaults to "true". Set this to "false" if you want to have a layer that just shows labels without the associated feature

"graphicName": The name of the symbol used for drawing points. The default is a circle. Valid options are "circle", "square", "triangle", "cross" and "x"

Note: This option requires "pointRadius" option to exist in order to work, not including "pointRadius" will prevent the layer from appearing when you include the "graphicName" option.

"pointRadius": Size of the drawn points. Set this to "1" or a higher, value is valid. Setting to 0 is an invalid option.

Note: If you want to have a layer that just shows labels without the associated feature, do not include this or the "graphicName" options.

"label": The text displayed next to a feature. Can include attributes from the layer by including these in placeholders, e.g. "${feature_type}"

"labelAlign":	How the label text will be alingned with the centroid of the feature. The first character is the horizontal alignment, which can be "l"eft, "r"ight or "c"entre and the second character is the vertical alignment: "t"op, "b"ottom or "m"iddle. e.g. "cm" will centre the label both horizontally and vertically.
"fontColor":	The RGB colour used for labels
"fontOpacity":	1 is fully opaque, 0 is fully transparent
"fontWeight":	"normal", "bold", "bolder", "lighter" or a number from 100 to 900 (whole hundreds only)
"fontSize":	The size of the font to use, typically specified in pixels, e.g. "16px"
"fontFamily":	The name of the font to use. Note that your device may only support a limited set of fonts, but the generic families of "serif" and "sans-serif" should work on all devices.
"labelOutlineColor":	Used to draw a "halo" around text labels to make them stand out more.
"labelOutlineWidth":	The width of the label outline in pixels.
"labelOffsetX":	The horizontal offset of text labels in pixels, e.g. "10"
"labelOffsetY":	The vertical offset of text labels in pixels, e.g. "10"

Converting Raster Maps

Raster maps are image files with associated georeferencing information describing where they are in the world. Typical raster formats include TIF, PNG and JPEG files. In some cases the georeferencing information is embedded within the file (in the case of a GeoTiff) or in other cases it is contained in an accompanying World File or Tab file.

Note: When the georeferencing information is contained in the accompanying World file or tab files, ensure these files exist alongside the raster files prior to importing, this will ensure the georeferencing information is also imported.

The gdal_translate utility is used to load a raster image file into a GeoPackage database. A typical command line might look as follows:

```
gdal_translate -of GPKG -co APPEND_SUBDATASET=YES -co TILE_FORMAT=PNG
 -co RASTER_TABLE=myraster input.tif mydb.gpkg
```

Some of the most commonly used options are described below:

-of "GPKG"	This setting tells the gdal_translate utility to translate into GeoPackage format and must always be specified when converting Raster maps.
-co TILE_FORMAT=PNG	This specifies the image format that will be used when storing the raster data in the database. When source images are anything other than JPEG or PNG, this setting is mandatory. "PNG" format is recommended as it has high compression without any data loss. **Note:** Supported options are JPEG or PNG
input.tif	The name of the source image file

mydb.gpkg	The name of the GeoPackage database
myraster	The table name into which the image will be loaded.
-co APPEND_SUBDATASET=YES	If you want to add to an existing database then you must include the "-co APPEND_SUBDATASET=YES" option with each layer that you load.
-expand RGB	Some types of raster image use a colour palette to lookup the appropriate Red, Green and Blue value for each pixel in an image. If your images use a colour palette then you will need to add the "-expand rgb" option as otherwise the colours of your maps will not be displayed properly in ConfirmConnect®. You can find out if your images use a palette using the gdalinfo utility with the "-noct" option, e.g.: `gdalinfo -noct input.tif` Look for the lines that begin with "Band" and check the "ColorInterp" value. If this says "Palette" then you will need to use the expand option with this set of files.

Typically a large number of raster maps are provided which fit together to form a mosaic of the entire area you are interested in. The above command cannot be used to append further maps into an existing table so an intermediate step to convert into sqlite format is required.

Note: A separate table name should be used for maps that show different levels of detail.

The gdal_translate utility is only able to translate one image at a time. To assist in translating multiple images you might find it useful to create a batch file as follows:

```
@ECHO OFF
SETLOCAL ENABLEDELAYEDEXPANSION
set sqllitefile="temp.sqlite"
set WIPE=-co WIPE=YES
for %%f in ("%1") do (
  ECHO %%f
  gdal_translate -of Rasterlite !WIPE! -co DRIVER=PNG %4 %5 %6 "%%f"
RASTERLITE:!sqllitefile!,table="%3"
  set WIPE=
)

gdal_translate !sqllitefile! "%2"
DEL !sqllitefile!
```

If you were to name this file "ConvertRaster.bat" then a typical usage might be as follows:

```
ConvertRaster *.tif mydb.gpkg myraster -expand rgb
```

Preparing map settings for Raster maps

A Raster map layer can be configured in the settings.js file using settings similar to the following:

```
{
    "mapSettings":{
        "roads":{
            "type": "GeoPackageTile",
            "url": "mydb.gpkg",
            "table": "myraster",
```

```
            "projection": "EPSG:27700",
            "projectionDef": "+proj=tmerc +lat_0=49 +lon_0=-2
+k=0.9996012717 +x_0=400000 +y_0=-100000 +ellps=airy +datum=OSGB36
+units=m +no_defs +nadgrids=ostn02 ",
            "attribution": "(c) Crown Copyright",
            "maxExtent": [290000,190000,510000,410000],
            "numZoomLevels" : 25
        }
    }
}
```

"type":	this value must be set to "GeoPackageTile"
"url":	This is the name of the GeoPackage database. ConfirmConnect® will search for the database in the normal "root" location for your device.
"table":	The name of the GeoPackage layer in the database. **Note:** Only one table can be specified here. To view data from multiple layers, you will need to use a **Group Layer**.
"projection":	Refer to **Projections** page for details.
"projectionDef":	Refer to **Projections** page for details.
"maxExtent":	This is the minimum and maximum northings and eastings that the map covers. It is specified as a comma separated list of coordinates inside the square brackets as follows: Minimum X,Minimum Y,Maximum X,Maximum Y
"numZoom-Levels":	Specify how many zoom levels will be supported. Zoom levels start at the maximum extent and increase by a factor of two at each step.

Getting the maps onto your device

See the section on **getting files onto devices** for detailed instructions on how to get the GeoPackage databases and settings onto your device

Multiple Map Layers

The "Roads" layer can only be defined when customising map settings. However, it is possible to overlay data from multiple sources on top of each other using a "Group" layer. This is useful where background data is stored in a Tile Service but additional layers are only available in a separate WMS service.

Group Layers are also likely to be needed when working with local vector or raster data as one would typically not want to show all layers at all zoom levels.

The group layer sets overall properties that are shared between layers within that group and also determines the zoom levels at which different layers are displayed. A typical configuration for a Group layer might look like this:

```
{
    "roads":{
        "type": "Group",
        "projection": "EPSG:27700",
        "projectionDef": "+proj=tmerc +lat_0=49 +lon_0=-2
+k=0.9996012717 +x_0=400000 +y_0=-100000 +ellps=airy +datum=OSGB36
```

```
+units=m +no_defs +nadgrids=ostn02 ",
        "attribution": "(c) Crown Copyright",
        "maxExtent": [290000,190000,510000,410000],
        "resolutions" : [
            33.866734,
            16.933367,
            8.466684,
            4.233342,
            2.11667,
            1.058335,
            0.5291675,
            0.264584,
            0.132292,
            0.066146
        ],
        "layers": {
            "Overview" : {
                "minimumResolution": 2.11667,
                "order": 1,
                "type": "GeoPackageTile",
                "url": "raster.gpkg",
                "table": "overview"
            },
            "Place Labels" : {
                "maximumResolution": 0.264584,
                "order": 3,
                "type": "GeoPackageFeature",
                "url": "labels.gpkg",
                "table": "CartographicText",
                "column": "geometry",
                "style": {
                    "label": "${textstring}",
                    "labelAlign": "cm"
                }
            },
            "Features" : {
                "maximumResolution": 1.058335,
                "order": 2,
                "type": "GeoPackageFeature",
                "url": "areas.gpkg",
                "table": "TopographicArea",
                "column": "geometry",
                "style": {
                    "fillColor": "orange",
                    "fillOpacity": 0.5,
                    "strokeOpacity": 0.2,
                    "strokeWidth": 1
                },
                "styleBy": "featurecode",
                "styles": {
                    "10021": {"fillColor": "red"},
                    "10053": {"fillColor": "brown"},
                    "10172": {"fillColor": "grey"},
                    "10111": {"fillColor": "green"}
                },
                "info": "Feature Type: ${featurecode}"
            }
        }
    }
}
```

"type": This value must be set to "Group"

"projection":	The projection for all of the layers in the Group. Note that all layers must share the same projection. Refer to **Projections** page for details.
"projectionDef":	Refer to **Projections** page for details.
"maxExtent" "resolutions" "maxResolution" "numZoom-Levels":	These settings are determined by the layers that are contained within the group and must be consistent for all layers in the Group. Typically, if the group contains a Tile Service then the settings from the tile service should be used. If only local SQLite maps are being used then it is possible to simply specify the "maxExtent" and "numZoomLevels".
"layers":	This contains the list of layers that are contained within the group, enclosed in curly brackets {}. Each layer should be given a unique name, followed by a colon and then the specific settings for that layer. In addition, the following settings can also be specified for each layer:
"minimumResolution"	These determine when the layer is switched on and off as the user zooms in and out.
"maximumResolution":	Values represent the number of metres to show per pixel on the current zoom scale. In other words the more detailed map you have the lower the setting you should use. For example: **"minimumResolution": 0.0** will never turn off the layer no matter how far in you zoom. **"maximumResoltuion": 5.0** would show items until the user zooms out beyond 5 metres per pixel. This equates to an approximate scale of 1:20000 (1 metre screen size = 20000 distance to the ground) on a 96dpi device.
"order":	Use the "order" to control which layers appear on top if more than one can be displayed at a time (e.g. draw labels on top of areas). The layer with the highest order appears on top.

Aerial Maps

ConfirmConnect® allows both the road and the aerial map to be configured.

A sample configuration for both Roads and Aerial maps might look like this:

```
{
    "mapSettings":{
        "roads":{
            "type": "Group",
            "projection":"Projection Code",
            "layers": {
                "BaseTile": {
                    "order": 10,
                    "minimumResolution": 0.5,
                    "type":"XYZ",
                    "url": "Service URL/${z}/${y}/${x}"
                }
            }
        },
        "aerial":{
            "type": "WMS",
                "url": "Service URL",
                "projection": "Projection Code",
```

```
                "parameters": {
                "layers": ["0"],
                "format": "image/svg"
            }
        }
    }
}
```

Projections

ConfirmConnect®, ConfirmWorkzone®, and Confirm web are capable to transform all data coming from Confirm into your specified coordinate system, so that it can be displayed properly on the map. The popular visualisation system (EPSG:3785) used by Google and Bing is included as a standard. But for other coordinate systems, the definition needs to be provided, which is required for all map service types.

The definition for a coordinate system should be provided on Web Map Settings as follows:

"projection":	This is the EPSG code of the coordinate system that you want to use. E.g. "EPSG:27700" is the EPSG code for British National Grid.
"projectionDef":	ConfirmConnect® uses the Proj4 format for coordinate system definitions. You can find the Proj4 definition for your coordinate system here: **http://spatialreference.org/**. For example, **http://spatialreference.org/ref/epsg/27700/proj4/** gives: +proj=tmerc +lat_0=49 +lon_0=-2 +k=0.9996012717 +x_0=400000 +y_0=-100000 +ellps=airy +datum=OSGB36 +units=m +no_defs **Note:** Enter this on a single line in the projectionDef parameter.

Grid Shift

Some countries apply a grid shift in order to provide high accuracy coordinate conversions from default GPS coordinate systems into their own native coordinate systems. For example, in the UK the Ordnance Survey base maps use the OSTN15 grid. See the **Ordnance Survey** website for details.

In order for ConfirmConnect®, ConfirmWorkzone®, and Confirm web to accurately plot entities on map where this type of conversion is required, Confirm needs to be notified of the grid used so the grid shift file can be included. These files have not all been included by default due to their initial size and potential performance implications.

The OSTN02, OSTN15 & A66 National grid shift files have been included with ConfirmConnect®, ConfirmWorkzone® and Confirm Web, if you use OS background maps, you will need to include an additional **projectionDef** value. Append '+nadgrids=ostn15' onto the end of the current line, for example:

+proj=tmerc +lat_0=49 +lon_0=-2 +k=0.9996012717 +x_0=400000 +y_0=-100000 +ellps=airy +datum=OSGB36 +units=m +no_defs +nadgrids=ostn15

Note: For A66, use +nagrids=A66_National

GDA2020

Confirm supports the new GDA2020 coordinate reference system.

A GDA94 projection can be converted to a GDA2020 projection by adding another projectionDef value which is “+towgs84=-0.06155,0.01087,0.04019,-0.0394924,-0.0327221,-0.03289790,0.009994”.

For example:

The projection definition for MGA zone 55 from spatialreference.org is:

"+proj=utm +zone=55 +south +ellps=GRS80 +towgs84=0,0,0,0,0,0,0 +units=m +no_defs"

Which can be converted to GDA2020 as follows:

"+proj=utm +zone=55 +south +ellps=GRS80 +towgs84=-0.06155,0.01087,0.04019,-0.0394924,-0.0327221,-0.03289790,0.009994 +units=m +no_defs"

Note: Note: Enter this in a single line in the projectionDef parameter.

Navigate to Task

ConfirmConnect® can launch a native Navigation application on the device to provide the user with turn by turn directions to the Task concerned.

By default the following applications are used:

- Google Navigation on Android devices
- Apple Maps on iOS devices
- Microsoft Maps on Windows 8+

The default can be overridden by adding a "navigateTemplate" setting to the "settings.js" file on the device. On Android devices this setting corresponds to the URI that ConfirmConnect® will invoke with the "ACTION_VIEW" intent. On other devices it is a URI that will automatically launch the associated app.

If you need to customise this setting consult with the technical documentation for your Navigation application to determine the appropriate URI to use. Use the "${lat}" and "${lon}" placeholders to substitute the latitude and longitude of the Task into this template.

An example "settings.js" file to launch the **Waze** application is shown below:

```
{
  "navigateTemplate": "waze://?ll=${lat},${lon}&navigate=yes"
}
```

iOS only: An example "settings.js" file to launch the default Navigation app is shown below:

```
{
  "navigateTemplate": "http://maps.apple.com/?daddr=${lat},${lon}"
}
```

Android only: An example "settings.js" file to launch the default Navigation app is shown below:

```
{
  "navigateTemplate": "geo:0,0?q=${lat},${lon}"
}
```

Can we use both custom maps and Navigation?

Yes, both navigation and custom map settings can be combined in the settings.js file using standard JSON conventions, e.g.:

```
{
  "navigateTemplate": "...",
  "mapSettings": {...}
}
```

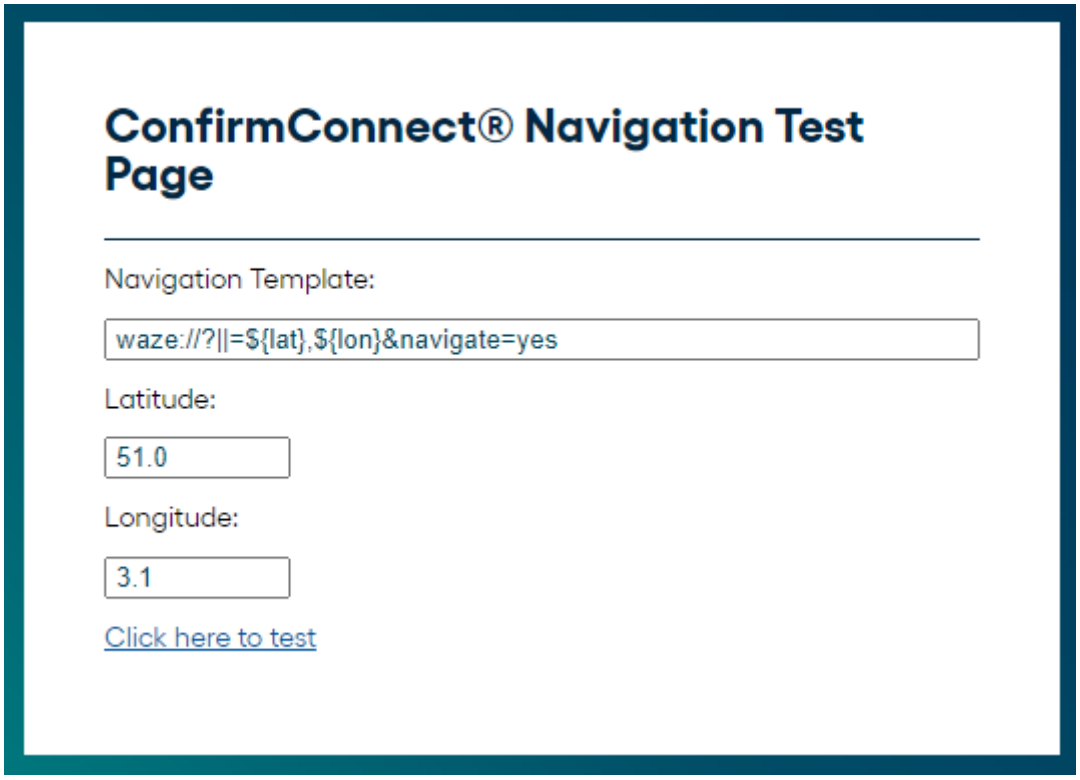
Troubleshooting

Navigation icon does not appear on Android:

- On Android devices the native container must be version 5 or later

Nothing happens when clicking the navigation icon

- Check that the Google Maps application is installed (Android and iOS) or Microsoft Maps (Windows 8+)
- Check that a generic URL based link works using the settings at bottom of this section
- Use the Navigation Test page from the ConfirmConnect® web site to test your navigation template from the browser on the device. The example below will launch the Waze application using the coordinates specified as the required destination:



Note: This test page requires GPS location to be on the device browser to establish the starting location for the route. The test page can be found in the root of the web service and is called TestNavigation.html.

- Make sure that ConfirmConnect® is re-started before applying any custom settings

```
{
  "navigateTemplate": "http://maps.google.com?saddr=My+Location&dad-
```

```
dr=${lat},${lon}"
}
```

iOS is only showing Apple Maps and ignoring my navigationTemplate setting

- On iOS, versions of the native container prior to version 5 only support navigation templates that begin with "http" or "https". From version 5 onwards the following prefixes are allowed: "citymapper", "comgooglemaps", "navigon", "transit", "waze", "yandexnavi", "uber", "tomtomhome", "com.sygic.aura", "here-route" and "moovit"

Creating the Settings.js file

Create a blank document and name it settings.js. To populate the settings.js file you need to refer to the pages below for your required Map Tile Service.

- **ArcGIS Tile Cache**
- **Spatial Server**
- **Stratus**
- **WMS**

If your tile server is not one of the ones listed above, then you will need to configure the Map Settings using the example shown **here**.

All of the examples show how to configure the "roads" background mapping. By default Confirm-Connect® will use Bing for Aerial mapping, but this can also be configured by including an "aerial" map settings. For example:

```
{
    "mapSettings":{
        "roads":{
            ** Put the settings for your roads maps here **
        },
        "aerial":{
            ** Put the settings for your aerial maps here **
        }
    }
}
```

In addition to the map options, it is also possible to add settings to include launching a **Navigation** application to show a route to the task.

Copy the settings.js file to the device

Once you have configured the settings.js file, refer to **Copying Files to Devices** to install them onto your chosen device/s.

Getting Files onto Devices

Settings.js, FakeGPS.js and GeoPackage database files

In order to copy the settings.js, fakeGPS.js and/or GeoPackage database files onto a device so that ConfirmConnect® can use them follow the steps below:-

Automatic download over WiFi for all devices

1. Ensure the Default Custom Maps Folder setting is set on the ConfirmConnect Settings screen or the Custom Maps Folder is set against the User's ConfirmConnect Profile (overrides the default).
2. Make sure the device is connected to WiFi.
3. ConfirmConnect® will automatically detect if there are any changes to the custom map file(s), in the specified folder on the server, on the next Transfer. Consider selecting Refresh Lookups on the menu, to initiate the check.
4. If there are any changes, then a prompt to download the new file(s) will appear on the Transfers tab on ConfirmConnect. Select option to download.
5. Once the file(s) have been downloaded then a prompt to install the custom maps will appear on the Transfers tab. Select option to install.
6. Once the install is complete, the app will restart and the new custom maps will then be in use.
7. The About page can be used to uninstall custom maps downloaded over Wifi.

Android Devices

1. Ensure ConfirmConnect® is not running.
2. Connect your Android tablet to your pc via a sync cable.
3. Once the device has been detected navigate to the devices Internal Storage directory.
4. From the root of Internal Storage, navigate down to Android > Data > com.pb.confirm.connect > files.
5. Place the file/s into this directory.
6. Start ConfirmConnect®.

GeoPackage Databases on External SD Cards

Android devices give you the additional option of placing the GeoPackage mapping databases on an External SD Card, doing so does require a change in the settings.js file.

1. Identify the full path to the root of the external SD card, for example "/storage/ext_sdcard". A file manager application can be used to identify the full path.
2. Create a Confirm directory on the root of the external SD card, for example "/storage/ext_sdcard/Confirm".
3. Enter the full path in the settings.js **"url"** field for each of your layers and prefix the path with **file://**, for example "file:///storage/ext_sd/Confirm/maps.gpkg"

   Note: You must maintain the 3 forward slashes and include the quotes shown in the example.

4. The settings.js (and fakegps.js if required) file must be placed in Android > Data > com.pb.confirm.connect > files directroy, as explained in the Android Devices steps.

iOS Devices

1. Connect the device to a PC or Mac and, using iTunes.
2. Ensure ConfirmConnect® is not running.
3. Select the device and then the File Sharing tab.
4. Select Confirm in the Apps section, this will display a section called Confirm Documents.
5. Click the add button and select the file.
6. Finally, sync the change to the device.
7. Start ConfirmConnect®.

Win32 Client

Win32 version of ConfirmConnect® requires the Settings and Fakegps files to be placed into the application data directory.

1. Ensure ConfirmConnect® is not running.
2. Launch Windows Explorer and navigate to "%LocalAppData%\ConfirmConnect"
3. Place the file/s into this directory.
4. Start ConfirmConnect®.

Note: This will need to be done for each user of ConfirmConnect® on each device.

Faking a GPS signal

Faking a GPS signal can be used during training to show how ConfirmConnect® behaves in the field without needing to be on the move with an active GPS signal.

ConfirmConnect® will emulate a GPS signal which is moving by reading a series of coordinates stored in a text file which is manually copied to the device.

How do I setup fake GPS?

In order to have ConfirmConnect® use fake GPS, you must first create a file called **fakegps.js** Edit this file with a text editor such as Notepad. Enter details as shown below and ensure you replace the coordinates with coordinates you require.

{ "accuracy" : 5,

"interval" : 1000,

"positions": [

[0.509681,51.275193],

[0.509701,51.275173],

[0.509721,51.275153],

[0.509741,51.275133],

[0.509761,51.275113],

[0.514781,51.270093]

]

}

Note: You may include any number of coordinates. Format is [X,Y],[X,Y]

The accuracy is in metres and determines the size of the blue "halo" around the current GPS location. The interval is in milliseconds and determines how often ConfirmConnect® will move to the next location in the file. When the last location is reached ConfirmConnect® will loop back to the start of the file and repeat this indefinitely.

Installing the fakegps.js file

Refer to the **Copying Files onto Devices** page for details on installing the fakegps file.

FAQ

This section will cover any frequently asked questions for the software.

Superseding Defects

Why hasn't my Defect been sent to Confirm?

With superseding Defects, the Defect will be linked to the Task is was first created against and not the one it was completed with.

For example:

- Inspection Route A and Inspection Route B both contain Feature 123 and are assigned to Officer ABC.
- Feature 123 has Defect 567 logged against it.
- Defect 567 is displayed in the Defects panel when viewing the Survey details of Feature 123 on both Inspection Routes.
- Tapping Defect 567, when viewing the Survey for Inspection Route A, displays the Defect details on a separate Defect page.
- Editing Defect 567 causes it to be superseded, and the superseding Defect will be displayed in place of Defect 567 on both Inspection Routes.
- The superseding Defect is associated with Inspection Route A, when it is Sent, because that was the Inspection Route from which it was superseded.

Note: Using the scenario, in the above example, the following clarifications apply:

- Using Send Now on the Defect 567 from the Survey on Inspection Route B will still upload Defect 567 as part of Inspection Route A.
- Completing the Survey on Inspection Route B will NOT send the Defect as the Survey for Inspection Route A has not yet been completed.

Font Size

How can I change the font size?

You are able to change the font size by tapping on the Menu and then the About button. This will present you a + and - button to increase or decrease the size of the font used by ConfirmConnect®.

Offline vs Online (caching)

What can I do when my device is offline?

ConfirmConnect® is designed to allow you to continue working even when your device has no connection to the server, e.g. no signal. This page will help you to identify what can and can not be done when your device is offline.

Online

When a device is online, full functionality is available to you.

Offline

When a device is offline, functionality is limited in the following ways: -

Note: When any transfer task is unable to communicate to the server a "Server Error" message will be displayed. These tasks will continue to retry until successful.

- Completed tasks along with any Photos will be queued in the Transfer tab until a connection to the server is re-established.
- The Refresh Lookups menu option will queue each of the lookup requests on the Transfer tab and they will complete once a connection to the server is re-established.
- The Refresh button will queue a request to refresh your task list on the Transfer tab. Your task list will automatically refresh itself once a connection to the server is re-established.
- The Select Routes menu option will not work while offline and will just present an empty list. You can cancel from this screen and try again later.
- Requests for Features e.g. new Defect select Feature, will only display Features which have been cached on the device. See Feature Caching for further details. ConfirmConnect® will also queue a request to the server for Features near to the location you have specified, so if the Feature you require isn't available then you can save the item as a draft and come back to it later once a connection to the server has been re-established.
- Requests for Sites e.g. new Feature select Site, will only display Sites which are linked to other tasks on the device. ConfirmConnect® will also queue a request to the server for sites near to the location you have specified, so if the site you require isn't available then you can save the feature as a draft and come back to it later once a connection to the server has been re-established.
- Maps - If you are using server based mapping services, you will only see maps if you have recently viewed that location or if the maps for the location have been cached when ConfirmConnect® was last connected via WiFi. See Map Caching below for further details.
- Whats Going on Here - these requests will not work while offline, a transfer message will appear in the transfer tab and will complete when a connection is established.
- A sign out request will not work. This is because the request needs to communicate with the server to release any assigned modules.

Feature Caching

ConfirmConnect® will cache any feature which is within a set distance of any Enquiry tasks.

- Enquiry has its own coordinates or is linked to a point Feature = point Features within 25m and non-point Features within 250m, or the distance set on the locate features system setting, of the point location.
- Enquiry is linked to a non-point Feature or not linked to a Feature = point Features within 25m and non-point Features within 250m, or the distance set on the locate features system setting, of the rectangle formed by the minimum and maximum Eastings and Northings of the Feature / Site the Enquiry is linked to

Feature Caching will also cache the Feature associated on any task you have on your task list, regardless of the task type.

Map Caching

ConfirmConnect® will perform a Map Caching task only when it is connected via WiFi to the ConfirmConnect® server and when no other transfers are currently taking place. This process will cache map tiles which surround each task in your task list. This will allow maps to be displayed when the device is offline.

Note: If Map Caching is Paused, it will remain in this state until you Resume.

Note: Map Caching is disabled for the Win32 version of ConfirmConnect®. This has been done as there is currently no method to identify if the Win32 client has a Wireless or 3G/GPRS connection.

ConfirmConnect Logging

This section is for Confirm Administrators.

The ConfirmConnect service can be configured to output log files in order to help diagnose any errors encountered. There are two types of logging that can occur:-

1. **Provider**: Provider logging will log process and error messages prior to accessing the database. For example: Login attempts and connection transactions between service and database.
2. **Tenant**: Tenant logging will log process and error messages between device, service and database when transferring data. For example: Download of lookups and signing in.

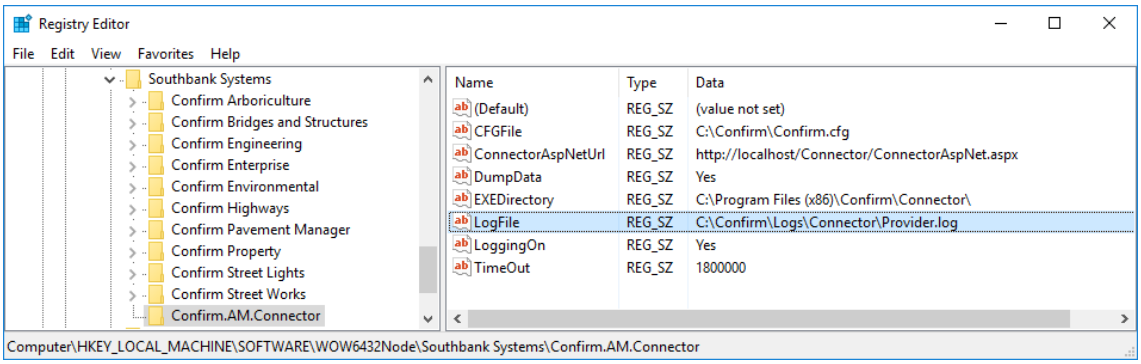
In addition to the above logging, the Confirm Connector will also be used to log process messages between client, service and database for any upload transactions such as the creation of a new defect or updating a Street Works inspection.

See the **Log File Format** specification for more details on the content of log files.

How to configure ConfirmConnect logging

ConfirmConnect uses several log files depending on the task being performed. The below is a list of each log file and how to configure them.

- **Provider log**: Configured in the server registry and shares the entry used by the Confirm Connector. Any log entries will be made into a log file of the same name with a prefix of "MS_"
- **Error log**: In addition to the Provider log, which will contain all the information (successful or not), an error log will also be generated. This log file name will have prefix of "ErrorMS_" and will only contain error information.



Note: Using the information shown in the above screen shot, the Provider Log files will be generated as follows: C:\Confirm\Logs\MS_provider.log and C:\Confirm\Logs\ErrorMS_provider.log

- **Tenant log**: Can be configured through the Confirm client in the same way as the current Confirm Connector log files. This is done by setting the **Logging** option to enabled and specifying a valid **Log File** entry on the **Connector Settings** screen. The ConfirmConnect® log file will be generated with a prefix of "MS_".

Troubleshooting Connection/Transfer Errors

Errors can occur when using ConfirmConnect and this page is designed to help diagnose and resolve them.

ConfirmConnect has three main components which work together with the main Confirm system to deliver its functionality.

1. **ConfirmConnect client**: Installed on mobile devices.
2. **ConfirmConnect web service**: Installed on a server. Downloads data from the main Confirm system to the ConfirmConnect Client.
3. **Confirm Connector** Installed on a server. Uploads data to the main Confirm system from ConfirmConnect Client.

Server Based Errors

The following message is returned from the ConfirmConnect Web Service.

- **Server is Busy**

  Server is busy message indicates that a connection to the server has been made but a response has yet to be received. This message will automatically retry after a period of time and does not require any further action.

iOS and Android Device Based Error Messages

The following is a list of errors that occur with the ConfirmConnect client on iOS and Android devices.

- **Error calling softwareUpdateManifest: Cannot Connect to Server. Check data Connection.**

  Occurs when a connection to the URL is not available. This could happen for the mutliple reasons including: -

  - URL details are incorrect.
  - URL is unreachable, either due to the service being down or the device being offline.

Win32 Device Based Error Messages

The following is a list of errors that occur with the ConfirmConnect client on Windows (Win32) devices.

- **The remote server returned an error: (404) Not Found.**

  The URL entered on the sign in screen isn't found on the Web Server. Check the URL and try again or contact your Confirm Administrator to see if the Web Site is operational.

- **Invalid URI: The Authority/Host could not be parsed.**

  The format of the URL entered on the sign in screen is incorrect. Check the URL and try again.

- **An exception occurred during a WebClient request.**

  The format of the URL entered on the sign in screen is incorrect. Check the URL and try again.

- **The remote name could not be resolved:**

  The Web Server isn't found. Check the URL and try again or contact your Confirm Administrator to see if the Web Server is operational.

Downloading Custom Maps

From v20.1 the ability to download maps to devices was added. This process works only when on wifi, these are known errors when downloading Custom Maps:

- **Error Downloading map files- Error code: 3**

  This typically means the file can no longer be found and can occur when wifi connection is lost during transfer. Using the "Retry Maps Download" button, whilst having no wifi connection, will change this message to the second known error (shown below).

- **Error downloading map files- Cannot connect to server. Check data connection.**

  This error means the ConfirmConnect server can't be reached and occurs when there is no connection to wifi or mobile provider and if the ConfirmConnect web server itself is down.

  For both of the above errors; ensure that wifi connectivity is established and the ConfirmConnect web service can be reached.

I have received one of the above errors, what do I do?

Perform the following steps to help identify where the problem lies:-

1. Does the device have an active Mobile or Wireless connection? - Launch the Web Browser application on the device and perform a web search. If the web search succeeds, move to step 2. If the web search fails, a connection will need to be re-established before transfers will continue or a login can be achieved.
2. Can the device browse the server URL? - Launch the Web Browser and navigate to the server URL, entered on the login screen, and append "testconnection.dita" onto the URL. If this page displays move to step 3. If this fails, then the URL is not accessible to the device and you should check with those responsible for the web service.
3. Enter your login details and tap the test button. If results are returned, move to step d. If no results are displayed after 5 minutes and you only see "Connecting to service. Please wait!", then arrange for the same test to be run directly on the server.

   Note: 5 minutes will allow enough time for the request to be processed by the server in the event of multiple queued requests.

   If the test directly on the server does not respond after 5 minutes please contact Confirm support.
4. Review the results of the "testconnection.dita" page. If the results are all green ticks then move to step e. If there are some red crosses, then supply these results to the Confirm Administrator to investigate the cause of the error mentioned.
5. With all pass results on the test page, retry/re-check ConfirmConnect.

   If ConfirmConnect is still failing after running through these 5 steps, you will need to manually stop the application.

Relaunch ConfirmConnect. If, after relaunching ConfirmConnect, the problem still persists, contact Confirm support with the details shown on the Transfer tab or the login page (if you were logging in).

Authentication Required

The Authentication Required message can appear when a User's password (in Confirm) has changed. You will need to enter the password and tap the submit button to resume transferring.

Server based Error Messages

The following is a list of errors that appear on the Client but are server (service) based problems.

If you are experiencing any of these errors, you will need to contact the Confirm Administrator. You will need to provide the Administrator with your ConfirmConnect user name, the time at which the error occurred and a brief description of what you were doing.

- **Build version V**.** is not compatible with database version V**.****

  ConfirmConnect has connected to the server but the Confirm Connector and the Confirm main system Database versions are not compatible.

- **The maximum supported version of ConfirmConnect is V**.****

  ConfirmConnect client has connected to the ConfirmConnect service but the client version is newer than the service.

  Resolve this issue by either upgrading the ConfirmConnect service or installing the older version of ConfirmConnect on the device.

  Note: Un-installing the current version of ConfirmConnect will remove the installation ID and a new one will be used once you have installed and signed in with the older version. This will use another device licence from Confirm.

- **An Internal ConfirmConnect service error occurred**

  This is a http 500 error indicating that there has been a problem with the ConfirmConnect Service configuration. Run through the steps outlined in the **How to troubleshoot Server based errors** section below to help identify the cause of this error.

How to troubleshoot Server based errors

There are many different types of errors which can occur, the steps below will help to identify their cause. These steps should be used when encountering errors not listed on this page.

1. Using a web browser, browse to the testconnection.dita page by appending "testconnection.dita" (excluding quotes) to the URL used when signing into ConfirmConnect.
2. Review the results of testconnection.dita page to identify any problems.
3. If the test page just hangs then replace "testconnection.dita" with "confirmmobileservice.svc/status". Confirmmobileservice.svc/status will either fail to run and produce a message indicating the problem or it will succeed.
4. If the confirmmobileservice.svc/status succeeds (as shown with text displaying a version number) then you will need to review the **ConfirmConnect Logging** files to identify what the problem could be.

How to manually stop ConfirmConnect

It is sometimes necessary to stop ConfirmConnect the details below explains how.

Android go to Settings > Apps (Application Manager) > Confirm and use the Force Stop option.

iOS double tap the home button to pull up a list of all running applications, now tap and flick the Confirm window up.

How to troubleshoot session re-validate errors while opening Confirm Web in Confirm Connect on the device.

While Opening Confirm Web in Confirm Connect, if session re-validate error appears then user can click on the exit button on the error prompt and try to re-open Web Job/ Feature and Defect details from Confirm Connect.

Blank Maps

I'm using my settings.js file but I have a Blank Map?

A blank map indicates that the settings.js file has been found by ConfirmConnect® but it is unable to access the data specified within the file.

This could be because ConfirmConnect® is positioning the map in a location that is not covered by your mapping service. To test this, create a new Enquiry or Defect and use the Locate option to open a map. Then use the Search tool to find an address that is definitely covered by your map service. If your maps display you can toggle between your maps and the Bing Aerial maps to make sure that everything lines up correctly.

The other likely causes of a blank map will be incorrect entries in the settings.js file or you have no network access to the service specified in the URL entry.

When investigating network access issues, consider the following: -

- Do devices which connect via a VPN have access to the mapping service?
- Does the device have access to the service if the Mapping Service is located within your organisations internal network but the device connects to the Internet via a mobile service provider?

Windows Touch Screens

My Windows 8 touch screen device does not correctly register where I tap.

Windows 8 touchscreen devices may require display scaling to be disabled in order for ConfirmConnect® to correctly register where you have tapped. To change this setting:

- Go to the directory where ConfirmConnect® is installed and locate the ConfirmConnect.exe file.
- Select the properties for the application file and select the "Compatibility" tab.
- Tick the box next to "Disable display scaling on high DPI settings".

After performing these steps touch screen events should occur in the correct location.

Locating Features

How does the locate features functionality find our features?

ConfirmConnect® will find all features containing spatial data which are within 25m of the located point on the map.

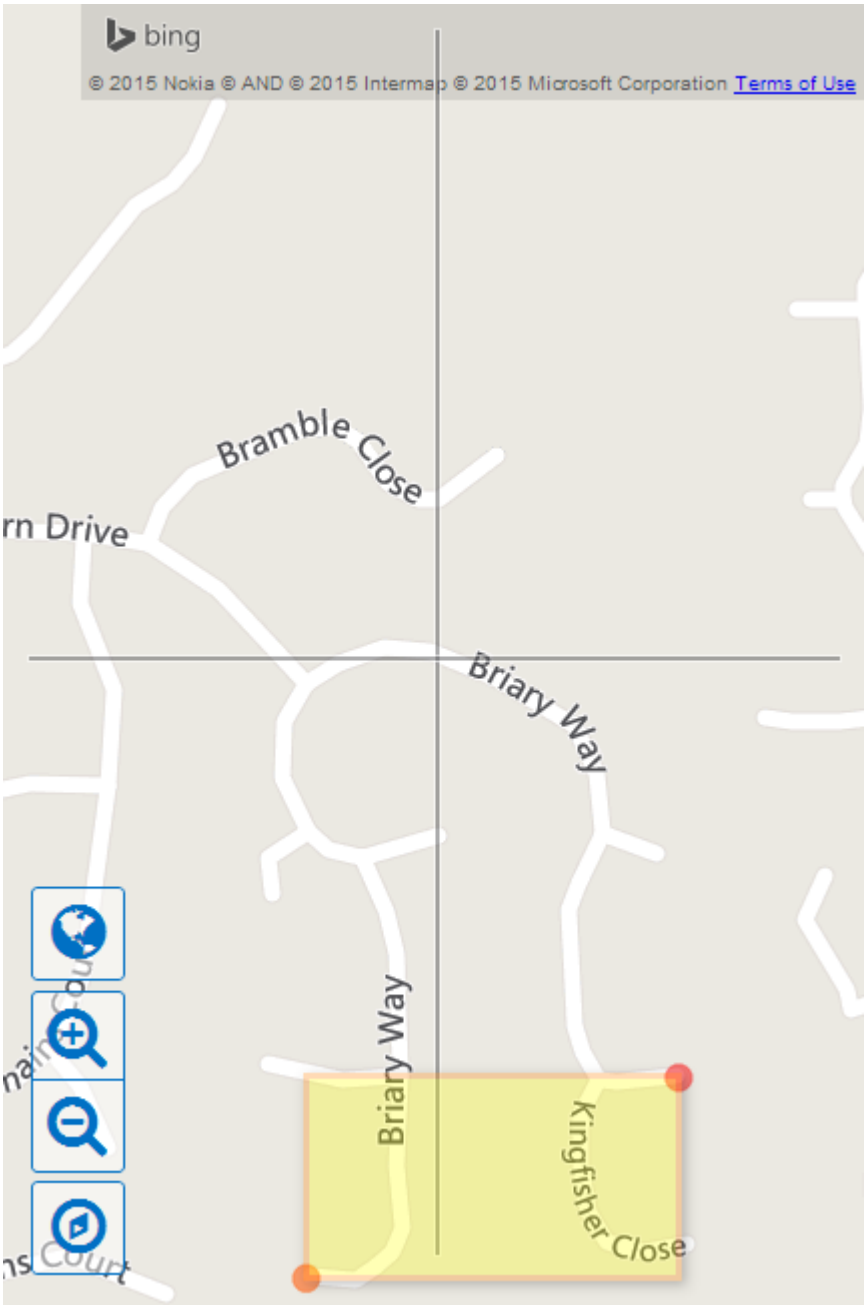
If there is no spatial data for the feature then ConfirmConnect® will use the Easting and Northing information stored against the **Feature** in Confirm:

- Point Features within 25m of the located point will be displayed in the list of available features.
- For non-point Features, a bounding box is created using the Features' Easting and Northing extents, and all Features whose bounding boxes intersect within 250m, or the radius specified in the locate distance system setting, of the located point will be displayed in the list of available features.

A maximum of 50 Features will be shown in the list. This limit is generally sufficient, so when a Feature is not listed the cause could be any of the following:

- Point Features having coordinates in Confirm that incorrectly classify them as non-point (having extents with different values) could cause more than 50 results found.
- Features not having any coordinate information. These will never be shown.
- The Feature is not in a group flagged as selected for adhoc inspection.
- Linear Features (non spatial) whose extents create bounding boxes that do not encompass the entire feature. See example below:

Example: In this example the Feature is not within 250m (this is the default search distance when not overridden by the locate distance system setting) of the located point. The orange dot represents extent 1, red dot is extent 2 and the centroid is either not populated or it has the same coordinates as either extent 1 or 2.



Can the locate features search distance be changed from the default 250m?

Please contact Confirm for SQL to set the system setting to the required distance in metres.

User Terminology

Does ConfirmConnect® use Confirm user Terminology?

Yes, When logging in, ConfirmConnect® will use any configured user terminology set in the **Terminology System Settings** screen within the Confirm Host. **Full Term** is used and, if not found, **Medium Term** and finally **Short Term**.

Photos

Are photos taken with ConfirmConnect® backed up on the device?

Yes, a copy of each photo taken with the camera button will be placed into the device's gallery and will not be automatically removed by ConfirmConnect®.

Pasting In Text Fields

I'm pasting into a text field but it is not appearing?

When pasting into a text field that already contains text then the paste will be blocked if it would cause the number of characters to go over the maximum length for the field.

If the text box is empty and then the text that is pasted will be truncated so that it is shorted than the maximum length.

Open Confirm Web in ConfirmConnect®

Does Open Confirm Web in ConfirmConnect® works in offiline mode?

No, This functionality is always available in the Online mode, which means that the Device is connected to the Internet. Opening these screens from Confirm Connect for the first time may take a few seconds.