

Confirm®

Confirm Web Interface v21.00b.AM

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November 27, 2020

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Questions

Confirm Web Interface

Confirm web interface enable users to access the available functionality through a web browser.

Supported Platforms:

O/S	Version	Support Status
Windows Server	2008 SP2 32-bit and 64-bit	Current
	2008 R2 SP1 64-bit	Current
	2012 64-bit	Current
	2012 R2 64-bit	Current

Note: For Windows Server 2008 SP2 (32-bit and 64-bit) an additional prerequisite *Hotfix KB-980368 - II7.0 & IIS7.5* is required.

Supported Web Browsers:

Browser Name	Version	Support Status
Google Chrome	Latest	Current
Microsoft Internet Explorer	11	Current
Mozilla Firefox	Latest	Current
Microsoft Edge	Latest	Current

Following capabilities are available through Confirm web interface:

Web Accessibility

Confirm web interface is tested for web 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.

Confirm Strategic Asset Management

Confirm Strategic Asset Management is a web based application that allows asset managers predict long term condition of their assets using current condition and applying algorithms. It also allows asset managers to assess cost of maintenance over long term to meet their service levels.

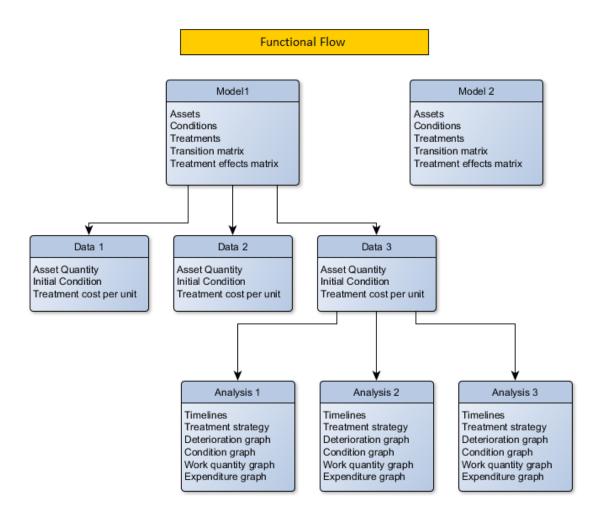
Confirm Strategic Asset Management application has three main parts: Model, Data and Analysis.

Model allows user to create asset groups and rule sets which are input to algorithms determining long term condition and cost analysis.

Data allows user to provide asset group quantity, initial condition and unit cost of treatment distribution which is used during Analysis. Application has the capability to pull asset and initial condition attribution data from Confirm.

Analysis allows user to create scenarios or treatment strategies to assess long term condition and expenditure for a scenario. Before carrying out any Analysis, a set of Model and Data is required.

The flowchart below describes the functionality of Confirm Strategic Asset Management application at high level.



Confirm Dashboard

Confirm Dashboards are now accessible in web through Chrome browser. This enables user to access dashboard anywhere, anytime. Also, The ability to switch between Dashboards is now available from the drop down on the Dashboard screen.

Confirm Customer Services

The Customer Services functionality on web allows to search for an enquiry. The user can view an enquiry from the searched list and update the assigned action officer, status or notes of the enquiry.

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Confirm Stock Management

The Stock Management functionality on the web allows you to manage stock levels at multiple stock locations.

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Confirm Web General Functionality

Change Password

Change password allows a user to change their password. They may do this because they wish to, or their password has expired.

Change password screen can be opened from the user menu displayed on the top right corner of the application.



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.

Confirm Web Announcements

Confirm OnDemand Users will now see a yellow exclamation mark on the Help button at the top of the Confirm web interface. This indicates a new notification has been published for Confirm OnDemand Users informing them of upcoming upgrades, planned weekend maintenance activity or any issues being investigated / confirmation of service restoration etc.

To view the announcement, click on the Help icon, and then click on the Announcements option. Clicking the Announcement option will open the notification in a pop up. The User can choose to close the pop up or dismiss the notification. Dismissing the notification will indicate the User has acknowledged the notification and the yellow exclamation mark will be removed. The mark will reappear if there is a new notification that has been published since the last dismissal.

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Installing, Configuring and Upgrading the Confirm web interface

Introduction

The purpose of this document is to detail the installation instructions for the Confirm web interface. Confirm web interface is a multi-tenant web service which allows to connect to multiple databases.

Confirm web interface supports side by side installation to deploy two different versions of web interface on same server at a time. To support the side by side installation two separate installers are provided as 'ConfirmWeb' and 'ConfirmWeb Beta'. This will provide two independent URLs exposing functionality available for their version. This may be useful in upgrading one installer and adapting selected users to new functionality before exposing all users to upgraded version.

Confirm web interface is backward compatible from v16 onwards. This means Confirm web interface can be installed for any Confirm DB version from v16 onwards without upgrading the database.

This document describes the process of deployment of Confirm web interface. The steps of installation are common for both ConfirmWeb installers.

Note that both 'ConfirmWeb' and 'ConfirmWeb Beta' are installed in separate directories, uninstall or upgrade of one will not affect the other.

Prerequisites

Ensure that the following prerequisites are installed prior to configuring the Confirm web interface:

- If installing the Web Service on a 32 bit system please refer to the **IIS Configuration Required for** 32 bit Systems page for more details.
- Ensure that Web Server IIS role is installed.
- Visual C++ 2010 redistributable.
- .Net Framework 4.8
- The MapXtreme 9.1 Redistributable must also be installed on the machine.
- The version of the Confirm web interface must be greater than or equal to the database they are serving.

These prerequisites are available within the Prerequisites directory of the Confirm media.

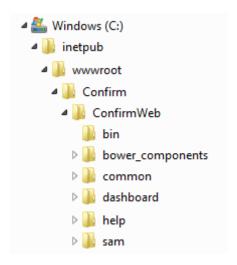
Note: It is a best practice, and highly recommended, to use HTTPS deployment for ConfirmWeb.

Installation

Run the following steps to install Confirm web interface:

• Run the ConfirmWeb.exe and specify a location to install the web service. The default location is set to C:\inetpub\wwwroot\Confirm\ConfirmWeb.

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• Enabling the *Confirm UEIP* checkbox will allow both Web Service and Client to send anonymous usage information to Confirm to help us improve our products and services.

Note: When the installation is completed you will to reboot the ConfirmWeb server so that the environment path is updated.

Configuring an Application Pool

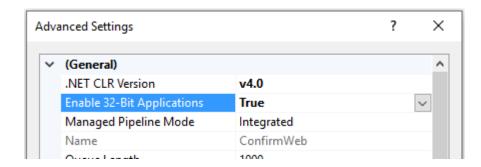
It is advisable to create a new application pool for the Confirm web interface. If setting up more than one web service, ensure that a unique application pool is created for each instance.

To create an application pool, go to the *IIS Manager* and right click on the *Application Pools* option and select *Add Application Pool*. Ensure that the following settings are applied to the new application pool.

Settings	Values
.Net Framework	Set to 'v4.0'
(Applicable for 64 bit machines only)	Set to 'True' (This is set in the 'Advanced Settings'.)
Enable 32-Bit Applications	
Managed Pipeline	Set to 'Integrated'
Identity	To view attachments on Job Tasks within Confirm-Workzone® an identity will need to be set here with the appropriate permissions to access the document store location.

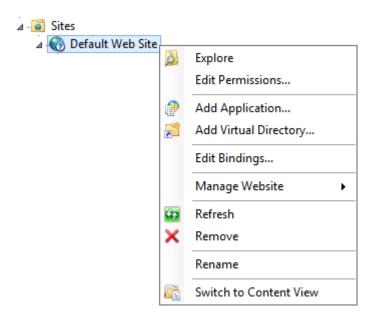
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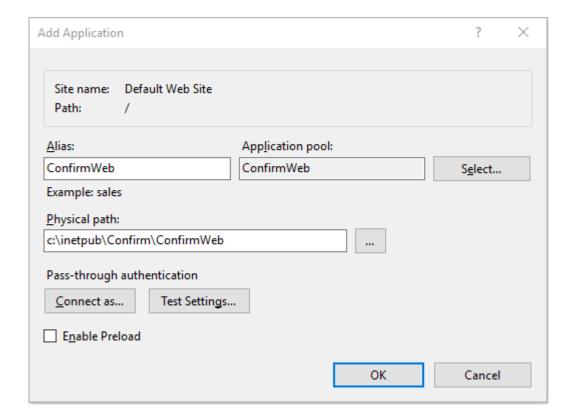
Creating the Web Service Application

Now the files have been installed the web service application can be created. To do this, open the *Internet Information Services (IIS Manager)* and navigate to *Sites*. Then right click on *Default Web Site* and select *Add Application*.



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The Add Application window will appear.



- Set the Alias to the name you would like for your Web Service.
- Set the *Application pool* to the application pool initially created.
- Set the *Physical Path* as the folder where the Web Service files are stored.
- Finally click on *OK* to create the application.

Side by Side Installation

Run the following steps to install ConfirmWeb Beta Interface:

- Run the ConfirmWebBeta.exe and specify a location to install the web service. The default location is set to C:\inetpub\wwwroot\Confirm\ConfirmWebBeta
- Enabling the *Confirm UEIP* checkbox will allow both Web Service and Client to send anonymous usage information to Confirm to help us improve our products and services.

Note: Please follow steps from Installation section to complete the setup. And also when the installation is completed you will have to reboot the ConfirmWeb server so that the environment path is updated.

Registry Configuration

There are some registry settings that need to be configured on the ConfirmWeb Server, as follows:

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

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The following settings are applicable to all Confirm Components:

Registry Key	Description
CfgFile	Path to Database configuration file.
AuthProviderType	Confirm - To Use Confirm Authentication. ActiveDirectory - To Use ActiveDirectory.

The following settings are applicable to ConfirmWeb only:

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

Registry Key	Description
LogFile	Path and Filename of the log file.
LoggingEnabled	Enable provider logging on or turn it off. (Yes/ No).

Note: It is recommended to disable RC4 ciphers as per the advisory released by Microsoft. For more information refer -https://support.microsoft.com/en-in/help/2868725/microsoft-security-advisory-update-for-disabling-rc4

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.

Checking the Web Service is Configured Correctly

IIS will need to be restarted to ensure changes have been made. To do this right click on the Web Server connection in the IIS Manager and opt to *stop* and then *start*.

The Web Service can be tested by performing these actions:

- **1.** Open the *IIS Manager* and ensure that the *Content* view is enabled.
- 2. In the connections panel of the manager navigate to "Server" > Sites > Default Web Site > "ConfirmWeb"
- **3.** In the SAM / Dashboard / CustomerServices / Settings / Workzone folder(s) you will find an Index.html file. Right click on the file and select Browse.
- **4.** Ensure Cookies are enabled in your browser.
- 5. The default web browser will start to load the page. The ID of the Confirm database you want to connect to will need to be inserted to the URL after index.html (?tenant=%database ID%) as shown in the examples below.
- **6.** Refresh the browser to connect to the web service. If successful, the login screen will appear in the browser.
- **7.** Login using a valid Confirm Username and Password.

Example URLs:

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Confirm Dashboard URL: https://ConfirmWebServer/ConfirmWeb/Dashboard/index.html?ten-ant=TestDB#/login

Confirm Strategic Asset Management URL: https://ConfirmWebServer/ConfirmWeb/SAM/index.html?tenant=TestDB#/login

Confirm Customer Services URL: https://ConfirmWebServer/ConfirmWeb/CustomerServices/index.html?tenant=TestDB#/login

ConfirmWeb Map Symbol System Settings URL: https://ConfirmWebServer/ConfirmWeb/app/index.html?tenant=TestDB#/settings

ConfirmWorkzone® URL: https://ConfirmWebServer/ConfirmWeb/Workzone/index.html?tenant=TestDB

Confirm Stock Management URL: https://ConfirmWebServer/ConfirmWeb/app/index.html?ten-ant=TestDB#/stockmanagement

Note: Replace TestDB with the database ID found in the database configuration file, the location of which is specified in the registry. Any spaces in the URL will be represented as %20. Some browsers make this change automatically but some do not and the URL will need to be amended manually.

Upgrading the Web Service

Follow these steps in order to upgrade the Web Service

- 1. Ensure all users are logged out of the Confirm web interface.
- 2. Stop the Web Service.
- 3. Run ConfirmWeb.exe to upgrade.
- 4. Restart the Web Service.
- 5. Clear any browser caches.
- 6. Log into the Web Service.

IIS Configuration Required for 32 bit Systems

Note: The following section is only required for 32 bit operating systems. For 64 bit systems, please ignore this section.

Set ISAPI and CGI Restrictions for ASP.NET V4



Select *ISAPI* and *CGI* Restrictions and in the screen that opens there will be two .dll files relating to *ASP.NET v4.0.30319*. Right-click on both .dll files and select *Allow*.

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Other IIS Configurations

Some of the IIS Web Servers may not have File name extension ".json", ".woff" and ".woff2" added to *Mime Types* which can cause Confirm web interface to behave erratically. This section describes additional configurations required allow the application to work properly.

Set the .json, .woff and .woff2 Mime Types

Open IIS Manager, select Web Server name and ensure Features View is selected.



On the right hand panel double click *Mime Types* and check if there are entries for *.json*, *.woff* and *.woff*2



If there are any missing entries then add the corresponding entry on the Mime Types screen.

For example to add .json, right click on Mime Types screen and select Add. On the screen that follows set the File Name Extension to .json and the Mime Type to application/json.



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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

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Configuring the Confirm Database

Introduction

Once the web service has been installed and configured there are some Confirm web interface settings that need to be set in the Confirm database.

Configure the Confirm web interface Settings

The Confirm web interface system settings are provided in the Confirm Client under the screen. Any changes to the settings should be made on this screen.

Configure the Confirm Strategic Asset Management User Security

(This is applicable for Confirm Strategic Asset Management only)

The user access can be set in the Confirm Client under *user security*. There is an entry for Confirm Strategic Asset Management and update access is required for a user to be able to access Strategic Asset Management.

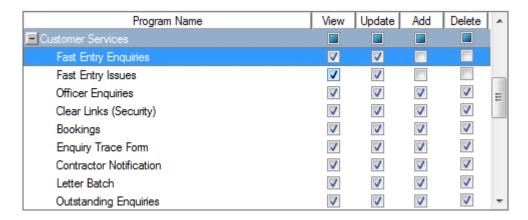


Configure the Confirm Customer Services User Security

(This is applicable for Confirm Customer Services only)

The user access can be set in the Confirm Client under *user security*. The user needs to have view (and update) access to either Fast Entry Enquiries or Fast Entry Issues (both of them are present under Customer Services) to be able to view (and create or edit) an Enquiry on web.

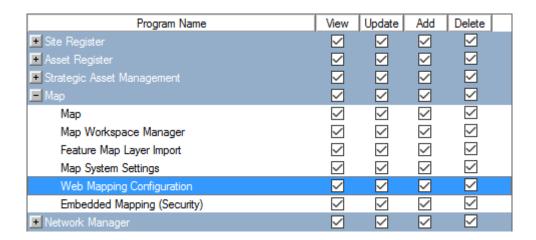
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Configure the Confirm Map Symbol System Settings User Security (This is applicable for Confirm Map Symbol System Settings only)

The Confirm database must be at v17.10 or later to use the Confirm Map Symbol System Settings screen.

The user access can be set in the Confirm Client under *user security*. The user needs to have update access for Web Map Symbol Settings.



Note: If this permission is not given, the Confirm Map Symbol Settings screen will simply return to the sign in page.

Configure the Confirm Stock Management User Security (This is applicable for Confirm Stock Management only)

The user access can be set in the Confirm Client under *user security*. There is an entry for Confirm Stock Management.

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■ Works Management	$\overline{\mathbf{A}}$	$\overline{\mathbf{A}}$	$\overline{\mathbf{A}}$	
■ ConfirmWorkzone®	$\overline{\mathbf{Z}}$	$\overline{\mathbf{Z}}$	$\overline{\mathbf{Z}}$	\checkmark
☐ Confirm Stock Management	\checkmark	\checkmark	\checkmark	✓
Confirm Stock Management User Access (Security)	~	~	~	~
Confirm Stock Management Admin Access (Security	~	~	~	~
■ Performance Monitoring	$\overline{\mathbf{Z}}$	$\overline{\mathbf{V}}$	$\overline{\mathbf{V}}$	$\overline{\mathbf{A}}$
■ Payment Processing	$\overline{\mathbf{Z}}$	$\overline{\mathbf{v}}$	$\overline{\mathbf{V}}$	$\overline{\mathbf{V}}$

- Confrm Stock Management User Access (security). Enables access to Stock Management.
- Confrm Stock Management Admin Access (security). Enables access to the Stock Management Settings form.

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Checking the Confirm web interface Configuration

Once Confirm web interface has been installed and setup it is recommended that the following actions are carried out to ensure that the system has been setup correctly.

1. Check that you can get to the login screen via the configured URL

Using one of the supported browsers you should be able to view the login screen. If there is a problem check the following:

- Check the Tenant ID name is correct in the URL and matches a database connection name in the Confirm web interface configuration file.
- Ensure any spaces in the URL are represented as %20. Some browsers convert spaces automatically but some do not.
- Ensure that the browser version you are using is supported.
- Check that the Web Service is started and functioning. Try restarting the Web Service.

If the login screen appears then the Confirm Web Service is working. If there are still issues viewing the login screen refer to the Web Service Install guide.

2. Check you can log onto Confirm web interface successfully with a valid Confirm user

If you are unable to login into Confirm web interface with your chosen Confirm user check the following:

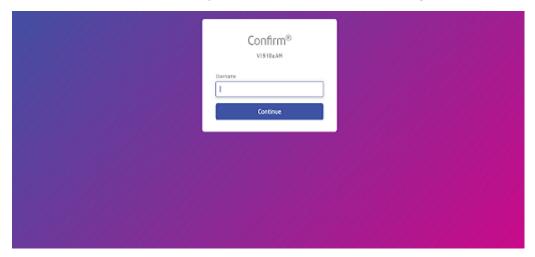
- Error messages will appear on the screen if an invalid Confirm User Login Name or password is used. Check the user login details within the Confirm Client to clarify details.
- Check that the URL has the correct database connection name.
- Check that the user is not locked out in the Confirm Client.

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Sign-In

The User Guide section will help users to get started with using Confirm web Interface.

Browse to the URL provided by the Confirm Administrator. A login screen like below will be displayed:



Enter a valid Username and hit Continue, this will display the password field. Enter the password to login to Confirm web Interface.

Note: In case of Single Sign-On, password field will not be displayed on Confirm web Interface' instead user will be redirected to configured Identity Provider of the organisation for authentication.

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

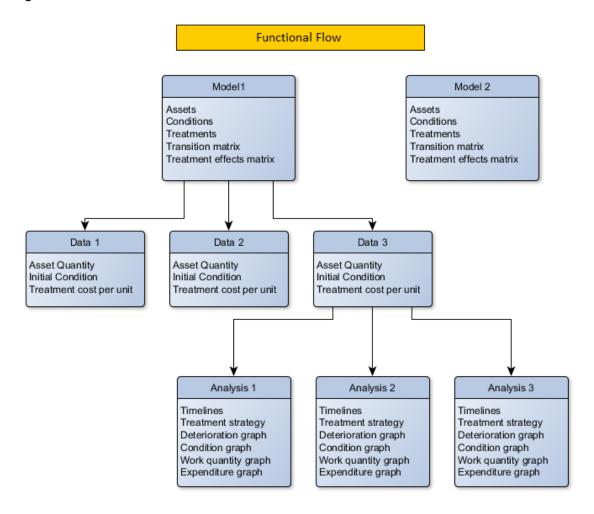
Note: Password change will be required whenever a user's password is edited by System Administrator in Confirm user security screen or password expires.

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Confirm Strategic Asset Management

Confirm Strategic Asset Management allows asset managers to predict long term condition of their assets using current condition and applying algorithms. It also allows asset managers to assess cost of maintenance over long term to meet their service levels.

The flowchart below describes the functionality of Confirm Strategic Asset Management application at high level.



Confirm Strategic Asset Management application has three main parts:

Model

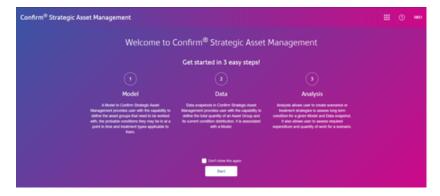
Data

Analysis

Landing Page

On successful sign in, user will be redirected to the landing page of Confirm Strategic Asset Management, like below:

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Start button will take user to the main application.

Note: Do not show this again: ticking will skip the landing page for user on all subsequent login.

Model

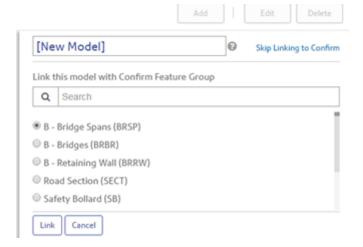
Creating Model is the first step in using Confirm Strategic Asset Management. A Model in Confirm Strategic Asset Management provides user with the capability to define the asset groups that need to be worked with, the probable conditions they may be in and treatment types applicable to them. This enables the application with the asset groups and rule sets which are input to algorithms determining long term condition and cost analysis.

Click Add button to start creating a Model.



Linked Model or Independent Model

A Model can either be linked to Confirm feature group or created independently. Model Name can be specified in [New Model] placeholder.



A linked Model is one which can refer to a Feature Group in Confirm to get all the asset and condition information. To create a Confirm Linked Model, user needs to choose a Confirm Feature Group from a list of Feature Group displayed.

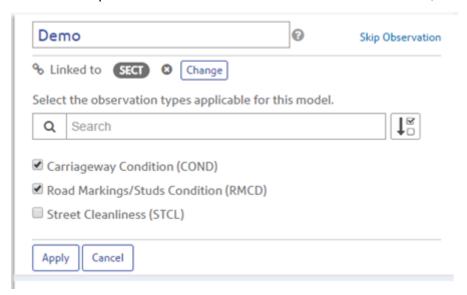
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Link Button: Links the selected Feature Group to the Model and proceeds to selecting the Observation Types (which have been enabled for Condition Assessment in Confirm) to be selected, for the linked Confirm Feature Group.

Skip Linking to Confirm: Use this option to create an independent Model which is not linked to Confirm Data. This option will take user to Model creation.

Select Observations

This page is available only for linked Model. The observation types associated with selected Feature Group and marked for Condition Assessment in Confirm, are available for selection.

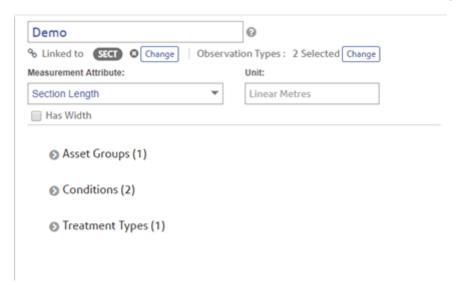


Apply: links the selected observation type to the Model being created

Skip Observation: Use this option to not link any observation type to the Model being created

Model Creation

Model creation requires Asset Groups, Conditions and Treatment Types to be defined:



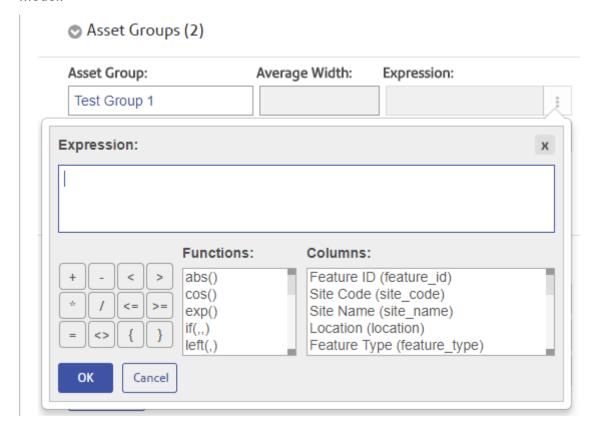
Measurement Attribute: Available only for Confirm Linked Model. Allows to select a measurement attribute that will be used to fetch asset quantity for the asset groups defined. We should also

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discuss about Units. This is automatically populated for Linked Model but is a selectable dropdown for Independent Model.

Has Width: Checking will consider Asset Groups as having width and user can specify width against each asset group. We should mention that for linked model this will be enabled only for linear assets.

Expression builder: Expression builder is available for Asset Groups and Conditions for Confirm Linked Models. It allows user to define an expression which is used to bring data from Confirm and assign corresponding Asset Quantity and Condition distribution value (in Data tab) for the Model.



Following columns are available and in that order in the expression builder to create expressions:

Feature ID, Site Code, Site Name, Location, Feature Type, Area Code, Contract Area, Classification.

Except Feature ID, Site Name and Location, all other columns use their value code as defined in Confirm lookups for expression evaluation. All Measurement Attributes and Primary Measurement of Feature Group can also be used to create expressions. Condition Observations selected while creating Model can also be used to create expression. Additionally, all user defined pick list attributes are also available to create expression.

The measurement attributes, observations and user defined pick list attributes are evaluated for the value stored in them.

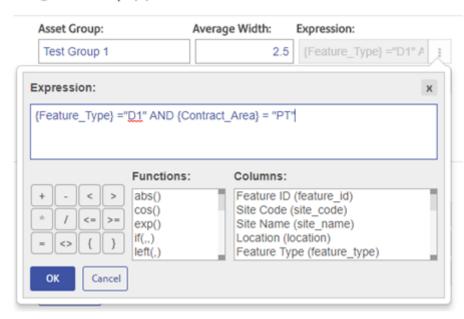
The operations and functions as available in expression builder can used to create expressions. The column value for a non-numeric field need to be specified within double quotes "" for a valid expression.

Asset Groups: The asset categorization according to which they need to be analyzed over a period of time.

Asset Group: Name of the Asset group being created.

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Asset Groups (2)

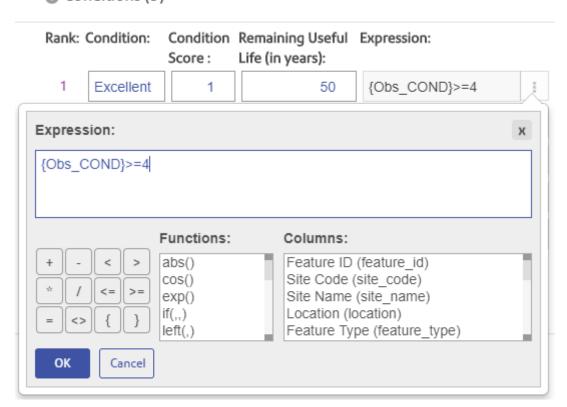


Average Width: Enabled only if 'Has Width' has been checked. It will be used in treatment costing while doing analysis by multiplying the quantity with the width. It is useful in linear assets like roads that are measure in length but treatment costs are in square units.

Expression: Enabled only for Confirm linked Model. It is used to define expression which will be evaluated against feature group assets and put the quantity against each asset group as per expression. Like in the image above, all assets with Feature Type 'D1' and within Contract area 'PT' will be put under Test Group 1 and a quantity as per sum of their primary measurement will be assigned to Test Group 1 in Data tab if data is pulled from Confirm.

Conditions: the probable condition bands in which an asset class can be in.

Conditions (5)



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Rank: Rank of the Condition. It is ranked from best to lowest, with 1 being the best and is read only.

Condition Score: It is the numerical score assigned for each condition.

Remaining Useful life: Expected Remaining Useful Life of asset defined in years.

Expression: Enabled only for Confirm Linked Model. It is used to define expression which will be evaluated against feature group asset condition. The resulting features' quantity will be aggregated and put in the Initial Condition against each condition defined. Like in the image above, all assets with Feature Condition having 'Carriageway Condition' Observation of value greater than 4, will be considered under Excellent condition within Test Group 1. And a quantity as per sum of their primary measurement will be assigned to Test Group 1 in Data tab if data is pulled from Confirm. The language in this para seems to be cryptic and difficult to understand. This document should be given to a new user in confirm and asked to follow these steps.

Treatment Types: The interventions that can be done with the asset groups while creating Analysis.



Save & Update Matrix will create a Model definition and take user to Matrix page.

Transition Matrix: Transition Matrix within a model is a transition probability matrix in 'As-is' state. Transition Matrix determines the probability with which an Asset Group in a Model will remain in current condition if no treatment is applied to it, in one year. It also determines the probability of Asset Group to deteriorate to worse condition(s) in a year if no treatment is applied. The matrix values need to be provided by users.



Treatment Effect Matrix: Treatment Effects Matrix Treatment Effects Matrix determines the effect on condition of an Asset Group when a particular treatment type is applied to it. A treatment type can only keep the condition of Asset Group same or make it better.

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Clicking Save on top of the Model page will save metrices and Model creation is now complete.

Data

Data in Confirm Strategic Asset Management provides user with the capability to define the total quantity of an Asset Group and its current condition distribution. It is associated with a Model.



New Data: Placeholder to define Data Name strategy.

Model: Allows to select a Model, for which Data needs to be created.

Preview will create the Data definition and will navigate page to define Data metrices



Get Data: The link is available only for Confirm Linked Model and its associated Data. It will activate the Data fetch from Confirm as per expressions defined in Model for Asset Group and Conditions.

The Data fetch may take some time during which



that process is in progress. User may click on

C Reload View to check if the process has complete. Once the Data fetch is com-

plete, Refresh Data max

be used to refresh the data from Confirm database. Any errors during data fetch are reported as Get Data Errors.

Quantity

Will be populated with the Data fetched from Confirm using Get Data. Contains the asset quantity, aggregated by the primary measurement, as per expression of the Asset group in the associated

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Model. It can also be populated/updated manually, which will always be the case for independent Model based Data.

Initial Condition

Will be populated with the Data fetched from Confirm using Get Data. Contains the asset quantity, aggregated by the primary measurement, as per expression of the Conditions in the associated Model. It can also be populated/updated manually, which will always be the case for independent Model based Data.

If the total condition distribution is not 100% of Asset Quantity, the deviation will be notified. Any distribution more that 100% is not allowed to be saved. Any distribution of less than 100% will be removed from quantity while creating Analysis so as to allow Analysis creation only on condition data available.

Get Data Errors

Get Data Errors are encountered if the expressions in the corresponding model are not calculating the data correctly. This may require re-visiting the expressions and correct them. Following three types of Get Data Errors may come:-

- 1. Quantity is zero for all asset groups.
- 2. Some Asset(s) have been counted multiple times for calculating Quantity.
- 3. Some Asset(s) have been counted in multiple Initial Conditions.

To verify which asset quantity and/or conditions are causing the problem, check the latest output file generated after Get Data or Refresh Data operation. The file ConfirmToSAM_Data-Sync_[timestamp].csv is generated at the Export File Path specified within ConfirmWeb Settings screen.

Reading the output file:

IsQuantityOverlapped column in file refers to an asset where quantity is being calculated multiple times. IsConditionOverlapped column refers to an asset where the condition is being calculated multiple times. Any TRUE value in these columns will cause the Get Data errors.

Treatment Costs Matrix

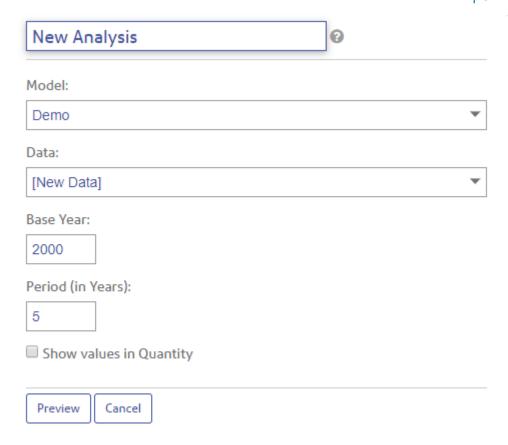
Treatment costs matrix defines the unit cost per treatment type per condition for each Asset Group. This unit cost is used in Analysis while projecting expenditure for a treatment strategy.



Analysis

Analysis allows user to create scenarios or treatment strategies to assess long term condition for a given Model and Data set.

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New Analysis: Placeholder to define Analysis Name.

Model: Allows to select a Model, based on which Data will be populated, for which Analysis is to be created.

Data: Allows to Select a Data for the Model selected, for which Analysis is to be created.

Base Year: Start year of the Analysis.

Period: No. of years for which analysis output is to be generated.

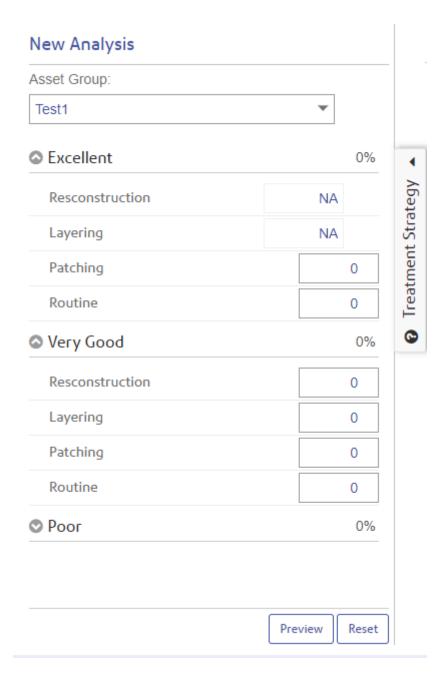
Show values in Quantity: If checked, the analysis graphs will show value in quantity, else percentage.

Preview will create a blank analysis and allow user to define a Treatment Strategy.

Treatment Strategy

Treatment Strategy allows user to create scenario(s) wherein user decides the treatment types that are to be done on an Asset Group, in a given condition. It also allows users to specify the percentage of total quantity of Asset Group that should be covered with a treatment type, in a given condition. Treatment Strategy is formulated per Asset Group.

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Asset Group: Allows to select the Asset Group within the Model/Data of the Analysis to create a treatment Strategy.

All the conditions for each Asset Group are available to define a treatment strategy.

Preview: Generates following output graphs, for each Asset Group, based on treatment strategy created for each Asset Group.

Individual Distribution

Condition - Do Nothing: It displays the long term condition profile of an Asset Group in case of no treatment strategy in place.

Condition - Treatment Strategy Applied : It displays the long term condition profile of an Asset Group with treatment strategy applied.

Work Quantity Graph: It displays the work done per Asset Group per Treatment Type for the strategy formulated. In case of no strategy, the graph displays no data

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Expenditure by Treatment Graph: Expenditure by Treatment graph displays the expenditure per Asset Group per Treatment Type for the strategy formulated. In case of no strategy, the graph displays no data.

Expenditure by Condition Graph: It displays the expenditure per Asset Group per Condition for the strategy formulated. In case of no strategy, the graph displays no data.

Overall values

Set of graphs for each Asset Group with Average Remaining Useful Life of the asset group and corresponding expenditure based on Treatment Strategy.

Average Remaining Useful Life: Takes the average of individual condition distribution and generates an overall condition of the Asset Group for each year based on the remaining useful life defined for each condition.

Average Condition Score: Takes the average of individual condition distribution and generates an overall condition of the Asset Group for each year based on the condition score defined for each condition

Total Expenditure: Aggregates the expenditure for each year for the Asset Group.

Aggregate: Switching Aggregate ON will generate the aggregated view of all the Asset Groups within the Analysis. All the individual graphs and the overall value graphs are aggregated. For independent Model if Asset Groups are measured in different units then only Expenditure Graph is aggregated.

Compare: Allows two or more analysis sharing the same Model, Data and Base Year to be compared with each other for overall values.

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Confirm interface with Street Manager

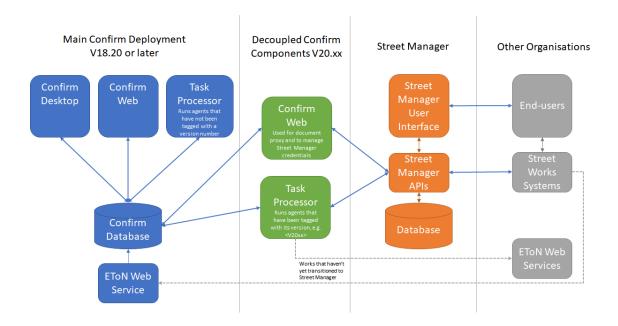
Mission statement

Confirm will integrate with Street Manager for all Street Works functionality. As such, it will not be required for Confirm users to use the Street Manager interface to plan, execute and coordinate works and associated permits.

Introduction

We are releasing frequent updates to the Confirm Street Manager interface in order to keep pace with the DfT's agile development methodology. We anticipate that pace of releases will remain relatively frequent beyond Street Manager go-live as teething problems are ironed out and Street Manager adds missing functionality.

To make it easier for customers to apply upgrades frequently, all of the Confirm components required to support the Street Manager integration are being provided in a decoupled form, so that they can be installed alongside your existing Confirm deployment without having to upgrade the entire system. The decoupled Confirm components are able to work alongside Confirm systems at a version of 18.20 or later. The diagram below depicts the various system components:



Decoupled Task Processor

The decoupled Task Processor performs the main task of integration with Street Manager, namely sending and receiving Street Works notifications. The decoupled Task Process will completely take over the role currently performed by the Street Works Transfer Agent, so it will also continue to send EToN notices prior to go-live of Street Manager and during the transition period.

Once the decoupled Task Processor has been installed it is activated by "tagging" the Street Works Transfer Agent scheduled task with the version number of the decoupled Task Processor, e.g. "<V20.23>". The act of tagging the scheduled task ensures that your "main" task processor no longer runs this task, allowing the decoupled task Processor to take over.

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Decoupled Confirm Web

Some additional settings are required in order to interface with Street Manager, most particularly the Street Manager API credentials that Confirm uses. The Street Manager Settings section has been added to the Web Settings screen to configure these settings in the Confirm Web component of Confirm which can also be run in decoupled mode.

Confirm Web is also used to provide a "proxy" service which allows Confirm users to view Street Manager documents without having to log into the Street Manager system.

Any changes to the Street Manager API for the existing integration with Confirm will be incorporated and provided as upgrades to the decoupled components.

For On Demand clients, the Confirm team will install the decoupled Task Processor and Confirm Web beta components. On-Premise clients need to install these components. Please refer to Getting Started sections of this document for more details.

Release Notes

Release notes for version v20.22a.AM.16127, 8th September 2020

The following issue has been fixed:

 When exporting a Permit Variation the deemed date from the original Permit was being displayed in Confirm.

Release notes for version v20.22a.AM.16104, 26th August 2020

The following feedback has been incorporated:

- 1. Confirm reflects Street Manager PAA rules, as follows:
 - When exporting a PAA to Street Manager, if Confirm detects that Street Manager has created a Permit Application (e.g. on a second Asset Activity phase) then Confirm will update the original notice in Confirm to be a Permit Application
 - When importing a PAA or Permit application from Street Manager, Confirm will set the notice type to correspond with what Street Manager supplied and will ignore the existing EToN rules
- 2. Permit Deemed date is now obtained from Street Manager
- 3. Refusing a Variation reverts the data in Confirm to what it was prior to the Variation application
- **4.** If a pending change is cancelled by Street Manager, because of a Works Stop before Grant, then a record of this is imported and the permit details are reverted to the values prior to the change request
- **5.** When a permit is Revoked from Confirm an additional works comment is created so that the revoke reason is visible in Street Manager
- 6. Export email error now includes Notice Type and Issue Date
- **7.** The Street Manager reference for entities is now consistently included on Imported as well as Exported items
- **8.** Confirm will now Import any text recorded on mandatory conditions (previously ignored). Note that a bug in Street Manager means that this text is currently ignored on export.
- **9.** A document link is created for each Works in Confirm with a URL that will launch the Street Manager for that Works.
- **10.** If a Grant or Refuse cannot be sent to Street Manager, e.g. because the permit has deemed, then the discount will be set to 100% and the permit status in Confirm will reflect that the permit was deemed

The following issues have been fixed:

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- 1. If Confirm is configured with multiple sets of only promoter credentials then only data for one of the promoters would be imported into Confirm from Street Manager
- 2. An "Unknown coordinate type" error could occur when inspecting a Registration of Non-notifiable works that had previously been imported via EToN
- **3.** Sending an Error Correction or Works Data Variation after a Works Stop in Confirm would start a new phase in Street Manager. ☐ Street Manager does not allow changes after works stop so these notifications are now blocked on export and will generate a transfer error.

Release notes for version v20.21a.AM.16071, 27th July 2020

The following feedback has been incorporated as part of this release:

- **1.** Set the Location area checkboxes (Footway, Verge, etc.) in Street Manager if specified in the Works location
- 2. Import HS2 Highway applications
- 3. Include Footway closure type in the works description on import and set the walkway flag on export if the works description contains "(walkway)"
- 4. Set default values on Organisations created on the fly, e.g. FPN Delivery Web Service URL

The following issues were addressed:

- 1. Not able to import registration notices if one of the sites has a depth of 0
- 2. Cannot export an Authority Imposed Variation if the Permit in Street Manager has attached Files
- 3. Excavation type is not updated when importing changes to works in progress
- 4. Works are transitioning to Street Manager before the transition end date
- **5.** Sending an Inspection or FPN to Street Manager on a works still being completed under EToN should not cause subsequent notices (such as grants) to be sent to Street Manager
- **6.** The Works Start notice of an existing works does not always transition properly if it was followed by a variation in EToN
- 7. Address character limit issues on export, e.g. pending change details, site name
- **8.** Ensure changes logged after Grant are recorded in Confirm as Permit Variations rather than Modified Applications.
- 9. Prevent payment of an EToN FPN from triggering transition of the FPN to Street Manager
- **10.** Ensure that re-sending an Inspection that was previously sent via EToN does not then later cause "Single-row subquery returns more than one row" errors

Release notes for version v20.21a.AM.16052, 13th July 2020

The following feedback has been integrated in Confirm functionality as part of this release:

- 1. Default text 'None supplied' is supplied when 'reason' is required by Street Manager but not supplied by a user in Confirm
- 2. Unpublished documents will now also be sent if they have "[Public]" in the Document Notes. Documents will not be sent if they contain "[Private]" in the Document Notes, even if they have been published
- **3.** Defective Apparatus, Unattributable Works (via Defective Apparatus), Fixed Penalty Notice and Inspections are sent to Street Manager after Transition Start Date instead after Transition End Date
- **4.** Incoming permits on partially private streets should default to public where the Road type in Street Manager is not set to "Private Street No definition information held by Street Authority"
- **5.** Suppress email when truncating Owner Name on import in Confirm
- **6.** Work Stop notice time to get populated under Notification comments on Import.

The following issues were addressed:

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- The permit created between last successful connection followed by the unsuccessful connection to Street Manager should not be missed to be picked up by the Confirm Street Works Transfer agent
- 2. Selected designations with a DfT reference higher than 3 were not being sent to Street Manager
- **3.** Ignore any custom inspection items that Street Manager cannot accept. These were causing export to Street Manager to fail
- **4.** Some Whole Street Designations geometries were not being exported to Street Manager
- **5.** Fix issue where exporting permit with Promoter organisation without any Interest gave 'Null Reference Exception'.
- **6.** Long text in the Address field of the Secondary contact should get truncated on Export to Street Manager
- **7.** Imported designations should not be re-exported to Street Manager when bulk transition date is passed.
- **8.** The Additional Comments for Street Manager field is now overall truncated to 500 chars when exporting an inspection from Confirm.
- **9.** Error Correction and other Agreements are incorporated into the Additional information sent to Street Manager
- **10.** Fix issue where Duration Variation Import in Confirm does not update the permit end date if time not supplied
- 11. Variation Comments should be updated on Duration Variation Import in Confirm
- 12 Section 58 dates should always be converted to and from UTC in the Street Manager interface
- **13.** Fixed an issue where it was possible for two Task Processors to process the same task if they both found two different tasks to process at exactly the same time

Release notes for version v20.21a.AM.16024, 26th June 2020

The following issues were addressed:

- 1. Section 58 import was not recognising change to the date format of the Street Manager extract
- 2. Section 58 import was not dealing with backward compatibility correctly when loading full ASD geometry
- **3.** Exporting an Authority Comment with an attachment could fail if the most recent works notice was from the Promoter

Release notes for version v20.21a.AM.16022, 24th June 2020

Following additional Confirm functionality is integrated with Street Manager as part of this release.

- 1. Defective Apparatus, Utility side.
- 2. FPNs on Historic Works.
- 3. Import and export Sec 58 co-ordinates.
- **4.** Export and Import Registration of non-notifiable works.
- 5. Export Confirm Phase Types as Activity Type to Street Manager.
- **6.** Export Unattributable works (with Defective Apparatus workaround)

The following issues were addressed:

- **1.** For Defective Apparatus, Occupancy and Permit Condition inspections we were populating Street Manager from the disabled Defect Notes field rather than the enabled Comments field.
- **2.** Fixed an issue where an "Object has been changed by another process" error could occur when importing Defective Apparatus updates, such as Acceptance.
- **3.** Fixed an issue where error email and logs were generated when a permit is granted in Street Manager without Duration Challenge and imported in Confirm.
- **4.** Permit Date and Status were not set when importing Duration Variations.
- **5.** Fix an issue where documents were not sent to Street Manger when attached to Defective Apparatus inspection from ConfirmConnect.

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- **6.** Notice Deemed information were being erroneously transferred to Street Manager when transitioning historic works.
- **7.** For forbidden access errors, Confirm will now stop retrying sending the notice, as manual intervention is required to fix the issue.
- 8. Dates were not importing correctly for Section 58 restrictions

Release notes for version v20.14a.AM.15597, 2nd June 2020

Following additional Confirm functionality is integrated with Street Manager as part of this release.

- **1.** Updating Transfer warning generation to recognise the new, shorter time scale for providing works start and stop notices (reduced from 24 hours to 2 hours).
- 2. Update the deemed date logic for PAAs (now 28 calendar days rather than 1 calendar month) for PAAs interfaced with Street Manager.

The following feedback items and issues reported in previous releases have been fixed:

- **1.** Automatically default the Outcome details from the Confirm Inspection Outcome name if no comments were entered.
- 2. Street Works Transfer agent should not revert EToN fixed penalty notice status from Resolved to Penalty Sent.
- 3. Street Works Licence Notice Type should be deduced properly during export to Street Manager.
- **4.** The Permit scheme for an application should be determined from the Street Interests on import from Street Manager and is not always use the system default "dummy" permit scheme.
- **5.** The Duration Challenge notice is now created in Confirm when importing a "Granted with duration challenge" permit decision from Street Manager.
- **6.** Registrations where trenches are defined as polygons are now being exported to Street Manager.
- 7. Fix the issue where if one of the new Apparatus Inspection Categories is used from Confirm-Connect then the resulting works are incorrectly classified as "Unattributable works".
- **8.** Fix the issue where if an application from Confirm is rejected by Street Manager because of a lack of early start reason (in the notice comments) it is not possible to correct this if a subsequent notice was added in Confirm before the first notice was sent. A default early start reason is now added automatically.
- **9.** Fix the breaking changes introduced by Street Manager API where works that use the new "Works for road purposes" Activity Type in Street Manager cannot be imported into Confirm.
- 10. For any error emails generated on export, include the email address of the 'logged by user'.
- **11.** Confirm was not allowing Granting of non-immediate permits to be exported to Street Manager after the Works Stop.

Release notes for version v20.13a.AM.15573, 4th May 2020

Following additional Confirm functionality is integrated with Street Manager as part of this release.

- 1. Defective Apparatus (Section 81), Authority side.
- 2. Inspection of Historic Works.
- 3. Importing Section 58 details.
- 4. Disabled the LondonWorks (Central Street Works Register) interface.

The following feedback items and issues reported in previous releases have been fixed:

- **1.** Fix issue where inspection site details were not being exported if the site was not registered in the most recent works phase.
- 2. Ignore various "works created" events in Street Manager to prevent unnecessary email alerts.
- **3.** Authority initiated inspections (Defective Apparatus and Historic Inspections) should be sent to Street Manager after Transition End date.
- 4. Fix issue where an new FPN is not imported if it is accepted before the agent next runs.

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- **5.** Confirm Inspection Comments should be appended to Street Manager Additional comments where Outcome details do not exist.
- 6. Send works to Street Manager automatically only if Transition Start Date has passed.
- 7. Updating the lookup SQL so that Street Manager agent flag old condition types 3 and 13 as not dead.
- 8. Use authority credentials in Street Manager agent to send out FPNs to Street Manager.
- 9. Inspections with Apparatus category should be sent to Street manager.
- **10.** Defective apparatus and Street Works Licences now gets sent over EToN (prior to transition) when the Street Manager Agent is used.
- 11. Carry forward early start agreements from the PAA to the Permit Application.
- **12** Multiple fields sent together in a text to Street Manager now have dot(.) followed by space as a delimiter for better readability.
- **13.** For importing data from Street Manager, Confirm now uses Authority details in preference to promoter credentials when both are available.
- **14.** User facing error message is now displayed in Street Works transfer tab when a Notice sent to Street manager has no early start reason supplied.
- **15.** Include user who logged notice on export error emails and Street Name, Town, Ward, Area and Contract area on import error emails.
- **16.** Notice should get sent successfully even if it has Section 58 designation selected. In this case Designation is not sent along with Notice.
- 17. Fix daylight saving conversion issues for offence and reinstatement dates.
- **18.** Improve error handling upon encountering Access Restricted issues in Street Manager.
- **19.** Fix breaking changes to Street Manager interface from Street Manager API changes on 16th and 30th April.

Release notes for version v20.12a.AM.15542, 26th Mar 2020

Following additional Confirm functionality is integrated with Street Manager as part of this release.

- 1. Automatic transition of ongoing works after deadline.
- 2. Export Notices to Street Manager as Permits.
- **3.** Support ongoing targeting of specific Authorities for Street Manager vs EToN post transition (to support Promoters that operate in Wales).
- **4.** Add a "Grant with Duration Challenge" notice type so that Grants followed by Duration Challenges can be sent from Confirm without relying on the send delay.
- 5. Automatically extract Refusal Codes from refusal comments being sent to Street Manager.
- **6.** Dealing with text that might be truncated on import into Confirm (e.g. Conditions). Any truncations are notified via an email alert containing the un-truncated text.
- 7. Export Events and Diversions from Confirm to Street Manager as activities on the map.
- 8. Export Section 50 Licences from Confirm to Street Manager as activities on the map.
- **9.** Export Section 58 Restrictions Designations from Confirm to Street Manager as activities on the map.

The following issues reported in previous releases have been fixed:

- **1.** Do not create duplicate Inspections in Street Manager when an existing Inspection is updated in Confirm.
- **2.** Export site id as part of inspection items only if it is a reinstatement inspection and having a registration of reinstatement against the site.
- **3.** Stop caching of Street Manager system settings in Confirm that causes Street Manager transfer errors.
- 4. Fix creation of Workstreams on the fly, broken by Street Manager API changes.
- **5.** If works is created, completed and registered on the same day then the registration details of site 1 are not imported correctly.
- **6.** Organisation Workgroup seed numbers are no longer required to import Permit Applications from Street Manager for Organisations that you Initiate for

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7. Fix breaking changes to Street Manager interface from Street Manager API changes on 19th and 26th March.

Release notes for version v20.11a.AM.15514, 27th Feb 2020

Breaking change:

1. The Confirm Street Manager interface is now deployed as part of a full Task Processor installation, working in "decoupled" mode. The previous installation mechanism of extracting a zip file and using the Windows Task Scheduler is no longer supported.

Note: This decoupled instance of Task Processor needs to be installed on a separate machine from the main Task Processor as two instances of the Task processor cannot work on one machine. For installation details, you may refer to Confirm Task Processor documentation, and 'setup' section therein. If you have been using earlier versions of Street Manager interface through the StreetManagerAgent.zip folder files, you need to stop the old Windows scheduled task and use the Task Processor.

The Street Manager agent process has also been enhanced to automatically run the latest versions of the lookups SQL files the first time it runs, so there is now no need to run these manually after upgrades.

The following issues reported in previous releases have been fixed:

- **1.** Prevent acceptable inspection items from getting exported to Street Manager.
- **2.** Fix issue where Third Party Report and Routine Inspections that have no items or a mix of Reinstatement and SLG items are not exported.
- **3.** Ignore items that are not configured for export, e.g. Inspections that are for internal purposes only.
- **4.** Allow user to specify Role when entering Street Manager API credentials in Confirm Web Settings Screen.
- **5.** Same Comments getting exported to Street Manager repeatedly.
- **6.** Authority Imposed Variations on a Street having Designation is not being accepted by Street Manager.

Release notes for version v20.01a.AM.15076, 10th Feb 2020

Breaking change:

1. Administering the Street Manager Agent from within Confirm Scheduled Tasks screen.

Note: As essential configuration to breaking change above, upgrading the Lookup Tables as part of Street Manager agent upgrade will populate Street Manager Agent <version> in the Notes section of Street Works Transfer agent in the Scheduled task screen. Like for the current release, <v20.01> will be populated. After upgrade, the Street Works Transfer agent need to be enabled for Street Manager agent to process tasks. Suspending the Street Works Transfer agent will suspend the Street Manager agent as well.

Following additional Confirm functionality is integrated with Street Manager as part of this release.

- **1.** FPNs export and import.
- 2. Exporting FPN status changes (e.g. paid) from Confirm to Street Manager.
- 3. Inspection import from Street Manager in to Confirm
- **4.** Create Workstreams on-the-fly for new Promoter Districts on export from Confirm to Street Manager.
- **5.** User Interface for configuring Street Manager URLs and credentials through Street Manager Settings screen from with Confirm Web Settings.

Following issues reported in previous releases have been fixed:

1. Enable the Street Manager agent to work through a proxy.

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2. When Inspection from Confirm splits in two at the Street Manager end, only the items relevant to the inspection type in Street Manager should be added to it.

Confirm Street Manager support:

For any issues and queries regarding Confirm Street Manager agent, send an email to ConfirmSMsupport@pb.com

Release notes for version v20.01a.AM.15049, 13th Jan 2020

Following additional Confirm functionality is integrated with Street Manager as part of this release.

- **1.** "Proxy" web service to allow documents in Street Manager to be viewed without the need for user to log in to Street Manager.
- 2. Catering for multiple authorities sharing a single Confirm system (multiple sets of Street Manager credentials).
- 3. Registration of Reinstatement (Import in to Confirm and export out of Confirm to Street Manager).
- **4.** Works Reference Special Characters Convert EToN supported '_' to Street Manager supported '/' in Works Reference and vice versa when works transferred from one system to another.
- **5.** Allow matching of Condition Text to NCT codes by convention.
- **6.** Authority Imposed Variations.
- 7. Multiple Phases.
- **8.** Forward Planning notice.
- 9. Duration Challenge Non-acceptance.

Release notes for version v20.01a.AM.15031, 18th Dec 2019

Following additional Confirm functionality is integrated with Street Manager as part of this release.

- 1. Works Data Variations.
- 2. Duration Variations and Duration Challenges.
- 3. Refuse a PAA, Refuse a Permit, Refuse a Variation.
- 4. Revoke a Permit.
- 5. Permit Cancellation.
- 6. Revert Actual Start.
- **7.** Revert Work Stop.
- **8.** Works comments. Includes all Confirm comment types, e.g. Promoter, Authority, Interested Party and FPN comments and Informal Overrun Warnings.
- 9. Generation of email alerts to the agent supervisor on import and export errors.
- **10.** Historic EToN Condition Types have been flagged as dead so they don't clutter up the wizards.

Following issues reported in previous releases have been fixed:

- **1.** Permit export to Street Manager failing when exporting Permit without comments, where early start agreement is not required.
- 2. Addressing breaking changes introduced by Street Manager on the 12th December.

Release notes for version v20.01a.AM.15020, 5th Dec 2019

Following additional Confirm functionality is integrated with Street Manager as part of this release.

- A new organisation 'STWRKS' can be added as recipient to a works, in which case the Street Manager agent will always talk to the Street Manager system for that works. Any works downloaded from Street Manager in Confirm will automatically add 'STWRKS' as recipient to that works and in Confirm.
- 2. Create a PAA notice. Grant it to be progressed to PA notice.

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- 3. Modified Application in response to a Modification Request.
- **4.** Create Modified application directly on a Permit notice.
- **5.** New inspection items relevant to the Street Manager system.
- 6. Published attachments with works in Confirm are uploaded to Street Manager system.
 - Links to documents attached in Street Manager are downloaded in Confirm which user can navigate to view the attachments.

Release notes for version v19.23a.AM 14595, Sep 10th 2019

This is the first available beta release of Confirm Street Manager agent. Following functionality is part of this release

- **1.** Confirm Street Manager agent as a separate package, which can be installed and upgraded without need to upgrade the other Confirm components.
- **2.** Confirm Street Manager Interface documentation, which describes the overview, supported actions, installations instructions and FAQs for the Street Manager agent.
- **3.** New Database settings to allow storing Street Manager API credentials to access Street Manager API as a Promoter and Authority.
- **4.** Street Manager agent capability to push notices created in Confirm to Street Manager system and pull notices created in Street Manager system in to Confirm.
- **5.** Following Street Manager actions (notices) are integrated with Confirm Street Manager agent for data push and pull:
 - Create a standard and immediate permit notice.
 - · Grant a permit notice.
 - · Issue a Work Start notice.
 - · Issue a Work Stop notice.
- **6.** Following Street Manager actions (notices) are integrated with Confirm Street Manager agent for pushing data to Street Manager from Confirm:
 - Inspections

Supported Confirm versions:

Confirm v18.2 onward support the Street Manager interface.

Installing and Configuring the Confirm Street Manager Agent:

For On Demand clients:

For On Demand clients the Confirm team will install and configure the Street Manager interface. Please get in touch with the Confirm technical support team for any queries.

For On Premise clients:

Download the Street Manager adapter from http://store.pbinsight.com/promo/4989413400

Then refer to the installation and configuration section of this document to configure the Confirm Street manager interface.

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Road Map

This section briefly lists planned developments in a prioritised order. Further detail is provided in other sections of the documentation.

Next release

We have no specific plans for the next release to allow scope to react to urgent user feedback during go-live.

Planned

We intend to deliver these in a follow-up release after initial go-live, subject to other customer feedback:

- Fix the issue where Linked Inspections are not exported.
- Automatically append FPN payment methods and details for representations in the offence details
- Automatically reply with a standard works comment when permit applications are received on streets that are not subject to permitting
- Allow the last updated date to be edited via the settings screen to allow users to fetch older updates not transferred due to outages, etc.
- Review the retry strategy in scenarios such as where credentials for a particular organisation are not available
- Allow follow-up Works Comments to be sent to Street Manager where Historic works have been created as the result of an Inspection or FPN
- Only import Section 58 designations (activities) against Streets that are applicable to Street Works

TBA

Not yet decided when these will be implemented. Subject to customer feedback and prioritisation.

- Deal with changing the Excavation type is changed on Works Stop. Pending a mechanism to do this from Street Manager
- Ensure Works Comments are correctly classified as being from the Promoter or Authority (subject to APIs in Street Manager to allow us to determine this). Currently all comments appear in Confirm as if they are from the Authority.
- · Send Noticing FPNs as Emails
- · Support import of additional HS2 fields and export Acknowledgments
- Support exporting Error Corrections after Works Stop by Reverting the Works Stop, issuing a change and re-issuing the Works Stop.
- Prevent creation of Workstreams on-the-fly in Street Manager if the Confirm organisation is flagged as dead
- Importing Historic Inspections and FPNs on works that do not existed in Confirm
- Allow decoupled Task Processor to be installed on the same server as the "main" Task Processor
- Importing Section 50 licences promoters may be happy to review these in Street Manager

Out of scope

We are not currently intending to include these for go-live, either because they are not supported by Street Manager or are not deemed relevant for integration:

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- Submit change to Street Manager if Contact Details are changed on Works Start. Doesn't happen often so low priority.
- Error Correction. Doesn't happen often so low priority
- · Document Notes. Not widely used so won't be missed
- Scheduling Inspections in Street Manager. All inspection sampling and scheduling will still be carried out in Confirm. Only inspection results will be sent to Street Manager
- Traffic Signal Applications. Awaiting feedback from DfT on whether this will be brought into Street Manager as lots of people use it
- Exporting manually configured (non-EToN) Works Types to Street Manager as Activities

Getting Started

This section of the document describes setting up the Confirm Street Manager interface.

Step 1 - Get the Street Manager API credentials

Street Manager API access is required to interact with Street Manager from Confirm. You will need a set of generic email IDs to be set up to access the Street Manager system which you can then use in Confirm. Please contact the DfT to obtain an administrative account which will allow you to create the necessary users in each environment.

If you want generic email addresses on Confirm on-demand domain as Street Manager API access email IDs, you may use following format when creating the accounts in Street Manager:

- Promoter email address you want to use like <confirmcouncil>-promoter@ondemand.confirm.co.uk . You may replace <confirmcouncil> with your council name.
- Authority email address you want to use like <confirmcouncil>-authority@ondemand.confirm.co.uk
 You may replace <confirmcouncil> with your council name.

Please let us know at ConfirmSMsupport@pb.com when you have created the users so that we can forward the activation emails to you. You can use the same email address for Sandbox and Production but they are different "accounts" in Street Manager so should be given different passwords.

You will initially receive a temporary password for the user ID created which you need to change to permanent. Also, your admin user in the Street Manager will need to give all Confirm user accounts the API role. We recommend that an API user to not have a UI role in Street Manager.

You need to ensure that the Promoter API user has access to the all of the relevant Workstreams that corresponds with your promoter districts in Confirm. To do this log in as your admin user and select Organisation Users. The select the Promoter API user. Click Manage against their user permissions. We recommend you select all on the Workstream and 'Confirm access'

Step 2 - Install the Decoupled Confirm Task Processor and Confirm Web beta environment

All the On-demand clients have been set up to use the decoupled Task Processor and Confirm Web beta environment for Development and Production (not Test). We recommend that Development is linked to the Street Manager Sandbox environment and Production to Production.

You will need to access the Confirm web beta environment for Street Manager interface specific configurations. The On-demand URLs for the Confirm Web beta environments are unique for each customer and look like this:

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- Development: https://beta-development-webservices.ondemand.confirm.co.uk/confirm/web/app/?tenant=<Your Profile Name>#/settings
- Production: https://beta-production-webservices.ondemand.confirm.co.uk/confirm/web/app/?ten-ant=<Your Profile Name>#/settings

Replace "<Your Profile Name>" with your usual profile name, e.g. "Authority Name - Development" without any leading or trailing spaces. Please contact Confirm support team if you are unsure of your Confirm web beta URLs for development and production.

The On-premise clients need to follow the Installation (For On-Premise clients) section of the document to install the decoupled Task Processor and Confirm Web beta environment.

Step 3 - Configuring the Confirm Street Manager interface

Following Street Manager Settings in the Web Settings screen need to be configured

- Street Manager URL. Refer to https://departmentfortransport.github.io/street-manager-docs/api-documentation/ and Current Release section for sandbox and production URLs which could change. The current URLs are:
 - Sandbox: https://api.sandbox.manage-roadworks.service.gov.uk
 - Production: https://api.manage-roadworks.service.gov.uk
- Document Proxy URL The URL to the Confirm Web beta that supports the Street Manager document proxy service. Ensure this ends with a trailing slash. For On-demand these URLs are as follows:
 - Development: https://beta-development-webservices.ondemand.confirm.co.uk/confirm/web/
 - Production: https://beta-production-webservices.ondemand.confirm.co.uk/confirm/web/
- Email Address (for role 'Promoter') the API access key of a Promoter user for accessing the Street Manager APIs. Required when Confirm is used as Promoter system and for self Promoted works.
- Password (for role 'Promoter') the API secret of a Promoter user for accessing the Street Manager APIs. Required when Confirm is used as Promoter system and for self Promoted works.
- Email Address (for role 'Highway Authority') the API access key of an Authority user for accessing the Street Manager APIs. Required when Confirm is used as Authority system.
- Password (for role 'Highway Authority') the API secret of an Authority user for accessing the Street Manager APIs. Required when Confirm is used as Authority system.

If you are an On-demand client and want to work with your own self-promoted works prior to the Transition Start date you need to send your promoter and authority organisation codes to ConfirmSMsupport@pb.com to update your database. For On-premise clients, a SQL script is provided in the installation section.

Step 4 - Activating the Confirm Street Manager interface through the decoupled Task Processor

The decoupled Task Processor performs the main task of integration with Street Manager, namely sending and receiving Street Works notifications. The decoupled Task Process will completely take over the role currently performed by the Street Works Transfer Agent, so it will also continue to send EToN notices prior to go-live of Street Manager and during the transition period.

Once the decoupled Task Processor has been installed it is activated by "tagging" the Street Works Transfer Agent scheduled task with the version number of the decoupled Task Processor, e.g. "<V20.22>". The act of tagging the scheduled task ensures that your "main" task processor no longer runs this task, allowing the decoupled task Processor to take over.

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Note that the first time the new agent runs it will make the necessary lookup table changes as described in the various Field Mapping sections, so please ensure that you have familiarised yourself and relevant users with these changes in a development environment before activating the new Task Processor in production.

On-premise customers need to ensure that the Task Processor procedure patching has been completed, as described in the installation section, before tagging the agent.

General Principles

Street Manager Recipient

A new organisation with a code of "STWRKS" will be created which will represent Street Manager. When a works is sent or received from Street Manager the "STWRKS" recipient will be added to the works (if not already). Once a works has been sent or received via Street Manager then all subsequent notifications for that works will be sent via Street Manager and EToN notifications will stop being sent.

A new works will be automatically sent to Street Manager if the "STWRKS" organisation is added as a recipient. New works will also automatically be sent to Street Manager if both the Promoter and Authority are included in the list of Street Manager Organisations system setting or the Transition Start Date has passed.

To revert back to using EToN for a works prior to the Transition Start date simply Suspend the "STWRKS" organisation. You may also have to go back and re-send previous notifications for organisations that you want to resume EToN for.

Street Manager API access email IDs

The email IDs used for accessing the Street Manager API's from Confirm should not be used to access the Street Manager system through the Street Manager user interface. The Confirm system uses these email IDs to identify the Confirm generated transactions in the Street Manager system and any transactions in the Street Manager system created using these email IDs will not be pulled back to the Confirm system.

Batches and Diagnostics

Batches will continue to be used to audit transfers to and from Street Manager. However, there are no XML file equivalents for Street Manager so the Batch File Name will be recorded. The Task Processor log file can be configured to show detailed information about individual API calls made to Street Manager for diagnostic purposes.

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Error Handling

If Confirm is not able to contact the Street Manager API, there is a problem with authentication or Street Manager indicates that an internal error has occurred then Confirm will keep trying the current notice till the time it is successfully sent. Note that the Street Works Initiation System Settings > Notification Retries settings based limitation will be applied to only EToN based transfers.

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If Confirm obtains an error back from Street Manager that indicates that Street Manager will not accept the data from Confirm (e.g. invalid USRN), then the notice will be flagged as unsent allowing the data to be corrected in Confirm and re-sent.

If there is more than one pending notice to be sent to Street Manager and a data error occurs on a notice that is not the most recent notice then the failing notice will be flagged as "Do not send" and Confirm will attempt to send the next notice.

If there is an error with importing a notice from Street Manager such that a record cannot be created in Confirm then the System Supervisor will be emailed with the error details. Confirm will attempt to re-import the notice the next time the works is updated in Street Manager.

If condition text or any comment exceeds the character limit of confirm while importing the notice from Street Manager, then the System Supervisor will be emailed with the original values and the work header number. The truncated text will be available in Confirm with

'...More in SM' text.

Lifecycle Validation

There are some instances where Street Manager enforces more stringent validation than was expected under EToN. Please feel free to lobby the DfT if you feel this differences could cause operational issues. Examples include:

1. Changing the USRN for a Works

Street Manager does not allow the USRN to be altered or corrected at any point once a works has been created. The only way to change the USRN is to create a completely new works (you can't even change the USRN if you create a new permit on an existing works).

Confirm allows the USRN to be changed on a number of notices, e.g. Permit Application after a PAA, Works Data Variation, etc. but these changes will not be reflected in Street Manager.

2. Modification Request on Immediate Works

Street Manager has formalised the practice of not allowing Modification Requests to be sent in response to an Immediate Permit Application, and will reject this notice if sent from Confirm in this scenario. If you do not want to refuse the Immediate Permit but would like some small changes to be made then you should grant the permit and then submit an Authority Imposed Variation.

3. Works Data Variation after Works Stop

Street Manager does not permit Variations / Error Corrections after the works has stopped. The only way to achieve this is to revert the Works Stop, submit the Variation and re-submit the Works Stop.

Lookup Table Matching

For EToN, matching to Confirm lookup tables was mostly done based on the DfT reference fields on the lookup. In some cases, however, Street Manager adds more options than EToN supported, but during transition we still need any new options to be supported under EToN. Where new options are to be supported these will be added into Confirm with DfT references that most closely match the EToN equivalent. New options that have been added to support Street Manager will typically be matched based on the lookup table entry Code / Number in Confirm. The exception is Permit Condition Types which don't have a Code, in which case a partial match on Name will be attempted. If multiple matches are found using a DfT reference or Name then the first item will be selected based on the order that the items are typically presented in Confirm, e.g. by name or display order.

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Missing Data

Given that Street Manager will be the official "system of record" for Street Works, data from Street Manager will be downloaded in Confirm in any way possible.

This includes automatically creating missing organisations. For example, if a new works prefix is received from Street Manager then a new Organisation with a matching DfT Ref 2 will be created in Confirm using the contact details from the Street Manager "Workstream".

Confirm will also create new Workstreams in Street Manager where necessary.

If an unrecognised USRN is received from Street Manager then the works will be recorded against the Provisional Street in Confirm as currently happens with EToN.

Document Links

When documents are received from Street Manager a Document Link record will be created with a URL in the Document Location that will launch the document stored in Street Manager. The document will not be downloaded to the local Confirm system. The URL itself does not include the document file name, so this will be included in the Document Notes in Confirm. If the document relates to a specific Permit then the Permit reference will also be appended to the document link notes. Street Manager documents are actually viewed via a "proxy" service built on Confirm Web, which allows documents from Street Manager to be viewed from Confirm without having to log into Street Manager. You will need to install the latest version of Confirm Web to use this Proxy service, but this can be done in "beta" mode so a new version of Confirm Web can be installed that works with your current Confirm database. Note that the 'Received' flag will still be set to 'No' as changing this to 'Yes' for documents received from Street Manager will need a Confirm database change and will be considered in future.

If a notification is created in Confirm and there are outstanding published documents (with the \$ORG_PREFIX\$ prefix or "[Public]" in the document notes) that haven't previously been sent to Street Manager, then these documents will first be uploaded to Street Manager before sending the notification. The Document Location for uploaded documents will not be altered, so will still point to Confirm's local copy of the document. However, the URL that links to the copy of the document in Street Manager will be appended to the Document Description in Confirm.

Documents will not be sent to Street Manager if they contain "[Private]" in the Document Notes.

Street Manager allows documents to be attached to Permit applications and Permit changes and also to be generally uploaded against the Works. However, there is a current issue in Street Manager where it is not possible to see documents that were uploaded as part of a Permit change. For this reason we are currently uploading all documents from Confirm against the Works as a whole, rather than against individual Permit applications or changes. We will review this once the issue is resolved in Street Manager.

Street Manager does not allow specific Document Notes to be added, so the document notes associated with any published documents will not appear in Street Manager.

Note for on-premise customers: When the Street Manager agent uploads documents to Street Manager it must obtain them via the published URL, so you will need to make sure that the Street Manager Agent can access these URLs. The Agent will currently only support uploading documents that are published at HTTP or HTTPS locations.

Works Reference Special Characters

In EToN, works references are allowed to contain letters, numbers and forward slash "/" and hyphen "-" characters. Under street manager forward slashes are not allowed but underscores "_" are allowed.

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When transitioning legacy works from EToN to Street Manager (e.g. as a result of a Cat C inspection) we will need to replace any forward slashes in the works reference with underscores so that Street Manager will accept the works reference. We perform the replacement "on-the-fly", so keep the works reference the same in Confirm (with slashes) so that the original works reference in Confirm is preserved for audit purposes. This that means that what you see in Confirm won't be consistent with what is seen in Street Manager, so a works reference like ABC/123-A in Confirm would be ABC_123-A in Street Manager. We would advise that slash and underscore characters are avoided where possible on new works.

Transition

Transition activities will occur at two specific dates, the "Transition start" date/time, which is defaulted to 1st July 2020 and the "Transition end" date/time which is defaulted to 1st August 2020. There is also a "Bulk Transition" date/time which would normally be the same as the Transition start date. For testing purposes we will allow these dates to be changed so that the different scenarios can be tried out in the Sandbox. Note that if Bulk transition is attempted prior to the Transition start date then bulk transition will only occur if both the Promoter and Authority are included in the list of Street Manager Organisations system setting.

From an Authority perspective, Confirm will automatically transition ongoing works notifications to Street Manager as soon as any notification for that works is received from Street Manager. For works that have not yet appeared in Street Manager all Authority notifications will continue to be sent via EToN apart from Inspections, Defective Apparatus and FPNs logged after the Transition Start date, which will be sent to Street Manager using the "historic works" mechanism.

When external parties transition works to Street Manager you may notice a number of Ignored notices being logged where Confirm already knows about the notice. We will still log these in Confirm to allow authorities to double check that the data being entered into Street Manager is equivalent to the original Permit that was granted under EToN. We are also aware that the DfT have issued transition guidelines that suggest users should cancel works using EToN after these have been transitioned to Street Manager. We have strongly recommended against this to avoid the works accidentally being left in a cancelled state, but the DfT have so far been unwilling to change this guidance. Hopefully, any cancellation send via EToN will have an invalid sequence number if transition notices have already been received from Street Manager, so the cancellation will be ignored, but please be aware of this in case some works are incorrectly cancelled where they should remain ongoing.

For works that are Promoted from within Confirm (where the Organisation Notice Initiation flag is checked), notifications for any new Phase will automatically be sent to Street Manager once the Transition Start date has passed.

The Task Processor will also perform a bulk transition the first time it runs after the Bulk Transition date/time has passed for all works that are already scheduled to complete after the Transition End date. When Confirm transitions a works the following notifications could be created in Street Manager:

- Forward Planning (only if this is the most recent notice for the works, in which case no other notifications will be created)
- Provisional Advanced Authorisation (PAA) from the most recent PAA in Confirm (if the current works phase is major)
- Permit Application (PA) with data from the most recent application of any kind, e.g. Permit Application, Modified Application, Works Data Variation, etc. for the current works phase in Confirm that hasn't been refused. Note, if the most recent Variation for a Minor or Standard works has varied the duration such the works is classed as Major Works then the Permit Application generated by Confirm will be treated as a PAA and a subsequent Actual Start will be rejected.
- Actual Start (if the current works phase is in progress)

Permit Applications or Variations that have been refused or revoked will not be replicated in Street Manager - only the current valid permit and most recent pending change (if any) will be sent to Street Manager.

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For each generated notification the early start reason or equivalent comment field in Street Manager will indicate that the works were transitioned from EToN and include the date and time that the original notification was received under EToN and the date it was previously Granted or deemed if applicable.

Section 58s, Section 50 licences and Events will all be migrated as Activities to Street Manager at the Bulk Transition date if their end date is later than the Transition Start date.

The Bulk Transition date will be cleared once the process has been completed.

For any works that were not transitioned at the Bulk Transition date, Confirm will automatically transition the works to Street Manager if either:

- A change is made that would result in the works now being scheduled to complete after the cutoff date, e.g. requesting an extension
- · Any promoter notification is entered after the Transition End date

In this scenario Confirm will generate all of the necessary notifications described above followed by the specific new notification that was just being created. This may also result in a the most recent Works Stop being sent to Street Manager if the new notification relates to a phase that has just completed, for example, a registration of reinstatement.

Launching Street Manager from Confirm

A document link is created for each Works in Confirm with a URL that will launch the Street Manager for that Works when Confirm interacts with the Street Manager the first time for that Works. Users would need to log into Street Manager using their own credentials in order to follow this URLs.

Noticing

Street Manager does not support noticing but there are a number of scenarios where Permits are not applicable, e.g. in Private Streets or where the Permit scheme only applies to certain Streets.

If a PAA / Permit application is received from Street Manager against a Street that only supports Noticing then the application will be linked to the "Dummy" Permit Scheme specified on the Street Works Notice Default System Settings.

If a non-Permit Notices are entered into Confirm these will be translated to notifications that Street Manager will accept, as follows:

- We will send and receive S54, S55 and S57 notices as PAAs and PAs in Street Manager.
- Error corrections and revised duration estimates will be converted to permit changes.
- Any directions entered into Confirm will be translated into Works Comments in Street Manager with a suitable preamble.
- If any S54, S55 or S57 noticing FPNs are generated after the transition to Street Manager then these will be sent via email, even if the user requested to send them via EToN.

Supported Actions

The following table outlines the Confirm action or process, the corresponding action in Street Manager and the status of the integration.

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Table 1: Street Works

Confirm Action	Street Manager Action	Status	Notes
New Planned Street Works (Forward Plan- ning)	Raise a Forward Plan	Available	
(Forward Plan- ning Informa- tion) Planned Works	Progress forward plan to PAA	Available	
New Planned Street Works	Apply for works	Available	
New Immediate Street Works	Apply for works	Available	
Permit Applica- tion	Progress PAA to PA	Available	
Grant PAA	Assessment decision > Grant	Available	
Grant Permit	Assessment decision > Grant	Available	
Refuse Per- mit/PAA/Vari- ation	Assessment decision > Refuse	Available	
Modification Request	Assessment decision > Modification request	Available	
Modified Application	Request a change	Available	
Works Data Variation	Request a change	Available	
Duration Variation Application	Request a change	Available	
Duration Challenge Non-Acceptance	Not available	Available	Will be sent as a works comment
Cancellation	Cancel permit application	Available	
Actual Start Date	Log works start	Available	
Revert Actual Start	Revert works start	Available	
Duration Chal- lenge	Assessment decision > Grant with duration challenge	Available	
Authority Im- posed Vari- ation	Impose a change	Available	
Revoke Permit	Revoke permit	Available	
Works Stop	Log works stop. Was an excavation required? > Change	Available	(Out of scope) Don't currently change the excavation status if

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Confirm Action	Street Manager Action	Status	Notes
			this is edited on the Works Stop.
Revert Work Stop	Revert works stop	Available	
Error Correction	Request a change	Available	Note Street Manager does not allow changes after the works has stopped so this notification could cause errors.
Registration of Reinstatement	Add a reinstatement	Available	
New Planned Phase	Apply for new permit	Available	
New Immedi- ate Phase	Apply for new permit	Available	
Temporary Traffic Signal Application & Response	Out of scope	Out of scope	Not in scope for Street Manager but could consider logging as works comments if desired
Document Links	Add a file	Available	
Works Com- ments	Added	Available	

Table 2: Inspection

Confirm Action	Street Manager Action	Status	Notes
New Inspection	Add and Inspection Add inspection to historical works	Available	Note that some historic works may not have valid coordinates, but these are mandatory in Street Manager. Ensure that coordinates are specified on the inspection if this is the case.
Programmed Inspection	Schedule inspection	Out of scope	Inspections will continue to be sampled and programmed in Confirm. Only completed inspections will be sent to Street Manager

Table 3: Street Works Licences

Confirm Action	Street Manager Action	Status	Notes
New Street Works Licence	Add activity to the map		Note that the actual works carried out under a licence would be logged as normal works.

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Confirm Action	Street Manager Action	Status	Notes
			(TBA) Currently only planning to export Section 50s to Street Manager, not import

Table 4: Defective Apparatus

Confirm Action	Street Manager Action	Status	Notes
New Defective Apparatus + Apparatus In- spection	Issue Section 81	Available	A Section 81 record will only be created in Street Manager when the Apparatus Inspection is recorded in Confirm
Defective Apparatus (issue to new promoter)	Cancel Section 81 Issue Section 81	Available	The previous Section 81 will be cancelled and a new one created as Street Manager doesn't allow the promoter to be changed
Cancellation	Cancel Section 81	Available	
Promoter Comment	Acknowledge	Available	Import only.
Defective Apparatus Non-Acceptance	Rejected	Available	
Defective Apparatus Acceptance	Accepted	Available	Note a linked works will not be created
Works Stop Completion of Non-notifiable Phase	Mark S81 as fixed	Available	On import, the Defective Apparatus works status will be set to 'Completed'. An extra works history entry will be added with a new Notice Type of 'Defective Apparatus Acceptance Fixed'. This new Notice Type is similar to "Defective Apparatus Acceptance" having code "202A". On export the Section 81 will be marked as Fixed when the linked works is completed

Table 5: Non-notifiable Works

Confirm Action	Street Manager Action	Status	Notes
New Registra- tion of Non-No- tifiable Works	Add reinstatement of non-notifiable works	Available	

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Table 6: Unattributable Works

Confirm Action	Street Manager Action	Status	Notes
New Unattributable Works	Issue Section 81	Available	Current workaround re- commended by the DfT
Unattributable Works (issue to new promoter)	Cancel Section 81 Issue Section 81	Available	The previous Section 81 will be cancelled and a new one created as Street Manager doesn't allow the pro- moter to be changed
Cancellation	Cancel Section 81	Available	
Promoter Comment	Acknowledge	Available	Import only.
Unattributable Works Non-Acceptance	Rejected	Available	
Unattributable Works Acceptance	Accepted	Available	Note a linked works will not be created
Works Stop Completion of Non-notifiable Phase	Mark S81 as fixed	Available	On import, the Unattributable Works status will be set to 'Completed'. An extra works history entry will be added with a new Notice Type of 'Unattributable Works Fixed'. This new Notice Type is similar to "Unattributable Works Acceptance" having code "2002". On export the Section 81 will be marked as Fixed when the linked works is completed

Table 7: Offences and Penalties

Confirm Action	Street Manager Action	Status	Notes
l .	Issue an FPN Issue FPN to historical works		Only FPNs will be sent to Street Manager, not candidate Of- fences.
Offence > Actions	FPN action	Available	Only the Cancellation (with- draw) and Paid statuses will be exported from Confirm.

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Table 8: Designations

Confirm Action	Street Manager Action	Status	Notes
Site > Designations > S58 Restriction	Add activity to the map	Available	
Site > Designations > S58A Restriction	Add activity to the map	Available	Will be recorded as Section 58 with the designation name in the description

Table 9: Events and Diversions

Confirm Action	Street Manager Action	Status	Notes
New Event Diversions	Add activity to the map	Available	
Edit Event	Change activity detail	Available	
(Event) Cancellation	Cancel activity	Available	

Non-Permit Notices

Street Manager currently only supports permitting. Permit applications made in Street Manager that are made on Noticing Streets will be attached to the "Dummy" Permit Scheme. The following Notices will be translated to equivalent Street Manager notifications on export:

Confirm Action	Street Manager Action	Status	Notes
New Planned Street Works New Immedi- ate Street Works	Apply for works	Available	
Confirmation	Progress PAA to PA	Available	
Revised Dura- tion Estimate	Request a change	Available	
Error Correction	Request a change	Available	Note cannot be used after Works Stop
Directions on Timing	Add a comment	Available	
Direction on Placing Appar- atus	Add a comment	Available	
Undue Delay Direction	Add a comment	Available	Deadline will be included in the comment text

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(Planned) If any S54, S55 or S57 noticing FPNs are generated after the transition to Street Manager then these will be sent via email, even if the user requested to send them via EToN.

Field Mappings

This section provides the mapping of Confirm fields with Street Manager for the supported notification types.

Actual Start

Note that Notification Comments are not sent to Street Manager.

(Out of Scope) Confirm allows works contact details to be changed on the Works Start, would have to submit a permit change to affect these in Street Manager.

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Works started	Street Works > Start Date	Full date and time are imported	Confirm does not currently allow time to be specified on the Actual Start wizard.
			If the Start Date in Confirm is on the same day that the Notice was issued then the Issued Date (time) will be used. Otherwise the Start Date will be used.

Authority Imposed Variation

Street Manager allows Conditions to be specified on Authority Imposed Changes, whereas only free text was supported by EToN.

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Conditions	Street Works > Conditions	Will be mapped to Confirm Condition Types based on matching the NCT condition code to the first 6 characters of the Permit Condition Type Name. Mandatory conditions NCT01a, NCT01b and NCT11a are ignored	Condition updates will be generated where NCT codes are used in the Variation Comments. Conditions will only be added or updated, never removed.
Condition Comments	Street Works > Conditions Text	Concatenated together. May be truncated. The text from each condition will be on a new line prefixed	If a fragment of Condition text in Confirm begins with a valid NCT code then everything after the code will be attached to the

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	,
		by the corresponding NCT code.	relevant Condition in Street Manager.
Why do you need to change the permit details?	Street Works > Conditions > Authority Im- posed Vari- ation		Condition updates will be generated where NCT codes are used in the Variation Comments.

Cancellation

Street Man- ager Field		Notes (When importing into Confirm from Street Manager)	
Reason for cancellation	Street Works > Transfer > Noti- fication Com- ments	characters	Street Manager will reject the notice if a Reason is not supplied. A default value of "None supplied." will be sent when there are no notification comments.

Defective Apparatus (Section 81)

Key Differences from EToN

Under EToN a Defective Apparatus works is created and an Apparatus Inspection attached to it. In Street Manager there is no need to create an additional inspection for the Section 81 process to work. Confirm will therefore only send the Defective Apparatus details to Street Manager when both the Works and Inspection have been created, and input will automatically create a works and a corresponding Inspection.

Street Manager does not allow Section 81 to be re-issued to another promoter if the initial promoter rejects it. If a Section 81 has been rejected and a Confirm user attempts to send it to another Promoter then Confirm will automatically create a new Section 81 in Street Manager. Similarly, Street Manager does not allow Section 81 details to be edited once submitted, so if any details are changed in Confirm the existing Section 81 in Street Manager will be cancelled and a new one created.

Street Manager does not support linking to a Promoter's actual works on acceptance. On import of Accepted Fixed from Street Manager Confirm will simply update the Works Status in Confirm to closed. An extra works history entry will be added with a new Notice Type of 'Defective Apparatus Acceptance Fixed'. This new Notice Type is similar to "Defective Apparatus Acceptance" having code "202A".

Inspection Category

Street Manager introduces the concept of a Section 81 type. Confirm will populate this based on the Inspection Category selected. The following additional Inspection Categories (all configured for Apparatus inspections) will be added to support this:

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Street Manager Section 81 Type	New Inspection Category Code	New Inspection Category Name
Tee/valve/access covers	SMTV	Apparatus - Tee/valve/access covers
Cabinet	SMCA	Apparatus - Cabinet
Marker post	SMMP	Apparatus - Marker post
Pole/post	SMPP	Apparatus - Pole/post
Overhead cables broken/low encroaching onto highway	SMOC	Apparatus - Overhead cables
Other (Specify)	IC16	(Existing lookup)

Note that if Other (Specify) is imported with text containing the word "Unattributable" then the Section 81 from Street Manager will be imported into Confirm as an Unattributable works.

Inspection Outcome

EToN does not have a way of transmitting "HA Actioned" as part of an Apparatus inspection. To support this, two new Inspection Outcomes will be added applicable to Defective Apparatus:

New Outcome Code	New Outcome Name	
O25A	Failed (Higher Risk) HA Actioned	
O35A	Failed (Lower Risk) HA Actioned	

These will use the same DfT references as the existing O20A and O30A outcomes but with the Authority Actioned checkbox checked.

Field Mapping

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Works reference	Street Works > Transfer > File Name		
	Street Works > Project Refer- ence		
	Street Works > Project Descrip- tion		
	Street Works > Works Ref. (Import)		
USRN	Street Works > Street		

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Location co- ordinates	Street Works > Map		Street Manager only displays it as a point.
Issuing authority	Street Works > From	This will be the first (by name) matching Authority organisation that either has interest in the street or has the same SWA Org Code	
Receiving or- ganisation	Street Works > Promoter	This will be the first (by name) non-dead Organisation that has the same SWA Org Code	
Location area	Street Works > Location	Appended to Location	Extracted from the location text if supplied in brackets, e.g. a location text of "o/s 45 (Footway and verge)" would set the Footway and Verge checkboxes in Street Manager.
			If no suitable text is found in brackets then defaults to Carriageway.
Location de- scription	Street Works > Location	Location populated on import	Both appended together on export
	Street Works > Description (Export)		
Inspection date	Inspection > Inspected		
Туре	Inspection > Category Street Works >	See table above. If no matching lookup is found the existing Apparatus Inspection Category will be used	
	Description (Import)		(possibly truncated)
Severity	Inspection > Outcome		
Made safe by HA	Inspection > Outcome > Au- thority Ac- tioned	If set to yes then the appropriate Authority Actioned outcome will be selected as per the table above	
Inspector name	Inspection > Officer > Name		
Inspector contact details	Inspection > Officer > Tele- phone Number		
Additional de- tails	Inspection > Comments		
	Inspection > Site Informed	Not set	Will be appended to Additional details if checked

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Events and Diversions

Key Differences from EToN

Street Manager has a general facility to show "Activities on the map" (referred to as Activities going forward). A Street Manager Activity can only be linked to one USRN whereas Confirm Events and Diversions can be linked to multiple USRNs.

Street Manager automatically assigns an activity reference to the works.

Street Manager supports a number of Activity Types plus "other". For Activity Type "other" an additional activity type details must be supplied but this is not currently displayed anywhere in Street Manager. Diversions are exported as "other" activity type so Work Type is assigned to the activity type details when exported to Street Manager.

Street Manager does not allow activities to be created with a start date that is in the past. In addition, the start date of an activity must be now or in the future even when updating an existing Activity. Hence, if the end date of an Event is also in the past then it will not be sent to Street Manager.

Confirm does not allow the user to flag an Event to be Sent. We are therefore proposing to send all Events and Diversion routes to Street Manager unconditionally.

Street Manager does not allow the geometry of an existing Activity to be changed. In this scenario Confirm will close the current activity (cancel it) and create a new one to cater for these changes.

There are no plans to import Events / Diversions from Street Manager.

Field Mapping

Street Manager Field	Confirm Field	Notes (When exporting from Confirm to Street Manager)
USRN	Street Works > Streets	Only the first Street will be exported
Event or activity foot- print	Street Works > Map	Event - Educational Shows: The Academies Show brings together over 3,000 attendees and 200 leading education suppliers for a
Activity name or licence reference number	Street Works > Works Type	Appended together. Note, may be truncated by Street Manager, e.g:
	Street Works > Description	Event - Educational Shows: The Academies Show brings together over 3,000 attendees and 200 leading education suppliers for a
Activity type	Street Works > Works Type	If the Works Type name matches a standard Street Manager Activity Type, otherwise "Event" for Events and "Other" for Diversions and the Works Type Name will be specified in the "Briefly describe the nature of your event or licensed activity" field.
Contact organisa- tion/name	Street Works > Contacts > Owner Name	May be truncated by Street Manager.
Contact details	Street Works > Contacts > Owner (remaining details)	May be truncated by Street Manager.
Start date	Street Works > Start Date	Will be set to today's date if the date in Confirm is in the past. In this scenario, the original Start

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Street Manager Field	Confirm Field	Notes (When exporting from Confirm to Street Manager)
		Date will be appended to the Additional information
End date	Street Works > Estimated End Date	When updating an existing Activity will be set to today's date if the date in Confirm is in the past. In this scenario, the original End Date will be appended to the Additional information. New Activities will not be created for Events that already end in the past.
Activity location	Street Works > Location	Extracted from the location text if supplied in brackets, e.g. a location text of "o/s 45 (Footway and verge)" would set the Footway and Verge checkboxes in Street Manager. If no suitable text is found in brackets then defaults to Carriageway.
Activity location description	Street Works > Loca- tion	May be truncated by Street Manager.
Traffic management type	Street Works > Traffic Man.	
Collaborative working	-	Set to "No"
Additional information	Street Works > Trans- fer > Notice Comments	May be truncated by Street Manager.
Reference	Street Works > Trans- fer > File Name	Activity Reference generated by Street Manager will be written back to Confirm

FPNs

Key Differences from EToN

EToN supported Issuing and Withdrawing (Cancelling) FPNs. Street Manager introduces some addition actions. For promoters:

- Accept
- Dispute

For authorities:

· Mark FPN as paid

These new actions will be supported when importing FPNs into Confirm. In the case of "Mark FPN as paid" this will update the Offence Status to "Resolved". For the promoter responses, an FPN Comment will be generated and the promoter's response and reason will be appended to the Offence Notes.

The new actions will not initially be supported when exporting from Confirm to Street Manager (TBA subject to customer feedback).

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Field Mapping

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
FPN offence code	Offence Type > External Ref- erence		Offence Types with External Reference 1, 2, 3, and 4, relating to S54, S55 and S57 offences, will not be exported to SM. An error will be logged in Confirm.
Location	Offence > Location (Import)		The Location displayed in Street Manager is derived from the works so cannot be set when creating an FPN.
Offence date	Offence > Of- fence Date		
Offence details	Offence > De- scription Offence > Loc-		Location and Description will be appended together on export.
	ation (Export)		
Authorised of- ficer name	Penalty > Ac- tion Officer		
Officer contact details	Action Officer > Telephone Number	Will be added to the Offence > Notes	
Attach photo evidence	Offence > Doc- ument Links		
Withdraw FPN > Additional details	Offence> Notes		
Mark FPN as paid > Was a discount ap- plied	Penalty > Amount Paid	If discount was applied then Amount Paid will be set to the Discounted Amount for the Penalty, otherwise will be set to the Full Amount	If Amount Paid is less than the Full Amount, then exported as Paid with Discount. Otherwise exported as paid.
Accept > Addi- tional details	Offence > Notes	Imported as FPN comments with details mentioned in de-	Not exported to Street Manager
	Street Works Comment > Text	scription field.	
Dispute > Reason for dis- pute	Offence > Notes Street Works Comment > Text	Imported as FPN comments with details mentioned in description field.	Not exported to Street Manager

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Forward Planning Information

Key Differences from EToN

Street Manager allows forward planning information notices to be created only for major works, whereas EToN allowed them for other work types as well.

Once a forward planning information notice is cancelled in Street Manager, a new forward planning information notice cannot be created on the same works. In fact, no other action is allowed on the works and the works also gets cancelled.

Street Manager does not allow creation of permits on top of forward planning information notices. The only allowed action is to progress it to a PAA.

Field Mapping

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Works refer- ence number	Street Works > Reference		Not exported to Street Manager
Works area (View on Map)	Street Works > Map > Easting / Northing		Note these aren't mandatory in Confirm but Street Manager will reject the notification so this will have to be corrected and re- sent if not initially supplied
USRN	Site > Code	If only 7 digits then will attempt a match with and without a	Leading zeros will be stripped.
		leading zero.	If street is not found in Street Manager then notification won't
		USRN with Road category 2 is not supported. TBA - what to do about it?	be sent.
		TBA create street on the fly if doesn't exist	
Primary Notice Authority (Works apply to)	Street Works > Street Auth	Will search for interests with type of "Highway Authority" or "Permit Authority" that has an Organisation with an External Ref 1 equal to the SWA code of the Primary Notice Authority.	External Ref 1 from the Street Auth Organisation
		If no matches found will use the first live Organisation with a Highway/Permit Authority Interest, sorting by Organisation Name.	
		TBA. If none found will create one on the fly.	
Interested Parties		Will be coped from the USRN as these are not supplied by the Street Manager API	Not supplied - derived automatically by Street Manager
Designations impacted by works	Street Works > Location > Designations	All the distinct designation types returned from Street Manager	These are retrieved from Street Manager API for the USRN and compared with the street desig-

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
		are pulled. The full details of the designation, e.g. location, are ignored	nation types from Confirm. Only the applicable designations are pushed.
Location area	Does not exist	Appended to the Location text	Values - Footway, Carriageway, Verge, Cycleway, Footpath
			Currently defaulted to 'Car- riageway'
Location de- scription	Street Works > Location		
Primary con- tact	Street Works > Contacts > Owner > Name	If truncated, no email will be sent.	Derived by Street Manager
Primary contact number	Street Works > Contacts > Owner > Phone		Derived by Street Manager
	Street Works > Contacts > Owner > Ad- dress	Populated from the Organisation Contact details stored in Confirm	Derived by Street Manager
Workstream	Street Works > From	Not used. Confirm Promoter Organisation is determined by matching the first 5 characters of the Works reference against DfT Ref 2 of live Organisations.	Last 3 digits of Dft Ref 2 from the Promoter Organisation
	Street Works > Contacts > Agent > Name		Ignored
	Street Works > Contacts > Agent > Phone		Ignored
	Street Works > Contacts > Agent > Ad- dress		Ignored
Project reference number	Street Works > Project Refer- ence		
Proposed start date	Street Works > Start Date		
Proposed end date	Street Works > Estimated End Date		
Works cat- egory	Street Works > Works Type		Street Manager currently treats all works with Forward planning notices as Major. This has been raised with the Street Manager team and there are no immediate plans to change this.

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Description of work	Street Works > Description		
	Street Works > Excavation Type		Ignored.
Required traffic management type	Street Works > Traffic Man.		
	Street Works > Footway Clos- ure		Ignored
	Street Works > Collaboration		Ignored
Additional de- tails	Street Works > Transfer > No- tice Comments		
Additional files	Street Works > Document links	Street Manager documents will be added as URLs to Confirm	

Grant / Refuse / Modification Request

Key Differences from EToN

Street Manager introduces Refusal reasons. We will map these onto Notice Types that have a DfT Reference "Refuse PAA/Permit/Variation" that contain the Reason for refusal code in the Notice Type name.

Modification Requests from Street Manager do not currently allow revised Permit Conditions to be proposed. When sending Modification Requests from Confirm we will combine all of the proposed Condition changes into a single text field.

EToN allows a Grant to be issued even after a Permit Application is Deemed, but Street Manager does not allow Grant to be issued for a Deemed application.

In EToN a Grant, Refuse or Modification Request (Permit decision) applies to all of the Applications, Modifications or Variations received up until that point, whereas in Street Manager a decision is recorded against the specific Permit or Change. When exporting a Permit decision to Street Manager, Confirm will only apply the decision to Permits or Changes that had already been downloaded into Confirm at the time the Permit decision was logged in Confirm (to avoid Granting something that the Confirm user hasn't seen yet).

Another complex scenario relates to how Street Manager deals with proposed changes to permits that haven't been granted yet... If a Promoter submits a Permit application to Street Manager but then requests a change before the original Permit has been Granted then the change details will be incorporated into the main Permit application and effectively granted when the permit is granted. The following scenario is therefore possible:

- 1. Promoter applies for Permit in Street Manager which is loaded into Confirm
- 2. Confirm user reviews and Grants the permit
- 3. In the meantime the Promoter submits a permit change in Street Manager
- 4. The Confirm Street Manager Agent attempts to export the permit grant to street manager...

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In this scenario the permit should not be granted because the user did not see the change entered at step 3. The proposed behaviour is that the Grant will not be logged in Street Manager and will be overwritten by the Permit change from street manager (so in Confirm it will look like the Grant never happened). The user can then Grant the permit with the change in Confirm and re-send this to Street Manager.

Refusal reasons and notice types

Refusal reason codes can be specified from Confirm in two ways:

- 1. By incorporating the relevant "RC" code in the Notice Comments for the Refusal
- 2. By changing the notice type to one of the new Notice Types introduced below

The following Notice Types will be added to map to Street Manager Reasons for refusal. All with have their Dft Ref. set to "Refuse PAA/Permit/Variation".

The existing standard "Refuse Permit / PAA / Variation" Notice type will be used to represent "RC50 - Other (General)" unless the Notification Comment includes one or more valid "RC" codes.

Notice Type Code	Notice Type Name	
RC10	Refuse: Missing Information (General)	
RC11	Refuse: Condition Not Provided/Not	
RC12	Refuse: TM Not Received	
RC20	Refuse: Incorrect Details on Permit (General)	
RC21	Refuse: Incorrect Primary Recipient	
RC22	Refuse: Location issues	
RC23 Refuse: Conflicting Information		
RC30 Refuse: Co-ordination Issues (General		
RC31 Refuse: Clash of Works		
RC32 Refuse: Timing of Works		
RC33 Refuse: Collaboration/Coordination		
RC40 Refuse: Lack of Approval (General)		
RC41 Refuse: Incorrect TM		
RC42	Refuse: Early Start Agreement	
RC43	Refuse: S.58 Restriction	
RC44	Refuse: Duration	

Street Manager may also automatically cancel a proposed change if this is not granted before the works stop. In this scenario Confirm will generate an Refusal Notice for the cancellation using a new Notice Type Code of "RCCR" - "Street Manager Cancelled Change Request".

Duration Challenges

Under EToN the Duration Challenge notice is separate from the Grant notice, whereas Street Manager combines these into a single "Grant with duration challenge" permit change decision. During import of a Grant with duration challenge into Confirm, the Street Manager Agent will create two notices in Confirm, a Grant followed by a Duration Challenge.

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A new "Grant with Duration Challenge" Notice Type has been added which can be selected from the Grant wizard. If this is selected then the Confirm Street Manager agent will indefinitely prevent the Grant from being set to Street Manager until a Duration Challenge has been entered into Confirm. Note that this must be used with caution as the Permit could deem if a "Grant with Duration Challenge" notice is entered without subsequently adding the Duration Challenge. This change introduces the following two new notice types:

Notice Type Code	Notice Type Name	
161D	Grant Permit with Duration Challenge	
162D	Grant Variation with Duration Challenge	

On export, when the Street Manager agent encounters a normal Grant notice in Confirm it will "look ahead" to see if this has been followed by a Duration Challenge, and if so will record a Grant with duration challenge in Street Manager.

If a Duration Challenge is encountered after the Grant has already been sent to Street Manager then this will be logged in Street Manager as a Works Comment.

Field Mapping

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Assessment decision	Street Works > Permit Status		
Permit fee dis- count	Street Works > Conditions > Discount		
Reason for re- fusal	Street Works > Notice Type > Code Street Works > Transfer > Notice comments	If a Notice Type cannot be found with a Code matching the refusal reason then the refusal reason text will be prepended to the Notice Comments. If more than one Reason code	The refusal codes will be populated from valid "RC" codes found in the Notice Comments and/or the Notice Type specified. If the Confirm Notice Type Code
		is supplied then the second and subsequent Reasons will be prepended to the Notice Com- ments.	is not a valid refusal code and no "RC" codes are found in the Notice Comments, then "RC50 Other (General)" will be sup- plied.
Refusal details	Street Works > Transfer > No-		For Modification Requests, if the selected Conditions or
Modification request details	tice comments		Condition Text has been changed then the details of the
Grant with duration challenge			change will be appended to the Modification request details.
> Details			For refusals, if there are no notice comments, refusal details will be defaulted to 'None supplied.'
Reasonable period end date	Street Works > Reasonable Period	Will generate two notices in Confirm, a Grant Variation fol- lowed by a Duration Challenge	See note above on Duration Challenges

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PAAs, Permit Applications, Modifications and Variations

Key Differences from EToN

Street Manager treats PAAs and Permits both as "Permits". The Street Manager Work Category indicates whether a "Permit" is a PAA or a Permit Application.

Changes are not permitted to PAAs, the previous PAA must be cancelled and a new PAA submitted to make any changes. Confirm will automatically cancel any outstanding PAA in Street Manager when submitting a revised PAA.

Under EToN, major works that were not Asset Activity (e.g. Remedial or Interim to Permanent) did not require a PAA, but in Street Manager a PAA is required. Conversely, at the moment Street Manager does not allow a PAA to be created if a previous permit exists on the works. The latter is acknowledged as a bug with Street Manager plan to address, but in the meantime Confirm will behave as follows:

- When exporting a Permit Application for non-Asset Activity works, if Confirm detects that Street Manager has created a PAA for the works then Confirm will immediately send a Permit Application on the same reference
- When exporting a PAA to Street Manager, if Confirm detects that Street Manager has created a Permit Application (e.g. on a second Asset Activity phase) then Confirm will update the original notice in Confirm to be a Permit Application
- When importing a PAA or Permit application from Street Manager, Confirm will set the notice type to correspond with what Street Manager supplied and will ignore the existing EToN rules

Changes to Permit applications (Modified Applications, Works Data Variations and Duration Variation Applications) are referred to as Permit Changes or Change requests.

Note: Change reasons (Notification Comments) are mandatory in Street Manager. If none is specified then Confirm will default this to "None specified" on export.

Permit Condition

Street Manager uses the National Condition Types for Permit Conditions rather than the high-level condition "groupings" that were used by EToN. SQL is provided to add these extra Condition Types in Confirm. Each Condition Type will have a DfT Ref. set to the appropriate EToN value to allow you transition to the new Condition Types while still using EToN.

The old Condition Types in Confirm will be flagged as dead so that they don't clutter up the Permit Application process, with the exception of Condition Types 3 (Out of hours work) and 13 (Local) for which there are no Street Manager equivalent conditions. These latter condition types can be flagged as dead once EToN is no longer valid.

Note that the Permit Condition Type lookup management screen in Confirm does not currently cope with multiple conditions having the same DfT Ref, so until a Confirm desktop upgrade is available any additional changes to Condition Types will need to be made via SQL. Please contact the Confirm support team for assistance with this if required.

Permit Changes

Once a Permit has been granted, Street Manager only allows one change (variation) to be processed at a time, however EToN allows multiple variations to be submitted with a Grant / Refuse covering all previous changes. This means that if you apply for a Variation from Confirm and then attempt to apply for another Variation before the first has been Granted, Refused or Deemed, then the second Variation will be rejected by Street Manager. The Street Manager Agent to "look ahead" whenever it is processing a Variation and if there are subsequent Variations to be processed submit them all to Street Manager as a single change.

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For works in progress, EToN uses Works Data Variations for all changes other than duration and a Duration Variation Application to change the duration. In Street Manager a single permit change can change all aspects of the works. Therefore, when importing changes into Confirm that change both the duration of the works and other data (e.g. traffic management) we will create two notices in Confirm, a Works Data Variation and a Duration Variation Application.

Street Manager does not currently support Error Correction notices which are used to make corrections after the works has completed. (TBA) we could support exporting Error Corrections from Confirm by Reverting the Works Stop, issuing a Works Data Variation and re-issuing the Works Stop.

Field Mapping

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Works reference number	Street Works > Reference		
Permit reference	Not applicable	Ignored	
Works area (View on Map)	Street Works > Map > Easting / Northing		Note these aren't mandatory in Confirm but Street Manager will reject the notification so this will have to be corrected and re- sent if not initially supplied
USRN	Site > Code	If only 7 digits then will attempt	Leading zeros will be stripped.
		a match with and without a leading zero.	If street is not found in Street Manager then notification won't be sent.
Primary Notice Authority (Works apply to)	Street Works > Street Auth	Will search for interests with type of "Highway Authority" or "Permit Authority" that has an Organisation with an External Ref 1 equal to the SWA code of the Primary Notice Authority. Priority will be given to Permit Authority interests.	External Ref 1 from the Street Auth Organisation
		If no matches found will use the first live Organisation with a Highway/Permit Authority Interest, sorting by Organisation Name.	
		See below for Private Streets.	
Road type	Street Works > Street Auth	If the Road type in Street Manager is "Private Street - No definition information held by Street Authority" then Confirm will prioritise Private Street Interests when determining the Street Authority from the Street Interests	Will be set to "Private Street - No definition information held by Street Authority" if the Street Authority is a Private Street Manager. Otherwise will default from the USRN.
Interested Parties	Street Works > Contacts > Re- cipients	Will be coped from the USRN as these are not supplied by the Street Manager API	Not supplied - derived automatically by Street Manager

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Designations impacted by works	Street Works > Location > Designations	All the distinct designation types returned from Street Manager are pulled. The full details of the designation, e.g. location, are ignored	These are retrieved from Street Manager API for the USRN and compared with the street designation types from Confirm. Only the applicable designations are pushed.
Location area	Street Works > Location	Appended to the Location text	Extracted from the location text if supplied in brackets, e.g. a location text of "o/s 45 (Footway and verge)" would set the Footway and Verge checkboxes in Street Manager. If no suitable text is found in
			brackets then defaults to Carriageway.
Location de- scription	Street Works > Location		
Primary con- tact	Street Works > Contacts > Owner > Name	If truncated, no email will be sent.	Derived by Street Manager
Primary con- tact number	Street Works > Contacts > Owner > Phone		Derived by Street Manager
	Street Works > Contacts > Owner > Ad- dress	Populated from the Organisation Contact details stored in Confirm	Derived by Street Manager
Workstream	Street Works > From	Not used. Confirm Promoter Organisation is determined by matching the first 5 characters of the Works reference against DfT Ref 2 of live Organisations.	Last 3 digits of Dft Ref 2 from the Promoter Organisation
Secondary contact	Street Works > Contacts > Agent > Name		If Agent Name not specified uses Owner name or otherwise the main contact name from the Promoter Organisation
Secondary contact num- ber	Street Works > Contacts > Agent > Phone		As above if not specified
Secondary contact email	Street Works > Contacts > Agent > Ad- dress	Will be prepended to the Organ- isation's Contact contact ad- dress from Confirm	First line of the address.
Project reference number	Street Works > Project Refer- ence		
Works type	Street Works > Works Type	Not used. Work Type is derived from Works category	Set to "Immediate" if Street Work Type > Priority is Urgent, otherwise set to "Planned"

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Is a TTRO required	Does not exist	Ignored if received from Street Manager	If the Street Work Type has a DfT Ref. of "Major" it is set to True else False.
Proposed start date and time	Street Works > Start Date		For immediate works, it is determined from the Actual Start Date.
Proposed end date and time	Street Works > Estimated End Date		
Reasonable period end date	Street Works > Reasonable Period	Derived. Note that Confirm displays the later of the Reasonable Period (based on the agreed duration of the works) and the Prescribed Period (2 days). Street Manager does not take the Prescribed Period into account when displaying this date so could be earlier than the date displayed in Confirm for works that take less than 2 working days.	Derived. See note on left.
Works cat- egory	Street Works > Works Type	HS2 Highway works are imported as Major Permits	Derived by Street Manager
Works duration	Street Works > Duration	Derived	Derived
Early start pre- approval	Street Works > Agreements	If true then Agreement with DfT Ref of 5 will be added	If Agreement present with DfT ref 5 or Agreement contact name or reference is set then True else False.
Pre-approved by	Street Works > Agreements > Contact		
Pre-approval details	Street Works > Agreements > Reference	Invalid reference characters will be replaced with dashes "-" and may be truncated.	. •
	Street Works > Agreements > Date	Will also be added to Added to Street Works > Transfer > Noti- fice Comments	
		Agreement Date is set to the date of the notice	
Reason for requesting an early start	Does not exist	Added to Street Works > Transfer > Notifice Comments	If the works require early start agreement but no Agreement has been specified then the Notice Comments will be used. If an early start is needed but no early start agreement or reason is supplied then this will be set to "None specified"

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Activity type	Street Works > Phase Type	Phase Type will be set as appropriate for the following activity types: Permanent reinstatement Remedial works Core sampling And will be set to "Asset Activity" for all others.	If the Phase Type in Confirm is "Asset Activity" then the Promoter Organisation's Interest will be examined. If the Interest Name contains the exact wording of one of the Activity Type options in Street Manager we will use this Activity Type. If not, then if the Promoter Organisation Interest DfT reference is "Highway Authority (Works Promoter)" then "Highways Improvement Works" will be used, otherwise "Utility Asset Works" will be used. If the Phase Type is not "Asset Activity" then the Activity type that matches the Phase Type will be used.
Description of work	Street Works > Description		
Excavation required	Street Works > Excavation Type	Excavation Type with Dft Ref of 18 if the received value is True. Otherwise Excavation Type with Dft Ref of 12. Note that Works Data Variations do not allow Excavation Type to be updated while works are in progress but if the change is agreed this will be picked up on Works Stop import.	Set to True if Excavation Type Dft Ref is between 14-18 else set to False.
Required traffic management type	Street Works > Traffic Man.		
Footway closure	Street Works > Footway Clos- ure Street Works > Description	Set if either of the "Yes" options are supplied. The specific option details will also be appended to the Works Description	If the Confirm Footway Closure flag is not set then the Street Manager flag will be set to "No". If the Confirm flag is set and the works description contains the word "walkway" inside round brackets, e.g. "full width footway excavation (walkway provided)", then the Street Manage flag will be set to "pedestria n walkway will be provided". Otherwise it will be set to "alternative route will be provided"
Is lane rental applicable	Does not exist	Ignored	Set to false

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Is traffic man- agement plan required	Does not exist	Ignored	Set to false
Attached traffic management plan	Street Works > Document Links	TBA Add as a document link. Description prefixed with Traffic Management Plan and Permit Id. Document Location is URL to Street Manager file	Not supplied. Documents are uploaded separately
Notifying environmental health	Street Works > Outside Work- ing Hours		
Is collaborative involved	Street Works > Collaboration	"Sharing traffic management only" is mapped to "Works in- volving other collaboration"	
Collaboration details	Does not exist	Added to Street Works > Transfer > Notice comments	Set to name of collaboration type
Works reference number of collaborative works	Does not exist	Added to Street Works > Transfer > Notice comments	Not set
Conditions	Street Works > Conditions	Will be mapped to Confirm Condition Types based on matching the NCT condition code to the first 6 characters of the Permit Condition Type Name. Mandatory conditions NCT01a, NCT01b and NCT11a are ignored	Will send all conditions where the first 6 characters of the condition name match one of the allowed values in Street Manager. SQL is provided to add these. Note that mandatory conditions are not needed.
Condition Comments	Street Works > Conditions Text	Concatenated together. May be truncated. The text from each condition will be on a new line prefixed by the corresponding NCT code.	Added to the Comments of the first non-mandatory condition. If a fragment of Condition text in Confirm begins with a valid NCT code then everything after the code will be attached to the relevant Condition in Street Manager.
Additional permit details	Street Works > Transfer > No- tice Comments Street Works > Agreements (Export)		If Agreements other than early start are specified then details of these agreements will be appended to the Additional permit details.
Additional files	Street Works > Document links	Street Manager documents will be added as URLs to Confirm	
Reason for changes (only on change re- quests)		Will be the first line of the Noti- fication Comments where other	

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Street Man- ager Field	Notes (When importing into Confirm from Street Manager)	
Ag		pended to the Reason for changes. Will default to "None specified" if blank.

Registration of Non-notifiable Works

Key Differences from EToN

Street Manager doesn't allow updates to multiple Sites to be grouped together on a single notice, so each individual update to a Site shows as a separate transaction in the Street Manager works history. When Confirm imports Reinstatements from Street Manager it will attempt to consolidate all of the individual Site updates onto a single registration notice. However, if more than one notice may be generated in Confirm if the Sites are still being updated in Street Manager when the Street Manager Agent runs.

Street Manager allows new applications to be made on top of a non-notifiable works, whereas Confirm does not allow this. Confirm will import new applications made on top of a non-notifiable works.

Field Mapping

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Location co- ordinates	Street Works > Map > Easting / Northing		Note these aren't mandatory in Confirm but Street Manager will reject the notification so this will have to be corrected and re- sent if not initially supplied
USRN	Site > Code	If only 7 digits then will attempt	Leading zeros will be stripped.
		a match with and without a leading zero.	If street is not found in Street Manager then notification won't be sent.
Submitting application to	Street Works > Street Auth	Will search for interests with type of "Highway Authority" or "Permit Authority" that has an Organisation with an External Ref 1 equal to the SWA code of the Primary Notice Authority.	External Ref 1 from the Street Auth Organisation
		If no matches found will use the first live Organisation with a Highway/Permit Authority Interest, sorting by Organisation Name.	
Workstream	Street Works > From	Not used. Confirm Promoter Organisation is determined by matching the first 5 characters	Last 3 digits of Dft Ref 2 from the Promoter Organisation

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
		of the Works reference against DfT Ref 2 of live Organisations.	
Works refer- ence number	Street Works > Reference		
Reinstatement type	Street Works > Sites > Status		
Site location description	Street Works > Sites > Location Street Works > Transfer > Notice Comments (export)		If Notice Comments have been entered these will be appended to the Site location description of the first site
Site location area	Street Works > Sites > Posi- tion	Street Manager allows multiple Site location areas to be specified whereas Confirm only supports one Position per Site. If multiple Site Location areas are supplied by Street Manager then only one will be stored in Confirm, selecting the first one that appears in order of Carriageway, Cycleway, Footway, Footpath, Verge. All of them also to be appended to the Location text.	
Site location coordinates	Street Works > Sites > Map		If the geometry of the reinstatement stored in Confirm is a Line then this will be the first point of the line. If it is a region/polygon then this will be the bottom left corner of the geometry's bounding box
Secondary site coordinates	Street Works > Sites > Map	If these are supplied Confirm will draw the reinstatement as a line between the two pairs of coordinates	If the reinstatement is stored as a point in Confirm then this will not be supplied. If the geometry of the reinstatement stored in Confirm is a Line then this will be the last point of the line. If it is a region/polygon then this will be the top right corner of the geometry's bounding box
Number of holes	Not available	Will be appended to the Location text	Will default to 1
Reinstatement date	Street Works > Sites > Date	Interim, Permanent and Guarantee date will be populated as appropriate depending on the status	

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Reinstatement state	Street Works > Sites > Status	Sets the Interim / Permanent sub-status for Excavation Reinstatement types	
		Remedial reinstatements will always reset the guarantee period	
Do you want to add photo evidence?	Street Works > Document Links	Document Links are attached to the Works. The Site number of the Site a photo relates to will be added to the Document Notes	If any Document Links have been added to the Works prior to sending the Registration then these will be associated with Works, not the individual sites
Total number of inspection units	Street Works > Inspection Units		

Revert Actual Start / Works Stop

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Reason for reverting the works	Street Works > Transfer > Noti- fication Com- ments	Trim the comment text to 500 characters	
	Street Works > Agreements	Not populated	Agreement Type, Agreement Contact, Date and Reference
	Street Works > Agreements > Contact		will be appended to the revert reason
	Street Works > Agreements > Reference		
	Street Works > Agreements > Date		

Revoke Permit

Street Man- ager Field	Notes (When importing into Confirm from Street Manager)	
Reason for revoking the permit		A General comment with the reason for revoke is sent to Street Manager after the Revoke notice

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Street Man- ager Field		Notes (When importing into Confirm from Street Manager)	
1	Street Works > Conditions > Revoked Per- mit - Deadline		Will be appended to Reason for revoke if date is present in Confirm

Section 58 Restrictions

Key Differences from EToN

Street Manager supports full geometry for Restrictions, whereas Confirm only currently supports Start and End coordinates.

There are currently two mechanisms for registering S58 restrictions in Street Manager:

- 1. As an Authority user using "Add activity to map"
- 2. As a Promoter using "Apply for works" with an Activity type of "Section 58"

The advice from the Street Manager team is that the "Works" method will be dropped and that using Activities on the map is the preferred approach.

Map activities do not allow recording of the fact that a restriction is In Force or support S58A restrictions. In addition the Activity reference is automatically generated by Street Manager.

Activities cannot be logged with a start date in the past, so historic restrictions would only be able to be recorded as starting on the day they were first exported to Street Manager.

Site Designations Field Mapping to Map Activities

If existing Designations were to be mapped to map activities then the following field conversions would be proposed:

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Activity reference	Site > Designation > Comments (export) Site > Designation > Works Ref (import) Site > Designation > Organisation (import)		The Activity reference generated by Street Manager will be appended to the Comments
Activity name	Site > Designation > Designation Site > Designation Site > Designation > Works Ref		The Designation name will be used, e.g. "S58 Restriction In Force" followed by the works reference in brackets.

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
		If the Works Ref of an existing EToN designation on the Street is found within the Activity name text or Activity Reference text then the existing designation will be replaced with the new information from Street Manager. Otherwise a new designation will be created (in that case Activity Reference will be used as Works Ref for the designation). The Works Ref of the existing EToN designation will be appended to the comments.	
		to the Description	
Contact organ- isation/name	Site > Designation > Organisation (export)	Will be appended to the Comments	The Organisation name will be supplied
	Site > Designation > Comments (import)		
Contact details	Organisation > Contact (ex- port)	Will be appended to the Comments.	The contact phone number and email address will be exported
	Site > Designation > Comments (import)		
Start date	Site > Designa- tion > Effect From		Will be set to today's date if the date in Confirm is in the past. If this is the case the original Effective From date will be appended to the Additional information
End date	Site > Designa- tion > Effect To		
Activity location area	Location (Ex- port) Site > Designation > Comments (import)	If not Carriageway will be appended to the Comments	Extracted from the location text if supplied in brackets, e.g. a location text of "o/s 45 (Footway and verge)" would set the Footway and Verge checkboxes in Street Manager. If no suitable text is found in brackets then defaults to Car-
Activity loca-	Location	Applicable to will always be set	
tion description Traffic management type	-	to Partial Ignored	if Applicable to is set to "Whole" Set to "No carriageway incursion"

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Collaborative working	-	Ignored	Set to "No"
Additional information	Description	If set to yes then "Made safe by HA" will be appended to the Description	Set to "Not Required"
Event or activity footprint	Start / End Easting & Northing	For Points the start and end will be the point location. For Lines the first and last point of the line will be imported. For Polygons the two points on the Polygon that are furthest away from each other will be used. For Confirm DB v20.2 and above, the full geometry will be imported in the Confirm system.	send as a polygon that is a 4m buffer around the Street geometry held in Street Manager. If this results in multiple polygons the polygon with the largest area will be used. If the Applicability is Partial then will export a straight line between the Start and End
Cancelled reason	Will be appended to the Comments		Set from comments

Street Works (Section 50) Licences

Key Differences from EToN

Street Manager has a general facility to show "Activities on the map" (referred to as Activities going forward).

Street Manager automatically assigns an activity reference to the licences.

Street Manager supports a number of Activity Types plus "other". For Other an additional description can be provided but this is not currently displayed anywhere so we won't be using this until Street Manager resolve this issue.

Street Manager does not allow activities to be created with a start date that is in the past. In addition, the start date of an activity must be now or in the future even when updating an existing Activity. Hence, if the end date of a Licence is also in the past then it will not be sent to Street Manager.

Street Manager does not allow the geometry of an existing Activity to be changed. Confirm will therefore close the current activity (cancel it) and create a new one to cater for these changes.

There is no plans to import Licences into Confirm from Street Manager.

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Field Mapping

Street Man Confirm Field Notes (When importing into Notes (When experting from			
Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
USRN	Street Works > Streets		
Event or activity footprint	Street Works > Map		
Activity name or licence refer-	Street Works > Notice Type	Appended together. Note, may be truncated by Street Manager,	
ence number	Street Works > Description	e.g: Cellar Works: New excavation for	
	Street Works > Works Ref.	cellar (ABC1234)	
Activity type	Street Works > Notice Type	If the Notice Type name matches a standard Street Manager Activ- ity Type, otherwise "Section 50"	
Contact organ- isation/name	Street Works > Contacts > Owner Name	May be truncated by Street Manager.	
Contact details	Street Works > Contacts > Owner (remaining details)	Appended together. May be truncated by Street Manager.	
Start date	Street Works > Start Date	Will be set to today's date if the date in Confirm is in the past. In this scenario, the original Start Date will be appended to the Additional information	
End date	Street Works > Estimated End Date	When updating an existing Activity will be set to today's date if the date in Confirm is in the past. In this scenario, the original End Date will be appended to the Additional information. New Activities will not be created for Events that already end in the past.	
Activity location	Street Works > Location	Extracted from the location text if supplied in brackets, e.g. a location text of "o/s 45 (Footway and verge)" would set the Footway and Verge checkboxes in Street Manager.	
		If no suitable text is found in brackets then defaults to Carriageway.	
Activity location description	Street Works > Location	May be truncated by Street Manager.	
Traffic manage- ment type	Street Works > Traffic Man.	Note can't be entered in Confirm - defaults from the Street Works Notice Defaults System Settings	

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Collaborative working	-	Set to "No"	
Additional in-	Street Works >	Appended together, e.g.:	
formation	Contacts > Agent	Agent: Agent Name, Address Line1, Address Line2, AG3 ANT,	
	Street Works >	012345678910	
	Project Description	Project: Major cellar renovations in Birdlip Estate (PROJ123-A)	
	Street Works > Project Reference	Early start agreed with Street Works Team	
	Street Works > Transfer > No- tice Comments	May be truncated by Street Manager.	
Reference	Street Works > Transfer > File Name	Activity Reference generated by Street Manager will be written back to Confirm	

Unattributable Works (Section 81 Workaround)

Key Differences from EToN

Street Manager does not currently support Unattributable works notices, so the current advice11 is to use Defective Apparatus (Section 81) as a workaround.

Confirm will create a Section 81 record in Street Manager for a Defective Apparatus and then attach all associated inspections to this record (this is slightly different from Defective Apparatus, where the details of the Apparatus Inspection are incorporated into the Section 81 record in Street Manager).

Note that Confirm will only import a Defective Apparatus as an Unattributable works if the Type is set to Other (Specify) with text that contains the word "Unattributable"

Field Mapping

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Works reference	Street Works > Transfer > File Name		
	Street Works > Project Refer- ence		
	Street Works > Project Descrip- tion		

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
	Street Works > Works Ref. (Import)		
USRN	Street Works > Street		
Location co- ordinates	Street Works > Map		Street Manager only displays it as a point.
Issuing authority	Street Works > From	This will be the first (by name) matching Authority organisation that either has interest in the street or has the same SWA Org Code	
Receiving or- ganisation	Street Works > Promoter	This will be the first (by name) non-dead Organisation that has the same SWA Org Code	
Location area	Street Works > Location	Appended to Location	Extracted from the location text if supplied in brackets, e.g. a location text of "o/s 45 (Footway and verge)" would set the Footway and Verge checkboxes in Street Manager.
			If no suitable text is found in brackets then defaults to Carriageway.
Location de- scription	Street Works > Location		
Inspection date	Street Works > Issued Date (Export)	Appended to description	
	Street Works > Description (Import)		
Туре		Only Other "Unattributable" will be imported	Set to Other - "Unattributable"
Severity	Street Works > Description (Import)	Appended to the Description if Severity is High	Set to "Low"
Made safe by HA	Street Works > Description (Import)	If set to yes then "Made safe by HA" will be appended to the Description	Set to "Not Required"
Inspector name	Street Works > Transfer > Logged by (Ex- port)		
	Street Works > Description (Import)		

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Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Inspector contact details	Street Works > Transfer > Logged by > Officer > Tele- phone Number (Export) Street Works > De- scription (Im- port)		Will only be set if the Logged by user is linked to an Action Officer
Additional de- tails	Street Works > Description		

Works Comments

Key Differences from EToN

Confirm models Works Comments, Informal Overrun Warnings and FPN Comments as Street Works Comments whereas Street Manager has a general concept of Comments with a Topic.

EToN already supports the concept of General, Overrun Warning and FPN comments but Street Manager also introduces two new Topics of "Inspection" and "Section 74". Two new Comment Types will be added to cover these new topics and Confirm will match them based on the Comment Type Code. For the topics that already exist, Confirm will match based on the DfT Ref. Street Manager has also removed the "Duration Challenge Nonacceptance" comment type. If this notice is logged in Confirm it will be sent to Street Manager under the "Section 74" topic, but the reverse will not apply and "Section 74" comments received from Street Manager will map to a new Comment Type. The following table summarises the changes:.

Street Man- ager Topic	Exist- ing or New	Confirm Comment Type Code	Confirm Com- ment Type Name	Confirm Com- ment Type DfT Ref.	Notes
General	Existing	C15	EToN 4: Works Comments	EToN 4: Works Comments	Confirm will match based on the Dft Ref.
Overrun Warning	Existing	C14	EToN 4: Informal Overrun Warning	EToN 4: Informal Overrun Warning	Confirm will match based on the Dft Ref.
FPN	Existing	C22	EToN 4: FPN Comments	EToN 4: FPN Comments	Confirm will match based on the Dft Ref.
Inspec- tion	New	CINS	Inspection	EToN 4: Works Comments	Confirm will match on Code
Section 74	New	CS74	Section 74	EToN 4: Works Comments	Confirm will match on Code
Section 74	Existing	C13	EToN 4: Duration Challenge NonAc- ceptance	EToN 4: Duration Challenge Non- acceptance	Mapping for export from Confirm to Street Manager only

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Field Mapping

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Topic	Street Works Comment > Comment Type	Inspection and Section 74 topics will be matched to the new Codes, other Topics will be matched by DfT reference. Note: Street Manager does not currently provide access to the Comment Topic via the APIs so all imported comments are being treated as "General" Comments until this is resolved	If the Comment Type is one of the new ones then the Code will be used to determine the Topic, otherwise the Dft Ref. will be used. If there are multiple matches when matching on DfT Ref then the first match will be used when sorting alphabetically by Comment Type Name.
Comment	Street Works Comment > Text	The comment text will be all of the Details that are displayed in the Works history. The User- name who logged the com- ments will also be appended	For Duration Challenge Non- Acceptance this will be prefixed with the Comment Type Name
Date and Time	Street Works Comment > Is- sued		Note if a comment is edited and resent a new comment will be added in Street Manager
	Street Works Comment > Comment From	The Highway Authority organisation will be used. The person who made the comment can be determined from the Username logged in the Text	We will use the API user (Authority or Promoter) that corresponds to whether the comment came from the Promoter or Highway Authority. The Authority API user will be used for Interested party comments.

Work Stop

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	
Works stopped		End date and time will be added to notice comments	If the Issue Date is on the same day as the Actual End Date then the Issue Time will be provided. Otherwise the time will be set to 23:59
Was an excavation required?		from Street Manager if this has	(Out of scope). Users will need to submit separate change to Street Manager to alter this pri- or to sending the Works Stop

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Organisations / Workstreams

Key Differences from EToN

Organisations in Street Manager are the same as for EToN and equivalent to Organisation Groups in Confirm. Street Manager Workstreams replace EToN Operational Districts and are equivalent to Confirm Organisations.

Confirm will automatically create an Organisation and Organisation Group if necessary if a notice is received from Street Manager from a promoter with an unknown Organisation / Workstream.

Confirm will also create new Workstreams in Street Manager where necessary.

Note that Street Manager permits a workstream prefix of "000" which is not valid under EToN rules and can prevent the existing Confirm client application from allowing new notices to be created. To work around this, a district number of 0001 (three zeros) is created for the Confirm Organisation that corresponds to the Street Manager Organisation's "000" workstream. This means the DfT Ref 2 in Confirm might be something like "AB0001". Note that the DfT Ref 2 would appear as "AB000" in the Organisation screen as it is truncated, but will appear as AB0001 in the Reference on the Street Works screen.

Field Mapping

Organisation Group

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Organisation Profile > Organ- isation refer- ence	Organisation Group > Code		Not exported to Street Manager
Organisation Profile > Organ- isation name	Organisation Group > Name		Not exported to Street Manager

Organisation

Street Man- ager Field	Confirm Field	Notes when importing into Confirm from Street Manager	Notes when exporting from Confirm to Street Manager
Organisation Profile > Organ- isation refer- ence	Organisation > Additional > DfT Ref 1		Not exported
Workstreams > Prefix	Organisation > Additional > DfT Ref 2	First two characters are the organisation 2 letter code (not displayed in Street Manager). See above note regarding handling of Workstream 000.	Set to last 3 digits of the DFT Ref2 in Confirm, when Confirm creates Workstream in Street Manager.
	Organisation > Code	This is made by concatenating the Organisation reference and Workstream prefix	

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Street Man- ager Field	Confirm Field	Notes when importing into Confirm from Street Manager	Notes when exporting from Confirm to Street Manager
Workstreams > Workstream name	Organisation > Name	This is prefixed with the Organisation name	Set to Organisation DFT Ref 2 code in Confirm, when Confirm creates Workstream in Street Manager.
Workstream > Workstream description	Organisation > Address	Set to Flat/Sub-Bldg field of Address in Confirm	First 500 characters of Address are exported.
Workstream > Contact name		Will be set to "Unknown" if blank in Street Manager	
Workstream > Contact num- ber	Organisation > Contact > Phone	Will be set to "Unknown" if blank in Street Manager	
Workstream > Contact email	Organisation > Contact > Email		
Organisation Profile > Ad- dress line 1	Organisation > Address > Ad- dress		Not exported to Street Manager
Organisation Profile > Ad- dress line 2	Organisation > Address > Street Name		Not exported to Street Manager
Organisation Profile > Local- ity	Organisation > Address > Loc- ality		Not exported to Street Manager
Organisation Profile > Town	Organisation > Address > Town		Not exported to Street Manager
Organisation Profile > Post- code	Organisation > Address > Post Code		Not exported to Street Manager
Organisation Profile > Email	Organisation > Contact > Email	The Organisation profile Email only used if the Workstream Email is blank	Not exported to Street Manager
Organisation Profile > Phone number	Organisation > Contact > Phone 2		Not exported to Street Manager

Installation (For On-premise clients)

The Street Manager interface is provided as part of Street Works Transfer agent in Confirm. This is provided through the Task Processor in a decoupled mode which means the Task Processor for the Street Works Transfer agent can be installed and upgraded without the need of upgrading main Confirm. It is backward compatible with Confirm v18.2. The complete Street Manager interface package is provided as **StreetManagerAgent<version no.>.zip**

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Location

The installer is available at \Task Processor directory within **StreetManagerAgent<version no.>.zip** (available for download **here**).

Installation

The installer setup.exe needs to be installed from the \Task Processor directory from the Street Manager package in the 'Run as administrator' mode. This instance of the Task Processor needs to be installed on a separate machine from main Task Processor as two instances of Task processor cannot work on one machine. For installation details, you may refer to Confirm Task Processor documentation, and 'setup' section therein.

If you have been using earlier versions of Street Manager interface through the StreetManager-Agent.zip folder files, you need to stop the old Windows scheduled task.

The database config (cfg) file for the Task Processor are located under the registry location **HKEY_LOCAL_MACHINE\SOFTWARE\WOW6432Node\Pitney Bowes\Confirm\Task Processor**. The key name is CfgFilePath.

The ConfirmWebBeta.exe needs to be installed this in the same way as Confirm Web would normally be installed, as described in the "Installing, Configuring and Upgrading the Confirm web interface" section in the Confirm help. The Confirm Web Beta service can be installed side-by-side on the same server as a normal Confirm Web installation, but we would recommend that it is installed on a different server.

Document Proxy Service

To be able to view Street Manager files from Confirm without having to log into Street Manager, a "proxy" service is required which is installed as part of Confirm Web beta.

Database Changes

In order to prevent the main Task Processor from running tagged Tasks the Task Processor stored procedures must be updated in the database as follows:

For Oracle database:

- 1. Go to Task Processor folder in Program Files under Pitney Bowes\Confirm
- 2. Login to the database with non-central schema e.g. HIGHWAYS/CONFIRM.
- Open StreetManagerTaskProcessorPatchOracle.sql from "StreetManagerAgent\Resources" folder and copy the content to a query window.
- **4.** Run the query
- **5.** Setup is complete.

For SQL Server database:A DBA can follow similar steps for a SQL database by using Street-ManagerTaskProcessorPatchSQL.sql instead of StreetManagerTaskProcessorPatchOracle.sql in step #3.

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Testing Connectivity

You can verify connectivity with Street Manager and check your credentials are working from a PowerShell prompt, by creating the following function:

```
function Test-StreetManagerCredentials {
  Param (
    $Username,
    $Password,
    [Switch] $Production
  if ($Production) {
    $Url = "https://api.manage-roadworks.service.gov.uk/v1"
    $Url = "https://api.sandbox.manage-roadworks.service.gov.uk/v1"
  (New-Object System.Net.WebClient).Proxy.Credentials = [System.Net.CredentialCache]::De-
faultNetworkCredentials
  [Net.ServicePointManager]::SecurityProtocol = [Net.SecurityProtocolType]::Tls12
    $authenticateResponse = (Invoke-RestMethod -Method POST -Uri "$Url/work/authenticate"
-Body @{"emailAddress" = $Username; "password" = $Password})
  } catch {
    return $_.Exception
  $idToken = $authenticateResponse.idToken
  headers = @{
     'Content-Type' = 'application/json'
    'Token' = $idToken
  try{
    $res = (Invoke-RestMethod -Method GET -Uri "$Url/work/works/junk" -Headers $headers)
  catch {
    $status = $_.Exception.Response.StatusCode.value__
    if($status -eq 401){
       return 'Not API credentials'
    if($status -eq 404){
       return 'Valid API credentials'
    return $_.Exception
}
```

You can then call this, supplying your user name and password in single quotes, e.g.

Test-StreetManagerCredentials 'username@test.com' 'password'

This will test Sandbox by default. To test production add the -Production switch, e.g.

Test-StreetManagerCredentials 'username@test.com' 'password' -Production

If the user is valid then "Valid API credentials" will be returned, If the user is valid but not configured with API access then the error "Not API credentials" will be returned.

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A "401 Unauthorised" error indicates that either the Username or password is incorrect. Any other errors indicate connectivity issues accessing the Street Manager services which may be caused by local proxy servers or firewalls.

Logging settings

The Provider log settings for the beta Task Processor are specified under the 'HKEY_LOCAL_MA-CHINE\SOFTWARE\Wow6432Node\Pitney Bowes\Confirm\Task Processor' key for log file path.

Lookup Tables

A number of changes to Confirm lookup tables are required to support the interface with Street Manager. When the decoupled Street Works Transfer agent runs, it automatically updates the required lookup in the Confirm database. These lookup are refreshed automatically on every upgrade of Confirm Street Manager software.

Note: The Confirm system uses first 6 characters of the new Conditions entered in the 'Name' of 'Permit Condition Type' lookup when sending condition code to Street Manager. It is recommended not to change the name of the new permit condition types.

Upgrades

An upgrade to the Confirm Street Manager interface will require an upgrade of the decoupled Task Processor and Confirm Web beta. Also, the version tag against the Notes section of the Street Works Transfer agent in the Scheduled Task screen need to be updated in Confirm, e.g from V20.01 to V20.22.

Switch off the Decoupled Task Processor

In order to switch off the decoupled Task Processor and execute the Street Works Transfer agent as per the main Confirm version, remove the Task Processor version tag from the Notes section of Street Works Transfer agent in the Scheduled Task screen. This will prevent the decoupled Task Processor from running the Street Manager Works Transfer agent.

Troubleshooting

The following tables document common errors observed when exchanging information with Street Manager, what may have caused the error and possible ways to fix the issue.

Notices

Errors that occurred during notice export can be seen on the Transfer Issues section of the Street Works > Transfer tab.

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* Note that in a number of cases additional notices may need to be manually added into Street Manager to bring Street Manager and Confirm in-sync with one-another. These changes will be imported into Confirm which may result in some Ignored notices.

Error Message	Cause	How to Fix
A HA can only imposed changes on a granted permit	Have attempted to issue an Authority Imposed Variation on a permit that has not yet been granted in Street Man- ager	Check the transfer status of the previous Grant sent from Confirm to ensure that was sent to Street Manager. Make any manual corrections necessary in Street Manager*.
A highway authority officer can only grant/refuse permits that have not already been granted, refused, revoked or cancelled. Permit has no pending changes	Permit may have already deemed in Street Manager due to changes in deeming rules	No action required. Unsent Grant/Re- fuse in Confirm will be overwritten with the next notice received from Street Manager
A highway authority officer can only request a permit modification on permits with a status of submitted	Modification Requests are only valid where there is no current permit	Refuse the most recent change from Street Manager with reasons. The promoter will still have their previously granted / deemed permit
A PAA can not be altered	Street Manager currently treats the first application for all Major works as a PAA, even if the works are not asset activity, which can cause notices to become out of sync with Confirm.	Grant the PAA in Street Manager and re-send the Modified Application from Confirm which will be treated like a Permit Application in Street Manager.
A permit modification can only be requested on permits with a work category of standard, minor, major or hs2_highway	Modification requests cannot be sent in response to Immediate Permits	Either refuse the permit or issue an Authority Imposed Variation
A planner can only alter permits with a status of gran- ted. br>An active alteration already exists for this per- 	Once a Variation has been sent for an existing permit then this must be granted, refused or deemed before a subsequent variation can be sent	Wait for the previous variation to be granted
A planner can only cancel permits with a status of submitted	Street Manager is out of sync with Confirm	Compare the Street Manager history with the Confirm history to determine where the notices went out of sync and make corrections in Street Manager*
A Promoter or HA imposed change can not be assessed	It is possible that the permit has already been granted in Street Manager	Compare the Street Manager history with the Confirm history to determine where the notices went out of sync and make corrections in Street Manager*

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Error Message	Cause	How to Fix
Access restricted	The promoter does not have access to the necessary workstream for the works	Check that the Confirm Promoter API user has access to the workstream for the works (3rd to 5th digit of the works reference)
Additional change added since grant	Confirm has detected that a further change has been logged in Street Manager since the version that was reviewed and Granted in Confirm	Review the most recent changes to the Permit and re-assess
Bad Request. additional_comments is required	Notice comments must be supplied when refusing or revoking permits	Add comments and re-send
Bad Request. Date must be in the future	Forward planning notices cannot be submitted retrospectively	Re-plan the works and send a Forward Planning or PAA as appropriate
Bad Request. pending_change_de- tails is required	A Modification Request has been sent without any proposed changes	Add necessary changes to the Notification comments and re-send
Bad Request. The maximum duration for proposed works allowed is 5 years. Please make sure your timings fall within the permitted range.	Self explanatory	Double-check the dates on the works
Cannot add a reinstatement as the work status is not in progress, completed or non-notifiable	Works start may not have transferred to Street Manager	Check Street Manager history and add a works start if necessary*
Coordinates are mandatory	Self explanatory	May need to run an Error Correction wizard to add coordinates to a legacy works
Forbidden	Some characters in a descriptive field are deemed as suspicious by Street Manager. This is determined by a Street Manager security algorithm, so it is not possible to give a simple list of words / characters to avoid.	Check log files and contact technical support
Forward plans can only be sent for major works to Street Manager.	Street Manager does not allow Forward Plans for other works categories	Send a normal permit application when due
No changes have been made to the permit	A variation of some kind has been sent with no relevant changes. Note this can also occur with Authority Imposed Variations where no valid NCT codes are included in the Notice Comments.	firm history to investigate. For Author-

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Error Message	Cause	How to Fix
		zeros are included where appropriate, e.g. "NCT04b"
No Street Manager Authority credentials found for Organisation	Attempting to perform an authority action for an organisation where no Authority credentials are configured	Check that the DfT Ref 1 of the Street Authority Organisation for the Permit is set correctly
No Street Manager Promoter credentials found for Organisation	Attempting to perform an promoter action for an organisation where no Promoter credentials are configured	Check that the DfT Ref 1 of the Woks Promoter Organisation for the Permit is set correctly
Not found	Not able to find the referenced works in Street Manager	Check log files for the earliest mentions of this works reference and contact technical support
permit_status must be submit- ted, granted or permit_modifica- tion_request in or- der to update the actual_start_date	Street Manager may have treated the first application from Confirm as a PAA	Create and Grant a Permit application in Street Manager and re-submit the actual start notice
Street Manager notification not im- plemented for: E42700	Street Manager does not currently support Temporary Traffic Signal applications	Agree a suitable alternative application process with the Highway Authority
Work has no act- ive permit	Permit / variation may have already deemed in Street Manager	Check permit status in Street Manager
You can't add a reinstatement unless an excavation has been carried out	Requires excavation flag in Street Manager is not checked	Revert the works stop (if required) and create a change in Street Manager to enable the excavation. When this is granted re-submit the works stop and the registration.
Exported to Street Manager: Waiting for the Actual In- spection to be cre- ated	Defective Apparatus details (Section 81s) are only sent to Street Manager when the inspection is exported.	See the inspections section to check if the Inspection has exported
Cannot vary a closed Permit.	Street Manager does not allow a permit to be varied after the Works Stop	Revert the Works Stop, submit the Variation, wait for it to be Granted and re-submit the Works Stop
Only PAA can be raised after a forward planning information.	Street Manager does not allow Forward Planning notices to be used on anything other than major works	Re-run the Planned Works wizard and force the notice type to Major so that a PAA is generated.
"Unknown object type: sw_head- er" message when trying to cre- ate the next notice	If the first two notices for a works have been created in quick succession but the first notice fails due to some error then both notices have their send flag unticked. Confirm is then not able to determine what the logical next notice should be.	To avoid this issue, ensure that the previous notice has been been sent before sending follow-up notices. If this issue occurs the Confirm team can provide SQL to flag the first notice as "notionally" sent which then allows a Modified Application to be sent to correct the original error.

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Errors that occurred during notice import will be received via email. Once the cause of the error is resolved you can prompt Confirm to re-import the data by making any change to the works, e.g. adding a works comment.

Error Message	Cause	How to Fix
A site status with an external ref of E4Depth4 / 8 could not be found	If a depth of zero is received from Street Manager then the DfT Ref on your Confirm Site Status codes is used to flag the site as abandoned or sub- sumed. This error indicates that these DfT Refs. have not been set	The "Subsumed" site status (typically with a code of "SUBS") should have a DfT Ref. of "E4Depth4" and your "Abandoned" Site Status (typically with a code of "S08") should have a DfT ref. of "8".
Object reference not set to an in- stance of an ob- ject. (Number of possible causes)	Legacy works has a Works Comment that was never exported (has no Batch Number)	
	Original works was imported as a Confirmation notice due to a previous bug	Ask the promoter to cancel the current works and re-submit the permit application
Works not found in Confirm	Unable to import a follow-up notice due to a previous failure	Determine the cause of the failure to import the original notice
Not found party/organisa- tions//work- streams/	The works reference does not match the normal pattern. On importing a works into Confirm for an organisation we do not recognise we assume that the 3rd to 5th digit of the works reference correspond to the workstream in street manager. If the works reference is badly formed then this cannot be found and we can't import the permit	Ask the promoter to re-submit the works using a valid works reference
Site wasn't found in Confirm. Usrn not found and no provisional street configured	USRN was not found in Confirm.	Check the status of the Gazetteer in Confirm and ensure that a Provisional Street is set up on the Street Works System Settings screen
Street Works Notice truncated to characters. Original value:	Some fields in Confirm cannot hold the full length of text that could be sent from Street Manager	Be aware of the truncation when reviewing the works

Works Comments

Errors that occurred during comment export can be seen by clicking on the Send To button and selecting the Street Manager recipient.

Error Message	Cause	How to Fix
Not found	against a works that does not exist in Street Manager	If the comment relates to a Defective Apparatus notice then re-send the original apparatus inspection. If the comment relates to a works that you did not promote then either ask the promoter to transition the works to Street Manager or log an historic in-

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Error Message	Cause	How to Fix
		spection on the works to re-create the historic works in Street Manager. The comment will re-send on the run after the works was created in Street Manager.

Inspections

Inspection errors can be viewed by clicking the Batch button on the inspection toolbar. To re-send an inspection untick and re-tick the Send Inspection checkbox, Save the inspection and respond "Yes" to the prompt to send an update for the Primary Inspection.

Error Message	Cause	How to Fix
Bad Request. fail- ure_reason_de- tails is required	Failed inspection item does not have any notes	Add notes to the item and re-send the inspection
Inspection category: does not map to a valid Street Manager inspection category.	Inspection category cannot be sent to Street Manager	Check DfT references on Inspection Categories in Confirm against the field mapping tables in this document. Note: Street Manager does not support Investigatory (core sample) inspections. Use Third-party or Routine instead
Inspection Outcome: Passed/Abortive does not map to a valid Street Manager Section81 Severity. No Street Manager Promoter credentials found for Organisation	Sending a second inspection on a Defective Apparatus that was previously sent over EToN	The only workaround at present is to re-raise the Defective Apparatus under a different reference (and untick the send flag of any pending inspections / notices under the old reference)
'officer_con- tact_details' is re- quired	No phone number has been specified for the Inspecting officer	Add a suitable phone number or email address to "Telephone Number" field of the Inspecting Action Officer
"To be pro- cessed". No error or batch number	Inspections are only sent from organisations you initiate for to organisations that have the EToN Export flag checked. Note that for Defective Apparatus and Unattributable works the "to" organisation is the inspecting authority	Check the EToN Export flag for the recipient. Note before changing this contact the Confirm team to obtain SQL to check for legacy inspections that might also get exported if this flag is changed
Request failed with status code 404	Can occur if an historic inspection is against a USRN that is no longer valid in Street Manager	Correct the USRN on the parent works using a suitable notice, e.g. Error Correction or Defective Apparatus, and then re-send the inspection.
'works_coordin- ates' is required	Can occur if an historic inspection is against a works that did not have original coordinates	Ensure that an Easting and Northing are specified on the Inspection and resend it.

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Errors that occurred during inspection import will be received via email. Once the cause of the error is resolved you can prompt Confirm to re-import the data by making any change to the works, e.g. adding a works comment.

Error Message	Cause	How to Fix
cannot insert NULL into actu- al_inspection.of- ficer_code The IN- SERT statement conflicted with the FOREIGN KEY constraint "act_in- spection_fk1_of- ficer"	All received inspections are logged against the Inspection Officer set on the Inspection Import System Settings screen	Ensure that the setting is populated with a valid Action Officer
Cannot perform atomic update as objects previous state was not sup- plied	This can happen if the next inspection number for a works (managed intern- ally) gets out of sync	Obtain SQL to fix this from the Confirm team

FPNs

FPN errors can seen in the Notes on the Offence tab or can be viewed by clicking the Issue / Withdraw Batch button.

Note that FPNs that have failed to send will still show with a status of "Penalty Sent Queue". Once corrections have been made you will need to click Resend from the Actions menu.

Error Message	Cause	How to Fix
Offence Type: An offence under s does not map to a valid Street Manager Offence Code.	Street Manager does not support Notice offences	Re-send the FPN via email or post
'officer_con- tact_details' is re- quired	No phone number has been specified for the Penalty Action Officer Officer	Add a suitable phone number or email address to "Telephone Number" field of the Action Officer specified on the Penalty tab
Cannot read property 'length' of undefined	This can occur if no withdrawal reason is supplied	Add a reason to the Offence Notes and resend the Withdrawal.
'works_coordin- ates' is required	Can occur if an historic FPN is against a EToN works that did not have original coordinates	Log a Received ("paper") error correction notice on the works to set its coordinates and then re-export the FPN

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Confirm Dashboard

Introduction

The Dashboard provides a graphical display of information from Confirm. That information is derived from Data Sources and transmitted to the Dashboard, using the Scheduled Reports functionality and the Task Processor, at user-defined intervals. The Dashboard is automatically refreshed at an interval specified in Dashboard User Settings.

The Dashboard has Fit In View option, which allows viewing all widgets without scrolling the page.

Switching

The active Dashboard can be changed by selecting a different Dashboard from the drop down list. All the Dashboards which the logged in user have access to, are displayed in the drop down list. Typing search criteria in the drop down will filter the Dashboards displayed in the list.

Changing the active Dashboard in web interface will also change it in Confirm Client.

Drill-Down

The information of the data being displayed on the Dashboard can be viewed by clicking on the Category Text, or on the chart. The underlying information is displayed in a tabular form, in a new tab of the web browser. The table can be sorted by clicking on the column title.

Further details about Jobs, Enquiries, Defects and Features can be viewed from the Drill-down screen by clicking on the required item, provided the corresponding database table (Job, Enquiry/Central Enquiry, Defect, or Feature) is configured as a Linked Table.

Search

All the records in the Drill-down can be searched by entering the criteria. Records having the exact phrase entered will be filtered and displayed in the table. Clearing the search criteria by clicking 'x' icon will display all records in the table.

Export

All the records in the Drill-down can be exported to a CSV file by clicking Export. A file will be downloaded to the browser's default download location. File name will be same as widget name.

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Confirm Customer Services

Intro

Confirm

The Customer Services functionality on the web allows you to create, view, and edit an Enquiry.

Search Enquiry

You can search for an Enquiry to view/edit its details.

You can perform search in the search box. You need to enter one or more of the following search criteria: Enquiry number, Enquiry location, Enquiry description, Customer name, Customer reference, Customer email Address, Subject name, Service type, Site name, Feature Type, Town or External System reference number.

If you want to search using multiple criteria, include a <space> between the criteria.

If you want to search for an exact match, enter the search criteria in quotes <"">.

The list of enquiries matching the search criteria will be displayed below the search box. The list displays up to latest 100 edited/updated Enquiries that match the search criteria. The list includes Customer as well as Officer Enquiries.



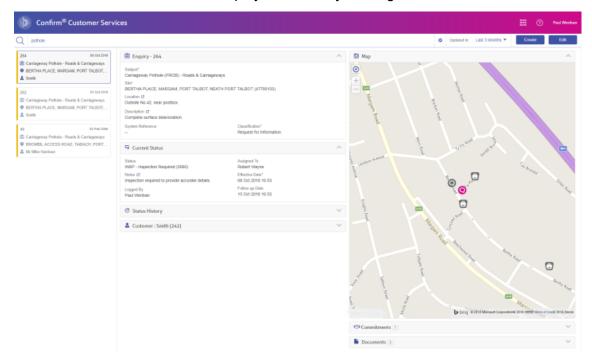
An enquiry in the list has following information:

Site of the Enquiry.

: Customers linked to the Enquiry.

View Enquiry

You can view the details of an Enquiry in the list by clicking it.

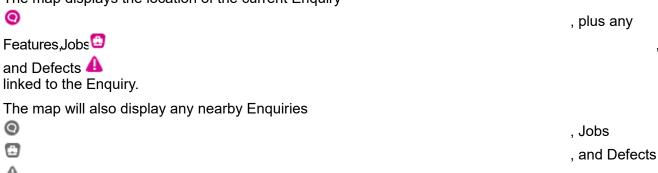


Anyfieldwiththe 2

icon can be displayed in a pop-up with a bigger text area, allowing you to view longer text without having to scroll within the field. Click on the icon to see the pop-up.

Map

The map displays the location of the current Enquiry



- Nearby Enquiries will be shown if they have the same Subject as the current Enquiry.
- Nearby Jobs will be displayed if any activity was performed on them in the last 30 days or they are scheduled to start in next 30 days. For Contractor users, the Job must also be at a Job Status with the 'Available to Contractor' flag ticked.
- Nearby Defects will be displayed if they are not superseded, and are not set to 'No Action Required'.

To hide/show nearby Enquires, Jobs, or Defects, click the layer control button on the map.

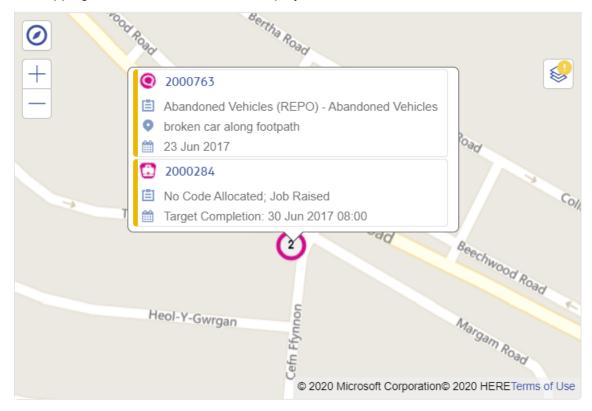


Clicking on any item on the map will display an info popup.

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The info popup displays the following details for Enquiry: Enquiry number, status, description (or subject if description not available), location (or site if location not available), logged date. For Jobs, the info popup displays the Job number, Job Type, current status, target/actual completion date. For Defects, the info popup display the Defect number, Defect Type, and the Defect creation date.

If more than one entity is at same location, a cluster is displayed in that location, with the count of overlapping entities. If the cluster has Enquiry in it, its border will have the same colour as that of Enquiry.



Map - Create Enquiry

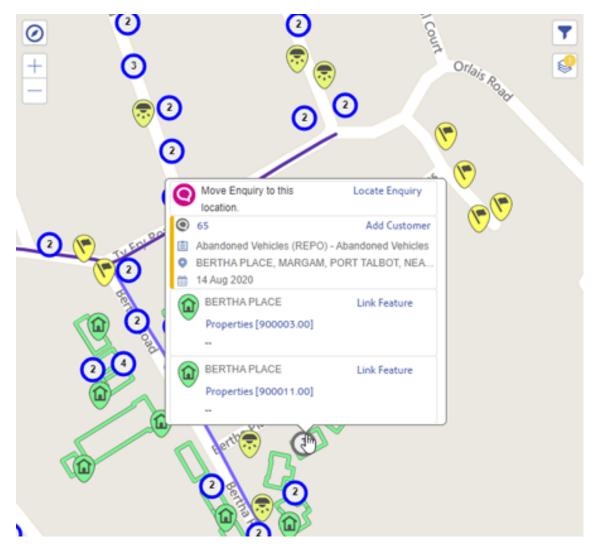
When creating an Enquiry, the Map allows an Enquiry to be located. Selecting a Site will focus the map on the location of Site and all eligible features near the location of Site will be displayed. The symbols of features will be displayed as defined in Web Map Settings screen.

If Subject and Site are selected, any nearby Enquires created or updated in last six months and with the same Subject as selected will be displayed as



If more than one entity is at same location, a cluster is displayed in that location, with the count of overlapping entities. The cluster border will have the same colour as that of nearby Enquiry.

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Map - Locating an Enquiry

The Enquiry can be located using the map. Click the location of the Enquiry and select 'Locate Enquiry' from the popup.



Alternatively, the Enquiry can be linked to a Feature. Click the Feature's icon on the map and select 'Link Feature' from the popup.



Before saving the Enquiry, the Feature can be unlinked, the Enquiry relocated or the Enquiry linked to a different Feature. To unlink, click the Feature's icon on the map and select 'Unlink Feature' from the popup.



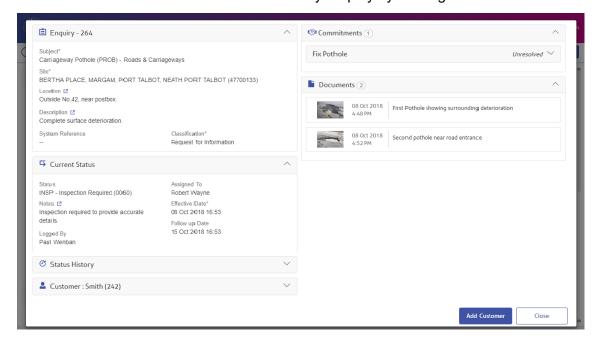
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Map - Adding a Customer to an existing Enquiry

When creating an Enquiry, you can view the details of a nearby Enquiry by clicking it on the map. An info bubble is displayed with information of the nearby Enquiry: Enquiry number, status, description (or subject if description not available), location (or site if the location is not available), logged date and 'Add Customer' link.

You can add a Customer to this nearby Enquiry by clicking the 'Add Customer' link in the info bubble. You will be redirected to that Enquiry, with a Customer section added.

You can view more details of nearby Enquiry in a pop-up by clicking the Enquiry number in the info bubble. You can add a Customer to this nearby enquiry by clicking the 'Add Customer' button.



Documents

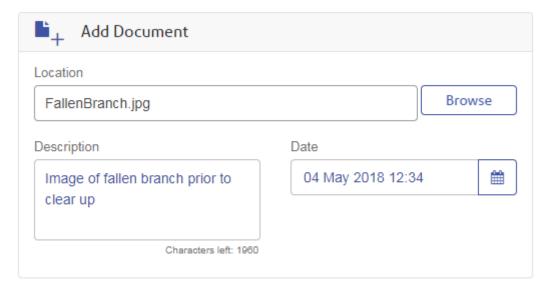
This panel displays the Documents attached to an Enquiry. Clicking on a Document link opens the full view of the attachment in a new pop-up window. The opened Document can be downloaded to browser's default download location or to a specific path by clicking on download button.



Add Document

When creating or editing an Enquiry, it is possible to add a Document to an Enquiry to record any additional information coming via attachments. Use the Browse button to browse to any accessible location.

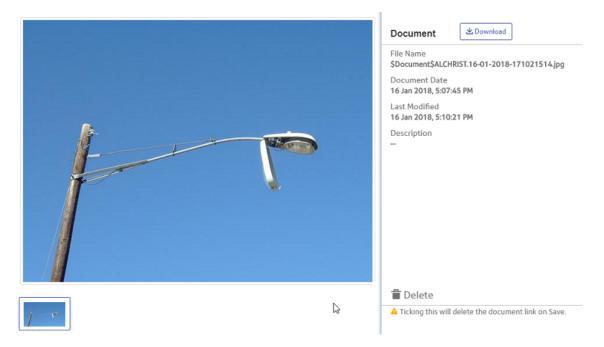
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Delete Document

When editing an Enquiry, it is possible to delete an existing Document from an Enquiry, through the Document review pop-up.

The actual Document will be deleted if Document Store is set to 'Folder'.



Deleting Customer details

To delete a Customer's details from an Enquiry, Edit the Enquiry and click on the 'Make Anonymous' button in the Customer section.

Clicking on 'Make Anonymous' button will clear all details of a customer or contact in an existing Enquiry. It will replace the customer surname or the contact name with the date the details were cleared and the user who cleared them.

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Confirm Job Screen

Job Type

The Job Type field in the Details section of the Job screen is editable for Jobs which are not on an Order.

Updating the Job Type may cause the Traffic Management, Hazard Type and related Attributes to change based on the Job Type defaults.

Hazard Type

The Hazard Type field in the Details section of the Job screen is editable for Jobs which are not on an Order.

Updating the Hazard Type will cause the Job Attributes to be updated with those linked to the new Hazard Type.

Priority

The Priority field in the Details section of the Job screen is editable for Jobs which are not on an Order.

Updating a Job's Priority will automatically cause the Price Factor, Estimated Completion Date & Target Completion Date values to be updated when appropriate.

Changing the Priority may affect the Current Status, in which case the Status History will be updated.

NB: This functionality is only available to users with the necessary User Security.

Traffic Management

This field will default from the Job Type 'Default Traffic Management' setting but can be changed for Jobs that are not on an Order.

Estimated Start Date

You may enter an Estimated Start Date from which the Estimated Completion will be calculated in preference to the Entered Date.

Using this field will ensure that the Estimated Completion date accurately reflects the date on which the work was started rather than the date on which the Job was entered into Confirm.

Actual Start Date

Enter the date to record when the Job actually started. This will be automatically set if a Job Status is selected with the 'In Progress' setting ticked.

Estimated Completion Date

Estimated Completion is automatically calculated in three different ways:

The default is for Estimated Completion to be calculated on committal of the Job, based on the committal date and the Follow Up set on the Priority. In this case the Estimated Completion field remains blank until the Job is committed.

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- If the Job System Settings 'Set Estimated Completion Date When Job Raised' is flagged, then an Estimated Completion is calculated based on the 'Logged date' and the Follow Up set on the Priority when the Job is raised.
- If a Start Date is entered for the Job, then regardless of Systems Settings, or Committal date, the Estimated Completion will be based on the Start Date and the Follow Up set on the Priority.

An Estimated Completion may also be directly entered, and will remain unaltered when the Job is committed.

Workstream

The Workstream field allows Jobs to be placed onto a Workstream, which allows for the grouping of Jobs when scheduling in ConfirmWorkzone.

The Workstream field is only visible when at least one Workstream lookup has been defined.

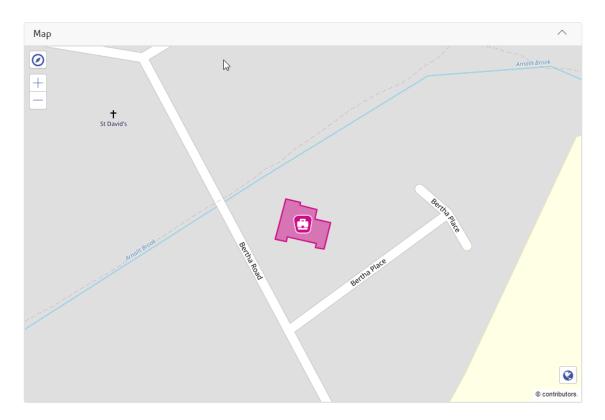
Document Panel

The Document panel shows all images and files linked to a Job as well as those for any Defects related to the Job.

The Document panel will only be visible to users with Document User Security access. Any linked Defect Documents will be visible in the panel regardless of the user's Defect User Security settings

Documents for the Job can be uploaded and edited in accordance with the user's Document User Security permissions. Documents for related Defects are read only on the Job screen.

Map



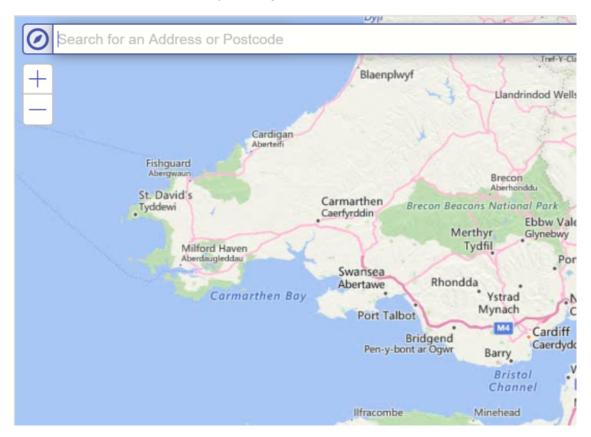
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The Map displays the plotted Job Geometry. Job Geometry can be a Point, a Line, or a Polygon. If the Job itself does not have Geometry, the Point Geometry of the linked Feature is displayed. If the linked Feature also does not have Geometry, the Site Point Geometry is used instead.

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Confirm Map Search

The Map Search enables text and spatial searching across Enquiries, Jobs, Defects and Features. Locations can be searched for by clicking the compass icon at the top left corner of the map.



What's Going On Here

When zoomed in to a location What's Going On Here entities can be shown by clicking



at the top right

of the map and selecting the options from the list. The entities will refresh as the map is moved.



Entities are included according to the following rules:

Features

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• Features are restricted by Device Data Key Security on the Feature Group (see the Feature Group lookup in the Confirm desktop client).

Enquiries

• Enquires will be displayed that have been created or updated in last six months.

Jobs 🖼

- The Job is scheduled to start in the next thirty days.
- Or the Job has been completed within the last year.
- Or the Job has not been completed but some activity has been performed on it within the last year and the Job has not been archived.
- For Contractor users, the Job must also be at a Job Status with the 'Available to Contractor' flag ticked.

Defects A

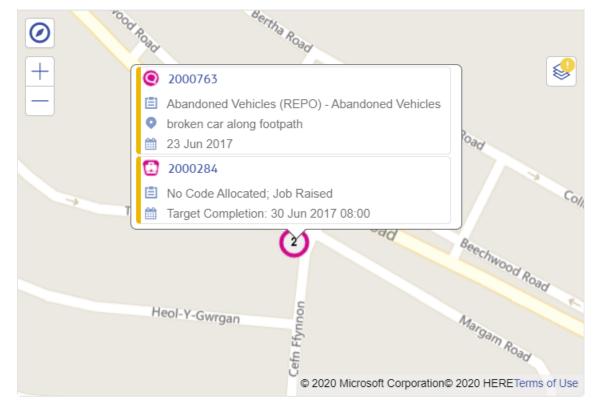
• Defects will be displayed if they are not superseded, and are not set to 'No Action Required'.

Entity Information

Clicking on any item on the map will display an info popup.

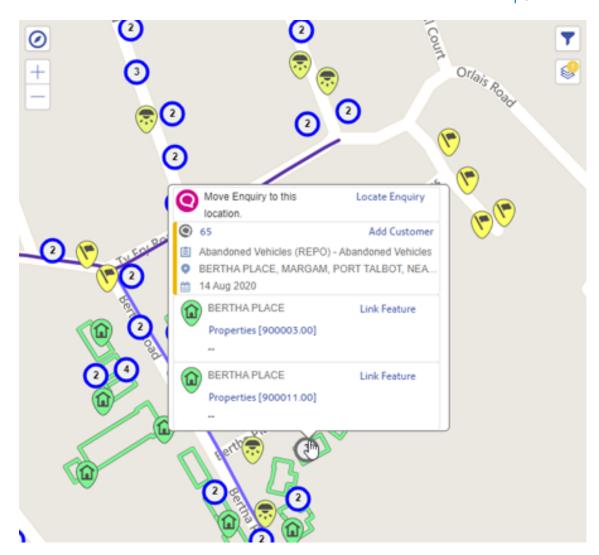
The info popup displays the following details for Enquiry: Enquiry number, status, description (or subject if description not available), location (or site if location not available), logged date. For Jobs, the info popup displays the Job number, Job Type, current status, target/actual completion date. For Defects, the info popup display the Defect number, Defect Type, and the Defect creation date.

If more than one entity is at same location, a cluster is displayed in that location, with the count of overlapping entities. If the cluster has Enquiry in it, its border will have the same colour as that of Enquiry.



If more than one entity is at same location, a cluster is displayed in that location, with the count of overlapping entities.

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Feature Filter

Features can be further filtered by Id, Group or Type by clicking the filter button at the top right of the map.

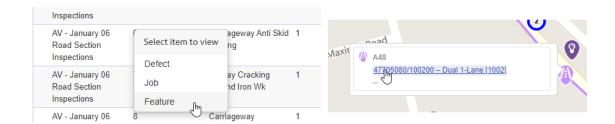


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Confirm Feature Screen

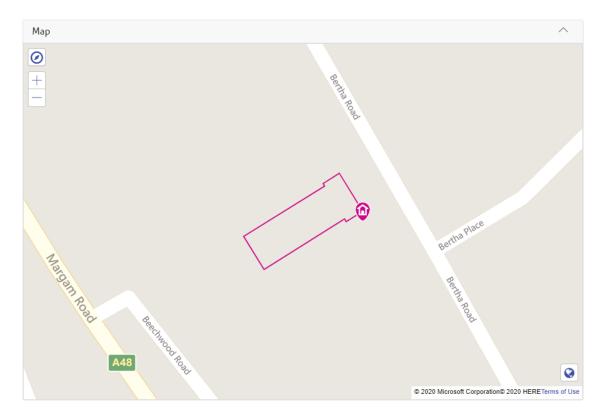
Introduction

The Feature screen can be accessed by drilling down from either the Dashboard or from the Map Search.



The page displays standard Feature details as well as Straight Line Diagrams for Linear class Features.

Мар



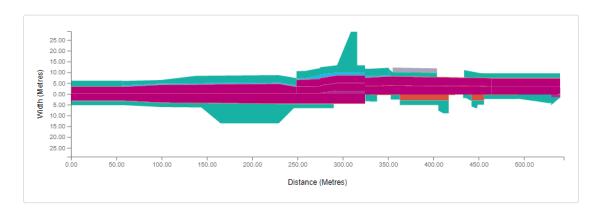
The Map displays the plotted Feature Geometry. Feature Geometry can be a Point, a Line, or a Polygon. If the Feature itself does not have Geometry, the Site Point Geometry is used instead.

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Sensor History

If the Feature is an IoT device or is fitted with one the Sensor History component will appear. To identify a Feature as having sensor readings it must have been provisioned by ConfirmConnect or have an Attribute with the Attribute Type Code defined in the IOT_ATTRIB_TYPE_CODE System Setting set. This component will display the device sensor readings for a specified date range. This component is initially collapsed and will show data from the last 7 days when expanded by default.

Straight Line Diagrams: The Inventory Schematic (For Linear class Features)



This diagram uses the configured Cross Sectional Positions ordering, the selected Linear feature's own child Linear Feature Inventory (currently Discrete Features are not plotted), their Start and End Widths and their Start and End Distance to build a representation of the Feature as a straight line. Each Inventory item is coloured according to their Feature Type.

Inventory items are grouped by their Cross Sectional Position and then by their Feature Type. The separated Inventory groups are then stacked on top of each other going out from the centre.

When hovering over the Inventory with the mouse a tool-tip displays the the Feature's Type and Cross Sectional Position.

Straight Line Diagrams: The Survey Browser (For Linear class Features)

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This component lists Surveys for the current Linear Feature which have a Start Date. If there are Observations available they are grouped by their Cross Sectional Position and plotted on a chart along the length of the Feature.

When the component initialises it will display the full extent of the Observation Type based on its configured Observation Parameter (from the Minimum to the Maximum of the Parameter Options). To toggle between the full extent of the Observation Parameter and the extent of the Observations you can click the chart or the arrow button above the Y-axis.

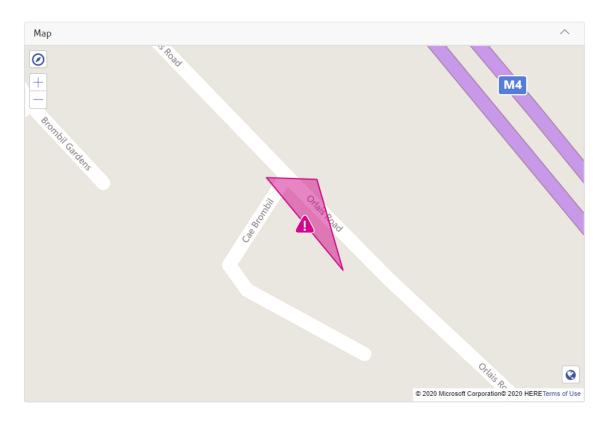
Cross Sectional Position visibility can be toggled by clicking on the Cross Sectional Position in the chart legend.

When hovering over the data points in the chart with the mouse a tool-tip displays the distance along the Feature and the Observation value.

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Confirm Defect Screen

Map



The Map displays the plotted Defect Geometry. Defect Geometry can be a Point, a Line, or a Polygon. If the Defect itself does not have Geometry, the Point Geometry of the linked Feature is displayed. If the linked Feature also does not have Geometry, the Site Point Geometry is used instead.

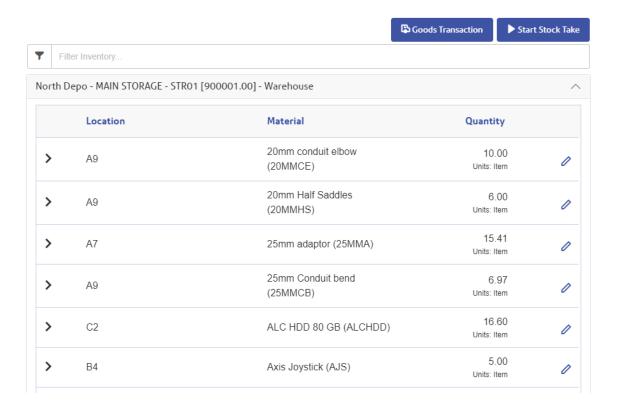
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Confirm Stock Management

Stock Management provides an easy to use web interface to manage stock levels aimed for use by tablet devices. The main page shows the Goods Transaction and Start Stock Take buttons (more on these later) and a list of all Stock Locations (Confirm Features) for which the user has Contract Area access. The search bar can be used to filter this list via location or inventory details.

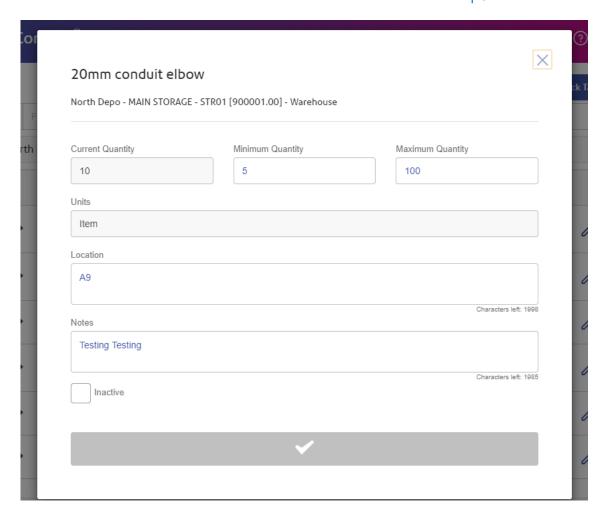


Selecting a Location shows the Inventory of Materials at the chosen Location, including quantities.



By using the Pencil icon, it is possible to edit the Minimmum and Maximum Quantities, Location, Notes and Inactive details of existing Stock. Minimum Quantity can be used to indicate when an order must be placed. Whereas the Maximum Quantity can be used to indicate when not to place an order, or, this is the Maximum quantity that can be stored at said Location. Location and Notes fields can be used to further descirbe the inventory. The Inactive flag, when enabled, will grey out (disable) this Inventory item, this will not clear any existing details and prevents further changes until it is marked as active again.

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Stock Take

A Stock Take can be initialised by tapping the 'Start Stock Take' button.

Once a Stock Take has been initialized then Inventory can be added to the Location by using the + button.



This also allows the current quantity of Inventories to be updated by value in the list. When a value is updated in the list and the user taps away from that text box the value will be automatically saved.

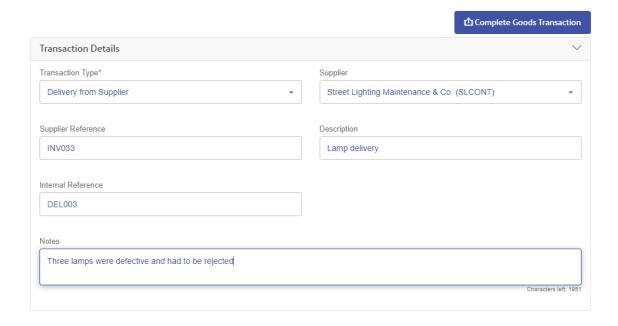
Once the Stock Take is completed then you can tap the 'Stop Stock Take' to highlight that the batch of updates is finished.

Goods Transactions

A Goods Transaction can be initialised by tapping the 'Goods Transaction' button. This allows the recording of when Inventory items are either taken out or brought in.

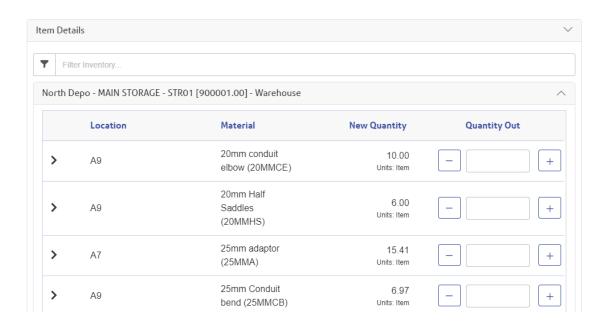
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Once a Goods Transaction has been initialised the Transaction type needs to be selected before the specific fields for that type and the list of Locations will be shown. For example: "Return from Gang" would be used when Inventory is returned by the gang, at the end of the day, who had previously taken Inventory out. Whereas Delivery from Supplier would indicate Inventory is being entered as the result of a delivery.



Once you expand the chosen Location, it will then be possible to enter the amount of each item involved in the transaction by entering that value into the item details panel.

For any transaction type a positive number is entered and the software will calculate whether this value is added to or removed from the total. Note: the + and - buttons can be used to add or deduct one from the currently entered value. It is not possible to enter a negative number. The New Quantity field shows the new value once the Quantity In/Out value has been added/deducted from current Quantity.



Once the information required has been entered the 'Complete Goods Transaction' button would be used to save a record of the transaction in Confirm.

If you no longer need to record a Goods Transaction then the back button on the browser can be used to return to the Stock Inventory screen.

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Administration

Configure the Confirm Stock Management User Security (This is applicable for Confirm Stock Management only)

The user access can be set in the Confirm Client under *user security*. There is an entry for Confirm Stock Management.



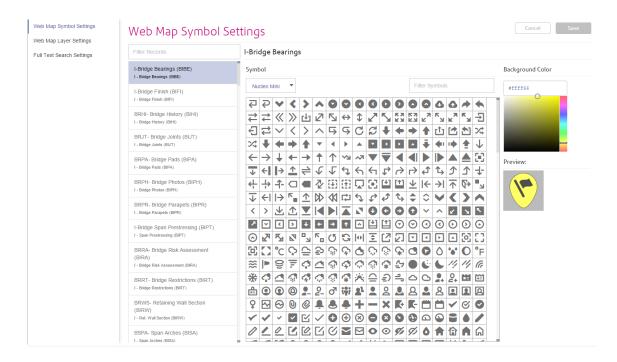
- Confrm Stock Management User Access (security). Enables access to Stock Management.
- Confrm Stock Management Admin Access (security). Enables access to the Stock Management Settings form.
- In Confirm web interface, sign in as an Admin user and launch the Web Settings > Stock Management Settings form. Set the Location Feature Group to the required Feature Group.
- Locations (Features) appear in the list of Locations if the following is met:
 - Users Work Group has Contract Area access to the required Features.

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Confirm Web Settings

Web Map Symbol Settings

Gives the ability to set custom symbols for Features displayed in the What's Going on Here functionality in ConfirmConnect®. This allows the user to set a symbol and background colour of the icon. The foreground or symbol colour will be automatically set to provide the best contrast for the chosen background colour.



Note: A default symbol has been pre-selected for all Feature Types, should there be a need to reset to this default symbol, filter for location_flag-diagonal-33 in the Nucleo Mini font and the default colour is hex number #ffff66.

Search

Text based filter for the Feature Type list.

Fonts

Select from a list of available font types.

Search Symbols

Text based filter for the grid of symbols available for the selected Font.

For Example: Entering the text 'tree' will limit the symbols to those containing 'tree' in their name.

Note: Hovering the cursor over a symbol will display a tooltip containing its name.

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Colour Picker

Select the desired colour. The text field beneath the colour picker allows the entry of a hex number should a specific colour be required.

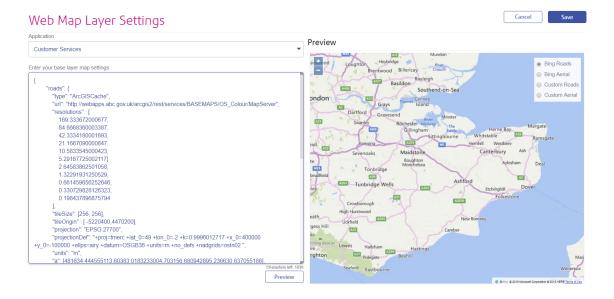
Preview:

Displays the chosen Symbol for the currently selected Feature Type.

Web Map Layer Settings

This page provides the ability to configure background map layers for Confirm Customer Services, ConfirmConnect® and ConfirmWorkzone® which can be used to replace the default Bing maps, along with the preview of the map layer.

The map preview displays Bing layer, if the extents of the custom layer cannot be determined, with an option to switch to custom and aerial views (if available).



Note: The page removes the need to request SQL from Confirm to apply these settings. It will ensure that the entered text is within the database limit of 4000 characters and will use simple parsing to validate JSON text.

This will apply to all users of ConfirmConnect® who do not currently have a settings.js file loaded on their device.

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.

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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).

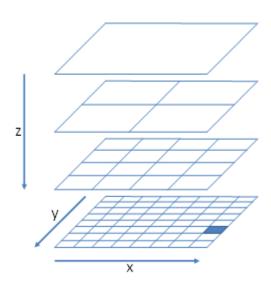
The URL for a tile is found by taking these values and substituting them into a placeholder in the "url" parameter provided in the map layer setting. For example, if the url in the setting is set to:

"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.

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- 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:

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"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" sep-

arated 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 "fullEx-

tent".

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.

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"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": {
          "tvpe":"StratusLaver".
          "url": "Servername/folder/controller/tiling/gettile? mapcfg=Configura-
tion%20Name&name=Map%20Name &level=${z}&row=${y}&col=${x}&output=image/gif",
       },
"Business": {
          "order": 1,
"type": "StratusLayer"
          "url": "Servername/folder/controller/mapping/getmap?layers=/foldername1/folder-
name2/Lay-
er%20Name&width=${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:

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"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,

10.58335450004231,

"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

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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&RE-

QUEST=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?RE-

QUEST=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":

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- "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.

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 (in fact, ConfirmConnect® will automatically limit the number of features displayed from any one SpatiaLite layer to 2000).

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,
```

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```
"type": "RasterLite",
            "url": "raster.sqlite",
           "table": "overview"
         },
"Place Labels" : {
            "maximumResolution": 0.264584,
            "order": 3,
            "type": "SpatiaLite",
            "url": "labels.sqlite"
            "table": "CartographicText",
            "column": "geometry",
            "style": {
               "label": "${textstring}",
              "labelAlign": "cm"
           }
         "Features" : {
            "maximumResolution": 1.058335,
            "order": 2,
            "type": "SpatiaLite",
            "url": "areas.sqlite",
            "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" These settings are determined by the layers that are contained within the

"resolutions" 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.

"maxResolution" If only local SQLite maps are being used then it is possible to simply specify

the "maxExtent" and "numZoomLevels".

"numZoom-Levels":

"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:

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tion"

"minimumResolu- These determine when the layer is switched on and off as the user zooms in and out.

tion":

"maximumResolu- 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.

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://spa-

tialreference.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 +v 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 OSTN02 grid. See the section entitled The National Grid transformation OSTN02 on 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 grid shift file has 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=ostn02' onto the end of the current line. For example:

Confirm 128 of 134 +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

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.

Full Text Search Settings

Confirm web interface supports full text search for Enquiry search and customer address. This enables faster search of Enquiry and customer address in the web interface.

Before enabling the full text search, Confirm Database need to be configured

Configuring SQL Server for enabling full text search

The instructions mentioned here must be followed, to enable full text index feature in SQL server.

Note: Ensure the windows service 'SQL Full-text Filter Daemon Launcher' is running and it's startup type is set to Automatic.

Configuring Oracle Server for enabling full text search

The instructions mentioned **here** must be followed, to enable full text index feature in Oracle database.

In Oracle, for every schema user (that needs to use full text search) in the asset_type table, following things are needed:

- **1.** The database user needs to be given the role of CTXAPP (to allow them to create/manage full text preferences/indexes.
- 2. Execute permissions need to be given for the oracle text packages CTXSYS.CTX_CLS, CTX-SYS.CTX_DDL, CTXSYS.CTX_DOC, CTXSYS.CTX_OUTPUT, CTXSYS.CTX_QUERY, CTXSYS.CTX_REPORT, CTXSYS.CTX_THES, CTXSYS.CTX_ULEXER.

Once the database configuration has been done, the following settings need to be enabled in the to enable full text search in the web interface:

- **1.** The 'Address' checkbox needs to be selected to enable full text search for customer address.
- 2. The 'Enquiry' checkbox needs to be selected to enable full text search for Enquiry.

This will add the Full Text Index agent in the Scheduled Tasks. The Full Text index agent creates and maintains the full text index on Enquiries and customer address

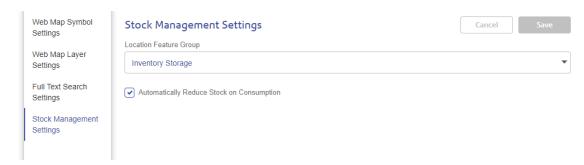
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After the index has been created, full text search functionality will be used in the web interface for searching Enquiries and customer address.

If the 'Enquiry'/'Address' checkbox is deselected, the full text search is disabled for Enquiry/Address and the corresponding index will be deleted.

Stock Management Settings

This page is used to configure Stock Management.



Location Feature Group

Set which Confirm Feature Group will be used for Stock Management. This allows any Features, of a Feature Type within this group, to be available as locations.

Automatically Reduce Stock on Consumption

Set whether Inventory levels should be decreased when Jobs are completed in ConfirmConnect.

Street Manager Settings

This page is used to configure Street Manager agent.



Street Manager URL

Set API URL of Street Manager. This URL is used by Street Manager agent to export or import notice to and from Confirm. Click the pencil to add/edit the URL and tick or cross to update or cancel it. (Ex. https://api.sandbox.stwrks-dev.net/)

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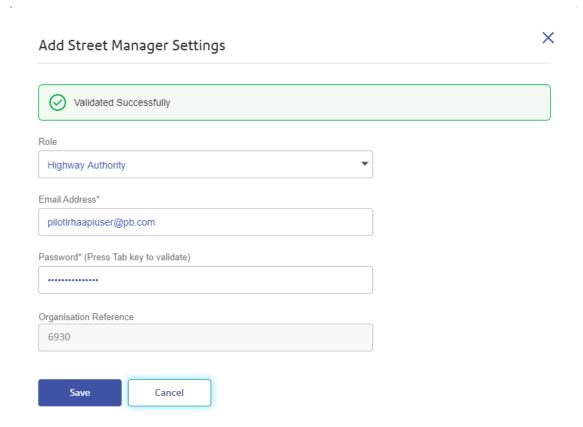
Document Proxy URL

Set the URL to use when launching the Street Manager documents from Confirm. It uses the Street Manager API credentials and launches the document(s) in web browser. Click the pencil to add/edit the URL and tick or cross to update or cancel it.

Street Manager API credentials

Set the API credentials for Promoter and Authority. For adding API credentials, click the (+) in the header of the table. It will open a new pop-up window to select role, add email address and password. Tabbing out of the password field will validate the Street Manager API credentials. On successful validation, the Organisation Reference fields is populated and Save button is enabled. To Edit or Delete, click the appropriate icon.

This page is used to add/edit/delete API credentials.



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Change Password

Change password allows a user to change their password. They may do this because they wish to, or their password has expired.

Change password screen can be opened from the user menu displayed on the top right corner of the application.



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.

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Frequently Asked Questions

Does ConfirmWeb Use Cookies?

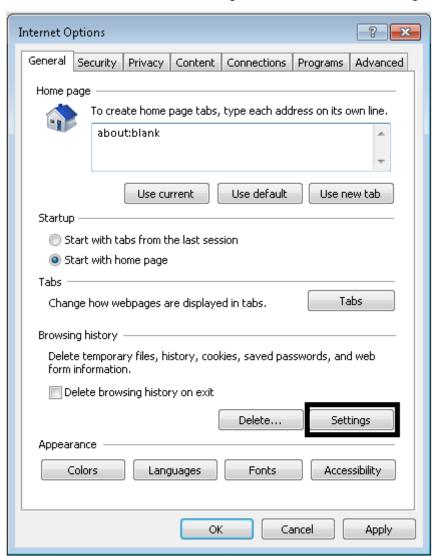
Yes, some features of the ConfirmWeb need cookies to be enabled. We recommend enabling cookies on the browser for this application.

• I use Internet Explorer 11.0 to connect to ConfirmWeb. The application does not reflect the changes that I make to the page.

Internet Explorer 11.0 maintains an old version of the rendered data as Temporary file. Though this feature improves the application performance but causes the browser to retain the old data.

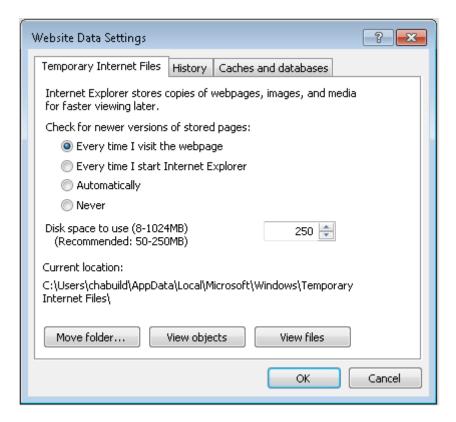
To prevent this caching of data, Internet Explorer should be configured as directed

- 1. Open Internet Options from Tools menu
- 2. Go to General Tab and click Settings button under the Browsing History section



3. On Website Data settings dialog, go to Temporary Internet Files tab. For *Check for newer versions* of stored pages select the first option that is *Every time I visit the webpage*.

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- 4. Close the dialog and refresh the page. The changes would start appearing correctly.
- · I am not able to see contextual help.

Sometimes you may not be able to see contextual help in Firefox or Chrome. Try one of the following:

- 1. Refresh your browser (Press [Ctrl+R] or F5).
- 2. If Refresh does not work, clear cache in your browser and try again.