

Confirm®

Confirm Web Interface v21.20b.AM

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July 06, 2021

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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	2012 64-bit	Current
	2012 R2 64-bit	Current
	2016 64-bit (Server with Desktop Experience)	Current

Supported Web Browsers:

Browser Name	Version	Support Status
Google Chrome	Latest	Current
Microsoft Internet Explorer	11	To be With- drawn v22.0 Release
Mozilla Firefox	Latest	Current
Microsoft Edge	Latest	Current
iOS Safari	Latest	Current

- **Note:** Only the Job, Defect, Feature, and Map Search screens in the Confirm Web Platform Client support Safari on iOS.
- **Note:** Confirm Web Reporting is not supported in the Microsoft Internet Explorer 11.

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

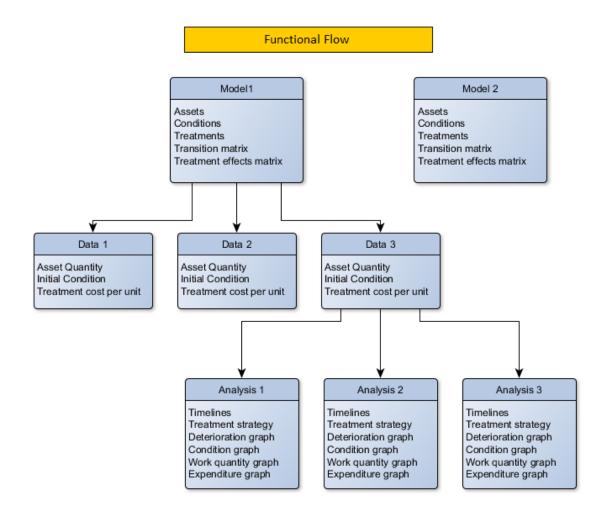
Confirm Strategic Asset Management is a web based application that allows asset managers predict long term condition of their assets using current condition and applying algorithms. It also allows asset managers to assess cost of maintenance over long term to meet their service levels. Confirm Strategic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

Confirm Stock Management

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

Confirm Web Reporting

The Web Reporting functionality can be used to create and run custom reports on the web.

In this section

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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.

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.

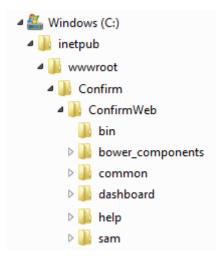
These prerequisites are available within the Prerequisites directory of the Confirm media.

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.



- 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.

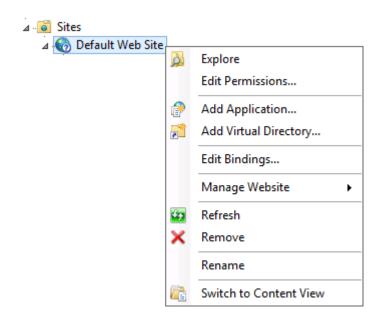
Settings	Values
.Net Framework	Set to 'v4.0'
(Applicable for 64 bit machines only)	Set to 'True' (This is set in the 'Advanced Settings'.)
Enable 32-Bit Applications	
Managed Pipeline	Set to 'Integrated'
Identity	To view attachments on Job Tasks within Confirm- Workzone® an identity will need to be set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

Add Application Pool ? X
Name:
ConfirmWeb
.NET <u>C</u> LR version:
.NET CLR Version v4.0.30319 $$
<u>Managed pipeline mode:</u>
Managed pipeline mode:

Adva	anced Settings		?	×
~	(General)			^
	.NET CLR Version	v4.0		
	Enable 32-Bit Applications	True		\sim
	Managed Pipeline Mode	Integrated		
	Name	ConfirmWeb		
	Owners I are at h	1000		

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*.



The Add Application window will appear.

Add Application	?	\times
Site name: Default Web Site		
Path: /		
<u>A</u> lias: App <u>l</u> ication pool:		
ConfirmWeb ConfirmWeb	S <u>e</u> lect	
Example: sales		
Physical path:		
c:\inetpub\Confirm\ConfirmWeb		
Pass-through authentication		
Connect as Test Settings		
Enable Preload		
ОК	Cancel	

- 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

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\Con- firm\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.
- 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.
- 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:

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

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

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

ConfirmWeb Map Symbol System Settings URL: https://ConfirmWebServer/ConfirmWeb/app/in-dex.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*.

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.

Features View 📑 Content View

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



MIME Types

Use this feature to manage the list of file name extensions and associated content types that are served as static files by the Web server.

Group by: No Group	ing 🔹	
Extension	MIME Type	Entry Type
.json	application/json	Local
.woff	application/font-woff	Local
.woff2	application/font-woff2	Local

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.

Add MIME Type ? ×
File name <u>e</u> xtension: .json <u>M</u> IME type: application/json
OK Cancel

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

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.

Program Name	View	Update	Add	Delete	^
🗾 Site Register	✓	✓	✓	✓	
💽 Asset Register	✓	✓	✓	✓	
E Strategic Asset Management	✓	✓	✓	✓	
Strategic Asset Management (Security)		✓			
🛨 Map	✓	✓	✓	✓	
Network Manager	✓	✓	✓	✓	
Asset Valuation	✓	✓	✓	✓	
🗩 Data Analyser	✓	✓	✓	✓	
🗲 Asset Maintenance	✓	✓	✓	✓	

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.

Program Name	View	Update	Add	Delete	*
Customer Services					
Fast Entry Enquiries		V			
Fast Entry Issues	1	1			_
Officer Enquiries	V	1	1	1	Ξ
Clear Links (Security)	1	1	1	1	
Bookings	V	1	1	1	
Enquiry Trace Form	V	1	1	1	
Contractor Notification	V	1	1	1	
Letter Batch	V	1	1	1	
Outstanding Enquiries	1	1	1	V	Ŧ

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.

Program Name	View	Update	Add	Delete
🗾 Site Register			\checkmark	
🕖 Asset Register	\checkmark		\checkmark	
🗩 Strategic Asset Management			\checkmark	
🖃 Map	\checkmark	\checkmark	\checkmark	
Мар	\checkmark	\checkmark	\checkmark	\checkmark
Map Workspace Manager	\checkmark	\checkmark	\checkmark	\checkmark
Feature Map Layer Import	\checkmark	\checkmark	\checkmark	\checkmark
Map System Settings	\checkmark	\checkmark	\checkmark	\checkmark
Web Mapping Configuration	\checkmark			
Embedded Mapping (Security)	\checkmark	\checkmark	\checkmark	\checkmark
🗩 Network Manager	\checkmark	\checkmark	\checkmark	\checkmark

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.

💌 Works Management	\checkmark	\checkmark	\checkmark	\checkmark
■ ConfirmWorkzone [®]	\checkmark	\checkmark	\checkmark	
Confirm Stock Management			\checkmark	
Confirm Stock Management User Access (Security)	\checkmark	\checkmark	\checkmark	\checkmark
Confirm Stock Management Admin Access (Security	\checkmark	\checkmark	\checkmark	\checkmark
➡ Performance Monitoring				\checkmark
Payment Processing	\checkmark		\checkmark	\checkmark

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

Configure the Confirm Web Reporting User Security

(This is applicable for Confirm Web Reporting only)

The user access can be set in the Confirm Client under *user security*. The user needs to have view access to Data Queries to be able to create or run reports on the web.

Program Name	View	Update	Add	Delete	$\mathbf{\wedge}$
Reporting					
Data Queries	\checkmark				
Reports	\checkmark	\checkmark	\checkmark	\checkmark	
Schema Report	\checkmark	\checkmark	\checkmark	\checkmark	
Dashboards	\checkmark	\checkmark	\checkmark	\checkmark	
Submit Analysis	\checkmark	\checkmark	\checkmark	\checkmark	
Analysis Instances	\checkmark	\checkmark	\checkmark	\checkmark	
Import Survey Analysis Data	\checkmark	\checkmark	\checkmark	\checkmark	
Analysis Templates	\checkmark	\checkmark	\checkmark	\checkmark	

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.

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:

Confirm® VIRIMAM	
Userane 1 Continue	

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.

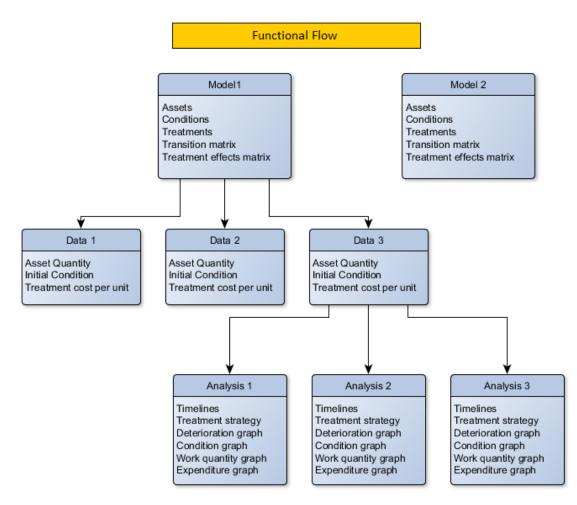
Please refer to Single Sign-on page for more information on Federated Security.

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

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:

Confirm [®] Strategic Asset Management				5851
Welcome t	o Confirm [®] Strategic Asset	Management		
	Get started in 3 easy steps!			
•				
Model	Data	Analysis		
A Model in Confirm Strategic Asset Management provide user with the capabilit define the asset groups that needs to be our with, the productive conditions they may be in port in time and tendence types applicable term.	ed define the total quantity of an Asset Group and it a its current condition distribution. It is associated	Analysis allows user to create scenarios or treatment strategen to assess long tem condition for a given Model and Data snapshot. It also allows user to assess magnetid expenditure and quantity of work for a scenario.		
	Court show the agen Start			

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

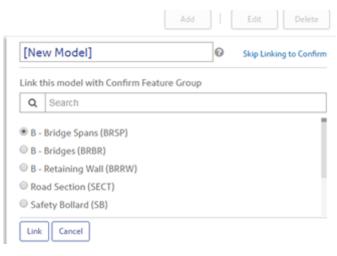
Creating Model is the first step in using Confirm Strategic Asset Management. A Model in Confirm Strategic Asset Management provides user with the capability to define the asset groups that need to be worked with, the probable conditions they may be in and treatment types applicable to them. This enables 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.

Confirm® Strategic Asset Management	Model	Deta	Anatysis	0	System Supervisor
Modele			Add	Edit	Delete

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. 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.

Der	no	0	Skip Observation
� Lir	nked to SECT 😣 Change		
Select	t the observation types applicable fo	or this model.	
Q	Search		1ª
🗹 Roa	rriageway Condition (COND) ad Markings/Studs Condition (RMCD eet Cleanliness (STCL)))	

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:

Demo	Ø
Linked to SECT O Change	Observation Types : 2 Selected Chang
Measurement Attribute:	Unit:
Section Length	▼ Linear Metres
Has Width Accet Groups (1)	
 Has Width Asset Groups (1) Conditions (2) 	

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

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.

Asset Group: Test Group 1	/	Average Width:	Expression:	
Expression:)
1				
+ - < >	Functions:		: D (feature_id) e (site_code)	

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.

Asset Groups (2)

Asset Group:	Avera	ge Width:	Expression:
Test Group 1		2.5	{Feature_Type} ="D1" A
Expression:			x
{Feature_Type} =	"D1" AND {Contrac	t_Area} = "PT	1
	Functions:	Columns:	
+ - < >	abs() cos()		(feature_id) (site_code)
× / <= >=	exp()	Site Name	(site_name)
= <> { }	if(,,) left(,)	Location (k Feature Ty	pe (feature_type)
]		pe (louidio_i)po/
OK Cancel	J		

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.

x

Conditions (5)

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.

Treatment Types:
Resconstruction
Layering
Patching
Routine
O Add More

. . .

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.

Model: Demo Asset Group: Test1 Unit: Lin	ear Metres Feature Group: Road Section			
 Transition Matrix Ø 				
		Condition after one year (Probability %)		
Current Condition	Excellent	Very Good	Poor	Δ
Excellent	45	35	20	0.00%
Very Good		60	40	0.00%

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.

Treatment Effects Matrix @

Treatment Types	Excellent	on Current Condition Very Good	Poor
Resconstruction	Not Applicable 💌	Excellent 💌	Excellent
Layering	Not Applicable 💌	Excellent 💌	Very Good 👻
Patching	No Change 💌	Excellent 💌	Very Good 👻
Routine	No Change 💌	No Change 🛛 🔻	No Change 👻

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]	0
Model:	
Demo	•
Preview Cancel	

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

Data: (New Dota) Model: Demo Feature Group: Road Section					Get Duta
	Initial Condition (%) in Base Year				
Quantity (Linear Metres)	Average Width	Excellent	Very Good	Poor	۵
0		0	0	0	100.00% 🚯

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

🗘 Syncing	wilindicate
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	may

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 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.

Treatment Costs Matrix (per Linear Metres) 😡			
		Condition(s)	
Treatment Types	Excellent	Very Good	Poor
Resconstruction	NA	900	900
Layering	NA	500	600
Patching	250	325	400
Routine	100	100	150 0

Analysis

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

New Analysis	0
Model:	
Demo	•
Data:	
[New Data]	•
Base Year: 2000	
Period (in Years):	
Show values in Quantity	
Preview Cancel	

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.

New Analysis			
Asset Group:			
Test1	•		
S Excellent		0%	•
Resconstruction	NA	A	Ireatment Strategy
Layering	NA	A.	t Stra
Patching		0	tmen.
Routine		0	Treat
🛇 Very Good		0%	٩
Resconstruction		0	
Layering		0	
Patching		0	
Routine		0	
🛇 Poor		0%	
	Preview	Reset	

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

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.

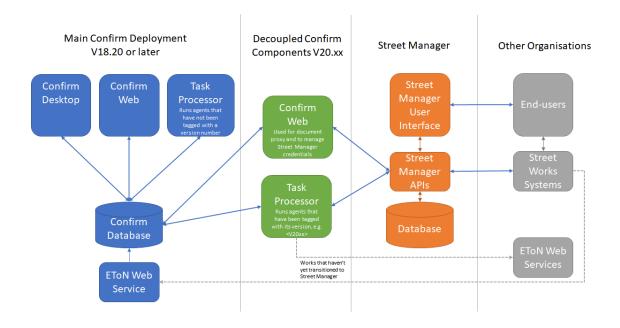
Compare: Allows two or more analysis sharing the same Model, Data and Base Year to be compared with each other for overall values.

Confirm interface with Street Manager

Introduction

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

To make it easier for customers to apply upgrades, 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 Processor takes over the role performed by the Street Works Transfer Agent.

Once the decoupled Task Processor has been installed, it is activated by "tagging" the 'Street Works Transfer' Agent in the Scheduled Tasks screen with the version number of the decoupled Task Processor, e.g. "<V21.20>". The act of tagging the scheduled task ensures that the "main" Task Processor no longer runs this task, allowing the decoupled Task Processor to take over.

Decoupled Confirm Web

Some additional settings are required in order to interface with Street Manager, mostly 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 Interface 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.

Release Notes

Release notes for version v21.20a.AM (Full Release)

The following changes have been incorporated:

- 1. Sending an Inspection is delayed if all the documents are not available when the Confirm Task Processor tries to send an Inspection. If the Inspection Outcome has the 'Risk Level' set to 'Higher' then default delay time is 15 minutes else 2 hours.
- **2.** The reason for the failure of the unsent notice can be found in the 'Transfer tab' when unsent notice is overridden by the incoming notice.
- **3.** The length of the 'Condition Text' field has been increased to 4000 characters to match the length in Street Manager.
- **4.** Time can be specified along with date in the Work Stop notice wizard. So, the time for the Work Stop notice is now sent to Street Manager in addition to the date.
- **5.** Wizard and Browser will now show 'Notifying Env. Health' instead of 'Outside Working Hours' for notices meant for Street Manager.

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 a generic email addresses on the 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, use the format <confirmcouncil>-promoter@ondemand.confirm.co.uk replacing <confirmcouncil> with your council name.
- Authority email address, use the format <confirmcouncil>-authority@ondemand.confirm.co.uk replacing <confirmcouncil> with your council name.

Please let us know at confirm.support@dudesolutions.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 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:

- 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/?tenant=<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-managerdocs/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.

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 takes over the role performed by the Street Works Transfer Agent.

Once the decoupled Task Processor has been installed, it is activated by "tagging" the 'Street Works Transfer' Agent in the Scheduled Tasks screen with the version number of the decoupled Task Processor, e.g. "<V21.20>". 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.

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.

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.

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.

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 difference 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.

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 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.

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

Inspections, Defective Apparatus and FPNs logged on EToN notices will be sent to Street Manager using the "historic works" mechanism.

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.

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.

Table 1: Street Works

Confirm Ac- tion	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 Immedi- ate 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 > Modific- ation request	Available	
Modified Applic- ation	Request a change	Available	
Works Data Variation	Request a change	Available	
Duration Vari- ation Applica- tion	Request a change	Available	
Duration Chal- lenge Non-Ac- ceptance	Not available	Available	Will be sent as a works com- ment
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 excav- ation required? > Change	Available	(Out of scope) Don't currently change the excavation status if

Confirm Ac- tion	Street Manager Action	Status	Notes
			this is edited on the Works Stop.
Revert Work Stop	Revert works stop	Available	
Error Correc- tion	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 Ac- tion	Street Manager Action	Status	Notes
New Inspec- tion	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 inspec- tions will be sent to Street Man- ager

Table 3: Street Works Licences

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

Confirm Ac- tion	Street Manager Action	Status	Notes
			Currently only planning to ex- port Section 50s to Street Man- ager, not import

Table 4: Defective Apparatus

Confirm Ac- tion	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 re- corded in Confirm
Defective Ap- paratus (issue to new pro- moter)	Reassign Section 81 to another organisation	Available	The Section 81 will be reas- signed to the new organisation along with the Inspection.
Cancellation	Cancel Section 81	Available	
Promoter Comment	Acknowledge	Available	Import only.
Defective Ap- paratus Non- Acceptance	Rejected	Available	
Defective Ap- paratus Accept- ance	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 Appar- atus 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 Accept- ance" 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 Ac- tion	Street Manager Action	Status	Notes
New Registra- tion of Non-No- tifiable Works	Add reinstatement of non-notifiable works	Available	

Table 6: Unattributable Works

Confirm Action	Street Manager Ac- tion	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 Is- sue 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 Unattrib- utable 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 "Unat- tributable Works Accept- ance" 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 Ac- tion	Street Manager Action	Status	Notes
	Issue an FPN Issue FPN to historical works	Available	Only FPNs will be sent to Street Manager, not candidate Of- fences.
Offence > Ac- tions	FPN action	Available	Only the Cancellation (with- draw) and Paid statuses will be exported from Confirm.

Table 8: Designations

Confirm Ac- tion	Street Manager Action	Status	Notes
Site > Designa- tions > S58 Restriction	Add activity to the map	Available	
Site > Designa- tions > 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 Ac- tion	Street Manager Action	Status	Notes
New Event Di- versions	Add activity to the map	Available	
Edit Event	Change activity detail	Available	
(Event) Cancel- lation	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 Ac- tion	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 Correc- tion	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

(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 gener- ated where NCT codes are used in the Variation Com- ments. Conditions will only be added or updated, never re- moved.
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

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 gener- ated where NCT codes are used in the Variation Com- ments.

Cancellation

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

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:

Street Manager Sec- tion 81 Type	New Inspection Cat- egory Code	New Inspection Category Name
Tee/valve/access cov- ers	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 encroach- ing 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.

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	Street Works > Transfer > File Name		
	Street Works > Project Refer- ence		
	Street Works > Project Descrip- tion		
	Street Works > Works Ref. (Import)		
USRN	Street Works > Street		

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 author- ity	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 Foot- way and Verge checkboxes in Street Manager.
			If no suitable text is found in brackets then defaults to Car- riageway.
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 > Description (Import)	See table above. If no matching lookup is found the existing Ap- paratus Inspection Category will be used	
Severity	Inspection > Outcome		
Made safe by HA	Inspection > Outcome > Au- thority Ac- tioned	If set to yes then the appropri- ate Authority Actioned outcome will be selected as per the table above	
Inspector name	Inspection > Officer > Name		
Inspector con- tact details	Inspection > Officer > Tele- phone Number		
Additional de- tails	Inspection > Comments		
	Inspection > Site Informed	Not set	Will be appended to Additional details if checked

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.

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.

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 > Descrip- tion	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 > Con- tacts > Owner Name	May be truncated by Street Manager.
Contact details	Street Works > Con- tacts > Owner (remain- ing details)	May be truncated by Street Manager.
Start date	Street Works > Start Date	
End date	Street Works > Estim- ated End Date	
Activity location	Street Works > Loca- tion	Extracted from the location text if supplied in brackets, e.g. a location text of "o/s 45 (Footway

Street Manager Field	Confirm Field	Notes (When exporting from Confirm to Street Manager)
		and verge)" would set the Footway and Verge checkboxes in Street Manager.
		If no suitable text is found in brackets then de- faults to Carriageway.
Activity location descrip- tion	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).

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, relat- ing to S54, S55 and S57 of- fences, will not be exported to SM. An error will be logged in Confirm.
Location	Offence > Loc- ation (Import)		The Location displayed in Street Manager is derived from the

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
			works so cannot be set when creating an FPN.
Offence date	Offence > Of- fence Date		
Offence details	Offence > De- scription		Location and Description will be appended together on export.
	Offence > Loc- ation (Export)		
Authorised of- ficer name	Penalty > Ac- tion Officer		
Officer contact details	Action Officer > Telephone Number	Will be added to the Offence > Notes	
Officer address	Organisation > Address	Not imported	Will be set to "Not provided" if the Authority Organisation Ad- dress is blank
How payment can be made	Organisation > Fixed Penalty Notice Pay- ment	Not imported	"Card payment" will be included if either the Web Site URL or Credit Card Contact Number are specified.
			"Cheque" will be included if any of the Cheque fields are popu- lated
			"Bank transfer" will be included if any of the BACS details are populated or if none of the FPN Payment fields are populated.
			"Cash" will never be included.
Contact for representa- tions	Street Man- ager System Settings > FPN Contact for Representa- tions	Not imported	Will be set to "Not provided" if there is no Setting
Contact ad- dress for rep- resentations	Street Man- ager System Settings > FPN Contact Ad- dress for Rep- resentations	Not imported	Will be set to "Not provided" if there is no Setting
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	If Amount Paid is less than the Full Amount, then exported as Paid with Discount. Otherwise exported as paid.

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)	
		Penalty, otherwise will be set to the Full Amount		
Accept > Addi- tional details	Offence > Notes Street Works Comment > Text	Imported as FPN comments with details mentioned in de- scription field.	Not exported to Street Manager	
Dispute > Reason for dis- pute	Offence > Notes Street Works Comment > Text	Imported as FPN comments with details mentioned in de- scription field.	Not exported to Street Manager	

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.

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 zero. USRN with Road category 2 is not supported. TBA - what to do about it? TBA create street on the fly if doesn't exist	Leading zeros will be stripped. If street is not found in Street Manager then notification won't be sent.

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
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 In- terest, sorting by Organisation Name.	
		TBA. If none found will create one on the fly.	
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 automat- ically by 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 desig- nation types from Confirm. Only the applicable designations are pushed.
Location area	ocation area Does not exist Appended to		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 con- tact number	Street Works > Contacts > Owner > Phone		Derived by Street Manager
	Street Works > Contacts > Owner > Ad- dress	Populated from the Organisa- tion Contact details stored in Confirm	Derived by Street Manager
Workstream	Workstream Street Works > Not used. Confirm Promote From Organisation is determined matching the first 5 charact of the Works reference aga DfT Ref 2 of live Organisation		Last 3 digits of Dft Ref 2 from the Promoter Organisation
Street Works > Contacts > Agent > Name			lgnored

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
	Street Works > Contacts > Agent > Phone		lgnored
	Street Works > Contacts > Agent > Ad- dress		lgnored
Project refer- ence 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 immedi- ate plans to change this.
Description of work	Street Works > Description		
	Street Works > Excavation Type		lgnored.
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...

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

Notice Type Code	Notice Type Name	
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.

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 not be sent and a Transfer warning will be recorded.

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	If a Notice Type cannot be found with a Code matching the refusal reason then the refusal	

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
	Street Works > Transfer > No-		and/or the Notice Type spe- cified.
tice	tice comments	If more than one Reason code is supplied then the second and subsequent Reasons will be prepended to the Notice Com- ments.	If the Confirm Notice Type Code 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			For Modification Requests, if
Modification request details	Transfer > No- tice comments		the selected Conditions or Condition Text has been changed then the details of the
Grant with dur- ation challenge			change will be appended to the Modification request details.
> Details			For refusals, if there are no no- tice comments, refusal details will be defaulted to 'None sup- plied.'
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

Inspection Results

Key Differences from EToN

Editing Inspections

At the moment Street Manager doesn't allow an Inspection to be edited after it has been logged, whereas EToN had the ability to update an Inspection, for example if an agreement was made after the joint site visit.

At the moment editing and re-sending an inspection will send details of edits as a works comment.

Inspection Type and Category

Street Manager defines inspections at a high level as three different types: Live Site, Reinstatement and Non-compliance follow-up. These are sub-divided into categories which are similar to those in EToN. As for EToN, the category determines what outcomes are valid.

Inspection Categories in Confirm will be mapped to Inspection types and categories in Street Manager according to the DfT references. Inspection Categories with no DfT references or combinations not listed (e.g. "All Categories" and "Non Categorised Inspections") will not be sent to Street Manager.

Dft Ref. 1	Dft Ref. 2	Confirm Inspection Category Name	Inspection Type	Inspection Category
9	Any	Category A	Live site	Category A
10	Any	Category B	Reinstatement	Category B

Dft Ref. 1	Dft Ref. 2	Confirm Inspection Category Name	Inspection Type	Inspection Category
11	Any	Category C	Reinstatement	Category C
14	Any	Occupancy	Live site	Site occupancy
15	Any	Permit Conditions	Live site	Conditions
16	Any	Apparatus	Section 81	
Any	2	Defect Follow Up	Non compliance follow Follow up	
Any	4	Defect Follow Up Com- pletion	n- Non compliance follow Follow up comple	
Any	6	Defect Joint Inspection	on Non compliance follow Joint site visit	
Any	5	Third Party Report	See note below	Third party
	7	Routine	See note below	Routine

Note that for DfT Ref. 2 values of 5 and 7 (Third party and Routine) the Inspection Items will be queried to determine if it is a "Live site" or "Reinstatement" inspection based on the DfT Ref. of the Item's associated Inspection Group. If failures are recorded in Item Groups with a DfT Reference of 3 the inspection will be classed as "Reinstatement", otherwise it will be classed as "Live site". If a mix of items are included then two inspections, one of each type, will be created. If no items are marked as failed then the inspection will be recorded as "Live site" unless the outcome is a failed Reinstatement outcome in which case it will be set to 'Reinstatement'.

Inspection Outcomes

Street Manager allows different Inspection outcomes depending on the Inspection category. The following tables show how the outcome is derived from the Confirm Inspection Outcome:

Street	Managei	⁻ Fields	Direc-		Confirm Fields			
Inspection out- come	Live site	Were the non compliant is- sues fixed? Made safe by HA?	tion	DfT Ref. 1	Dft Ref. 2	Author- ity Ac- tioned	Usual Inspec- tion Outcome Name	
Category A, B 8	C, Thire	d party, Routine,	Follow u	up and F	ollow up	comple	tion	
Passed				1			Passed	
Failed - high	Yes	No		2	1		Failed - Higher - SLG	
	Yes	Yes		2	5		Failed - Higher - HA Actioned	
	No			2	3		Failed - Higher - Reinstatement	
Failed - low	Yes	No		3	2		Failed - Lower - SLG	
	Yes	Yes		3	5		Failed - Lower - HA Actioned	
	No			3	4		Failed - Lower - Reinstatement	

Street I	Manage	r Fields	Direc-				lds
Inspection out- come	Live site	Were the non compliant is- sues fixed? Made safe by HA?	tion	DfT Ref. 1	Dft Ref. 2	Author- ity Ac- tioned	Usual Inspec- tion Outcome Name
Unable to com- plete inspection				4			Abortive
Joint site visit			•	•	•	•	
Further inspec- tions required			Export	2 or 3	Any		Any Failed out- come
			Import	3	5		Failed - Lower - HA Actioned
Agreed site compliance				1			Passed
Unable to com- plete inspection				4			Abortive
Apparatus			•	•	•	•	
Passed				1			Passed
Failed - high		Not required		2		No	Failed (Higher Risk/Dangerous)
		Yes		2		Yes	Failed (Higher Risk) HA Ac- tioned
Failed - low		Not required		3		No	Failed (Lower Risk) HA Ac- tioned
		Yes		3		Yes	Failed (Lower Risk/Non Dan- gerous)
Unable to com- plete inspection				4			Abortive
Site occupancy			•	~		<i>.</i>	
Works stopped - Apparatus re- maining				8			8 - Works Stopped - Appar- atus Remaining
Works in pro- gress - No car- riageway incur- sion				7			7 - Works in pro- gress – No c- way incursion
Works in pro- gress				6			6 - Works in pro- gress
Works stopped				5			5 - Works Stopped
Unable to com- plete inspection				4			4 - Abortive
Conditions							

Street Manager Fields			Direc-		Co	Confirm Fields	
Inspection out- come	Live site	Were the non compliant is- sues fixed? Made safe by HA?	tion	DfT Ref. 1	Dft Ref. 2		Usual Inspec- tion Outcome Name
Passed				1			1 - (Passed)
Non compliant (with conditions)				9			9 - Non-Compli- ant (with Condi- tions)
Unable to com- plete inspection				4			4 - Abortive

Inspection Items

Inspection Items don't exist in Street Manager but have been replaced with Non compliance areas which do overlap with Inspection Items to some extent but also have some significant changes such that a one-to-one mapping is not possible. The following approach is proposed to aid transition:

- New Inspection Items types will be added to Confirm for Non compliance areas that do not have corresponding Inspection Items. These Inspection Items will have DfT references that correspond to the most suitable EToN equivalent, e.g. "Signing Lighting & Guarding - Cyclist provision" will be mapped to EtoN Inspection Item "7. Sign Light and Guard Other".
- Inspection Item types that do not have a one-to-one corresponding Non compliance area will be moved into the "No longer used" Inspection Group
- This will allow inspectors to start using the new Inspection Items whilst ensuring that these can still be transmitted over EToN if required
- Note that new Inspection Items will have numbers in the 100 range to avoid clashes with any custom items users have created. The Street Manager adapter will initially be hard-coded to work with these Item Numbers, so if users add their own Inspection Items these will not be sent to Street Manager

EToN allows multiple sites to be specified on a Reinstatement inspection whereas in Street Manager there is only the option to optionally specify the Site number against Non compliance areas. If multiple sites are recorded on a Confirm Inspection (multiple Inspections with linked Sites) then a separate Street Manager inspection will be created for each Site, so there will always be one Street Manager inspection for every Inspection exported from Confirm.

Conversely, when inspections are imported into Confirm a separate Inspection will be created for every Site referenced in the Non compliance areas.

The following existing inspection items will be mapped directly to Street Manager non-compliance areas. Items that do not have a direct mapping will be moved to the "No Longer Used" Inspection Group:

Existing Dft Reference and Name	Street Manager Non-compliance area
1 Signing and Guarding (Signs)	Signing Lighting & Guarding - Signage
2 Signing and Guarding Distance	Signing Lighting & Guarding - Distance(s)
3 Signing and Guarding Safety Zone	Signing Lighting & Guarding - Safety zone
4 Signing and Guarding Barriers	Signing Lighting & Guarding - Barriers
5 Signing and Guarding Traffic Control	Signing Lighting & Guarding - Traffic control
6 Signing and Guarding Pedestrian Control	Signing Lighting & Guarding - Pedestrian provi- sion

Existing Dft Reference and Name	Street Manager Non-compliance area
7 Sign Light and Guard Other	No Longer Used
8 Excavation	No Longer Used
9 Backfill Apparatus Surround	Excavation, Backfill & Reinstatement - Equip- ment
10 Backfill Material	Excavation, Backfill & Reinstatement - Materials
11 Backfill Compaction	Excavation, Backfill & Reinstatement - Compac- tion
12 Backfill Sub-Base	No Longer Used
13 Backfill Base (Roadbase)	No Longer Used
14 Backfill Binder Course (Basecourse)	No Longer Used
15 Backfill Surface Course (Wearing Course)	No Longer Used
16 Backfill Other	No Longer Used
17 Reinstatement Edge Depression	Performance - Edge depression
18 Reinstatement Edge Cracking	Performance - Interface cracking
19 Reinstatement Trips	No Longer Used
20 Reinstatement Surface Depression	Performance - Depression
21 Reinstatement Crowning	Performance - Crowning
22 Reinstatement Texture Depth	Performance - Texture depth
23 Reinstatement Surface Regularity	No Longer Used
24 Reinstatement Other	No Longer Used
25 Structure	No Longer Used
26 As Laid Profile	Performance - As laid profile
27 Profile and Structure Other	No Longer Used
28 Signs Equipment Type	No Longer Used
29 Barriers Equipment Type	No Longer Used
30 Traffic Control Equipment Type	No Longer Used
31 Pedestrian Control Equipment Type	No Longer Used
32 Qualified Operative	Signing Lighting & Guarding - Operative qualific- ation

The following Street Manager non-compliance areas will be added as new Inspection Items. DfT References will be assigned so that these new Items can start being used whilst still working with EToN:

Existing Dft Reference and Name	Street Manager Non- compliance area	Existing Dft Reference and Name	Street Man- ager Non- compliance area
Signing Lighting & Guard- ing - Cyclist provision	7 Sign Light and Guard Other	SLG - Cyclist provision	101

Existing Dft Reference and Name	Street Manager Non- compliance area	Existing Dft Reference and Name	Street Man- ager Non- compliance area
Excavation, Backfill & Rein- statement - Storage of ma- terials	10 Backfill Material	Excavation - Storage of materials	113
Excavation, Backfill & Rein- statement - Construction layers	12 Backfill Sub-Base	Backfill - Construction lay- ers	111
Quality - Saw cutting	24 Reinstatement Other	Quality - Saw cutting	126
Quality - Acute angles	24 Reinstatement Other	Quality - Acute angles	121
Quality - Verge	24 Reinstatement Other	Quality - Verge	127
Quality - Anti-skid	24 Reinstatement Other	Quality - Anti-skid	122
Quality - Fixed features	24 Reinstatement Other	Quality - Fixed features	123
Quality - Modular	24 Reinstatement Other	Quality - Modular	124
Quality - Proximity	24 Reinstatement Other	Quality - Proximity	125
Quality - Damage to sur- round area	24 Reinstatement Other	Quality - Damage to sur- round area	128
Materials - Incorrect	24 Reinstatement Other	Materials - Incorrect	133
Materials - Damaged	24 Reinstatement Other	Materials - Damaged	131
Materials - Edge sealant	24 Reinstatement Other	Materials - Edge sealant	132
Materials - Over-banding	24 Reinstatement Other	Materials - Over-banding	136
Materials - Road markings	24 Reinstatement Other	Materials - Road markings	137
Materials - Infill/Pointing	24 Reinstatement Other	Materials - Infill/Pointing	134
Materials - Ironwork/Appar- atus	24 Reinstatement Other	Materials - Ironwork/Appar- atus	135
Performance - Breaking out/fretting	24 Reinstatement Other	Performance - Breaking out/fretting	141

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Inspection type	Inspection > Category	See section above	See section above
Inspection cat- egory	Inspection > Category	See section above	See section above
Inspection date	Inspection > Inspected		
Inspection start time	Inspection > Inspected		
Inspection out- come	Inspection > Outcome	See section above	See section above

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Made safe by HA	Inspection > Outcome > Au- thority Ac- tioned	See section above	See section above
Outcome de- tails	Inspection > Comments Inspection > Outcome > Name		Outcome details can only be supplied for "Unable to com- plete inspection" and "Non- compliant (with Conditions) outcomes. For all other out- comes the Inspection Com- ments will be appended to the Additional comments. If Comments are not supplied but the Outcome details are
			mandatory then the Inspection Outcome name will be used
Non compli- ance areas	Inspection > Items		See section above. Only failed items are recorded.
			Note that Street Manager does not allow Non compliant areas (Inspection Items) to be recor- ded for Joint site visit inspec- tions, so any items recorded in Confirm will not be passed to Street Manager.
Non compli- ance area > Site(s)	Inspection > Site No.	If there are no Non compliance areas, or none reference any Site, then the Inspection will be created against the primary Site (Site 1). If multiple Sites are referenced then an Inspection will be created for each Site with all details (apart from the Inspection Items) being identic- al. Any Inspection Items that do not mention a Site will be in- cluded on all generated Inspec- tions	Will only be set for Reinstate- ment inspection types.
Non compli- ance area > Details	Inspection > Items > Notes		If no Notes have been entered on the Item the Inspection > Defect Notes will be used
Inspector name	Inspection > Officer > Name (export) Inspection > Inspection Notes (import)	The Inspection Notes will be populated with the Inspector name. The Officer will be set to the system default.	
Non compliant issues fixed	Inspection > Outcome	Used to determine whether HA Actioned Outcome is used. If yes will also be appended to the Defect Notes	If Inspection Outcome > Author- ity Actioned is checked then set to "Yes, by inspector", other- wise set to "No"

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
	Inspection > Defect Notes (import)		
Has the pro- moter been contacted?	Inspection > Logged Call		
Call contact	Inspection > Inspection Notes (import)	Appended to the Inspection Notes	Note this isn't strictly correct as the contact should be the pro- moter contact, but using the authority contact in the absence of an alternative field
Call reference number	Inspection > Inspection Notes (import)	Appended to the Inspection Notes	Not populated
Call summary	Inspection > Logged call date (export)	Appended to the Inspection Notes	
	Inspection > Inspection Notes (import)		
Additional comments	Inspection > Defect Notes Inspection > Comments	Inspection Comments in Con- firm will be populated where the Inspection Category does not allow Defect Notes to be entered (Apparatus, Occupancy and Permit Condition inspec- tions)	Inspection Comments will be appended to the Additional comments where the Outcome does not allow Outcome details to be supplied.
Reinspection	Inspection > Schedule a fol- low up inspec- tion	Ignored	Not set
Reinspection date	Inspection > Follow up Inspection > From	Ignored	Not set
Reinspection type	Inspection > Follow up Inspection > Category	Ignored	Not set
Attach photo evidence	Inspection > Document Links		
Works pro- moter	Inspection > Organisation	The promoter for the Works	Automatically populated by Street Manager
Highway au- thority	Inspection > Inspected by	The Highway Authority for the Works	Automatically populated by Street Manager
	Inspection > Inspection No.	The next sequential number for the Site being inspected	Not implemented

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
	Inspection > Inspection Units	Set to 1	Not implemented
	Inspection > Sampled	Will be checked for Category A, B and C inspections, otherwise will be unchecked	Not implemented
	Inspection > Linked Site	Not set	Not implemented
	Inspection > Group No.	The next sequential number for the Works	Not implemented
	Inspection > Unattributable	Will be checked for Apparatus inspections	Not implemented
	Inspection > Inadequacy	Defaulted from the Inspection Outcome	Not implemented
	Inspection > Easting	Not set	Not implemented
	Inspection > Northing	Not set	Not implemented
	Inspection > Defect Notifica- tion No.	Not set	Not implemented
	Inspection > Defect No.	Not set	Not implemented
	Inspection > Site Informed	Unchecked	Not implemented

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.

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.

Street Man- ager Field		Notes (When importing into Confirm from Street Manager)	
Works refer- ence number	Street Works > Reference		
Permit refer- ence	Not applicable	Ignored	

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm 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 zero.	Leading zeros will be stripped. 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 In- terest, sorting by Organisation Name.	
		See below for Private Streets.	
Road type	Street Works > Street Auth	If the Road type in Street Man- ager is "Private Street - No definition information held by Street Authority" then Confirm will prioritise Private Street In- terests 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 automat- ically by 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 desig- nation 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 Foot- way and Verge checkboxes in Street Manager.
			If no suitable text is found in brackets then defaults to Car- riageway.

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
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 Organisa- tion 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 refer- ence 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"
Is a TTRO re- quired	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 de- termined 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 dis- plays the later of the Reason- able Period (based on the agreed duration of the works) and the Prescribed Period (2 days). Street Manager does not	Derived. See note on left.

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
		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.	
Works cat- egory	Street Works > Works Type	HS2 Highway works are impor- ted 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.	Agreement Reference and Date appended together
	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 re- questing 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"
Activity type	Street Works > Phase Type	Phase Type will be set as appro- priate for the following activity types: Permanent reinstatement Re- medial works Core sampling And will be set to "Asset Activ- ity" for all others.	If the Phase Type in Confirm is "Asset Activity" then the Pro- moter Organisation's Interest will be examined. If the Interest Name contains the exact word- ing of one of the Activity Type options in Street Manager we will use this Activity Type. If not, then if the Promoter Organisa- tion Interest DfT reference is "Highway Authority (Works Promoter)" then "Highways Im- provement Works" will be used, otherwise "Utility Asset Works" will be used. If the Phase Type is not "Asset
			Activity" then the Activity type

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
			that matches the Phase Type will be used.
Description of work	Street Works > Description		
Excavation re- quired	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 Vari- ations 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 im- port.	Set to True if Excavation Type Dft Ref is between 14-18 else set to False.
Was an excav- ation carried out?	Street Works > Excavation Type	If this has been changed to "No" in Street Manager then the Excavation Type in Confirm will be updated using the above rules on receipt of the Works Stop	Will be set to "No" on export of the Works Stop if the Excava- tion Type changes from a "with excavation" type to a "no excav- ation" type. Note this cannot be changed from "No" to "Yes" - to do this a change must be requested via Street Manager
Required traffic management type	Street Works > Traffic Man.		
Footway clos- ure		Set if either of the "Yes" options are supplied. The specific op- tion details will also be appen- ded 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"
ls lane rental applicable	Does not exist	Ignored	Set to false
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

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Notifying envir- onmental 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 refer- ence 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.	Added to the Comments of the first non-mandatory condition.
		The text from each condition will be on a new line prefixed by the corresponding NCT code.	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 per- mit details	Street Works > Transfer > No- tice Comments		If Agreements other than early start are specified then details of these agreements will be ap-
	Street Works > Agreements (Export)		pended 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)	Street Works > Transfer > No- tice Comments Street Works > Agreements	Will be the first line of the Noti- fication Comments where other fields are also added to Notific- ation Comments	If Agreements other than early start are specified then details of these agreements will be ap- pended to the Reason for changes.
	(Export)		Will default to "None specified" if blank.

Reinstatements

Key Differences from EToN

Confirm has Sites / Trenches about which there can be multiple Registration Notices. This is essentially similar to Street Manager which has Reinstatement sites which shows details of each registration of that site, e.g. Interim and then Permanent. However, Street Manager doesn't allow updates to multiple Sites to be grouped together, so each individual update to a Site shows as a separate transaction in the Street Manager works history. When Confirm imports Site 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 has removed the need to specify the Construction Method for Interim Reinstatements and does not currently support the concept of Subsumed, Combined or Abandoned Sites. Subsumed, Combined or Abandoned sites will be exported as Excavation with L0.01m x W0.01m x D0.01m.

Street Manager has added some validation which does not allow an Interim Site to be converted to Permanent unless a new Permit has been started. This can potentially cause errors if Interim sites are Subsumed or Combined or if Interim sites are converted to Permanent during the same works phase. We've logged an issue with the Street Manager team to discuss relaxing this validation.

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Reinstatement type	Street Works > Sites > Status	Bar holes, Core holes and Pole testing map directly to the cor- responding Site Status. For Ex- cavation works the Reinstate- ment state (below) is used to determine Interim or Perman- ent.	Inverse of that described on the left
		If the Activity Type of the cur- rent works is Remedial then the Confirm Site Status will be set to the Remedial Status that re- sets the Guarantee period (un- der discussion with SM about how remedial reinstatements that don't reset the guarantee period are handled).	
Site location description	Street Works > Sites > Loca- tion		
Site location area	Street Works > Sites > Posi- tion	Street Manager allows multiple Site location areas to be spe- cified 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	

Field Mapping

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
		that appears in order of Car- riageway, 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 reinstate- ment 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	If the reinstatement is stored as a point in Confirm then this will not be supplied.
		coordinates	If the geometry of the reinstate- ment 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
Length	Street Works > Sites > Length		
Width	Street Works > Sites > Width		
Depth	Street Works > Sites > Depth Street Works > Sites > Status	Will be mapped to the range that applies (up to 1.5 meters or over 1.5 meters). Actual value will be appended to the Location. If the Depth is zero we will as- sume that the site is Aban- doned if the site has not had a previous Interim or Permanent	Up to 1.5m will be sent as 1.5m, over will be sent as 1.6m. For Abandoned, Subsumed and Combined sites the depth will be set to 0 TBA we could allow additional Depths to be added in Confirm, say in increments of 0.1m and
		registration, or Subsumed if it was previously registered.	then match based on these.
Number of holes (Bar holes, Core holes and Pole testing only)	Not available	Will be appended to the Loca- tion text	Will default to 1
Reinstatement date	Street Works > Sites > Date	Interim, Permanent and Guaran- tee date will be populated as appropriate depending on the status	
Reinstatement state	Street Works > Sites > Status	Sets the Interim / Permanent sub-status for Excavation Rein- statement types	

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
		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
Are you regis- tering the final site?	Street Works > Notice Type	If yes then the Registration (Full) Notice Type will be used, otherwise the Registration (Partial) Notice Type will be used.	Based on the Notice Type as described on the left
What is the total amount of inspection units?	Street Works > Inspection Units		
Not implemen- ted	Street Works > Sites > Con- struction Meth- od	Will be set to the Construction Method that has a DfT Ref. of 4 (Not applicable)	Ignored

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 a match with and without a leading zero.	Leading zeros will be stripped.

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
			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. If no matches found will use the first live Organisation with a Highway/Permit Authority In- terest, sorting by Organisation Name.	External Ref 1 from the Street Auth Organisation
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
Works refer- ence number	Street Works > Reference		
Reinstatement type	Street Works > Sites > Status		
Site location description	Street Works > Sites > Loca- tion Street Works > Transfer > No- tice 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 spe- cified 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 Car- riageway, 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 reinstate- ment 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

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Secondary site coordinates	Street Works > Sites > Map	If these are supplied Confirm will draw the reinstatement as a line between the two pairs of	If the reinstatement is stored as a point in Confirm then this will not be supplied.
		coordinates	If the geometry of the reinstate- ment 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 Loca- tion text	Will default to 1
Reinstatement date	Street Works > Sites > Date	Interim, Permanent and Guaran- tee date will be populated as appropriate depending on the status	
Reinstatement state	Street Works > Sites > Status	Sets the Interim / Permanent sub-status for Excavation Rein- statement 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 re- verting 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 Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	
	Street Works > Agreements > Date		

Revoke Permit

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
	Street Works > Transfer > Noti- fication Com- ments		A General comment with the reason for revoke is sent to Street Manager after the Revoke notice
Not currently implemented	Street Works > Conditions > Revoked Per- mit - Deadline	Not Set	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.

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)	
Activity refer- ence	tion > Com-	The "ARN" number generated by Street Manager will be stored in the Works Reference.	The Activity reference gener- ated by Street Manager will be appended to the Comments
	tion > Works	The Organisation will be determ- ined from the SWA Org code for the Activity, which can be	

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
	Site > Designa- tion > Organisa- tion (import)	seen in the first 4 digits of the Activity reference.	
Activity name	Site > Designa- tion > Designa- tion Site > Designa- tion > Works Ref	If the name contains the phrase "in force" then the appropriate In Force designation type will be used, otherwise the Pro- posed designation type will be used. If the phrase "58A" then the appropriate Section 58A designation type will be used, otherwise a Section 58 designa- tion type will be used.	The Designation name will be used, e.g. "S58 Restriction In Force" followed by the works reference in brackets.
		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 Man- ager. Otherwise a new designa- tion will be created (in that case Activity Reference will be used as Works Ref for the designa- tion). The Works Ref of the ex- isting EToN designation will be appended to the comments.	
		Activity name will be appended to the Description	
Contact organ- isation/name	Site > Designa- tion > Organisa- tion (export)	Will be appended to the Com- ments	The Organisation name will be supplied
	Site > Designa- tion > Com- ments (import)		
Contact details	Organisation > Contact (ex- port) Site > Designa- tion > Com- ments (import)	Will be appended to the Com- ments.	The contact phone number and email address will be exported
Start date	Site > Designa- tion > Effect From		
End date	Site > Designa- tion > Effect To		
Activity loca- tion area	Location (Ex- port) Site > Designation > Comments (import)	If not Carriageway will be appen- ded 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 Foot-

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
			way and Verge checkboxes in Street Manager.
			If no suitable text is found in brackets then defaults to Car- riageway.
Activity loca- tion description	Location	Applicable to will always be set to Partial	Will be sent as "Whole street" if Applicable to is set to "Whole"
Traffic manage- ment type	-	Ignored	Set to "No carriageway incur- sion"
Collaborative working	-	Ignored	Set to "No"
Additional in- formation	Description	If set to yes then "Made safe by HA" will be appended to the Description	Set to "Not Required"
Event or activ- ity 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.	If Applicable to Whole then will send as a polygon that is a 4m buffer around the Street geo- metry held in Street Manager. If this results in multiple poly- gons 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 point. For Confirm DB v20.2 and above, if the Applicability is Partial then will export the full geometry as available in Con- firm.
Cancelled reason	Will be appen- ded 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 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.

Field Mapping

Street Manager Field	Confirm Field	Notes (When exporting from Confirm to Street Manager)
USRN	Street Works > Streets	
Event or activity footprint	Street Works > Map	
Activity name or licence reference number	Street Works > Notice Type	Appended together. Note, may be truncated by Street Manager, e.g:
	Street Works > Descrip- tion	Cellar Works: New excavation for cellar (ABC1234)
	Street Works > Works Ref.	
Activity type	Street Works > Notice Type	If the Notice Type name matches a standard Street Manager Activity Type, otherwise "Section 50"
Contact organisa- tion/name	Street Works > Contacts > Owner Name	May be truncated by Street Manager.
Contact details	Street Works > Contacts > Owner (remaining de- tails)	Appended together. May be truncated by Street Manager.
Start date	Street Works > Start Date	
End date	Street Works > Estim- ated End Date	
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 descrip-	Street Works > Location	May be truncated by Street Manager.
Traffic management type	Street Works > Traffic Man.	Note can't be entered in Confirm - defaults from the Street Works Notice Defaults System Settings
Collaborative working	-	Set to "No"
Additional information		Appended together, e.g.:
	> Agent Street Works > Project	Agent: Agent Name, Address Line1, Address Line2, AG3 ANT, 012345678910
	Description Street Works > Project	Project: Major cellar renovations in Birdlip Estate (PROJ123-A)
	Reference	Early start agreed with Street Works Team
	Street Works > Transfer > Notice 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 refer- ence	Street Works > Transfer > File Name		
	Street Works > Project Refer- ence		
	Street Works > Project Descrip- tion		
	Street Works > Works Ref. (Import)		
USRN	Street Works > Street		
Location co- ordinates	Street Works > Map		Street Manager only displays it as a point.
Issuing author- ity	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 Foot- way and Verge checkboxes in Street Manager.
			If no suitable text is found in brackets then defaults to Car- riageway.

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
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)		
Inspector con- tact 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 Of- ficer
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 Manger will map to a new Comment Type. The following table summarises the changes:.

Street Man- ager Topic	Exist- ing or New	Confirm Com- ment 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

Field Mapping

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Торіс	Street Works Comment > Comment Type	Inspection and Section 74 top- ics 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 be- ing treated as "General" Com- ments 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 alphabetic- ally 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 >		We will use the API user (Au- thority or Promoter) that corres- ponds to whether the comment

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Confirm to Street Manager)
	Comment From	Otherwise the Highway Author-	came from the Promoter or Highway Authority. The Author- ity API user will be used for In- terested party comments.

Work Stop

Street Man- ager Field	Confirm Field	Notes (When importing into Confirm from Street Manager)	Notes (When exporting from Confirm to Street Manager)
Works stopped	Street Works > Actual End Date	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
			Note: Latest version of Con- firm client allows time to be specified along with date.
Was an excav- ation carried out?	Street Works > Excavation Type	Works in Confirm will be up- dated with the current value from Street Manager if this has been changed	Will be set to "No" on export of the Works Stop if the Excava- tion Type changes from a "with excavation" type to a "no excav- ation" type.
			Note this cannot be changed from "No" to "Yes" - to do this a change must be requested via Street Manager

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 or- ganisation 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	
Workstreams > Workstream name	Organisation > Name	This is prefixed with the Organ- isation 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	Organisation > Contact > Sur- name		
Workstream > Contact num- ber	Organisation > Contact > Phone	Will be set to "Unknown" if blank 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
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.

Location

The installer is 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\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 under Program Files (x86)\Confirm
- **2.** Login to the database with non-central schema e.g. HIGHWAYS/CONFIRM.
- 3. 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.

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/v2"
    } else {
        $Url = "https://api.sandbox.manage-roadworks.service.gov.uk/v2"
    }
    (New-Object System.Net.WebClient).Proxy.Credentials = [System.Net.CredentialCache]::De-
faultNetworkCredentials
    [Net.ServicePointManager]::SecurityProtocol = [Net.SecurityProtocolType]::Tls12
    try {
```

```
$authenticateResponse = (Invoke-RestMethod -Method POST -Uri "$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.

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 tenant logging settings for the Confirm Street Manager interface are located in the Confirm Task Processor Settings screen. The beta Task Processor for Confirm Street manager interface share these settings and append <Decoupled Task Processor version> prefix like <V21.20_> to the log file name. So for a Task Processor log file path of D:\Logs\TaskProcessor.log, the Street Manager interface creates D:\Logs\V21.20_TaskProcessor.log log file.

The Provider log settings for the beta Task Processor are specified under the 'HKEY_LOCAL_MA-CHINE\SOFTWARE\Wow6432Node\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 V21.12 to V21.20.

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.

* 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 im- posed 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 previ- ous Grant sent from Confirm to ensure that was sent to Street Manager. Make any manual corrections necessary in Street Manager*.
	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
	Modification Requests are only valid where there is no current permit	Refuse the most recent change from Street Manager with reasons. The

Error Message	Cause	How to Fix
modification on permits with a status of submit- ted		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 modifica- tion can only be requested on per- mits with a work category of stand- ard, 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. An active alteration already exists for this per- mit record	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 Man- ager*
A Promoter or HA imposed change can not be as- sessed	It is possible that the permit has already been granted in Street Man- ager	Compare the Street Manager history with the Confirm history to determine where the notices went out of sync and make corrections in Street Man- ager*
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. addi- tional_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 Notific- ation comments and re-send
Bad Request. The maximum duration	Self explanatory	Double-check the dates on the works

Error Message	Cause	How to Fix
for proposed works allowed is 5 years. Please make sure your timings fall within the permitted range.		
Cannot add a rein- statement as the work status is not in progress, com- pleted or non-noti- fiable	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 For- ward 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.	Use Compare with latest in the Con- firm history to investigate. For Author- ity Imposed Variations Street Manager only allows Conditions to be imposed and these must be prefixed by valid NCT codes in the text entered into Confirm. Ensure that NCT codes do not contain spaces and that leading zeros are included where appropriate, e.g. "NCT04b"
No Street Man- ager Authority cre- dentials 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 Man- ager Promoter credentials found for Organisation	Attempting to perform an promoter action for an organisation where no Promoter credentials are configured. Confirm currently does not support Contractor credentials.	Check that the DfT Ref 1 of the Woks Promoter Organisation for the Permit is set correctly
	Note: For contractors, please use Promoter credentials instead.	
Not found	Not able to find the referenced works in Street Manager	Check log files for the earliest men- tions of this works reference and con- tact technical support

Error Message	Cause	How to Fix
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 ap- plications	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 un- less 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 per- mit 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 for- ward planning in- formation.	Street Manager does not allow For- ward 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 un-ticked. 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 cor- rect the original error.
Duration Chal- lenge is not valid in this scenario	If a Duration Challenge is sent inde- pendently from the Grant or is not valid in the scenario then the Confirm Duration Challenge notice will not send and will have this transfer warn- ing	Please see the field mapping section on Granting with a Duration Challenge and refer to the Street Manager busi- ness rules on when this is allowed.
Bad Request. reasonable_peri- od_end_date must be on or after the original reason- able_peri- od_end_date and before the pro- posed_end_date	If a Grant with Duration Challenge is created in Confirm for any Variation notice but the reasonable period is not as per the rules set by Street Manager then only Grant is sent individually and Duration Challenge is marked unsent with transfer warning as - 'Duration Challenge is not valid in this scenario'.	Please see the field mapping section on Granting with a Duration Challenge and refer to the Street Manager busi- ness rules on when this is allowed.

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)	Contact Confirm team for SQL to de- lete the unsent comments
	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 applic- ation
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 refer- ence 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 No- tice truncated to characters. Ori- ginal 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 re- viewing the works
Unsent notice in Confirm is overwrit- ten by any incom- ing notice.	Since the notice is unsent (draft mode) so any notice on top of it overwrites it.	In Transfer tab's Transfer Warnings field, we store some of the information of overwritten notice for future use.

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
		If the comment relates to a Defective Apparatus notice then re-send the ori- ginal apparatus inspection. If the

Error Message	Cause	How to Fix
		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- 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 Man- ager.

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	1. Failed inspection item does not have any notes and there are no Defect notes	 Add notes to the item or Defect Notes and re-send the inspection Go through the process of logging
	2. Confirm will automatically remove any items that are not applicable to the inspection category before sending to Street Manager. For example, Backfill inspection items are not al- lowed on a Defect Follow-up inspec- tion	the inspection in Street Manager to determine the allowed inspection items for the category (no need to save the inspection) and ensure that only these items are used. It is advisable to up- date your Inspection Categories in Confirm to remove Inspection Groups that are not valid for Street Manager
Inspection cat- egory: does not map to a valid Street Manager inspection cat- egory.	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 sup- port Investigatory (core sample) inspec- tions. Use Third-party or Routine in- stead
Inspection Out- come: Passed/Abortive does not map to a valid Street Man- ager Section81 Severity. No Street Manager Promoter creden- tials found for Or- ganisation	Sending a second inspection on a Defective Apparatus that was previ- ously 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 organ- isations you initiate for to organisations that have the EToN Export flag checked. Note that for Defective Ap-	Check the EToN Export flag for the recipient. Note before changing this contact the Confirm team to obtain SQL to check for legacy inspections

Error Message	Cause	How to Fix
	paratus and Unattributable works the "to" organisation is the inspecting au- thority	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 ori- ginal coordinates	Ensure that an Easting and Northing are specified on the Inspection and re- send it.

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 Man- ager Offence Code.	Street Manager does not support No- tice 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

Error Message	Cause	How to Fix
Cannot read prop- erty 'length' of un- defined	This can occur if no withdrawal reason is supplied	Add a reason to the Offence Notes and resend the Withdrawal.
	Can occur if an historic FPN is against a EToN works that did not have origin- al coordinates	

Release History

Release notes for version v21.12a.AM.17742, 3rd May 2021

The following change have been incorporated:

1. Confirm now supports launching documents using Street Manager version 2 of the API.

Release notes for version v21.12a.AM.17711, 7th April 2021

The following issues were addressed:

- 1. Confirm now supports Street Manager V2 API and V1 API support has been deprecated.
- **2.** Street Manager now supports changing Excavation Type after Work Stop. Confirm creates an Error Correction Notice on importing this action.
- 3. Importing Reassignment of organisation for Section 81 defective apparatus.

Release notes for version v21.10a.AM.16667, 22nd March 2021

The following issues were addressed:

- 1. In some cases Historic Inspections would not export if the works had previously had coordinates but didn't have any on the most recent notice
- **2.** For incoming notices Directions was not getting set correctly and hence the validation warnings are not showing appropriately.
- **3.** Documents that cannot be sent earlier are resent successfully to the Street manager, whenever a retry happens on the next notice.
- **4.** Street Manager changed the sliding rules to be based on the selected designations on the works, not those that appear on the street.
- **5.** When Inspection is sent on-site that doesn't yet exist in Street manger" You must provide site_ids on an inspection against a work that contains a reinstatement".
- 6. Late submission warning appears on importing Immediate Permit Notice after 2 hours of creation.

Release notes for version v21.01a.AM.16212, 5th November 2020

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

- 1. Confirm was not matching the Street Manager deemed date where a Modified Applications was received where there was no Modification Request
- 2. Automatically append FPN payment methods and details for representations in the offence details
- **3.** 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.
- 4. Catering for the new "Was an excavation carried out?" field in Street Manager
- **5.** The actual start and end date of Activities (Events, Licences and Designations) can now be stored in Street Manager even if these are in the past

- 6. Ensure that certain types of Inspection do not cause import errors when text is too long
- 7. If Confirm attempts to send a Grant With Duration Challenge to Street Manager but this is rejected then ensure that the error given by Street Manager is logged
- 8. Help and release notes now available online as part of Confirm Web
- **9.** Duration Challenge notices will no longer be sent as works comments if they cannot be sent properly with the Grant
- **10.** If a Works Comment is imported on a works where the Authority is an Initiator and the Promoter is not then we will assume that the Comment came from the Promoter (currently always defaults to the Authority)

The following issues were addressed:

- 1. Fix the issue where Linked Inspections are not exported.
- **2.** Automatically reply with a standard works comment when permit applications are received on streets that are not subject to permitting or are privately managed
- **3.** 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
- 4. Transfer warnings for imported late Immediate Notices were not being logged
- 5. Allow inspection of historic Site numbers that haven't yet been migrated to Street Manager
- 6. Confirm will allow a permit to slide on a Traffic Sensitive Category 3 or 4 Street if the works themselves are not marked as Traffic Sensitive (consistent with Street Manager)
- 7. Ensure that duplicate FPNs are not created in Street Manager if an FPN is re-sent from Confirm for any reason
- 8. If a document fails to upload to Street Manager Confirm should retry the upload when the next notice / comment is sent

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

The following issue has been fixed:

1. 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:

- 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
- 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:

- 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
- 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.
- **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.
- **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
- **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.
- 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:

1. 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.
- **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.

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.

Confirm Customer Services

Intro

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

Search Enquiry

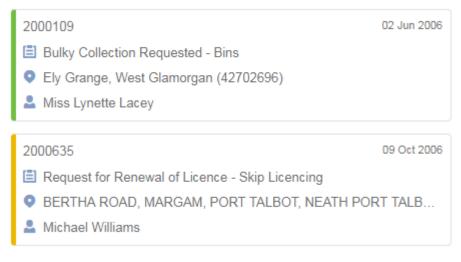
You can search for an Enquiry to view/edit its details.

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:

Color: Represents if the Enquiry is Outstanding (Amber)ornot Green).
Subject and Enquiry Type of Service.	: Enquiry
Enquiry.	: Site of the
Linked to the Enquiry.	: Customers

View Enquiry

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

<complex-block>Configned Construction Configned Construction Construction</

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.

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The map displays the location of the current Enquiry

	, plus any
Features,Jobs 😂	,
and Defects 📣 linked to the Enquiry.	
The map will also display any nearby Enquiries	
0	, Jobs
	, and Defects
A	

- 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'.

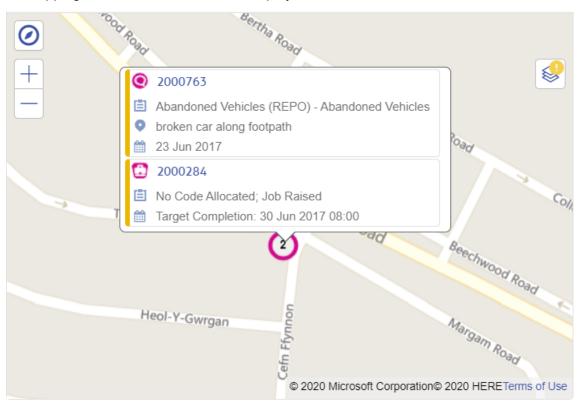
To hide/show nearby Enquires, Jobs, or Defects, click the layer control button on the map.

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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.



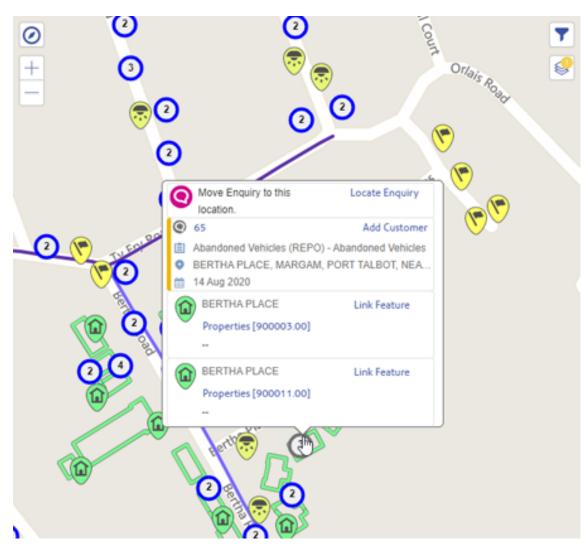
Map - Create Enquiry

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

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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.



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.



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.

🖹 Enquiry - 264		^	Commitments 1	
Subject* Carriageway Pothole (PROB) - Roads & Ca Site*			Fix Pothole Unresolved	1~
BERTHA PLACE, MARGAM, PORT TALBO Location [2] Outside No.42, near postbox.	T, NEATH PORT TALBOT (47700133)		Cocuments 2	
Description 12 Complete surface deterioration.			08 Oct 2018 4-48 PM First Pothole showing surrounding deterioration	
System Reference	Classification* Request for Information		08 Oct 2018 4-52 PM Second pothole near road entrance	
Gurrent Status		^		
Statu s INSP - Inspection Required (0060) Notes [2] Inspection required to provide accurate details. Logged By Paul Wenban	Assigned To Robert Wayne Effective Date* 06 Oct 2018 16.53 Follow up Date 15 Oct 2018 16.53			
C Status History		\sim		
Customer : Smith (242)		\sim		
			Add Customer Clo	se

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.

L Docume	nts 2		\sim
A	08 Oct 2018 4:48 PM	First Pothole showing surrounding deterioration	
K	08 Oct 2018 4:52 PM	Second pothole near road entrance	

Add Document

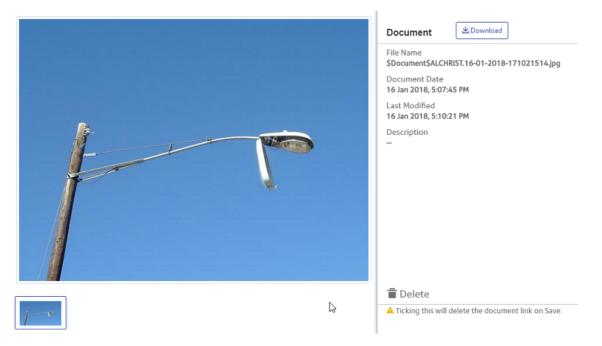
When creating or editing an Enquiry, it is possible to add a Document to an Enquiry to record any additional information coming via attachments. Use the Browse button to browse to any accessible location.

+ Add Document	
Location	
FallenBranch.jpg	Browse
Description	Date
Image of fallen branch prior to clear up	04 May 2018 12:34
Characters left: 1960	

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.

💄 Ci	ustomer : Mr Jeff	Williams (15	54)	^
				Make Anonymous
Surnan	ne*		Forename	Title
Q	Williams	0	Jeff	Mr

Linking an existing Job to an Enquiry

When linking an Enquiry to an existing Job, if the Job is at a Status with a linked Enquiry Status, the Status of the current Enquiry will be updated to match. If both the Enquiry Status is updated and the Enquiry is also linked to a Job at a Status with a linked Enquiry Status before saving, the Enquiry Status change will be applied first, and then the Job Status link will be applied after.

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.

- 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.

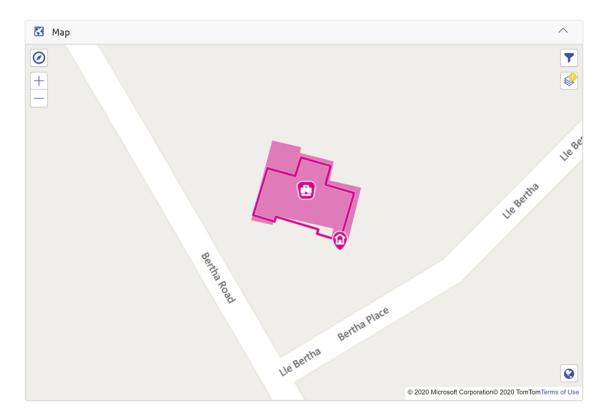
Document Panel

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

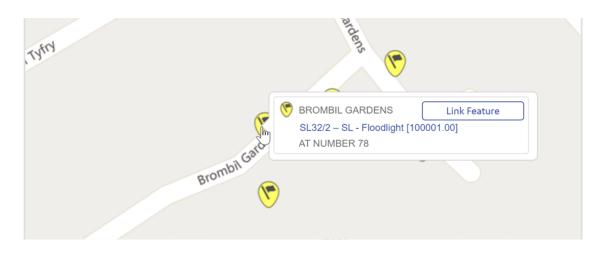
The Document panel will only be visible to users with Document User Security access. Any linked Defect document will be visible in the panel regardless of the user's Defect User Security settings. Enquiry documents will only be visible if the user has access to the Enquiry (via Enquiry Subject or Action officer data key security).

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

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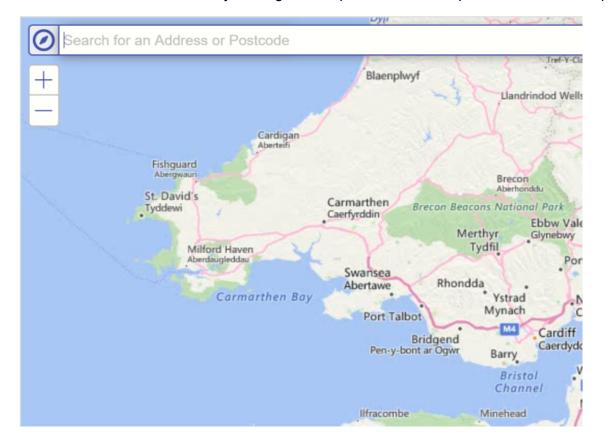
The Map displays the plotted Job Geometry. Job Geometry can be a Point, a Line, or a Polygon. If the Job itself does not have Geometry, the Point Geometry of the linked Feature is displayed. If the linked Feature also does not have Geometry, the Site Point Geometry is used instead.



The Map can also be used to change the Feature linked to the current Job. This can be done by clicking on the Feature symbol of the Feature you would like to link to (the Feature layer will need to be visible). This will bring up the Feature details which will include the 'Link Feature' button that you can click on to confirm the link. The Feature can be changed until the Job has been added to an Order. Linked Features must be from a Site with a Street Record Type applicable to Maintenance Management.

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

• 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 📣

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

Entity Information

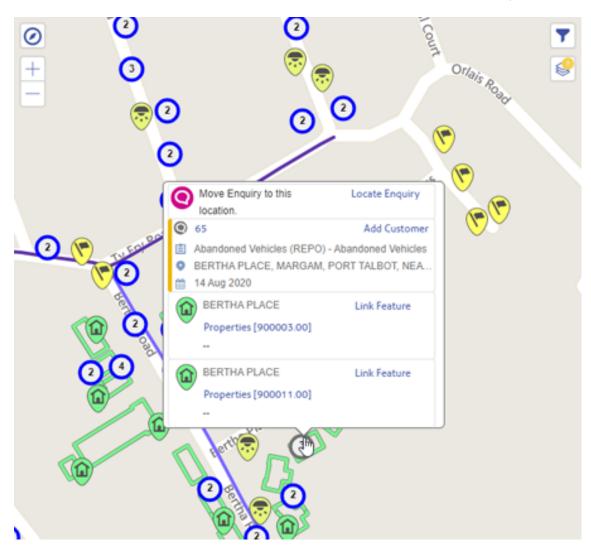
Clicking on any item on the map will display an info popup.

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.

00	Road	
+	2000763	ך 🔮
_	 Abandoned Vehicles (REPO) - Abandoned Vehicles broken car along footpath 23 Jun 2017 	Poad
	2000284	E I
	No Code Allocated; Job RaisedTarget Completion: 30 Jun 2017 08:00	Coll
		Beechwood Road
	Ŭ	Margam Road
	© 2020 Microsoft Corporation©	2020 HERETerms of Use

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



Layer Filter

Layers can be further filtered by Feature Identifier, Feature Group, Feature Type, Description, Location, Job Number, Job Type, Status, Enquiry Number, Subject, Service, Defect Number, and Priority by clicking the filter button at the top right of the map.



Confirm Feature Screen

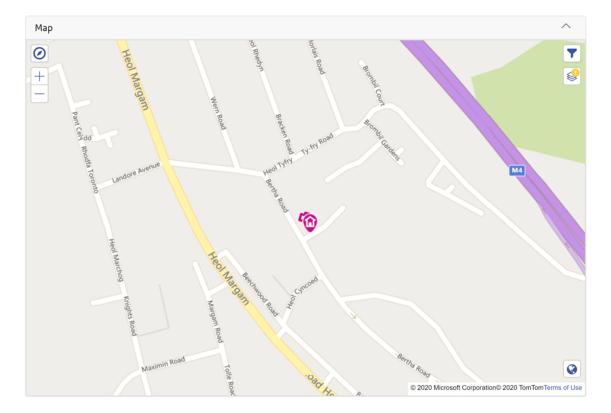
Introduction

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

Inspections							
AV - January 06 Road Section	Select item to view	ageway Anti Skid ng	1	Maxin	anad	<u> </u>	0
Inspections	Defect			VIGIN	(4) A48		
AV - January 06 Road Section	Job	ay Cracking nd Iron Wk	1		<u>47705080/100200 – Du</u> 	<u>ual 1-Lane [1002]</u>	
Inspections	Feature						
AV - January 06	8 Carr	riageway	1		-		

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

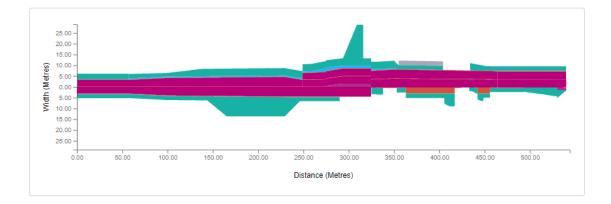
Мар



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.

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 its 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 Feature's Type and Cross Sectional Position.

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



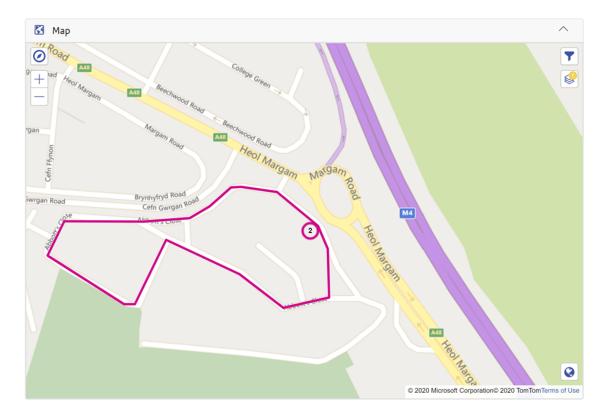
This component lists Surveys for the current Linear Feature which have a Start Date. If there are Observations available they are grouped by their Cross Sectional Position and plotted on a chart along the length of the Feature.

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.

Confirm Defect Screen



Мар

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.

Confirm Web - Reporting

Introduction

The Confirm Web - Reporting is a new web-based interface for creating and running reports.

The Reporting page can be accessed via the Confirm Web App launcher.

To access the Confirm Web Reporting, users will need 'View' access to the 'Data Queries' screen in their user Program rights in Confirm.

How to use Confirm Web - Reporting

The Confirm Web – Reporting screen is split into three sections:

- The **Select Tables & Columns** section, at the top left, where the tables and columns to be interrogated are selected.
- The Set Display Preferences section is found in the tabbed box at the top right-hand side.
- The **Set Filters** section is found on the other tab of the top right-hand box.
- The Report Results are seen along the bottom of the screen.

Select Tables & Columns

In this section users can select table(s) and corresponding column(s). Users can select multiple tables and columns to generate a report.

Clicking on the 'Search entities' box will list all available entities. Table and Column names are typically based on the names in Confirm.

For instance, Feature related tables can be found by searching for text 'feature'. To select columns available within Feature table, select Features which loads the Feature entity and lists available columns in search-able drop-down list, as seen below:

Confirm®	👯 🕜 Rahul Khazanchi
Reporting	Print Results Copy Results Run
1. Select Tables & Columns 😧	2. Set Display Preferences ② 3. Set Filters
featured featured featureAttributes	Report Name Image Maximum Height/Width (in px)
featureDotes featureGroups	1000 Display Layout Display as Table
featureMeasurements features	Columns:
featureTypos inspectionFeatures	

Columns can be selected from the list, or by searching using the 'Search entities' box.

The first table of the report, displayed at the top left is the root table. Linked tables may be opened to the right of the root table by selection from the 'Search fields' list. Linked Tables will be seen with a greater than (>) symbol at the end of their names.

Confirm®	🗰 🕝 Rahul Khazanchi
Reporting	Print Results Copy Results Run
1. Select Tables & Columns 🕑	2. Set Display Preferences 3. Set Filters
Q features	Report Name Report Name
Q Search fields	Image Maximum HeightWidth (in px)
dates >	1000
defects >	Display Layout
documents >	Display as Table 💌
anquiries >	Columns:
G featureType >	
hierarchyLevel >	
inspectionFeatures >	
i jobs >	

Set Display Preferences

This section is used to set the preferences for displaying the results.

Report Name	Apply a name for the report which can be used in header or footer in the PDF output. This setting is available only in the root table of the report and defaults to the root table name.
Image Maximum Height/Width (in px)	This setting determines the height and width for images that will be included in the report and can be specified as values between 30 and 9999 pixels.
	When one of the image dimensions - height or width exceeds the maximum size, it is reduced to meet the maximum size, and the aspect ratio is main-tained by reducing the other dimension.
	This setting is available only in the root table (first on the left) of the report and defaults to the 1000 pixels.
Table Name	This field is only available for tables other than the root table. It can be used to override the display name of the selected table. This field defaults to the actual table name.
Display Layout	This can be used to specify the layout of the selected table. Currently, three display options are supported:
	 Display as Table Display as Cards Display follows from parent. The parent table is the table immediately to the left of the selected table, and if this option is selected this layout will trickle down from the parent.
	This field defaults to the 'Display as Table' for the root table and for all other tables 'Display follows from parent' is used as default.
Columns Name	This can be used to override the display name of the columns in the selected table. Defaults to the actual column name.

'Report Name', 'Table Name(s)' and 'Column Name(s)' must:

- Be made up of only alphanumeric characters,
- Start with an alphabetic character,
- Have no spaces.

Special characters, except underscore '_', are not supported.

All Display Preferences are optional and if not specified then default values will be used while running the report.

Sample screen-shot is as below:

Reporting		Print Results Copy Results Run
1. Select Tables & Columns 😧	2. Set Display Prefer	ences 😧 3. Set Filters
Q features	Report Name	
i leatores	FeatureReport	
Q. Search fields	Image Maximum Height/	Width (in px)
≤ siteCode (Site Number)	800	
Z plotNumber (Sequence Number)	Display Layout	
2 centre/AssetId	Display as Cards	•
☑ location	Columns:	
Z notes	Columns:	
activeFromDate	siteCode	siteNumber
active ToDate		
D areaCode	plotNumber	sequenceNumber
¬ · •		
	centralAssetId	Enter New Display Name
	location	Enter New Display Name
	notes	Enter New Display Name

Set Filters

This is used to filter the results. Once the filter is applied to a table, it will display a filter icon

- Static filters will be applied every time the report is run unless the filter options are changed.
- Dynamic filtering is applied by selecting the 'Is Variable' checkbox. This means that the filter value must be entered each time the time the report is run.

Confirm®	🗰 💿 Rahul Khazan
Reporting	Print Results Copy Results Run
1. Select Tables & Columns 🛛	2. Set Display Preferences 🚱 3. Set Filters 🔻
Q features	filter 💌
Q Search fields	plotNumber 💌
I siteCode (Site Number)	equais 💌
Z plotNumber (Sequence Number)	🗾 Is Variable
C centralAssetId	
☑ location ☑ notes	
	· · · · · · · · · · · · · · · · · · ·
active ToDate	
areaCode	

Once a filter is set it can be removed by clicking the Clear Filter icon.

Running a Report

Clicking on the 'Run' button will display the results in the results panel, which is maximized by default. Users can toggle between the Result panel and the Settings panel as desired.

If one or more columns are indicated as variable(s) clicking on the run button will prompt the user to enter value(s) for the specified column(s).

Confirm®		📰 📀 Rahul K
Reporting	Enter All Variable Values	Print Results Copy Results
1. Select Tables & Columns 🚱	Features > Sequence Number (equals)	2. Set Display Preferences 🕢 3. Set Filters 🍸
Q features	200346	filter 💌
Q Search fields	Run Cancel	plotNumber
SiteCode (Site Number)		equals Variable
CentralAssetid		
🖬 notes		
activeFromDate activeToDate		
areaCode		

Populating the variables and clicking the 'Run' button on the Pop-Up will run the report and display the results.

The results can be saved in the PDF format by clicking on the 'Print Results' button after expanding the Results panel.

The output PDF can also include custom header and footer, these can be simple html snippets which could include text and images like logos etc

Note: The SQL to enable a custom Header and Footer can be obtained by reaching out to the Confirm Technical Support.

'Copy Button' can be used to copy the results and then paste it in external applications like excel spreadsheet.

Saving a Report

Running a Report embeds its configuration in the URL. Bookmark the report URL to save it and make it available to be run again.

Where a linked document is an image, the images linked to an entity can be viewed in the results and included in the output PDF as well.

Where the linked document is not an image, an icon will be displayed with the file extension.

Files that can be opened by a browser, such as text files or with the help of a plug-in like Adobe Reader for PDFs, will now open directly in the browser.

Where a file cannot be displayed it can be downloaded locally on the User's computer.

Example Report

Below is an example of a sample Job report having few Job details, some columns from associated Feature table, some columns from linked Defects & Jobs, linked documents and the jobNumber is set as a variable here.

Sample URL: http://ConfirmWebServer/confirm/web/app/index.html?tenant=DatabaseId#/reportina?auerv=%7BJobReport:jobs(filter:%20%7BjobNumber:%20%7Bequals:\$jobs_jobNumber equals%7D%7D)@ card@ size 800%7BjobNumber%20asset:feature@_table@_size_800%7Bsite@_size_800%7BcentralSite@_size_800%7Bsite-Name:name%7D%7D%20Alias:featureId%20sequenceNumber:plotNumber%20feature-Type@_size_800%7BassetType:name%7D%20centralAssetId%7D%20description%20location%20estimatedStartDate%20estimatedCompletionDate%20jobType@_size_800%7Bjob-Type:name%7D%20statusLogs@_table@_size_800%7BloggedDate%20jobStatus@_size_800%7Bjob-Status:name%7D%20statusNotes%20loggedByUser@_size_800%7BloggedBy-User:email%7D%7D%20attachments:documents@_card@_size_800%7BimageName:document-Notes%20image:url%7D%20enquiries@_card@_size_800%7BenquiryNumber%20centralEnquiry@_size_800%7BenquirySubject@_size_800%7BsubjectName:name%7D%20loggedDate:logged-Date%20statusLogs@ table@ size 800%7BloggedDate%20enquiryStatus@ size 800%7Bjob-Status:name%7D%20notes%20loggedByUser@_size_800%7BloggedByUser:email%7D%7D%20attachments:documents@, size 800%7BimageName:documentNotes%20image:url%7D%7D%7D%20defects@ size 800%7BdefectNumber%20defectType@ size 800%7Bname%7D%20loggedDate%20targetDate%20attachments:documents@_size_800%7BimageName:documentNotes%20image:url%7D%7D%7D%7D%7D

Note: DatabaseId in the URL is the database ID found in the configuration file, the location of which is specified in the registry.

| Confirm Web Interface |

Confirm®			×			? Rahul Khazanchi	
Reporting		Enter All Variable Values			Print Results Copy Results Run		
1. Select Tables & Columns 🕑		Jobs > Job Number (equals)		2. Set Display Prefe	erences 😧	3. Set Filters	
Q jobs Y Q Search fields 2 job/tumber 3 decorption 4 decorption 4 stantadOsmDate 4 stantadOsmDate 5 statustogs >	feature (Asset)	2003340 Run Cancel associationerCode associationerCode costsCodeCode codeCodeCode codeCodeC		Table Name feature feature Desplay Layoot Desplay as Table Columns featureId plotNumber controlAssetId	Alas Alas Enter New Displa		
Confirm [®] Reporting					Print Results Co	Rəhul Khazanchi opy Results Run	
Enquiries	Image Name Image	Ver Betrige					
Enquiry Number Subject Name Logged Date Status Logs Copyright @2021 Confirm. All rights reserved.	2000764 Carriageway Pothole 03 May 2021 23:42						

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.

	Goods Transaction	Start Stock Take
Filter Inventory		
North Depo - MAIN STORAGE - STR01 [900001.00] - Warehouse		\sim
North Depo - GATE 19 - STR02 [900002.00] - Gate House		\sim

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

Fil	ter Inventory			
orth D)еро - MAIN STORAGE - STRO	1 [900001.00] - Warehouse		
	Location	Material	Quantity	
>	A9	20mm conduit elbow (20MMCE)	10.00 Units: Item	0
>	A9	20mm Half Saddles (20MMHS)	6.00 Units: Item	0
>	A7	25mm adaptor (25MMA)	15.41 Units: Item	0
>	A9	25mm Conduit bend (25MMCB)	6.97 Units: Item	0
>	C2	ALC HDD 80 GB (ALCHDD)	16.60 Units: Item	0
>	В4	Axis Joystick (AJS)	5.00 Units: Item	0

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.

20mm conduit elt	JOW	
North Depo - MAIN STORA	GE - STR01 [900001.00] - Warehouse	
Current Quantity	Minimum Quantity	Maximum Quantity
10	5	100
Units		
Item		
Location		
A9		
		Characters left:
Notes		
Testing Testing		
		Characters left:
Inactive		

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. 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.

	凸 Complete Goods Transaction
Transaction Details	~
Transaction Type* Delivery from Supplier	Supplier Street Lighting Maintenance & Co. (SLCONT)
Supplier Reference	Description Lamp delivery
Internal Reference DEL003	
Notes Three lamps were defective and had to be rejected	Characters left: 1951

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.

m Det	ails				
Filt	ter Inventory				
orth D)epo - MAIN STORAGE - S	TR01 [900001.00] - Warehouse			~
	Location	Material	New Quantity	Quantity Out	
>	A9	20mm conduit elbow (20MMCE)	10.00 Units: Item	-	+
>	A9	20mm Half Saddles (20MMHS)	6.00 Units: Item		+
>	A7	25mm adaptor (25MMA)	15.41 Units: Item	-	+
>	A9	25mm Conduit bend (25MMCB)	6.97 Units: Item	-	+

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.

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.

💌 Works Management	\checkmark	\checkmark	\checkmark	\checkmark
■ ConfirmWorkzone [®]	\checkmark	\checkmark	\checkmark	\checkmark
Confirm Stock Management				
Confirm Stock Management User Access (Security)	\checkmark	\checkmark	\checkmark	\checkmark
Confirm Stock Management Admin Access (Security	\checkmark	\checkmark	\checkmark	\checkmark
Performance Monitoring	\checkmark	\checkmark	\checkmark	\checkmark
Payment Processing				

- Confirm Stock Management User Access (security). Enables access to Stock Management.
- Confirm 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.

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.

Filter Records	I-Bridge Bearings	
I-Bridge Bearings (BIBE) I - Bridge Bearings (BIBE)	Symbol	Background Color
I-Bridge Finish (BIFI) I - Bridge Finish (BIFI)	Nucleo Mini Filter Symbols P P C <td>#ffff66</td>	#ffff66
BRHI- Bridge History (BIHI) I - Bridge History (BIHI)		
BRJT- Bridge Joints (BIJT) I - Bridge Joints (BIJT)	·	
BRPA- Bridge Pads (BIPA) I - Bridge Pads (BIPA)	↓ ↓ ↓ ↑ ↑ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	Preview:
BRPH- Bridge Photos (BIPH) I - Bridge Photos (BIPH)	+ + + 口 = を田田口目目 中 + + - + □ 中 + + - + □ 中 + + + - + + + + + + + + + + + + + + +	
BRPR- Bridge Parapets (BIPR) I - Bridge Parapets (BIPR)	↓ ↓ ↓ ↑ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	
I-Bridge Span Prestressing (BIPT I - Span Prestressing (BIPT)		
BRRA- Bridge Risk Assessment (BIRA)	E C C C ⊆ ≥ S C C S S C C)°F
I - Bridge Risk Assessment (BIRA) BRRT- Bridge Restrictions (BIRT)	※○●○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○	
I - Bridge Restrictions (BIRT) BRWS- Retaining Wall Section		
(BIRW) I - Ret. Wall Section (BIRW)		

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 #fff66.

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.

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.

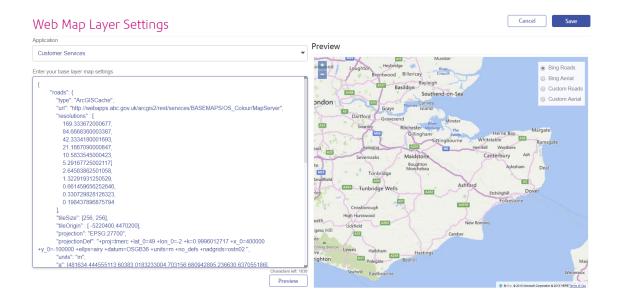
Preview:

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.

Caching Bing maps (ConfirmConnect[®] only)

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

- **Note:** Map Caching only occurs when ConfirmConnect® has a wireless network connection due to the quantity of data downloaded.
- **Note:** Map Caching is disabled for the Win32 version of ConfirmConnect®. This has been done as there is currently no method to identify if the Win32 client has a Wireless or 3G/GPRS connection.

Tile Services

Overview of a Tile Server

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

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

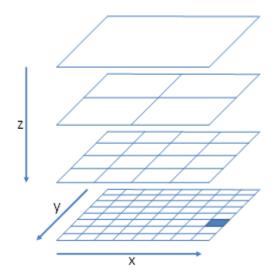
The URL for a tile is found by taking these values and substituting them into a placeholder in the "url" parameter provided in the map layer setting. For example, if the url in the setting is set to:

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

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

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

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



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

- The zoom is set to the zoom level. Zero is the most zoomed out level.
- The resolution is determined from the zoom level.

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

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

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

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

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

ArcGIS Tile Cache

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

```
"roads":{
 "type": "ArcGISCache",
 "url": "Server Name/ArcGIS/rest/services/Map Name/MapServer",
 "resolutions" : [
 92.6043518753704.
 26.4583862501058.
  13.2291931250529,
 6.61459656252646,
 5.29167725002117,
 3.96875793751588,
 2.64583862501058,
 1.32291931250529,
 0.661459656252646,
 0.264583862501058],
 "tileSize": [512, 512],
 "tileOrigin" : [-5220400, 4470200],
"projection": "EPSG:27700",
"projectionDef": "+proj=tmerc +lat_0=49 +lon_0=-2 +k=0.9996012717 +x_0=400000 +y_0=-
100000 +ellps=airy +datum=OSGB36 +units=m +no_defs ",
 "units": "m<sup>"</sup>
 "restrictedExtent": [230000,629267,320000,704092],
 "maxExtent": [230000,629267,320000,704092]
}
}
```

How do I obtain the settings required for the above?

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

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

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

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

"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=${x}&output=image/gif",
        },
"Business": {
          "order": 1,
"type": "StratusLayer"
          "url": "Servername/folder/controller/mapping/getmap?layers=/foldername1/folder-
name2/Lav-
er%20Name&width=${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.
                   Refer to Projections page for details.
"projectionDef":
"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:

"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]
 }
}
                    Set this value which is applicable to your Tile Service.
"type":
                    Note: If your tile service is one based, rather than zero based (i.e. the most
                            zoomed out zoom level is 1 and the first row and column is 1 rather
                            than 0), then use a "type" of "StratusLayer" rather than "XYZ".
"url":
                    This is the full URL for an individual tile. Use the placeholders {z}, {y} and
                    ${x} to specify the relevant zoom, row and column in the URL.
"resolutions":
                    Enter a list of all the resolutions required.
                    e.g. "resolutions" : [ 42.3334180001693, 21.1667090000847,
                    10.5833545000423],
"tileSize":
                    This is the width and height of an individual tile, in pixels.
                    e.g. [256, 256] or [512, 512].
"tileOrigin":
                    This is the coordinates of the top left hand corner of the tile at row zero, column
                    zero. This is only needed if it is different from the maxExtent
"projection":
                    Refer to Projections page for details.
"projectionDef":
                    Refer to Projections page for details.
"units":
                    must be entered as "m", as shown in the example. m = metres.
"restrictedExtent": This is the maximum extent of the map that a user would be allowed to see.
                    Does not need to be supplied if this is the same as the maxEtent below.
"maxExtent":
                    This is the minimum and maximum northings and eastings that the map covers.
                    It is specified as a comma separated list of coordinates inside the square
                    brackets as follows: Minimum X, Minimum Y, Maximum X, Maximum Y
```

Web Map Service (WMS)

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

```
{
   "roads":{
      "type": "WMS",
     "url": "Service URL".
     "projection": "Projection Code",
     "projectionDef": "Projection Definition",
     "units": "m",
     "maxExtent": [Maximum extent],
      "parameters": {
        "layers": ["Layer name"]
   }
}
"type":
                   this value must be set to "WMS"
"url":
                   This is the base URL for the WMS service. e.g. "http://www.os-
                   mgb.org.uk/ogc/wms":
                   To test this in a browser, enter the base URL followed by "?Service=WMS&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":
```

- "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,
```

```
"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 group and must be consistent for all layers in the Group. Typically, if the group contains a Tile Service then the settings from the tile service should be used. If only local SQLite maps are being used then it is possible to simply specify the "maxExtent" and "numZoomLevels".

"layers": This contains the list of layers that are contained within the group, enclosed in curly brackets {}. Each layer should be given a unique name, followed by a colon and then the specific settings for that layer.

In addition, the following settings can also be specified for each layer:

}

Levels":

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

"maximumResolution": Values represent the number of metres to show per pixel on the current zoom scale. In other words the more detailed map you have the lower the setting you should use. For example:

"minimumResolution": 0.0 will never turn off the layer no matter how far in you zoom.

"maximumResoltuion": 5.0 would show items until the user zooms out beyond 5 metres per pixel. This equates to an approximate scale of 1:20000 (1 metre screen size = 20000 distance to the ground) on a 96dpi device.

"order": Use the "order" to control which layers appear on top if more than one can be displayed at a time (e.g. draw labels on top of areas). The layer with the highest order appears on top.

Projections

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

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

- "projection": This is the EPSG code of the coordinate system that you want to use. E.g. "EPSG:27700" is the EPSG code for British National Grid.
- "projectionDef": ConfirmConnect® uses the Proj4 format for coordinate system definitions.

You can find the Proj4 definition for your coordinate system here: http://spatialreference.org/.

For example, http://spatialreference.org/ref/epsg/27700/proj4/ gives:

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

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

Grid Shift

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

+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.
- 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

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.

Web Map Symbol Settings	Stock Management Settings Cancel Save
Web Map Layer	Location Feature Group
Settings	Inventory Storage
Full Text Search Settings	✓ Automatically Reduce Stock on Consumption
Stock Management Settings	

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

Street Manager Settings screen is used to configure Confirm to interact with Street Manager. All the fields on the screen have in-line help, refer to the page for further information.

Device Watermark Settings

This page is used to configure how photos are watermarked within ConfirmConnect.

Device Watermark Settings		Cancel Save
✓ Enable Device Watermarking of Photos	Preview	
Watermark Expression:		
Photo taken by (<u>UserName</u>) on (<u>DateTime</u>) (<u>Taskid</u>) at location (<u>GeoLocation</u>)		
Available Expressions (double-click to add):		
Date and Time: {DateTime} User ID: {UserId}		
User Name: {UserName}		
Geo Location: {GeoLocation} Contractor Name: {Contractor}		
Task ID: {TaskId}		
		Photo taken by John Doe on 26 Apr 2021 10:34
	Preview	Job 123456 at location 51.39926, 0.53601

Enable Device Watermarking of Photos

When checked, ConfirmConnect will watermark all photos that are taken on a device using the expression defined on this settings screen.

Watermark Expression

This field is used to configure a watermark using a combination of static text and/or dynamic expressions that will be calculated at the time of taking a photo in ConfirmConnect. The result will be stamped on the photo as a watermark.

Available Expressions

This list contains all the available expressions that can be added to the Watermark Expression above. Each expression can be added to the watermark expression field by a double-click. Alternatively the expression code can be typed into the watermark expression field manually. Each expression will be evaluated at the time a photo is taken in ConfirmConnect.

Preview

Click the "Preview" button to show an example of how the watermark might look based on the current values in the Watermark Expression field.

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.

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

Internet Options								
	General	Security	Privacy	Content	Connections	Programs	Advanced	
Home page To create home page tabs, type each address on its ov							wn line.	
	9	5 <u> </u>	about:blank					
			Use cu	rrent	Use default	Use n		
	Startup Start with tabs from the last session Start with home page							
	Tabs Change how webpages are displayed in tabs							
	Browsing history							
	Delete temporary files, history, cookies, saved passwords, and web form information.							
	D	elete brow	sing histor	ry on exit				
				[Delete	Set	tings	
Appearance								
		Colors	Lang	juages	Fonts	Acce	ssibility	
	OK Cancel Apply							

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.*

Website Data Settings						
Temporary Internet Files History Caches and databases						
Internet Explorer stores copies of webpages, images, and media for faster viewing later.						
Check for newer versions of stored pages:						
Every time I visit the webpage						
Every time I start Internet Explorer						
Automatically						
O Never						
Disk space to use (8-1024MB) 250 🚔 (Recommended: 50-250MB)						
Current location:						
C:\Users\chabuild\AppData\Local\Microsoft\Windows\Temporary Internet Files\						
Move folder View objects View files						
OK Cancel						

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.