# Consat Telematics Solution

## TS Administrators Reference Manual

Covers release 25.7.(X)

# Table of Contents

# 1 Introduction

The manual in your hands (or on your screen) covers all the administrative functions required to administer users, roles, and user configurations for the Traffic Studio application.

**Administrators have "PowerUser" access in Traffic Studio.** The top access, "SuperUser", is normally only available to Consat personnel and provides functionality for complex system setup.

Normally, Consat will perform all advanced system configurations, setting up a basic set of user roles with configurations that you as administrator (PowerUser) can then edit, copy and add users to. Consat normally also configure tool placement and define how each tool window is presented in the Application etc.

## 1.1 Default Role Configuration (Performed by Consat)

As stated, a Consat Telematics TM (Traffic Monitoring) system is normally delivered with several pre-defined user roles, set up by Consat to suit your needs

To simplify the specification of these roles, the list below explains the basic functions that can be specified by you for each role.

The delivered roles can then be edited/copied etc. by you as the system administrator to suit your changing needs.

| Role Functionality | Description |
|---|---|
| User log-in inside/outside domain | Users placed outside the system domain log in through a web service. The path is provided by Consat (specified in dialogue with the customer). |
| Local Configuration File write functionality | The local configuration file in each Traffic Studio computer will normally work as a fallback whenever the central configuration database cannot be accessed.<br><br>If you specify that changes to the configuration are to be saved in this local file, the fallback configuration can be kept up to date (follow the configuration specified in the database), but it can also be "damaged" by faulty configuration.<br><br>On the other hand, if you specify that changes in the configuration will not be written to the local file, it will work as a "factory" default configuration, providing tamper-protected basic functionality when the configuration database cannot be accessed. |
| Prevent Specific Configuration Changes | As a complement/alternative to write-protecting the local configuration file, specific settings in the applications can be protected from configuration changes. This function is extremely flexible as any part of the application configuration can be write-protected. Discuss your needs with Consat if you need to prevent changes to specific functions, tools, etc. |

| Role Functionality | Description |
|---|---|
| Toolset/role | Each pre-set role will have a basic tool-set included by default (selected from the list of TrafficStudio tools ordered by the customer).<br>As an administrator, you can then add or remove tools from the role as needed, or copy the role and make changes in the toolset, see the following chapter for how to change the toolset in a configuration. |
| Individual tool configuration in the application framework | Each tool placement and basic framework functionality can be configured by Consat to suit your needs. The following functions can be set for each tool:<br>• Tool placement (left, bottom, top application window- or separate floating tool window. Note that some tools need to be placed in rectangular "vertical"/"horizontal" tool windows for the user interface to function properly.)<br>• Tool auto start (automatically activated, in configured position, when the application is started)<br>• Display placement when two displays are used: Primary/Secondary display<br>• Tool Close button (in the tool tab) enabled/disabled. (If needed, crucial tools can be prevented from being closed by the user, for instance, Voice communication or other important communication tools may be configured this way to prevent missed messages, etc.)<br>• If needed, the application can also be configured to start with one tool in full-screen mode. For instance, if the workstation is to be used for one specific task. |
| Maximized Application Window | The TrafficStudio application can be configured to open in the maximized mode in Windows. |
| Application log | The number of user roles applied to the user. |

## 1.2 Configuration applied to Roles, Users, and Computers

In Traffic Studio, a configuration is mainly applied to user roles, but in some cases, individual users and individual computers can have specific configurations. (Note: A user may be assigned several roles and may have access to multiple configurations, selected when he/she login to the application.)

Here, we will show you how to administer users and user roles (chapter 2) and how to manage configurations applied to these users, roles, and individual computers (chapters 3 and 4).

## 1.3 Basic Functionality and Workflow

Configuring Traffic Studio includes the following basic steps:

1. Define base roles and their pre-set role functionality *together with Consat* (see section 1.1 above)
2. Create users and apply roles to users, see chapter 2

If needed, create new roles based on the pre-defined roles, see chapter 2

1. Administer/edit configurations applied to roles.
2. If needed: Edit individual user/computer configurations: (Tool setup etc.)

# 2 Administer Users and User Roles

To administer users and roles, the **User Manager** Traffic Studio tool is available to you as PowerUser. Depending on your default roles **you will find the tool in the regular Tool menu.**

### Externally created Users and Groups (Roles)

In some systems, users and groups (roles) can also be defined outside the application if such a workflow is preferred. See the Window's user manual for more information about how to set up and edit users and groups (roles). Note that the User manager tool cannot view/edit these users/groups.

## 2.1 User Manager: Tool Overview

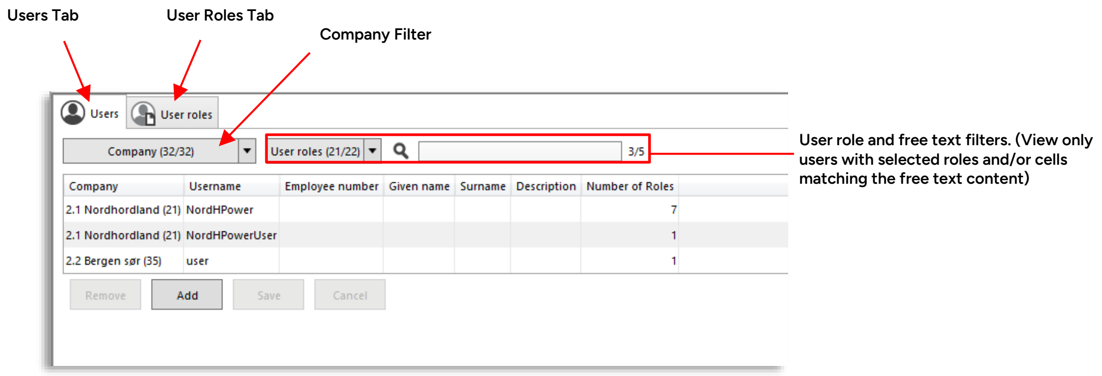
The User Manager tool lists users and user roles on two separate tabs. On each tab, you will find function buttons for adding, editing, and removing users and roles, respectively.

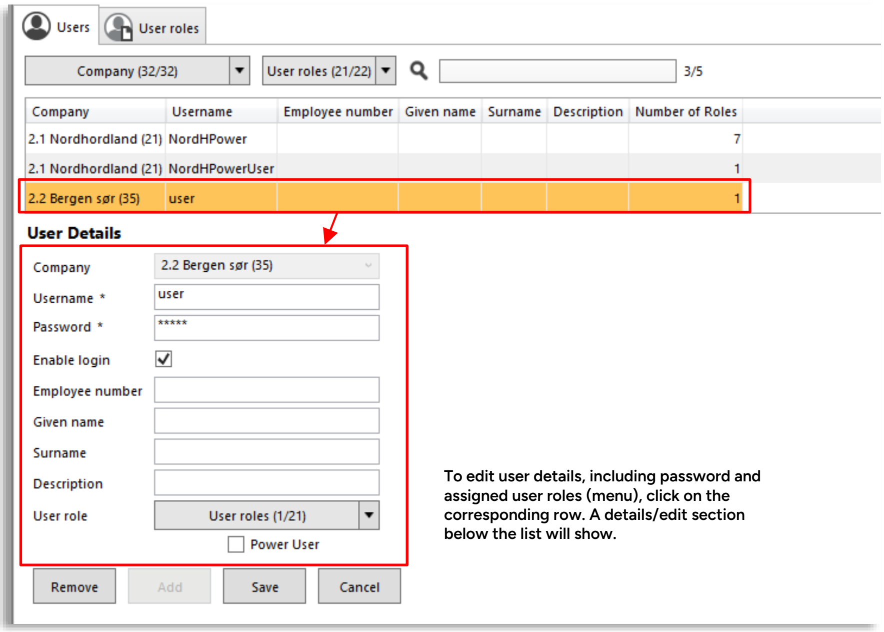
When you select a user/role, the edit section below shows the available details for this item.

- If you are an administrator handling multiple companies, a top company filter lets you list either the users/roles in **all** companies – or the users/roles of **a selected** company.

- If you are a Power User without access to some roles, these will be greyed out and highlighted with a lock symbol in the role checkbox list in the details section. You cannot add/remove users from roles you do not have access to/belong to.

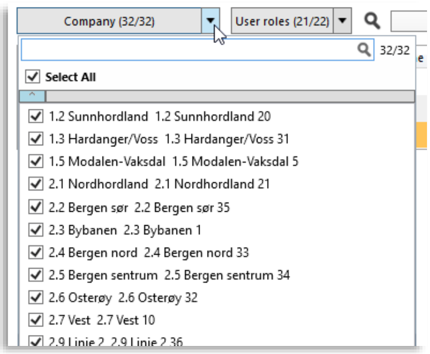
- The Users tab also includes filters for focusing the list, these filters are described below.






## The Company Filter

Use the company filter to either list the users of all the companies you administer or only cover a selected company. Open the menu by clicking on the menu button and click to select one of the available items in the list. The "Administration company" includes all companies in your system.



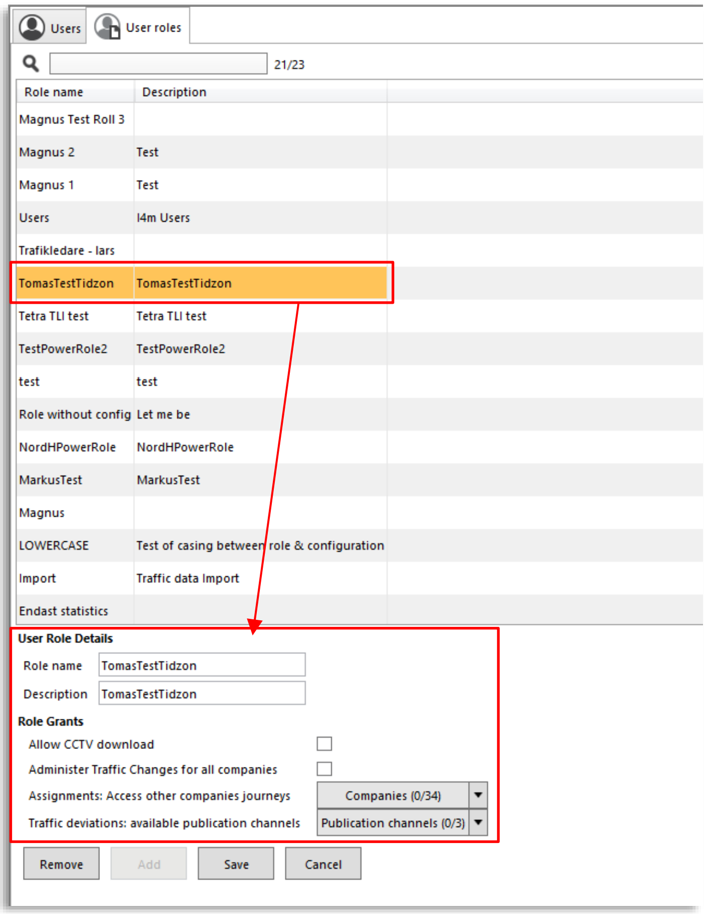
## 2.2 Administer User Roles (User Roles Tab)

If the pre-defined set of roles supplied by Consat is insufficient to cover your needs, you can edit or copy and then edit any of the pre-set roles to set up the roles you need.

As users are to be assigned different roles, you normally first define the roles that are to be available in your system. This is a simple naming procedure.

The user roles tab contains a role list with a separate description column (for describing the role).

- **Note:** So-called **Role Grants** can allow the users with that role to access specific functionality/data, see below.
- **Note:** If you are not a Super User, only the roles you belong to will be presented in the list.
- **Note:** If you are not a Super User and create a new role, you will automatically be added to that role (making it visible in the list)



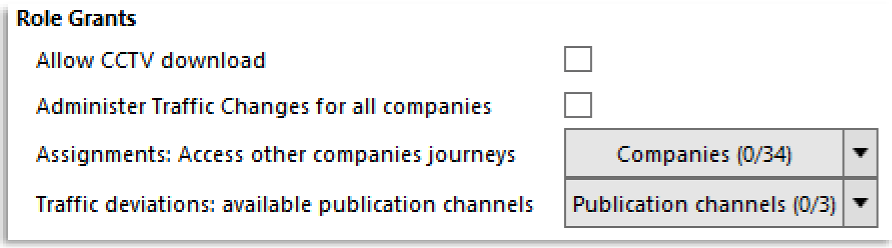

Click on a row to edit role name and/or description in the separate details field.

A Role Grants section enables configuration of available functionality/access for the role.

## Role Grants

Role Grants set basic functionality/access for the user role.
You can allow the role to download CCTV media (using the CCTV Media tool), administer traffic information for all companies and assign vehicles to other companies' journeys (for reinforcement, etc.). Checkboxes to include that functionality.

Traffic deviations can be publicized over multiple channels (to multiple receivers). In the Publication channels menu, you configure which channels are to be available to the role.

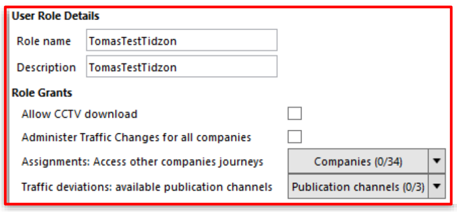



## Add User Role

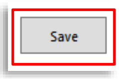
1. If a row is selected, click on Esc to deselect it. Click on the Add button to open a new empty role details field.


2. Enter the new role name (mandatory) and, optionally, a descriptive text in the description field.

   If applicable check the appropriate boxes in the Role Grants section (see description above).




3. Click on the Save button to save the role.




## Edit User Role

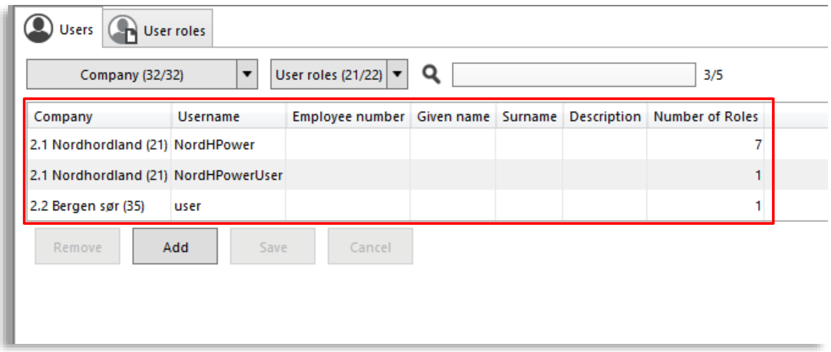
1. Click on a role (row) to select it.
2. Edit the name/description/role grants.
3. Click on the **Save** button to save your changes.

### Remove User Role

1. Click on a role (row) to select it.
2. Click on the Remove button. 


## 2.3 Administer Users (Users tab)

On the Users tab, you will find all users created by the User Manager tool. You can add or remove users and change names, settings, role(s), etc.

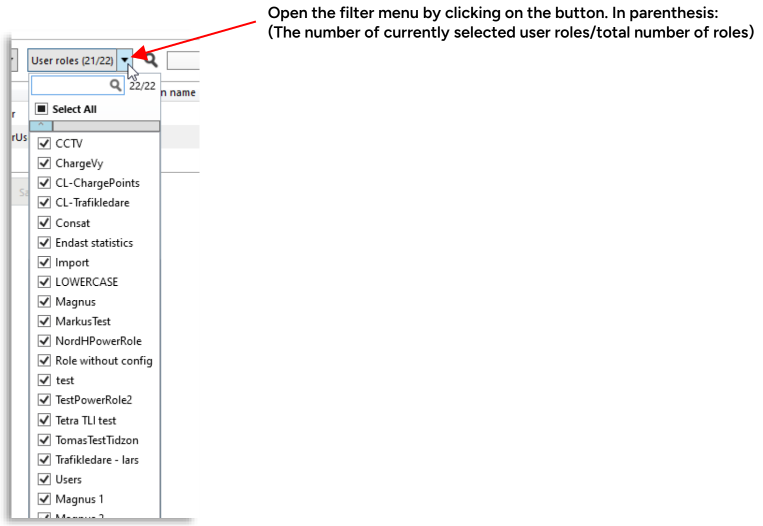



### Column description

| Header | Description |
|---|---|
| Username | User name |
| Employee number | Employee number. |
| Given Name | The user's first name(s) |
| Surname | The users' surname |
| Description | Descriptive text |
| Number of roles | The number of user roles applied to the user. |

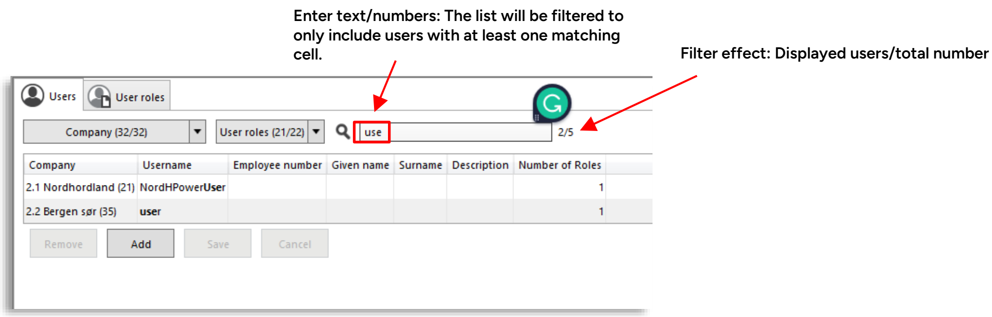
## The User Roles Filter

Use the user roles filter to only view users with certain user roles.




## Free Text Filter

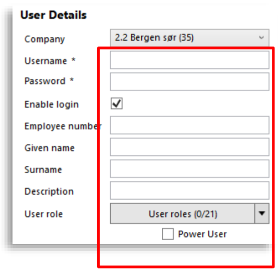
Use the free text filter to narrow down the user list to only include users with at least one matching cell (these are highlighted in the list).



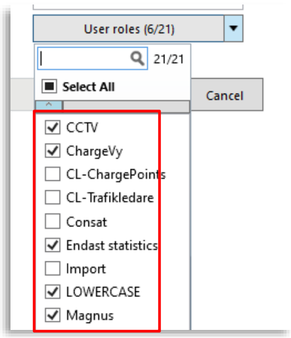

## Add User (and assign roles)

1. Click on the **Add** button to open a new, empty, details field.

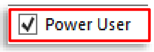
2. Enter user details. The fields highlighted with "*" are mandatory.



3. In the user roles menu, check the roles the user is to have.




4. If the user is to have PowerUser (administrator) access, check the PowerUser checkbox




5. Click on the **Save** button to save the user

## Edit User

1. Select the user in the list by clicking on the corresponding row.

2. In the edit field below, change the information/settings that are to be updated.

3. Click on the **Save** button to save the changes.

## Remove User

1. Select the user in the list by clicking on the corresponding row.
2. Click on the **Remove** button, the user will be removed immediately (no confirmation dialogue).

# 3 Administer Configurations

File > Setup > Configuration Manager

Individual Traffic Studio Configurations are administered with the Configuration Manager, a floating configuration window available to power users.

Note: Super Users have access to more functionality in this tool for viewing and comparing configurations in detail. See the Super User Manual for more information.

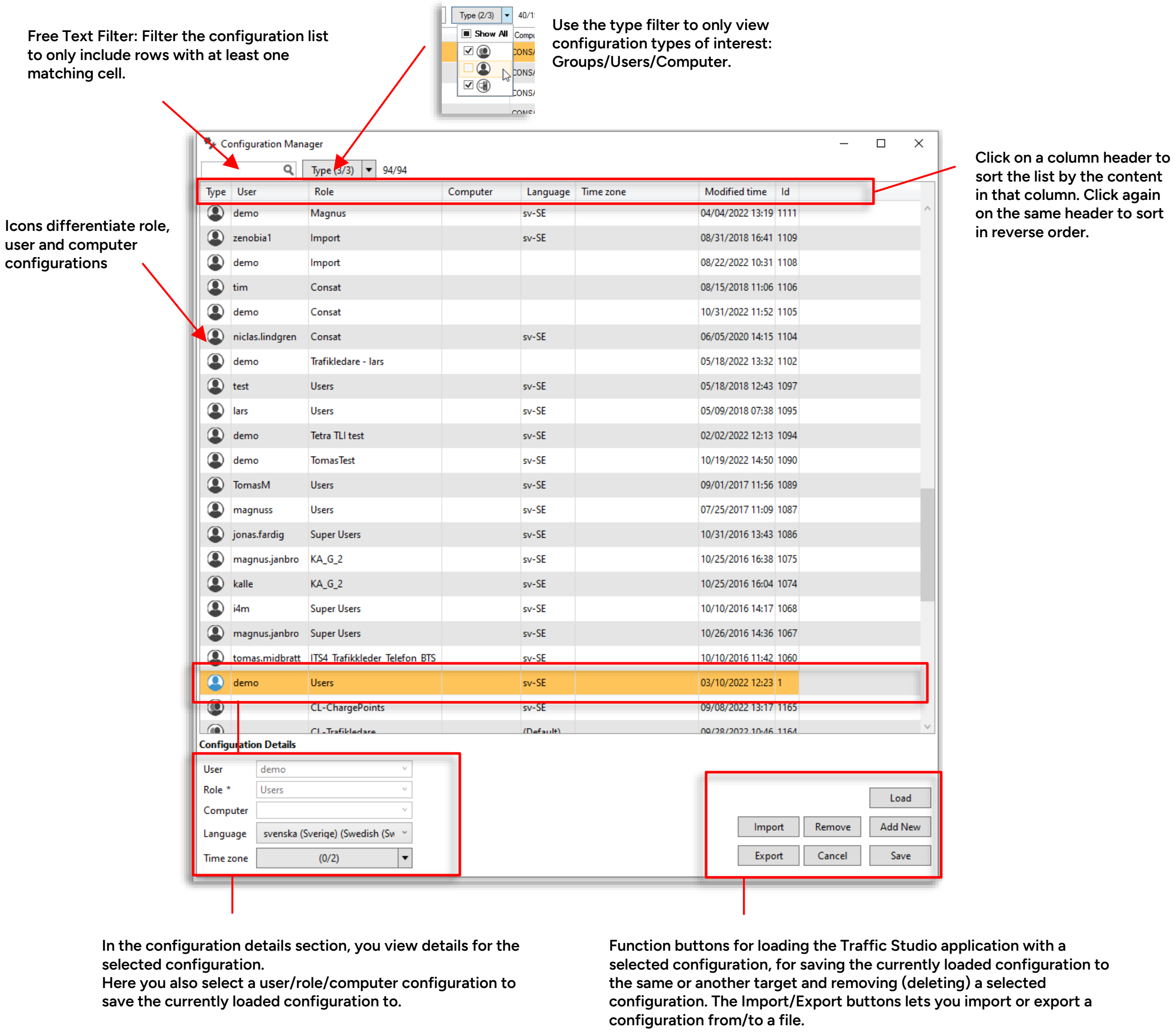
Here, you get an overview of all configurations in the system. Below the configurations list, you will find function buttons for:

1. Loading a selected configuration into Traffic Studio (for viewing details, and editing)
2. Saving the currently selected/loaded and edited configuration – to the same target.
3. Copying a configuration (saving a loaded configuration to another target, overwriting the current configuration)
4. Removing/deleting a selected configuration

## 3.1 Configuration Manager Window: Overview

The floating Configuration Manager lists all individual configurations in your system.

Like other list views, the Configuration Manager list can be filtered using a free text filter, a type filter, and sorted by any column to allow focusing on the information you need.




| Header | Description |
| --- | --- |
| Type | The symbol indicates the configuration target/user:  - Role  - User (logged in as role...)  - Computer (logged in as role...) |
| User | User Name. |

| Header | Description |
| --- | --- |
| Role | Role Name |
| Computer | Computer Name |
| Language | Default language (languages depending on system) |
| Time Zone | Available time zones, selected at login.<br><br>If no time zone is selected in the menu/displayed in the column, all system time zones will be available to the user at login. |
| Modified Time | Time Stamp, showing last change |
| ID | Configuration ID |

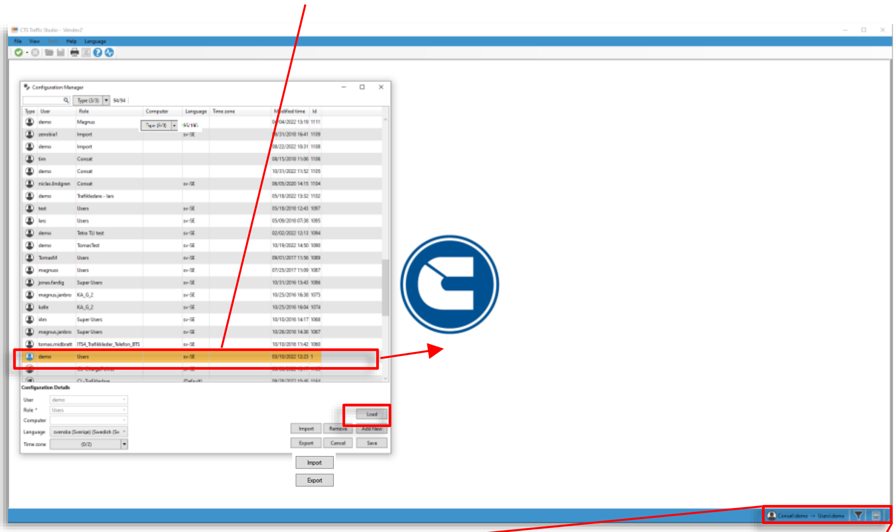
## 3.2 Loading Configurations into Traffic Studio (for viewing/editing/copying)

Most editing of a configuration is performed within Traffic Studio with that specific configuration loaded. To make changes to a configuration you first use Configuration Manager to load the configuration in Traffic Studio.

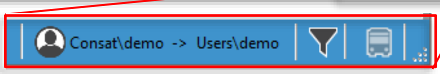
The Traffic Studio application window will load the complete configuration – all tools, settings, etc. so that you can make any changes in the various configuration menus in the Setup menu– and then save it with the Save button in the Configuration Manager, see the following page.

When Traffic Studio is loaded with another configuration than your own, the top and bottom sections of the application window will be highlighted blue and the loaded configuration will show in the lower right corner of the application, see the image below.

**To load a configuration into Traffic Studio, select it in the Configuration Manager window and click on the Load button.**
**Traffic Studio will load the selected configuration. The Traffic Studio window will now be highlighted blue to show that another configuration than your own has been loaded. The loaded configuration will show in the bottom user row (see details window).**



**The user profile/configuration field shows both your configuration (to the left) and the loaded configuration, to the right.**



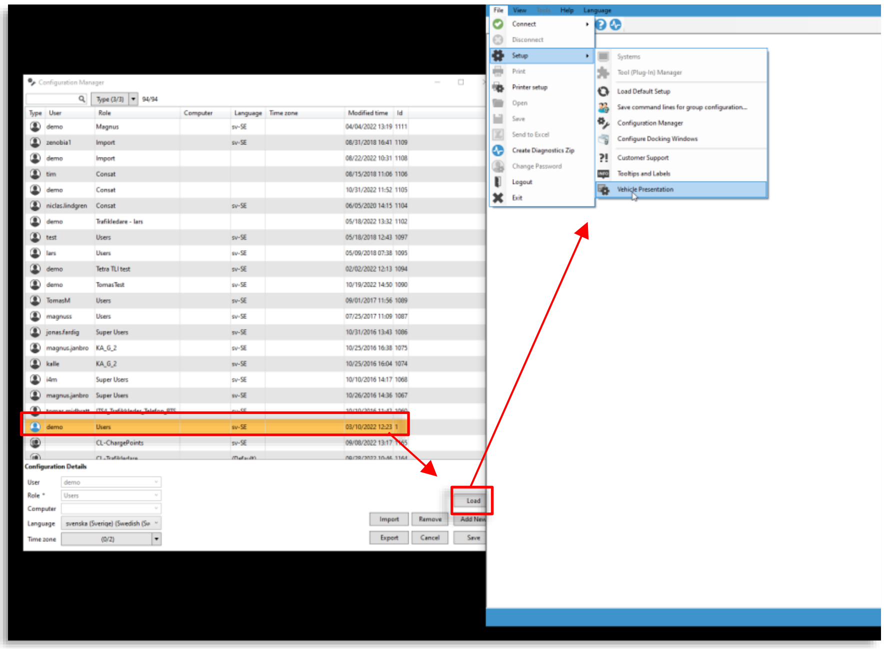
## 3.3 Load, View, and Edit Configuration

To view, and maybe edit a configuration in the list, do this:

1. Select the configuration you want to view/edit (click on the corresponding row).
2. Click on the Load button.

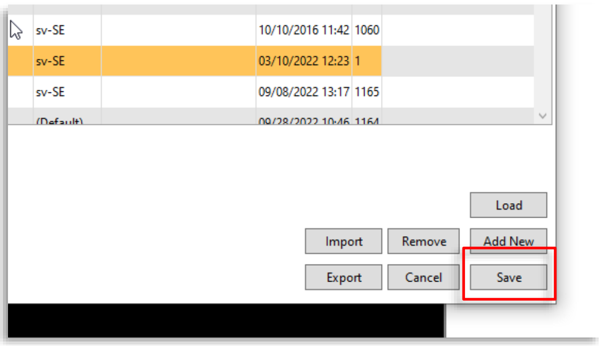
   The Traffic Studio window will load the selected configuration. To highlight that a configuration other than the one you logged in as is loaded, the window gets blue top and bottom bars. In the configuration manager window, the icon of the loaded configuration is also highlighted blue.

   You can proceed to connect the application to a configured system and check the toolset etc. to verify that the configuration is correct. Disconnect to open the setup menu to make changes in the configuration, see the example below.



3. If needed, edit the configuration using the available sub-menus in the Setup menu (see chapter 4).

4. Save any changes by clicking on the Save button in the Configuration Manager.



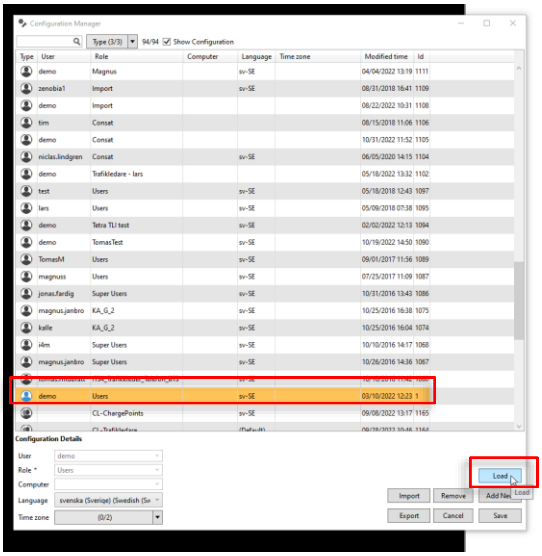
## 3.4 Copy a Configuration to another User/Role/Computer

As an administrator, creating a "new" configuration means copying an existing configuration and saving it to another "location": A "user logged in as selected role", to another role or to a "computer logged in as selected role", replacing that existing configuration. You can then load and edit the copied configuration to make it unique.

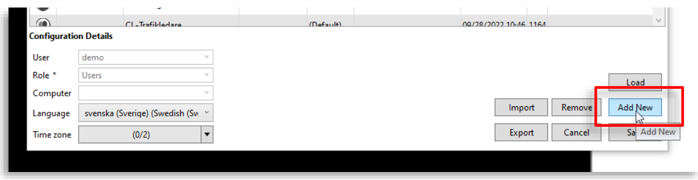
- In a new system, setting up configurations/roles normally start with a default configuration (created by Consat) that is then copied and edited to make all the desired roles/configurations.

- Note: Make a habit of separating "copying" configurations and editing configurations, so as not to save unwanted changes to the original configuration by mistake. First "copy" the configuration and then load, edit and save the copy.

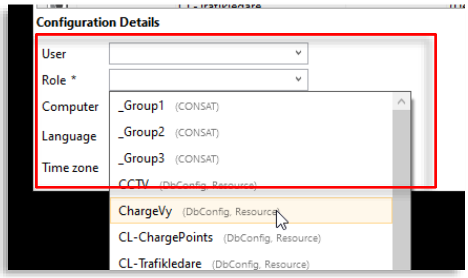
1. Load the Role or User configuration you want to "copy" by selecting (clicking on the row) and then clicking on the Load button.



2. Click on the Add New button. The details field under the list is cleared.




3. Select either a Role, a User, and a Role (user logged in as role) or a Computer and a Role (computer logged in as role) in the menus to receive the configuration.
4. Select a default language and the time zone(s) that are to be available upon login. (If no time zone is selected in the menu, all *system* time zones will be available to the user at login.)




5. Click on Save to save the configuration to the selected target.

## 3.5 Import Configuration from File

1. Load the Role or User configuration you want to import the configuration to by selecting (clicking on the row) and then clicking on the Load button. The import and Export buttons become active.
2. Click on the Import button. A browse window opens. Navigate to the file, select it and click on "Import" to import the configuration to the selected role/user.
3. Click on Save to save your changes.

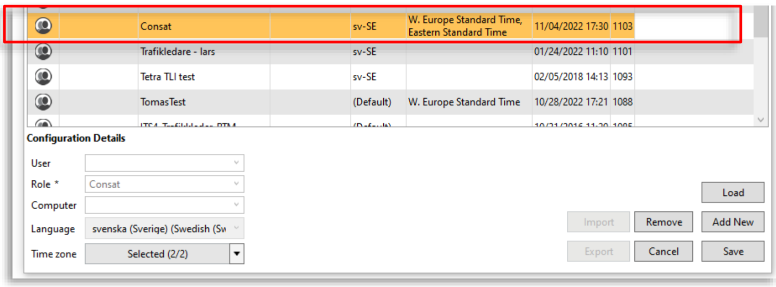
## 3.6 Export Configuration to File

1. Load the Role or User configuration you want to export by selecting (clicking on the row) and then clicking on the Load button. The import and Export buttons become active.
2. Click on the Export button. A browse window opens. Navigate to the place you want to save the configuration file, select it and click on "Export" to create the file.

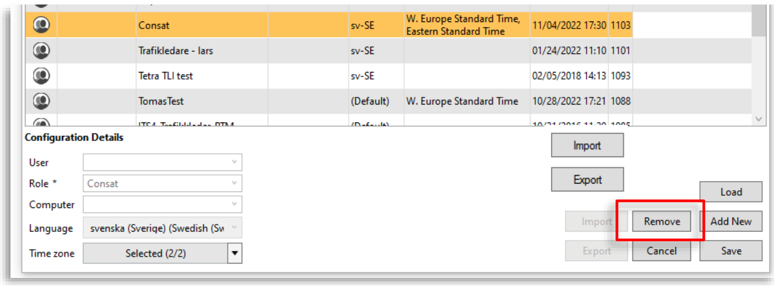
## 3.7 Remove Configuration

To clean up the configuration list you can remove configurations. Of, course, this function is to be used with caution.

1. Select the configuration that is to be removed




2. Click on the **Remove** button – the configuration will be removed from the database immediately

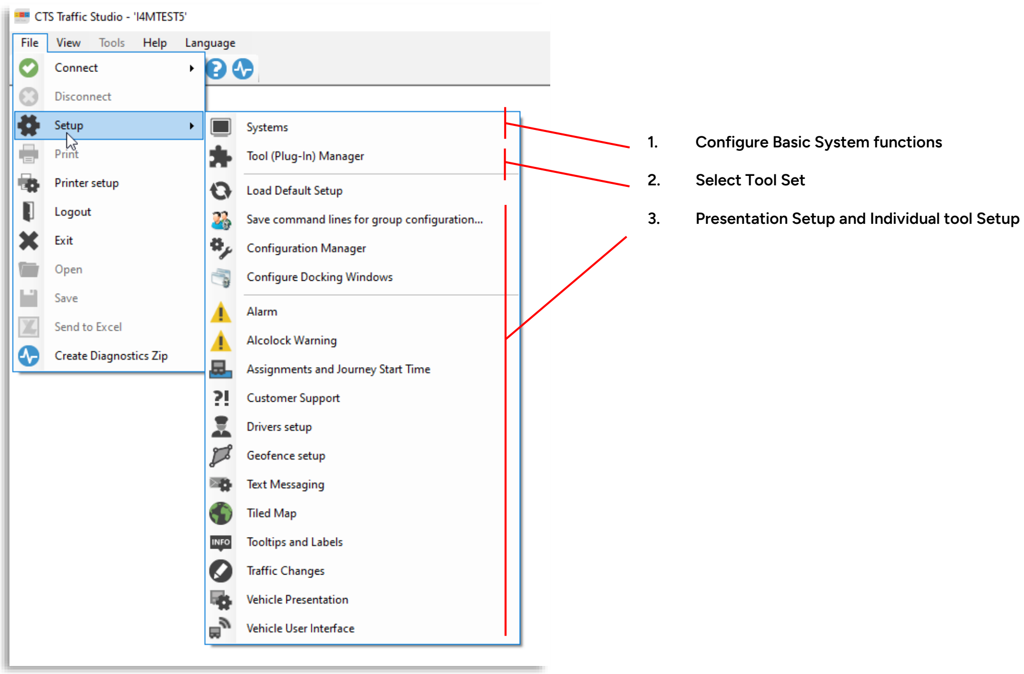


# 4 Make changes to the loaded configuration

As an administrator (PowerUser), you can change basic system functionality, the tools available in each (role) configuration, and also change the set-up of the individual tools.

- When you load a **role configuration** you can configure basic system functionality and the available toolset for that role, as well as configure information presentation and the individual tools in the selected toolset.

- When you load a **user or computer configuration** you can only configure the information set up in Traffic Studio and set up the individual tools. The top Systems and Tool (Plug-in) Manager menu alternatives will be greyed out.

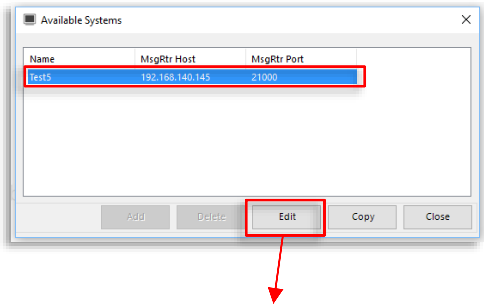


## 4.1 Set Basic System Functionality (Loaded Role)

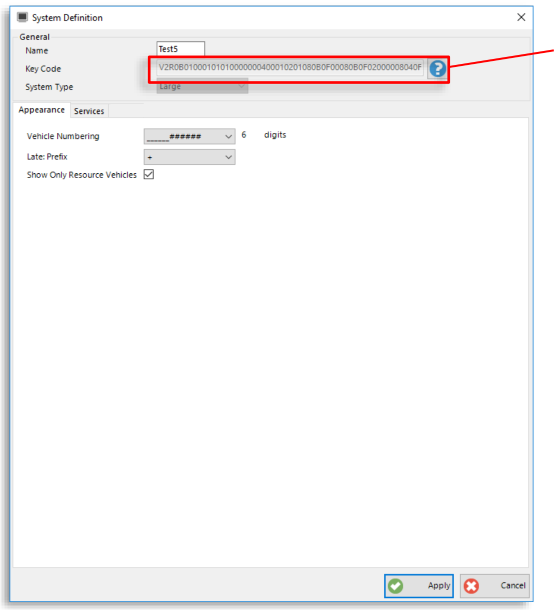
File > Setup > Systems>Edit Selected System

As a PowerUser, you can configure basic presentation settings and configure read-only-functionality for some system services, per role. This is performed in the System Definition window on two separate tabs: Appearance and Services.

Open the **System Definition** window by selecting **Systems** in the Setup menu, this opens the Available Systems menu. Select the system you are to edit settings for and click on the **Edit** button to open the System Definition window, see below.




### Key Code



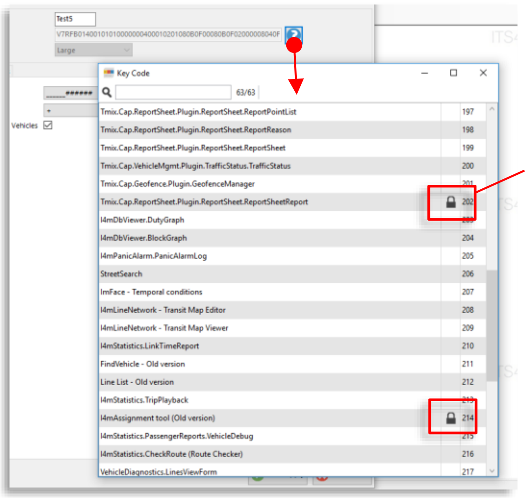

**Key Code**

Determines which functionality/tools will be available and which will be locked. The code is supplied by Consat for each role and system.

Click on the "?" button to view which tools/functions are available/locked, see following section.

## View Available/Locked Functionality

Click on the "**?**" button to open the Key Code window. Here, all tools and all key-code-controlled functionality are listed. Locked tools/functions have locked symbols, see below.

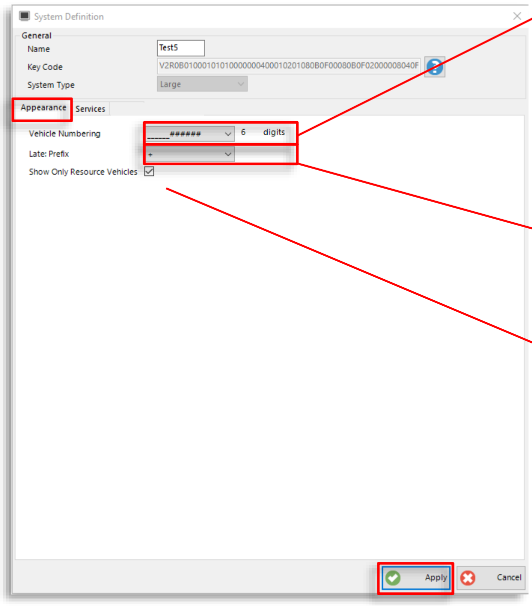



**Locked Functions**

All non-available tools and functions are highlighted with lock symbols.

Tip: Use the free text filter on top to quickly find a specific plug-in/tool in the list

## Appearance tab




**Vehicle Numbering**

Determine how the system addresses will be displayed. Each # represents a digit to be shown.

E.g. ____#### means that the last four digits of the vehicle number will be displayed.

**Late prefix**

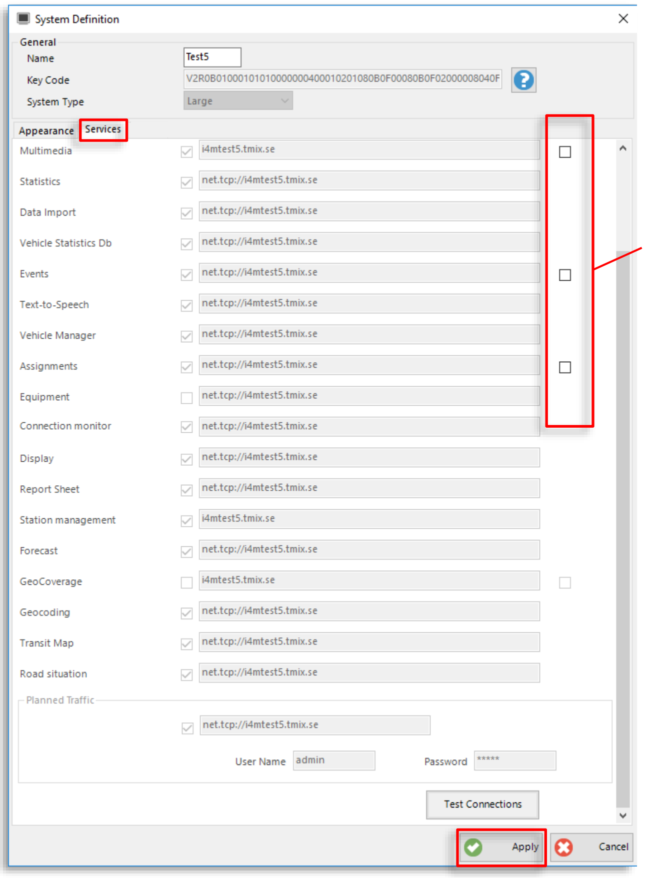
Display a + or a – when behind the timetable.

**Show Only Resource Vehicles**

Check to only show (Real Time) vehicles included in the system vehicle database.

- After you have made changes, click on the Apply button to save.

## Services Tab (Power User)




### Read Only

Check to make the service read only (for the loaded role), letting users only view information not create/save/publish/assign.

Currently, you can set Assignments, Events (Event: Configuration) and Traffic Information (the "Multimedia" Service) to read only mode.

- **You can check the connections to the services used in the system by clicking on the Test Connections button.** A green hatch by each service will show an OK connection, red crosses will indicate missing connections, impairing system functionality.
- After you have made changes, click on the Apply button to save.

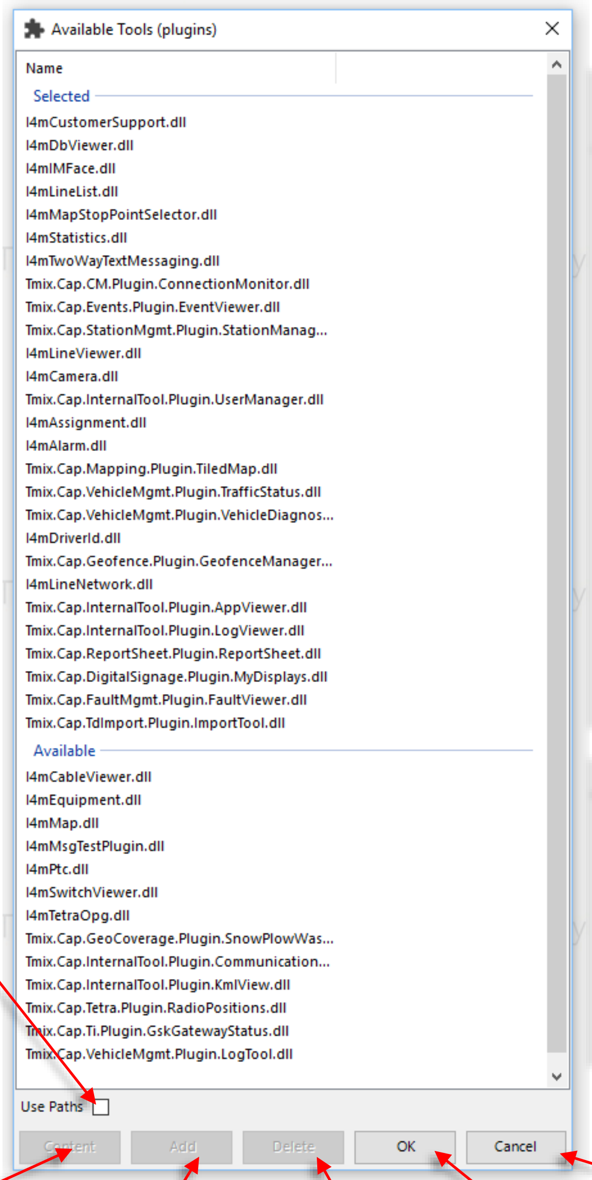
## 4.2 Define Toolset (Loaded Role)

File > Setup > Tool (Plug-in) Manager

In this window, you select the plug-ins (containing Traffic Studio tools) to be available to all users of the loaded Role.

You can add, remove and save your choices by using the buttons at the bottom of the window.

The tools are displayed with their [rather technical] plug-in names in the Available plugin window.




### Selected

A list of all selected tools that are available when the application is running. The tools in these plug-ins are the role toolset.

### Available

A list of all the remaining tools, which are not available when the application is running, but could be added.

### Use Paths

If the box is ticked, you can select a tool centrally hosted on a server.

If the box is not ticked, the plug-in is selected from the local application folder.

### Content

View the tools/report in a selected plug-in, see next page.

### Add

Add a tool you have selected in the Available list to the role toolset (the Selected list).

### Delete

Remove (selected) tool(s) from the role toolset. I.e. move it/them from the Selected list to the Available list.

### Ok

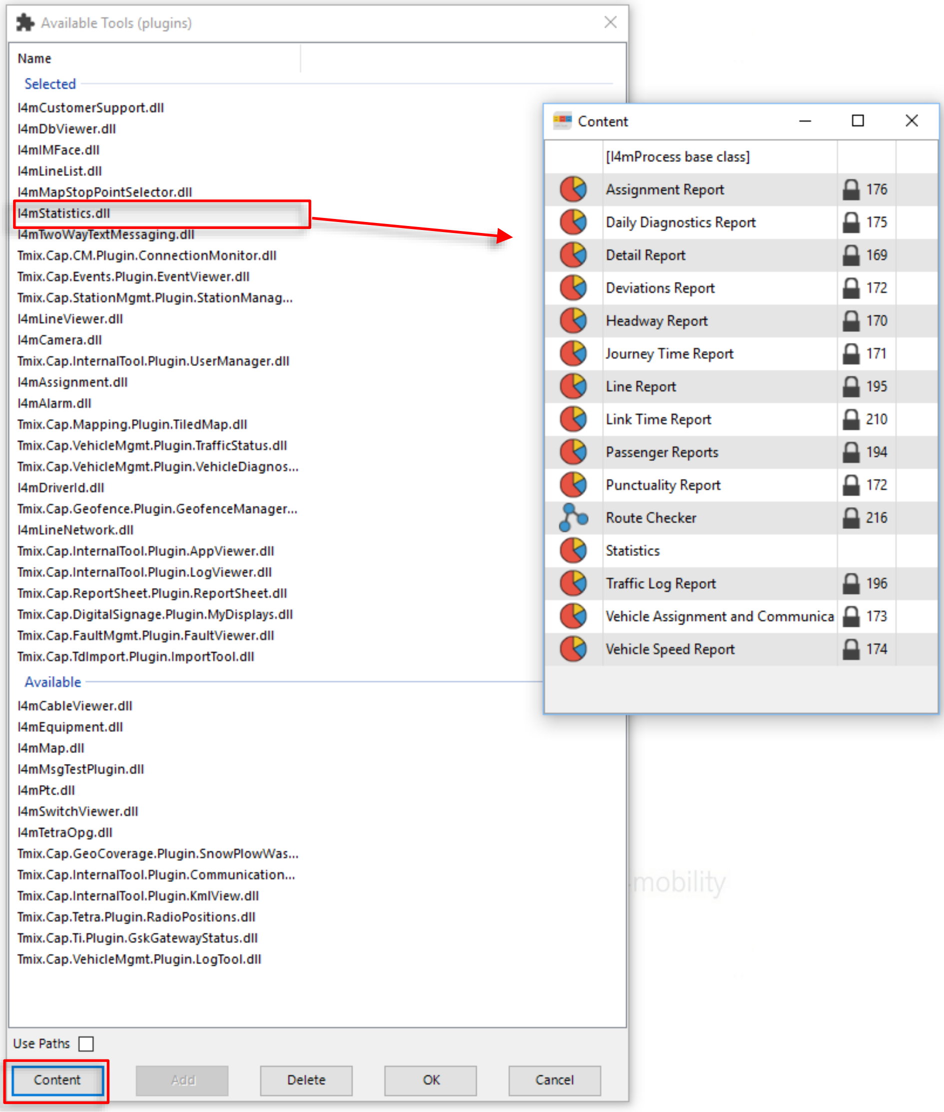
Save the changes and close the window.

### Cancel

Cancel the changes and close the window without saving.

## View tools in plug-in

A plug-in may contain many tools or reports. To view the specific tools (with their proper tool names) in a listed plug-in, select the plug-in in the list and click on "Content", see below. The tools are listed in a separate Content window.



# 4.3 Configure Tooltips and Labels

File > Setup > Tooltips and Labels

- See the Reference Manual.

# 4.4 Configure Vehicle Presentation

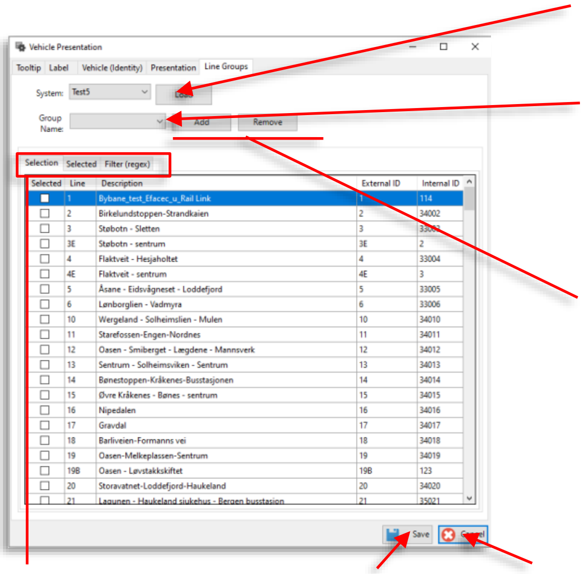
File > Setup > Vehicle Presentation

- See the Reference Manual.

# 4.5 Configure Line Groups

File > Setup > Vehicle presentation > Line groups

Add, remove, and edit line groups used for filtering the presentation in Traffic Studio.




**System**

Selection of the central system. Clock on "Load" if a system is not loaded.

**Group Name**

Selection of the group. This field will become empty if you click on Add to allow you to type in the name of the new group.

**Add / Remove**

Add or remove a group. See below for the description on how to perform both actions.

**Tabs**

Selected / Selection / Regex

**Save**

Save the changes and close the window.

**Cancel**

Cancel the changes made and close the window.

## Selected Tab

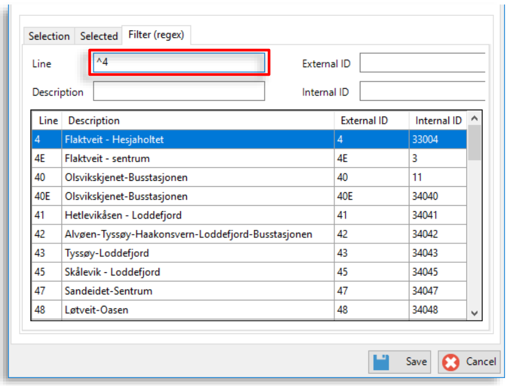
List of all the selected lines.

## Selection Tab

List all the lines, with a checkbox for each, where you select which ones will be included in the line group.

## Filter (Regex Tab)

The user can select which lines to include in the line group with the help of a filter. These lines are added to the manually selected ones under the Selected tab.




The filter uses the **Regular Expression** format, which allows you to define line groups with logical expressions/functions in four different categories, each of them related to the four columns in the Selected tab, i.e. Line, Description, External ID, and Internal ID.

Many columns can be combined to narrow down the selection. Only the lines fulfilling the user's criteria will be selected and shown in the Selected tab.

### Regular Expression: Special Characters

Special characters are optional. Without them, all the lines fulfilling the content entered by the user will be selected.

Two practical examples:

- You write 17 in the Line field. All the lines with a 17 in their names will be included in the line group, e.g. 17, 117, and 0171.
- You write Maple in the Description field. All the lines, which have this word somewhere in their description, will be included in the line group.

Regular Expression consists of many functions that allow, in combination with the normal fields, the creation of complex and advanced filters. The table below lists the most common special characters along with examples.

| Function | Description |
|---|---|
| [ ] | Include the strings containing a part of the content between the brackets.<br><br>Practical example<br><br>You want to include all the lines, which have the numbers 1, 2, or 6 in the line field. You enter [126].<br><br>You can also use intervals. If you want to include all lines with the numbers 1 to 5, you can enter [1-5]. |
| ^X | Identify the first element in the string. Using ^X means that all the strings beginning with X will be included. |

| Function | Description |
|---|---|
| | Practical example<br><br>You want to include all the lines with an internal ID starting with 4. You enter ^4 in the Internal ID's field. |

### Define a Group

1. Select a system and click on Load (if the system is not already selected).
2. Click on Add
3. Name the new group under Group name.
4. The button Add will change to Save. Click on it to save the new group.
5. Select your lines by their checkbox, either via the Selection or the Regex tabs.
6. Save the new group or save the changes and close the window by clicking on Save.

### Edit a Group

1. Select a system and click on Load (if the system is not already selected).
2. Select a group under Group name.
3. Tick to add a line or tick off to remove a line.
4. Continue to edit other groups or save the changes and close the window by clicking on Save in the bottom right corner of the window.

### Remove a Group

1. Select a system and click on Load (if the system is not already selected).
2. Select a group in the Group name's menu.
3. Click on Remove.

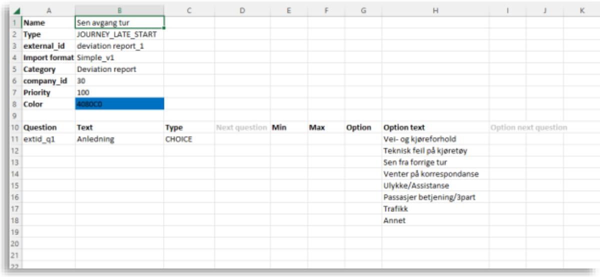
# 5 Power User/Administrator Functions, Tools

Traffic Studio includes a few tools that can be configured to be available for regular users but are mostly intended for advanced/power users. To "unclutter" the Reference Manual, we have placed the tool descriptions here in the Administrators Manual.

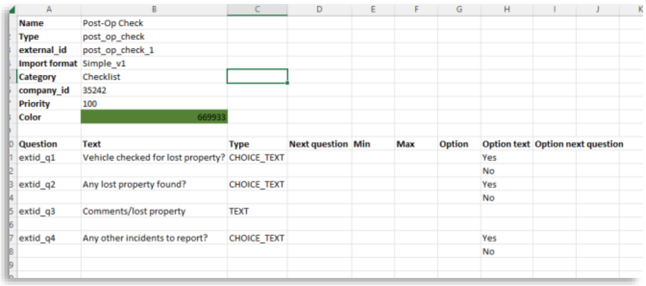
## 5.1 My Report Sheet Templates

This simple tool lists all the report sheet templates imported into your system.

The templates are used for handling questions and related answer alternatives presented both in pre-, and post-op check forms and for configuring Deviations, including trigger thresholds. See the default template examples below:



| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Name | Sen avgang tur | | | | | | | |
| Type | JOURNEY_LATE_START | | | | | | | |
| external_id | deviation report_1 | | | | | | | |
| Import format | Simple_v1 | | | | | | | |
| Category | Deviation report | | | | | | | |
| company_id | 30 | | | | | | | |
| Priority | 100 | | | | | | | |
| Color | 4080C0 | | | | | | | |
| | | | | | | | | |
| Question | Text | Type | Next question | Min | Max | Option | Option text | Option next question |
| extid_q1 | Anledning | CHOICE | | | | | Vei- og kjøreforhold | |
| | | | | | | | Teknisk feil på kjøretøy | |
| | | | | | | | Sen fra forrige tur | |
| | | | | | | | Venter på korrespondanse | |
| | | | | | | | Ulykke/Assistanse | |
| | | | | | | | Passasjer betjening/3part | |
| | | | | | | | Trafikk | |
| | | | | | | | Annet | |



| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Name | Post-Op Check | | | | | | | |
| Type | post_op_check | | | | | | | |
| external_id | post_op_check_1 | | | | | | | |
| Import format | Simple_v1 | | | | | | | |
| Category | Checklist | | | | | | | |
| company_id | 35242 | | | | | | | |
| Priority | 100 | | | | | | | |
| Color | 669933 | | | | | | | |
| | | | | | | | | |
| Question | Text | Type | Next question | Min | Max | Option | Option text | Option next question |
| extid_q1 | Vehicle checked for lost property? | CHOICE_TEXT | | | | | Yes | |
| | | | | | | | No | |
| extid_q2 | Any lost property found? | CHOICE_TEXT | | | | | Yes | |
| | | | | | | | No | |
| extid_q3 | Comments/lost property | TEXT | | | | | | |
| | | | | | | | | |
| extid_q4 | Any other incidents to report? | CHOICE_TEXT | | | | | Yes | |
| | | | | | | | No | |

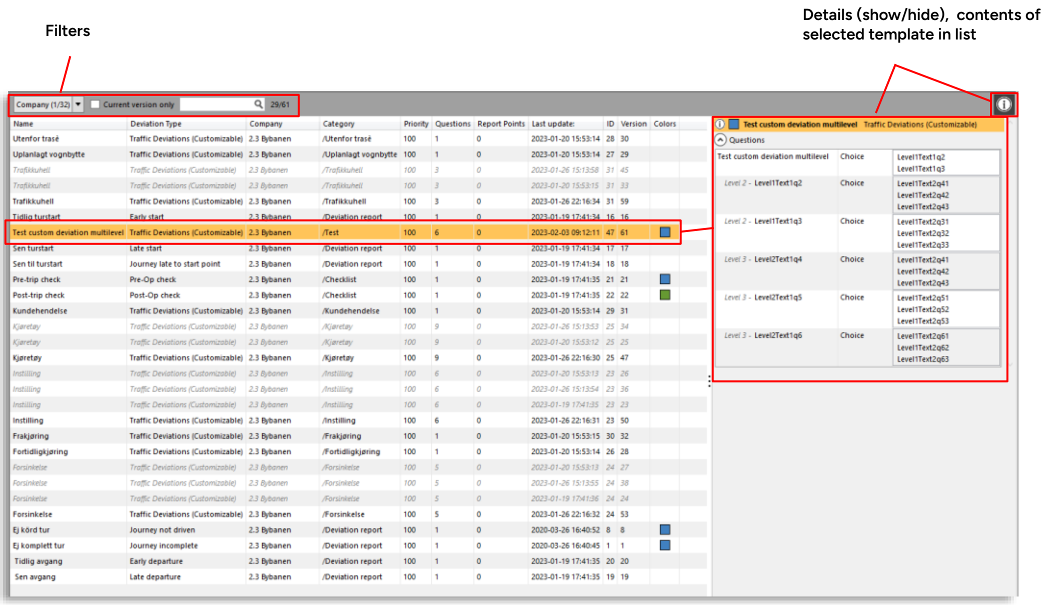
When a Deviation is triggered in a vehicle the driver is presented with a (template-specified) form for explaining the cause of the deviation. The Deviations tool in TS also provides the traffic controller with the same "cause" menu where traffic controllers can change/correct the reported cause of a deviation.

- Note: The default/"clean" template files for deviations and checks, respectively, are available in the system portal. To configure deviation/pre-/post-op checks, fill in the document(s) with the needed templates and import them as resources into CTS using the Configuration Manager web application. See the separate Configuration Manager manual for how to do this.

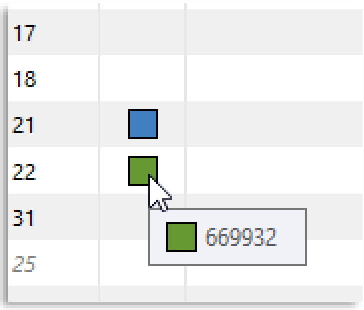
## Overview

The tool lists all imported templates. Use the filter section (described below) to view only templates of interest.

**Note:** The list will also include any waste-handling-related forms in the system. These are more complex and are not imported as excel files thru the CM.

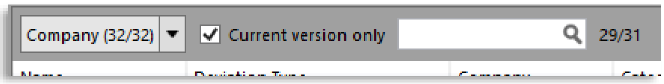



| Name | Description |
|---|---|
| Name | Template/form name |
| Deviation Type | Type of deviation (deviation template), or “pre/post-op check”.<br>**Note:** “Deviations (customizable) is the deviation type for deviations created by the New Deviation tool. |
| Company | Company/Operator |
| Category | Type of template/form (for Deviations (customizable), the deviation category/base node in the selection tree) |
| Priority | Template priority (not to be confused with deviation or event priority in the system). |
| Questions | The number of questions in the template<br>Note: For manually created deviations, this includes each expandable node, see the following section. |
| Report Points | The number of report points in a waste handling form. |
| Last Update: | A timestamp showing when the latest version of the template was imported into the system. |
| ID | Element ID |
| Version | Version number |

| Name | Description |
|---|---|
| Colours | Configured colour (background, report form in driver interface), if any.<br><br>Tooltip shows configured colour numerically. No box means no configured colour/default grey.<br><br> |

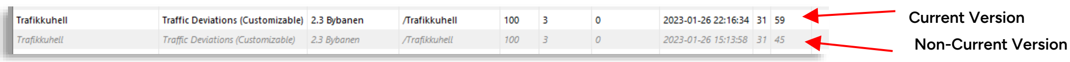
## Filter Section

- If you have access to multiple companies, select the company whose templates you want to display in the top left menu.
- Check the "Current version only" box to only view the templates **in use**. Also, see the section below.
- Use the free text filter so find specific templates.




## Current/Non-Current Versions

With the box "Current version only" unchecked, all versions of each template in the systems will be displayed. The current version is displayed with standard text but **historical (non-current) versions are displayed in greyed-out italics**. See below.

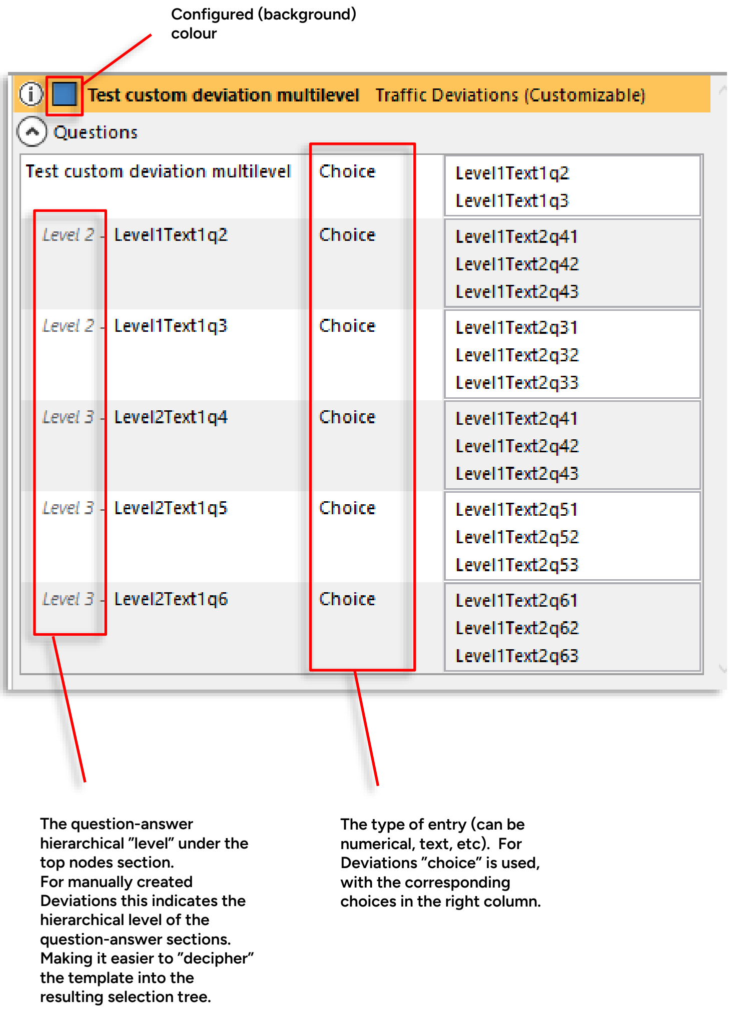


## Details

This section shows the contents of the currently selected template in the list. Each report sheet template consists of one or more "questions" (in the left column) and related answers (in the right column).

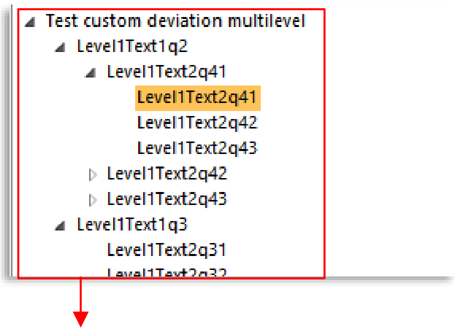
In Deviations triggered in the vehicles/centrally, the answers are the alternative causes of the related deviation presented to the driver /traffic controllers.

- **Note: Manually created deviations use templates in the same question-answers format to form a hierarchical selection tree** where the user can select a specific deviation type and cause. (One deviation type is defined by one template.) See the next page.



## Details: Report Sheet Templates for Manually Created Deviations

For manually created deviations (of the type Deviations (Customizable), the templates form an hierarchial selection tree of deviations sorted into categories and causes for quick selection.



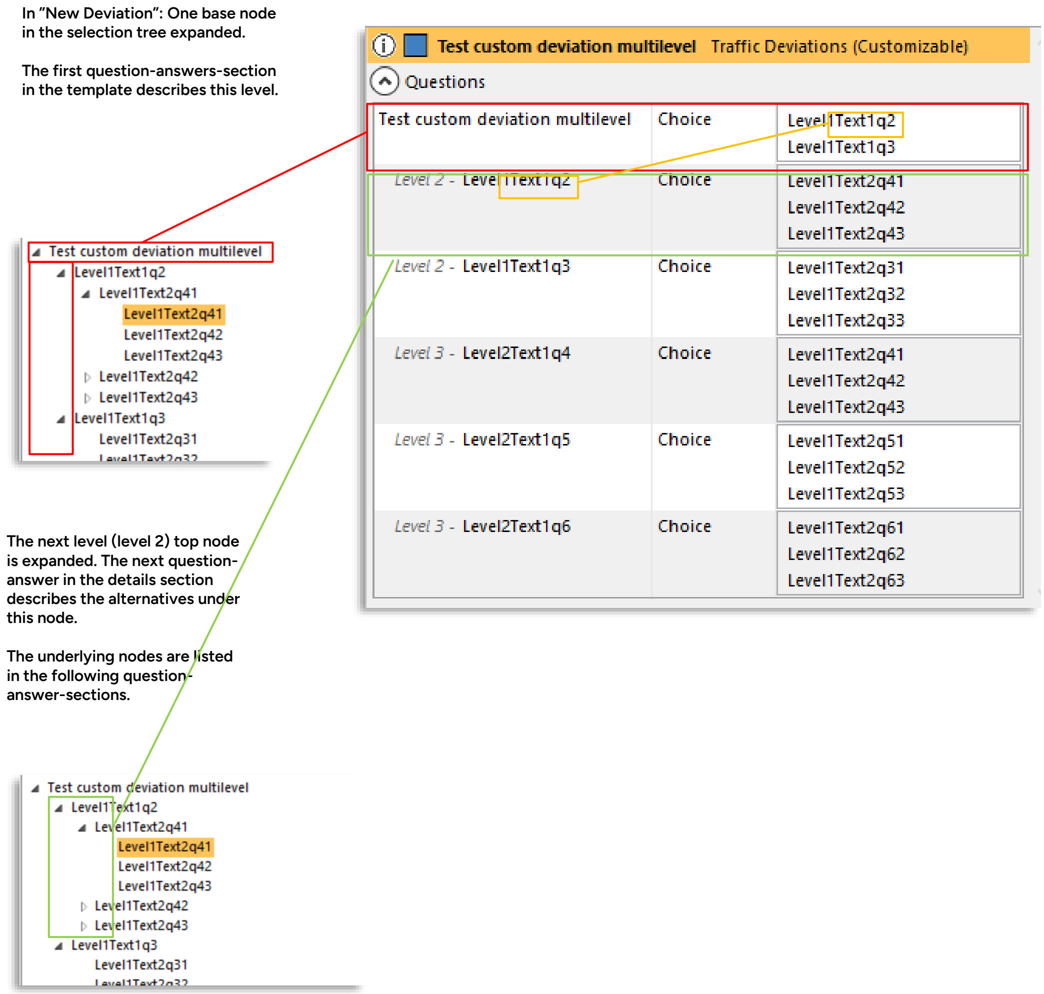

The selection tree in New Deviation, formed by the "Deviations (Customizable)" templates.

The base node "Test custom…" in the tree is one template/row in the My report sheet templates tool.

- Every "base node" in the tree is a separate template (row in My Report Sheet templates).

- The top level under the base node is described in the first "question-answers section", and the next level is described in the following sections, and so on. See the example below.

- The form is flexible and not specifically designed for this use. Taken together, all such templates for a company will form a simple "Deviation -> Cause" tree that is used by the New Deviation tool for manually entering Deviations.



## 5.2 Deviation Templates

**Note: This tool/function is under development.**

- In the current version of CTS, generation of Driver Alarm deviations are supported with the use of Deviation templates. More deviations will be added in upcoming releases.

### Deviation Templates: Basic Functionality

- **Deviation templates allow you to set up how** (based on your deviations configuration), **specific Events and Warnings will generate deviations.**

- Templates "fill in" the created Deviation [window] based on the template contents.

- Enter as few or as many templated items (menu selections/checked boxes) as you want. A template can produce an almost completed deviation form or maybe only check a single box (apart from defining the deviation).

### The Deviations Template Tool

The Deviation Templates tool lists all deviation templates in use in your system.

It allows you to create new templates, edit templates and delete templates.

Each deviation template is configured using the same deviation tool window you use for creating/processing deviations in your system, and shows your configured sections menu items etc. You make selections in the standard deviation menus and check boxes to define your template. And then save your template.

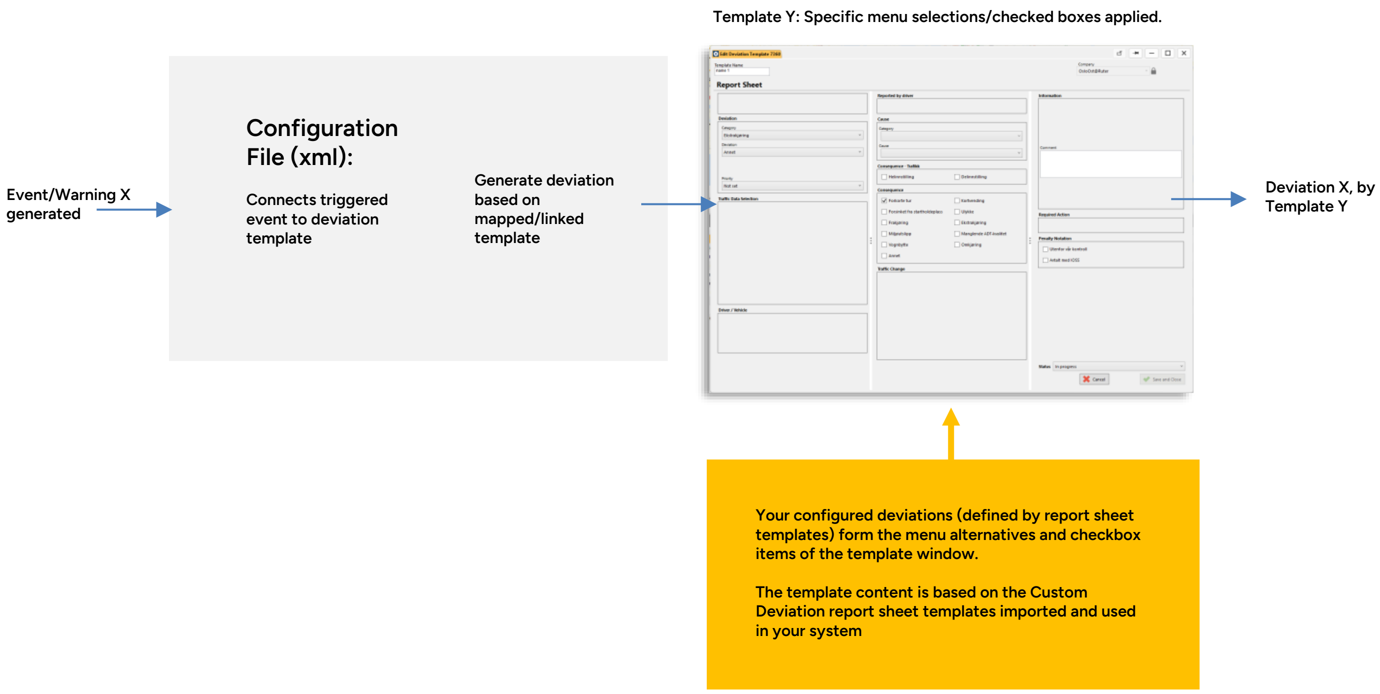
## How Deviation templates are applied to a generated deviation

- **Note:** In the current release, the **event/warning** that generates a deviation is manually mapped to the name you give a template that you want to use to create the deviation, or the template ID.

  **Contact Consat Telematics for assistance with mapping, when you have defined your templates.**

- **Note:** Currently, only a specific list of events/warnings use this deviation generation and configuration method.

  The events listed in the TS Event Configuration tool that can generate deviations use another way of configuring the resulting deviation.
  (These are configured with only the report sheet templates. See The Deviation chapter in the Reference manual and the My Report Sheet Templates here in this administrators manual for description.)




## Tool Overview

The Deviation Templates tool lists all your deviation templates w basic content presented. A "New Template" button opens a blank deviation template window, and quick menus allow you to edit or delete templates as needed.

- **Note:** The configurable columns mirror those in the Deviations tool. Normally fewer columns will be of interest in a Template list. The columns unique to this tool are bold in the list below.

| Column | Description |
| --- | --- |
| **ID** | **Deviation ID** |
| Priority | Set priority (if any), 1-5. Used for sorting and filtering the presentation to highlight the most important deviations. |
| **Template Name** | **Template Name (freetext)** |
| Summary | The configured “short description” of the deviation, that is also the deviation header in the deviation window. May include deviation, journey, journey start time, etc. |
| Company | The company driving the journey. Also, see the Company Filter description below. |
| Line | The line serviced by the journey on which the deviation was recorded |
| Destination | The journey destination |
| Vehicle | Vehicle number |
| Driver | The driver's name, if available. |
| Place | Location where the deviation occurred, if entered in free text. |
| Block | The block that includes the journey on which the deviation was recorded |
| Journey | The journey on which the deviation was recorded |
| Stop Point | The stop point where the deviation report was (first) triggered |
| Calendar Day | The date when the deviation report was triggered |
| Planned Departure | The planned departure time (from the indicated stop point on the indicated journey) |
| Actual Time | The recorded time of departure, (for automatic deviations: When the deviation was first triggered.) |
| Report Time Stamp | When the deviation report was created/sent |
| Time Deviation | The difference between the planned and the actual departure (for timetable deviations). |
| Deviation | The logged **Deviation** (specified in the bottom deviation menu in the deviation window): |
| Deviation Type | The logged deviation type (system dependent) **Note:** Manually created Deviations are of the type “Deviation (customizable)”. |
| Category | The category the deviation belongs to (specified in the top deviation menu in the deviation window). |
| Cause | The (currently selected) cause of the deviation, specified by traffic controller. |
| Cause (driver) | The cause of the deviation selected by driver (if available). Read only (default configuration). |

| Column | Description |
| --- | --- |
| Status | Shows the deviation ticket status: Not set/Pending/In Progress/ Processed/Closed |
| Action Card | Shows if the deviation includes required actions. (Actions that need to be performed for the deviation to be closed). |
| Comment | Deviation comment (**internal, not publicized**). It is possible to enter/add to/edit the comment, see below.<br>**Note:** A related Traffic Changes ticket including a disturbance and comment will export its comments to the affected deviation. |
| Published Comment | "**External**" comment included in publicized deviation. |
| Consequences | The (automatically/manually) selected consequences of the deviation, see the Deviation Window Consequences section(-s). |
| Published timestamp | When the deviation was published to 3:rd party. |
| Published Email | Email publication channels selected, see the Deviation Window Consequences section(-s). |
| Published SMS | SMS publication channel selected, see the Deviation Window Consequences section(-s). |
| Required Action | Checked required action, see the Deviation Window Consequences section(-s). |
| Penalty Notation | Checked penalty Notations, see the Deviation Window Consequences section(-s). |
| Modified by | User/Driver that (last) reported a cause of/reason for the deviation.<br>When a deviation has been created by an event (like "journey incomplete", this cell shows "Event Generator" as user/source. |
| Modified time | Timestamp showing when the deviation ticket was created/last changed. |
| Assigned | The user the deviation ticket is assigned to (if any) |
| Assigned Time Stamp | When the assign status was last changed |
| Removed | Checkbox (read only) shows if the deviation has been removed. Note: Deviations cannot be deleted only flagged as removed/"not valid". Check the "Show Removed" filter to see all removed deviations. |
| Source | Where the deviation was created/triggered: Traffic Control/ Vehicle... |

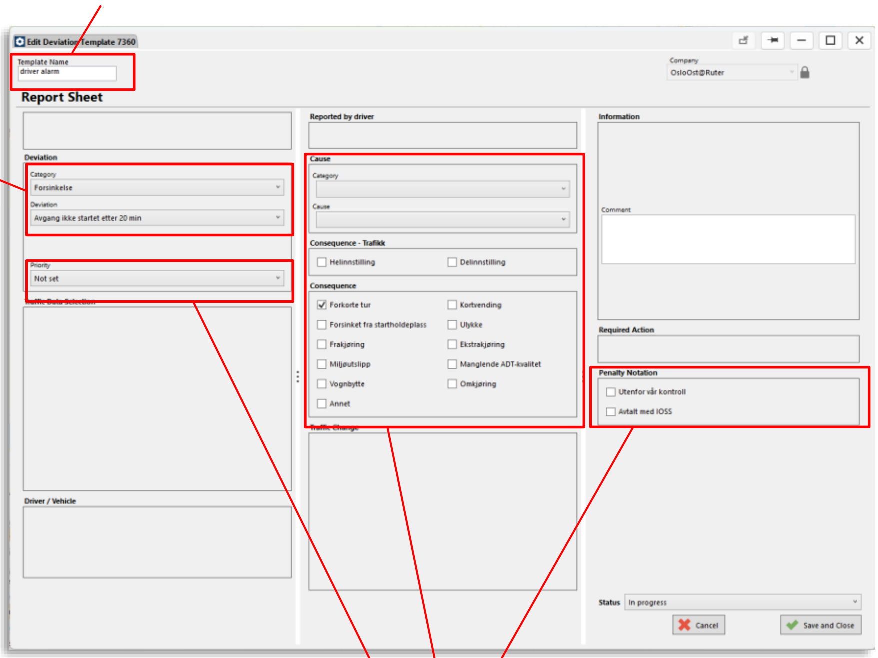
## Edit Window

The edit window works just like (and looks just like) the deviation window used for processing deviations.

- The deviation template has two purposes: Defining the deviation (in the deviation section) and applying a base configuration for each generated deviation, in the other editable sections, if so desired.

Your free text template name (give this to Consat for mapping).

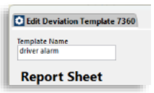
Deviation definition is mandatory: Select Category and Deviation.



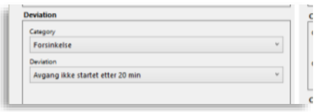

Use all other menus and checkboxes (if needed) to “pre-define” your deviation. The created deviation will have these default selections, which of course can be edited by the user processing the deviation.

## Create new Deviation Template

1. Click the New button 
2. In the Template window: Enter a free text template name.



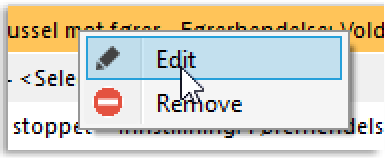

3. Define the deviation in the Category-Deviation menu. This is the only mandatory selection.)




4. Enter other menus/check boxes as needed.
5. Click Save.

## Edit Deviation Template

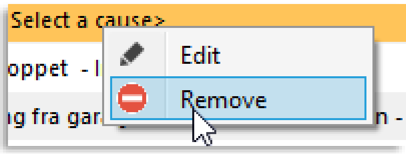
1. Right-clik on a deviation remplate row, select “Edit”.



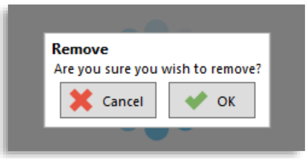

2. Change above described menus etc as needed.
3. Click Save.

## Delete Deviation template

1. Right-click on a deviation template row and select Remove.



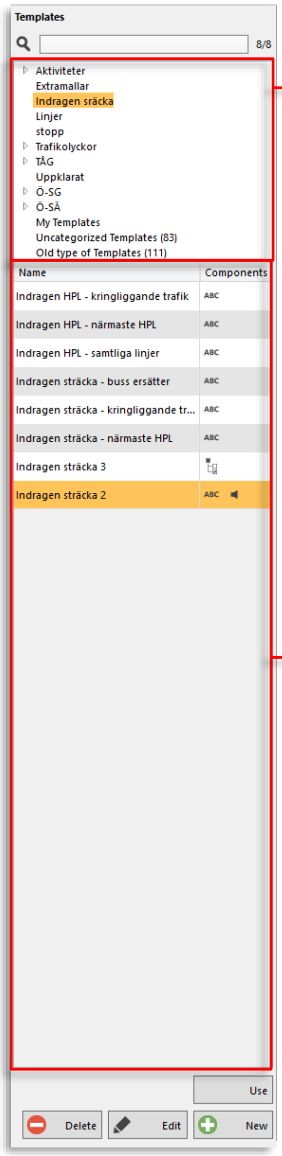

2. Confirm removal in dialogue.



## 5.3 Traffic Changes: Create, Administer Templates

If you are an administrator responsible for setting up and editing templates, you will find additional buttons and right-click menu alternatives in the template section.

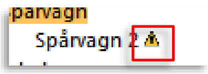
You can create and edit the template navigation tree, create and sort templates into these categories, and delete navigation tree items and templates.




**Template Category/Navigation Tree**

As administrator you get right-click menus to create, rename, move and delete categories and sub categories in the tree.

**Note:** A category must include at least one template for you to be able to save it. “Empty” categories are highlighted with warning symbols and will not be saved when the tool is closed. Se below.




**Note:** Depending on tool configuration, you may only be able to make changes to templates created by your user role, including their place in the navigation tree. From this follows that *you cannot move or delete a category that includes one or more templates created by another role*
(indicated by lock symbols).

**Template list, selected category**

As administrator you get right-click menus to move a selected template to a category.

Buttons at the bottom of the list allow you to create, name and configure a new template and delete a selected template.

### The Template Navigation Tree

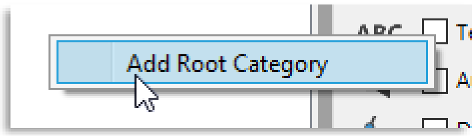
The templates are sorted and categorized in a Navigation tree (see description in the previous section)

- You create the navigation tree by creating **base categories**, **sub-categories** (and if needed sub-sub categories).
- **Categories are sorted alphabetically**.
- **Templates are sorted into the created navigation tree categories.**

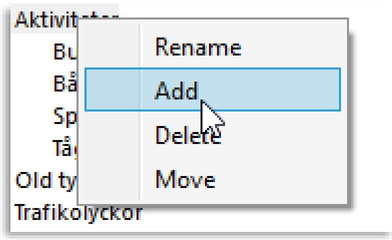
- **Note:** Templates that do not belong to a category are sorted into the category "**Uncategorized templates**". This category is only visible when there are uncategorized templates.

## Add a navigation tree category or subcategory.

1. To add a root category: Right-click **outside any category names** in the tree. An **Add Root Category** menu shows. Select it.



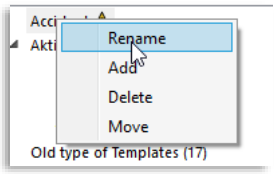

To add a subcategory: **Right-click on the parent category** and select **Add** on the menu.



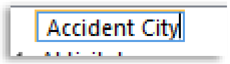

2. A new "Category" name field shows in the tree. Enter the category name. Press return to save, and verify the resulting sorting order.

## Rename a category/ sub-category

3. Right-click on the category/template you want to rename and select Rename in the menu. The name field changes to edit mode.




4. Make the name changes. Press return to save, and verify the resulting sorting order.

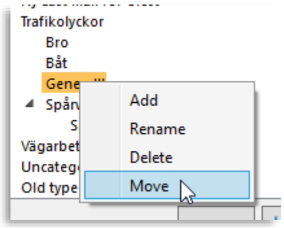


## Move a category or template to another category

You can move a subcategory to another root category, or place it under a subcategory, making it a subcategory. Moving templates inside the navigation tree work the same way.

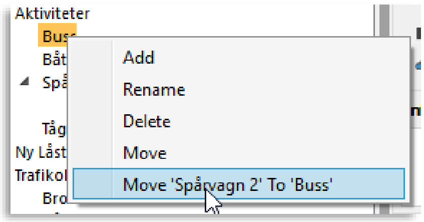
- **Note:** In a system with "old", uncategorized templates, you will have to categorize all templates by moving them from the "Uncategorized Templates" category to suitable categories in the tree. When no templates are uncategorized, the uncategorized category will be hidden.

1. Right-click on the category you want to move and select **Move** in the menu. Alternatively, right-click on a template in a category template list and select **Move to Category**.





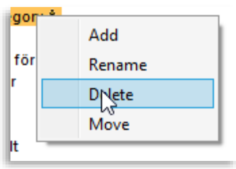
2. Right-click on the root or subcategory you want to move the category **to**, and select **Move** [category/template name] **to** [target category name] in the menu.




## Delete a category or subcategory in the tree

- **Note:** You can only delete categories created by the user role you logged in as. Categories created by other user roles are "locked".
- **Note:** Templates belonging to a category that is deleted will be moved to the "Uncategorized templates" category in the tree.

Right-click on the category/template you want to delete and select **Delete** in the menu. The category will be deleted immediately.



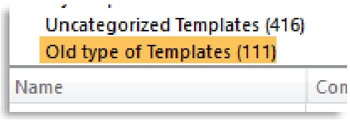
## Move all old locally/file stored text templates to the Uncategorized templates category

- **Note:** SuperUser only

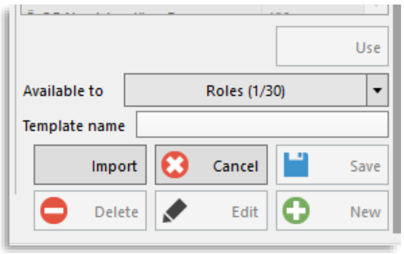
When upgrading a system from the legacy locally stored **text templates** (found in the "Old type of templates" category in the navigation tree) to the database, there is a quick way of importing all old text templates to the Uncategorized Templates category. This way they will be available to all users of the roles you selected at import. (Of course, the templates can then be moved to other categories, see above.)

- Note that old selection templates need to be moved manually, one by one.

1. In the navigation tree, check the number of old templates that are to be moved. (The number includes both text and selection templates.)



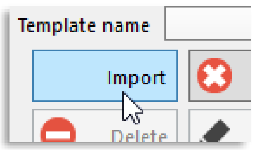

2. Click on the **New** button, the New template section will expand (and an **Import** button will show).



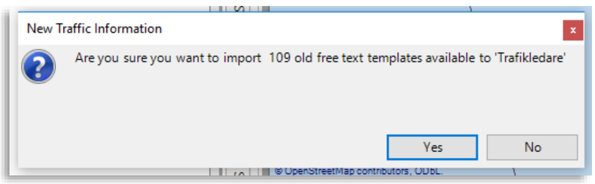

3. In the Roles menu, select the [user]role/roles that will have access to the moved text templates.

- For information about how to use filter/multiple selection menus, see Chapter Fel! Hittar inte referenskälla.

4. Click on the **Import** button.




5. Confirm in the dialogue.




Now all the old text templates have been copied to the Uncategorized Templates category.

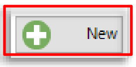
If/when the old-style locally stored templates are deleted (which have to be done manually by the administrator), this category will no longer be presented in the navigation tree.

## Create a New Template

- **A template is a "snapshot" of the current entries and selections in the New Traffic Changes tool.**
- **If you create a new template with a Template navigation tree category selected, the template will be sorted into this category. (You can, of course, move the template between categories later, see description above.)**

1. Fill in all the needed sections and selections in New Traffic Changes. You can, of course, make a template of a partially completed information ticket, leaving the rest to the template used to complete.

2. Click on the **New** button on the Templates tab. The bottom section will expand and show a name field, a Cancel, and a Save button.




3. Open the **Available by** menu to set which roles will have access to the template. You can select all the roles you have access to yourself.

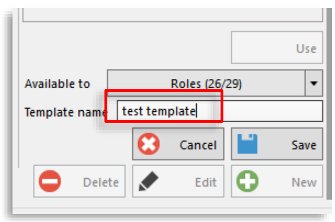
   The top selection is your logged-in user. **Check this box to make a personal template available only to you.** (When you check the top box all other users will be greyed out in the menu. **Note that this is a configurable function, see the Administrators manual**.)

   For information about how to use filter/multiple selection menus, see Chapter Fel! Hittar inte referenskälla.

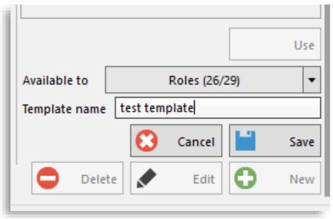
4. Enter a suitable **Template name** in the name field.

   **Note: Templates are sorted in alphabetical order when the list is sorted by the Name column**. If you want your templates in a specific order, start the name with a sorting number or letter, i.e. "1. Central Arena Main Event"...

   **Tip:** Try to standardize template names in your organization – this will make your work a lot easier...



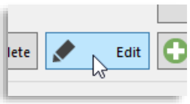

5. Click on the Save button to save the template to the central system (in the selected category in the tree).




## Edit a template

- **Note:** Templates can only be edited and re-saved (with the same name) by users with the same user role as the creator of the template.

1. Select the template you want to edit/change.
2. Click on the **Edit** button. The rest of the template section will be greyed out.




3. Make the modifications in the information ticket component sections.
4. Return to the Templates section and click on the **Save** button.
5. Confirm the changes in the dialogue.

## Make a new template based on an existing template

1. Select and apply (Use) the template you want to “edit”.
2. Make the modifications in the information ticket component sections.
3. Return to the Templates section and click on the **New** button to create a new template from the current content.
4. If needed, change the roles that have access to the template (see above).
5. Enter a unique name and click on **Save**.
6. Sort the template into a suitable category, if needed.

## Delete a Template

Note: **The** Delete **button will only be active if a selected template was made by a user with your user role** and the option Templates can be removed is ticked in Traffic Changes setup, see Appendix B.

1. Select the template in the list.
2. Click on the Delete button at the bottom of the tab window.


3. Confirm in the dialogue.

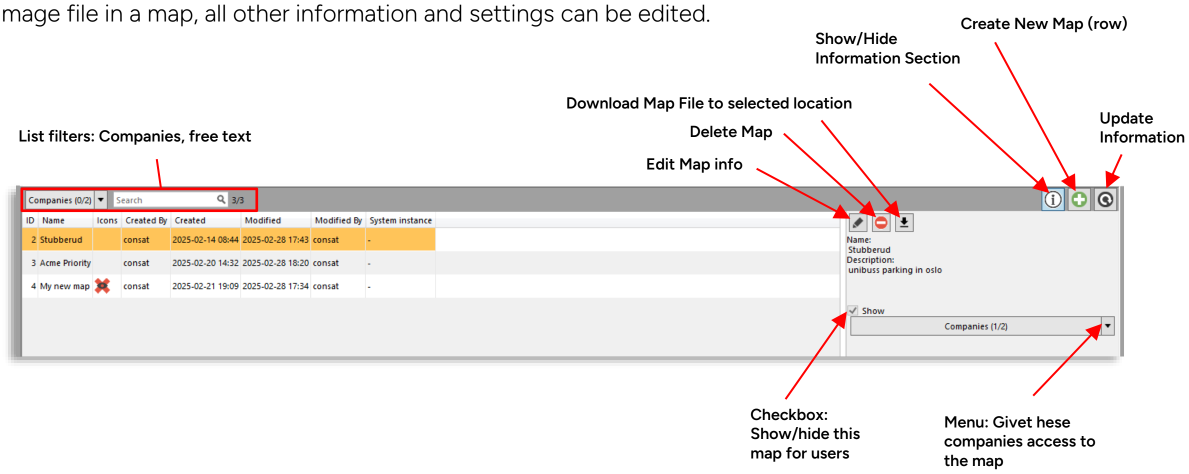
## 5.4 Yard Map Admin

Tools > Yard Map Admin

This simple tool allows you to administer yard maps (logical parking and charging maps). You can import, edit names, set the company access rights and delete maps as needed.

All available maps are listed with basic information in a table, described below.

**Note:** You will need to create a new map and delete the old one if you want to change the image file in a map, all other information and settings can be edited.




| Header | Description |
|---|---|
| ID | Internal Map ID. |
| Name | Free text Map name, editable. |
| Icons | If map is to be visible to/selectable by users or not. See the “show” setting in the details section below. |
| Created by | User that imported map |
| Created | Timestamp showing when map was imported. |
| Modified | Timestamp showing when map settings/info was last edited. |
| Modified By | User that last modified map. |
| System Instance | Map system instance (only systems with multiple instances) |

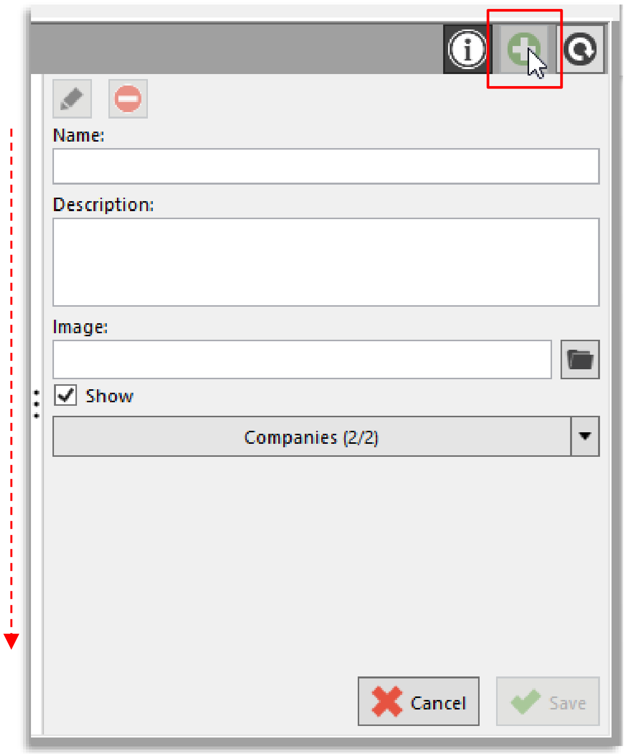
## Create New Map

To create a new map, click on the "New" button. The Information-section shows entry sections and menus for the new map.

**Note:** You will need a correct .svg file with the parking locations on the map mapped to the corresponding chargers/connectors. Contact Consat to get assistance with producing such a file.

Enter, from to top to bottom:

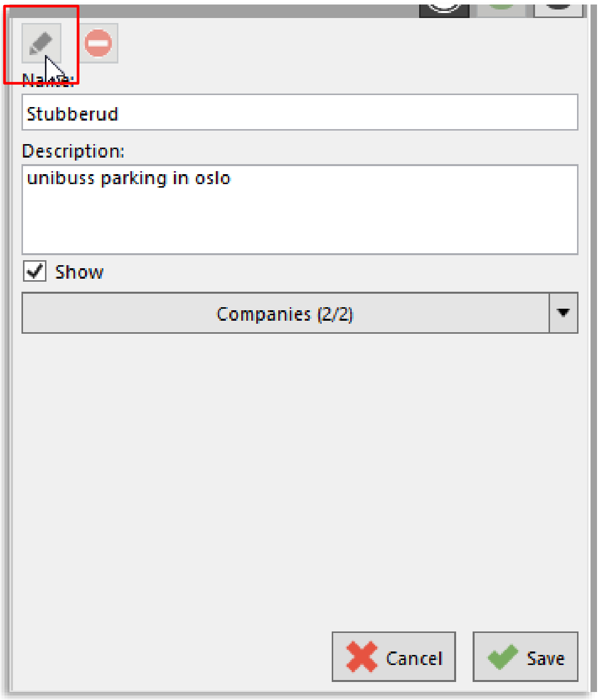
1. Name
2. Description
3. Upload map svg image file (browse and select file), see note above.
4. Choose if users are to see/have access to the created map (this can of course be changed later). Check box to let them see/select the map.
5. Choose the companies that shall have access to the map.
6. Click Save.



## Edit Map

To edit map information/settings, select the map row and click the edit button.

Now you can edit name/description, user access ("show") and company access. Click save to save changes.

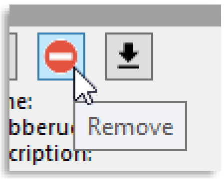



## Download Map Image File

To download the image file in/from a map, select the map row and click the download button, select the download location and click save.


## Delete Map

To delete a map, select the row and click the remove button.

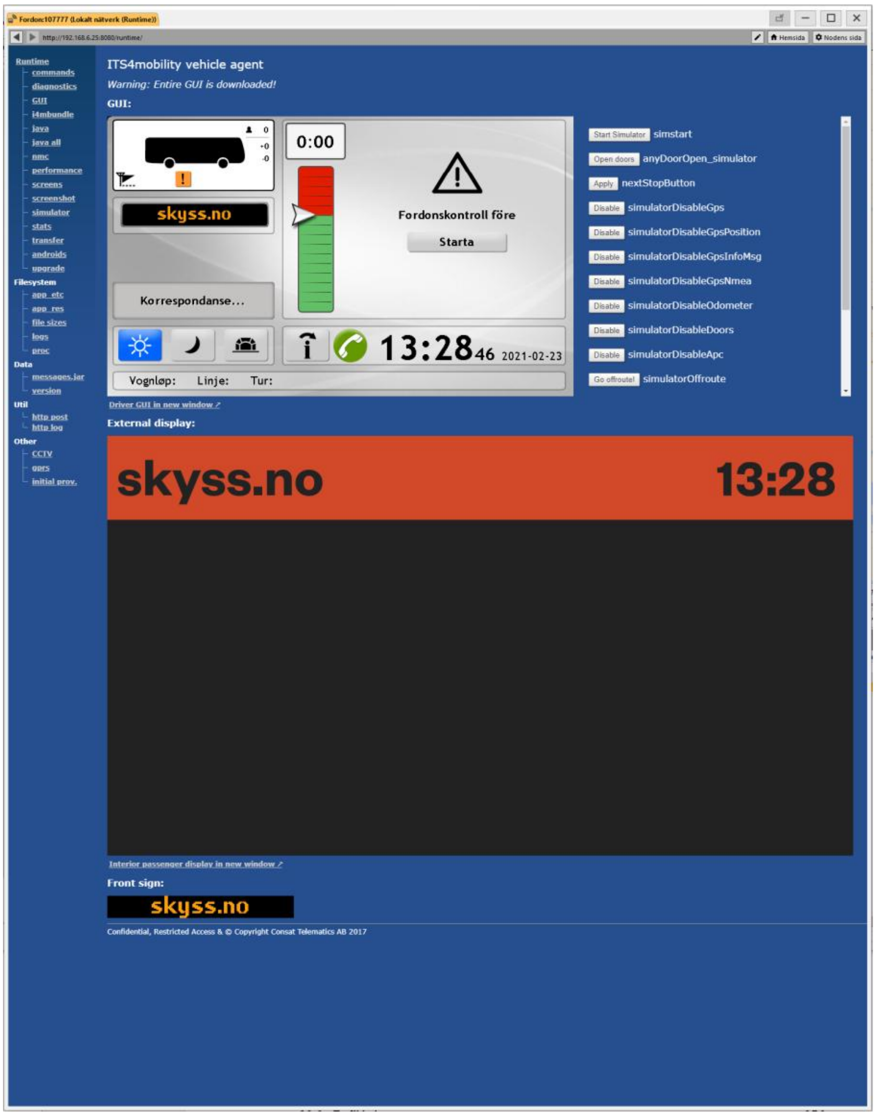


## 5.5 Vehicle User Interface – Runtime Page

Vehicle Quick Menu > Vehicle User Interface – Runtime Page

This quick menu item provides access to the vehicle system Runtime web interface. Here, you can access multiple system functions in the vehicle computer. It provides an interactive driver interface, displays, location map, simulator controls (for "driving" the test system), etc.

**Note:** The Runtime page functionality description may be added in a later version of this document (or in a separate document).

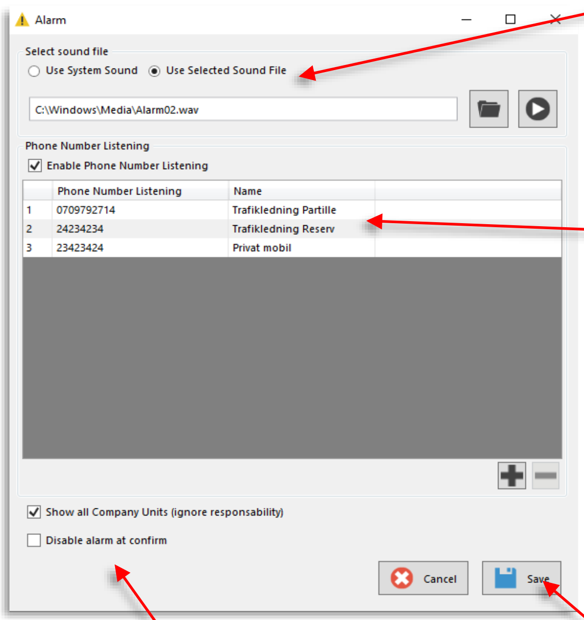


# 6 Tool Configuration

## 6.1 [Driver] Alarm

File > Setup > Alarm

In the alarm setup, you can select which sound to use when you receive a driver alarm. You can either select the default sound from the system or browse the path of the sound file of your choice. You can test your sound by clicking on the “play” symbol.




**Select Sound File**

Use either the standard system alert sound or select your own file (wav).

Browse to the file, select it and pre-listen to it with the play-button.

**Phone Number Listening**

Check the box to enable the function.

To add a phone number to the available numbers the traffic controllers can select, click on the Plus (add) button and enter number and name/description.

To delete a number from the list, select the row and click on the minus (delete)-button.

**Alarm Functionality**

See the description in the below text.

**Save Changes**

... Or Cancel with the Cancel button.

### Phone Number Listening

- In the “Phone number Listening” section you can configure one or more phone numbers that a traffic controller can choose from when acknowledging the alarm. This number will get sent to the vehicle system and the vehicle system then silently (stealthily) calls this number and keeps the line open for audio monitoring of the front of the cabin through the driver microphone.
- You can configure and name several telephone numbers that the traffic controller can choose from before acknowledging the alarm (and thus sending the number to the vehicle for call-up).
- Also, see the corresponding chapter in the reference manual for a description of the function.

## Alarm Functionality Configuration

- Two checkboxes allow you to configure the alarm functionality: Check “Show all Company Units (ignore responsibility)” to present alarms to the user from all vehicles in the system, *regardless of the company they belong to*.

  If this box is left unchecked, only alarms from the vehicles the user has responsibility for (i.e the vehicles listed in the My Vehicles tool) will be presented to the user.

- Check “disable alarm at confirm” to request the vehicle to turn off the alarm when an operator confirms the alarm. The vehicle will then stop sending alarm updates and the alarm window will stop flashing red. The vehicle position and information will still be updated in the alarm window (just like when following the vehicle on the map).

  If the box is left unchecked the vehicle will continue to send alarm updates (with configured frequency) and the alarm window will still flash red after a user has confirmed the alarm. (The alarm sound will still stop after the confirmation and the alarm window will still be closed in the other operators' applications.)

Click on **Save** to save your selection/configuration, or Cancel to exit without saving your changes.

## 6.2 Warnings

File > Setup > Warning setups, indicated with

In the various warning setups, you can enable/disable each warning and select if/which sound to play when the warning window is displayed in Traffic Studio.

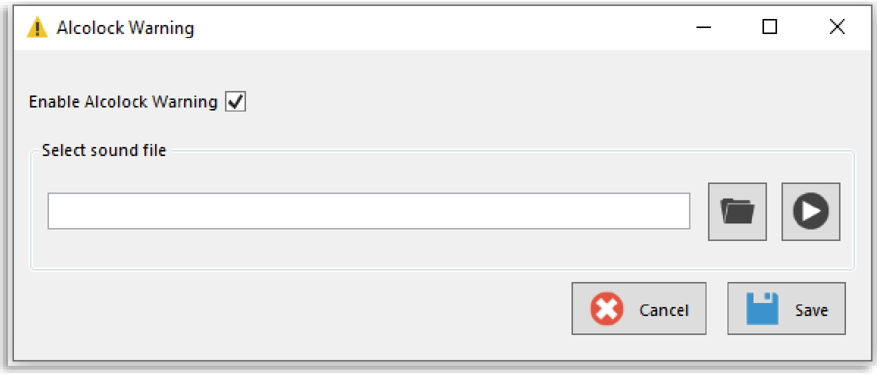
Warning setup windows:

- Alcolock
- Fire Alarm
- [Vehicle] In service, no driver logged in
- Vehicle Accident

- Note that geofence-triggered Road limitation warnings are configured in the Geofence setup, see the next chapter.

1. Check box to enable function.
2. Browse to the sound file of your choice and click on Open in the navigation window.

   If no sound file is selected, a default system sound will be used.
3. Click on the play symbol button to play the sound.



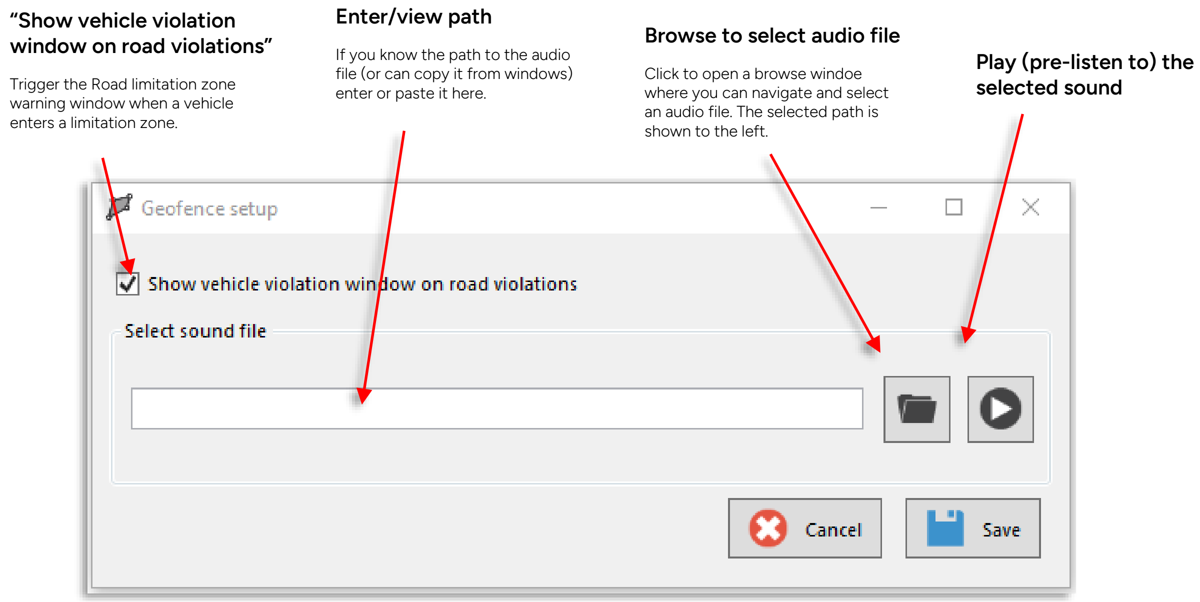

Click on Save to save your selection/configuration, or Cancel to exit without saving your changes.

## 6.3 Geofence

The Geofence setup window allows you to select a notification/warning sound to be played whenever a vehicle triggers a geofence warning (presently limited to Road Limitation zones). The sound is played as the Road Limitation zone vehicle details popup is presented.

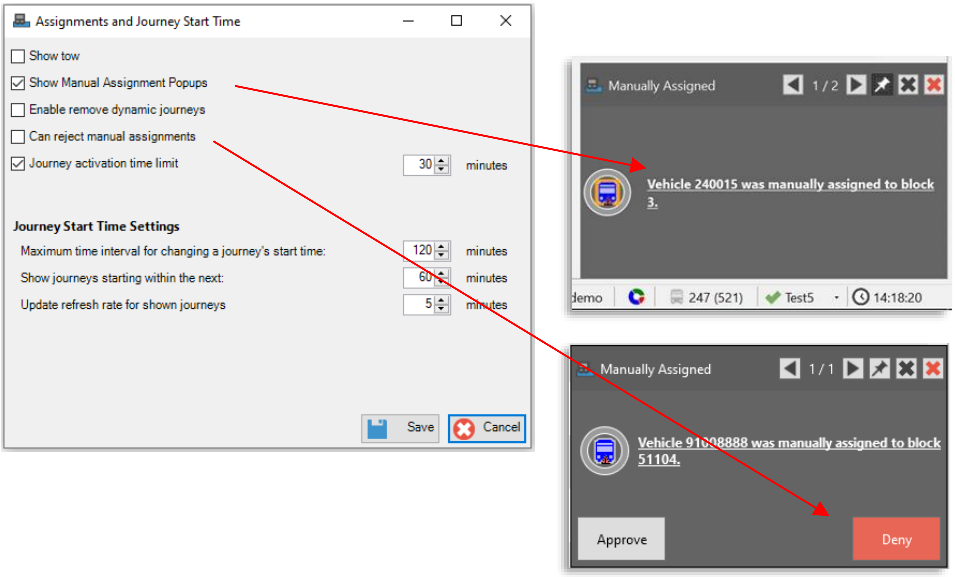
- You can browse and select an audio file (.wav format) on your computer, and play it to verify your selection. Alternatively, enter the path to the file. Then click on Save.

  Note: You can disable triggering the Road Limitation Zone window when a vehicle enters such a zone and only enable the corresponding event for more subtle monitoring – See the Event Configuration and Event Monitor chapters in the Reference.



# 6.4 Assignments and Journey Start Time Setup

File > Setup > Assignments and Journey Start Time




## Assignments Settings

- Show Tow: Tick this box to include functionality for assigning Towed vehicle (tram).
- Show manual assignments as popups: Ticking this box and clicking on Save will ensure that all manual assignments will be shown as popup windows in the lower right corner of the application.
- Check Enable remove dynamic journeys to allow the user to delete/remove dynamic journeys [created from journey templates].
- Check Can deny manual assignments to enable the user to approve or deny manual assignments, i.e., assignments performed by the drivers themselves. (Notification and decision on a pop-up and in separate section in the Assignments tool.)
- Check Journey activation time limit to turn off the activation function for on-demand journeys a set time before the planned journey start. (This makes it possible to avoid journey activations too close to the journey start for the drivers/organization to react.) Set the time [before the journey start] the activation is to be “locked” in the time window.

## Journey Start Time Settings

Maximum time interval for changing a journey’s start time: This determines how much a journey’s start time can be modified. E.g., the time is 9.00 am and the value is 120 minutes. The user can modify start times from 7.00 am to 11.00 am.

Show journeys starting within the next: Number of minutes used to populate the list of incoming journeys. The user can also change the settings directly in the Journey Start Time plugin.

Update refresh rate for shown journeys: This determines how often the list updates with new journeys.

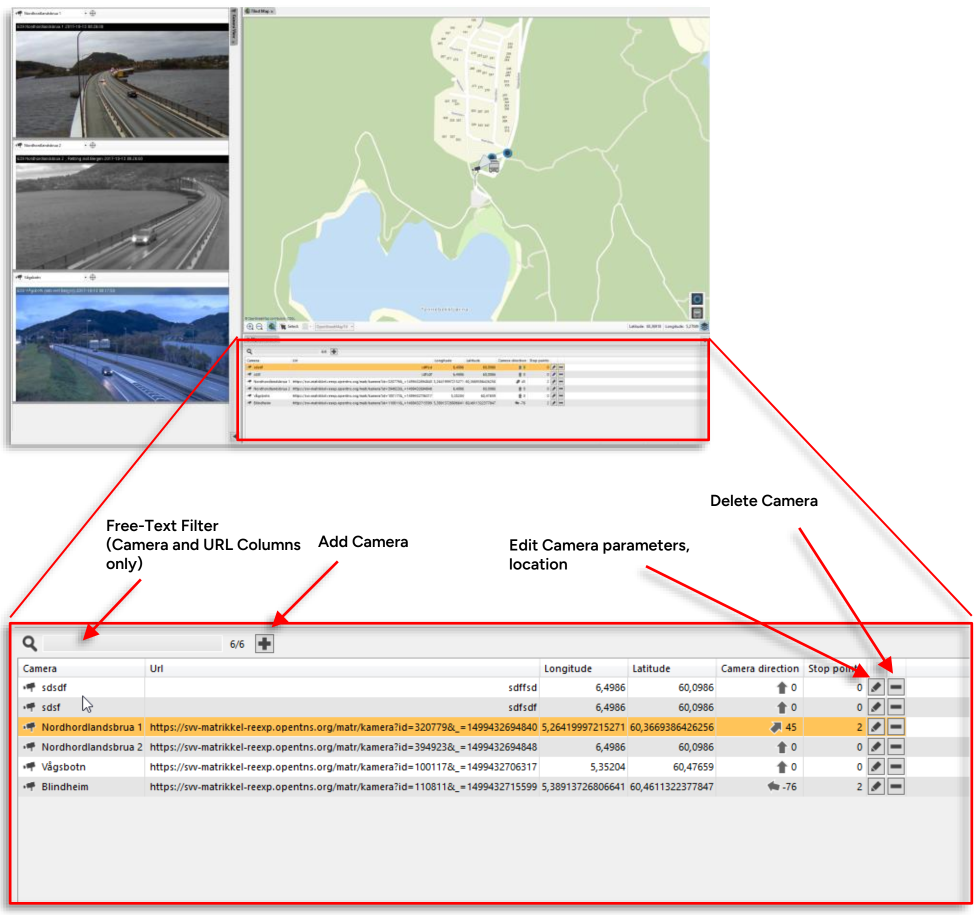
## 6.5 Camera View (My Cameras)

To set up the (web) cameras available to the user in the Camera View tool, you use the tool **My Cameras**. (Cameras are normally configured for whole roles/groups but can of course be set up for single users too.)

Use this tool to add and name cameras, define their position and direction, and configure which stop points are in view (if any) – for camera access through the corresponding stop point shortcut menus.

### My cameras: Overview

The tool lists all configured cameras, including the configured parameters and the number of stop points covered. Buttons for adding, deleting, and editing cameras are included. If you have many cameras the free text filter will help you quickly find a particular camera in the list.




- Double-click on a row to zoom the map to the camera position.

| Column | Description |
|---|---|
| Camera | The configured name of the camera |

| Column | Description |
|---|---|
| URL | The URL of the web camera |
| Longitude | Location: Longitude |
| Latitude | Location: Latitude |
| Camera Direction | The direction of the camera, in reference to the map: "0" is due north, "-90" due west, "90" due east… |
| Stop Points | The number of stop points covered by the camera (configured as being in the camera field of view).<br><br>Note: The Stop point presentation is configured in the Tooltips and labels menu – see the User reference manual, chapter 7.2. |

## Add a Camera

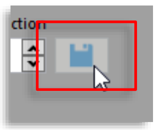
To add a new camera to the list:

1. Click on the Add camera button. An empty edit (Add new) section will show below the camera list section.


2. In the Add new section: Enter a suitable camera name, the search path (URL), and the camera location: longitude and latitude (if available). If long/lat is not available but you can identify the location on the map, use the map location functionality instead, see below. Enter the camera direction and add stop points visible in the camera view, see descriptions below.

   **Tip:** If you lack exact information about the camera, you can often use the camera image to identify the location, direction, and covered stop points: Enter the camera name and URL and save the camera with the default location. Then select the camera in the Camera View tool to view the camera image. Edit the relevant parameters to complete the setup. See the following section about how to edit cameras.

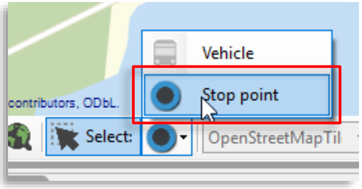

3. Save the camera by clicking on the save button.



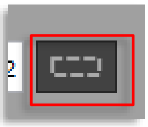
## Enter/edit camera location using the map

The correct coordinates of all cameras may not always be readily available. To enter a camera location using the map, both when setting up a new camera and when editing an existing camera, do like this:

1. Pan/zoom the map to show the area where the camera is located and make sure the map selection tool is set to Stop Point.

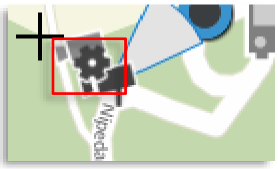



2. Click on the "enter location using map" button. The button is dark grey when the positioning function is active.

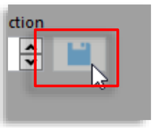


3. Right-click and draw a (yellow) positioning rectangle on the map – the camera location will be at the Centre of the drawn rectangle.

4. When you release the mouse button, a preliminary camera location will be displayed by a grey camera symbol with a cogwheel overlay. If you are editing an existing camera, the current location will still be indicated by the normal camera symbol, see the example below.
   If needed, redo steps 3-4 until the position of the camera is correct (use the camera image for reference, see the tip above).

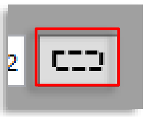


5. Proceed with entering the remaining parameters or save the location using the save button.

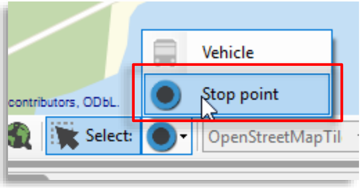


## Add/remove stop points visible in the camera view

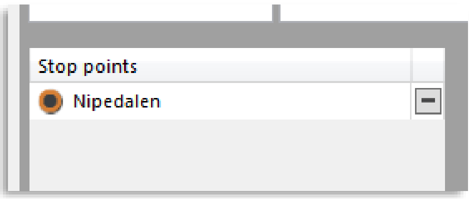
1. Make sure the "enter location using map" button is not active (otherwise, click on it to deactivate the function)



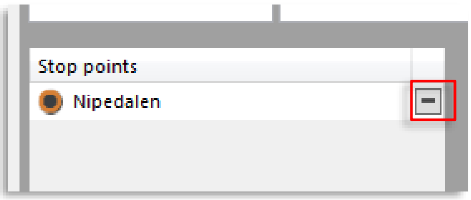
2. If needed, pan/zoom the map to show the area where the camera is located and make sure the map selection tool is set to Stop Point.



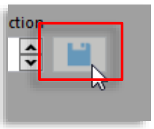

3. Right-click and draw selection rectangles over the covered stop points. These are added to the Stop points list in the Add new/edit section. Repeat to add more stop points to the list.




4. **To remove a stop point from the list**, click on the remove button to the right of the stop point name.




5. Proceed with entering the remaining parameters or save the current parameters/stop points using the save button.

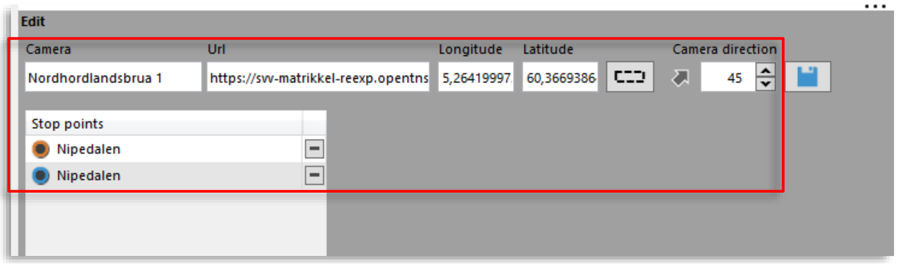


## Edit camera [parameters, location]

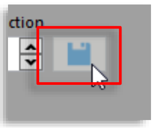
Editing cameras work just like setting up new cameras. The only difference is the name of the camera parameter section (Edit instead of Add new) and that parameters will already be entered in the various fields.

1. Open the **Edit** [parameters] section by clicking on the edit button on the corresponding camera row.

2. Change the needed parameters (see the previous sections for how to do this).




3. Save your changes by clicking on the save button.



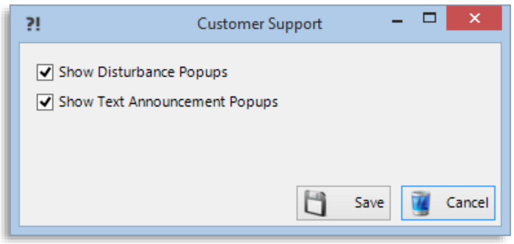
## Delete Camera

To delete a camera from the list, click on the delete camera button and confirm in the presented dialogue.

## 6.6 Customer Support

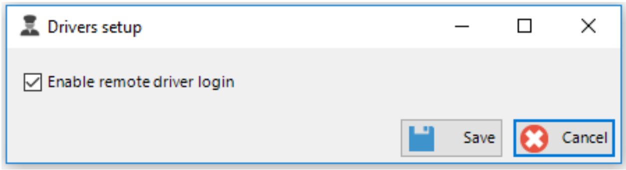
File > Setup > Customer Support

Disturbances and/or Text Announcements can be shown in a popup window in the lower right corner of the application when they become active. Tick the checkboxes to enable the popup window.



## 6.7 Drivers

The Drivers setup window is as simple as can be, it only includes a single check box: **Enable remote driver login.** Check the box and click save to enable traffic controllers to right-click on a vehicle to log in/out a driver. Click on Save to save the setting.

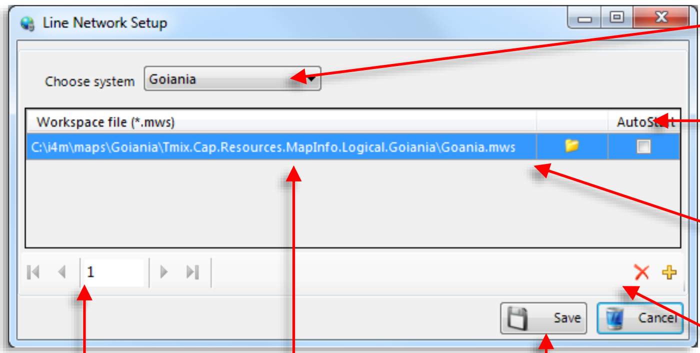


## 6.8 Line Network

File > Setup> Line Network Setup

This tool displays a logical view of the vehicles and the stops in the network. Vehicles are represented by arrows and their size and colour indicate their deviation from the timetable. Users can zoom in on vehicles and stop points just like the Map tool.

In the Line network setup window, you can add or remove network maps as well as configure those that will open when the application starts. The maps are linked to their respective system (see below). Several maps can be linked to each system (usually one for buses and one for tramways).




**Choose system**

Choose the central system

**AutoStart**

Tick this checkbox to open the Line network when the application starts.

**Show directory**

Click here to open the directory where the maps are located.

**Remove (x), Add (+)**

Select and click on X to remove a file.

Click on the + symbol and select a file to add it.

**Browse**

Click on the arrows to browse (if there is more than one Line network)

**Line network linked to the system**

List of the line network maps linked to the system

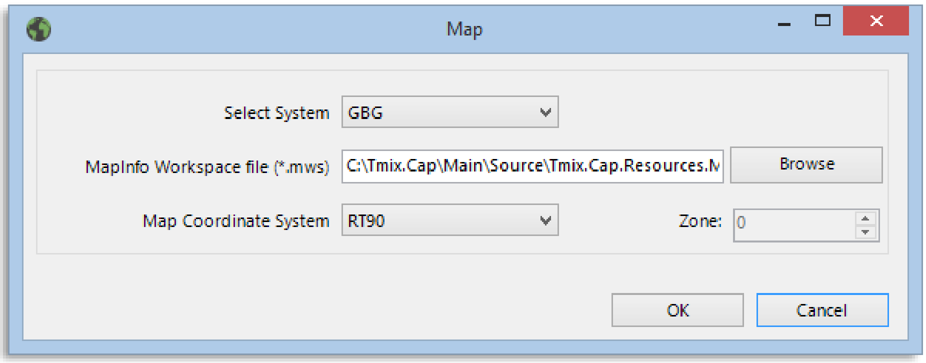
**Save / Cancel**

Save or cancel the changes. Both choices will close the window.

## 6.9 Map

File > Setup > Map

You can configure the map work area as well as assign a map and a database to each central system.




| Parameters | Description |
|---|---|
| Select system | Which central system the settings will apply to. |
| MapInfo Workspace file | Path to the map file. |
| Map coordinate system | Define the coordinate system used by the map. Choosing WGS84 will enable the Zone fields. |
| Zone | Selection of the current zone for the use of the WGS84 UTM coordinate system. |

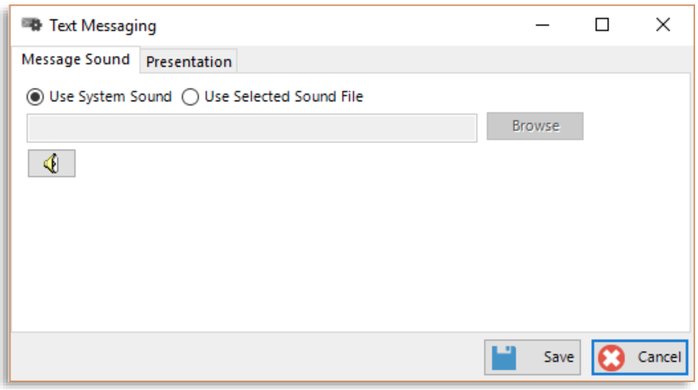
## 6.10 Text Messaging

File > Setup > Text Messaging

- **Note:** To set up pre-defined messages for a role: Load the role, open the Send Text Message tool and create the needed messages/reply alternatives. See the reference manual for how to use the Send Message tool.

### Tab: Message Sound

Select the sound/sound file to be played when a new message is received.




#### Use system sound

The default system's exclamation sound file is used whenever a new message is received.

#### Use selected sound file

Select your sound file by browsing to its location on your computer or typing in the path to its location. If the path is incorrect or the file is missing, no sound will be played upon the reception of a new message.

#### Browse

Open a new window to browse the location of your sound file. Click OK in the new window to finish your selection. The path to the file will appear in the textbox.

#### Preview the system sound or the selected sound file

Click on the icon to play the selected sound.

#### Save

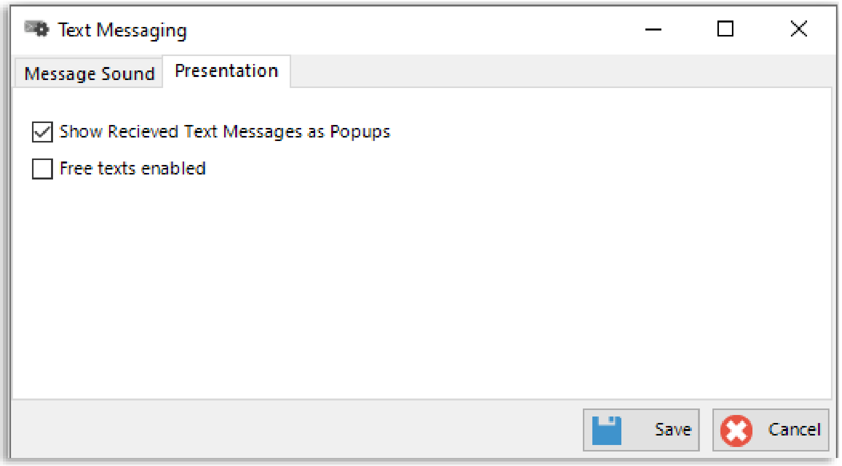
Save the new settings for the message sound.

#### Cancel

Close the window and discard all changes made to the Message sound setup.

## Tab: Presentation

- Tick the checkbox to activate/deactivate the option of showing new messages as popups.
- Tick in the “Free texts enabled” box to make it possible to enter free text messages and add new reply presets. With the box unchecked, only existing replies can be used in text messages.



## 6.11 Traffic Deviation

File > Setup > Traffic Deviation

- Note: These settings relates to the **extended** version of the Deviations tool.

### Enable Create Deviation on Journey Change

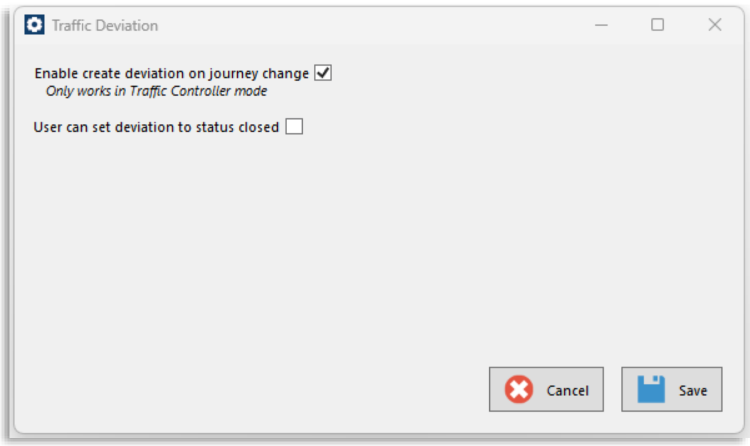
**Check to configure generation of new deviation/deviations when traffic controller traffic change actions are selected in the TS journey quick menu.** (Cancel Journey, Cancel Part of Journey, Short Run, Short Turn).

**Note:** Short turn generates two deviations, one for the selected journey and one for the matching following "return" journey.

- Check the box to enable deviation creation at traffic controller action. Click Save to save changes.

### User can set Deviation to Status Closed

**Check the box to allow the user to set the deviation to status closed** and save the changes. This function is normally only activated for "administrative" traffic controllers that will close deviations after negotiating penalties etc. with the PTA.



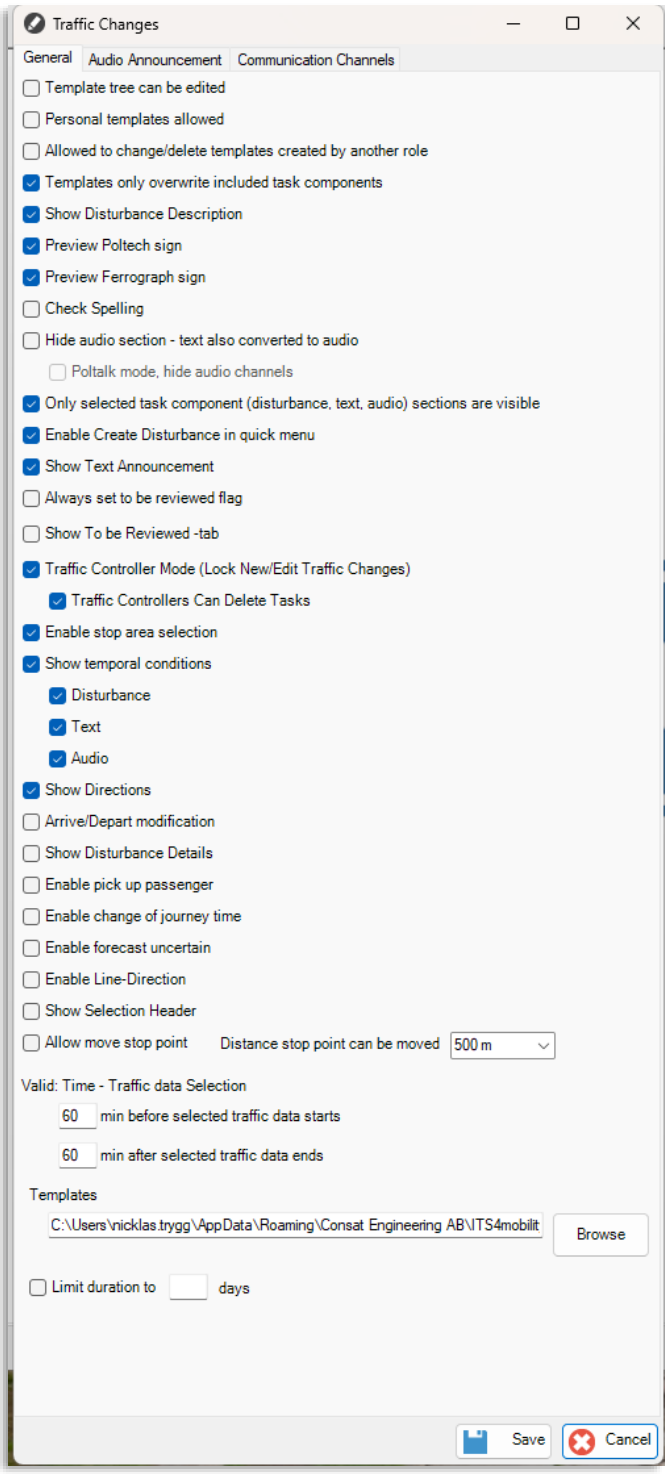
## 6.12 Traffic Changes

File > Setup > Traffic Changes

New Traffic Changes and Traffic Changes have a shared setup menu.

### Tab: General

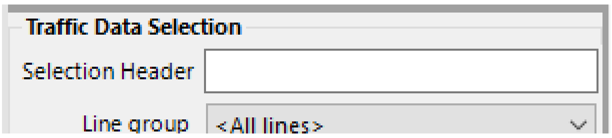
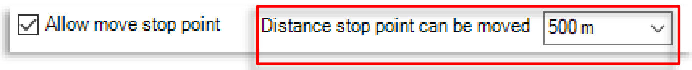
On this tab, you find various tool functionality settings. Check the box for enabling the corresponding function, and uncheck to disable it. Click Save to save any changes.



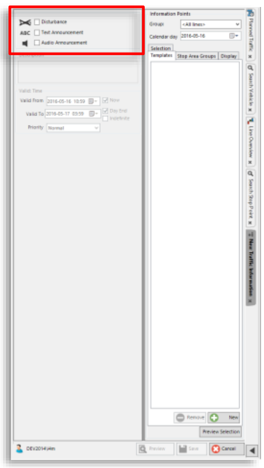

| Label | Description |
|---|---|
| Template tree can be edited | The user can create, rename and delete template categories and edit the template navigation tree structure, including template sorting/category. |
| Personal templates allowed | The user can use/create/delete personal templates.<br>(The user profile is added as a top selection alternative to the Available for menu when creating a new template.) |

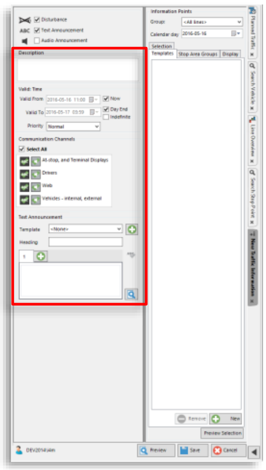
| Label | Description |
|---|---|
| Allowed to change/delete templates created by another role | The user can change/delete role templates *created by another role*.<br><br>(Templates created by the same role can always be changed/deleted.) |
| Templates only overwrite included task components | Check this box if templates are to only overwrite the task components included in the template and leave any other content/settings untouched. This allows for applying several templates in a sequence with different components to "build" a task.<br>If the box is not checked, templates will overwrite task components not included (in the template) with default setting/content, "resetting" these components for manual completion. |
| Show Disturbance Description | Display the window Description in the New Traffic Changes tool and allows the user to add a description. |
| Preview Poltech sign | Enable preview for Poltech LED signs. |
| Preview Ferrograph sign | Enable preview for Ferrograph signs. |
| Check spelling | Enable the spell-checking function in written messages. (Windows selected language.) |
| Hide audio section… | Check this box to auto-convert all text messages to audio announcements for on-demand audio (read-aloud buttons at the bus stops). The audio section will be hidden. |
| Poltalk mode, hide audio channels | Only available when "Hide audio section…" function is enabled, see above: Hides all audio channel buttons in the Communication Channels section in the New Traffic Information tool and distributes the converted files to Consat sign systems only. Uncheck to allow the user to distribute the converted audio to other channels also, like SIRI, etc. |
| Only selected task component (disturbance, text, audio) sections are visible | When this box is checked only the selected task component sections are visible in the New Traffic Changes tool. This enables a cleaner user interface, see the example below. |
| Enable Create Disturbance in quick menu | Enable "Create Disturbance" function in vehicle/block quick menus. Opening a new traffic information task with a disturbance for the specific traffic data node. |
| Show Text Announcement | Check to include the text announcement section in the New/Change Traffic Changes window. If unchecked, the user will not see the text announcement section and he/she will not be allowed to edit traffic changes with only text announcements. Traffic changes with mixed content can be edited but will not show any text announcement content in the editing window. Note that the user will then be able to change valid time and addressing, affecting the (not visible) text announcement. |
| Always set To Be Reviewed flag | All traffic information tasks created or edited by the user will be listed on the To Be Reviewed tab in the Traffic Changes tool. |

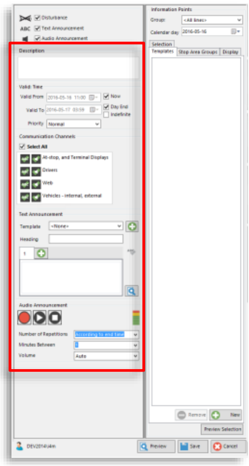
| Label | Description |
|---|---|
| Show To be Reviewed Tab | Enable the separate "To be reviewed" tab in Traffic Changes, showing Traffic Controller disturbance tasks that have not been completed with information task components. |
| Show indication when task is being edited | Enable "task being edited" indication for all users whenever a user edits a task. Also enables a popup reminding that a task is already being edited by another user whenever a user selects "Edit" for such a task. |
| Traffic Controller Mode… | Locks (write protects) the New Traffic Changes/Traffic Changes windows – Traffic Controllers create Traffic Information tasks using the simpler Traffic Controller Actions. |
| Traffic controllers can delete tasks | Available when Traffic Controller mode is checked. Allow Traffic controllers to delete traffic information tasks. |
| Show temporal conditions | Activate the Valid Intervals section in New Traffic Changes, enabling individually scheduled periods for all included task components. |
| Disturbance | Activate scheduled active periods for disturbances |
| Text | Activate scheduled active periods for text messages |
| Audio | Activate scheduled active periods for audio announcements |
| Show Directions | Include the task component Directions. (For drawing and distributing map directions to drivers – and in future versions, walking directions to passengers.) |
| Show Disturbance Details | Activate the Disturbance Details section. In the current version, this section only includes functionality for creating a "moved stop point" disturbance, see Reference Manual.<br><br>Note: This section is only used/activated in specific systems and cannot be active at the same time as "Allow move stop point", see below. |
| Enable pick-up passenger | Activate the "Pick up passenger" action that creates a corresponding information task. (Does not have to be enabled for the user to view such tasks in the Traffic Changes tool.). See the reference manual for the action description. |
| Enable change of journey time | Activate the "Change of journey timing" action that can "move" a journey or a section of a journey forward in time, to compensate for unplanned events.<br>Note: System-specific function |
| Enable forecast uncertain | In "Change of journey timing" action: Activate the possibility of, instead of changing journey time (see above), flagging the particular journey forecasts as "uncertain".<br>(Enables the "Uncertain" checkbox in the Change of journey timing action window.)<br>Note: System-specific function |
| Enable Line-direction | Include the Line-direction node in the Traffic data selection tree.<br><br>Note: This functiuon is currently not fully supported in all parts of the systemn so it may be turned off by default. |
| Show Selection Header | Display the "Selection header" section in the Traffic Data Selection tool section. This section/field can be used as a header for template-based selection and/or as "ScopeAlias" section in systems where this is distributed to a third-party information system. Also, see the Reference manual for an explanation.<br>Note: The setting controls if the section is to be displayed to the user. A header/ScopeAlias may be included in a template even if this section is not |

| Label | Description |
|---|---|
| | displayed for the user. The function is then hidden for the user, an argument for keeping the section visible.<br><br> |
| Allow Move Stop Point | Enable the “move stop point” function. (Which includes cancelling a stop point and assigning the traffic to an alternative, close by, stop point.) You can set a radius around the planned stop point to determine which alternative stop points shall be available to the users:<br><br><br>Note: This function cannot be active at the same time as “Show Disturbance Details”, see above. |
| Valid: Time – Traffic Data Selection | Applicable when Traffic Data Selection is chosen in the Valid: Time section of the tool.<br>These settings control how many minutes before the selected traffic data starts, and how many minutes after it ends the task/ticket is to be valid.<br>For instance, how many minutes before a cancelled journey is the announcement telling the public about it to be triggered, etc. |
| Templates | Path to folder containing traffic information templates created in older system versions. (browse function to locate, select folder)<br>These templates are displayed in the navigation tree in a separate category “Old templates.<br>When these templates are no longer needed, delete the template files in the folder to clean up the navigation tree. |

### Section Enabling Settings, Examples







**Only selected task component sections visible: No components selected**

When no task components are selected in the New Traffic Changes tool the description and valid time sections are greyed out. The text and audio announcement sections are hidden.

**Only selected task component sections visible: Disturbance and Text announcement selected**

All sections but the audio announcement section, are displayed.

**Only selected task component sections visible: All task components selected**

All sections are displayed.

## Tab: Audio Announcement

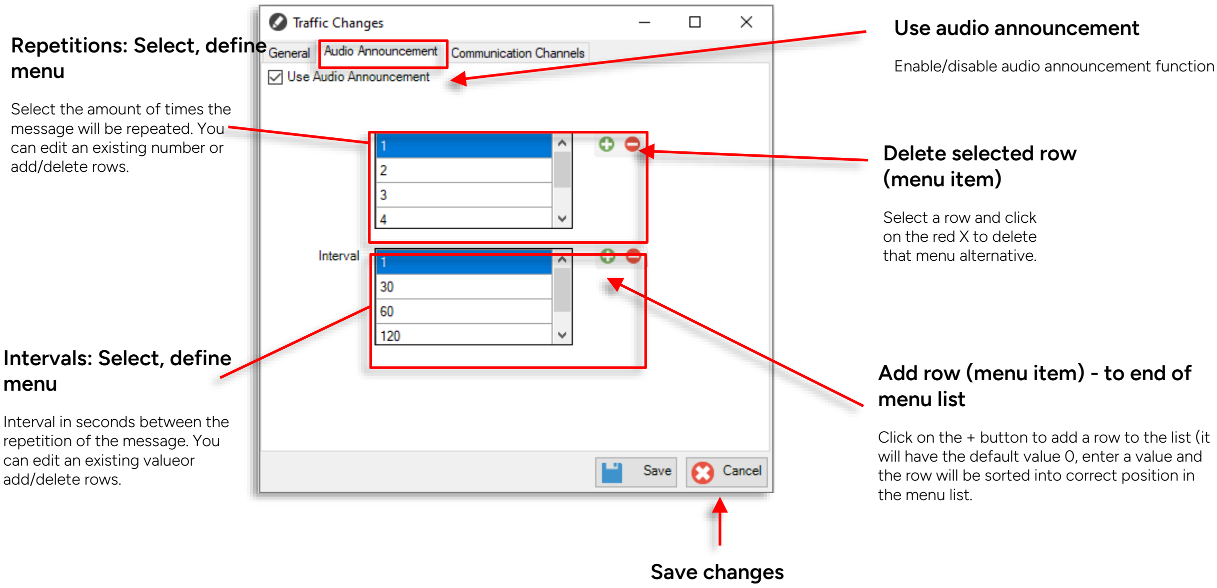
On this tab, you enable/disable the audio announcement function and define the available audio announcement repetitions and interval menu alternatives.

Add (+) or remove (x) alternatives for the repetitions and interval menus in the two corresponding fields and then save your settings by clicking on Save.

### Audio announcements disabled

When you uncheck the Use Audio Announcement checkbox your New Traffic Changes tool will have the Audio Announcement tool functionality removed, see image. In a system that includes the audio announcement functionality, you will still be able to see audio announcements created by other users with the function enabled.

- **Note:** Systems that use text-to-speech auto conversion but have the audio announcement section in the user interface hidden (the "Hide audio section.." box on the General Tab enabled) must still have "Use Audio Announcements" enabled.

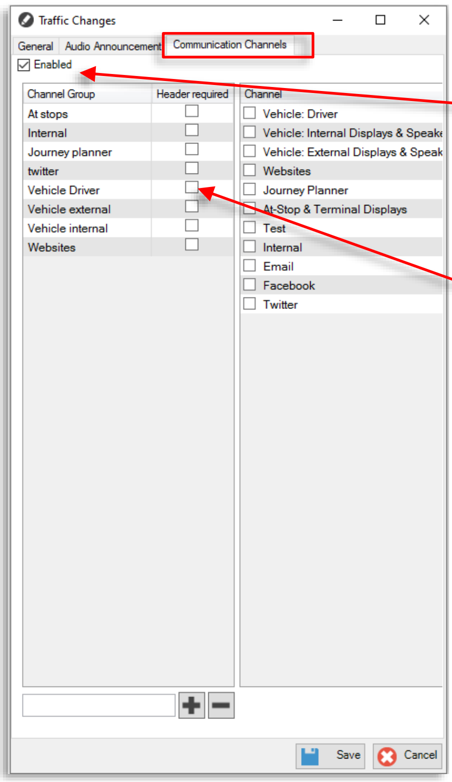


## Tab: Communication Channel (Groups)

Communication Channel Groups determine the Channels available to the users.

(See the separate project documentation for your particular communication channels/API:s, and what each individual "channel" covers).

- Note: This function can be enabled or disabled, depending on customer/user needs. Check the Enabled box to enable, and un-check to disable the function. When disabled the corresponding Communication Channels field will be hidden in the New Traffic Changes tool window.

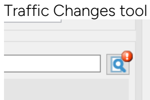



**Enabled**

Check/un-check to enable/disable the Communication Channel functionality

**Header Required**

Check to require a header for messages distributed over this channel group (indicated in the Traffic Changes tool section.)



When enabled, you can define and name the communication channel "group" alternatives available in the New Traffic Changes tool using two simple lists. Each named, selectable communication channel group in the left list is mapped to one or more communication channels/API: s in the right.

**Channel Groups**

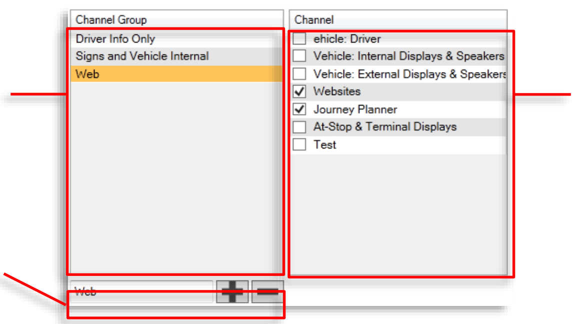
All created channel groups. These are the checkbox alternatives available in the New Traffic Changes tool.

Select a group to view/edit the mapped channels.

**Name, Create, delete**

Enter the name of a new group in the name field. Press "+" to add new group.

Select and press "-" to delete group.



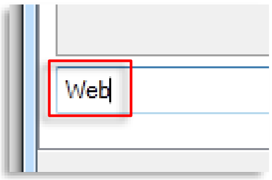

**Channel**

All available communication channels, through which disturbances/announcements are published.

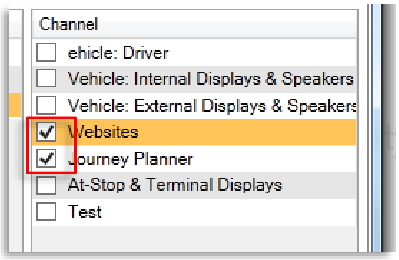
Check corresponding box to map one or more channels to selected group in left list.

### Create a Communication Channel Group

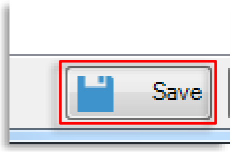
4. Type the name of your new communication channel in the name field.




5. Check the boxes of the channels you want to include in your group.

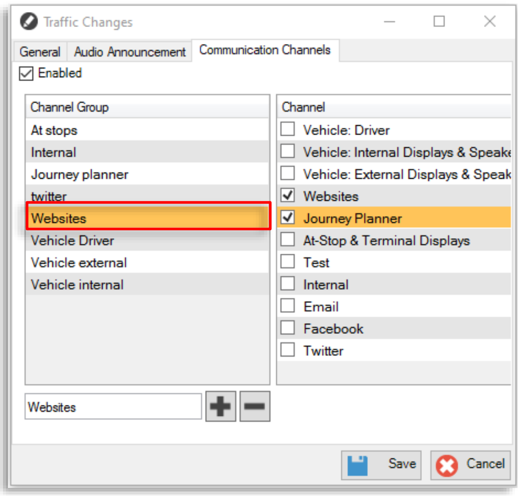



6. Click on Save to save your new group.

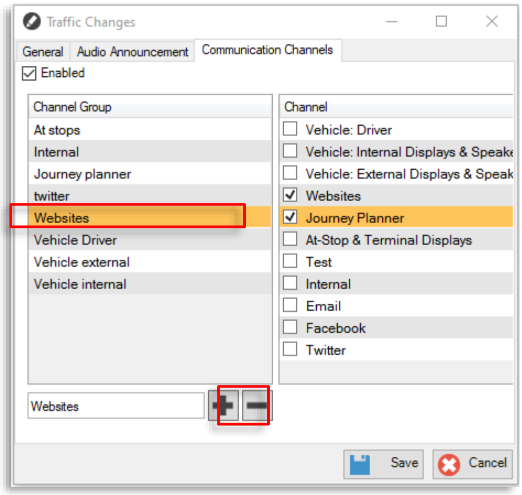



### Delete a Communication Channel Group

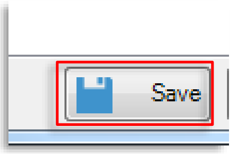
1. Select the communication channel group you want to delete.




2. Click on the delete button, the group will be deleted from the list.




3. Click to save your changes. (If you click on Cancel the window will close without changes i.e. the deletion will be undone.)




### Edit communication channels in a group

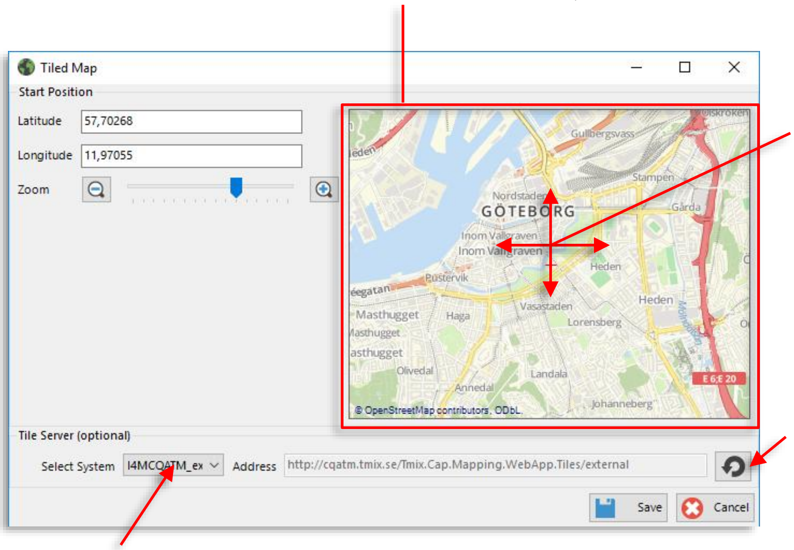
1. Select the group in the list
2. Check/un-check channels to make the desired changes
3. Click on Save to save your changes

## 6.13 Tiled Map

File > Setup > Tiled Map

**Start Position, zoom level presented on map**

Check the start position and zoom level set with the controls to the left with this map window.




**Drag to set starting point**

You can set/adjust the start position both by entering the longitude and latitude numerically in the fields to the left, and by dragging the map.

**Reload Map**

Click to (re-)load the map (and cache the corresponding tiles for fast presentation).

**Menu: Select System (available to user)**

Select central system to view corresponding map.

| Parameters | Description |
|---|---|
| Latitude | Starting position of the map: Latitude (check/adjust using map window) |
| Longitude | Starting position of the map: Longitude (check/adjust using map window) |
| Zoom | Desired default zoom level (check/adjust using map window) |
| Tile Server | IP address to the server where the map can be locally saved. Click on the reload button to load and verify the position/zoom level.<br><br>Note: This parameter can be left empty if the map is retrieved from the standard source on the internet. |

Note: The Map Cache Validity Timeout can be configured:

```
<plugInVariable d2p1:name="FileCacheTimeout" d2p1:value="7.00:00:00" />
```

# 6.14 Voice Communication

File > Setup > Voice Communication

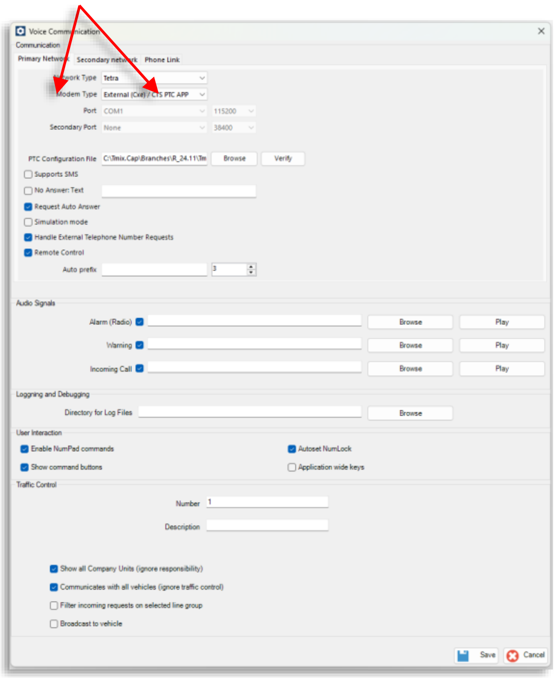
Note: The Voice Communication tool is configured both using a configuration file delivered to each customer by Consat Telematics and with the Voice Communication setup window in Traffic Studio, described below.

The two complement each other allowing for quick changing of basic settings in the setup window, and a very detailed configuration of each used message/status code, etc. in the file.

The setup window is divided into separate sections for:

- Communication (two tabs let you set up a primary and secondary communication system)
- Audio Signals
- Logging and debugging
- User Interaction
- Sound Files and Utilities and
- Traffic Control.

**Primary/Secondary Network Communication Setup**



**Communication**

View/select Network Type, Ports etc.

Here you can also browse and validate the configuration file with all configuration settings.

**Audio Signals**

Alarm, Warning and incoming Call (Request) sounds.

Activate (check box), use default (leave browse fields empty) or browse and select audio files. Play current sound with corresponding Play button.

**Logging and Debugging**

Browse the Log file Directory

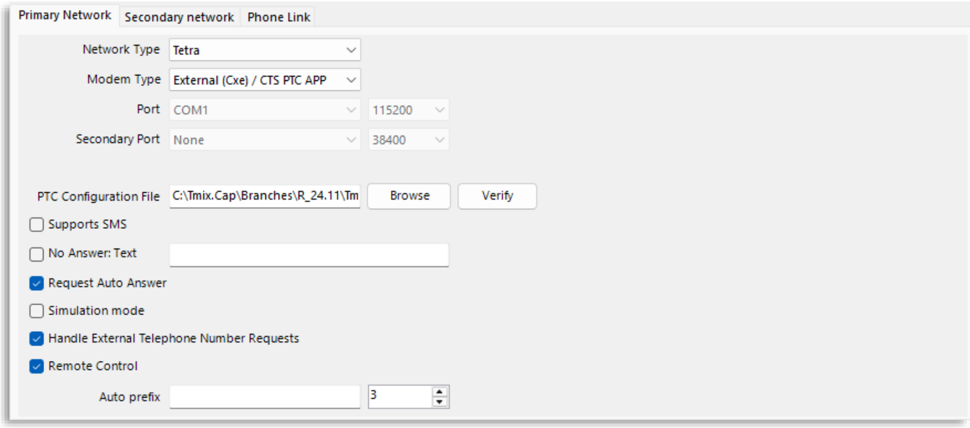
**User Interaction**

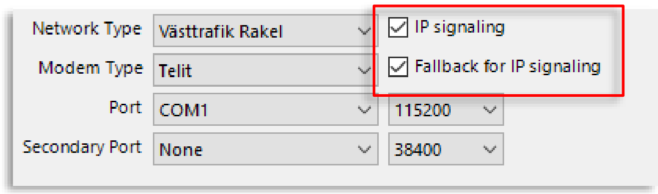
**Traffic Control**

Responsibility and traffic control related settings.

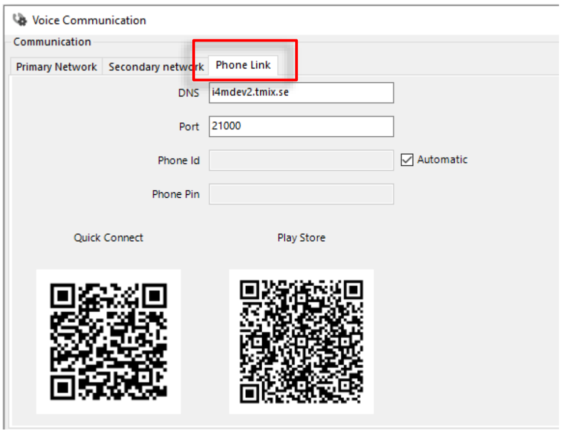
## Communication (Primary/Secondary Network)

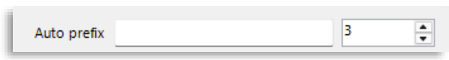
On the two Communication network tabs, you configure network type, hardware, communication settings etc. as well as features/functions like SMS generation (see table below). The primary and secondary network tabs are identical and they use two separate configuration files.




<table>
<tr><th>Setting</th><th>Description</th></tr>
<tr><td>Network Type</td><td>
The type of communication network: CTS (Consat) IP-based, Tetra, Rakel, etc.
Note: With Västtrafik Rakel selected, you can also choose to use IP signalling (communication with Västtrafik Telefonboken) instead of signalling/communicating with this system over Rakel, see screenshot below. Check the IP signalling checkbox.


With IP Signalling selected, it is possible to enable [Rakel] signalling fallback should the IP connection be lost.
This will tax the Rakel network, but at least one station at every traffic control site should have fallback enabled so as not to lose functionality if the IP connection is lost.
</td></tr>
</table>

| Setting | Description |
|---|---|
| Modem Type | Select modem/radio transceiver type. Specific types generally offer deeper integration but a General radio unit is also supported with limited functionality.<br><br>Select No Carrier Connected for allowing full tool functionality, minus voice communication (talking/listening).<br><br>Select External (Cxe) to use the Consat Voice communication app instead of a modem connected to the computer. (Consat IP-based network selected in menu above.)<br><br>This selection adds the Phone Link tab to the Communication section:<br><br><br>DNS: Supplied by Consat<br><br>Port: Supplied by Consat<br><br>Phone Id: Check "Automatic" to automatically generate the phone ID (default setting). Uncheck to manually enter the ID (supplied by Consat).<br><br>Phone Pin: Security PIN code, not yet supported. With "Automatic" unchecked, the PIN can be manually entered (supplied by Consat).<br><br>Quick Connect (QR code): This lets you connect the phone by reading the QR code. Also displayed in the Voice Communication tool when External (Cxe) is selected as the modem and the phone (app) is not yet connected.<br><br>Play Store (QR code): A QR code link to the Consat Voice Communication app on Google Play Store. (App only available for Android as of now.) |
| Port | Select port and speed, depending on the hardware used. |
| Secondary Port | A secondary port is configured for radio-based systems/networks that use two radio units.<br><br>Note! If a fixed port is already configured in the configuration file that configuration overrides the setting in the Setup window (which will have no effect)! |
| PTC Configuration File | Define where the Network specific configuration file is placed. Browse it and verify that it is correct and that the tool can reach it with the adjacent Browse/Verify buttons. |
| Supports SMS | When this box is checked an SMS is sent to a phone number (in the configuration file) when configured messages/call requests are received. |

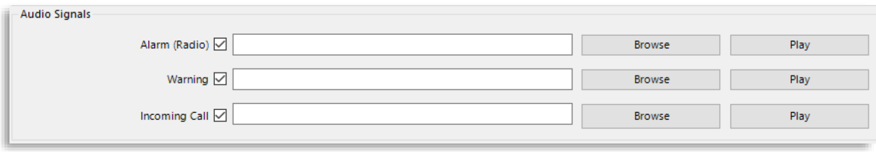
| Setting | Description |
|---|---|
| No Answer:<br>Text | Here the SMS text message sent when Calls are unanswered is defined. For example "Call:". |
| Request Auto Answer | When checked the vehicle systems are requested to automatically open calls, without the driver needing to pick them up. |
| Simulation Mode | When checked the tool is in simulation mode and no calls are opened. This mode is available for training and demonstration purposes. |
| Handle External Telephone Number Requests | Customer Specific Function |
| Remote Control | Allows TS Voice Communication tool to remotely control specific vehicle radio functions.<br>Current functionality allows TS users to **turn off an active driver radio alarm** (that locks the radio in transmit state).<br>An alarm off button is added to the Voice Communication tool. This turns off the active alarm state enabling the radio to receive incoming calls again. |
| Auto Prefix | Adds configured prefix number to call numbers entered in the TS Voice Communication tool. The right numerical field sets the number of digits the user enters to dial the number. In the example setting below, the user only enters tree digits, and the tool adds the prefix before making the call.<br> |

## Status code configuration in the configuration file

In the configuration file, apart from configuring ports, groups etc. for each needed message status code used by the communication system, the following functions can be configured:

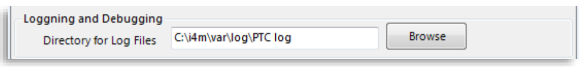
- Name in GUI
- Priority in Voice Communication tool queues
- Call and/or Information queue presentation
- Show as Alarm (Y/N)
- Remove from the queue at Call up (remove call request...)
- Colour coding in GUI
- Indication/Warning sound (Y/N)
- Alarm sound (Y/N)
- Forward as SMS
- Alarm priority level
- Description

## Audio Signals



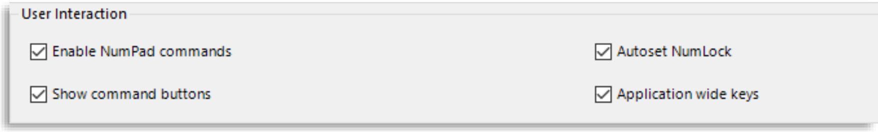

| Setting | Description |
|---|---|
| Alarm (Radio) | Activate sound by checking the box.<br>**Note**: Leave the field empty for default sound (play sound with the Play button).<br>Custom sound: Define the location, browse and click Play to verify a custom Alarm sound file. |
| Warning | Activate sound by checking the box.<br>Note: Leave the field empty for default sound (play sound with the Play button).<br>Custom sound: Define the location, browse and click Play to verify a custom Warning sound file. |
| Incoming call | Activate sound by checking the box.<br>Note: Leave the field empty for default sound (play sound with the Play button).<br>Custom sound: Define the location, browse and click Play to verify a custom Incoming Call notification sound file. |

## Logging and Debugging



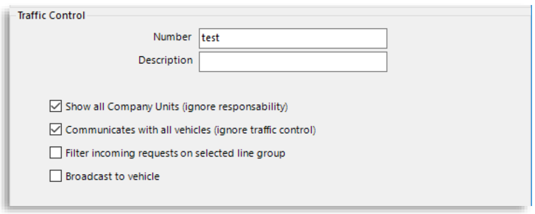

| Setting | Description |
|---|---|
| Directory for Log Files | Define the location and browse the log file |

## User Interaction




| Setting | Description |
|---|---|
| Enable NumPad commands | (Default: Checked) When this box is checked the keyboard commands described in the manual control the tool. When the box is not checked the keyboard function keys are used for control (see separate documentation). |
| Autoset NumLock | Numlock must be active for NumPad commands to be used. This setting allows for automatic Numlock when the tool is active. |
| Show command buttons | Check to include command-/Function buttons in the tool window, complementing the keyboard control. Uncheck when you do not want the tool to include these buttons. |
| Application wide keys | Check to make the command keys always active, regardless of which tool is selected in Traffic studio. If unchecked the command keys are only active when the Voice Communication tool is selected. |

## Traffic Control




| Setting | Description |
|---|---|
| Number | Control Center number |
| Description | Control Center name (free text description) |
| Show all Company Units (ignore responsibility) | Checked box: All vehicles in your own company are listed and available, regardless of responsibility.<br>Unchecked box: Only vehicles in your own company, under your current responsibility are listed and can be called. |
| Communicates with all vehicles (ignore traffic control) | Checked box: Allowed to call all vehicles in the whole system, including those from other companies. If the box is unchecked only own vehicles are listed and can be called. |

| Setting | Description |
|---|---|
| Filter incoming requests on selected line group | Checked box: Filter incoming call requests depending on the current Line Groups filter setting.<br>Unchecked box: Ignore Line Groups filter. |
| Broadcast to vehicle | Enable “broadcasting” to a selected vehicle, not only vehicle groups. See reference manual. |

## 6.15 Vehicle User Interface

File > Setup > Vehicle User Interface

The settings for Vehicle user interface access include enabling direct access over the local network (communicating directly with the vehicle computer to access the interface) and alternative/complementary access through the Software Configuration Manager.

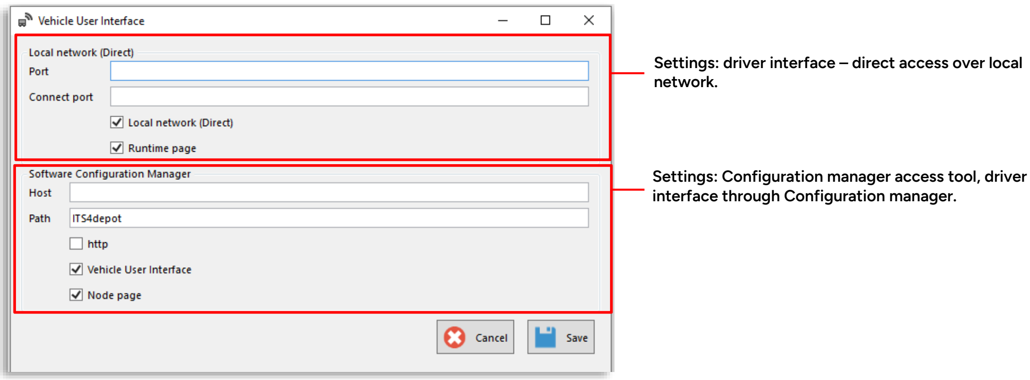
- Note: The Port and Connect Port settings are only used in specific installations. These fields are left empty by default. Consat will assist when setting up such specific systems.

- Check the "Local network (Direct)" box to enable direct communication with vehicle computers connected to the local network, like test systems, etc.

- Check the "Runtime page" box to enable access to the vehicle systems (on the local network) runtime page.

- Depending on system installation, you may need to enter Host and Path information for accessing the Configuration Manager. See below.

- Check the "HTTP" box to use HTTP instead of HTTPS (default) when accessing the Configuration Manager
- Check the "Vehicle User Interface" box to enable user interface access through the CM.
- Check the "Node Page" box to enable quick menu access to the software configuration manager node page of the vehicle.




- Click on the "**Save**" button to save your settings/changes.