Consat Telematics Solution

TS SuperUser Reference Manual

Covers release 25.7 (X)

Table of Contents

1 Introduction

Note: This manual covers configuration tools and system configuration in the configuration file normally performed by Consat.

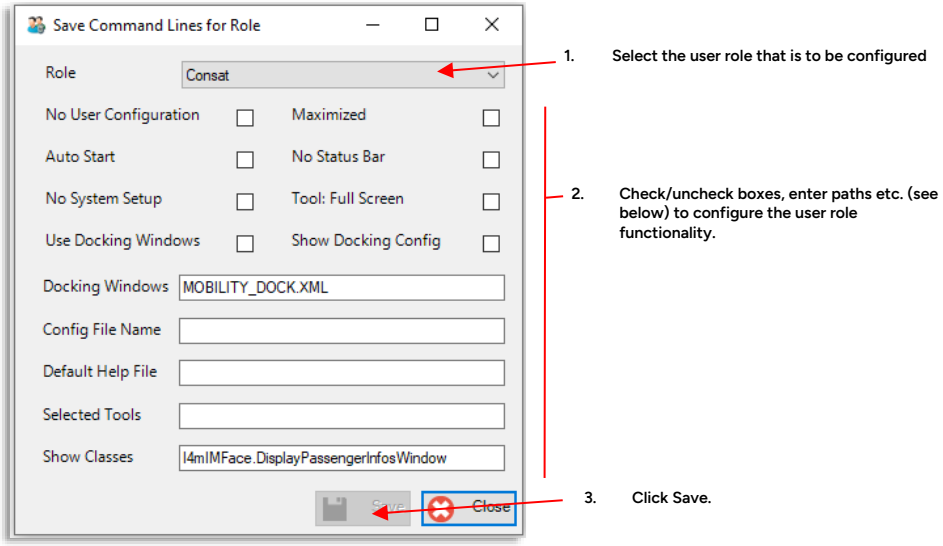
The presented tools/settings are only available to SuperUsers.

2 Save Command Lines for Role

Under the menu alternative **Save Command Lines for Role** you set up a select number of functions for the selected role.

Note: This configuration window only applies to (the loaded) role configuration, not individual user configurations.

You can remove the users ability to configure the application themselves, decide if the application will connect to the central system from the start, etc. (see below).



To make any changes/enter configuration, select the role in the top “group name” menu. Enter/edit settings and click on the Save button below.

Options	Description
Role	Which user role is affected by the setup.
No user configuration	Changes are saved to a file at the application level, i.e. users cannot modify their settings.
Auto start	The application connects automatically to the last system used (the user does not need to click on “connect”).

Options	Description
No system setup	The option "System" is not available in the File menu.
Use docking windows	The windows are docked according to the specifications in the file MOBILITY_DOCK.XML See "Docking Windows" below.
Maximized	Maximize the application on the actual screen.
No status bar	Hide the status bar usually located at the bottom of the application (including user and group).
Tool: Full Screen	The application starts with application and selected tool/tools in full screen mode (note that only one tool is presently full screen enabled/designed for full screen).
Show Docking Config	Activate the menu option "Configure window position" under File > Setup, where the window's position can be specified.
Docking Windows	Name of the file for docking windows if other then default. If you leave the field blank, the default file, MOBILITY_DOCK.XML. will be used. To create a specific configuration, locate the the default file (found here: %AppData%\Consat Telematics AB), copy it to the same folder. Then browse and edit the copy with the Docking Windows Configuration tool, see the following chapter.
Config File Name	Name of the configuration file which is not default (The default file name is I4mFrameWork.exe.config).
Default Help File	Location of the help file.
Selected Tools	List of plugins (each plugin may contain several tools) are selected at startup, in addition to the role/user configured plugins.
Show Classes	The tools opened at startup. Providing the whole name of a class will automatically show the window's call name at startup.

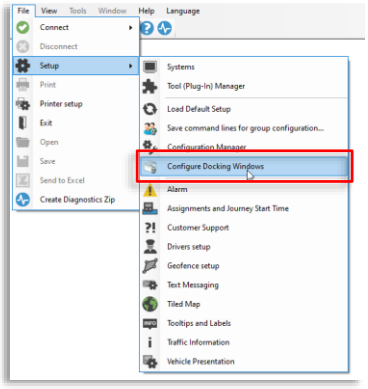
3 Configure Tool Placement in Application

File > Setup > Configure Docking Windows

To set the placement of the tools in the various application tool windows and to configure which tools are to be active on startup, select Configure Docking Window in the Files/Setup menu.

With this tool you can also deactivate specific close tool tab buttons, to prevent the users from closing essential tools like Voice Communication and thus miss important messages/calls.

With the application disconnected from the central system, you will find the Docking Window Configuration window in the Files Menu, see below.



3.1 Workflow

Docking Window Configuration is a pure file editor with a simple workflow:

1. You Browse the “docking window” configuration file you want to edit, either the default configuration file or a specific configuration file (click on the Browse button to open the browser).

   The window configuration file(s) are located here: [%AppData%\Consat Telematics AB]

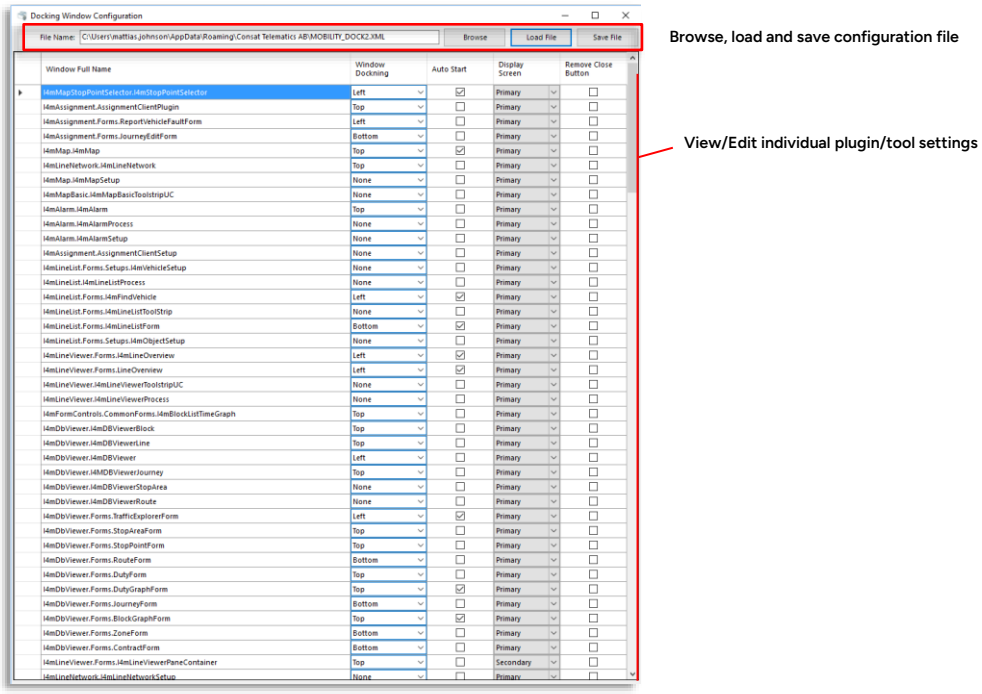
2. Load the file.
3. Edit it with the various editing functions, see the following page.
4. Save the edited file with the Save button.

Note: You cannot save the file with another name using Docking Window Configuration, to create a new, role-specific, file you must first copy the default file (and give the copy a suitable name) in the folder and then edit the copy with Docking Window Configuration.

3.2 Overview

The editing window is very simple: Below the top browse file section, all tools are listed (with their plugin names, not the tool names), regardless of if the users have them activated or not.

For each tool/row there are a few basic settings, see description below.



Header	Description
Window Full Name	The name of the tool plugin.
Window Docking	The application window the tool is to be placed in: Left/Top/Bottom/Right application window, or select “None” for floating, undocked tool window.
Auto start	Check the box to make the tool open at startup
Display Screen	Place the tool on the primary or secondary display (if available)
Remove Close Button	Check the button to remove the close (X) button on the tab. With the button removed the user cannot close the tool and potentially miss information/calls etc.

4 (Local) Configuration File

Configurations can be stored both in the system database and in a local configuration file. The file can function as fallback when the connection to the database is lost.

The configuration file, I4mFrameWork.exe.config, can be found in the application installation directory:

C:\Program Files (x86)\ Consat Engineering AB\ITS4mobility Traffic Studio

The location of the file with the individual user settings can vary depending on the Windows version. It can be, either:

C:\Documents and Settings\user\Application Data\Consat Engineering AB\ITS4mobility Traffic Studio

Or:

C:\Users\användare\AppData\Roaming\Consat Engineering AB\ITS4mobility Traffic Studio

You can see the user folder by typing [in the command prompt]:

C: \>echo %appdata%

C: \Users\'user' \AppData\Roaming

4.1 Configure Login Within / From Outside the Domain

This functionality is intended for users working outside the server's domains and logging in with usernames and passwords.

1. Open the configuration file in an editor.
2. Change the parameter UseClientApplicationService to True to activate login from outside the domain (see below).

```
</setting>
<setting name="UseClientApplicationServices" serializeAs="String">
        <value>False</value>
```

False means that the login takes place within the domain.

True means that the login takes place outside the domain.

Configuration section trafficstudio.authentication (Traffic Studio version 20.6 or later):

Defines which login providers that should be used when Traffic Studio starts and validates the user credentials. If this configuration section exists, the login will use this section configuration. Otherwise it will use the old UseClientApplicationServices settings described above. Thus, this section overrides the old flow.

When setting it up see example below.

Under section "Logins", add the ordered list of logins to attempt e.g. reference to provider e.g. if one wants a fallback from normal login using file credentials.

Providers:

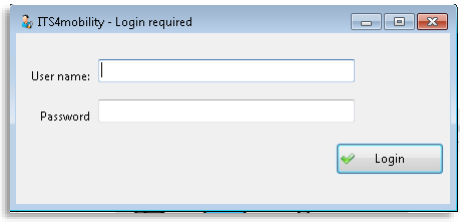
- AuthProviderWebservice – normal login form calling a backend service (implemented by Tmix.Cap.SecurityAuthentication.WebApp). Web auth (a section later that configures it) – same as: UseClientApplicationServices
- AuthProviderActiveDirectory – using active directory of the machine – same as: UseDBConfigMgmt (see below).
- AuthProviderFile – using a local file – when traffic studio must work internet/network e.g. critical tram operation
- AuthProviderOpenId – using open-id login where traffic studio opens a web browser window to a centralized authentication provider. CTS uses IdentityServer (implemented by Tmix.Cap.Security.IdentityServer.Process) which can contain links to external login provider e.g. azure login.
    - acr_value - a parameter in open-id where traffic studio can hint it wants to use a specific provider – same key must be configured on that service.
    - Uri – list of uri to try and connect to – uses the first that respond giving it endpoint configuration. Supports some dynamic formatting parameters to enable generic configuration.

```
<configSections>
    <section name="trafficstudio.authentication"
type="I4mFramework.Auth.Data.Cfg.AuthenticationSectionHandler,I4mFramework.Auth" />


<trafficstudio.authentication>
  <Configuration xmlns="http://its4mobility.com/trafficstudio/authentication.xsd">
   <Logins>
    <Login provider="openid" />
    <Login provider="webservice" />
   </Logins>
```

```
   <Providers>
    <AuthProviderWebservice enable="true" name="webservice" />
    <AuthProviderActiveDirectory enable="true" name="activedirectory" />
    <AuthProviderFile enable="true" name="file" />
    <AuthProviderOpenId enable="true" name="openid"> acr_values="idp:azure-common"
    <Uri>{Application.InstallUriHost:https://$/Tmix.Cap.Security.IdentityServer}</Ur
i>
     <Uri>https://localhost/Tmix.Cap.Security.IdentityServer</Uri>
     <Uri>https://i4mtest5.tmix.se/Tmix.Cap.Security.IdentityServer</Uri>
     <Uri>https://i4mtest5.tmix.se/Tmix.Cap.Security.IdentityServer</Uri>
    </AuthProviderOpenId>
   </Providers>

  </Configuration>
 </trafficstudio.authentication>-->
```

Logging in from Outside the Domain (Username + Password)

The login window shows up when the application is started if the user logs in from outside the domain. The user requires a username and a password to log in.

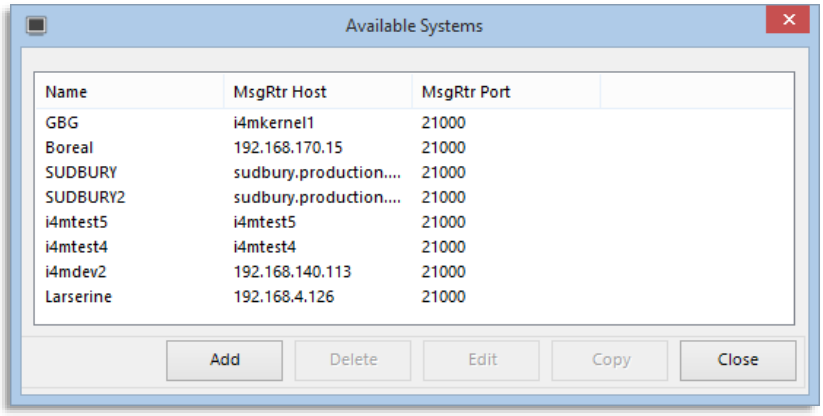


5 Configure Available Systems

(TrafficStudio Admin) File > Setup > System

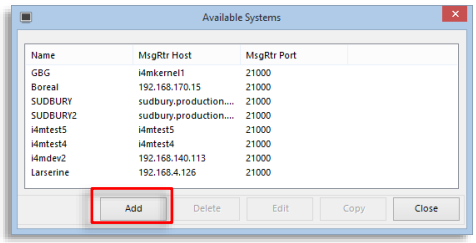
You can add, remove and edit available system connections for the loaded user/role.
Below is a summarized description of the parameters for the configuration of the system.

- Do not hesitate to contact Consat Telematics if you require assistance.

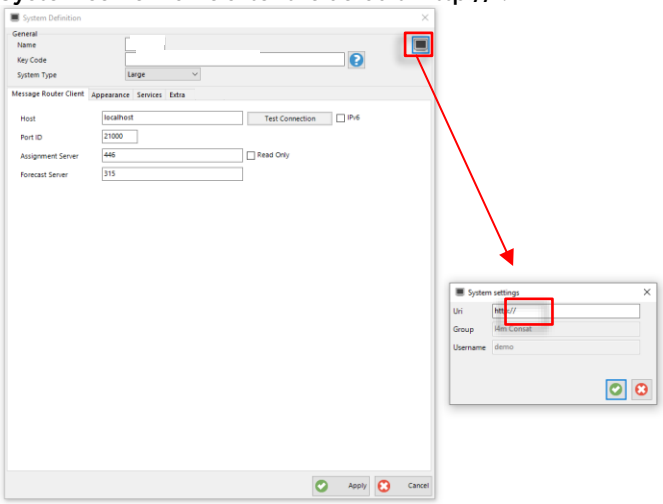


Add a New System Connection

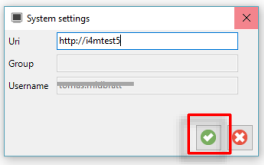
1. Click on the Add button. A new window, **System Definition**, will open with configuration fields on four tabs.



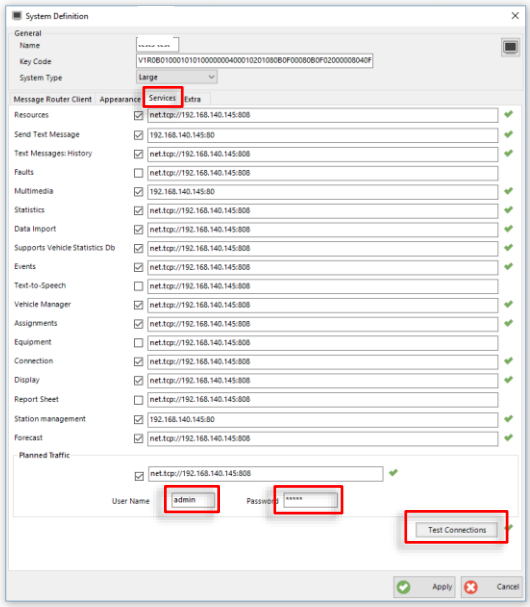
2. Click on the "System WCF" button in the top right corner of the System Definition Window. A System Settings window will open with the top Uri field selected. **Enter the System server name after the default "http://"**.



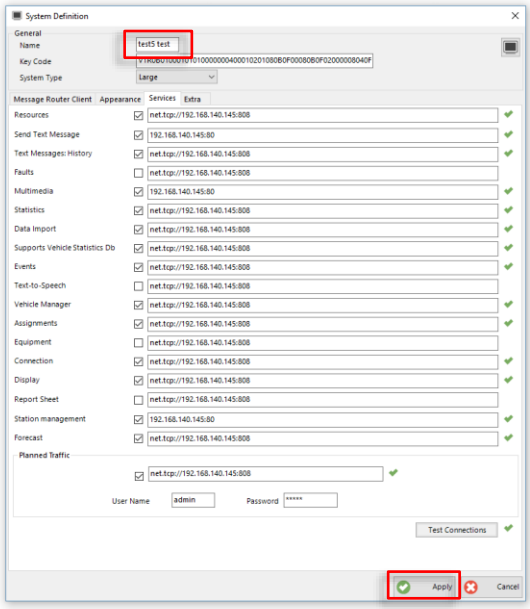
3. Click on the green OK button, the system settings will load filling out the configuration fields on all the System Definition window tabs.



4. Select the Services tab and enter the **Traffic database User Name and Password**. Click on the Test Connections button to check all connections (see following sub-chapter for mor information about the services and the connections check).



5. **Enter a suitable System name** in the top name field and click on the green **Apply** button to save your new systems settings.



Edit an Existing System Connection

1. Select the system to edit in the window Available Systems.
2. Click on **Edit**. A new window, **System Definition**, will open with tabs and many text fields in order to create a new system. See the following sub chapters for information about the system settings.

Copy an Existing System Connection

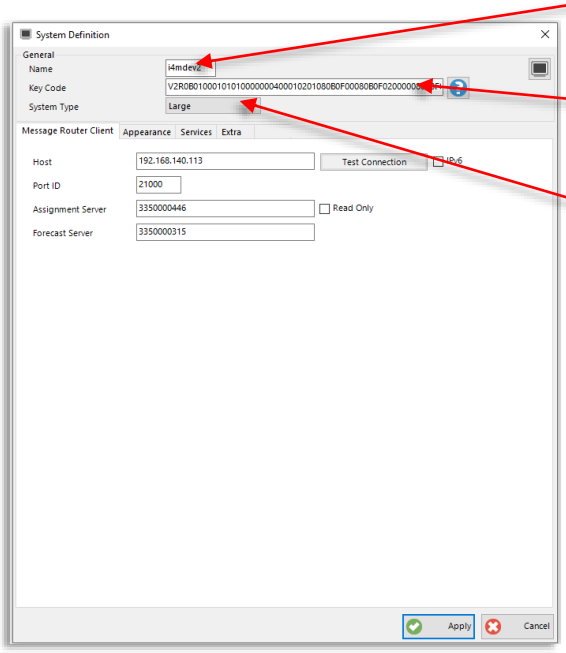
1. Select the system to copy in the window Available Systems.
2. Click on **Copy**. A new system will appear in the list of available systems. Edit the system name. See the following sub chapters for information about the system settings.

System Definition (Add/Edit a System Connection)

File > Setup > System Definition

- After making changes, click on Apply (at the bottom of the window) to save.

System Definition: General



Name
System's name (must be unique and cannot be omitted)

Key
User's software key (code)

System Type
Select between **Small, Medium** and **Large**, depending on the system's size.

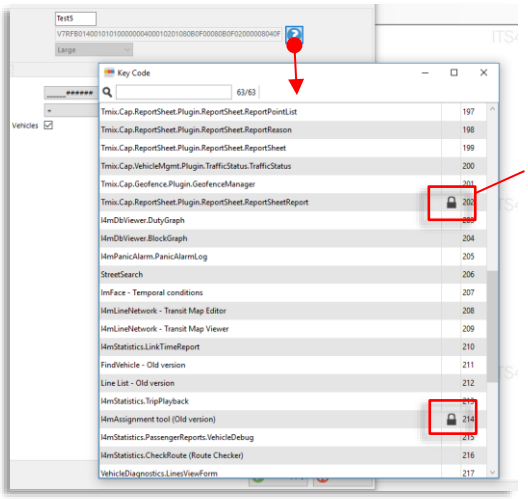
The type will show or hide certain parts of the system.

Small is for systems missing traffic data.

Import is used for accessing/verifying imported data in an import system (separate from the production system). When connected to such a system the Traffic Data Importer and Planned Traffic tools are used for controlling the import and verifying the data imported to the import system, before deploying the data to the production system.

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.

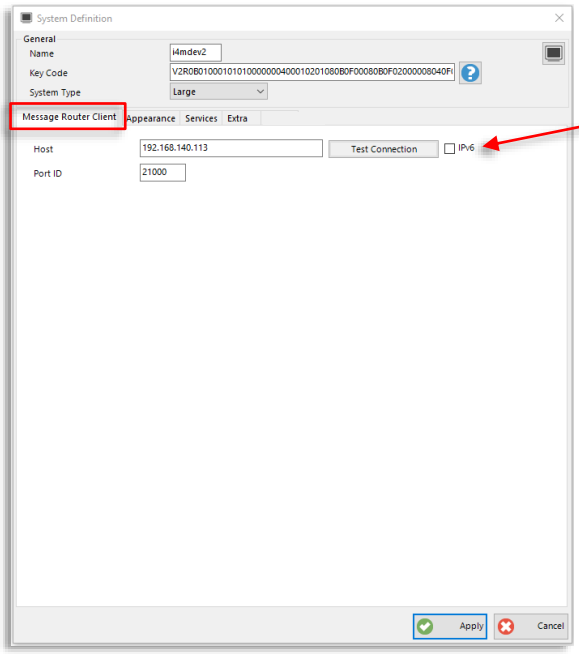


Locked Functions
All non-available tools and functions are highlighted with lock symbols.

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

System Definition: Message Router

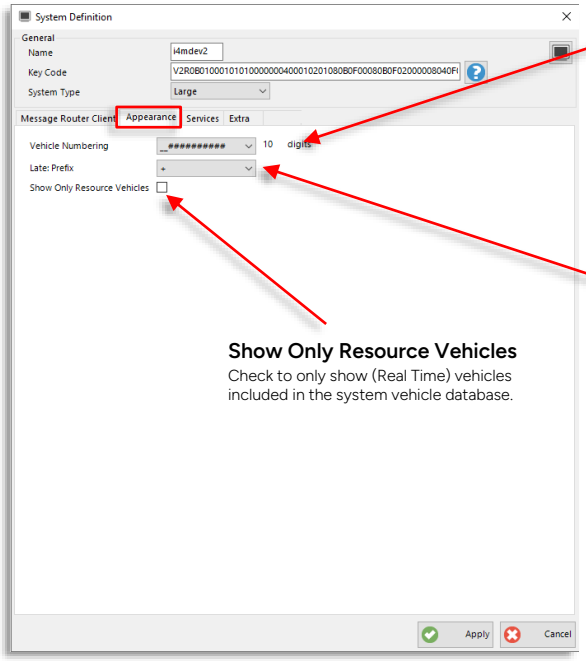
The Message Router Client handles the configuration for the message routers. The button “Test Connection” verifies the connection to the various servers.



Parameters	Description
Host	IP address or host name for the connection.
Port Id	TCP/IP port for the connection

System Definition: Appearance

Parameters for how the vehicle's numbers are shown in the application and how the deviations will be displayed (+ or – for delays).



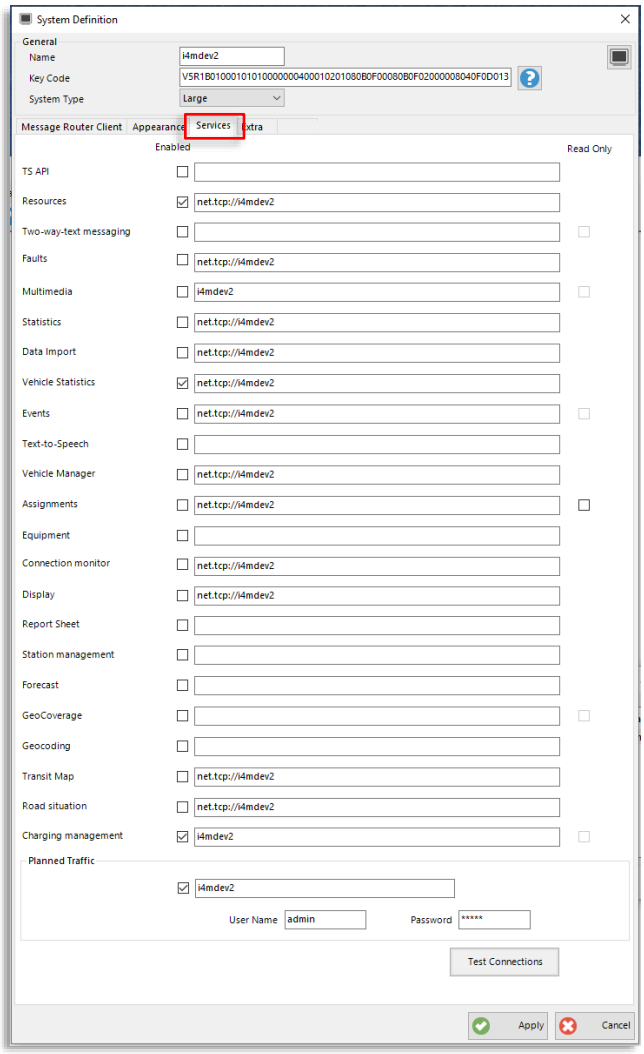
Vehicle Numbering
Determine how the system addresses will be displayed. Each # represents a digit to be shown. E.g. ___#### means that the last four digits of the vehicle number will be shown.

Late prefix
Display a "+" or a "–" for lateness.

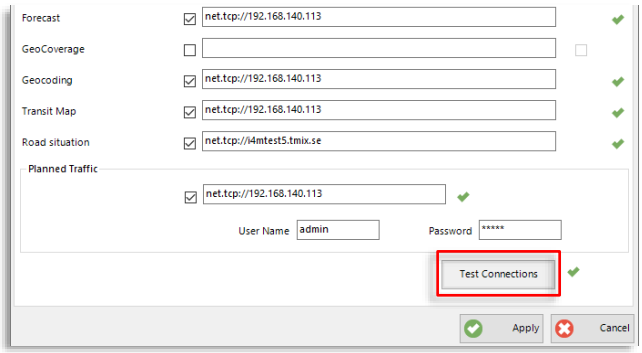
Show Only Resource Vehicles
Check to only show (Real Time) vehicles included in the system vehicle database.

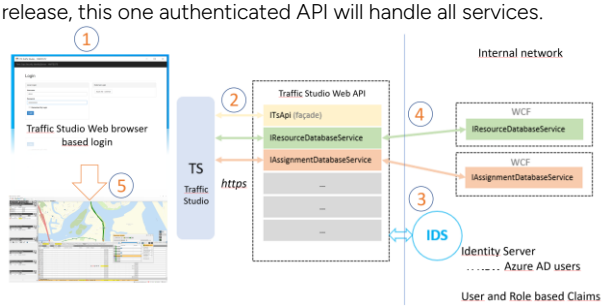
System Definition: Services

Settings for the services used in the system.



- The test Connections button runs a service connection test. Green OK symbols highlight working connections. Red crosses indicate missing connections (check Uri).
- **Tip:** Tooltip a red cross to view error description.



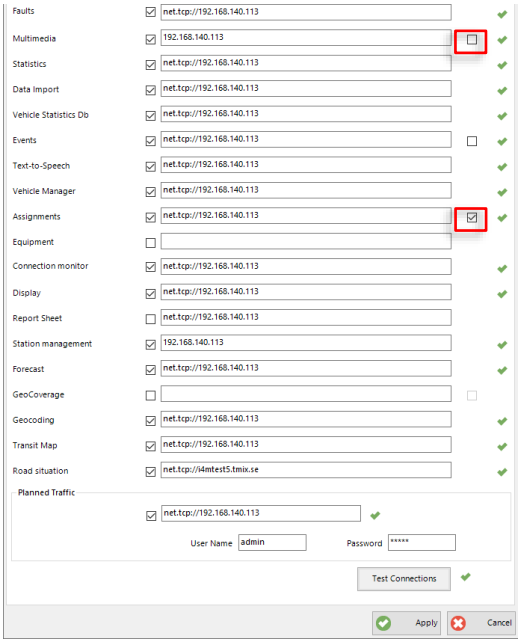
Parameters	Description
TS API	A common secure Traffic Studio API for multiple services. In a future release, this one authenticated API will handle all services.  **Note:** In the current release resources and assignments are supported.
Resources	Resource information
Two-way-text messaging	Manages two way text messages between the vehicles and the central system. Check Read only box to only allow reading of messages.
Faults	Fault management (needed for presentation of vehicle/display fault status and history).
Multimedia	Traffic information task content (announcements, text announcvements, disturbances). Check Read only box to not allow creating new traffic information tasks.
Statistics	Statistics server
Data import	Import of traffic data
Vehicles Statistics Db	Logged data, vehicles
Events	Events server. Check Read only box to not allow user to change event configurations.
Text to Speech	Server for text-to-speech functionality
Vehicle Manager	Fault report for vehicles
Assignments	Create vehicle assignments. Check Read only box to only allow viewing of assignments.
Equipment	Switch surveillance.
Connection monitor	Interchange data.
Display	At-stop displays
Report Sheet	User report functionality
Station management	Station Manager functionality
Forecast	Forecast history

Parameters	Description
GeoCoverage	Snowplow service for monitoring plowing status of route sections.
Geocoding	Service for geographivcal positions and adresses (used by the Search Street tool).
Transit Map	Transit Map (logical map)
Road Situation	Road status information (external source)
Charging Management	Charging point service.
Planned Traffic	Traffic database. User name and password to log in to the traffic databases. The user is saved in the traffic database deciding which companies can be accessed.

System Definition: Read Only Services

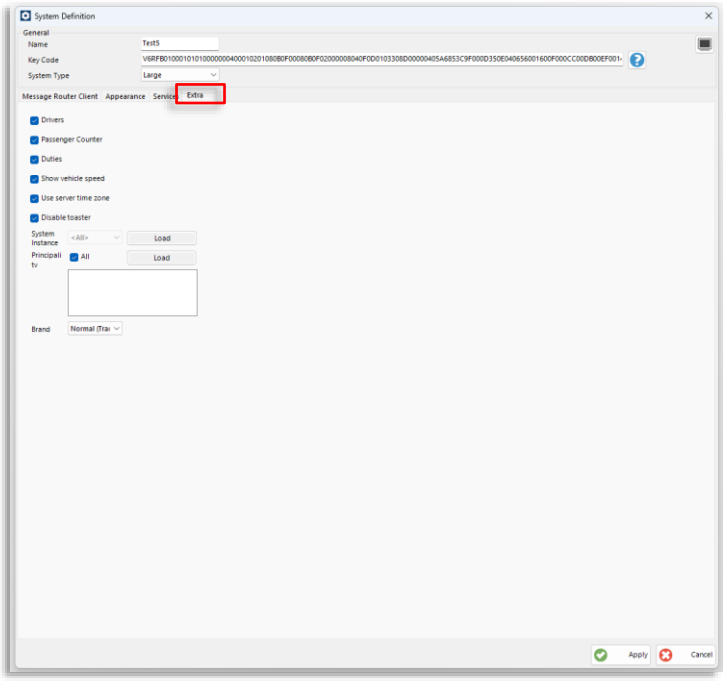
Some services can be set to be read only – only allowing the users to view information, not create tasks, make assignments, save changes, etc. This is controlled with checkboxes to the right of the services list, se below.

- Check the corresponding boxes and click on the **Apply** button for the setting to take effect.

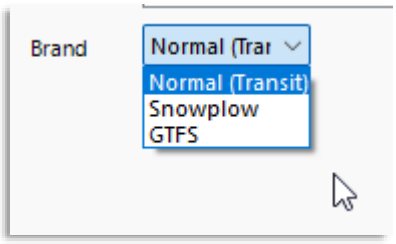


System Definition: Extra (Various Settings)

System data usage/presentation settings, including settings for setting up multiple system instances to separate presentation, messaging, information etc. between “sub systems” sharing the same system.



Parameters	Description
Drivers	Display of drivers on / off
Passenger Counter	Display of passenger counter on / off
Duties	Display of duties on / off
Show vehicle speed	Display vehicle speed data on / off
Use server time zone	For connecting to system in other time zone – use server local time.
Disable Toaster	Disable Notifications.
System instance	Selection of system instance in server (menu). Click on the “Load” button, to load the menu with all available items. The choice “All” will allow access to all instances.
Principality	Selection of principalities (menu). Click on the “Load” button, to load the menu with all available items. The choice “All” will allow access to all principalities.

Parameters	Description
Brand	 Adapts tool labels for different system setups (transit/snowplow...GTFS) Transit: Standard public transport Transmodel based terminology. **Note:** The GTFS setting adapts the terminology for local Canadian terminology. See the chapter 2 Terminlogy list in the TS reference manual.

5.1 Save Configurations in Database or in local Configuration File

It is possible to define how the application's configurations will be saved, whether to a database and/or to the application's local configuration file (FrameWorkConfig.xml, see chapter 9 Settings in the Configuration File for its location).

Three excerpts are shown below from the configuration file. The first two decide if the configurations will be read and written from/to the configuration file. The third one decides if it will be read and written from /to a database.

Read the Configurations from the Configuration File

```
<setting name="ReadUserConfigurationFile" serializeAs="String">
        <value>True</value>
</setting>
```

The settings in the file are colored in red if the parameter above is set to "True".

Write the Configurations to the Configuration File

```
<setting name="SaveUserConfigurationToFile" serializeAs="String">
        <value>False</value>
</setting>
```

In the example above, the configurations are written to the file FrameWorkConfig.xml. In this case, the parameter is set to "True".

- Note: The application reads the configurations from the file regardless if the parameters above are set to True or False.
- Note: Even if the application should normally be read from the database, the parameters can still be set to "True", which means that the configurations will use the local configuration file as a backup if the database cannot be reached.

Read and Write Configurations from / to the Database

```
<setting name="UseDBConfigMgmt" serializeAs="String">
        <value>True</value>
</setting>
```

True means that the application will first read and write from/to the database.

False means that the application does not read nor write from/to the database.

Database-IP

The servers address must be provided when using a server to store the parameters.

```
<setting name="ServerConnectionString" serializeAs="String">
      <value>i4mtest1:80</value>
</setting>
```

6 Configuration Manager (Super User)

File > Setup > Configuration Manager

Individual Traffic Studio Configurations are administered with the Configuration Manager, a floating configuration window available to Power and Super Users.

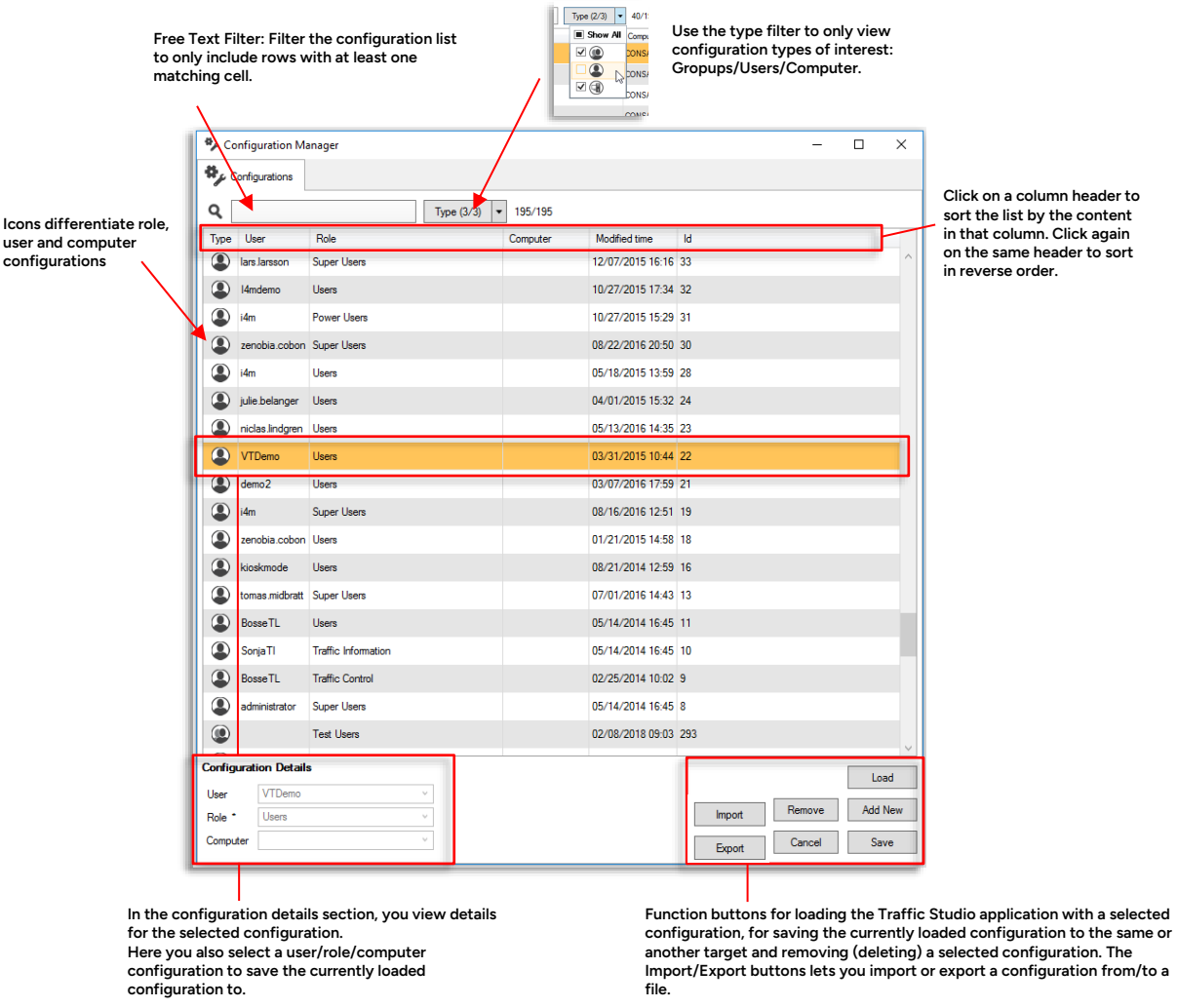
Note: As Super User, you have access to extra functionality in this tool for viewing and comparing configurations in detail.

For information about how to load, edit and save configurations, see the Administration Manual.

6.1 Configuration Manager Window: Overview

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

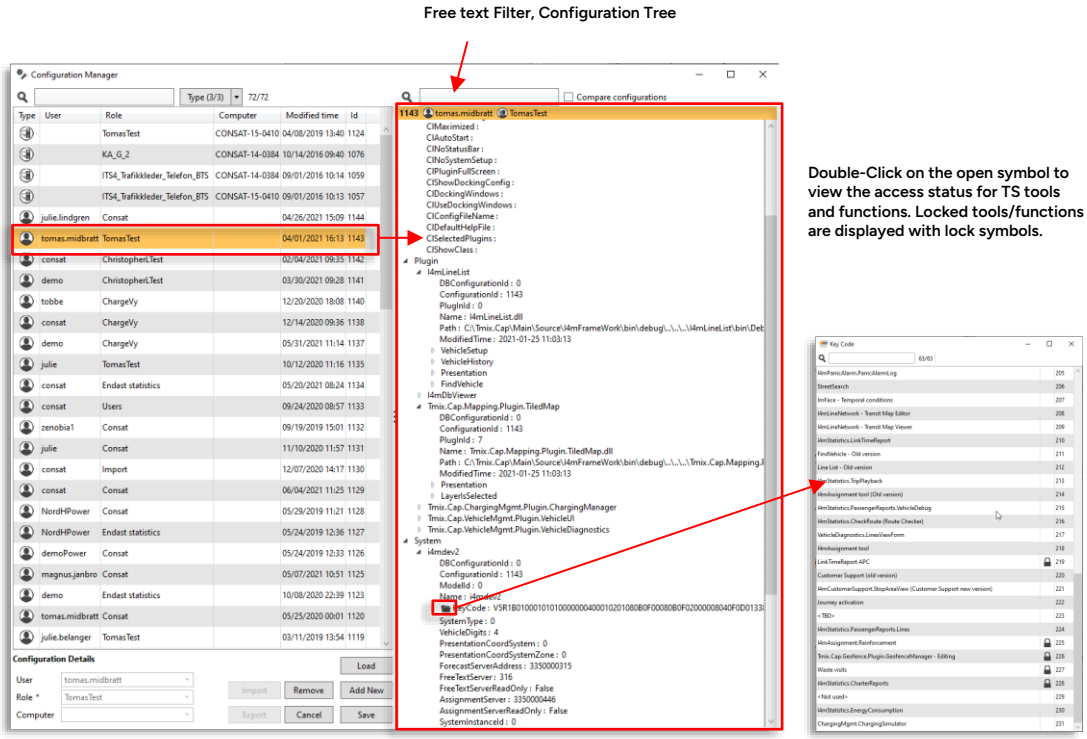
Like other list views, the Configuration Manager list can be filtered using a free text filter, a type filter, and sorted by any column to allow focusing on the information you need.



Header	Description
Typ	Symbol indicates configuration target/user:  - Role  - User (logged in as role…)  - Computer (logged in as role…)
User	User Name.
Role	Role Name
Computer	Computer Name
Modified Time	Time Stamp, showing last change
ID	Configuration ID

6.2 View complete configuration (selected role)

As Super User, when you select a role in the tool list, that roles' complete configuration – including plugins, settings, key code, system configurations, databases, etc. is displayed in a configuration tree in an expanded section to the right.

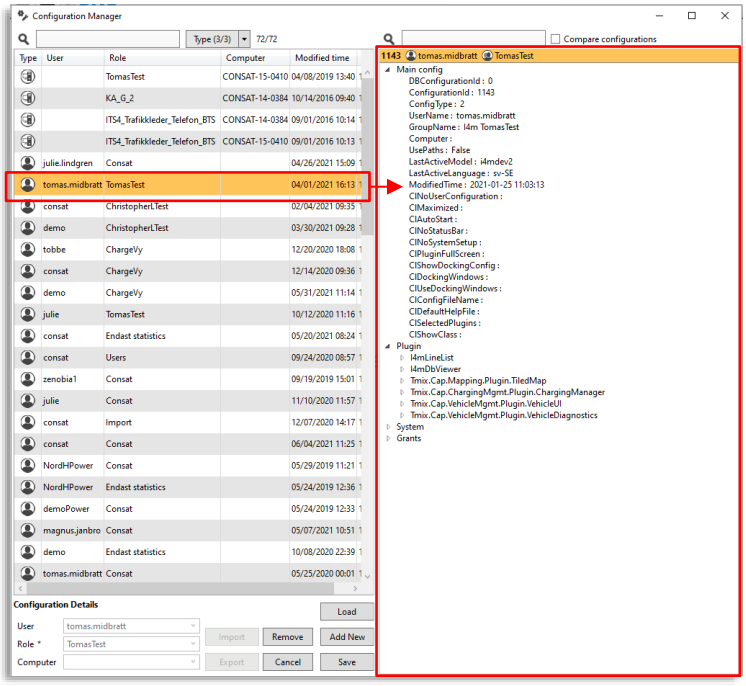


Note: This function is mainly intended for Consat personnel that needs to troubleshoot or set up new systems rationally and quickly. All individual configurations cannot be documented here (everything is documented in the application source code.)

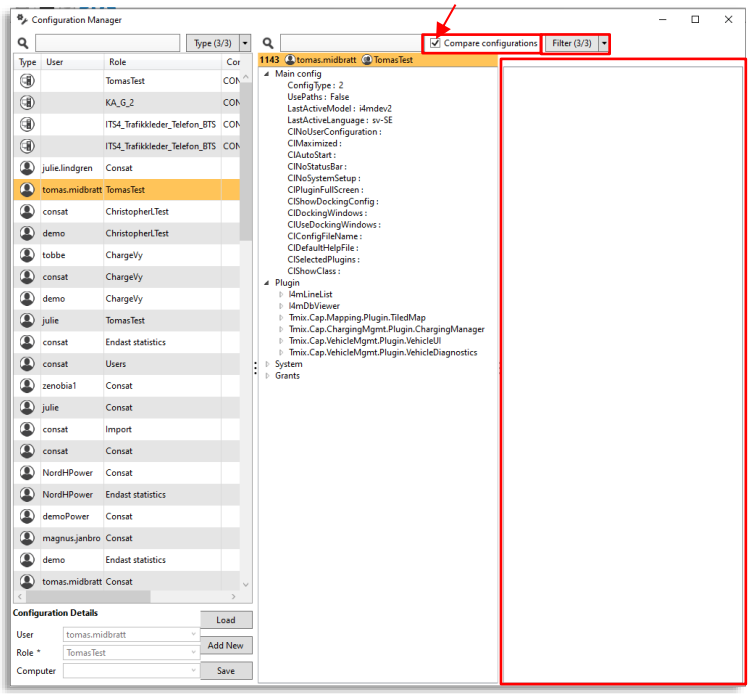
6.3 Compare two role configurations

You can easily compare the configurations of two selected roles. Differing configurations and sections not included in both roles are highlighted with different colors. You can also choose to exclude these categories to focus on differences, etc.

1. Select the first role by clicking the list – that roles configuration tree will show in the expanded section to the right.



2. Check the “Compare configurations” box to enable the comparison function. A new configuration tree section is added to the right. A “Filter” menu for selecting comparison categories is added.

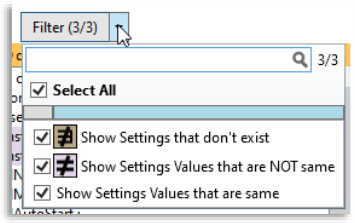


3. Click the role list to select the role [configuration] to compare with the first selected role.

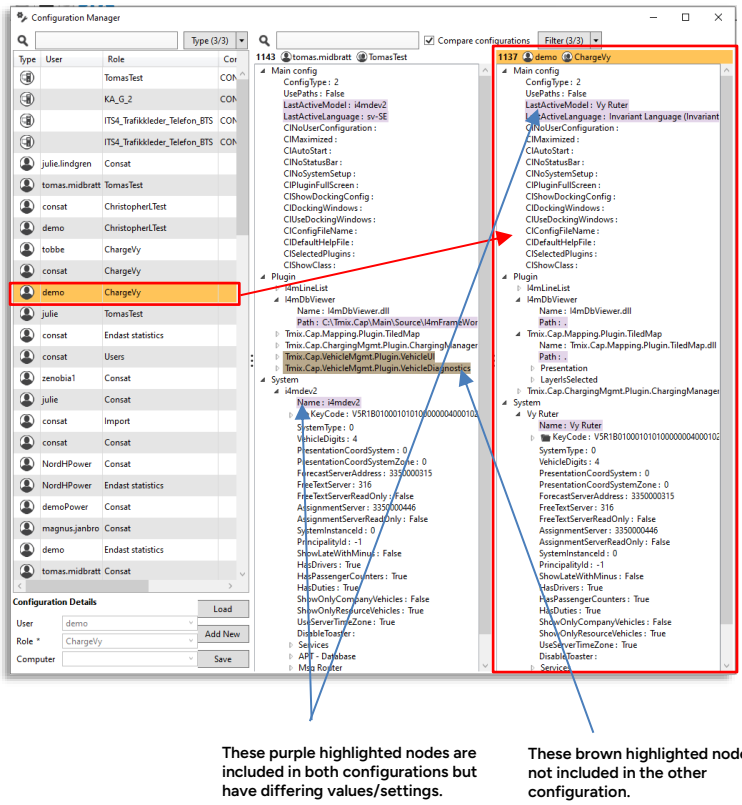
   Note: Depending on the Filter menu selections different comparison categories will be included in the two configuration trees. With all three categories checked in the menu, everything is included in the presentation.

   Configuration nodes not included in the other, compared role [configuration] is highlighted brown in the configuration trees (works both ways). To exclude these configurations from the presentation, un-check the “Show settings that don’t exist” item in the menu.

   Configuration nodes that are included in both role configurations, but have differing values/settings, are highlighted purple.
   To exclude these configurations from the presentation, un-check the “Show settings values that are NOT same” item in the menu.



   Tip: To focus only on the differences between the two configurations, un-check the “Show settings values that are the same”.

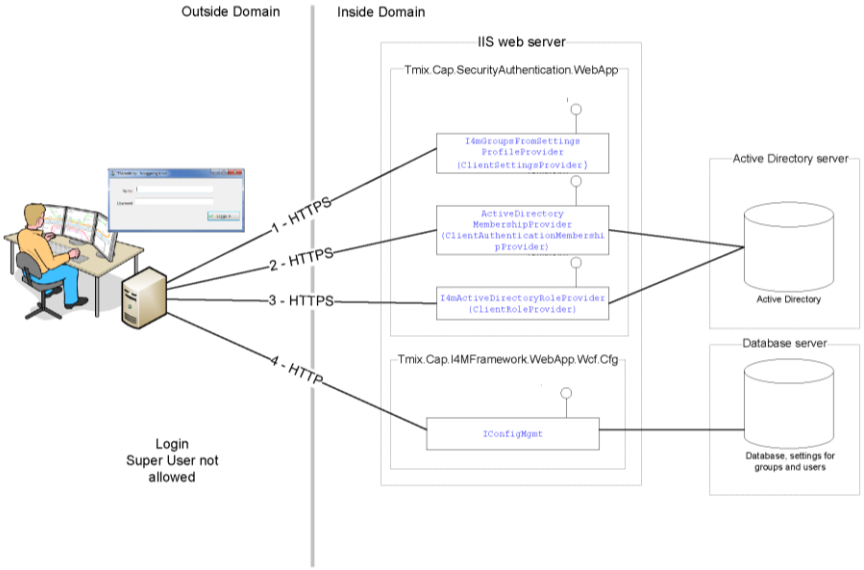


Note: To make another comparison, un-check the “Compare configurations” box and start over with step 1.

7 Paths to Web Services, Login Outside the Domain

If the user needs to log in via a web service (while using the application from outside the domain.) The path, or URL, provided by Consat after the installation, needs to be configured.

Login Through Client Application Services and Active Directory



- **Note: It is impossible to log in as a Super User from outside the domain.**

Path to the Web service

```
<appSettings>
<add key="ClientSettingsProvider.ServiceUri" value="http://xxx"/>
```

Path to the web service

```
<providers>
<add name="ClientAuthenticationMembershipProvider"
type="System.Web.ClientServices.Providers.ClientFormsAuthenticationMembershipProvide
r, System.Web.Extensions, Version=3.5.0.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35" serviceUri=http://xxx
```

Path to the web service

```
<providers>
<add name="ClientRoleProvider"
type="System.Web.ClientServices.Providers.ClientRoleProvider, System.Web.Extensions,
Version=3.5.0.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35"
serviceUri="http://xxx" cacheTimeout="86400" />
```

Path to the web service

- Note: When a user logs in for the first time in a group, the group's default configuration is used, before being saved in the user's configuration file.

8 Let Users Save Configuration Changes, or Not

In some situations, you may want to limit or stop users from saving changes being made to the configuration. I.e. let the application always return to its default configuration for each session.

(For instance, when several users share an account or when changed configurations has been known to cause problems.) You can also choose allow only Superusers to save changes to the configuration (see example below).

```
<setting name="DbConfigMgmtReadonly" serializeAs="String">
                <value>False</value>
            </setting>
            <setting name="DbConfigMgmtReadonlyTables" serializeAs="Xml">
                <value>
                    <ArrayOfString xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
                        <string/>
                    </ArrayOfString>
                </value>
            </setting>
            <setting name="DbConfigMgmtReadonlyPlugins" serializeAs="Xml">
                <value>
                    <ArrayOfString xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
                        <string/>
                    </ArrayOfString>
                </value>
            </setting>
            <setting name="DbConfigMgmtReadonlyPluginSections" serializeAs="Xml">
                <value>
                    <ArrayOfString xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
                        <string/>
                    </ArrayOfString>
                </value>
            </setting>
            <setting name="DbConfigMgmtReadonlyPluginVariables" serializeAs="Xml">
                <value>
                    <ArrayOfString xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema">
                        <string/>
                    </ArrayOfString>
                </value>
            </setting>
            <setting name="DbConfigMgmtApplyReadonlyRulesForNonSuperUser" serializeA
s="String">
                <value>False</value>
            </setting>
            <setting name="ForceSystemSetup" serializeAs="String">
                <value>False</value>
            </setting>
```

Example

In this example configuration all tools are read only for all but superusers.

Plus: Vehicle Setup is read only for all, including superusers.

```
<setting name="DbConfigMgmtReadonly" serializeAs="String">
            <value>False</value>
        </setting>
        <setting name="DbConfigMgmtReadonlyTables" serializeAs="Xml">
            <value>
                <ArrayOfString xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
            xmlns:xsd="http://www.w3.org/2001/XMLSchema">
            <string />
        </ArrayOfString>
    </value>
</setting>
<setting name="DbConfigMgmtReadonlyPlugins" serializeAs="Xml">
    <value>
        <ArrayOfString xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xmlns:xsd="http://www.w3.org/2001/XMLSchema">
            <string />
        </ArrayOfString>
    </value>
</setting>
<setting name="DbConfigMgmtReadonlyPluginSections" serializeAs="Xml">
    <value>
        <ArrayOfString xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xmlns:xsd="http://www.w3.org/2001/XMLSchema">
            <string>VehicleSetup</string>
        </ArrayOfString>
    </value>
</setting>
<setting name="DbConfigMgmtReadonlyPluginVariables" serializeAs="Xml">
    <value>
        <ArrayOfString xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
            xmlns:xsd="http://www.w3.org/2001/XMLSchema">
            <string />
        </ArrayOfString>
    </value>
</setting>
<setting name="DbConfigMgmtApplyReadonlyRulesForNonSuperUser"
    serializeAs="String">
    <value>True</value>
</setting>
```

9 Configure the Application Log

The application's logs are saved in this location:

C:\i4m\var\log\TrafficStudio\TrafficStudio

To change location, edit the file value below.

The SyslogAppender IP and port can also be edited, see below.

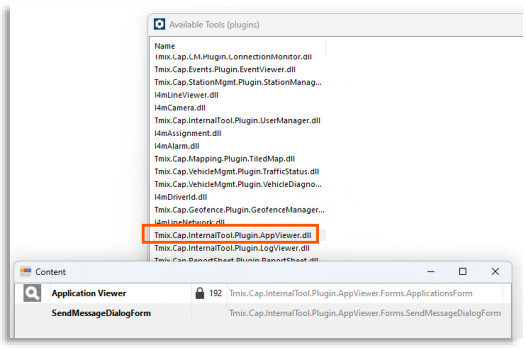
```
<log4net>
        <!-- Logger for Traffic Studio: -->
        <appender name="ProcessIdRollingFileAppender" type="I4mFormControls.ProcessI
dRollingFileAppender">
            <file value="c:\i4m\var\log\TrafficStudio\TrafficStudio" />
            <appendToFile value="true" />
            <maxSizeRollBackups value="10" />
            <maximumFileSize value="1MB" />
            <rollingStyle value="Size" />
            <staticLogFileName value="true" />
            <layout type="log4net.Layout.PatternLayout">
                <conversionPattern value="%date [%-6thread] %-
5level (%logger{1}) - %message%newline" />
            </layout>
        </appender>
        <appender name="RemoteSyslogAppender" type="log4net.Appender.RemoteSyslogApp
ender">
            <param name="RemoteAddress" value="192.168.0.15" />
            <param name="RemotePort" value="514" />
            <facility value="local7" />
            <layout type="log4net.Layout.PatternLayout" value="%date{yyyy-MM-
ddTHH:mm:ss.fffffffzzz} %P{log4net:HostName} [%-16thread] (%logger{2}) - %m%n"/>
        </appender>
        <root>
            <level value="ALL" />
            <appender-ref ref="ProcessIdRollingFileAppender" />
            <appender-ref ref="RemoteSyslogAppender" />
        </root>
    </log4net>
```

10 Application Viewer Tool

This remote troubleshooting tool provides information about a users' TS application version, configuration etc. It includes remote diagnostics retrieval and interaction tools handling reboot/updating a users' application/configuration.

When in contact with a customer with Traffic Studio problems you can use Application Viewer to check his/her configuration etc.

- **Note:** To use App Viewer, the plugin needs to be added as well as the **key enabled**

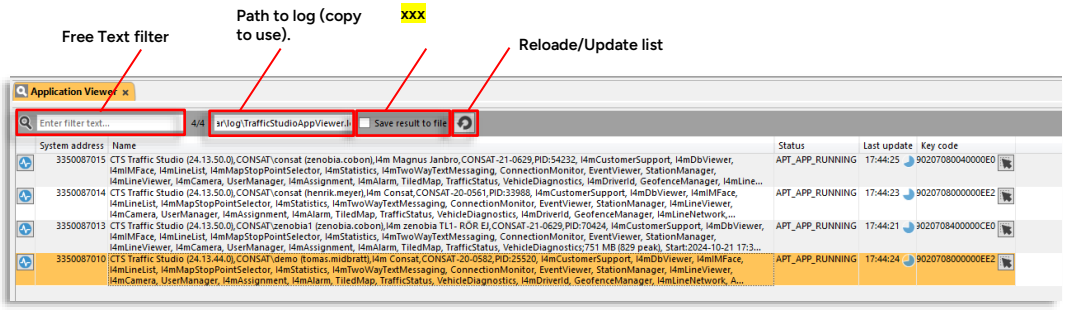


- You run the tool in TS connected to the users system.

- Application viewer is accessed in **Tools >Application Viewer**

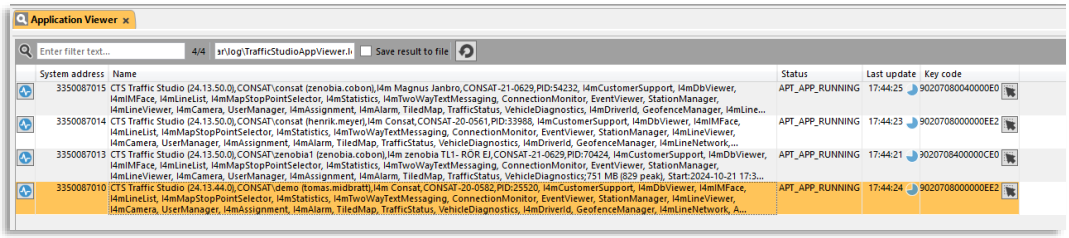
10.1 Tool Overview

The basic tool view is a list of all current TS sessions on the connected system. Each client session is listed in a separate row.

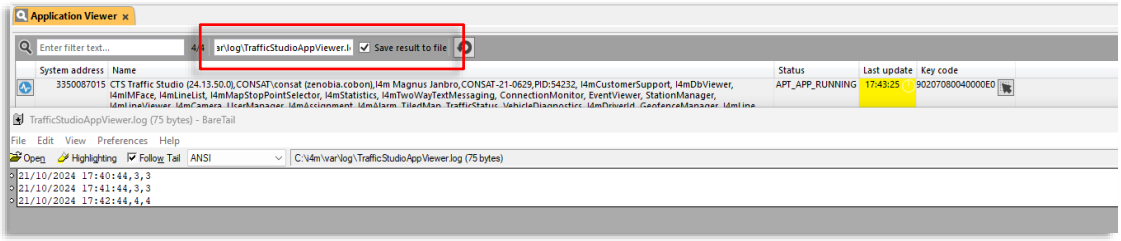


Header	Description
	Button to open Diagnostics Form window for client session, see following sub chapter.
System Adress	User application system address.
Name	Includes information about: • Traffic studio version • Login domain\login name (name) • Role • Computer name • Process ID • Plugins • Memory • Application start time • Total ?? • .Net version
Status	Application status: • APT_APP_STARTING • APT_APP_RUNNING • APT_APP_TERMINATING
Last Update	Time Stamp, showing last change
Keycode	Alpplication Key code. Copy to check/verify in keycode application. Button to copy key

Note: the row content can be copied to better see details, such as which plugins are used.

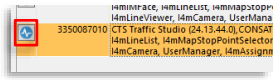


- Log for application viewer can be turned on

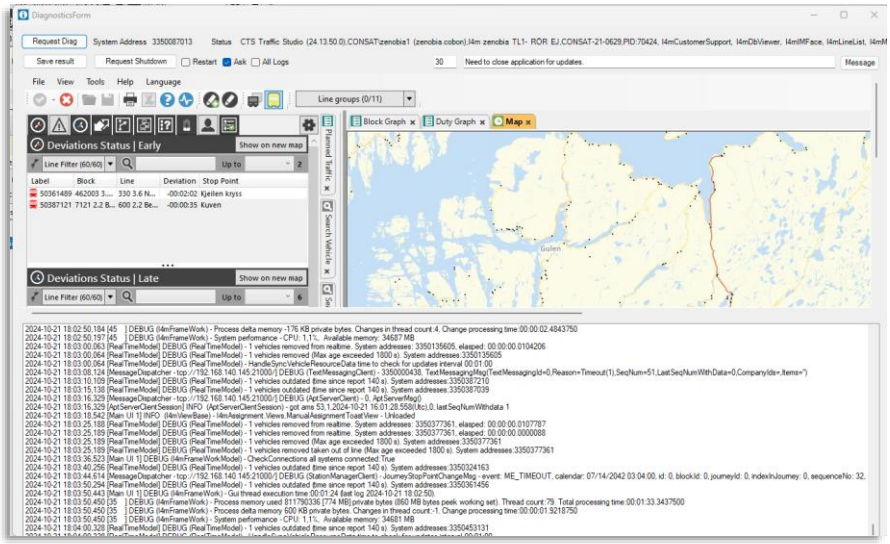


10.2 Request Diagnostics

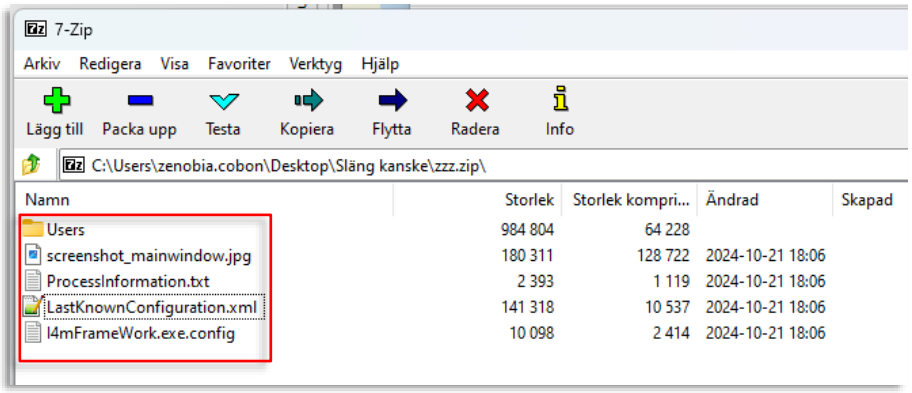
1. Click on the Diagnostics button to open Diagnostics form window:



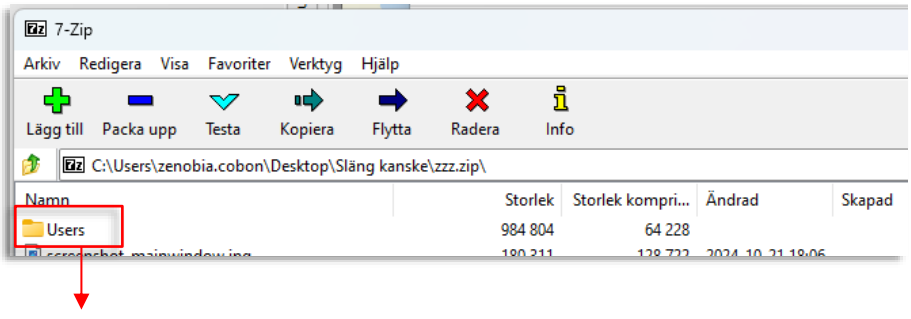
2. Click **Request Diag** to get the current state of the user client
3. The result is a **screenshot of TS as well as the latest TS log** available.

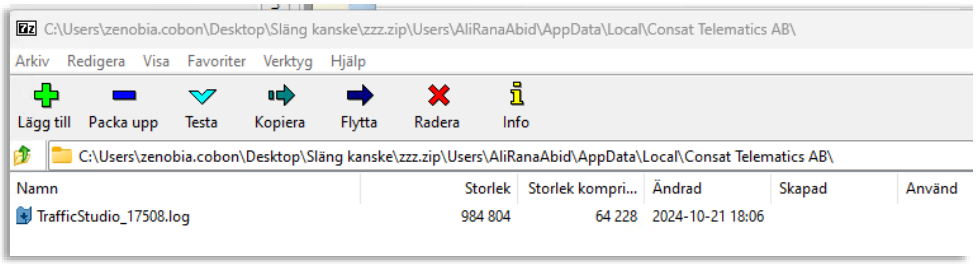


4. Click **Save result** to save diagnostics to local computer
you'll get a zipped folder containing:



5. The latest log file from the client can be found in further down in the users folder:

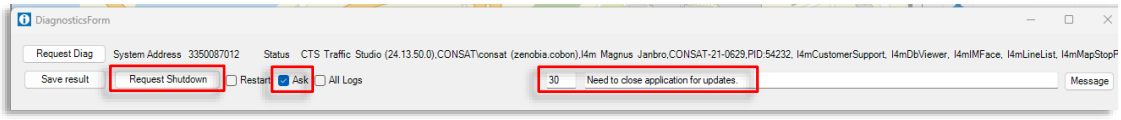



C:\Users\zenobia.cobon\Desktop\Släng kanske\zzz.zip\Users\AliRanaAbid\AppData\Local\Consat Telematics AB\
Arkiv Redigera Visa Favoriter Verktyg Hjälp
Lägg till
Packa upp
Testa
Kopiera
Flytta
Radera
Info
C:\Users\zenobia.cobon\Desktop\Släng kanske\zzz.zip\Users\AliRanaAbid\AppData\Local\Consat Telematics AB\
Namn
Storlek
Storlek kompri...
Ändrad
Skapad
Använd
TrafficStudio_17508.log
984 804
64 228
2024-10-21 18:06

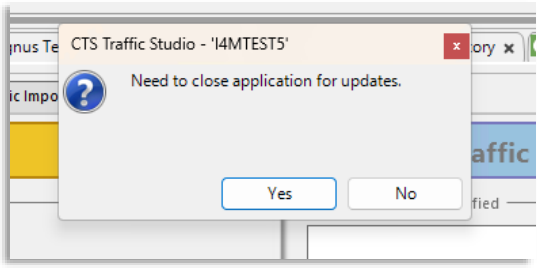
10.3 Request [User Application] Shut Down

The Diagnostics form includes a shut down/reboot request function. Use it to remotely shut down/reboot the client application. This normally includes a client heads up dialogue/message.

"**Request shut down**" + "Ask" +"30" + the message "Need to close application for updates." Will give the client user a dialog box 30 sec before closing the application

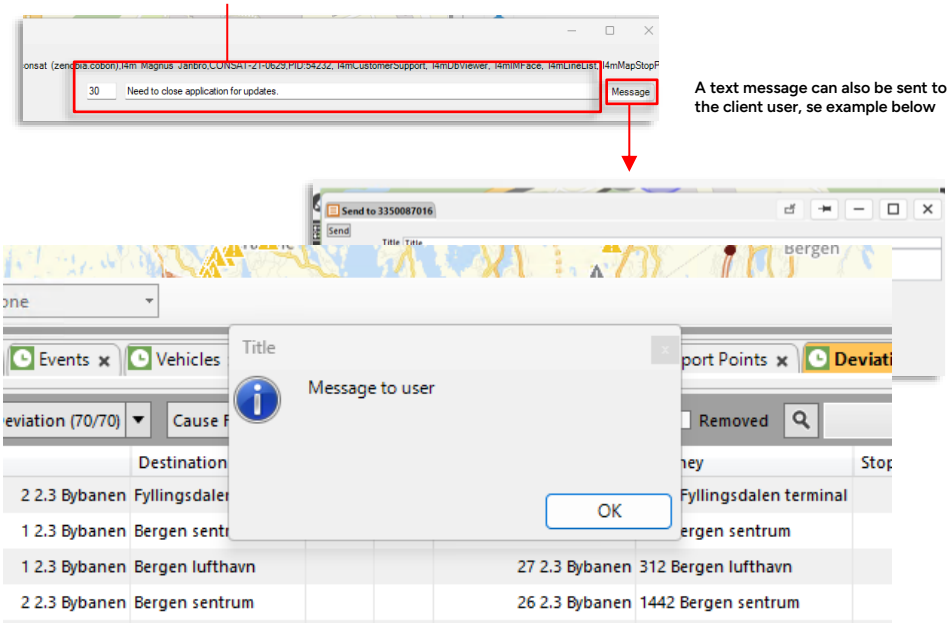


Dialog displayed in the Client application:



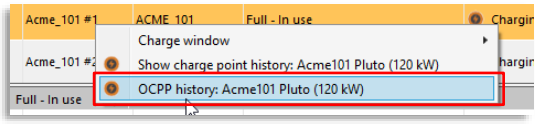
- the user will have a chance to deny the closing of the app. Rejected shutdown will be displayed like this:

- The dialog message and timeframe for a shutdown request can be altered as needed.



11 Charge Points: OCPP History

The OCPP History view (for a specific charger) is accessed through the Charge Point quick menus:



This view, available through the charge point quick menu, lists all transactions over the OCPP protocol, which is used to communicate with most chargers.

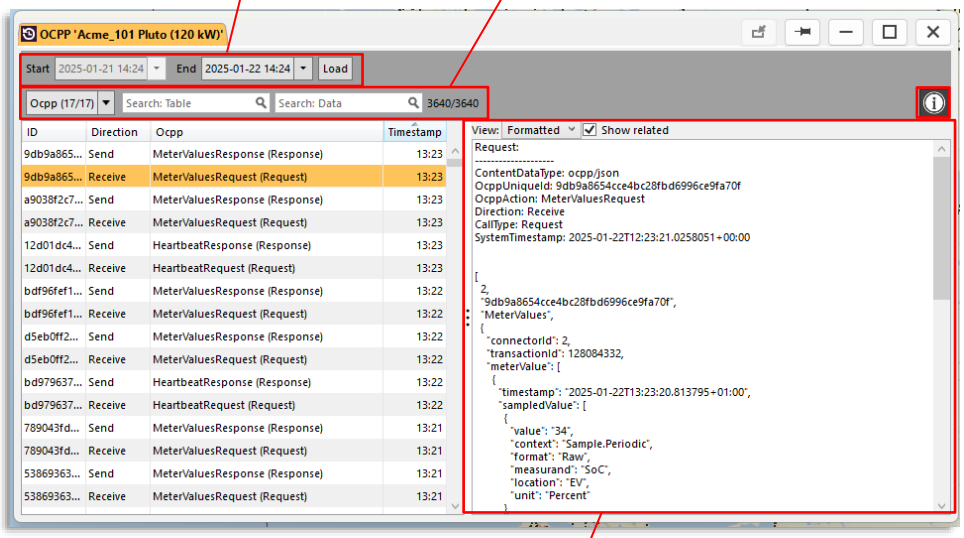
- The transaction list covers a specified period. Define the beginning and end of the period in the top section and click load to load these transactions. Change at any time and click Load to modify your search period.
- Each row in the list shows an information transaction to/from the charger (request-response).
- Separate message and free text filters for table contents and data allow you to quickly find matching items.
- Select a row (transaction) to view it in the details section to the right (expanded with the details button).

Search Period

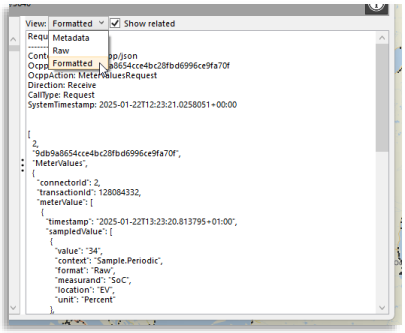
Select start and end time and click the Load button.

Filters

Message type filter, table free text filter and data free text filters. View only matching items.



Details show/hide



Details: Contents, selected transaction to/from charger.

Presentation menu: Formatted/Raw/Metadata.

Metadata is a compact presentation of the transaction.

Raw is the transaction unformatted.

Formatted (normal view) is a "pretty", formatted presentation of the complete transaction.

Check "Show related" to *also* display the related message (request/reply, depending on selected transaction) in the selected presentation mode.

12 Configure Custom Vehicle Alarm Events

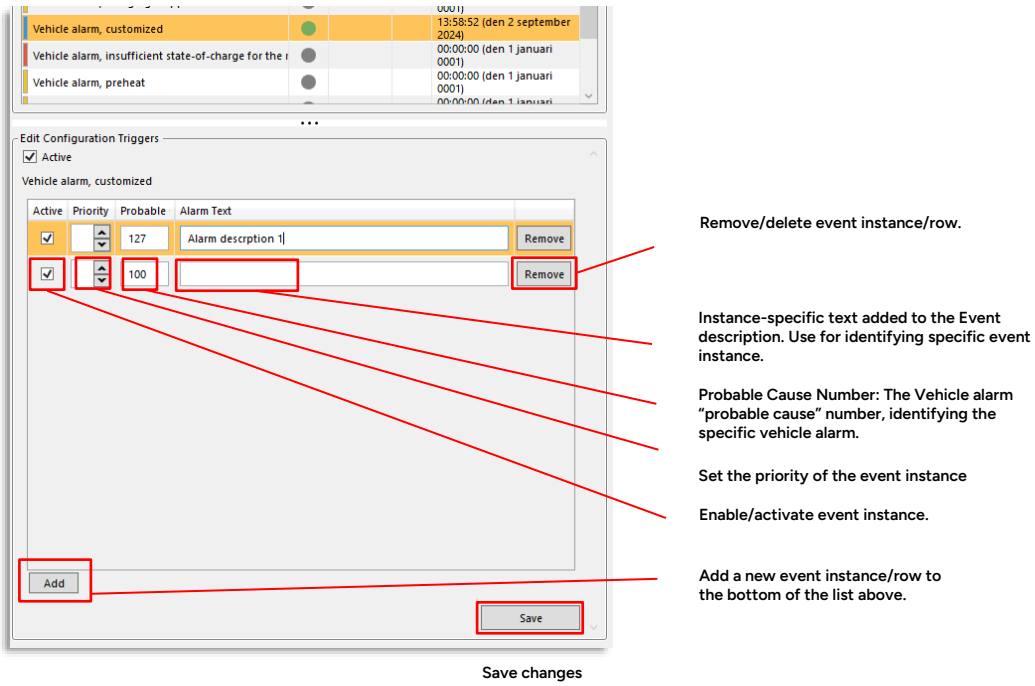
As a Superuser you have access to the Vehicle alarm, customized event configuration, in the TS Event Configuration tool.

This allows you to set up multiple instances of the event, linked to the vehicle alarms of your choice (if you know their individual probable cause number – check with the vehicle team for an up-to-date list of the vehicle alarms/numbers).

The event will trigger when the alarm goes active.

Note that the same *event type* will be triggered by all configured event instances. You will need to differentiate between the alarm triggered events by the text you configure for each instance. This text is added to the Event Description text and thus you can free-text filter the event list to find/monitor these event instances.

1. Click on the Add button to add a new instance/row
2. Check the "active" box to enable the instance
3. Set the event (instance) priority
4. Enter the probable cause code
5. Enter a suitable text that will be added to the event description.
6. Repeat the above to add more instances/vehicle alarm events.
7. Save your changes.



13 Create, Administer Transit Maps

- **Note:** The current version of the tool “My Transit Maps”, used for creating and administering Transit Maps, is considered an “inhouse” tool, mainly intended for Consat personnel. Future versions will have fine tweaked workflow and more use friendly functions and will be available to User Administrators – the tool descriptiio will then be moved to the Administrator manual.

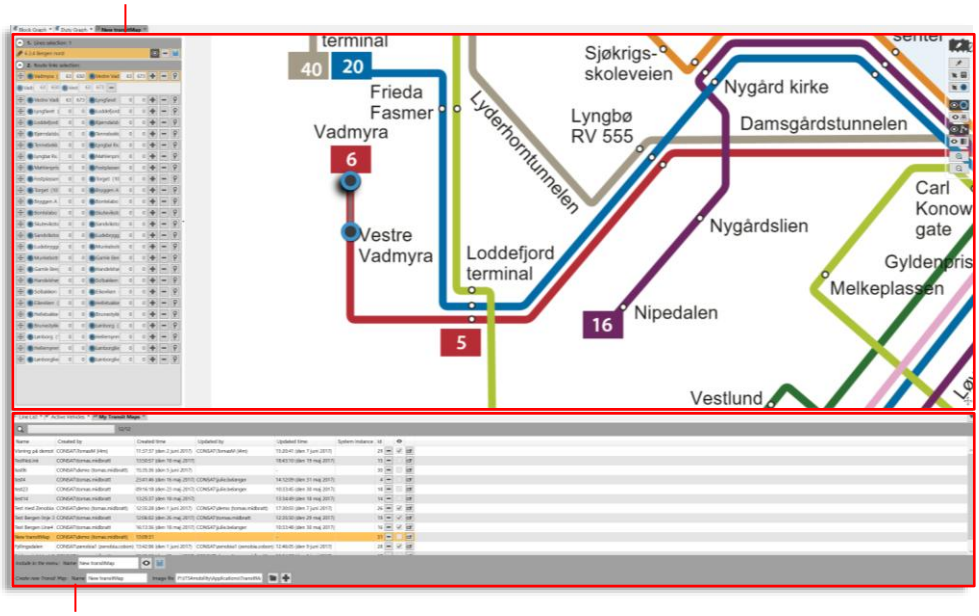
My Transit Maps, Transit Maps in Edit mode

To create, edit and administer transit maps, two Traffic Studio tools are used: **My Transit Maps**, for listing and administering transit maps, and the **Transit Maps** tool used in edit mode, for “building”/editing the maps.

- Transit maps consist of a background image, showing parts of or the whole line network, and on top of this, the logical stop points and line paths the vehicle symbols are to follow on the map. To create the finished map you simply position the stops the line paths between them, using Transit Maps in edit mode.

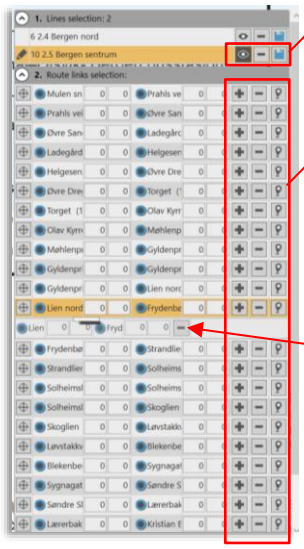
Toolset Overview

Transit Maps (Edit Mode)
With Transit Maps in edit mode, all included lines and paths (consisting of the links between the stops) are presented in a section to the left.
You add line and route data in this section from the Planned traffic tool using the shortcut men (see the following step by step sections for how to do this).
Key-commands are used to place the listed route stop points and the point-in-links that create the paths on the map.



My Transit Maps
The My Transit Maps tool lists all created Transit Maps and allow you to select maps for editing in the Transit maps tool.
My Transit Maps is also used for creating new transit maps and inserting/changing the background image used – and for deleting or hiding transit maps that is not in use.

Transit Map Edit Section Overview



Lines
All lines imported from the Planned Traffic.

Route, Selected Line
The route stops, imported from the Planned Traffic, with additional placed point in links.

View/Hide, Delete, Save Line Buttons
Use these function buttons to view/hide, delete and save the corresponding line (route). You can for instance choose to hide all routes you are not editing.

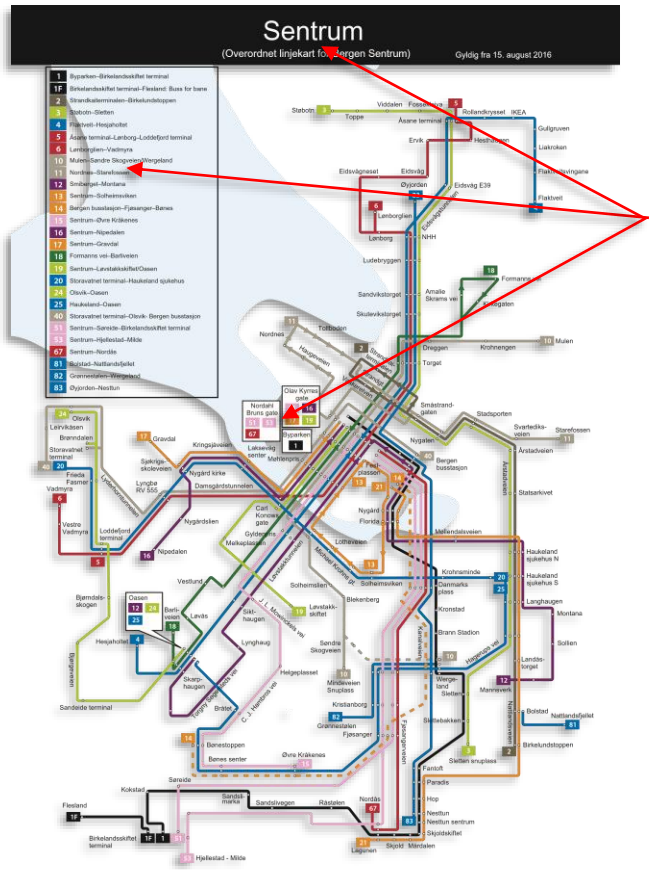
Add, Remove, Place Route point buttons
Use to add point in links to make link (path) between two stop points more/less complex. Use the Place button to start/continue placing points on the route.

Remove point button
Use to delete unnecessary points.

The Transit Map Background Image

To make a clear and easy to read transit map you need a good background image. Normally the transit map images that are designed for print may need editing to remove unneeded details, names etc. This is performed in a suitable application.

- Save the image in **png format** in a **resolution adapted to the display you are to use**. Verify that the image quality is ok at the zoom levels you are to use in practice.



Cleaning up a Transit Map backround Image.

For maximum clarity, you can remove unneeded details in the image. Edit the vector format original image for best results. Then save the image in .png format in optimal resolution.

The Transit Map Stops and Paths

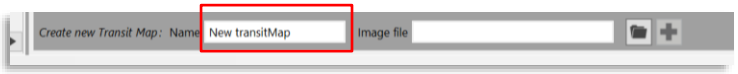
To display and position the real-time vehicle symbols in the Transit Map, **the application need you to define the position of all stops and the paths or "links" between them – based on the planned traffic data.** To do this you extract line data, stop points and routes from the Planned Traffic and "place" them om the map, using the Transit Map editing tools.

- **Note:** As the application need to reference the complete planned traffic to place the vehicle symbols along the line patths, **you need to place *all stop points* of the selected line routes on the map, even if they are not included in the simplified background image**. As the Traffic Studio stop points can be hidden in the view without loss of functionality (shortcut menu access) this should not be a problem.

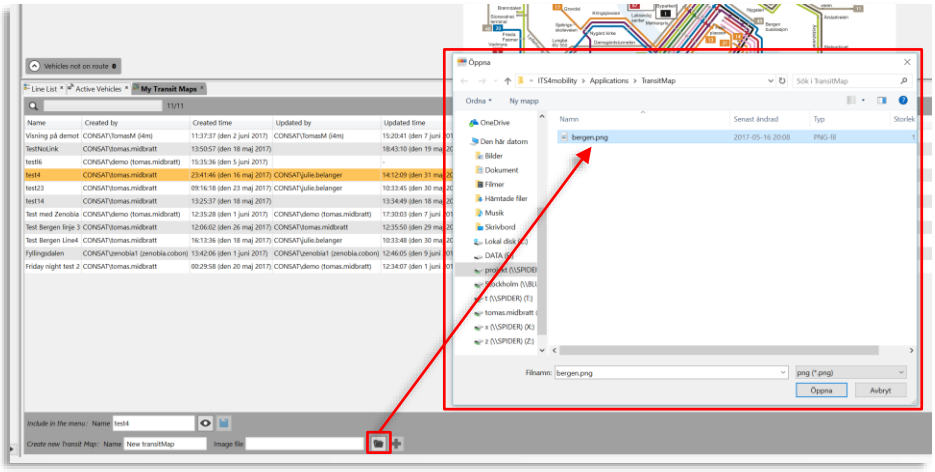
- The paths between stop points may be simple straight lines, or they may consist of any number of sections forming "curves" etc. These "links" are created by placing "point-in-links" along the intended path when you create the Transit Map.

Creating a New Transit Map

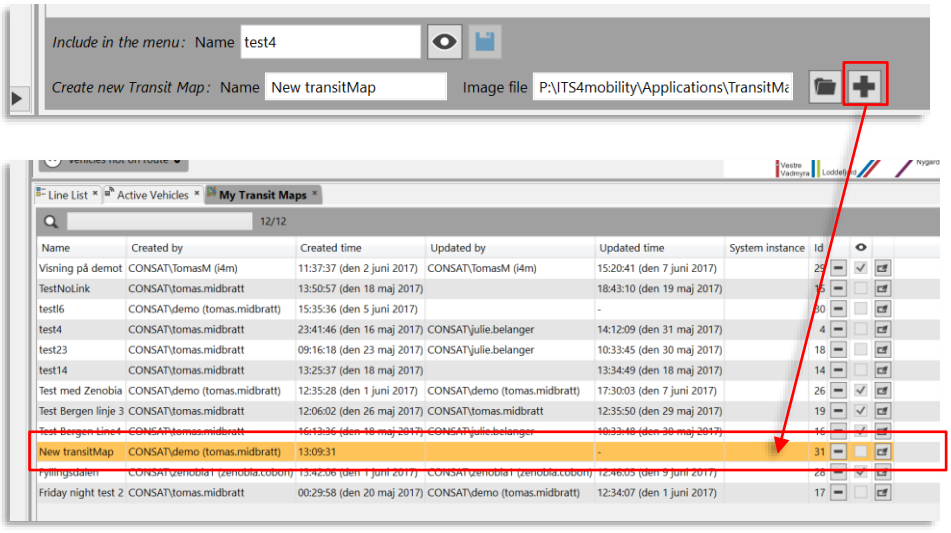
1. In My Transit Maps, enter the name of the new Transit Map in the name field:



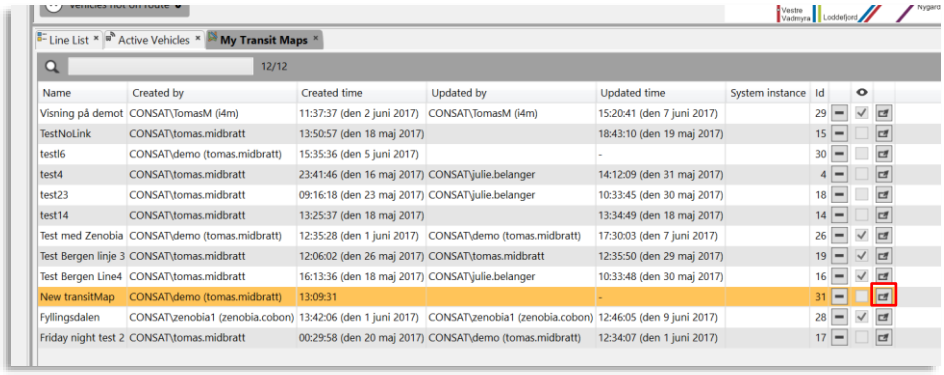
2. Click on the Browse button to open the browse window. Browse to the (png) image that is to be used as background and select it.



3. Click on the "Add" button to add the new transit map to the list above.

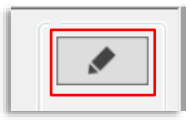


4. Click on the "Show in Transit Map tool" button to view the new transit map in the top Transit Map window.

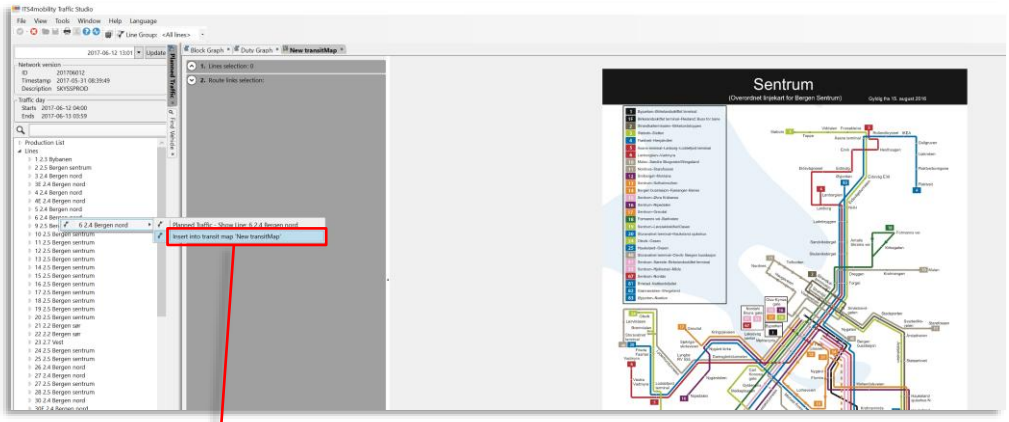


Name	Created by	Created time	Updated by	Updated time	System instance	Id
Visning på demot	CONSAT\TomasM (i4m)	11:37:37 (den 2 juni 2017)	CONSAT\TomasM (i4m)	15:20:41 (den 7 juni 2017)		29
TestNoLink	CONSAT\tomas.midbratt	13:50:57 (den 18 maj 2017)		18:43:10 (den 19 maj 2017)		15
testl6	CONSAT\demo (tomas.midbratt)	15:35:36 (den 5 juni 2017)		-		30
test4	CONSAT\tomas.midbratt	23:41:46 (den 16 maj 2017)	CONSAT\julie.belanger	14:12:09 (den 31 maj 2017)		4
test23	CONSAT\tomas.midbratt	09:16:18 (den 23 maj 2017)	CONSAT\julie.belanger	10:33:45 (den 30 maj 2017)		18
test14	CONSAT\tomas.midbratt	13:25:37 (den 18 maj 2017)		13:34:49 (den 18 maj 2017)		14
Test med Zenobia	CONSAT\demo (tomas.midbratt)	12:35:28 (den 1 juni 2017)	CONSAT\demo (tomas.midbratt)	17:30:03 (den 7 juni 2017)		26
Test Bergen linje 3	CONSAT\tomas.midbratt	12:06:02 (den 26 maj 2017)	CONSAT\tomas.midbratt	12:35:50 (den 29 maj 2017)		19
Test Bergen Line4	CONSAT\tomas.midbratt	16:13:36 (den 18 maj 2017)	CONSAT\julie.belanger	10:33:48 (den 30 maj 2017)		16
New transitMap	CONSAT\demo (tomas.midbratt)	13:09:31		-		31
Fyllingsdalen	CONSAT\zenobia1 (zenobia.cobon)	13:42:06 (den 1 juni 2017)	CONSAT\zenobia1 (zenobia.cobon)	12:46:05 (den 9 juni 2017)		28
Friday night test 2	CONSAT\tomas.midbratt	00:29:58 (den 20 maj 2017)	CONSAT\demo (tomas.midbratt)	12:34:07 (den 1 juni 2017)		17

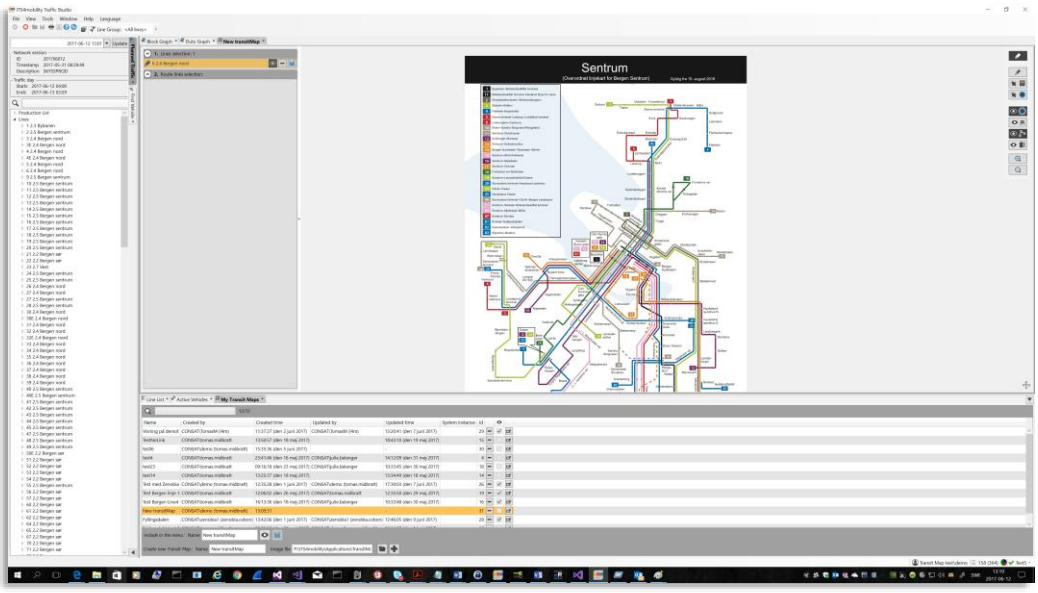
5. Verify that the background image will work OK (resolution at different zoom levels, image quality etc.). See the reference manual for how to use the Transit map tool.
6. Enable Transit Map Edit mode with the (top) Edit button in the Transit map tool, see below.



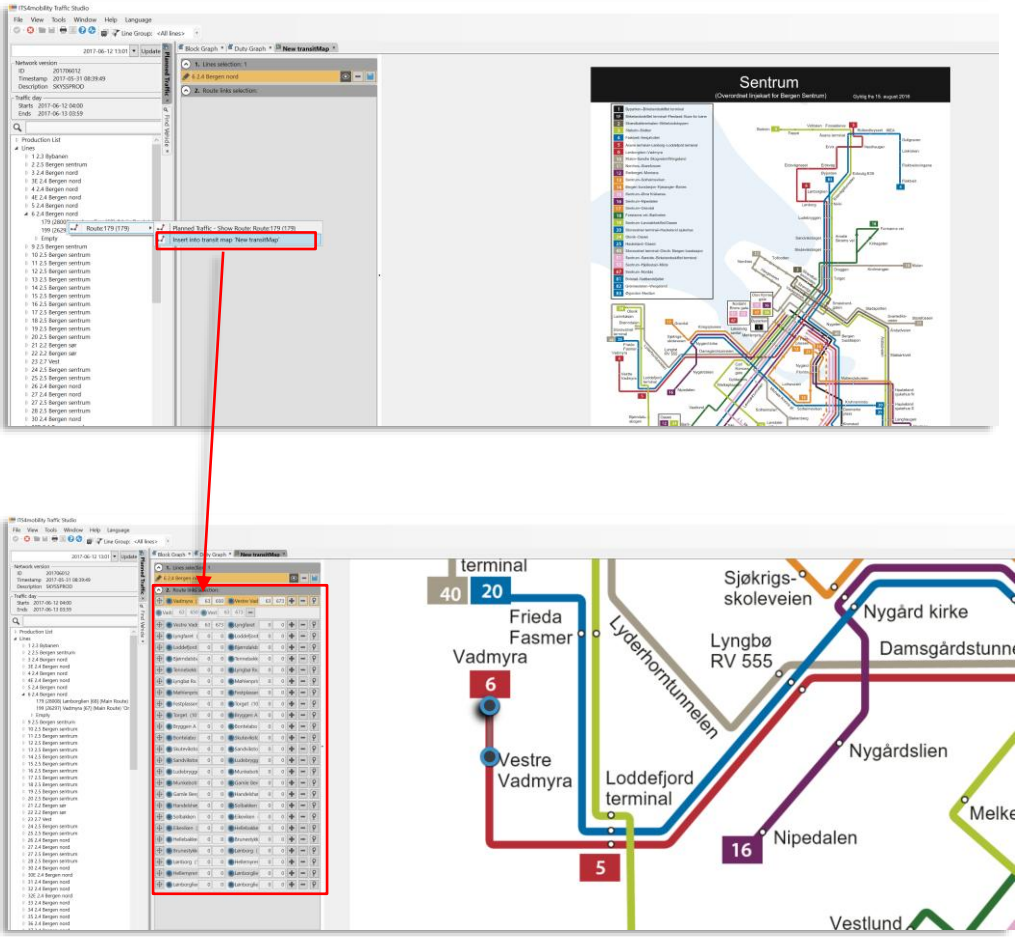
7. Add the first line to the Transit Map by selecting “Insert into Transit Map [name]” in the **Planned Traffic** tool Lines list shortcut menu, see below.



The line is added to the Lines list in the Transit Map edit section, to the left in the tool window.

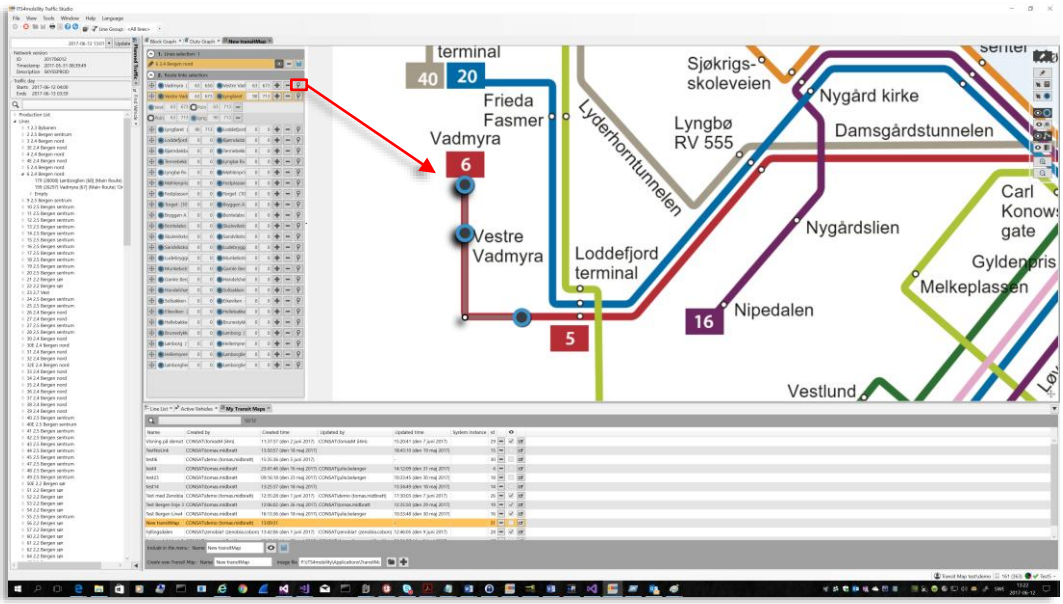


8. Now, add a suitable line route the same way from the Planned Traffic tool. Expand the route node, right-click on the route and select “Insert into Transit Map [name]”. The route with all its stops is inserted into the Route links section of the (already) selected line, see below.



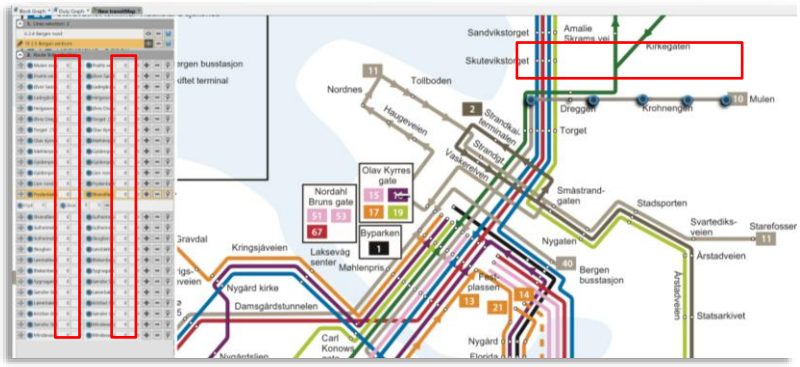
9. Place the stops along the route on to the map by clicking on the “place” button of the first stop in the series, see below. Then position the mouse pointer over the correct place on the background image followed by pressing “A” on the keyboard. The stop point will be placed on to the map. You can now proceed with either placing the next

stop (using the “A” key) or inserting a path point-in-link using the “S” key on the keyboard.



10. Repeat the above “point placing “ process, and create the whole line path from start to finish. As needed, click and drag to move any of the placed stop points or points in link (all new points that can be moved will have a “shadow”).

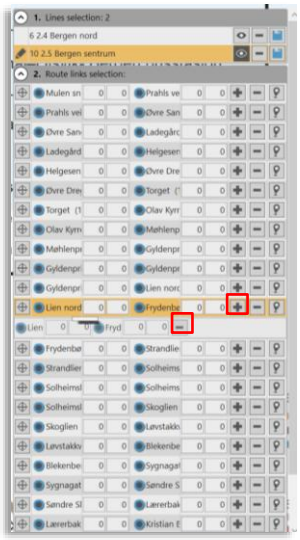
    Note: If needed, you can enter specific coordiates for each individual point on the map in the corresponding field in the route list and that way make sure everything aligns perfectly.



Use coordinates for exact vertical/horizontal placement.

Note: If you want to quit before placing all the stop points, press the **Esc** key.

11. If you need to add point-in-links between two stop points, click on the corresponding "+" button in the route list. If you need to delete a point, click on the corresponding "-" button.



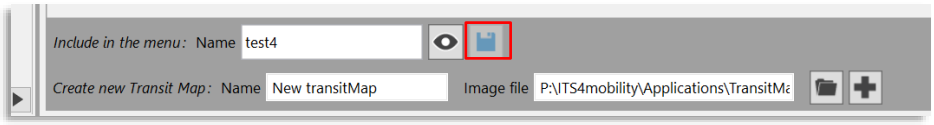
12. **Save** the created line route by clicking on the save button for that line in the top Line list. **Note that you have to save each line individually.**

13. Add more lines with stops and link paths by repeating steps 7 to 12

Changing/Editing a Transit map

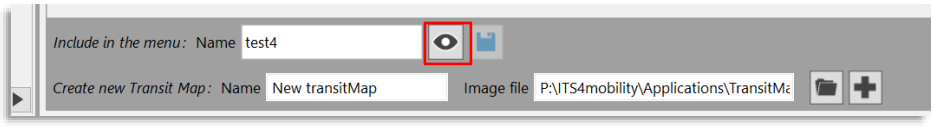
You can at any time change/update the background image of a Transit Map or add new Line routes etc. (see above), but in the current version of the tool you cannot edit a line route already created. If needed, delete the line route (use the "- "button in the line list) and create it anew.

Do not forget to save any changes by clicking on the Save button in the My Transit Maps tool/The save button for the new line route in the line section of the Transit Map tool, see below.



Publish/Unpublish (Show/Hide) Transit Maps

New Transit Maps are not by default visible to all users in the Company. When your new Transit map is ready for use, select it in the My Transit Maps tool and then click on the "View" button in the edit section under the list, se below. Then click Save to save your changes.

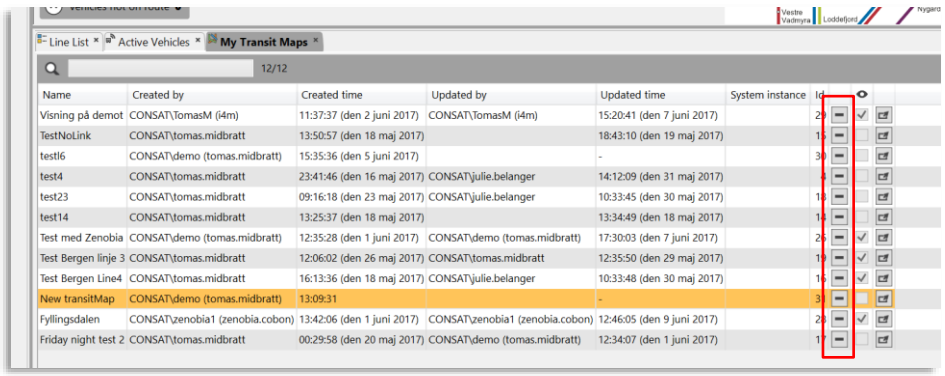


The "View" column checkbox will show that your Transit Map is now available for the user/-s.

Delete a Transit map

To delete a transit map, click on the corresponding "- "button in the My Transit maps list.

Note: This will immediately delete the transit map regardless if it is in use or not. Use with caution.



14 Basic Administrative Operations, Step-By-Step

In this chapter, we will walk you through some basic operations crucial for setting up/administering a CTS system.

14.1 Add TS user from scratch (New CTS System)

In a new system, you will need to install a first user, which can then be used for creating mpore users, roles, configurations, etc.

Setup first user in SQL Management:

Colour codes: Text – Paths – Functions – Replace

Navigate to the servers SQL Server Management Studio where you want to add the user.
In the following tables:

`[I4M].[RESOURCE].[Employee]` Create an employee

`[I4M].[RESOURCE].[User]` Add a user, link Id_Employee from previous table.

`[I4M].[RESOURCE].[UserUserRoles]` Add the ID from [User] and add 1002 under Id_UserRole.

The following SQL commands can be used to add data into the tables:

```
insert into [I4M].[RESOURCE].[Employee] values('<Id>','0','consat',
'Consat', 'Telematics', '1','Consat Se User', '0', '<XXXX-XX-XX>', '0',
'<XXXX-XX-XX>', 'NULL', 'NULL', 'NULL')
insert into [I4M].[RESOURCE].[User]
values('<Id>','<Id_Employee>','consat', '<Password>')
insert into [I4M].[RESOURCE].[UserUserRoles]
values('<Id>','<Id_user>','1002', 'NULL', '<XXXX-XX-XX>')
```

In Traffic Studio:

1. Login: Enter username and password, close the Role Selection window by pressing the X button. Do not press cancel.
2. Open File/Setup/Configuration Manager, press Add New and add a new import role. Press Save and then Load.

Select File/Setup/Tool (Plug-in) Manager, add the Tmix.Cap.InternalTool.Plugin.UserManger.dll.

Close the window and navigate to File/Setup/Systems. Press Add and fill in Name, Key Code, Host.
Add the desired functions in the tab Services and fill in Planned Traffic, Username, and Password.
Press Apply and Close.

Open Tool (Plug-in) Manager, add the desired plugins. Press OK and navigate back
Configuration Manager.
Press Save and then close it.

Thereafter connect to Traffic Studio.

Open TrafficStudio and navigate to User Manager under tools.
In the tab Users and User roles you can now add users more easily, you will still need to do step 2 to configure the new Users/User roles.

14.2 Add a TS Operator to a new system

1. Login to Traffic Studio as Superuser and if needed connect to the central system.
2. In the **User Manager Tool – add at least one User Role**, including role grant configuration - see Chapter **Fel! Hittar inte referenskälla.**, page **Fel! Bokmärket är inte definierat.** for how to do this.
3. Create a User (if needed) and **assign one or more of the above roles to the user**, or assign user role(s) to an existing user, see Chapter **Fel! Hittar inte referenskälla.**, page **Fel! Bokmärket är inte definierat.** for how to do this.

User Data in SQL Server

4. **Navigate to the server where you want to add the user and open SQL Server Management**.

   [APT].[DBO].[APT_Company]

5. Use this table to locate the **company_id** needed for the APT_Company_Access table.

   [APT].[DBO].[APT_Company_Access]

   Note! Do not add data to this table!

6. Add the **key_string** and link the **company_id** from the APT_Company table.

   [APT].[DBO].[APT_Users]

7. Add a **username** and **password**, link the **key_string** to the APT_Company_Access table.

   Note: Username and Password can have a maximum of 16 characters.

   The following SQL commands can be used to add User data into the tables (replace color-coded text below):

   insert into [APT].[dbo].[apt_company_access] values('<key_string>', '<company_id>', '1', '0', '<XXX-XX-XX>', '', 1)

   insert into [APT].[dbo].[apt_users] values('<username>', '<password>', '<key_string>', '<XXX-XX-XX>', '2038-01-01', getdate(), '', 1)

8. Disconnect Traffic Studio from the Central System

9. Open the **Configuration Manager and create a new configuration** (including toolset, key code, services, etc.) connected to a User Role created in step 2, see chapters **Fel! Hittar inte referenskälla.** and **Fel! Hittar inte referenskälla.** for how to do this.
10. **Save the configuration** in Configuration Manager.
11. **Reconnect Traffic Studio and verify that the new operator is up and running.**