

**Pacom Unison
Zettler Integration in Unison**

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1. Introduction

This is the documentation basis for the Zettler alarm panel integration in Pacom Unison. This is to be used as preliminary documentation until made available in the official Pacom Unison online documentation

1.1. System overview

The communication link between Unison and Zettler panels is established through a Serial port (COM port). To facilitate interaction between Unison and Zettler panels, specific configurations are required. These configurations include:

- Generate Object Tree in Unison

To enable communication, it is necessary to generate an object tree in Unison from a configuration file. This file serves as a blueprint for defining the structure and characteristics of the objects within Unison that correspond to the placement of real sensors in Zettler panels.

- Specify Network Card Connection Settings

In order to establish a connection between Unison and Zettler panels, it is imperative to specify the settings for connecting to the network card of the panel

By completing these configurations, Unison and Zettler panels will be able to communicate effectively, allowing for the integration and interoperability of the system. It is recommended to follow the provided guidelines for accurate setup and optimal performance

2. Zettler driver/device

This section describes how the driver is delivered

3. Zettler project configuration

For successful interaction, a configuration file corresponding to the system that will be connected to Unison is essential. This configuration file contains information about panels, sectors, zones, and points. Unison utilizes this information to generate an object tree reflecting the actual structure of panels and sensors.

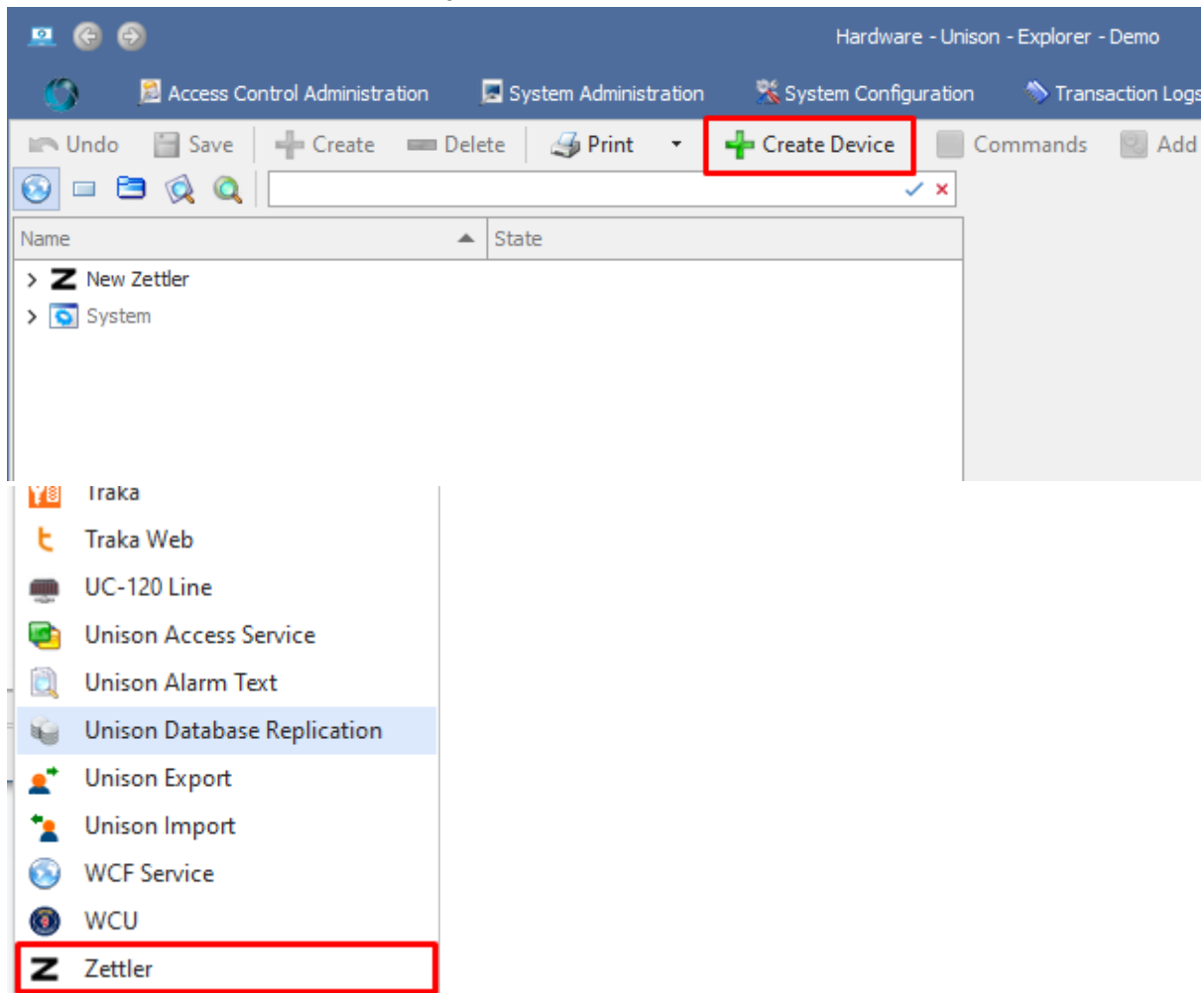
Key Elements in the Configuration File:

- Panels Information
- Sectors Configuration
- Zones Definitions
- Points Configuration

Refer to the documentation for detailed instructions on configuring the file, including the required syntax and specific parameters. It is essential to update the configuration file whenever changes occur in the system structure to maintain accurate representation within Unison

4. Zettler device – Create and configure

The Zettler device is created in the Unison explorer, as any other device is created and configured. You will find the Zettler driver in the list among all other installed drivers when you select Create Device from the menu.



4.1. The tree of objects

This is how the object tree looks in the Unison system

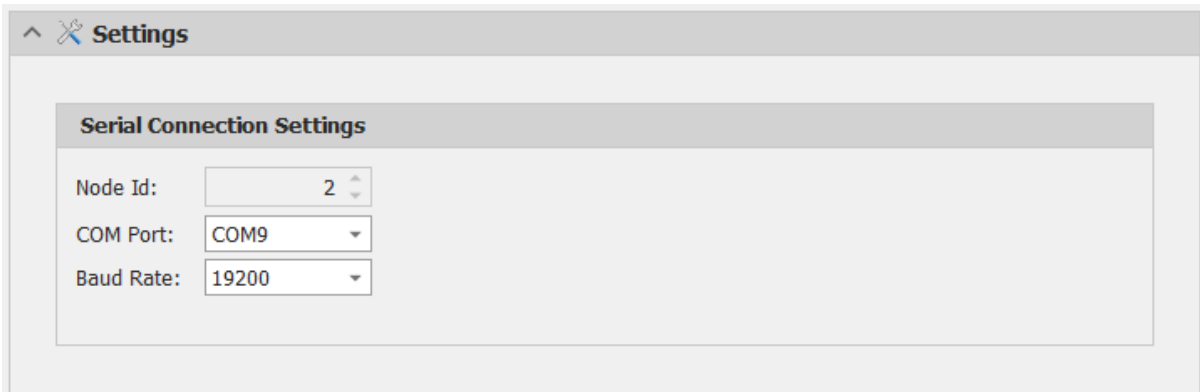


Description:

<ul style="list-style-type: none"> ▼ Z New Zettler ▼ ZETTLER PROFILE 001 ▼ Hus 1 pl.1+ljusgård ▼ Hus 1 Ljusgård 1 <ul style="list-style-type: none"> 🔥 Sek 01.151 -001 8 VESDA Brand 🔥 Sek 01.151 -100 8 VESDA Förvar... 🔥 Sek 01.151 -101 8 VESDA Fel 🔥 Sek 01.151 -102 8 Likriktare fel > Hus 1 Ljusgård 2 > Hus 1 pl.1 001 > Hus 1 pl.1 002 > Hus 1 pl.1 003 > Hus 1 pl.1 004 > Hus 1 pl.1 005 	<ul style="list-style-type: none"> Zettler device Panel Sector Zone Points
---	---

4.2. Settings

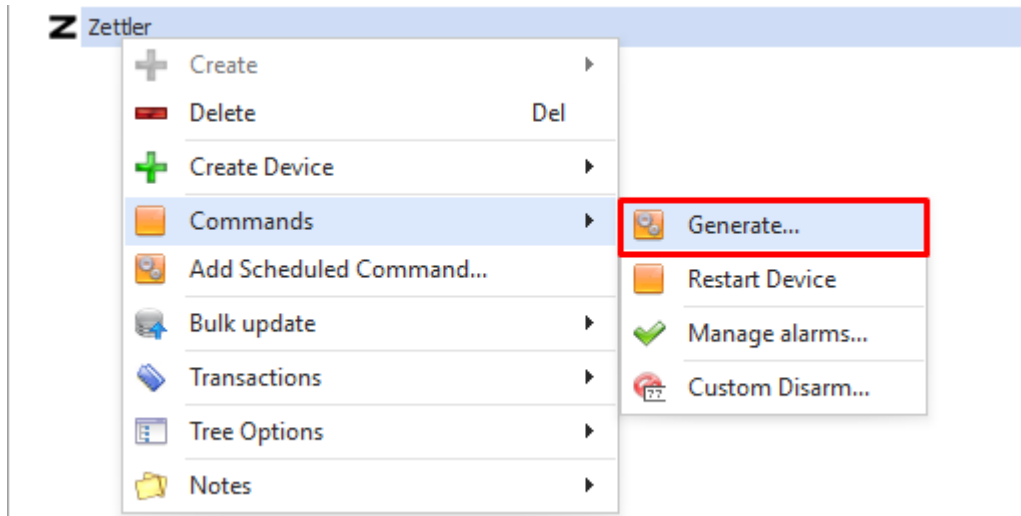
The properties/settings that are unique for the Zettler can be found under the part of the property page that is called Settings.Zettler device settings:



Settings	Description
Node Id	Is an identifier that indicates the address of the driver relative to the system it is connecting to. This identifier is crucial for establishing communication and coordination between different components within the system.
COM port	Specifies the port through which the connection to the system will be established.
Baud Rate	Data Transfer Rate

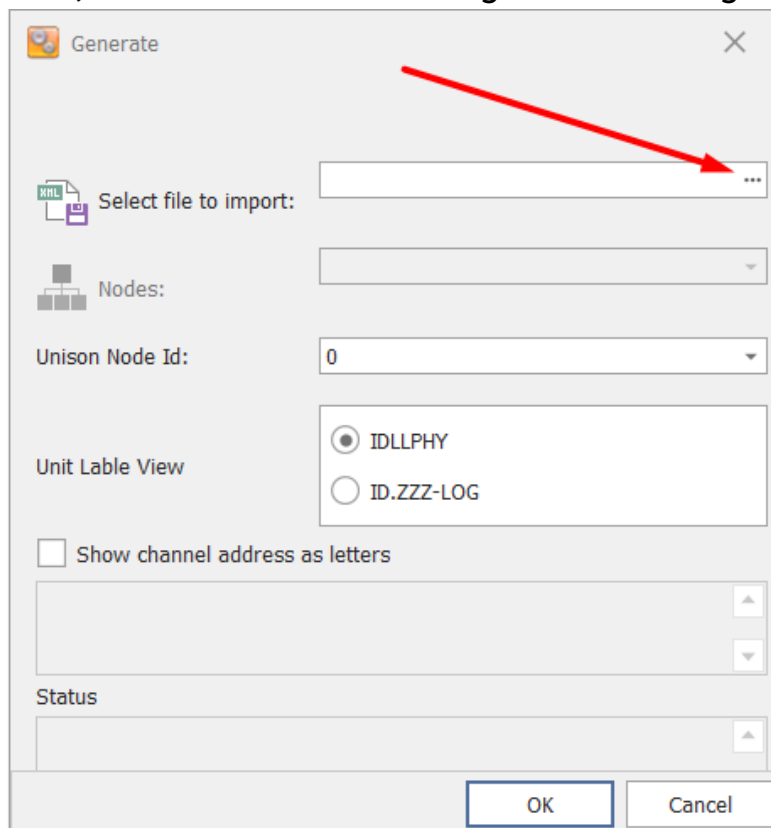
4.3. Commands

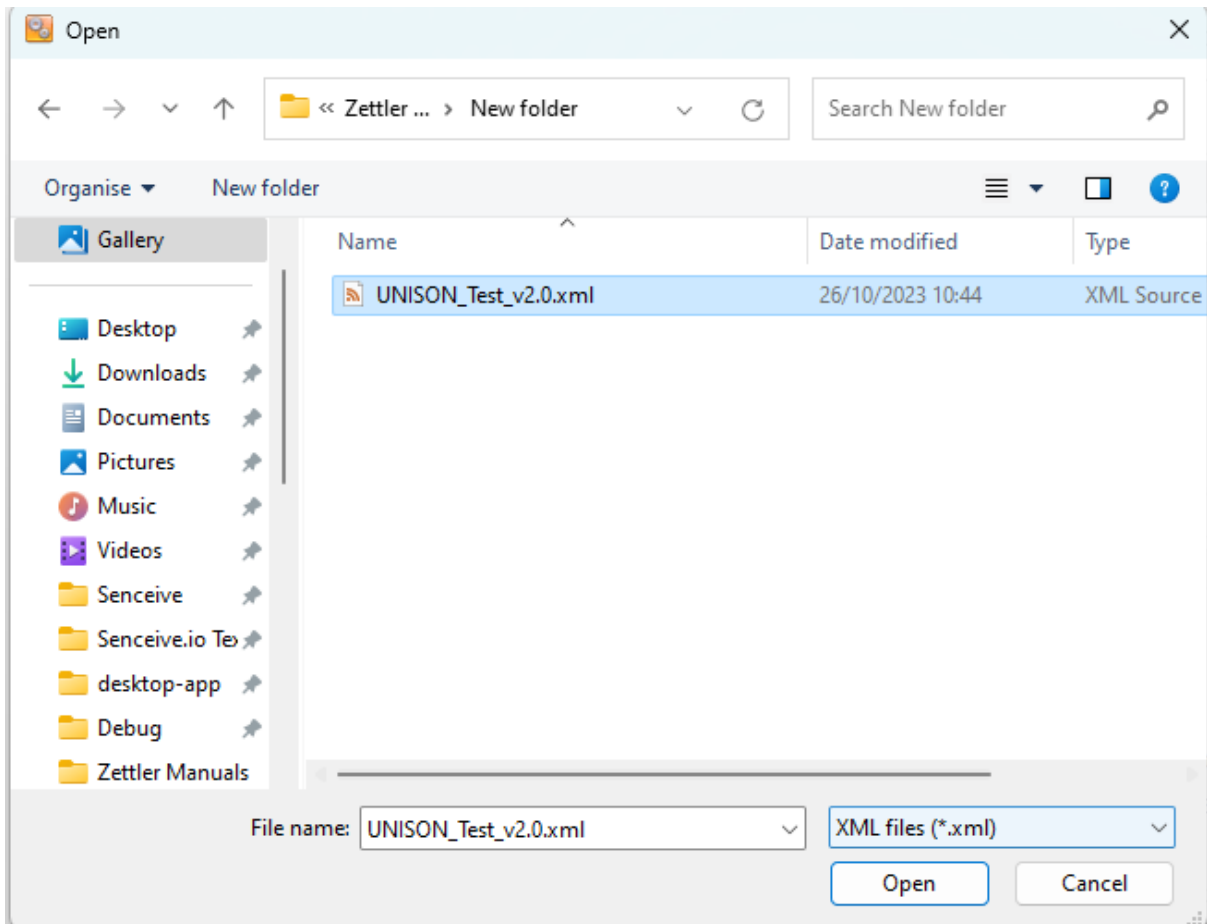
There is only one non-standard command here. This is a generate command



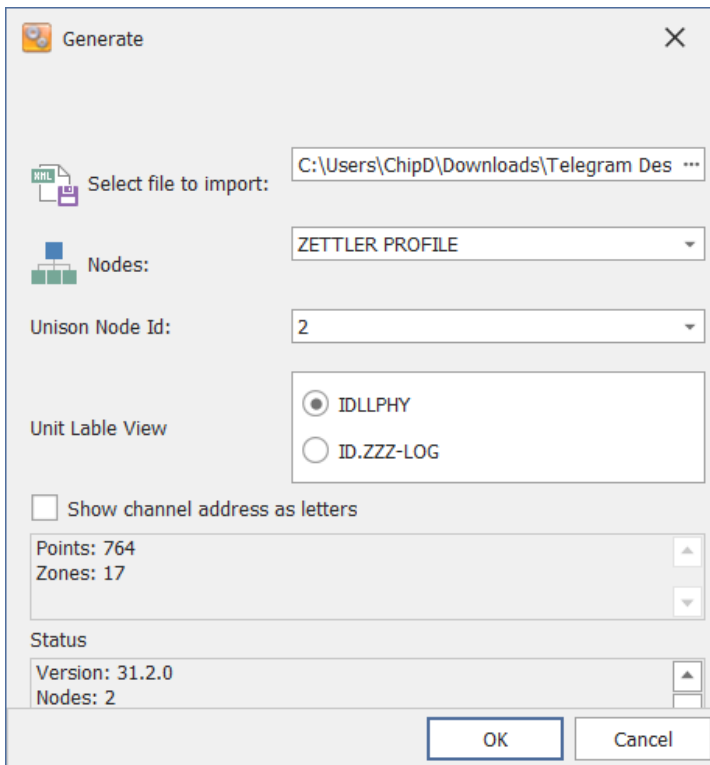
The configuration is stored in a file that provides information about the system to which we connect

First, we need to select a configuration file to generate the object tree

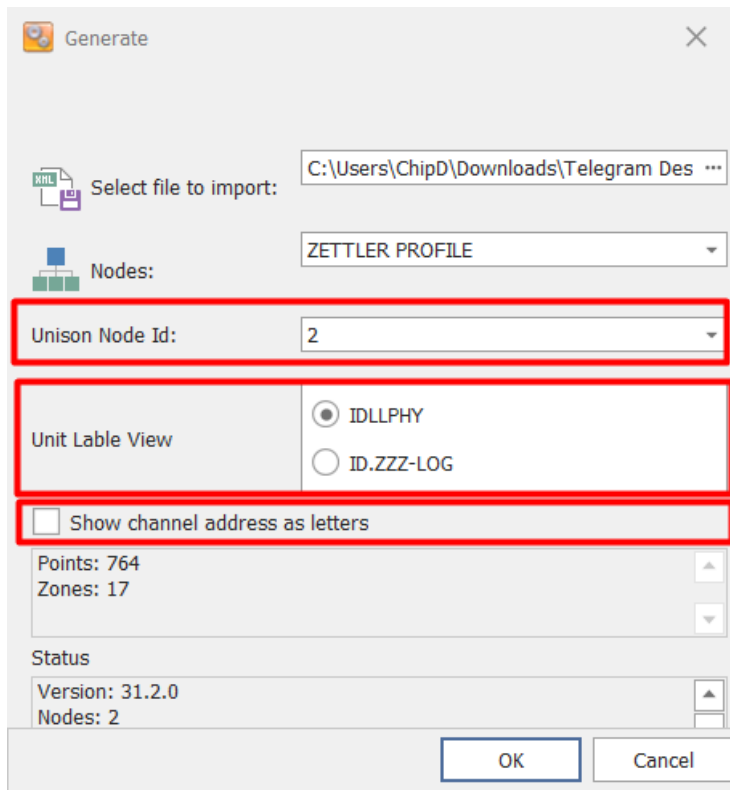




After that we will be able to view some information from this file



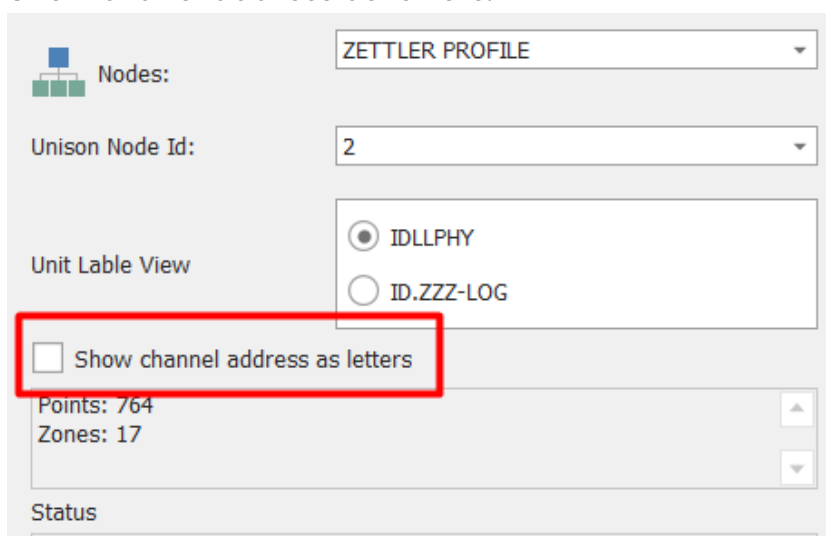
We also have several additional options:



Unison Node Id - is an identifier that indicates the address of the driver relative to the system it is connecting to. This menu contains values that are defined in the configuration file.



Unit Label View - determines what type of label the point will have.

Show channel address as letters:

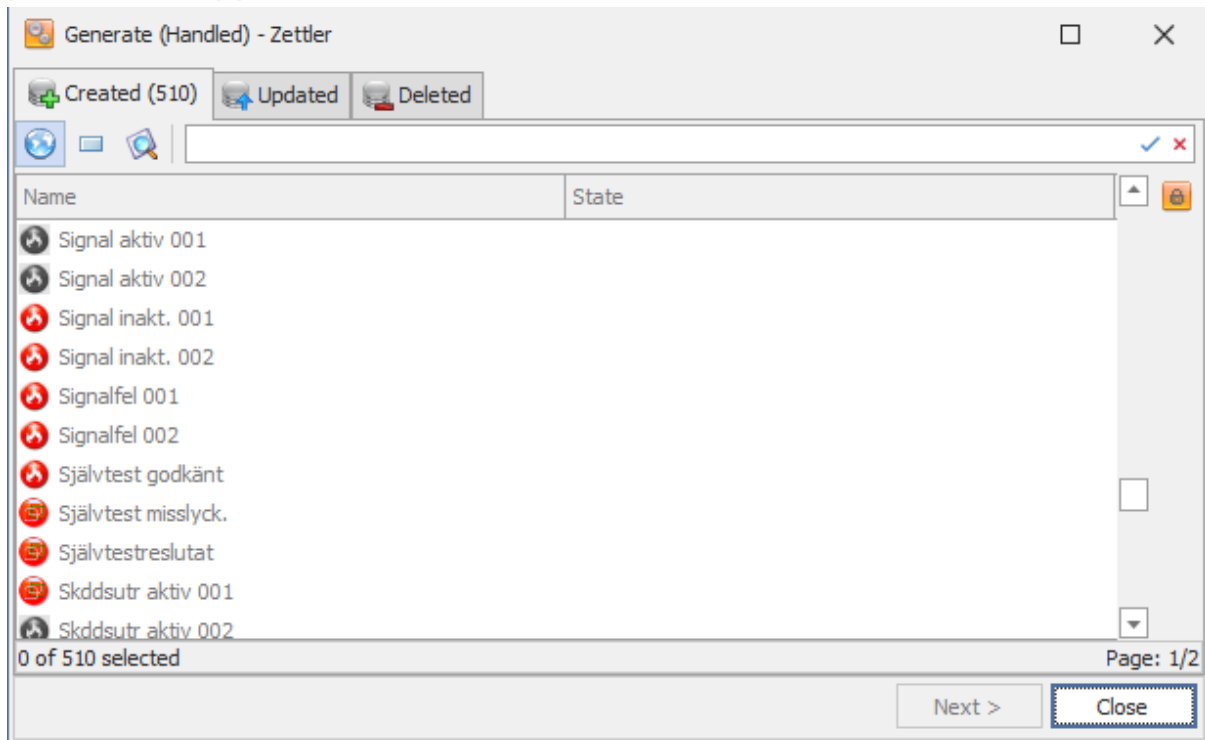


- 🔴 Sek 01.001 -001 1 Photo Sensor Device
- 🔴 Sek 01.001 -002 1 Sounder

Or




-  Sek 01.001 -001 A Photo Sensor Device
-  Sek 01.001 -002 A Sounder

After a successful generation process, a window with information about the process will appear



4.4. Events

The Zettler device have standard Events

Event	Alarm Type	Status	Message
 Communication Er...	System Warning	Off (0)	
 Internal Error	System Message	Off (0)	
 Disarmed		Off (0)	

5. Panel

5.1. Panel settings

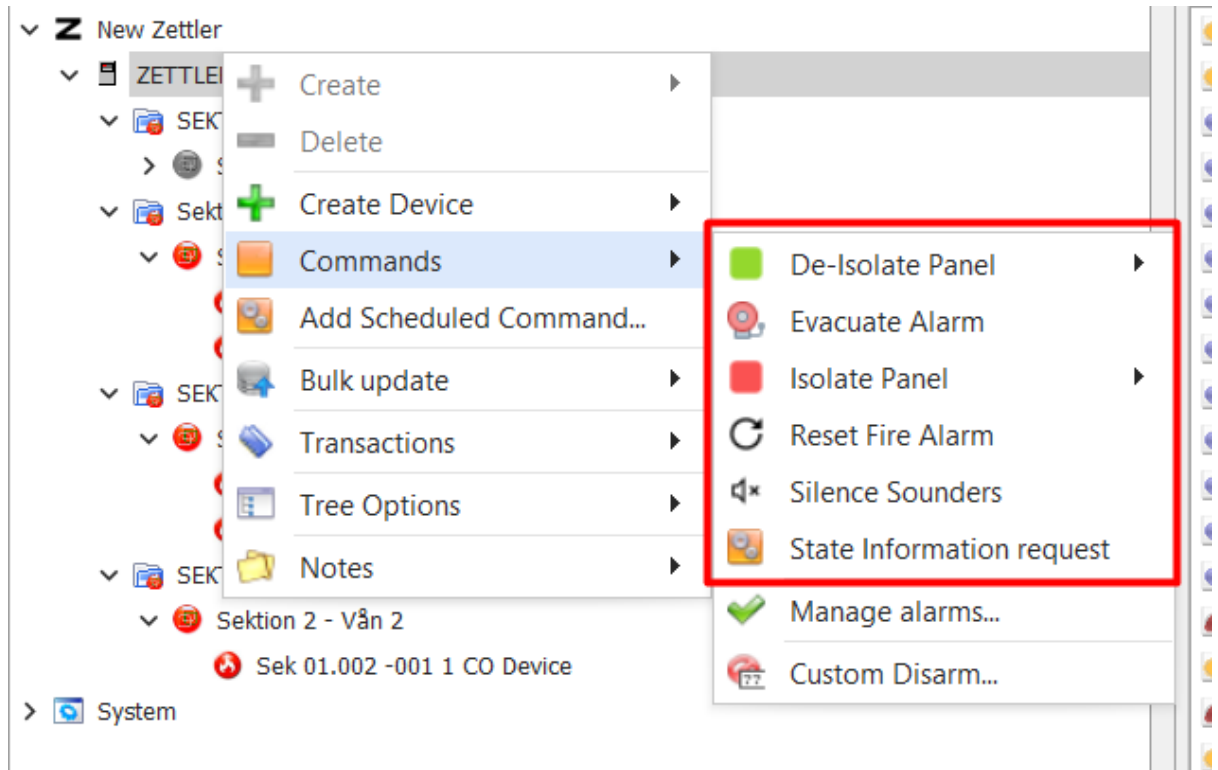
Panel settings:

The screenshot shows a 'Settings' window with a title bar containing a back arrow and a wrench icon. The main content area is divided into two sections. The first section, titled 'Settings', contains a 'Panel ID' label and a text input field containing the number '1'. The second section, titled 'Zones subscribed status', contains a grid of checkboxes. The checked checkboxes are: Alarm*, Fault*, Fully Isolated*, Gas Alert*, Partially Isolated, and Isolated Sounders. The unchecked checkboxes are: Active ProtectionEquipment, Active Sounders, and Isolated Protection Equipment.

Settings	Description
Panel Id	Is an identifier that indicates the address of the panel relative to the system. Read only.
Zone subscribed status	Is a representation of the subscriptions that the driver has for updating information related to zones. Alarm, Fault, Fully Isolated Gas Alert, it is required and cannot be turned off.

5.2. Panel Commands

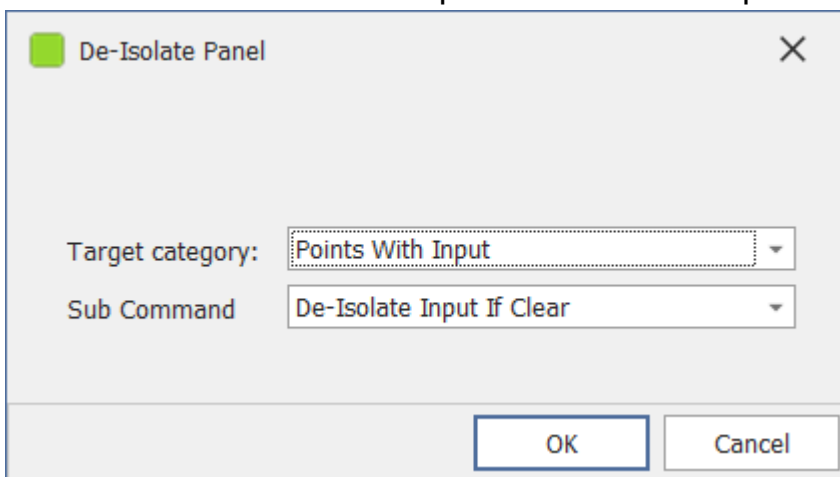
Panel has a several commands:



5.2.1. De-Isolate Panel

This command makes it possible to send packet 135 (PointStatusUpdateRequest) to a specific panel with a command to de-isolate points according to selected parameters for each zone except system.

The command has execution option with additional parameters:

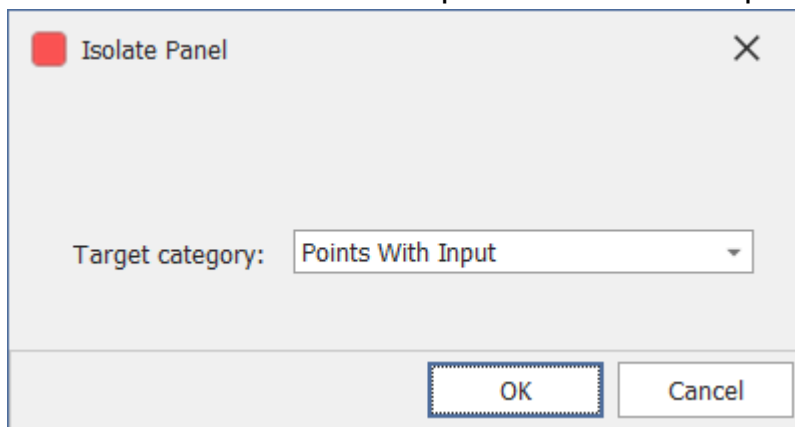


Default option. Send a command to de-isolate with 'SubCommand=DeisolateInputIfClear' and 'TargetCategory = PointsWithInput' for a zone.

5.2.2. Isolate Panel

This command makes it possible to send packet 135 (PointStatusUpdateRequest) to a specific panel with a command to de-isolate points according to selected parameters for each zone except system.

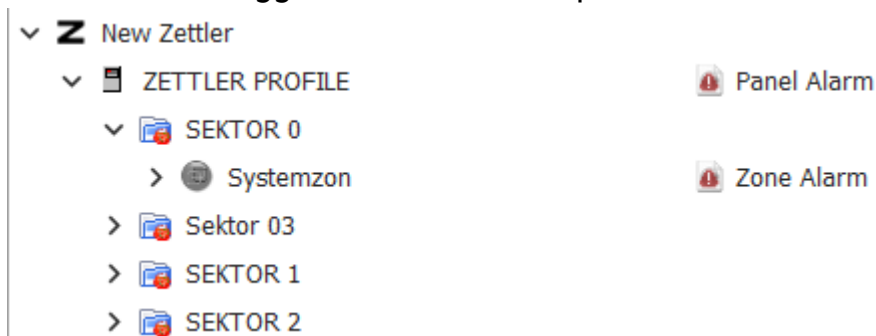
The command has execution option with additional parameters:



Default option. Send a command to de-isolate with 'SubCommand=IsolateInputAndOutput' and 'TargetCategory = PointsWithInput' for a zone.







5.2.3. Evacuate Alarm

This command triggers an alarm on the panel.



5.2.4. Reset Fire Alarm



























This command resets various types of alarms on the panel to a normal state.

- ▼ **Z** New Zettler
 - ▼  ZETTLER PROFILE
 - ▼  SEKTOR 0
 - >  Systemzon
 - >  Sektor 03
 - >  SEKTOR 1
 - >  SEKTOR 2

5.2.5. Silence saunders

This command silences the sound signals generated by the panel. However, it does not affect individual points if they are activated separately, for example, through the "Force output on" command

5.3. Panel Events

⚙️ Properties ⚠️ Events (26) 🛠️ Actions 📄 Dependencies 📅 Scheduled Commands 📝 Notes				
⚠️ Events				
+ Add Alarm Type ↔️ Reset Alarm Type ✎ Edit Event Properties ✓ Clear Event Properties				
Event	Alarm Type	Status	Message	Event Prop
 Generate Failed	System Warning	Off (0)		
 Communication Error	System Warning	Off (0)		
 Generate Complete		Off (0)		
 Investigate Time Ru...		Off (0)		
 Local Alarm Signallin...		Off (0)		
 Local Alarm Signallin...		Off (0)		
 Local Alarm Signallin...		Off (0)		
 Local Extinguishing A...		Off (0)		
 Local Extinguishing F...		Off (0)		
 Local Extinguishing I...		Off (0)		
 Local Fault Signalling...		Off (0)		
 Local Fault Signalling...		Off (0)		
 Local Fault Signalling...		Off (0)		
 Panel Alarm		Off (0)		
 Panel Fault		Off (0)		
 Panel has Local Alarm		Off (0)		
 Panel has Local Fault		Off (0)		
 Panel Has Local Isolate		Off (0)		
 Panel in Day Mode		Off (0)		
 Panel Isolate		Off (0)		
 Sounders Active		Off (0)		
 Sounders Isolated		Off (0)		
 Sounders Off		Off (0)		
 Sounders Silenced		Off (0)		
 Walktest		Off (0)		
 Disarmed		Off (0)		

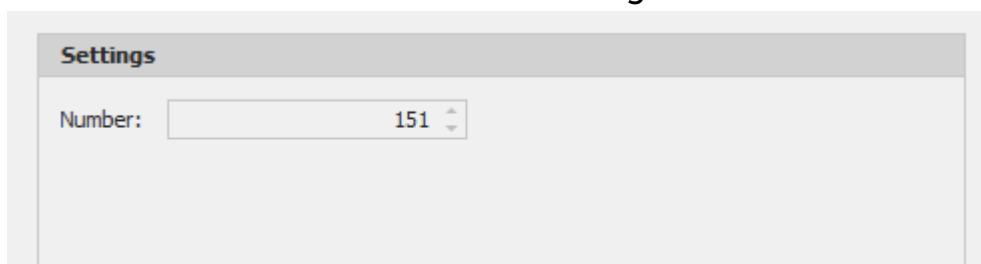
6. Zone

The geographical area covered by the system is subdivided in Zones. Every point in the system is assigned to a Zone. Each Zone can be assigned to a Sector – a Sector is a collection of Zones, i.e. a “large zone”.

▼ Z New Zettler	Zettler device
▼ ZETTLE PROFIL 001	Panel
▼ Hus 1 pl.1+Hjuscgärd	Sector
▼ Hus 1 Ljuscgärd 1	Zone
• Sek 01.151 -001 8 VESDA Brand	Points
• Sek 01.151 -100 8 VESDA Förvar...	
• Sek 01.151 -101 8 VESDA Fel	
• Sek 01.151 -102 8 Likriktare fel	
> Hus 1 Ljuscgärd 2	
> Hus 1 pl.1 001	
> Hus 1 pl.1 002	
> Hus 1 pl.1 003	
> Hus 1 pl.1 004	
> Hus 1 pl.1 005	

6.1. Zone settings

Sector and Zone have the similar settings



Settings

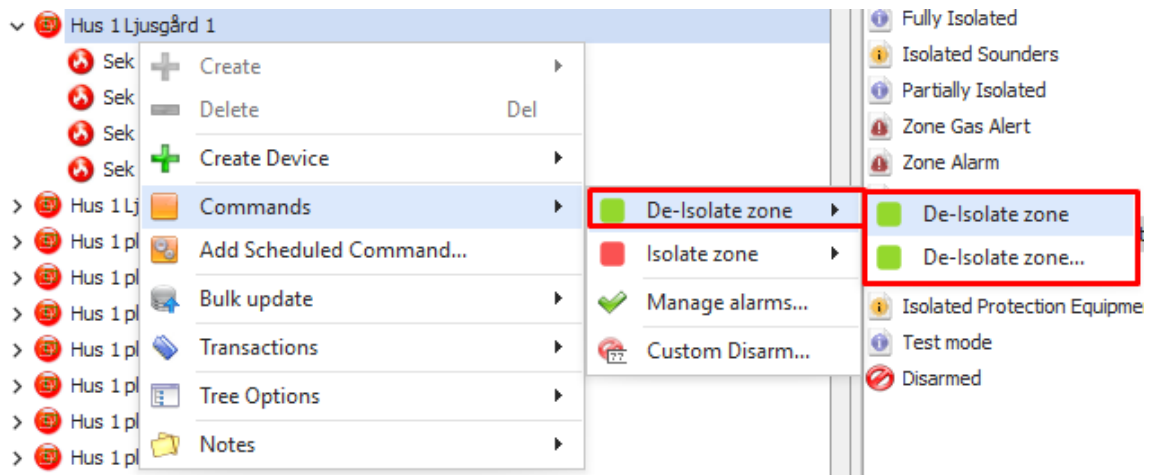
Number:

Number is an identifier. Read Only

6.2. Zone commands

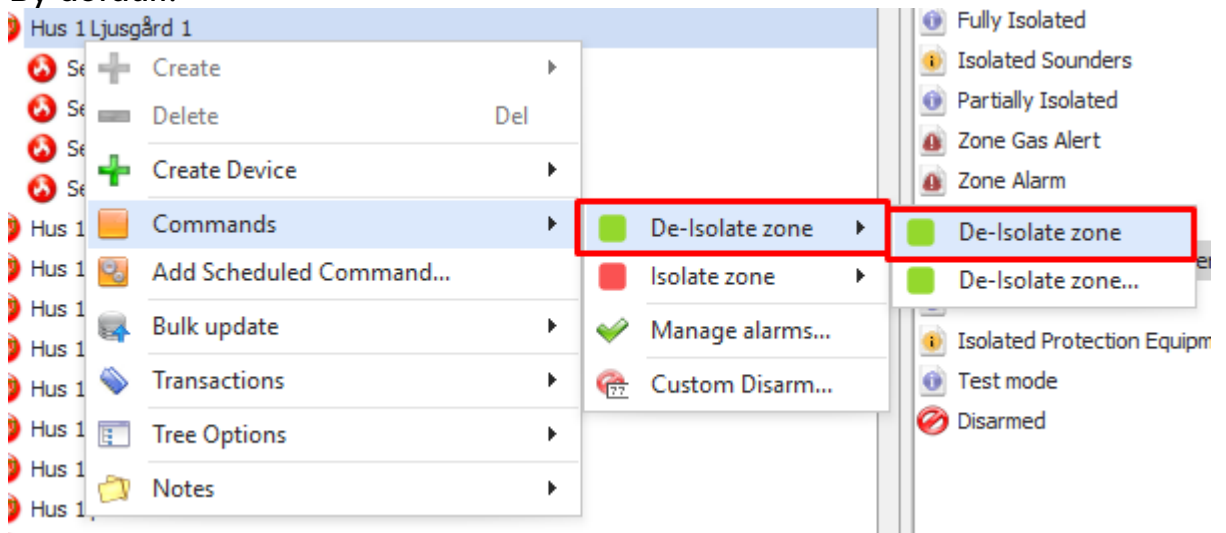
6.2.1. De-Isolate Zone Command

This command makes it possible to send packet 135 (PointStatusUpdateRequest) to a specific panel with a command to de-isolate points according to selected parameters in a specific zone



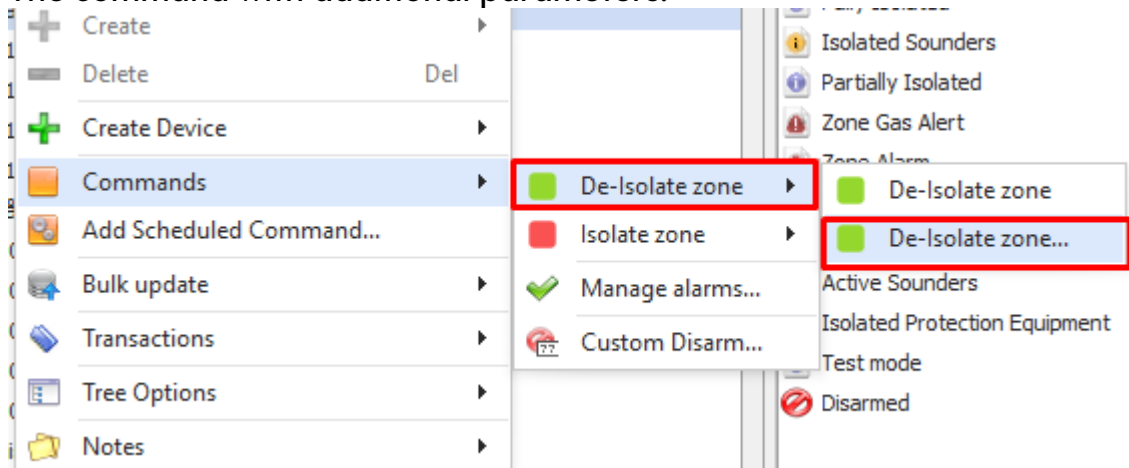
The command has two execution options: default and with additional parameters.

By default:

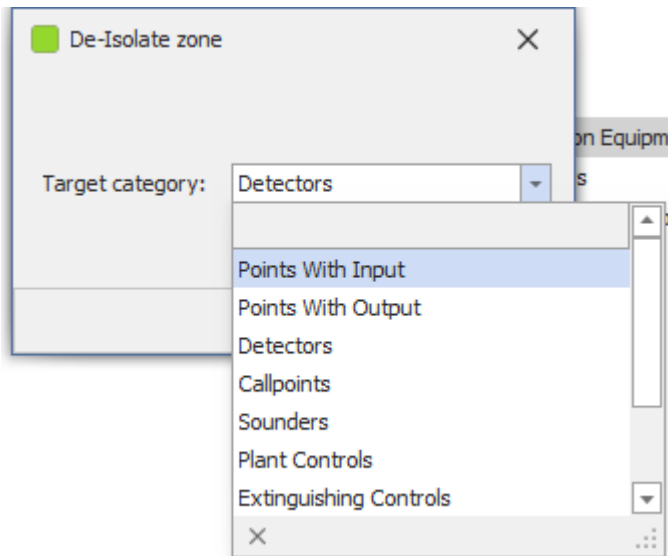


Default option. Send a command to de-isolate all points of type 'TargetCategory = PointsWithInput' for a specified zone.

The command with additional parameters:



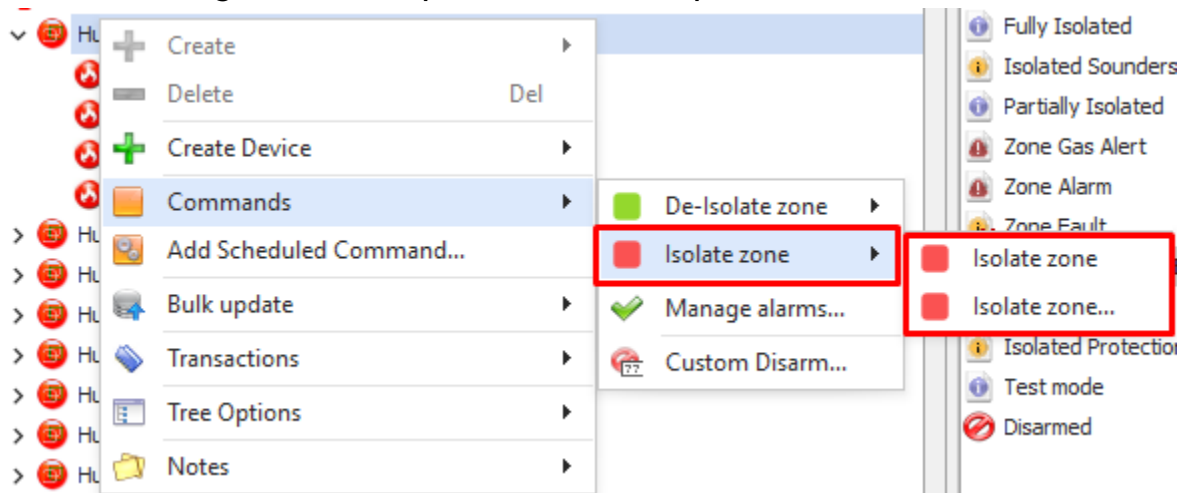
Opens a window with the selection of 'TargetCategory' from the list:



and then sends it to the specified pane

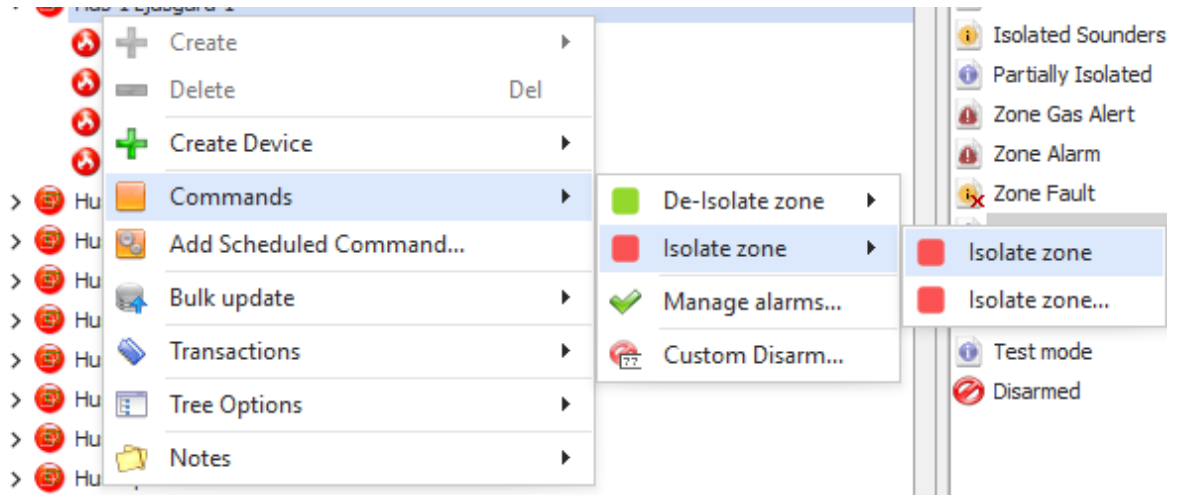
6.2.2. Isolete Zone Command

This command makes it possible to send packet 135 (PointStatusUpdateRequest) to a specific panel with a command to isolate points according to selected parameters in a specific zone



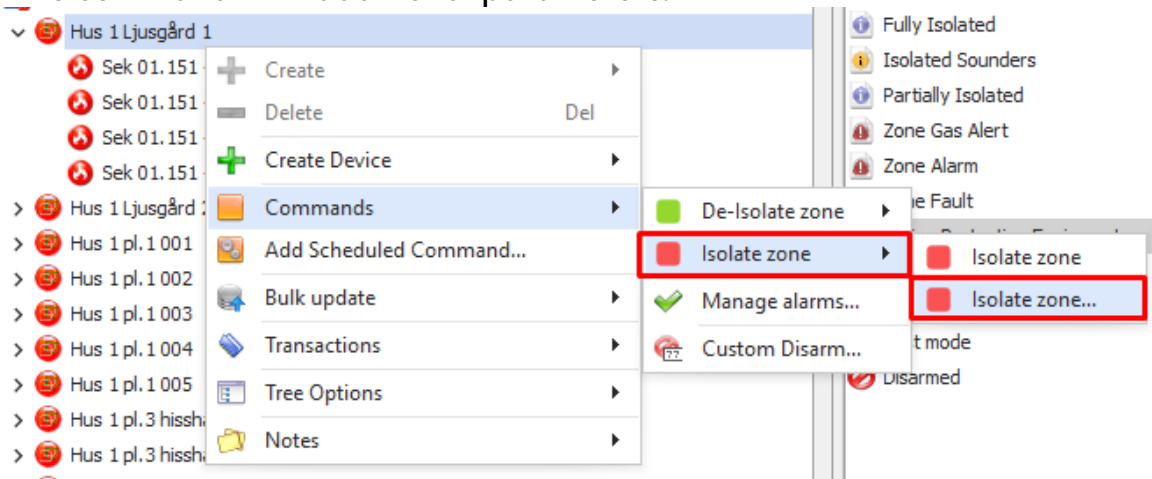
The command has two execution options: default and with additional parameters.

By default:

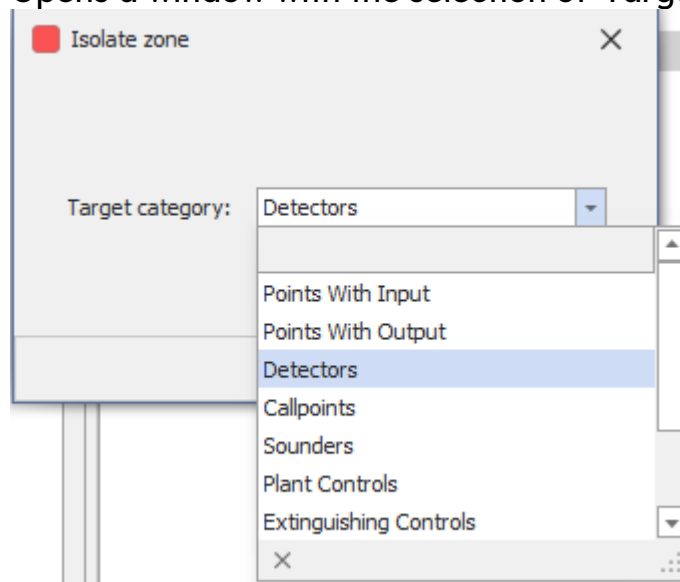


Default option. Send a command to isolate all points of type 'TargetCategory = PointsWithInput' for a specified zone.

The command with additional parameters:



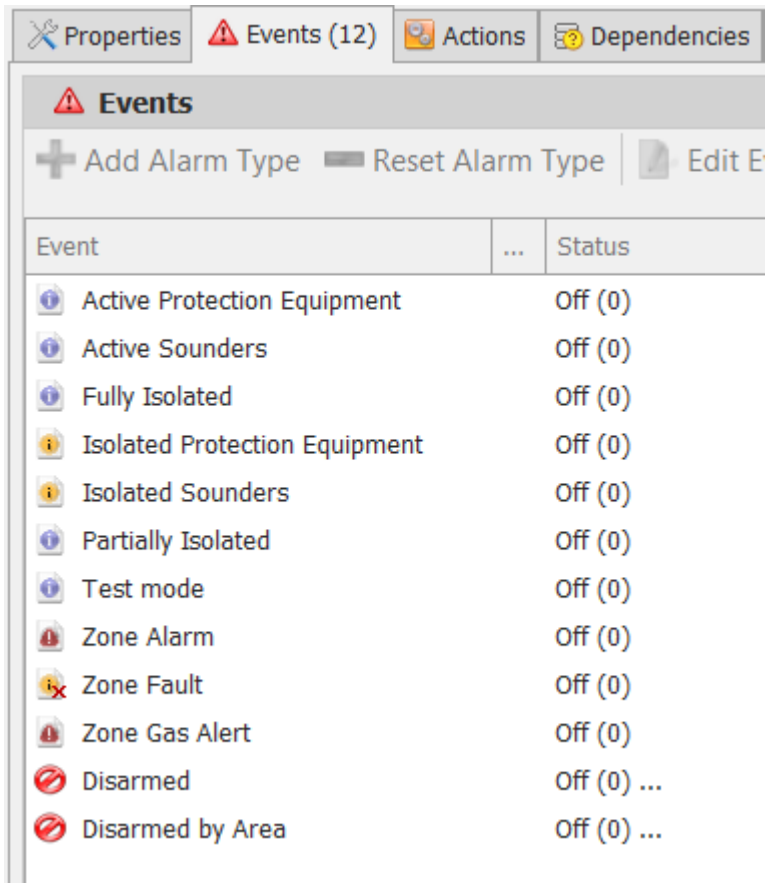
Opens a window with the selection of 'TargetCategory' from the list















and then sends it to the specified panel

6.3. Zone events

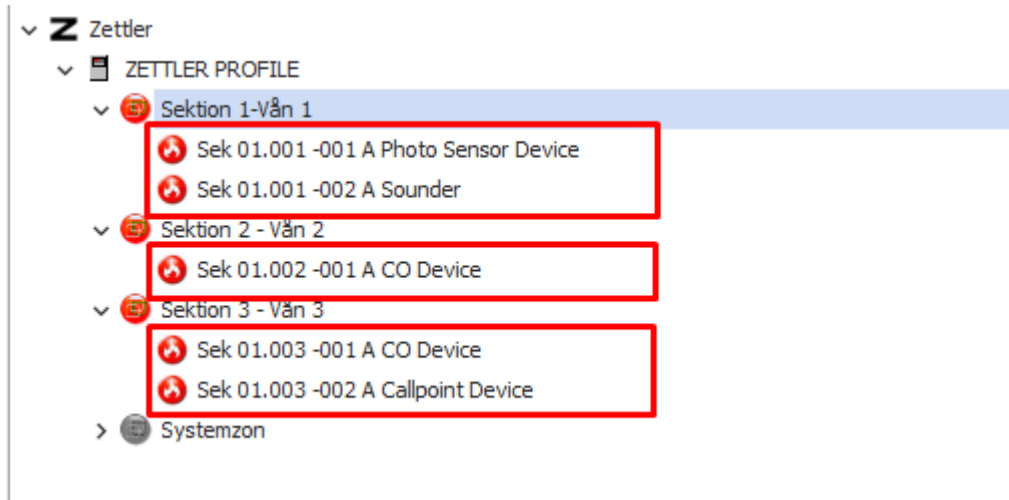
There are 10 event available for a zone. The ones with an alarm type connected are used to present different alarm states and most of the other ones are used to display whether the zone status. The name of the event tells what it is used for.



Event	...	Status
 Active Protection Equipment		Off (0)
 Active Sounders		Off (0)
 Fully Isolated		Off (0)
 Isolated Protection Equipment		Off (0)
 Isolated Sounders		Off (0)
 Partially Isolated		Off (0)
 Test mode		Off (0)
 Zone Alarm		Off (0)
 Zone Fault		Off (0)
 Zone Gas Alert		Off (0)
 Disarmed		Off (0) ...
 Disarmed by Area		Off (0) ...

7. Point

The Point module serves as a representation of real devices connected to the system, including detectors, callpoints, sounders, and other similar components.



The Point serves to depict the state of a specific point within an event and respond to the Isolate/De-Isolate commands.

7.1. Point Settings

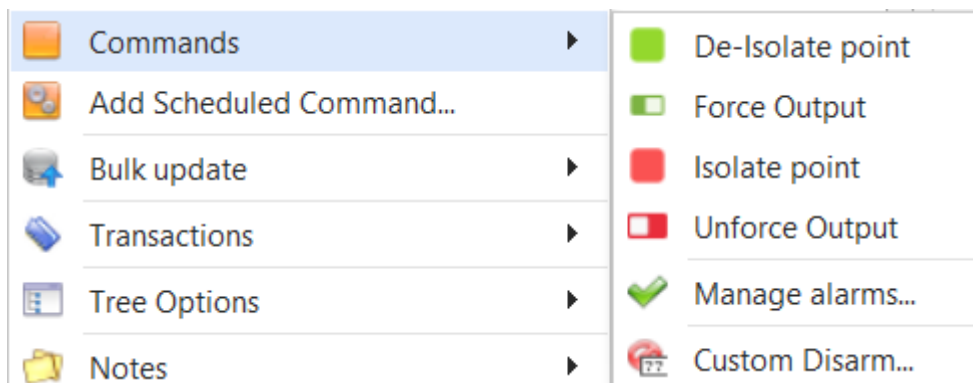
All configurations for the Point are established during the generation process from a configuration file. They are read only.

Settings	
Physical number:	<input type="text" value="229"/>
Logical number:	<input type="text" value="1"/>
Channel address:	<input type="text" value="8"/>
Channel:	<input type="text" value="MP Loop"/>
Device type:	<input type="text" value="Quad Input4Output4 Module_QIO850_4INOUT"/>
Category:	<input type="text" value="Real"/>
Address:	<input type="text" value="Sek 01.151 -001 MPLoop 8"/>

Settings	Description
Physical number	The physical number of the point in the system
Logical number	The logical number of the point in the loop
Channel address	ID in the MX Addressing Scheme which represents a particular address on a communications link where data can be sent to / received from, e.g. an OCM at address 00 on the RBus Channel.
Chanel	ID in the MX Addressing Scheme which represents the communications link used when transporting data to and from the Panel's Main Processor board, e.g. RBus
Device Type	Device Type (e.g. Heat Detector) assigned to the Point
Category	Within a Module there may different Categories of points (e.g. Real, Pseudo, etc.)
Address	Composed of address parameters for better human understanding

7.2. Point Commands

The Point has a several commands:



7.2.1. Isolate Command

This command allows you to send a 135 (PointStatusUpdateRequest) packet to a specific panel with the command to isolate the selected point point

7.2.2. De-Isolate Command

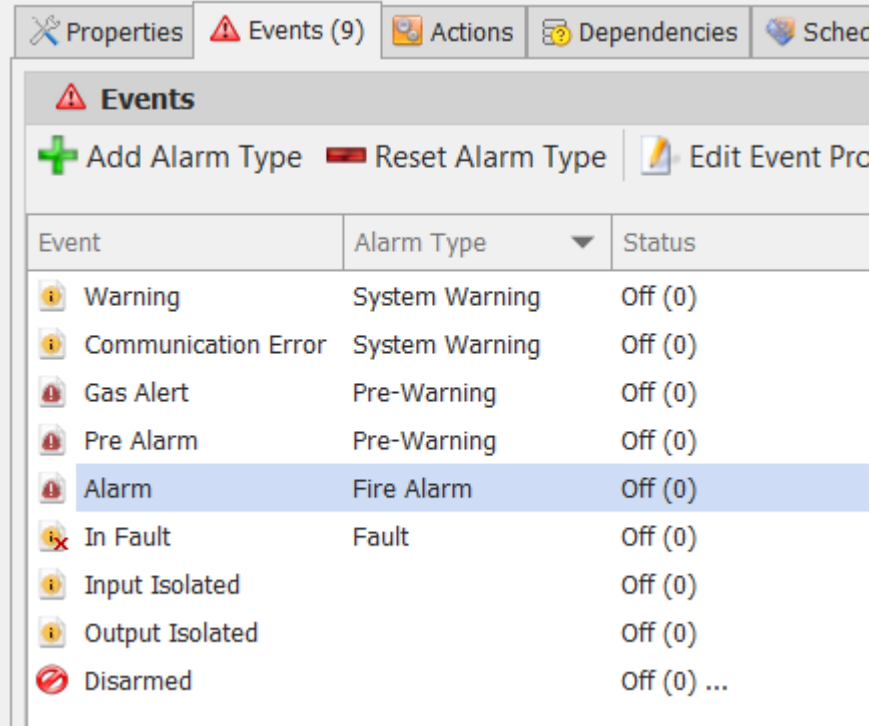
This command allows you to send a 135 (PointStatusUpdateRequest) packet to a specific panel with the command to isolate the selected point

7.2.3. Force/Unforce Output

This commands allows the Output to be activated/deactivated manually.

7.3. Point Events

There are 9 event available for a Point. The ones with an alarm type connected are used to present different alarm states and most of the other ones are used to display whether the point status. The name of the event tells what it is used for.



Event	Alarm Type	Status
Warning	System Warning	Off (0)
Communication Error	System Warning	Off (0)
Gas Alert	Pre-Warning	Off (0)
Pre Alarm	Pre-Warning	Off (0)
Alarm	Fire Alarm	Off (0)
In Fault	Fault	Off (0)
Input Isolated		Off (0)
Output Isolated		Off (0)
Disarmed		Off (0) ...