

Crowcon Technical Note

Document Reference: PAN001 Panels Pro Configurations and Vortex Voting

Date: 28/06/2018

Document applies to: Panels Pro software

This document provides specific instructions for using Panels Pro software with Vortex systems – particularly in regard to Relay Voting, and saving and loading configurations into a Vortex Panel, or to a P.C. The instructions for saving and backing up configurations are transferable to Gasmaster and Gasmonitor panels, although Vortex screen shots are used for illustration.

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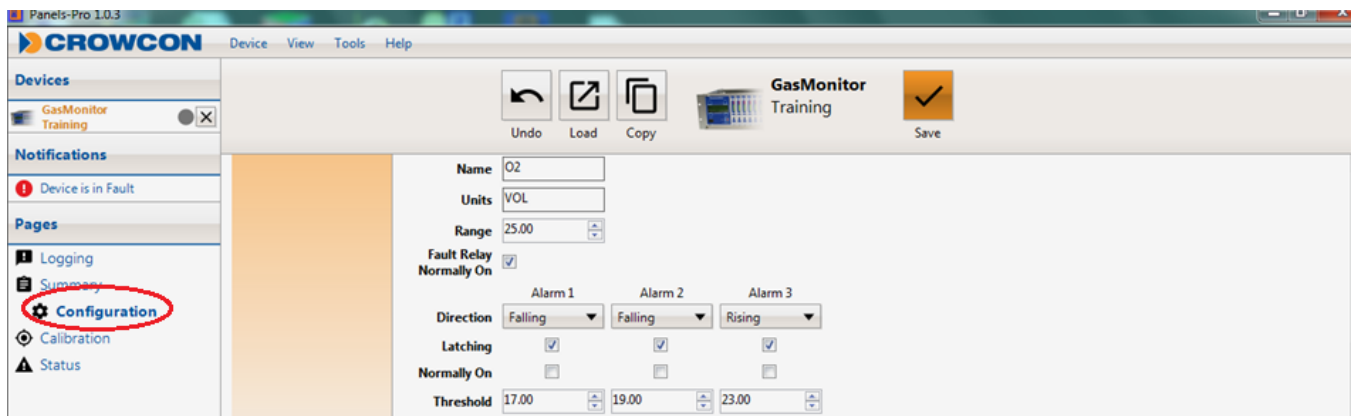
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Section 1. Saving, loading and backing-up configurations.

Configurations can be saved to three distinct destinations:

- Directly to a control panel (when connected to a panel).
- To Panels Pro's database (local to your P.C. and not transferable).
- To an XML file (which can be copied to other P.Cs for back up and transfer purposes).

When working with **Gasmaster** and **Gasmonitor** configurations, everything is modified and saved from the Configuration screen:



However, **Vortex** configurations always consist of **two parts** – which MUST be saved/loaded separately:

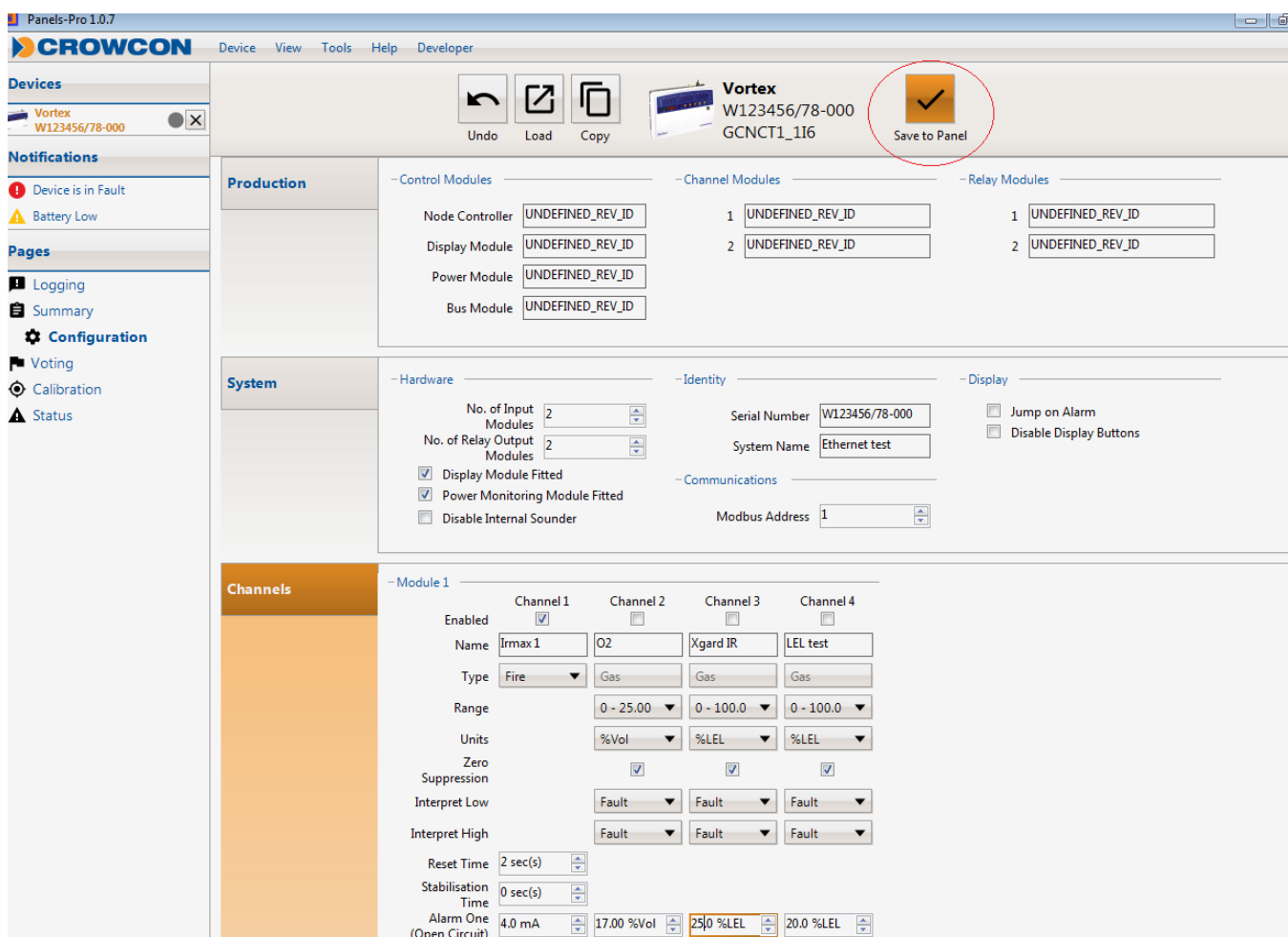
- The **Configuration Page** (System, Channels and Relay settings).
- The **Voting Page** (Relay assignment and Voting).

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1.1 Reading and writing a configuration directly to a control panel:

When Panels-Pro is connected to a control panel, the panel's configuration will be loaded automatically into the workspace, and the panel's serial number will appear at the top left of the screen.

When a change is made to the **Configuration** page the Save to Panel icon will flash. Click this to save the changes to the control panel:

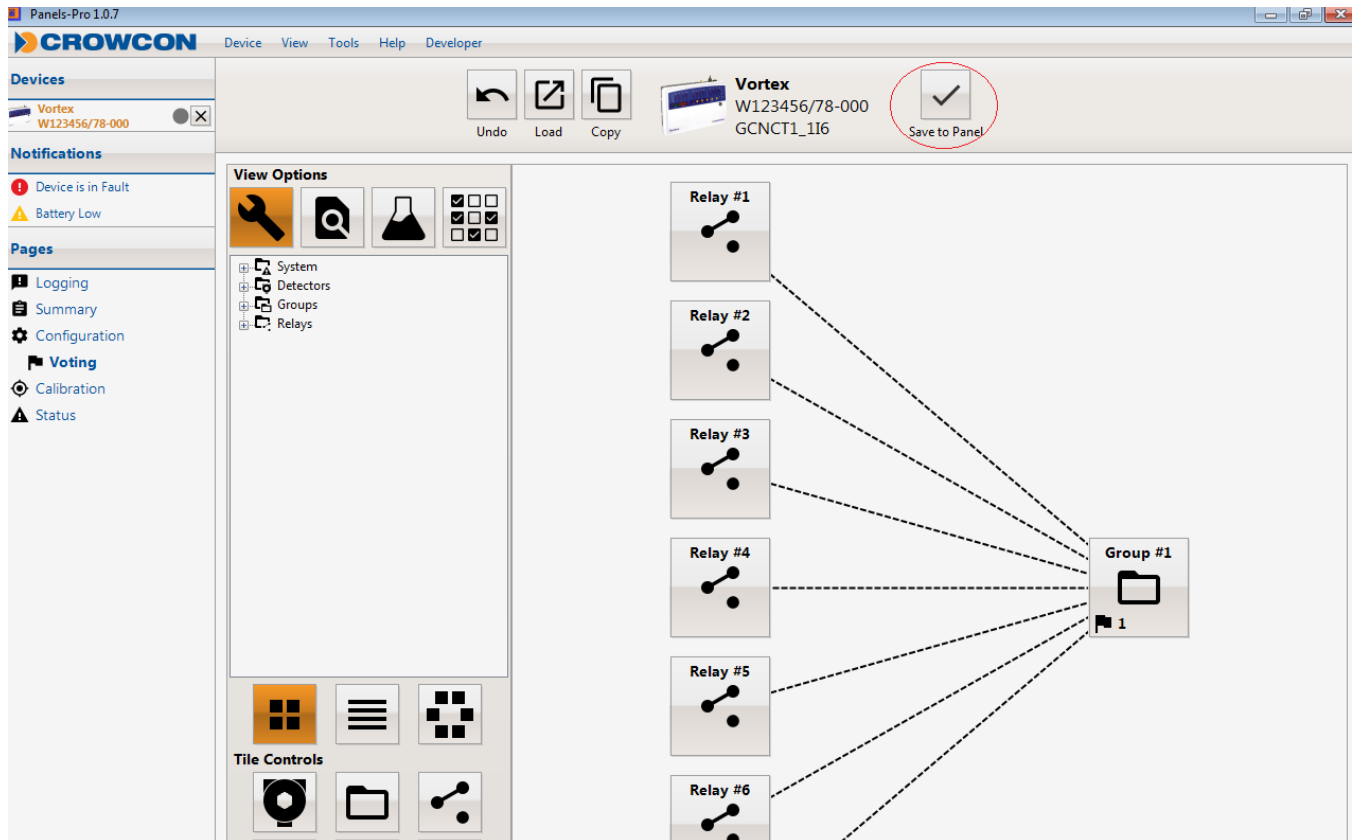


The screenshot shows the Crowcon Panels-Pro 1.0.7 software interface. At the top, the 'Save to Panel' icon (a checkmark in a square) is circled in red. The interface is divided into several sections:

- Production:** Contains three sub-sections:
 - Control Modules:** Node Controller, Display Module, Power Module, Bus Module (all set to UNDEFINED_REV_ID).
 - Channel Modules:** Two channels, both set to UNDEFINED_REV_ID.
 - Relay Modules:** Two channels, both set to UNDEFINED_REV_ID.
- System:** Contains three sub-sections:
 - Hardware:** No. of Input Modules (2), No. of Relay Output Modules (2), checkboxes for Display Module Fitted, Power Monitoring Module Fitted, and Disable Internal Sounder.
 - Identity:** Serial Number (W123456/78-000), System Name (Ethernet test).
 - Display:** Checkboxes for Jump on Alarm and Disable Display Buttons.
 - Communications:** Modbus Address (1).
- Channels:** Shows settings for Module 1 across four channels:
 - Channel 1:** Enabled, Name: Irmx 1, Type: Fire, Range: 0 - 25.00, Units: %Vol, Zero Suppression: checked, Interpret Low/High: Fault, Reset Time: 2 sec(s), Stabilisation Time: 0 sec(s), Alarm One: 4.0 mA.
 - Channel 2:** Enabled, Name: O2, Type: Gas, Range: 0 - 25.00, Units: %Vol, Zero Suppression: checked, Interpret Low/High: Fault, Alarm One: 17.00 %Vol.
 - Channel 3:** Enabled, Name: Xgard IR, Type: Gas, Range: 0 - 100.0, Units: %LEL, Zero Suppression: checked, Interpret Low/High: Fault, Alarm One: 25.0 %LEL.
 - Channel 4:** Enabled, Name: LEL test, Type: Gas, Range: 0 - 100.0, Units: %LEL, Zero Suppression: checked, Interpret Low/High: Fault, Alarm One: 20.0 %LEL.

NB (Vortex only): Saving from the Configuration page ONLY saves changes made on this page – it will not save any changes made to Voting: these have to be saved from the Voting page:

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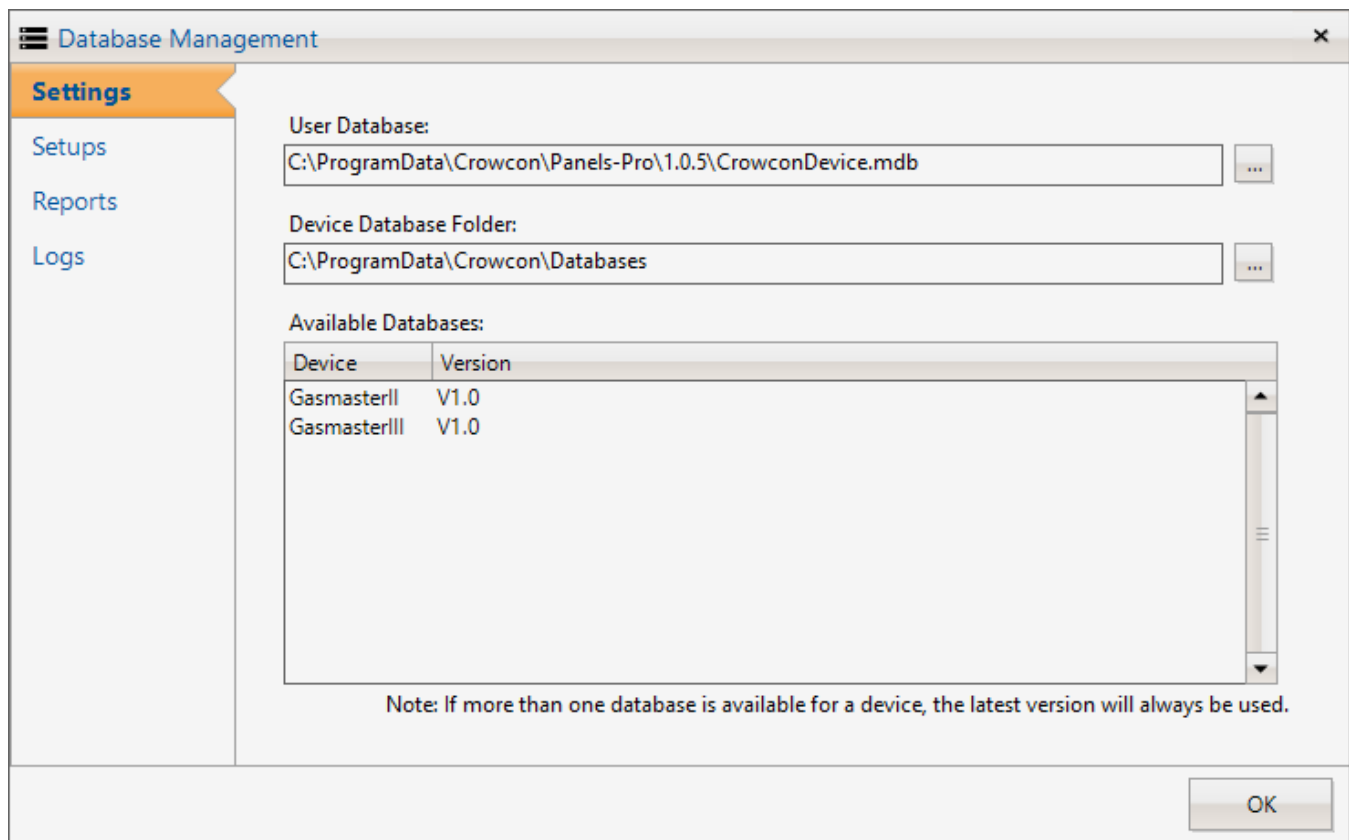
NB (Vortex only): Saving from the Voting page ONLY saves changes made on this page – it will not save any changes made to Vortex Configuration page.

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1.2 Reading and writing to the Panels Pro Database:

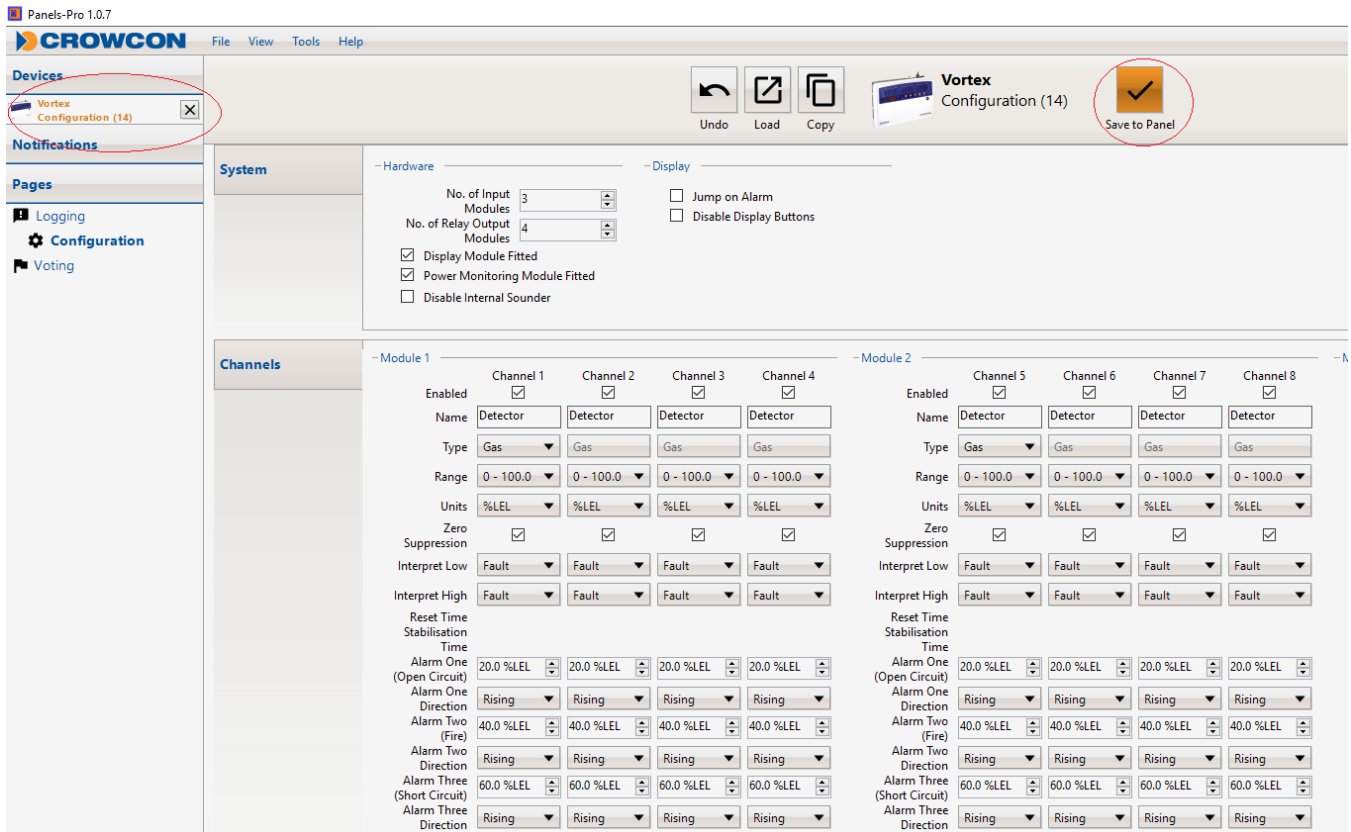
When Panels-Pro is NOT connected to a control panel, a configuration can be edited and saved locally to the Panels Pro database. This allows configurations to be prepared in advance and later saved to a control panel. **Configurations saved to the database are NOT easily transferred to other P.C.s so should be considered as non-transferable.**

Clicking on Tools then Database management shows the location of the database file – this database contains many configurations and other application data:



Clicking on the Save to Panel icon when **not connected** to a control panel, will save the configuration to this database:

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Notice that under devices, no serial number is listed, as no panel is connected to the system – in the example the configuration will be saved, to the local database, as Configuration (14).

NB (Vortex only): Saving from the Configuration page ONLY saves changes made on this page – it will not save any changes made to Voting: these have to be saved from the Voting page.

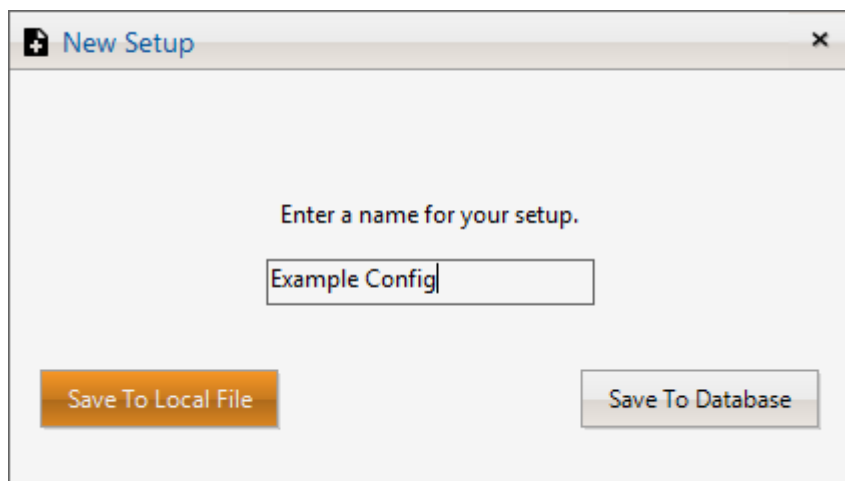
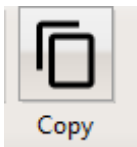
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1.3 Working with XML files:

XML files are transferable files, which can be copied to other P.C.s for back up and transfer purposes. **Note that for a Vortex panel, each configuration will consist of two separate files, one for the Configuration page, and one for the Voting page.** Gasmaster and Gasmonitor configurations consist of one file which is created from the Configuration page only.

To create the XML files (for back up, or to leave with the customer for instance), the configuration needs to first be created from new, loaded from the Panels Pro database, or downloaded from a control panel (by connecting to the panel).

In the **Configuration** screen, click on the Copy icon, enter a name for your setup, press 'Save to Local File' then choose the file location. This will create a transferable XML file containing the Configuration information.

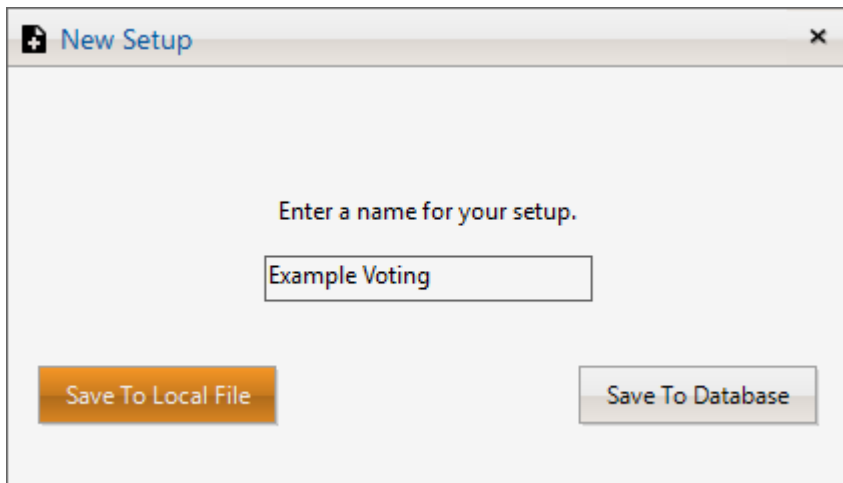
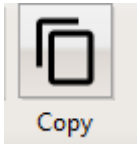


A screenshot of a software dialog box titled "New Setup". The dialog has a light grey background and a title bar with a plus icon on the left and a close icon on the right. The main content area contains the text "Enter a name for your setup." followed by a text input field containing "Example Config". Below the input field are two buttons: "Save To Local File" on the left and "Save To Database" on the right.

NB (Vortex only): Copying from the Configuration page ONLY creates a back up of settings on this page – it will not include any settings from the Voting page: these have to be saved from the Voting page:

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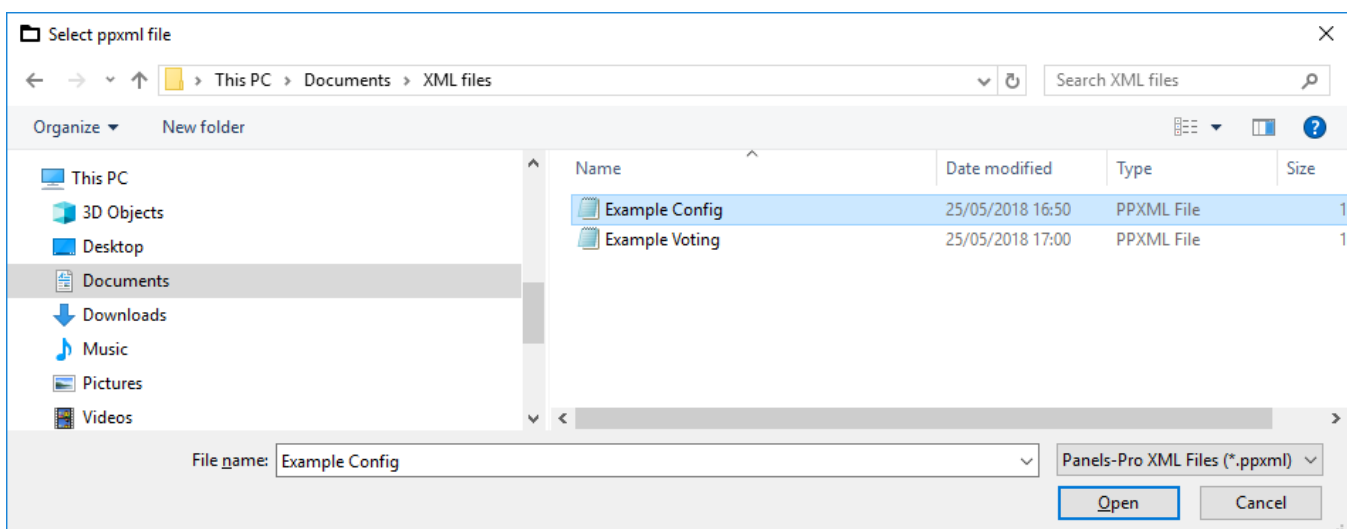
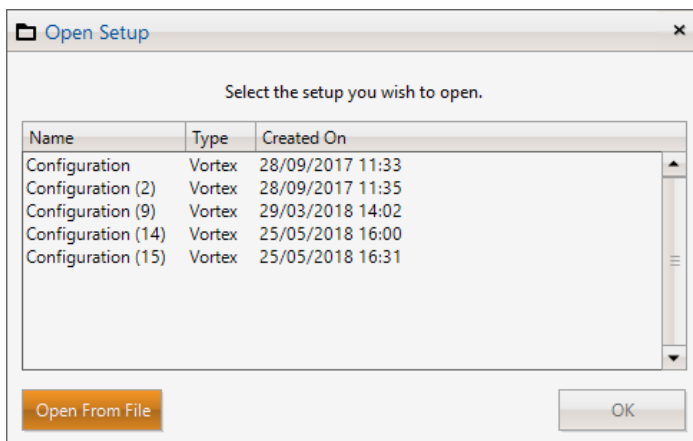
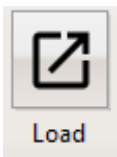
Vortex Only: In the **Voting** screen, click on the Copy icon, enter a name for you setup, then press 'Save to Local File' then choose the file location. This will create a transferable XML file containing the Voting information.

A screenshot of a software dialog box titled "New Setup". The dialog has a title bar with a plus icon on the left and a close icon (X) on the right. The main area contains the text "Enter a name for your setup." followed by a text input field containing "Example Voting". At the bottom, there are two buttons: "Save To Local File" on the left and "Save To Database" on the right. The "Save To Local File" button is highlighted with an orange background, while the "Save To Database" button has a grey background.

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Once created, the information in the XML files can later be loaded into the Panels Pro workspace, then saved to a control panel:

On the **Configuration** page, press the Load icon, then click on 'Open from File' then select the required configuration file:

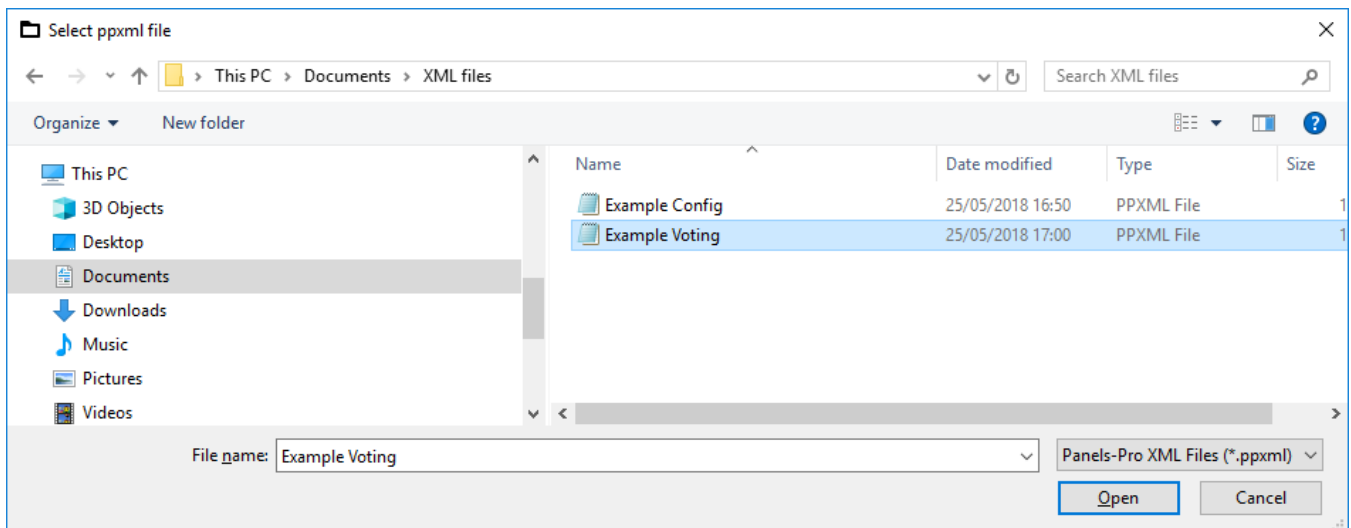
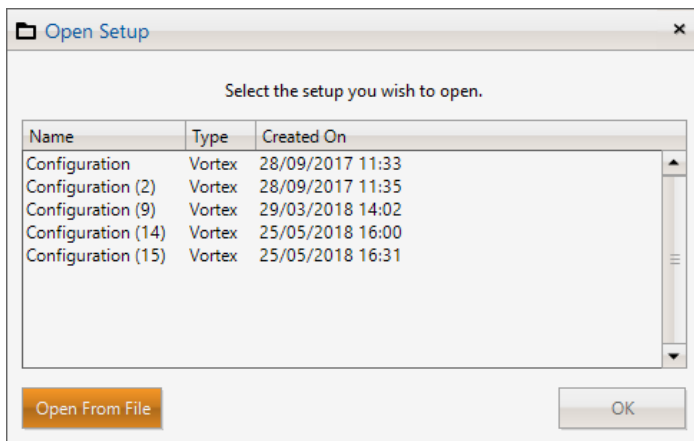
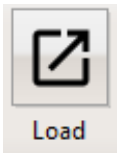


The loaded configuration can then be saved to a control panel in the usual way (see 1.1).

NB (Vortex only): Loading and saving from the Configuration page ONLY affects the settings on this page – it will not include any relay Voting settings: these have to be loaded and saved from the Voting page:

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On the **Voting** page, press the Load icon, then click on 'Open from File' then select the required configuration file:



The loaded voting configuration can then be saved to a control panel in the usual way (see 1.1).

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Section 2. Vortex Voting.

The following is a guide to assist with configuring channels and relays via the voting section of Panels Pro.

System configuration:

On opening the Panels Pro software, there are 3 options.

- Logging
- Configuration
- Voting

Choose Configuration; the screen will look the same as Vortex PC.

Configure as per Vortex PC to meet customers' requirements.

System: Channels: Relays.

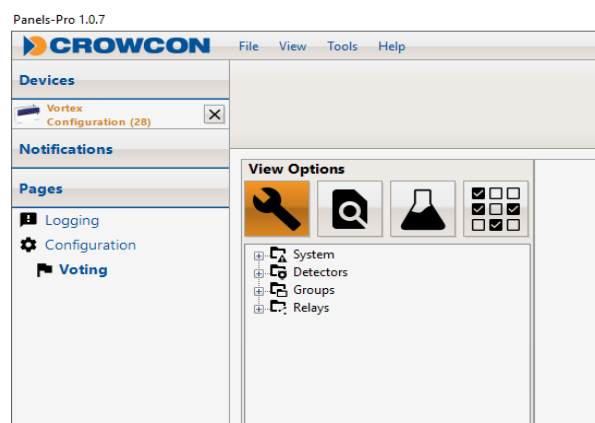
When complete save this configuration with a name that includes "configuration".

The voting configuration should be saved separately from the Voting screen with the word "voting" in the title. See section 1 for specific instructions about saving, loading and backing-up configurations.

Voting configuration example using Groups:

Note: Vortex PC had a limit of 8 relay functions per detector. Panels Pro software has a unique function that facilitates multiple voting for relays via the group tab (127 Groups available). The following configuration example would not be achievable using Vortex PC or Panel Pro 'Classic Mode' due to the 8-function per detector limitation.

On opening the Panels Pro software and select the Voting option



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Under “view options” there are 4 tile options:

-  Spanner = configuration mode.
-  Overview = overview mode.
-  Bottle = simulation mode.
-  Grid= Classic mode. **Will not be available once groups have been configured.**

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Example customer request:

- Channel 4 - Relay requirement (colour coded for example purposes)

Relay 1 alarm level 1 beacon

Relay 2 alarm level 2 1st stage sounder

Relay 3 alarm level 3 2nd stage sounder

Relay 4 alarm 1 to PLC

Relay 5 alarm 2 to PLC

Relay 6 alarm 3 to PLC

Relay 7 fault green healthy beacon deactivated

Relay 8 link alarm level 2 to fire system

Relay 9 link alarm level 2 to digital dialler for shift manager notification.

Resolution

5 groups will be required – organised by event/function. The groups will be:

Group 1 (Relay 1 & Relay 4)

Group 2 (Relay 2, Relay 5 and Relay 8)

Group 3 (Relay 3 and Relay 6)

Group 4 (Relay 7)

Group 5 (Relay 9)

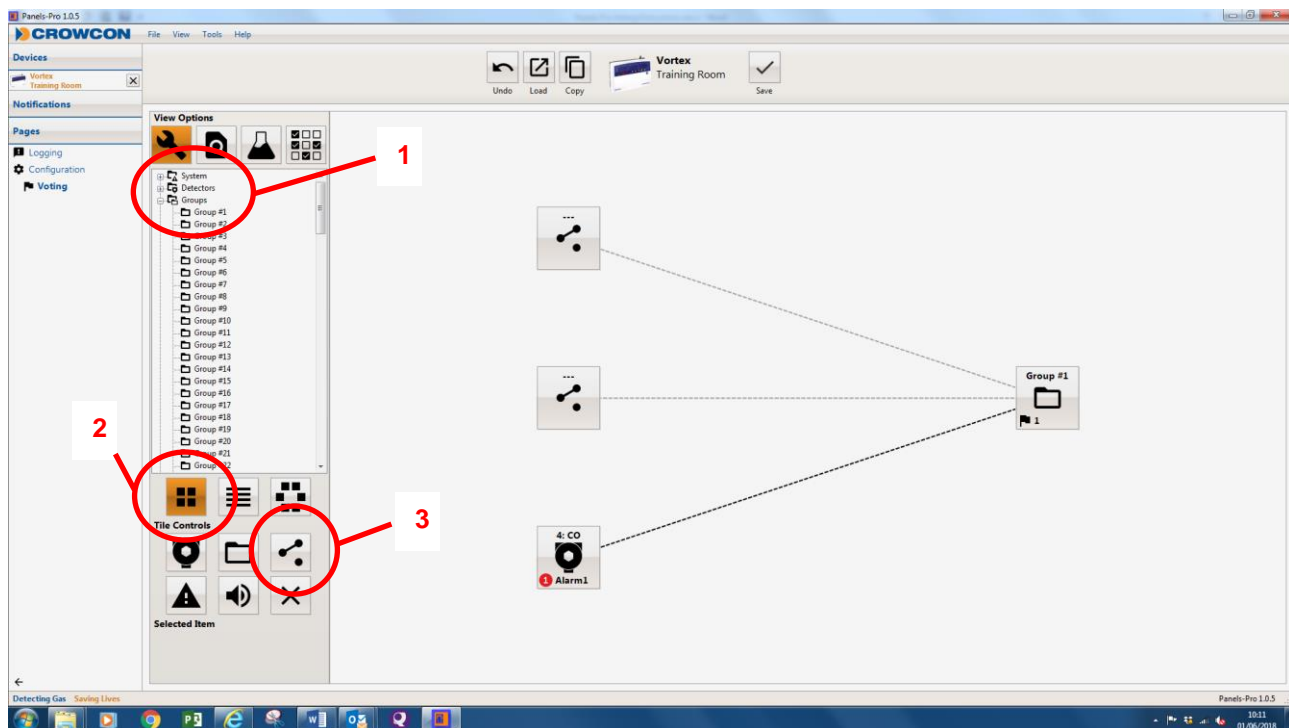
(NOTE: Once groups have been configured, Classic mode is no longer available).

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Group 1 (Relay 1 & Relay 4)

Click on spanner.

- 1: Select Group #1.
- 2: Select Add a Detector from Tile Controls.
- 3: Select Add a Relay twice to add two relays.



Right click on the detector and change to Detector 4.

Right click on the detector again and under trigger select Alarm 1.

Right click the top relay, select 'Change Relay' and select Relay 1.

Right click the bottom relay, select 'Change Relay' and select Relay 4.

Click on Save to save the configuration.

Your screen will look like the above screen-shot.

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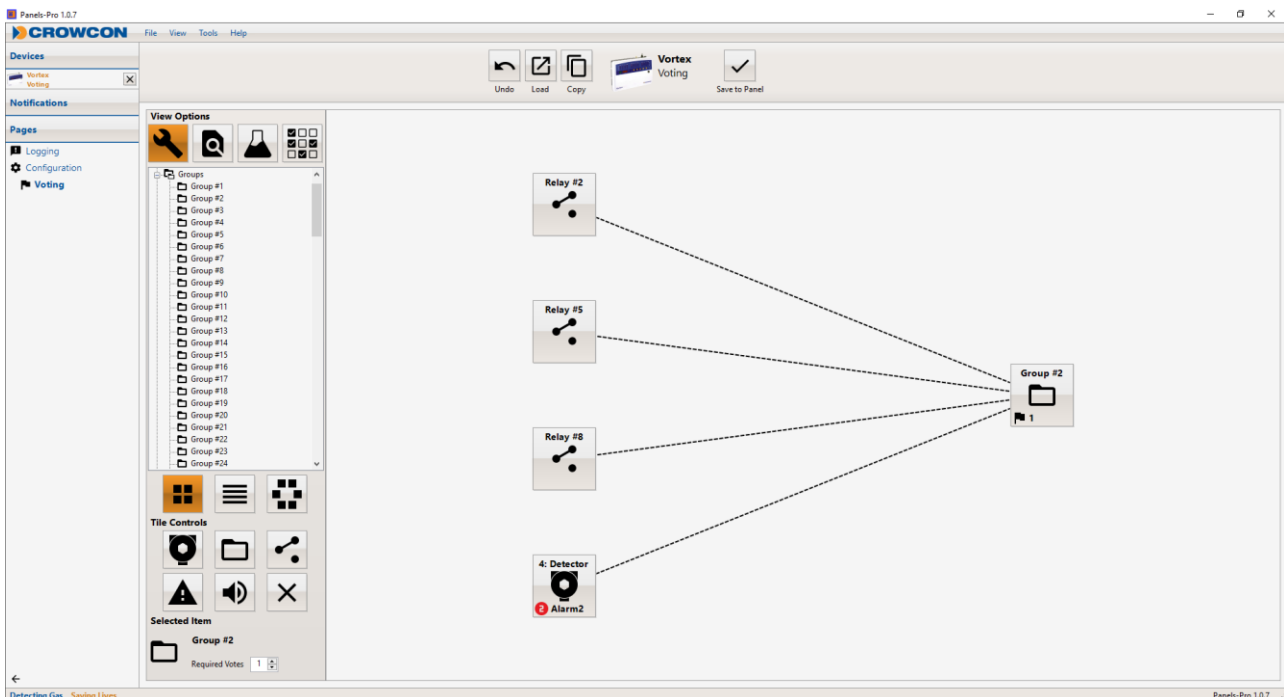
Group 2 (Relay 2, Relay 5 and Relay 8)

Click on spanner.

A: Select Group #2.

B: Select Add a Detector from Tile Controls.

C: Select Add a Relay thrice to add three relays.



Right click on the detector and change the detector to detector 4.

Right click on the detector again and under trigger select Alarm 2.

Right click the top relay, select 'Change Relay' and select Relay 2.

Right click the centre relay, select 'Change Relay' and select Relay 5.

Right click the bottom relay, select 'Change Relay' and select Relay 8.

Click on Save to save the configuration.

Your screen will look like the above screenshot.

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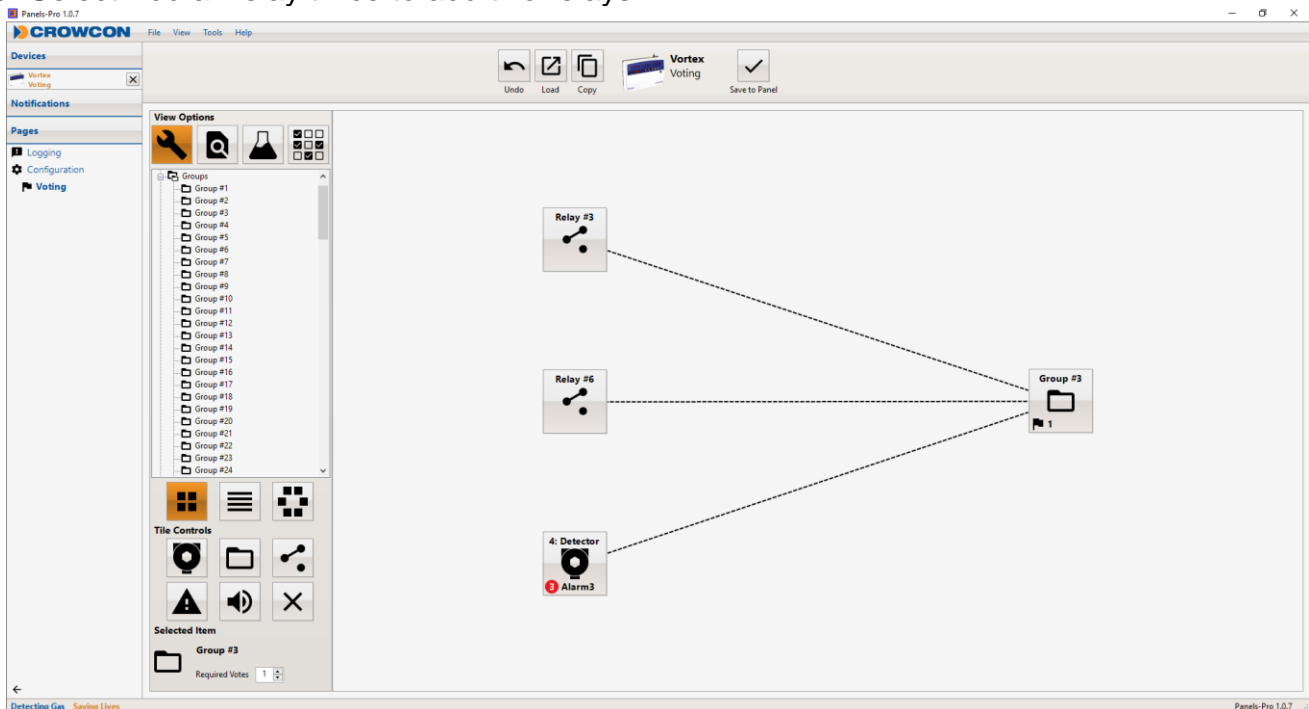
Group 3 (Relay 3 and Relay 6)

Click on spanner.

A: Select Group #3.

B: Select Add a Detector from Tile Controls.

C: Select Add a Relay twice to add two relays.



Right click on the detector and change the detector to detector 4.

Right click on the detector again and under trigger select Alarm 3.

Right click the top relay, select 'Change Relay' and select Relay 3.

Right click the bottom relay, select 'Change Relay' and select Relay 6.

Click on Save to save the configuration.

Your screen will look like the above screen-shot.

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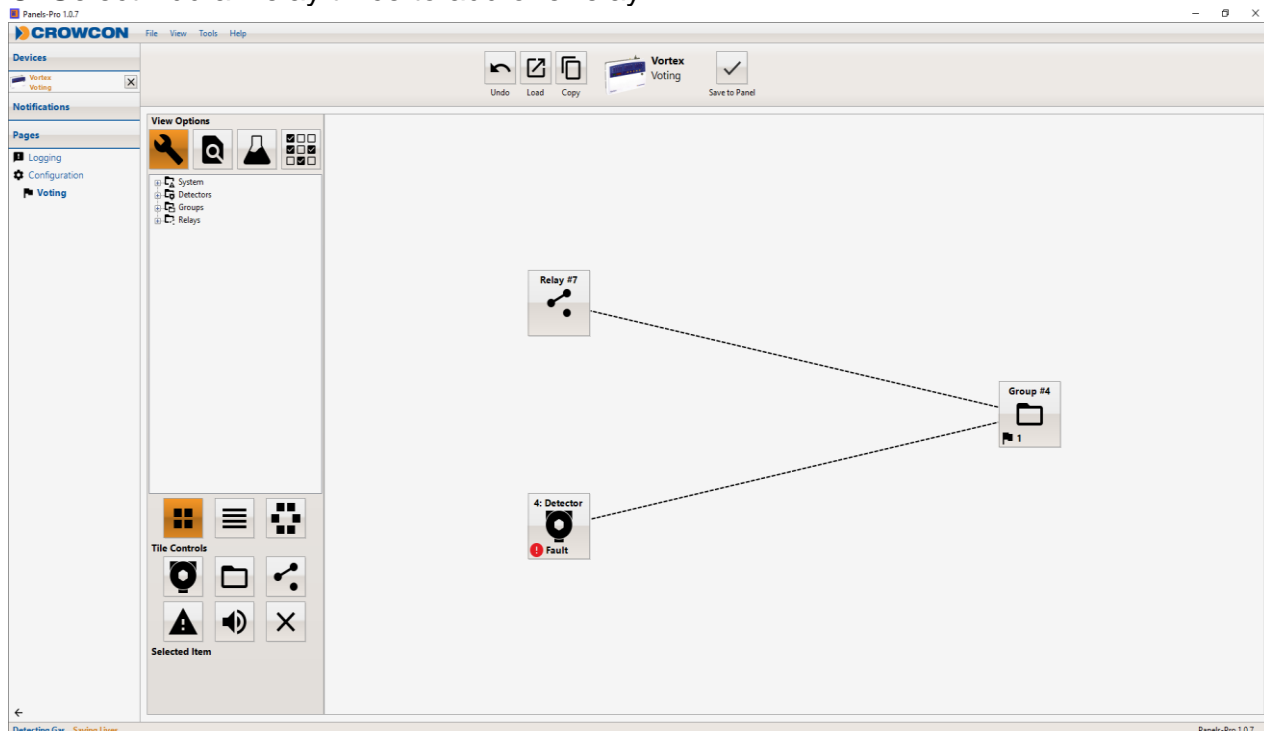
Group 4 (Relay 7)

Click on spanner.

A: Select Group 4

B: Select Add a Detector from Tile Controls

C: Select Add a Relay twice to add one relay.



Right click on the detector and change the detector to detector 4.

Right click on the detector again and under trigger select Fault.

Right click the relay, select 'Change Relay' and select Relay 7.

Click on Save to save the configuration.

Your screen will look like the above screenshot.

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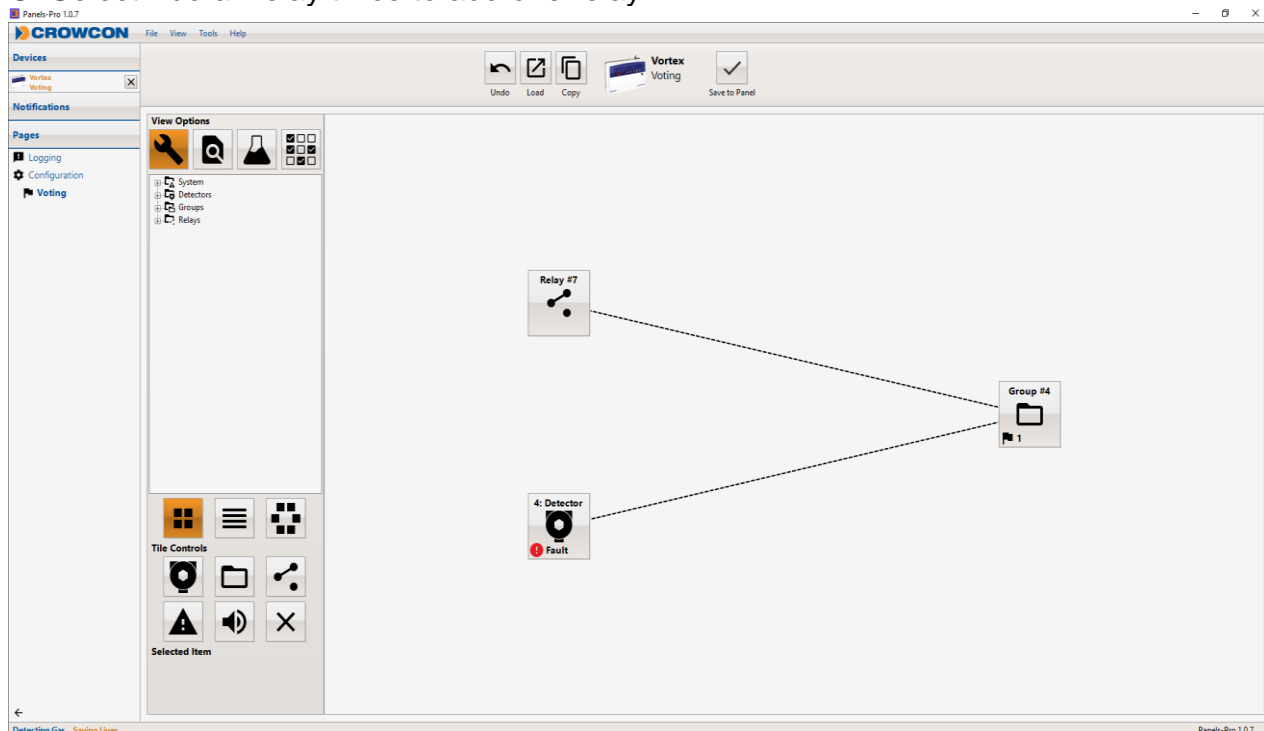
Group 5 (Relay 9)

Click on spanner.

A: Select Group 5

B: Select Add a Detector from Tile Controls

C: Select Add a Relay twice to add one relay.



Right click on the detector and change the detector to detector 4.

Right click on the detector again and under trigger select Alarm 2.

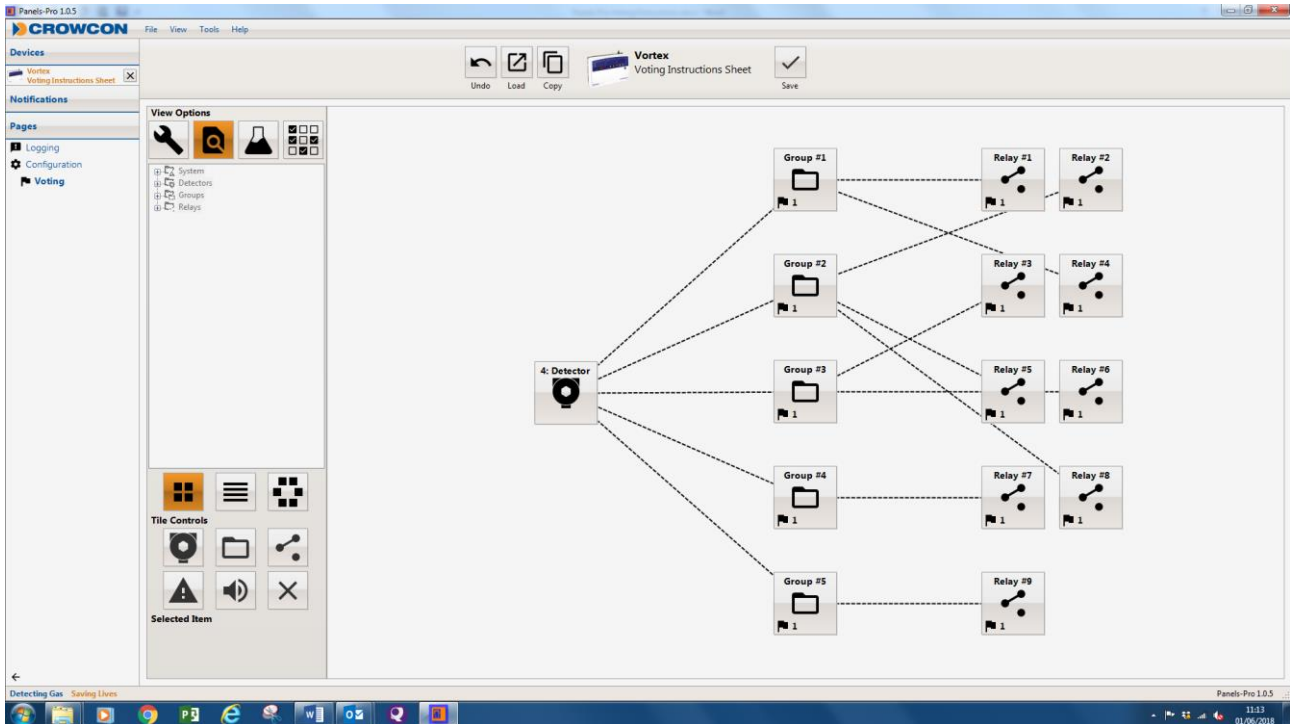
Right click the relay, select 'Change Relay' and select Relay 9.

Click on Save to save the configuration.

Your screen will look like the above screenshot.

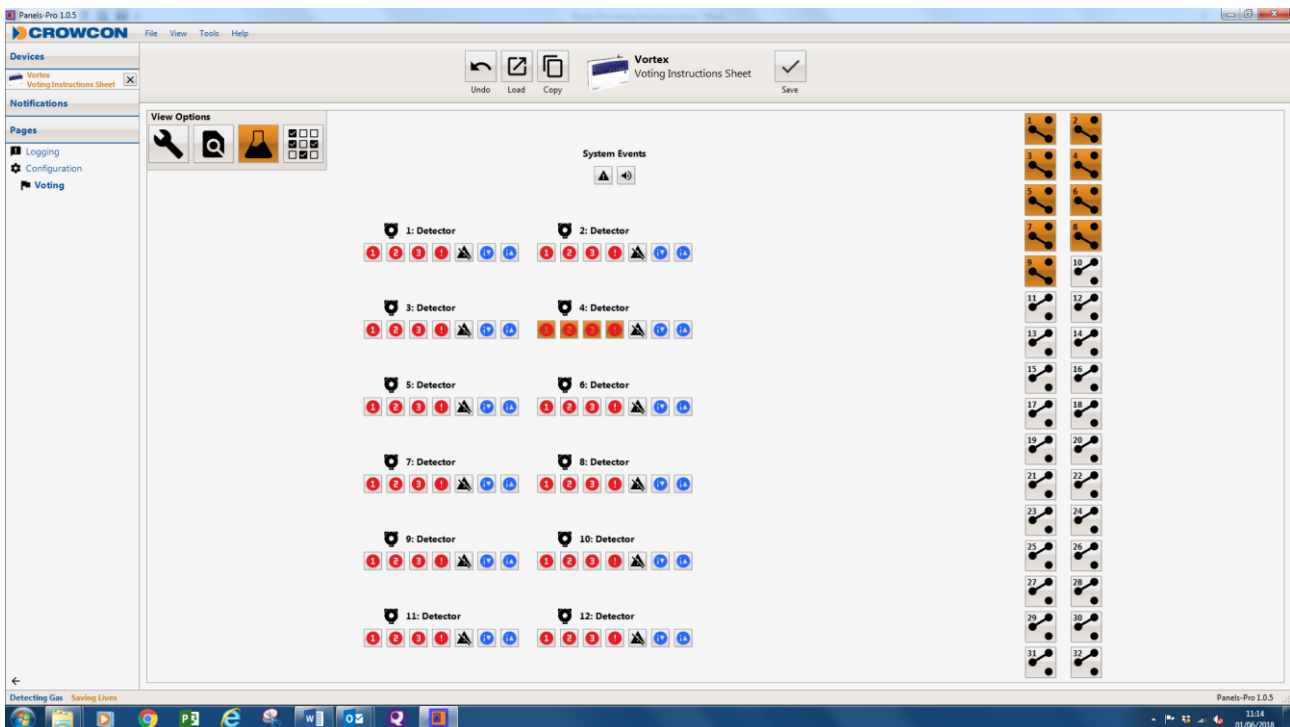
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The completed voting configuration for Detector 4 will appear as follows:



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There is also an added viewing screen under the hour glass (note, not for programming). From this screen you will see each detector and associated alarms available also all relays enabled. If you click on an alarm level the associated relays assigned in the group will be highlighted in Orange.



For further information please contact customersupport@crowcon.com +44 (0) 1235 557711