enCode Labs

Master Plugin for CCURE9000

Installation and Configuration

Revision A0 - July 2019

https://www.encodelabs.be

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Revision: A0

Release Date: July 2019

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Chapter 1

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Overview

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Introduction

The Master Plugin for CCURE9000 will allow you to receive status updates and alarms from the UTC Master Classic panel and a subset of its components.

Conventions

The following pictograms are used to indicate important information

Indicates extra information.

Indicates a warning. Pay extra attention to the information that is provided.

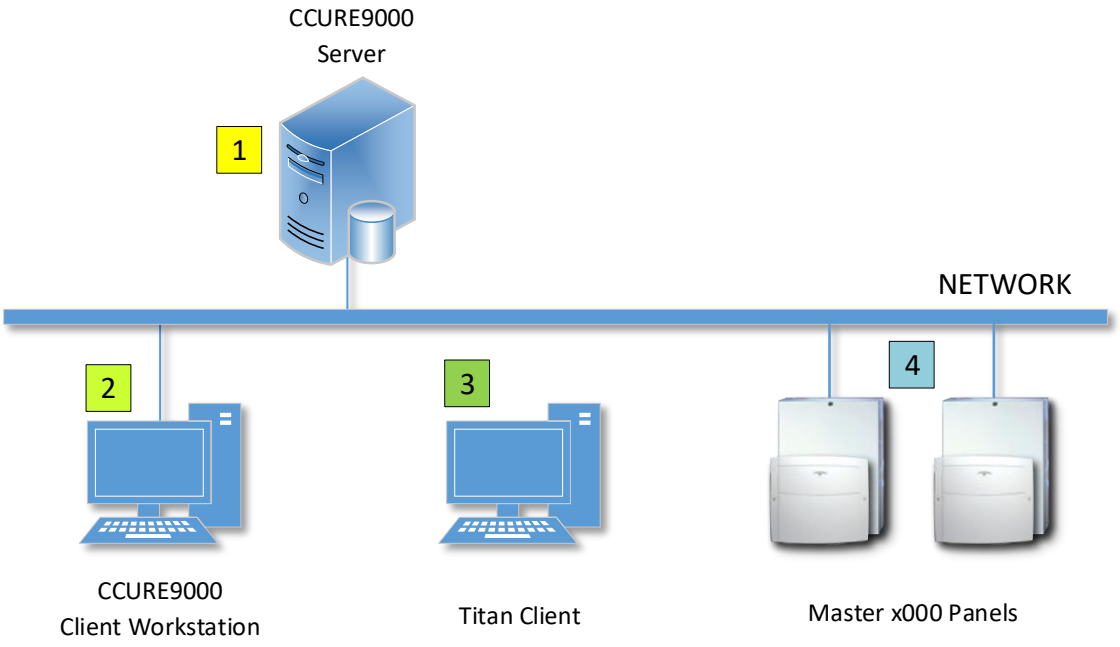
Indicates a danger with important consequences. Pay extra attention to the information that is provided and be cautious.

Features

- The Encode Labs Master plugin runs as a Windows Service
- Supports Master Classic x000 panels
- Supports wordlist language selection and downloading custom wordlists
- Synchronize panel configuration with the C•CURE9000. Automatically creates the following components:
  - DGP's (including Panel DGP 16)
  - Areas
  - Zones
  - RAS'es
- Manually send Date/Time updates to individual panels or
- Automatically program Date/Time updates through event actions
- Listen for status update messages from the panels
- Monitor live activity from the panels, DGP's, RAS, Areas and Zones
- Component changes are logged in the CCURE9000 Audit Log
- Configure panel commands through Event Actions: tap into the power of the Event Management of the C•CURE9000 for panels, areas, zones and ras'es
- Configure component triggers that can be used to activate events
- Support for the following manual actions:
  - Panel: Synchronize configuration | Send Date/Time | Arm/Disarm all zones
  - Areas: Arm | Disarm | Synchronize
  - Zones: Inhibit | Uninhibit | Synchronize

Architecture

Main architecture



1	CCURE9000 Server running the Encode Labs Master Plugin
2	CCURE9000 Client Workstation having the Client Components installed
3	Client workstation having the Titan Client to program the Master Panels
4	Master Panels with supported firmware

Specifications and Compatibility

This is a CCURE9000 Addon Service. Current supported versions:

- CCURE9000 V2.70

The requirements are those of the CCURE9000 system that is installed.

Server OS requirements

OS - Server Series L/M/N/SAS	Version	V2.70
Windows 7 Professional | Enterprise - SP1 or later	64-bit	✓
Windows 8.1 Professional | Enterprise - SP1 or later	64-bit	✓
Windows 10 Professional | Enterprise	64-bit	✓
Windows Server 2008 R2 Standard | Enterprise - SP1 or later	64-bit	✗
Windows Server 2012 R2 Standard SP1 or later	64-bit	✓
Windows Server 2016 Standard | Enterprise	64-bit	✓

OS - Server Series P/Q/R/R+/S/S+/T/SAS	Version	V2.70
Windows 10 Professional | Enterprise	64-bit	✓
Windows Server 2008 R2 Standard | Enterprise SP1 or later	64-bit	✗
Windows Server 2012 R2 Standard	64-bit	✓
Windows Server 2016 Standard | Enterprise	64-bit	✓

Server DBMS requirements

DBMS - Server Series L/M/N/SAS	Version	V2.70
SQL Server 2008 R2 Standard | Enterprise SP2 or later	64-bit	✗
SQL Server 2012 Express | Standard | Enterprise - SP2 or later	64-bit	✓
SQL Server 2014 Express | Standard | Enterprise - SP1 or later	64-bit	✓
SQL Server 2016 Express | Standard | Enterprise All Service Packs	64-bit	✓
DBMS - Server Series Standalone P/Q/R/R+/S/S+/T/SAS	**Version**	**V2.70**
SQL Server 2008R2 Standard | Enterprise SP2 or later	64-bit	✗
SQL Server 2012 Standard | Enterprise - SP2 or later	64-bit	✓
SQL Server 2014 Standard | Enterprise - SP1 or later	64-bit	✓
SQL Server 2016 Standard | Enterprise All Service Packs	64-bit	✓
DBMS – SAS Server Series P/Q/R/R+/S/S+/T	**Version**	**V2.70**
SQL Server 2008R2 Standard | Enterprise - SP2 or later	64-bit	✗
SQL Server 2012 Standard | Enterprise SP2 or later	64-bit	✓
SQL Server 2014 Standard All Service Packs	64-bit	✓
SQL Server 2014 Enterprise SP1 or later	64-bit	✓
SQL Server 2016 Standard SP1 or later	64-bit	✓
SQL Server 2016 Enterprise All Service Packs	64-bit	✓

Client Requirements

Client	Version	V2.70
Windows 7 Professional & Enterprise SP1 or later	64-bit	✓
Windows 8.1 Professional & Enterprise SP1 or later	64-bit	✓
Windows 10 Professional & Enterprise	64-bit	✓
Windows Server 2008 R2 Standard & Enterprise SP1 or later	64-bit	✗
Windows Server 2012 R2 Standard SP1 or later	64-bit	✓
Windows Server 2016 Standard & Enterprise	64-bit	✓

Known limitations

The plugin only supports a limited number of the Master Command Set. For a complete reference of the supported commands, refer to Supported Messages on page 76.

Some components are not supported such as Access Control devices, Cameras, Radios, GSM modules, ISDN comms and others. This is due to redundancy (Access Control), old technology (ISDN) or other reasons. As it is not possible to obtain a complete collection of devices, we advise to test the plugin for compatibility on the functionality you require through a demo version.

Chapter 2

Installation and configuration

Overview

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Acquiring the plugin installation package

The installation package can be obtained from our website at https://www.encodelabs.be/master.

Installation types

There is a single installation package that contains 2 installation components:

- Server Components
- Client Components

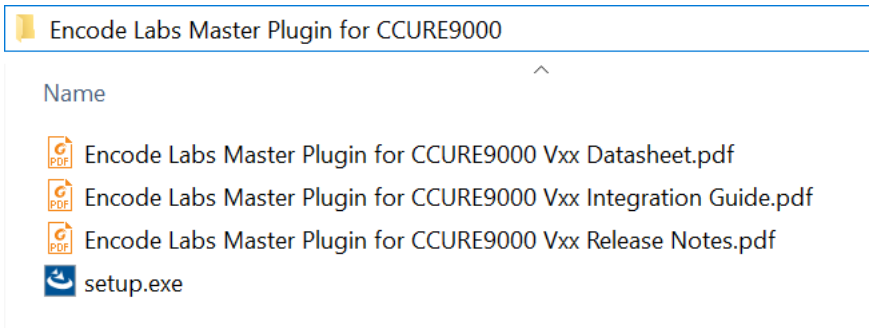
During the setup, you may choose what type of installation you require.

The following table shows where different components should be installed:

Environment	What to install
Client Workstation	Client Component only
Stand-alone server	Server and Client components
Site Server	Server and Client components
SAS (Satellite Application Server)	Server and Client components
MAS (Master Application Server)	Nothing

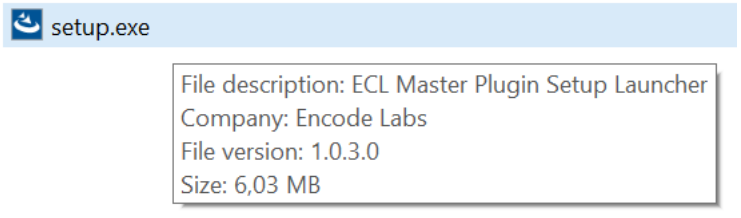
Contents of the installation package

The installation contains the following files:

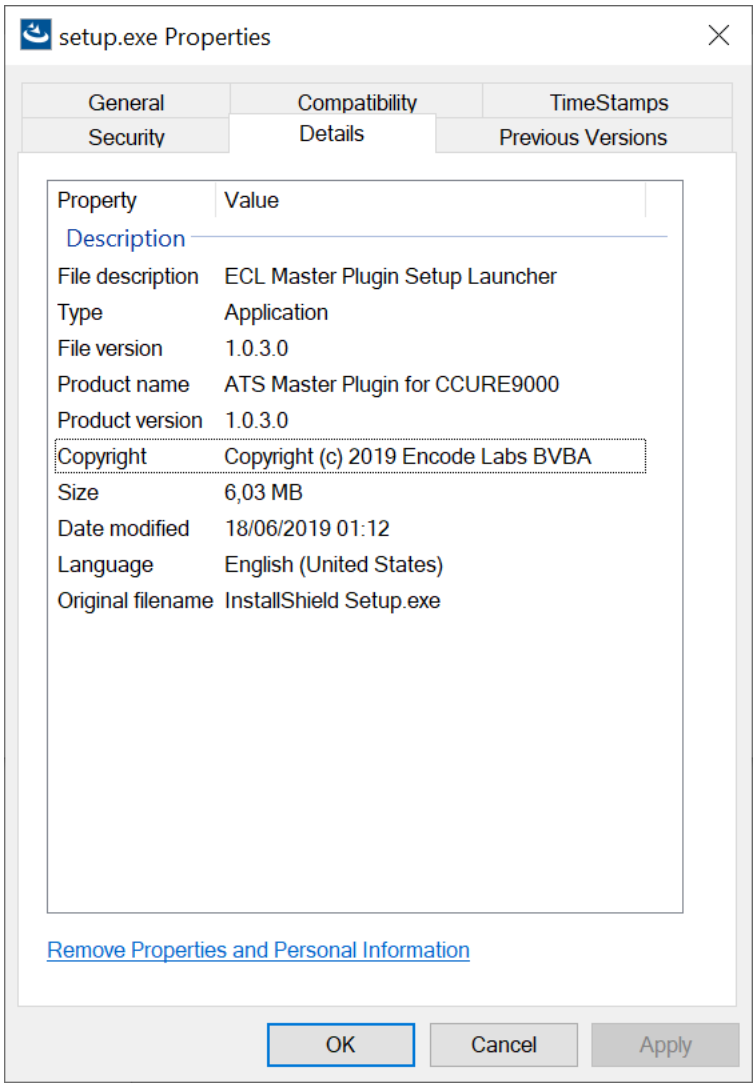


Checking your installer version

Hover over the Setup.exe to see the installer version:

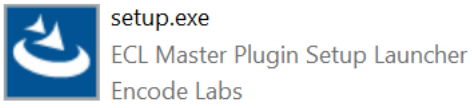


Alternatively, right-click the file and select properties -> Details

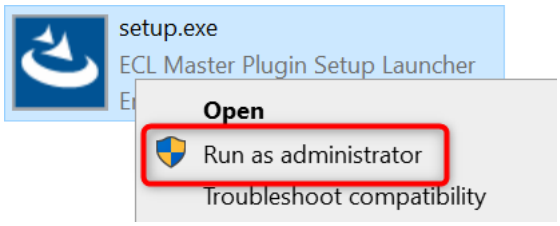


Installation

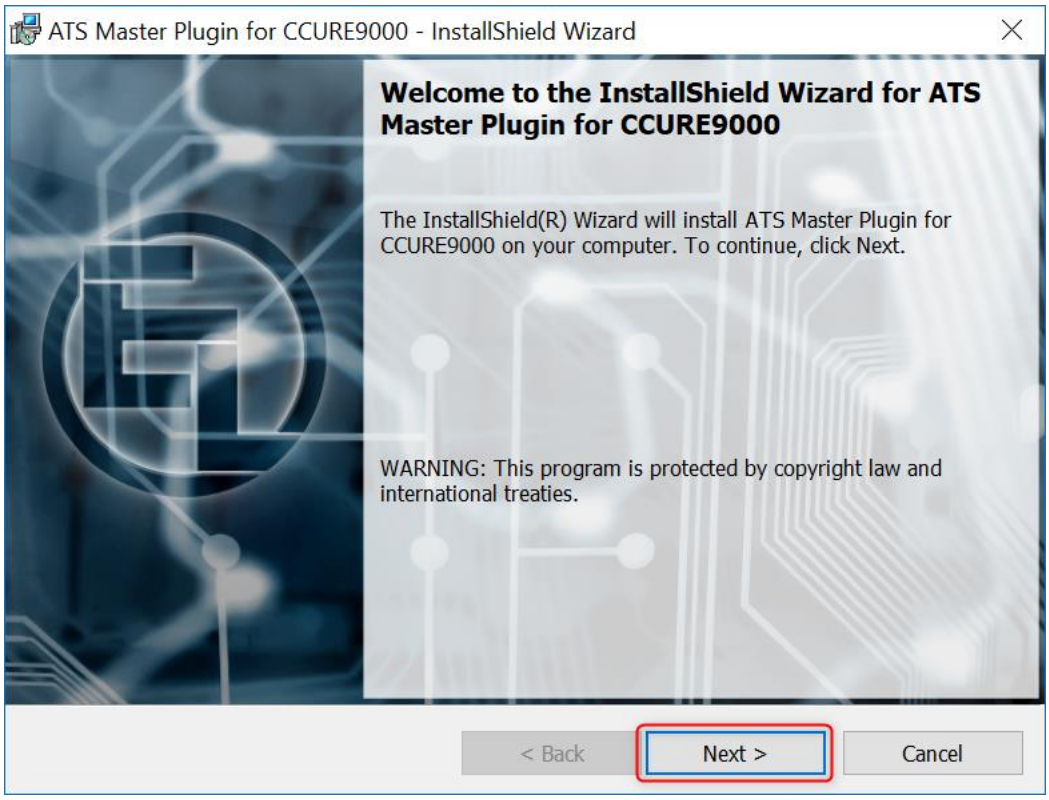
Launch the Setup.exe



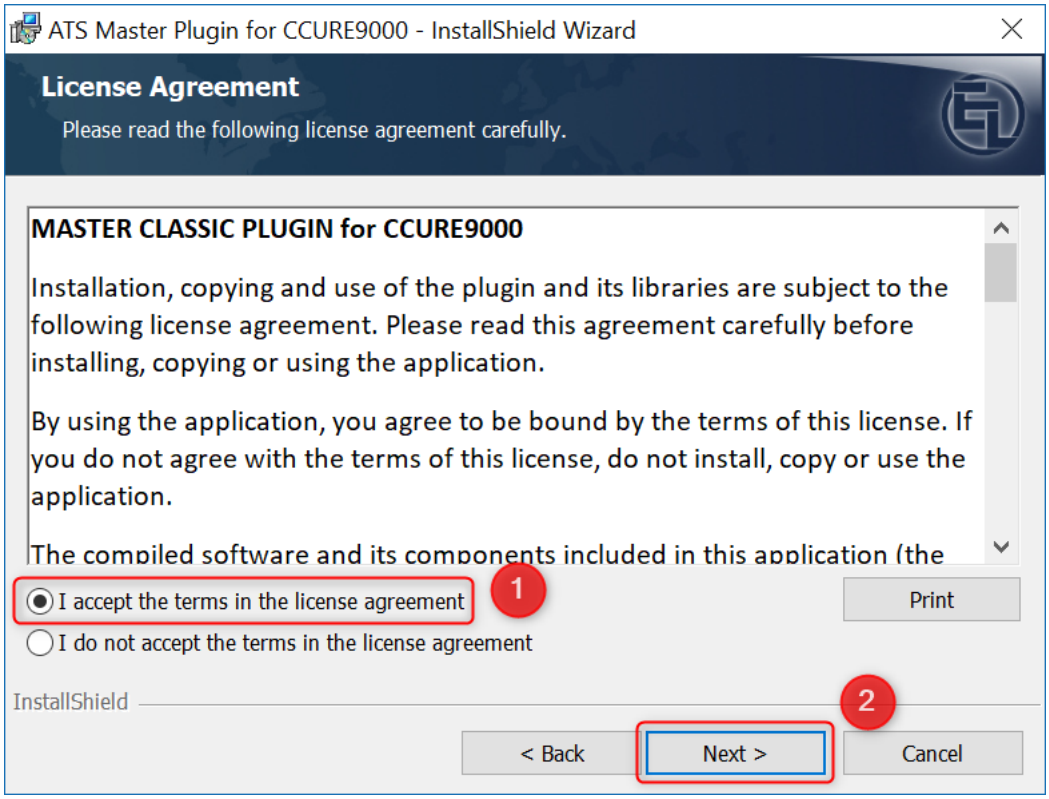
If necessary, run the installation as Administrator



Select NEXT

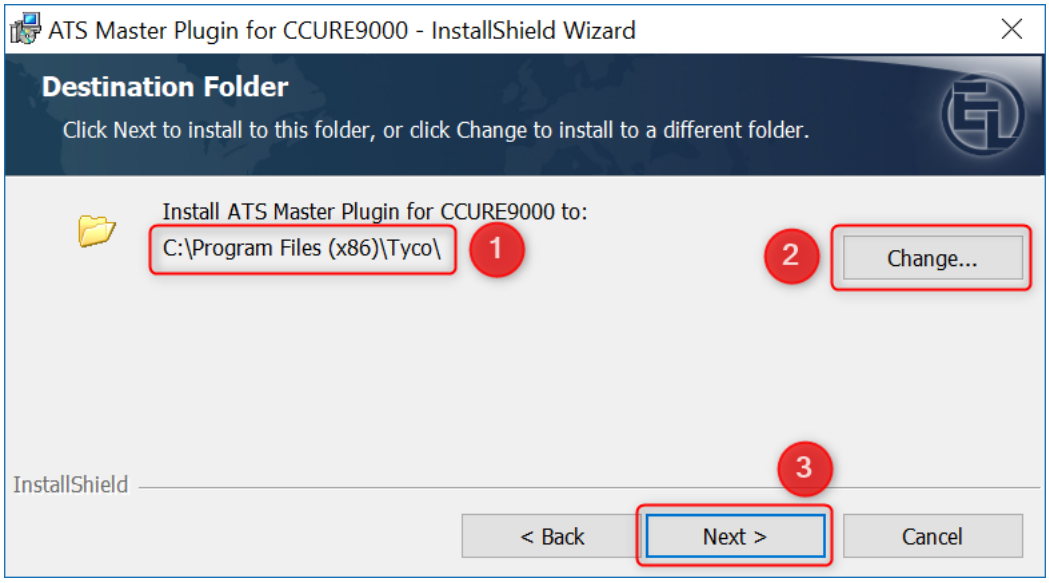


1. Accept the license terms if you agree
2. Select NEXT

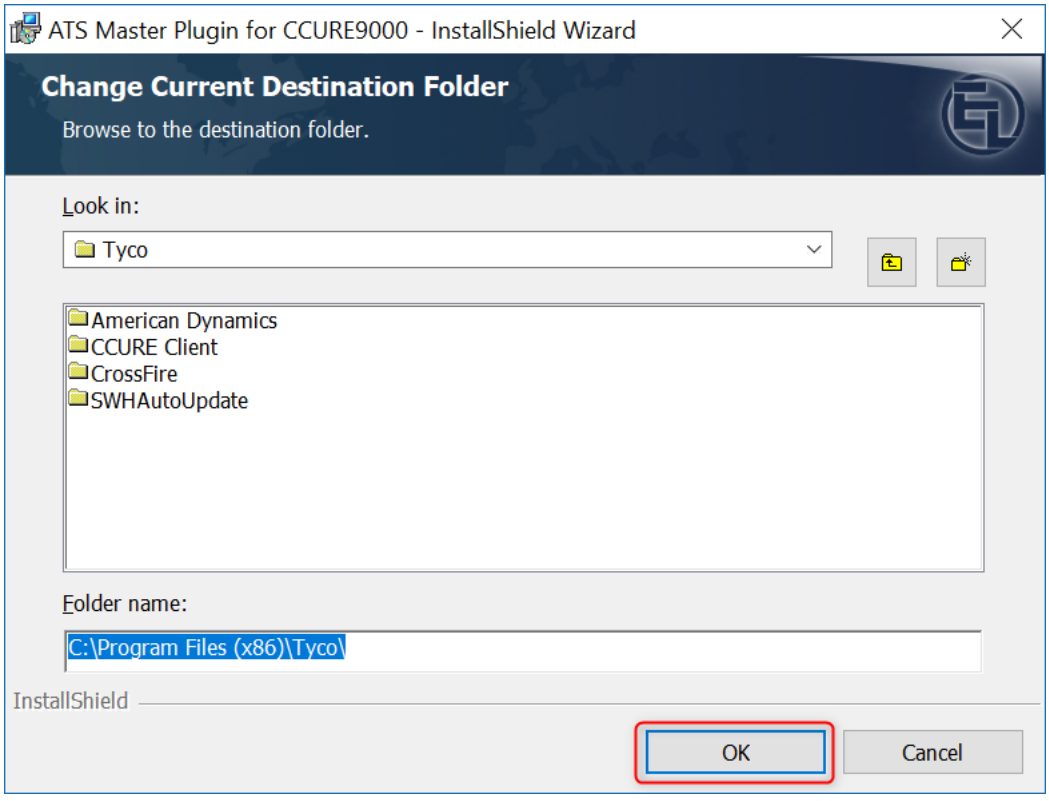


Select the installation location

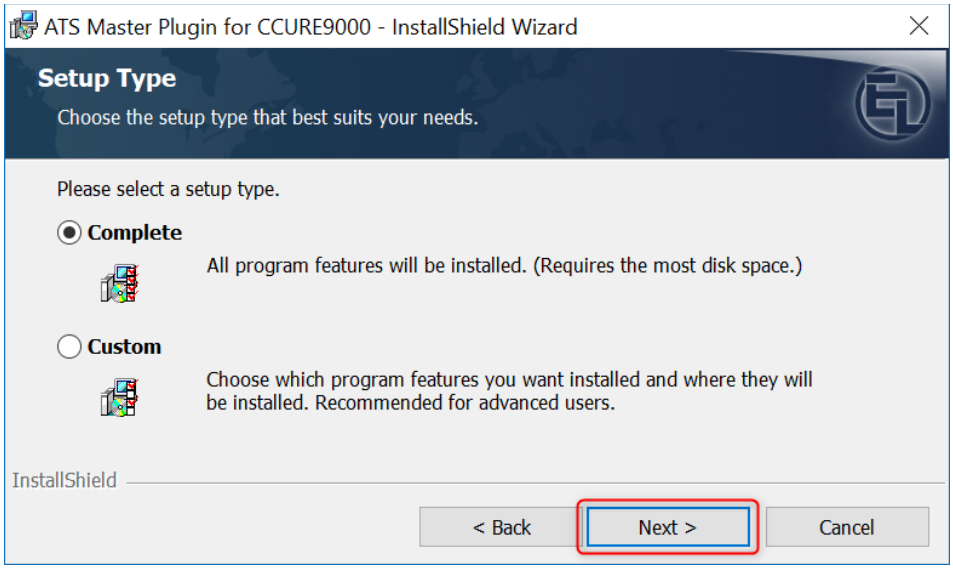
1. Verify if the installation location of your CCURE9000 is correct
2. If not, change the location to where you installed your CCURE9000 software by selecting the CHANGE button and navigating to that location
3. Select NEXT



Changing the installation location: navigate to the required location and select OK and then selecting NEXT from the previous form.

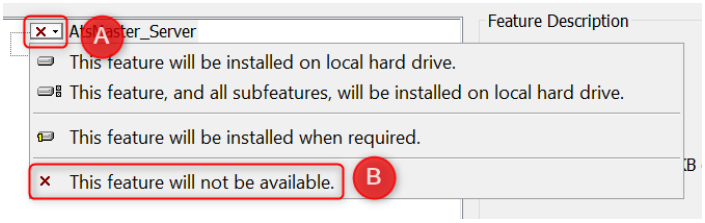


- For the installation of both Server and Client components select COMPLETE.
- For the installation of the Client Components only, select CUSTOM.
- Select NEXT

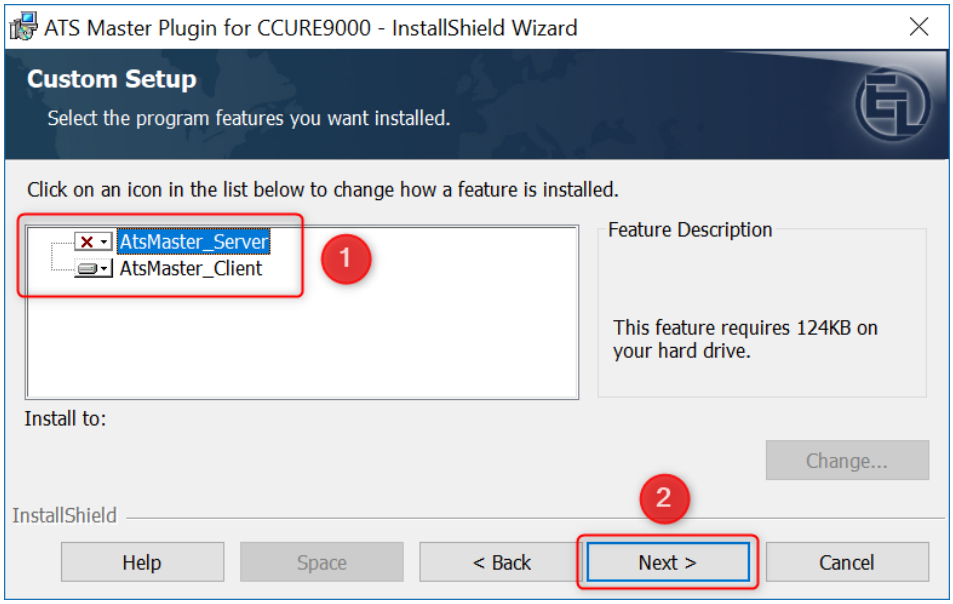


Choosing individual components: for the client-only installation (CUSTOM installation):

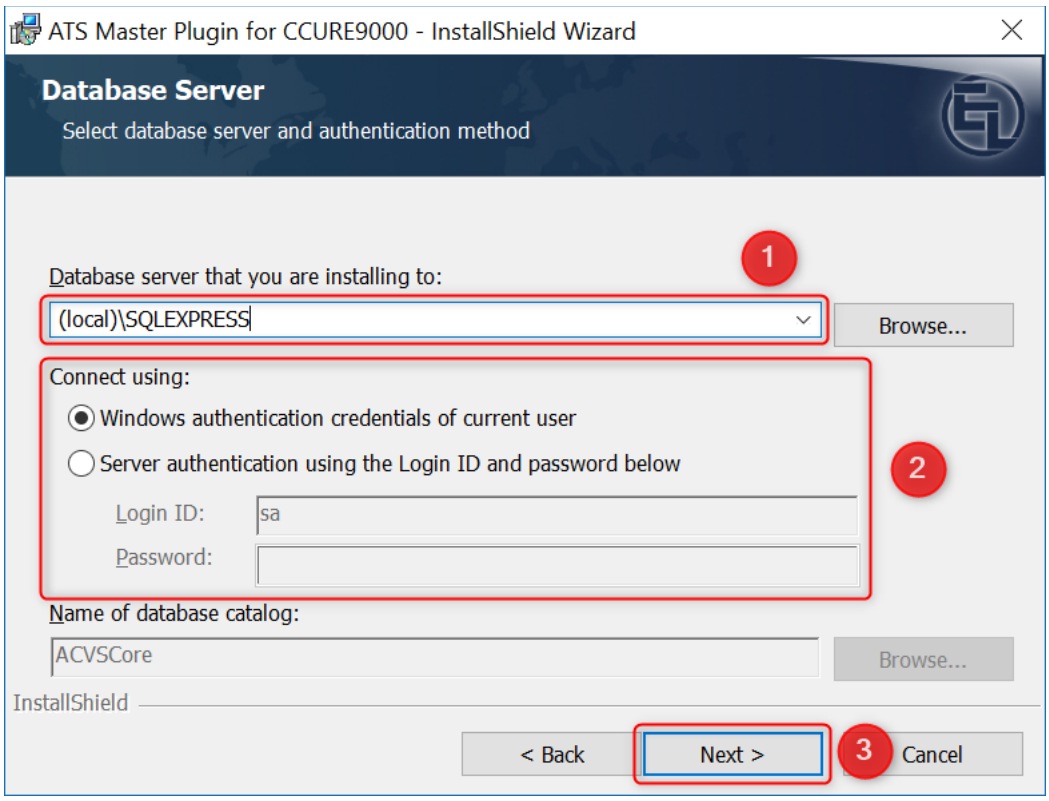
1. disable the installation of the Server Component
    a. Select the AtsMaster_Server component
    b. Select This feature will not be available



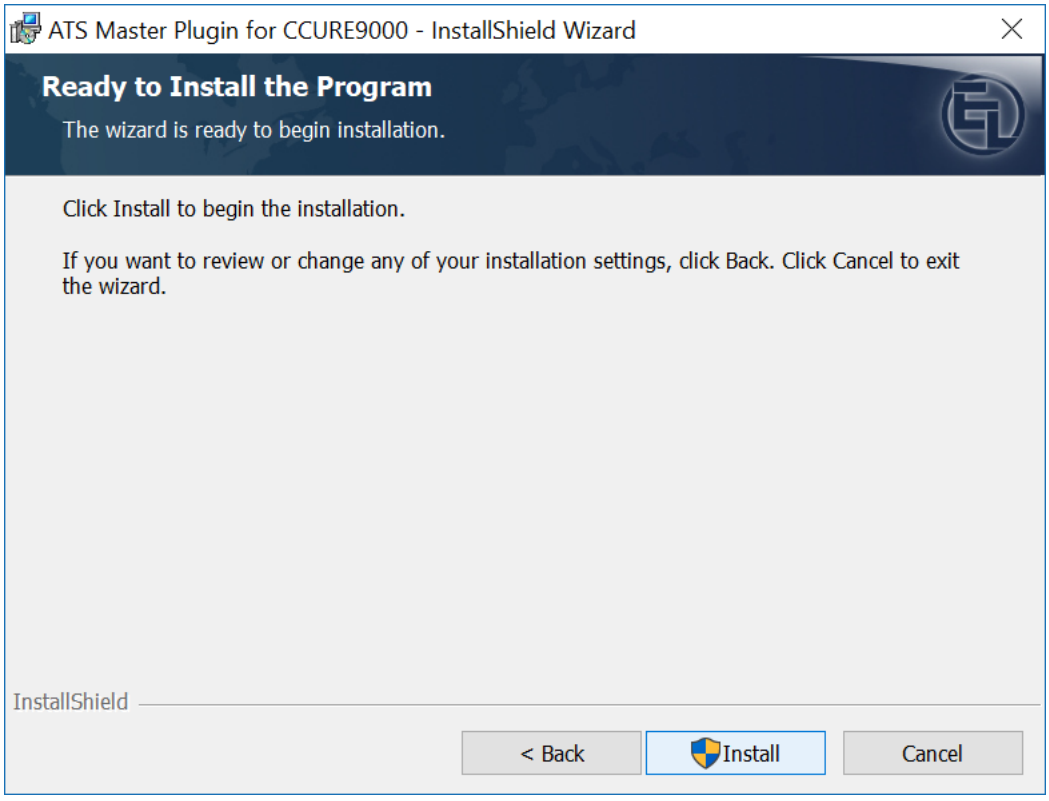
2. Select NEXT



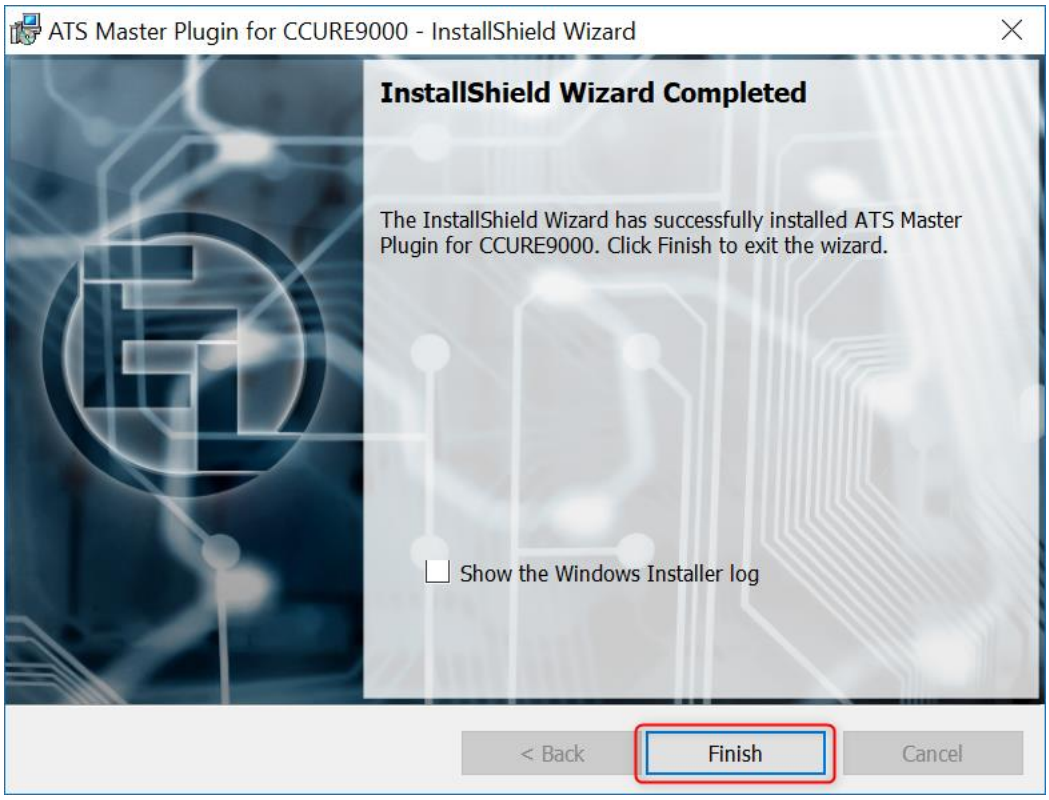
1. Select the CCURE9000 SQL Server Instance
2. Enter the required login details
3. Select NEXT



Select INSTALL



Select FINISH

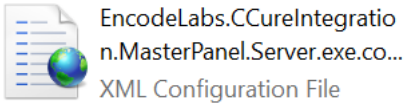


Configuration

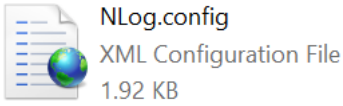
The service uses two configuration files that are both located in the ServerComponents folder of your CCURE9000 installation.

The configuration files are XML files and are named:

- `EncodeLabs.CCureIntegration.MasterPanel.Server.exe.config`



- `NLog.config`



Configuration tasks

The following configuration tasks can be performed:

- Configuration of the database connection on page 18
- Configuration of the wordlist dictionary path on page 19
- Configuration of the Logging framework on page 20

Configuration of the database connection

The database is first configured from the installer, where you chose the database server and login configuration.

In case the database connection properties have changed (DB location, IP address, login details etc), you can manually change these from the settings file.

The Database Configuration is located in the file

`EncodeLabs.CCureIntegration.MasterPanel.Server.exe.config`

Under the element connectionStrings with the name CCureDb.

Sample configuration:

```
<connectionStrings>
      <add name="CCureDb"
            connectionString="DATA SOURCE=localhost;
                  INITIAL CATALOG=ACVSCore;
                  INTEGRATED SECURITY=TRUE;
                  USER ID=;
                  PASSWORD="/>
</connectionStrings>
```

Do **NOT** change the connectionString name CCureDb or the integration will not work!

For more information on how to configure a connection string, navigate to

https://docs.microsoft.com/en-us/dotnet/framework/data/adonet/connection-string-syntax

or search for dotnet connection string syntax using your favourite search engine.

Configuration of the wordlist dictionary path

Master Panels can use different language versions.

The Master Plugin supports a single language version per service (stand-alone CCURE server or SAS). This setting cannot be changed on a per-panel-basis! Regardless of what language PROM your panel is equipped with, the service will use the dictionary of the selected language in the configuration file.

Location

The Master Panel dictionaries are located in the ServerComponents folder, in a subfolder called `TextProviderFiles`:

You can change the folder location as well as the specific language to be used for the wordlist translation.

The Wordlist Configuration is located in the file

`EncodeLabs.CCureIntegration.MasterPanel.Server.exe.config`

Under the element textProviderConfigSection -> textProviderConfig

Default configuration:

```
<textProviderConfigSection>
   <textProviderConfig rootFolder="TextProviderFiles\en"/>
</textProviderConfigSection>
```

The "rootFolder" is a location based on the installation location of the service executable.

It is possible to enter a complete path if you prefer, for example:

`C:\Program Files (x86)\Tyco\CrossFire\ServerComponents\TextProviderFiles\en`

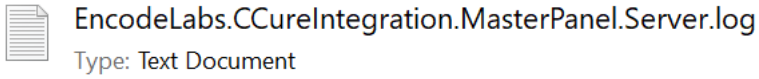
Configuration of the Logging framework

The service makes use of the NLog framework for logging its activity. Configuring the logging is done by editing the NLog.config file:

Sample Configuration:

```
<target xsi:type="File" name="allfile"
  fileName="EncodeLabs.CCureIntegration.MasterPanel.Server.log"
  archiveAboveSize="10485760"
  archiveNumbering="DateAndSequence"
  layout="${longdate}|${logger}|${uppercase:${level}}|${threadId}|${
      message} ${exception}"
  maxArchiveFiles="10" />
```

By default, the logfile is written to the Logging directory under the name:



You can change the name and location of the file by changing the **fileName** attribute of the **target** node.

Example:

```
  fileName="C:\Logging\Master.Log"
```

Or use a relative path:

```
  fileName=".\Logging\Master.Log"
```

By default, the file will be archived when it reaches 10Mb in size. You can change this value by changing `archiveAboveSize`.

Optionally you can opt to have a maximum number of log files. Any number of files above what you configure will automagically be removed to avoid storage issues if applicable by adding

```
      maxArchiveFiles="10"
```

For changing more logging options, please refer to the NLog documentation:

https://github.com/NLog/NLog/wiki

Chapter 3

Navigation

Overview

THE NAVIGATION PANE 22
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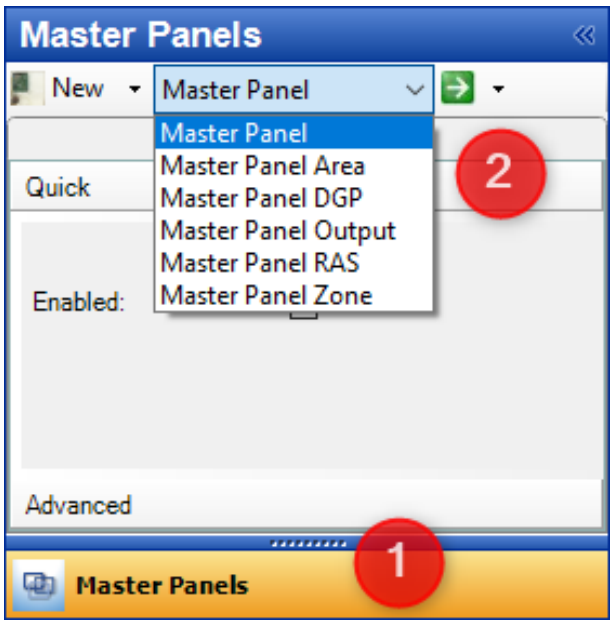
The navigation pane

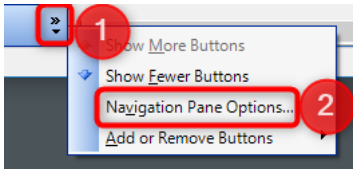
The Master plugin provides a separate navigation pane to provide quick access to the Master intrusion components (1).

When you select the pane, you will be able to access the different components from the navigation menu (2).

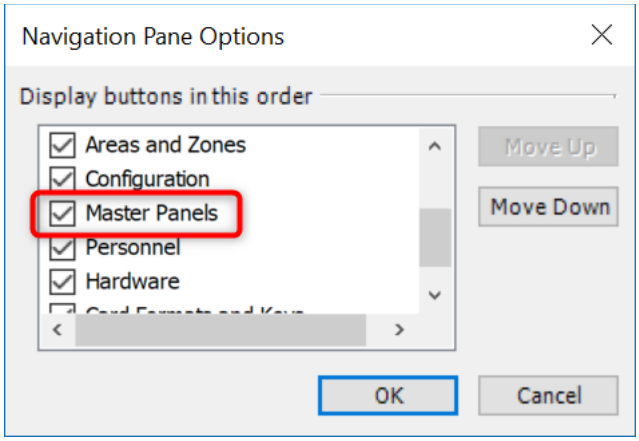


You can disable the pane from the bottom of the navigation panes:

1. Click the Arrows
2. Select Navigation Pane Options



Uncheck the Master Panels option



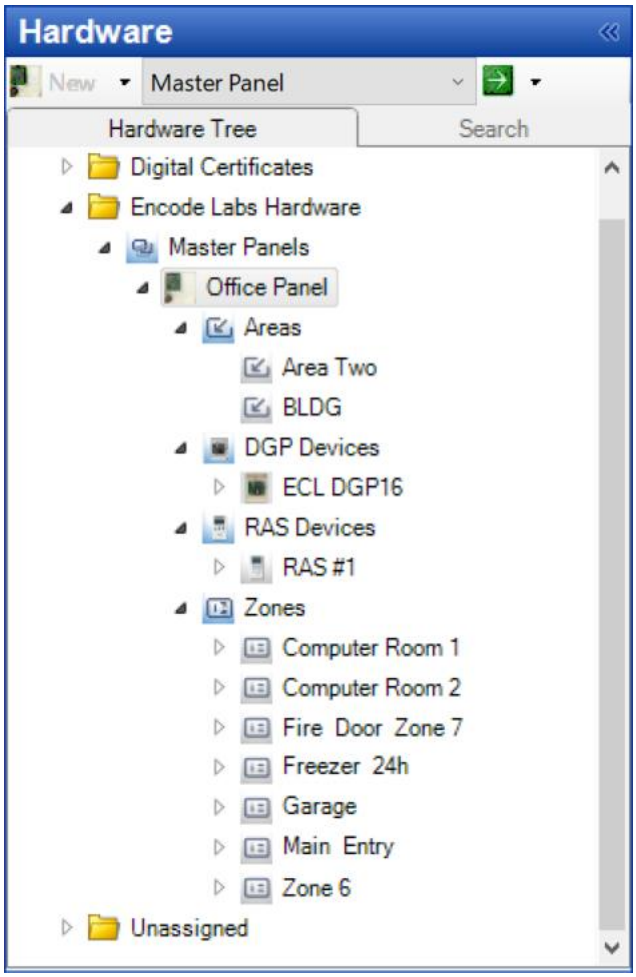
The hardware tree

You can navigate all components from the hardware tree. All Master Panels can be found in a separate folder of the hardware tree.

All components are grouped according to a child-parent structure.

For each Master Panel you can list all Areas, DGP's, RAS and Zones by selecting the appropriate class icon belonging to a Master Panel.

The Master Panel itself is considered a DGP with address 16.



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Master Panel

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Master Panel Overview

The Master Panels communicate with the Driver Service through an IP connection. You must

By configuring a Master Panel, you can synchronize the panel to make all components become available within the C•CURE9000. Creation of the components is done automatically upon synchronization.

The section on Configuration of a Master Panel starts on page 26

The section on Master Panel Tabs starts on page 28

The section on Master Panel Tasks starts on page 32

Tabs

The following sections provide more information about the Master Panel tabs and how to use them:

- The Master Panel General Tab on page 28
- The Master Panel Triggers Tab on page 29
- The Master Panel State Images Tab on page 31

Tasks

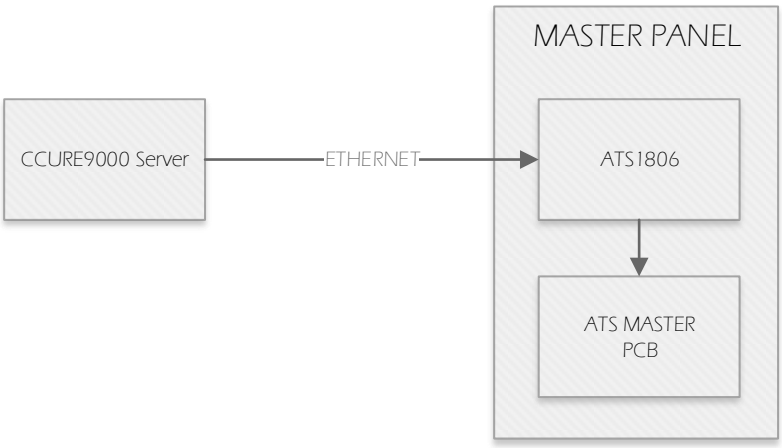
The following sections describe the tasks performed in the Master Panel form:

-
- Creating a Master Panel on page 32
- Configuring Master Panel Communications on page 33
- Accessing a Master Panel on page 34
- Deleting a Master Panel on page 36
- Synchronizing a Master Panel on page 37
- Defining Triggers for a Master Panel on page 38
- Removing Triggers for a Master Panel on page 39
- Adding Master Panel Actions to an Event on page 39
- Customizing Master Panel State Images on page 41

Configuration of a Master Panel

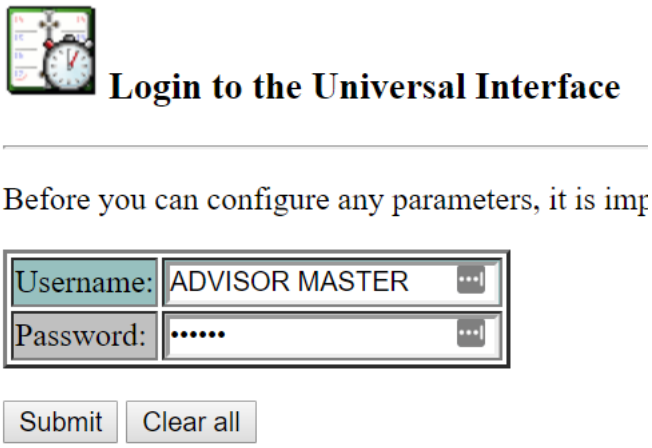
As shown from the Architecture, you require the Titan software to configure your Master Panel.

The Master Panel must be equipped with an 1806 ethernet card to allow communications with the plugin.



The default login credentials for an ATS1806 are:

- Username: ADVISOR MASTER
- Password: 998765



The default codes for the panel are:

- Engineer: 1278
- Manager: 1122

Default Password (for configuration – to be filled in on the General Tab in CCURE as well):

- 0000000000

Make sure the 1806 is configured to allow communications from the CCURE9000 Server. The image below shows the panel being set up for communication with a CCURE9000 Server at 192.168.2.80.

Setup the Central Station Network Parameters

Alarm Reporting Central Stations

Station	IP Address	Protocol	Port	Event Type	Encryption
1	0 .0 .0 .0	TCP	0	None	None
2	0 .0 .0 .0	TCP	0	None	None
3	0 .0 .0 .0	TCP	0	None	None

Management Central Stations

Station	IP Address	Protocol	Port	Event Type	Encryption
4	192 .168 .2 .80	UDP	3001	Computer	None

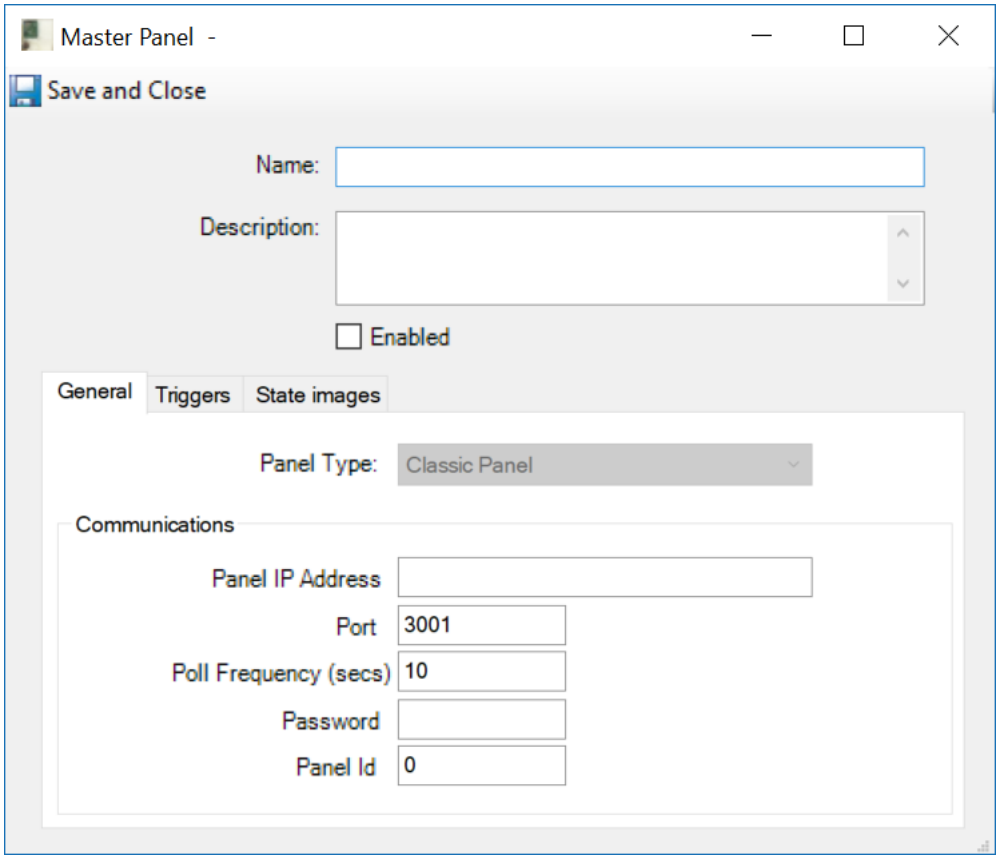
Master Panel Tabs

This section describes the following tabs of a Master Panel:

- The Master Panel General Tab on page 28
- The Master Panel Triggers Tab on page 29
- The Master Panel State Images Tab on page 31

The Master Panel General Tab

The General Tab is used to configure the communications for the panel.



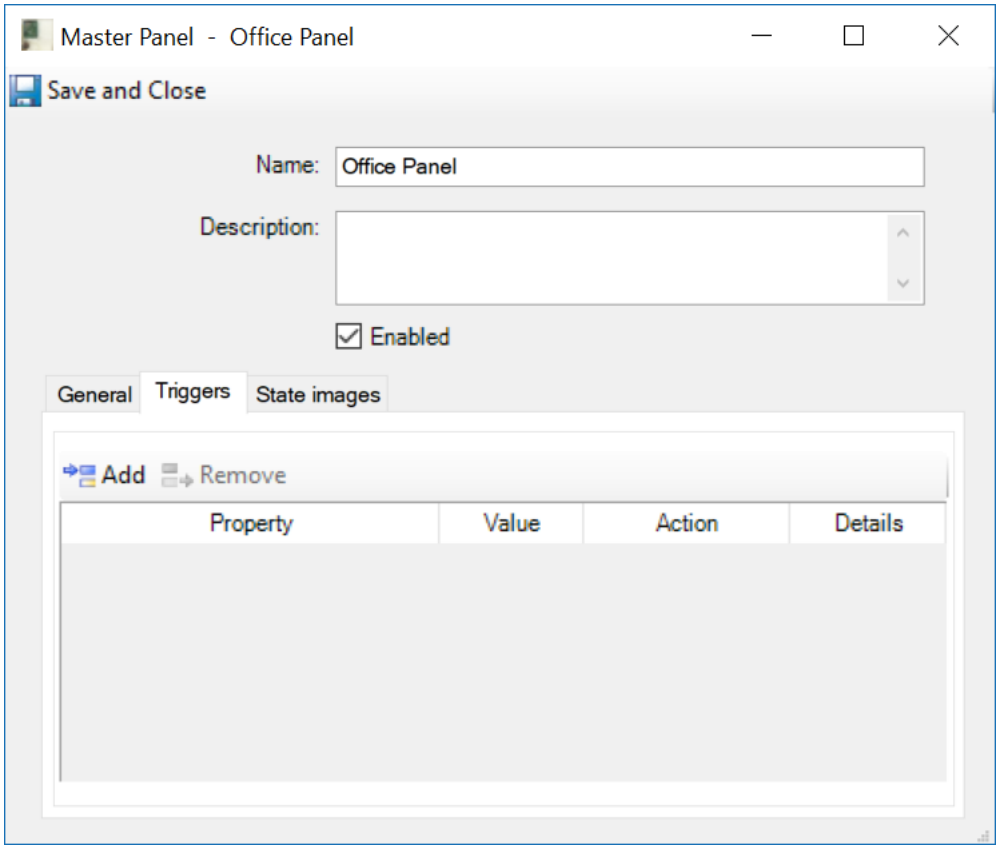
The following options can be configured:

Configuration option	Description
Name	Enter the name for the panel. This name must be UNIQUE within the Master Panels configured on the system.
Description	Optional. Enter a description for the panel. This can be for instance the location of the panel, or other useful details.
Enabled	Check this box to enable communications with the panel.
IP Address	The IP address of the panel.

Configuration option	Description
Port	The port number on which the panel listens for connections.
Poll Frequency	The polling frequency for the panel. Value is in seconds.
Password	The panel password as configured on the network interface.
Panel Id	The Panel Id as configured from the Master software.

The Master Panel Triggers Tab

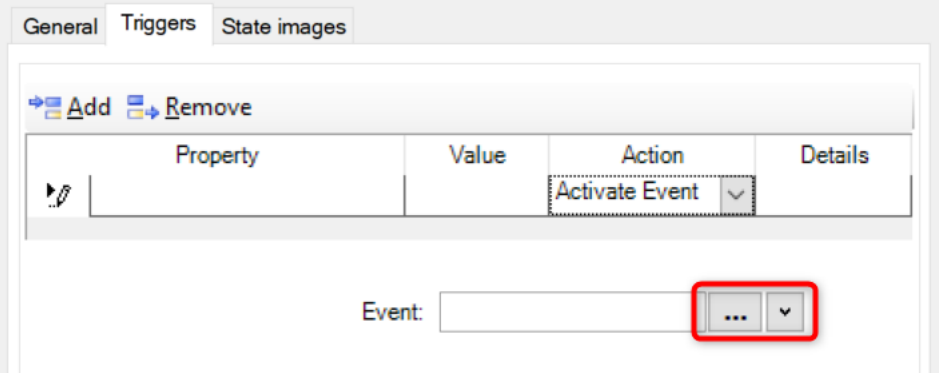
This tab is used to add triggers to the Master Panel and works in the same way triggers are added for standard C•CURE9000 components.



The following trigger combinations can be configured:

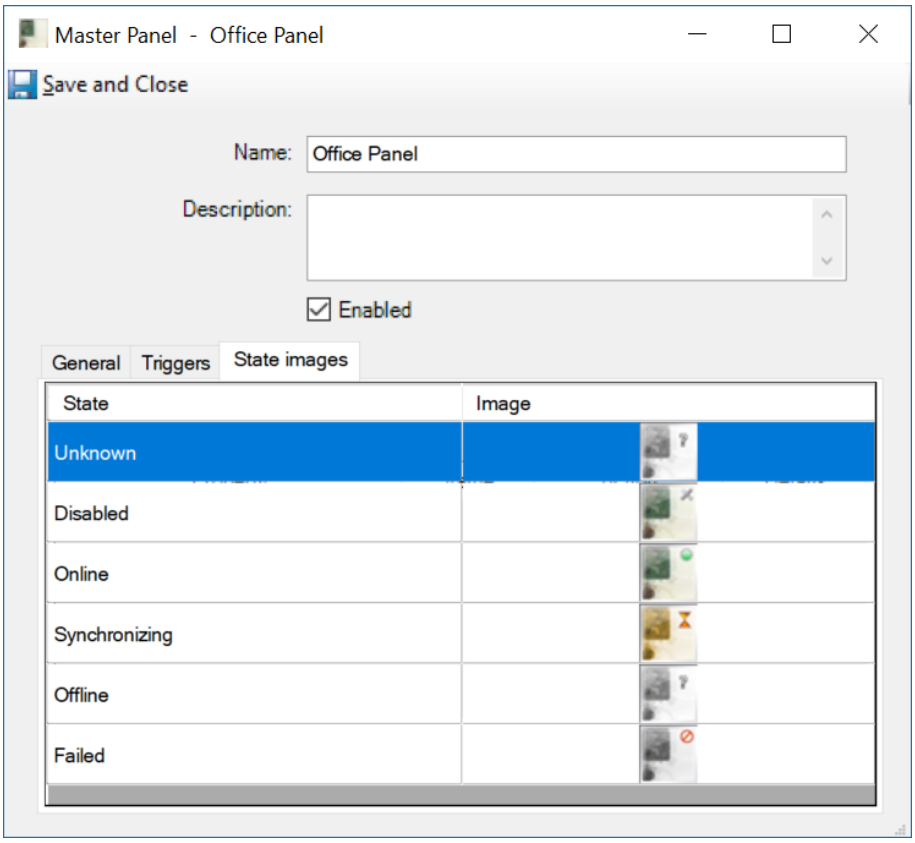
Property	Value	Action
Online State	▪ Offline ▪ Online	Activate Event
Communication State	▪ Offline ▪ Failed ▪ Normal ▪ Synchronizing	Activate Event

The following options can be configured:

Configuration option	Description
Property	The property of the Master Panel for which to configure a trigger. The available properties depend on the object type you are configuring.
Value	The value of the property upon which the trigger is activated. The available values depend on the selected property you are configuring.
Action	The Action to activate when the property and value combination evaluate to TRUE. The available actions depend on the object type you are configuring. When selecting an action that requires a target, a selection control will appear below the Action table.  Press the ... button to bring up the target selection dialog. Press the ˅ button to create a new object you want to use as the target object.
Details	This field displays the selected target object for the configured Action.

The Master Panel State Images Tab

This tab allows you to customize the state images of the Master Panel as displayed in activity viewers or maps. It is based on the Monitoring State of the panel.



The following states are valid for the Master Panel:

Master Panel State	Description
Unknown	The panel state is not known.
Disabled	The panel is not ENABLED.
Online	The panel is Online and Communicating with the Driver.
Synchronizing	The panel is synchronizing its configuration with the C•CURE system. Synchronization includes downloading the panel configuration.
Offline	The panel is Offline and not communicating with the Driver. Check network configuration and communications.
Failed	The panel failed communication attempts.

Master Panel Tasks

The following sections describe the tasks performed in the Master Panel form:

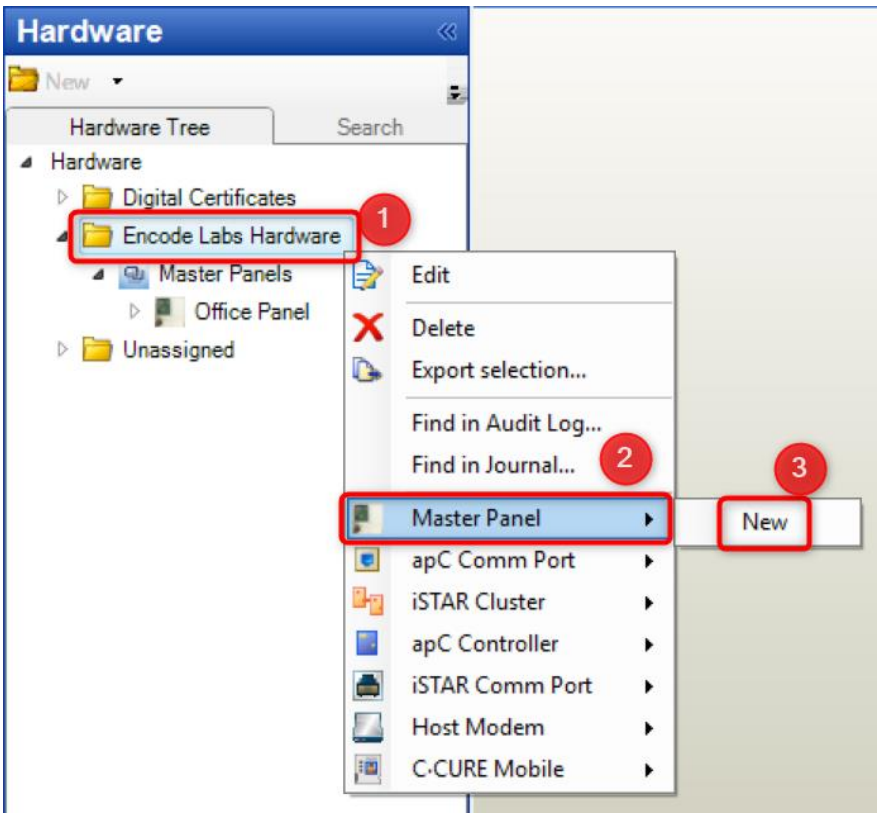
- Creating a Master Panel on page 32
- Configuring Master Panel Communications on page 33
- Accessing a Master Panel on page 34
- Deleting a Master Panel on page 36
- Synchronizing a Master Panel on page 37
- Setting DateTime of the Master Panel on page 37
- Defining Triggers for a Master Panel on page 38
- Removing Triggers for a Master Panel on page 39
- Adding Master Panel Actions to an Event on page 39
- Customizing Master Panel State Images on page 41

Creating a Master Panel

From the hardware tree

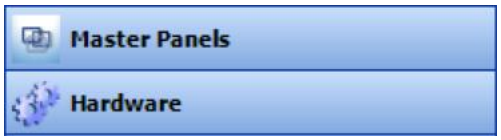
Go to the top level of the hardware tree.

1. Right click the hardware folder
2. Open the Master Panel menu
3. Click "New"



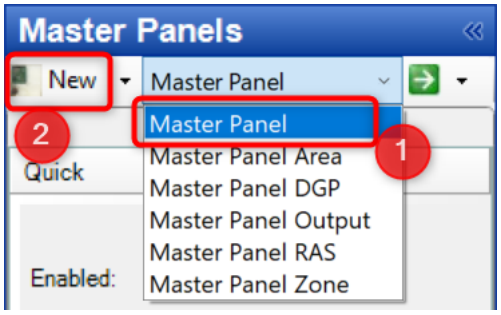
From the Master Panels pane or Hardware Pane menu

Select the Master Panels or Hardware pane



From the drop-down menu

1. Select Master Panel
2. Click "New"



Enter a name for the panel and click "Save and Close".

Next step: Configuring Master Panel Communications on page 33

Configuring Master Panel Communications

Prerequisites:

In order to configure a Master Panel, make sure you have done the following:

- The panel is connected with an IP module and is connected to the network
- You have the IP address of the panel
- You have the port number of the panel
- You added the server's IP address to the allowed Central Station Parameters

Starting configuration

Open the Master Panel from any location (hardware tree, dynamic view, Master Panel Pane...)

Fill in the different configuration fields for the panel:

Configuration option	Description
Name	Enter the name for the panel. This name must be UNIQUE within the Master Panels configured on the system.
Description	Optional. Enter a description for the panel. This can be for instance the location of the panel, or other useful details.
Enabled	Check this box to enable communications with the panel.
IP Address	The IP address of the panel.

Configuration option	Description
Port	The port number on which the panel listens for connections.
Poll Frequency	The polling frequency for the panel. Value is in seconds.
Password	The panel password as configured on the network interface.
Panel Id	The Panel Id as configured from the Master software.

Accessing a Master Panel

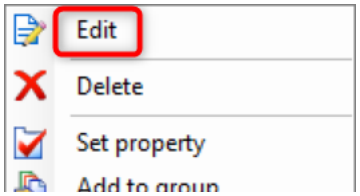
A Master Panel can be accessed from several locations:

- From the hardware tree (see page 34)
- From the Dynamic View (see page 34)
- From the activity monitoring (see page 35)
- From the panel monitoring menu (see page 36)
- From a Map (see page 36)

From the hardware tree

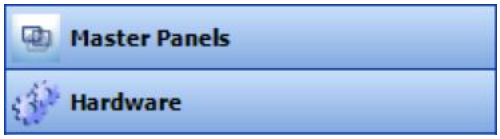
1. Navigate to the Master Panel group from the hardware tree, click the arrow to open the "Master Panels" node
2. Double click the panel you want to edit

3. You can also right click the Master Panel and select "Edit" from the popup menu



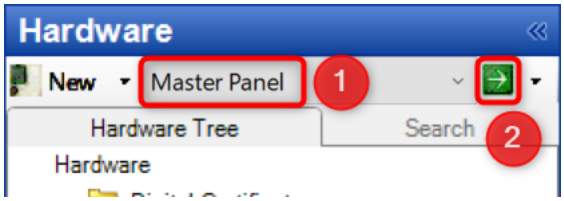
From the Dynamic View

Select the Master Panels or Hardware pane

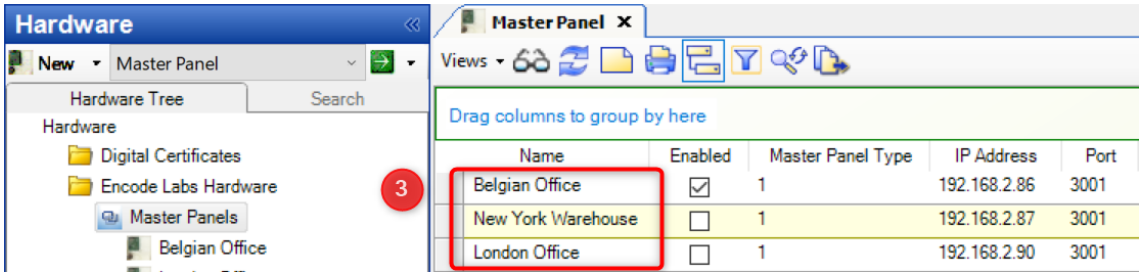


From the drop-down menu:

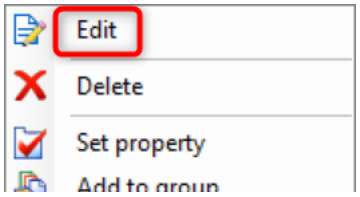
1. Select Master Panel
2. Click the green arrow to display all panels in the Dynamic View



3. In the resulting Master Panel list, double click on any panel

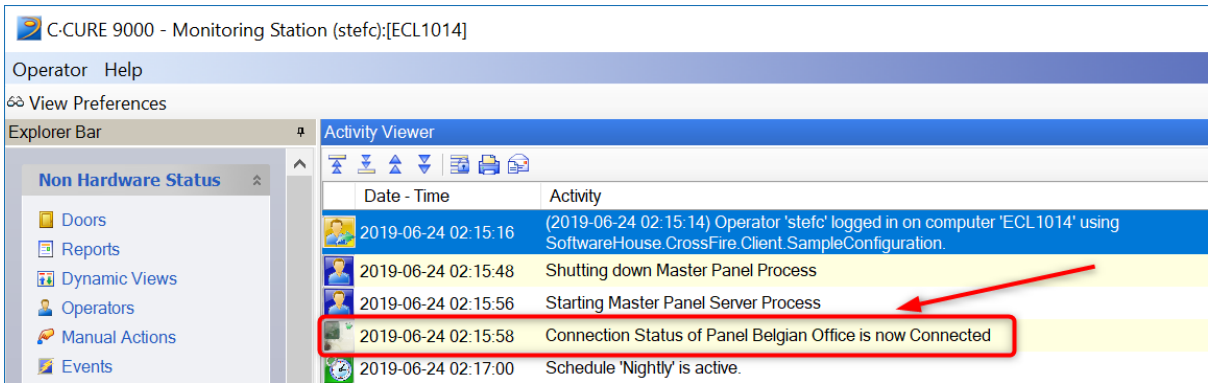


4. You can also right click any panel and select "Edit" from the popup menu



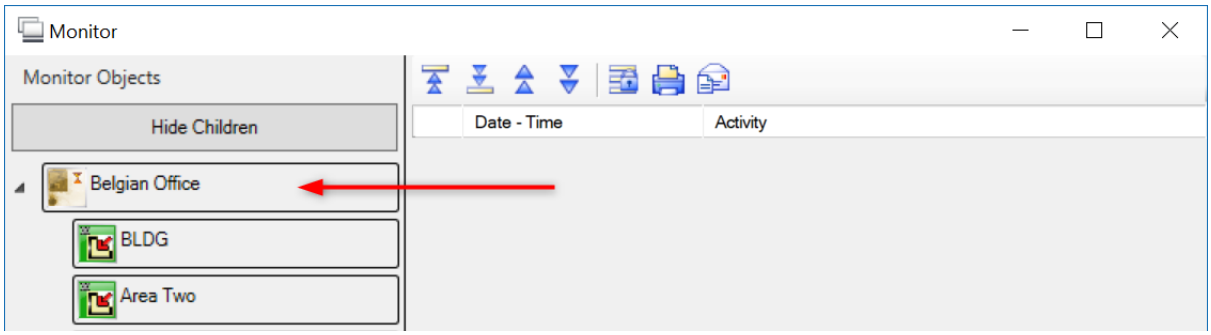
From the activity monitoring

Whenever a status image is present from a Master Panel, you can select it and access functions by right-clicking the icon.



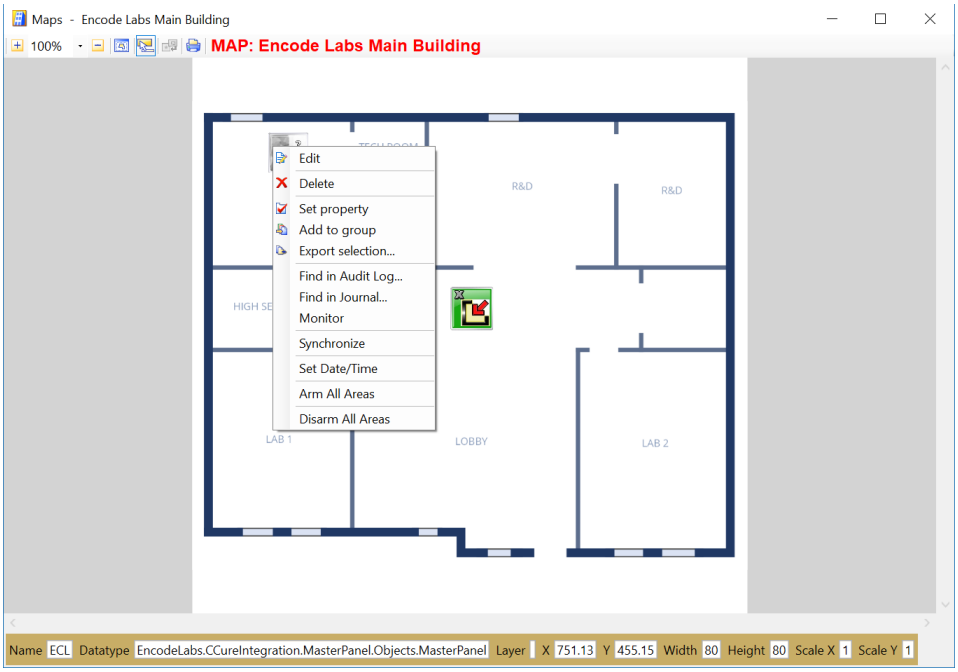
From the panel monitoring menu

Any object can be selected from the "Monitoring Objects" list, even if they appear in child nodes.



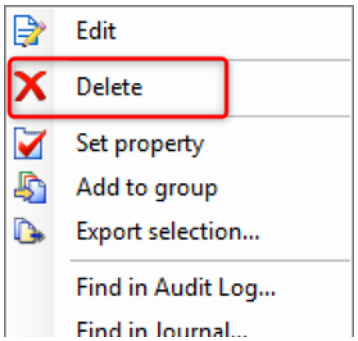
From a Map

To access the popup menu of the Master Panel, right click the icon on the map.



Deleting a Master Panel

Access a Master Panel through any method as documented in Accessing a Master Panel on page 34 and select the popup menu option, then select "Delete".



Synchronizing a Master Panel

After configuring a new Master Panel, you need to synchronize all its components with the C•CURE. This will create and save all components that are not known in the C•CURE.

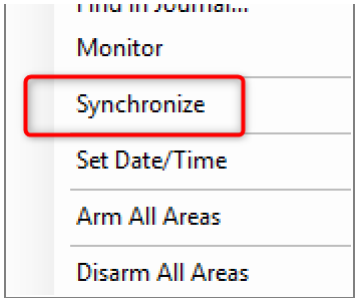
If any changes are made to the panel, it needs to be resynchronized so that the C•CURE has the latest configuration again.

When synchronizing a panel, components that no longer exist on the target panel will also be deleted from the C•CURE.

Only configured components will be synchronized to the C•CURE.

Performing the synchronization

Access a Master Panel through any method as documented in Accessing a Master Panel on page 34 and select the popup menu option, then select "Synchronize".



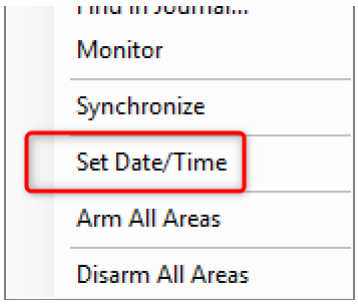
Setting DateTime of the Master Panel

You can set the DateTime of the Master Panel to match the CCURE Server DateTime. This can be done from 2 locations:

1. By manually sending a Set Date/Time command from the Panel popup menu
2. By programming an Event Action

Sending the manual Set Date/Time command

Access a Master Panel through any method as documented in Accessing a Master Panel on page 34 and select the popup menu option, then select "Set Date/Time".



Programming the Set Master Panel DateTime Event Action

Refer to Adding Master Panel Actions to an Event on page 39

Defining Triggers for a Master Panel

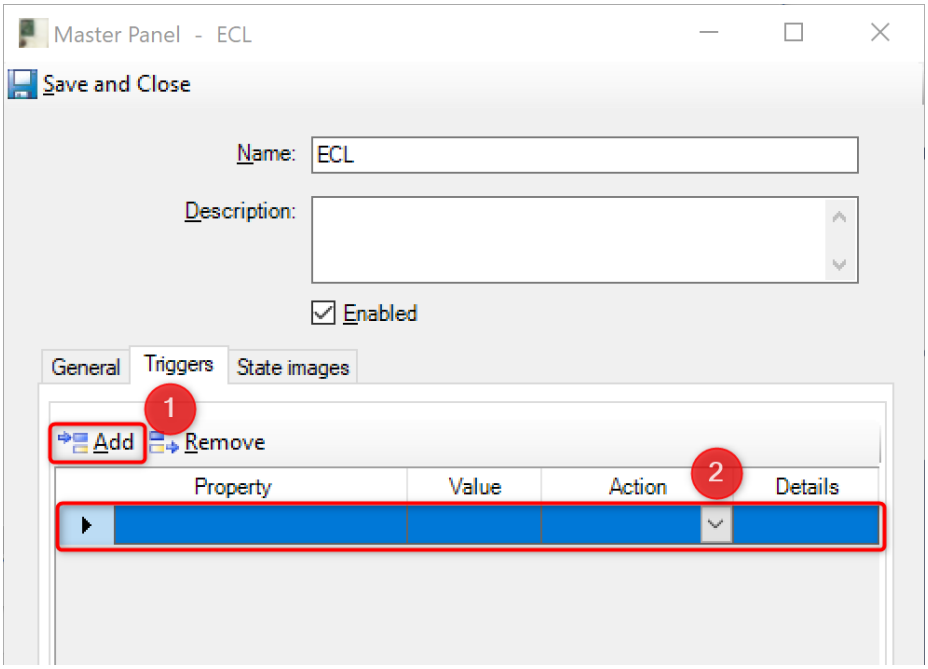
Property triggers can be added to the panel from the Triggers tab. They are used to activate events based on certain property states of the Master object.

The Master Panel itself is split into two parts: The panel and the virtual DGP16. For possible triggers on the virtual DGP, refer to Defining Triggers for a Master DGP on page 50.

Adding a trigger

Go to the Trigger tab

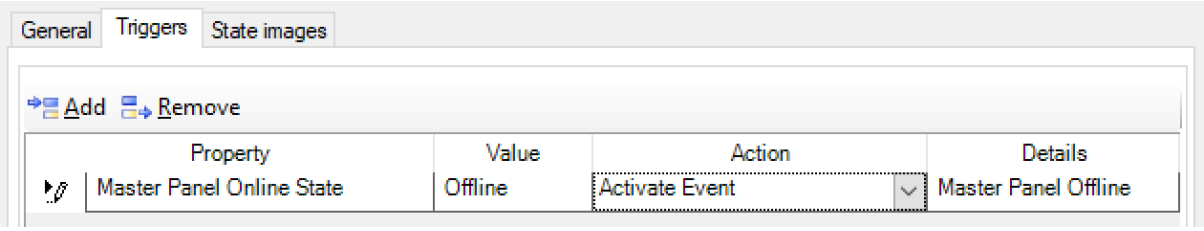
1. Click Add
2. Configure the options for the trigger



The following trigger combinations can be configured:

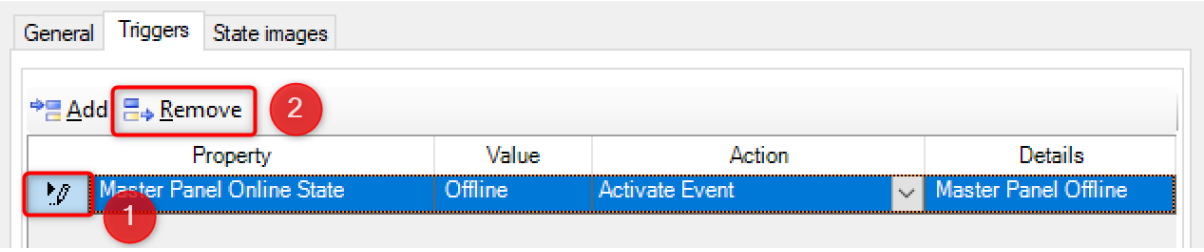
Property	Value	Action
Master Panel Online State	▪ Offline ▪ Online	Activate Event
Master Panel Communication State	▪ Normal ▪ Failed ▪ Offline ▪ Synchronizing	Activate Event

Example: Activate a Communication Fail event when the panel "Master Panel Online State" is "Offline".



Removing Triggers for a Master Panel

1. On the trigger tab, select the trigger you want to remove from the list by clicking the arrow next to the trigger line
    a. The complete line will be selected (here in blue)
2. Click "Remove"



After saving the panel, the trigger will be removed.

Adding Master Panel Actions to an Event

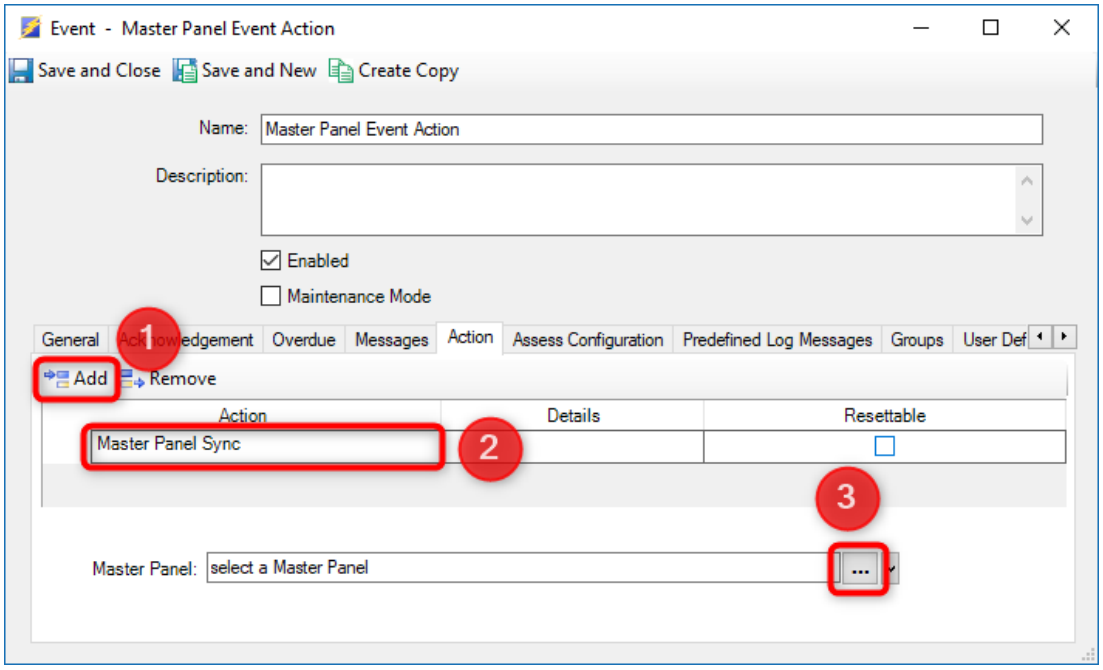
The following action is currently supported for Master Panels:

- Master Panel Set DateTime
- Master Panel Sync

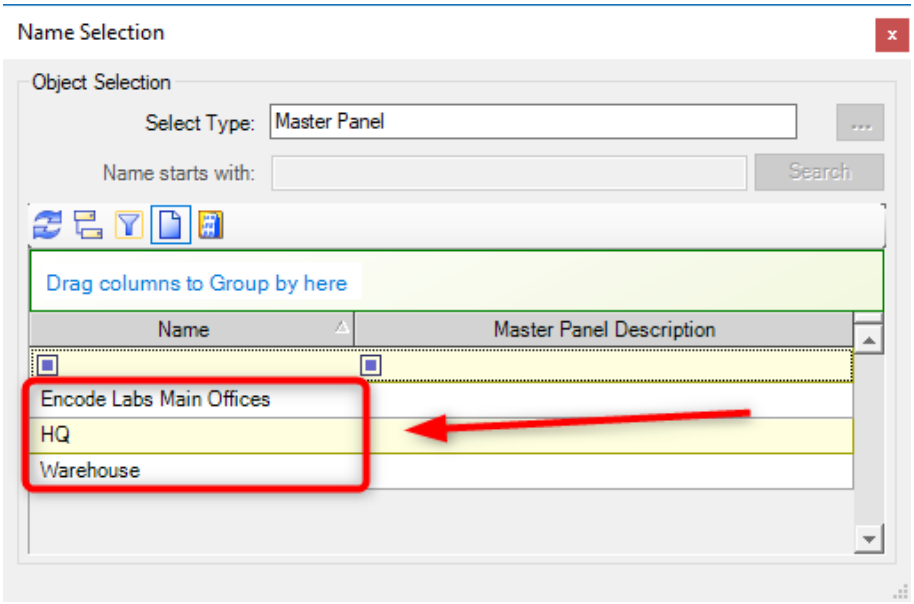
Adding the action to the action list

Open an event and navigate to the "Actions" tab

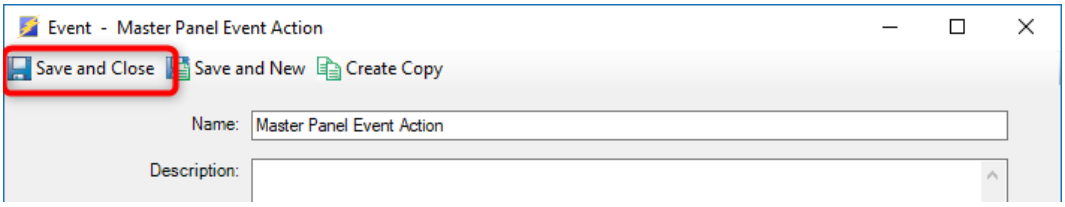
1. Click "Add"
2. Select the action you want to execute from the dropdown menu
3. Select the object on which to execute the action by clicking the ... button



You can select the object from the list by clicking on it.



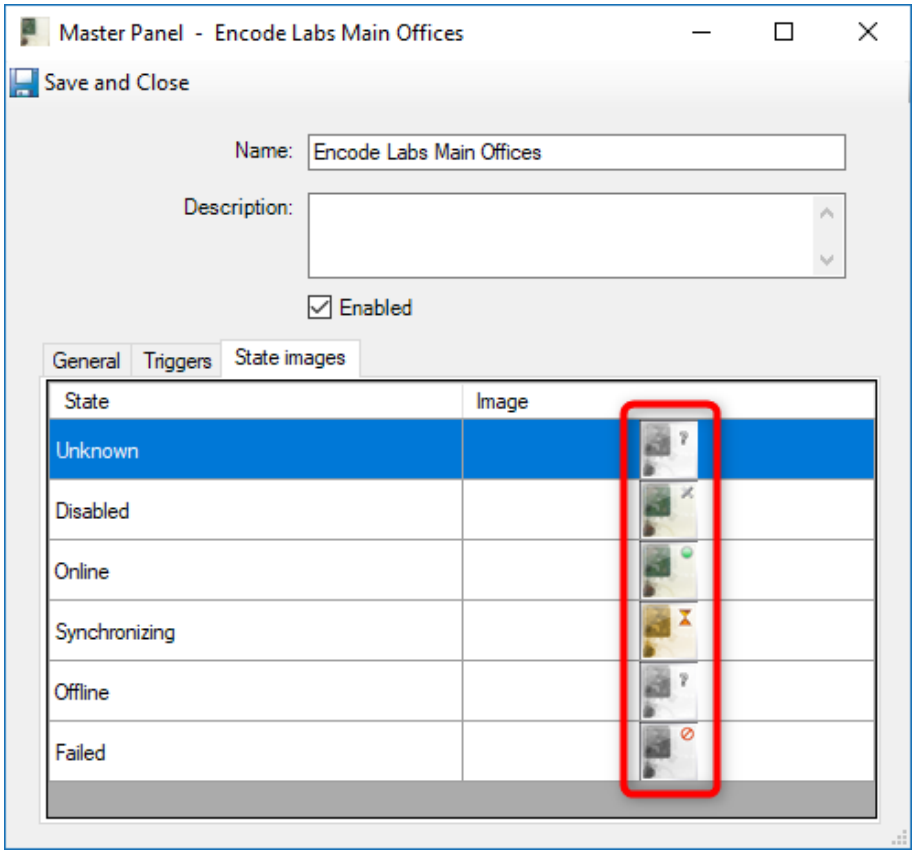
Finally, click "Save and close" to save your configuration



Customizing Master Panel State Images

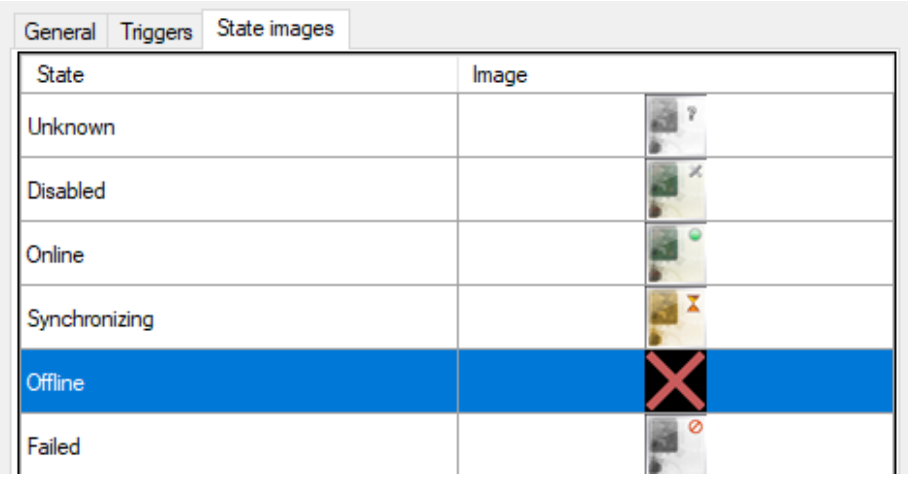
Navigate to the State Images tab.

Double click on the State image you want to change



Select the image you want from the file dialog.

Example changed state image:



Chapter 5

Master DGP

Overview

MASTER DGP OVERVIEW 43
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Tasks *43*
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Adding a trigger 50
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Master DGP Overview

The Master DGP's are created automatically upon synchronization with the Master Panel.

The section on Master DGP Tabs starts on page 44

The section on Master DGP Tasks starts on page 47

Tabs

The following sections provide more information about the Master Panel tabs and how to use them:

- The Master DGP Triggers Tab on page 44
- The Master DGP State Images Tab on page 46

Tasks

The following sections describe the tasks performed in the Master Panel form:

- Creating a Master DGP on page 47
- Accessing a Master DGP on page 47
- Deleting a Master DGP on page 50
- Defining Triggers for a Master DGP on page 50
- Removing Triggers for a Master DGP on page 51
- Customizing Master DGP State Images on page 51

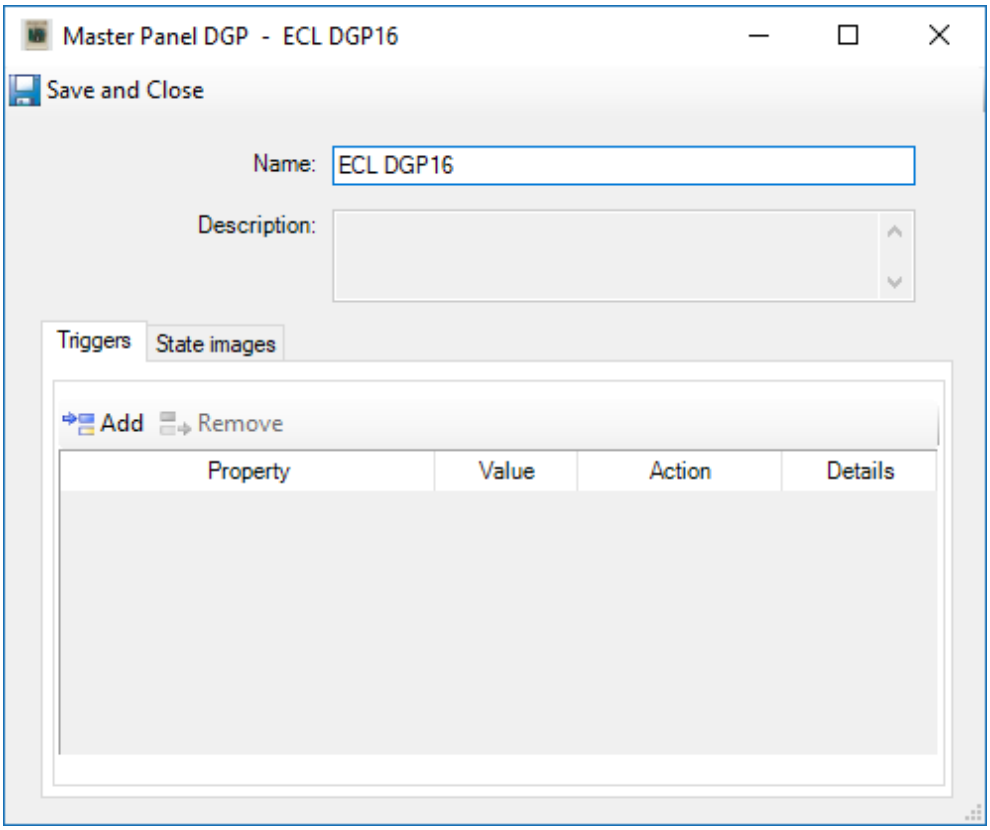
Master DGP Tabs

This section describes the following tabs of a Master DGP:

- The Master DGP Triggers Tab on page 44
- The Master DGP State Images Tab on page 46

The Master DGP Triggers Tab

This tab is used to add triggers to the Master Panel and works in the same way triggers are added for standard C•CURE9000 components.

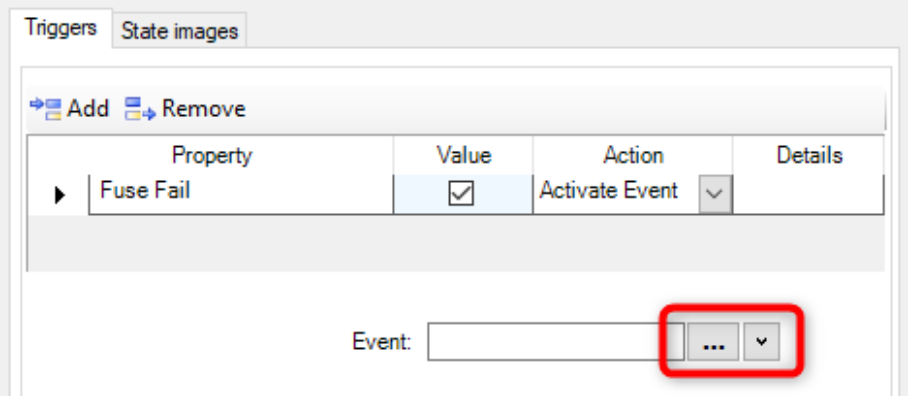


The following trigger combinations can be configured:

Property	Value	Action
Battery Missing	▪ True/False	Activate Event
Battery Test Fail	▪ True/False	Activate Event
Fuse Fail	▪ True/False	Activate Event
Inhibited	▪ True/False	Activate Event
Low Battery	▪ True/False	Activate Event
Mains Fail	▪ True/False	Activate Event

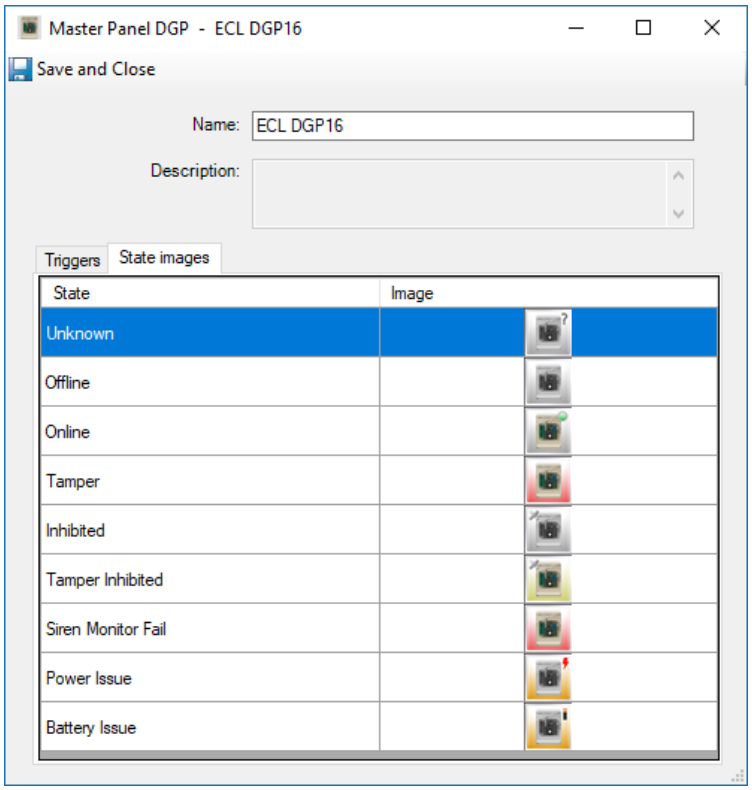
Property	Value	Action
Offline	▪ True/False	Activate Event
Siren Fail	▪ True/False	Activate Event
Tamper	▪ True/False	Activate Event
Tamper Inhibited	▪ True/False	Activate Event

The following options can be configured:

Configuration option	Description
Property	The property of the Master Panel for which to configure a trigger. The available properties depend on the object type you are configuring.
Value	The value of the property upon which the trigger is activated. The available values depend on the selected property you are configuring.
Action	The Action to activate when the property and value combination evaluate to TRUE. The available actions depend on the object type you are configuring. When selecting an action that requires a target, a selection control will appear below the Action table.  Press the ... button to bring up the target selection dialog. Press the ˅ button to create a new object you want to use as the target object.
Details	This field displays the selected target object for the configured Action.

The Master DGP State Images Tab

This tab allows you to customize the state images of the Master DGP as displayed in activity viewers or maps. It is based on the Monitoring State of the DGP.



Master DGP Tasks

The following sections describe the tasks performed on a Master DGP:

- Creating a Master DGP on page 47
- Accessing a Master DGP on page 47
- Deleting a Master DGP on page 50
- Defining Triggers for a Master DGP on page 50
- Removing Triggers for a Master DGP on page 51
- Customizing Master DGP State Images on page 51

Creating a Master DGP

DGP's cannot be created manually. You need to synchronize the panel in order to create it.

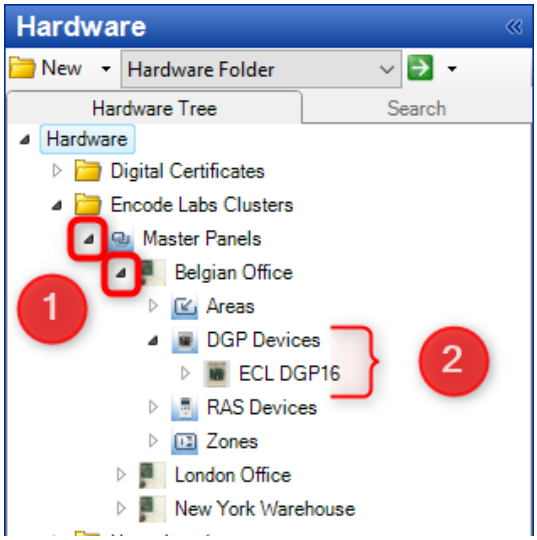
Accessing a Master DGP

A Master DGP can be accessed from several locations:

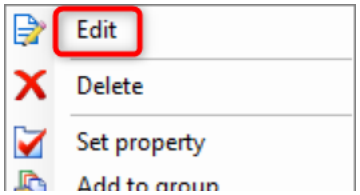
- From the hardware tree (see page 47)
- From the Dynamic View (see page 48)
- From the activity monitoring (see page 49)
- From the panel monitoring menu (see page 49)
- From a Map (see page 49)

From the hardware tree

5. Navigate to the Master Panel group from the hardware tree, click the arrow to open the "Master Panels" node and open a Master Panel.
6. Inside the panel you will find the DGP devices. Double click the DGP device you want to edit

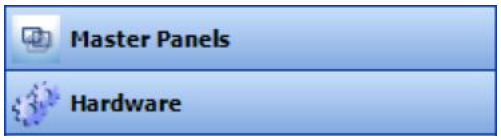


7. You can also right click the Master DGP and select "Edit" from the popup menu



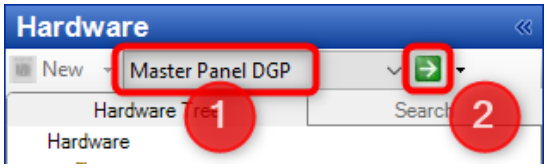
From the Dynamic View

Select the Master Panels or Hardware pane

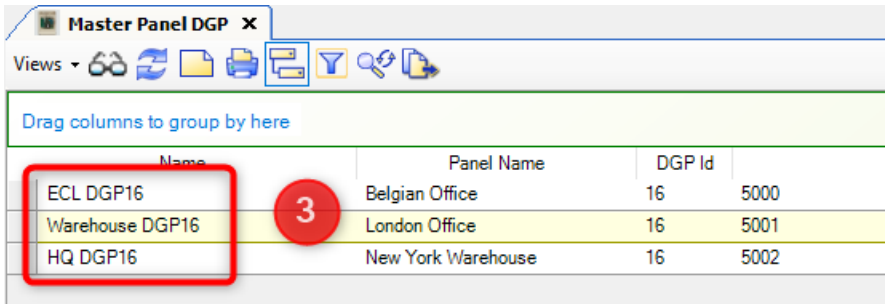


From the drop-down menu:

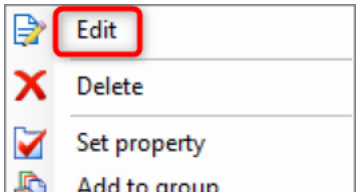
4. Select Master Panel DGP
5. Click the green arrow to display all DGP's in the Dynamic View



6. In the resulting Master DGP list, double click on any DGP

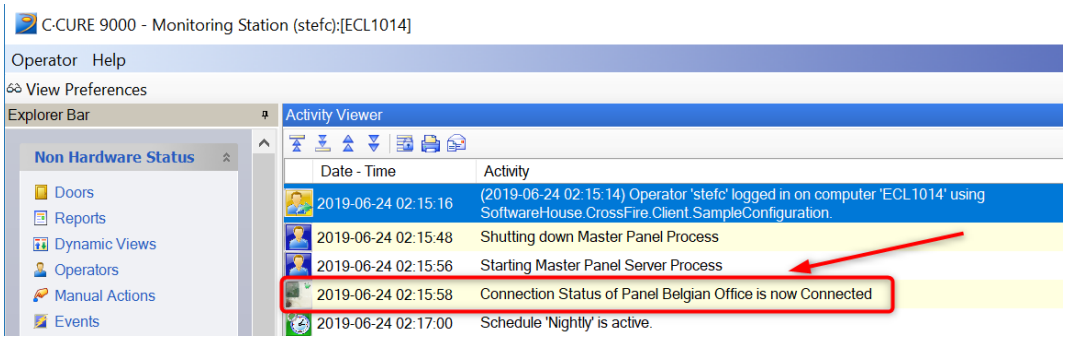


8. You can also right click any DGP and select "Edit" from the popup menu



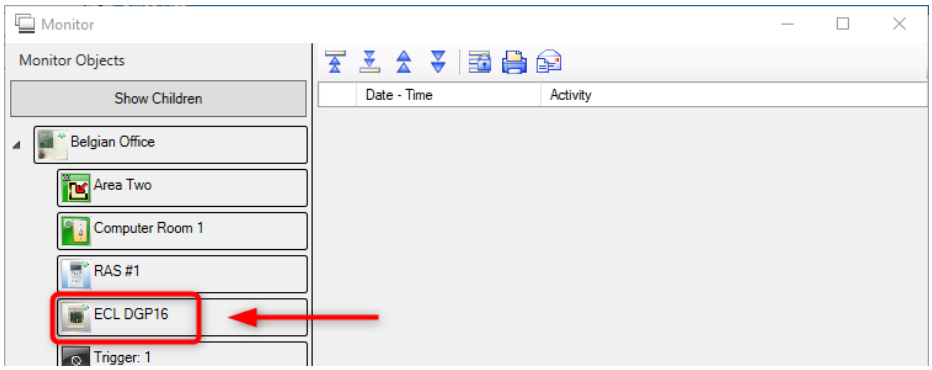
From the activity monitoring

Whenever a status image is present from a Master DGP, you can select it and access functions by right-clicking the icon.



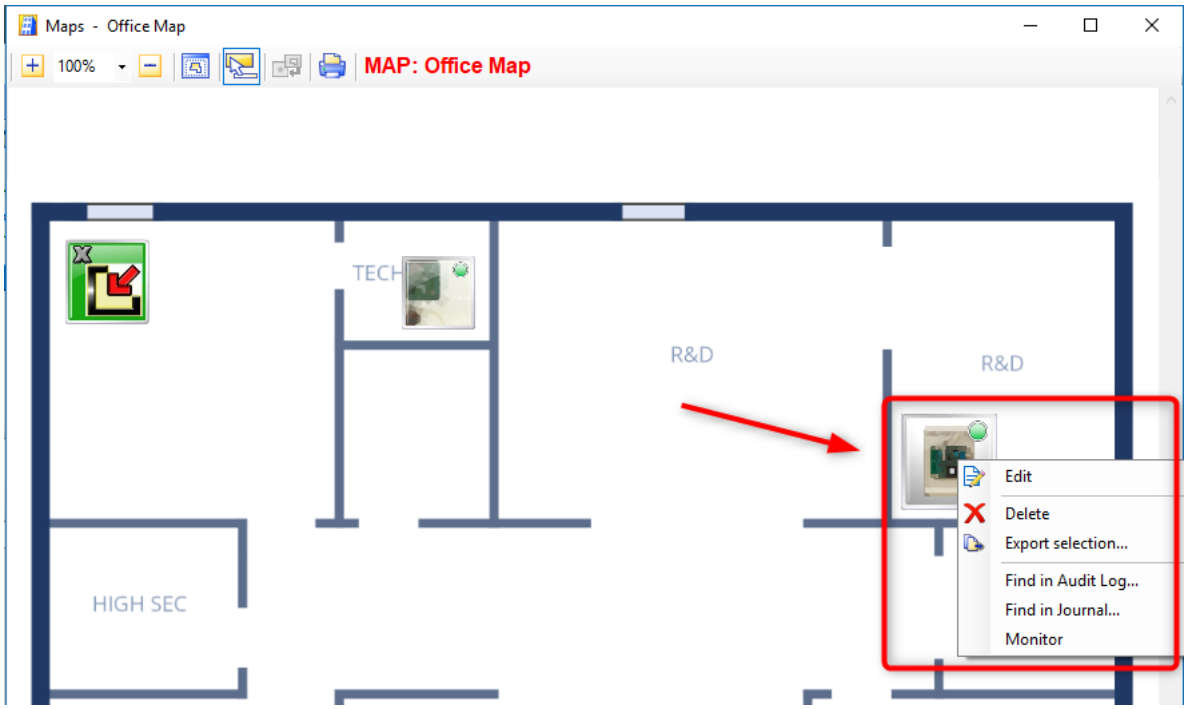
From the panel monitoring menu

Any object can be selected from the "Monitoring Objects" list, even if they appear in child nodes.



From a Map

To access the popup menu of the DGP, right click the icon on the map.



Deleting a Master DGP

It is advised not to delete the DGP directly. If you want to remove the panel itself, you can do so from the panel menu. This will also delete the DGP.

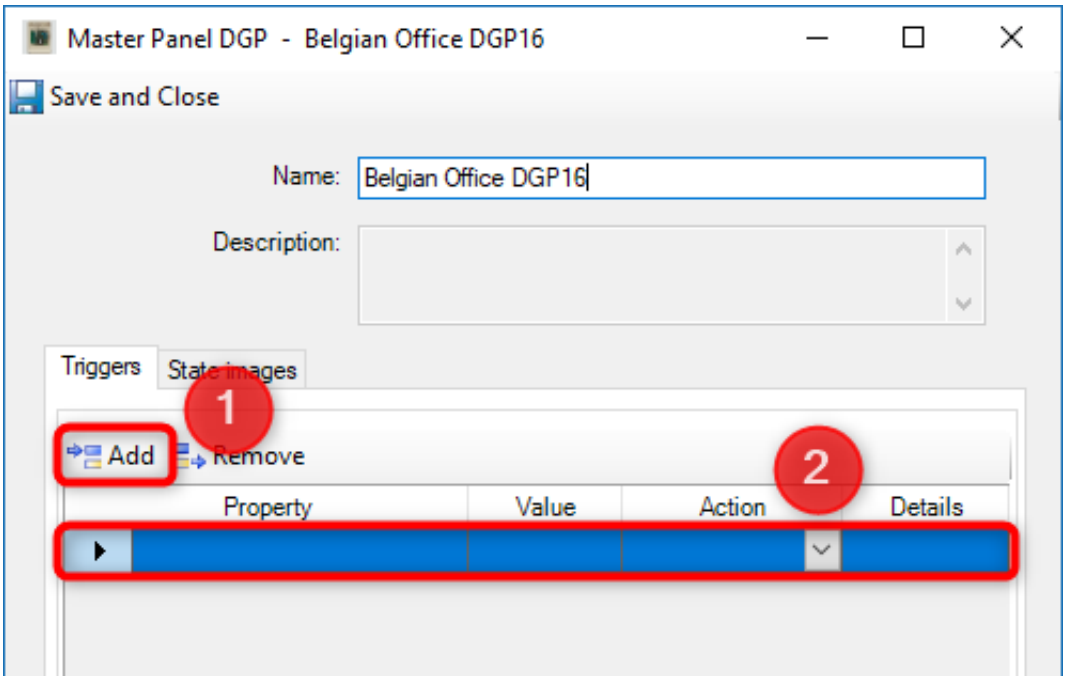
Defining Triggers for a Master DGP

Property triggers can be added to the DGP from the Triggers tab. They are used to activate events based on certain property states of the Master object.

Adding a trigger

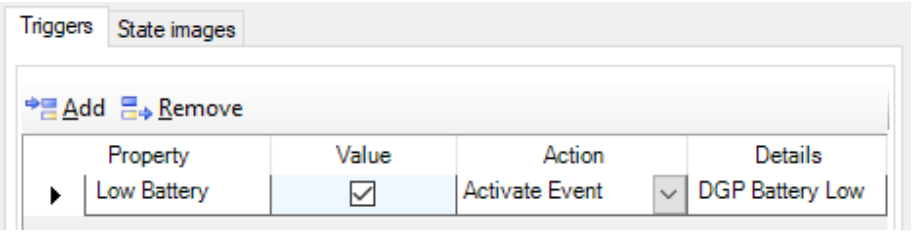
Go to the Trigger tab

1. Click Add
2. Configure the options for the trigger



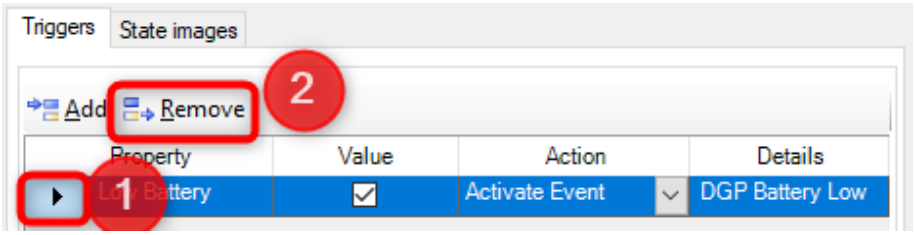
For a list of available triggers, refer to The Master DGP Triggers Tab on page 44.

Example: Activate a Communication Fail event when the panel "Master Panel Online State" is "Offline".



Removing Triggers for a Master DGP

1. On the trigger tab, select the trigger you want to remove from the list by clicking the arrow next to the trigger line
    a. The complete line will be selected (here in blue)
2. Click "Remove"

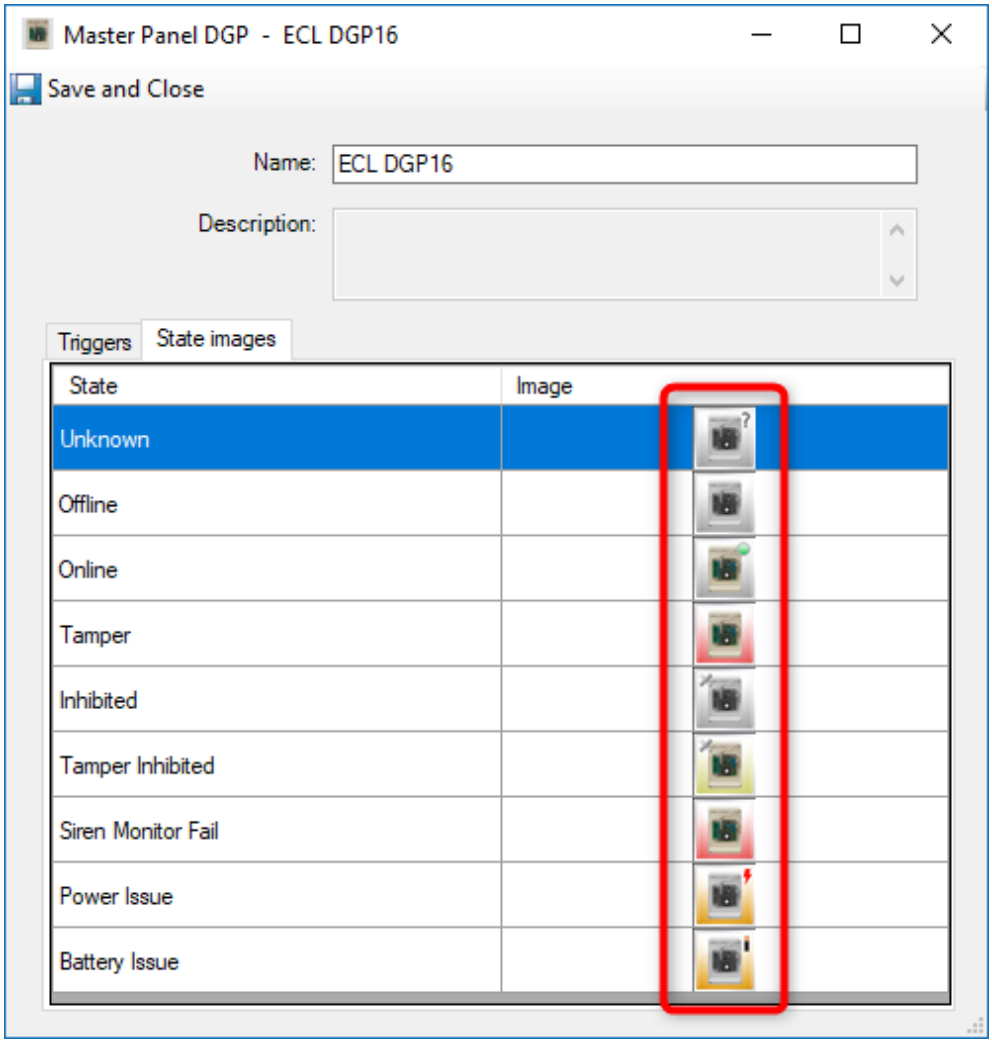


After saving the DGP, the trigger will be removed.

Customizing Master DGP State Images

Navigate to the State Images tab.

Double click on the State image you want to change



Select the image you want from the file dialog.

Chapter 6

Master Area

Overview

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Master Area Overview

The Master Areas are created automatically upon synchronization with the Master Panel.

The section on Master Area Tabs starts on page 54

The section on Master Area Tasks starts on page 57

Tabs

The following sections provide more information about the Master Panel tabs and how to use them:

- The Master Area Triggers Tab on page 54
- The Master Area State Images Tab on page 56

Tasks

The following sections describe the tasks performed in the Master Panel form:

- Creating a Master Area on page 57
- Accessing a Master Area on page 57
- Deleting a Master Area on page 60
- Arming/Disarming a Master Area on page 60
- Defining Triggers for a Master Area on page 60
- Removing Triggers for a Master Area on page 61
- Customizing Master Area State Images on page 62

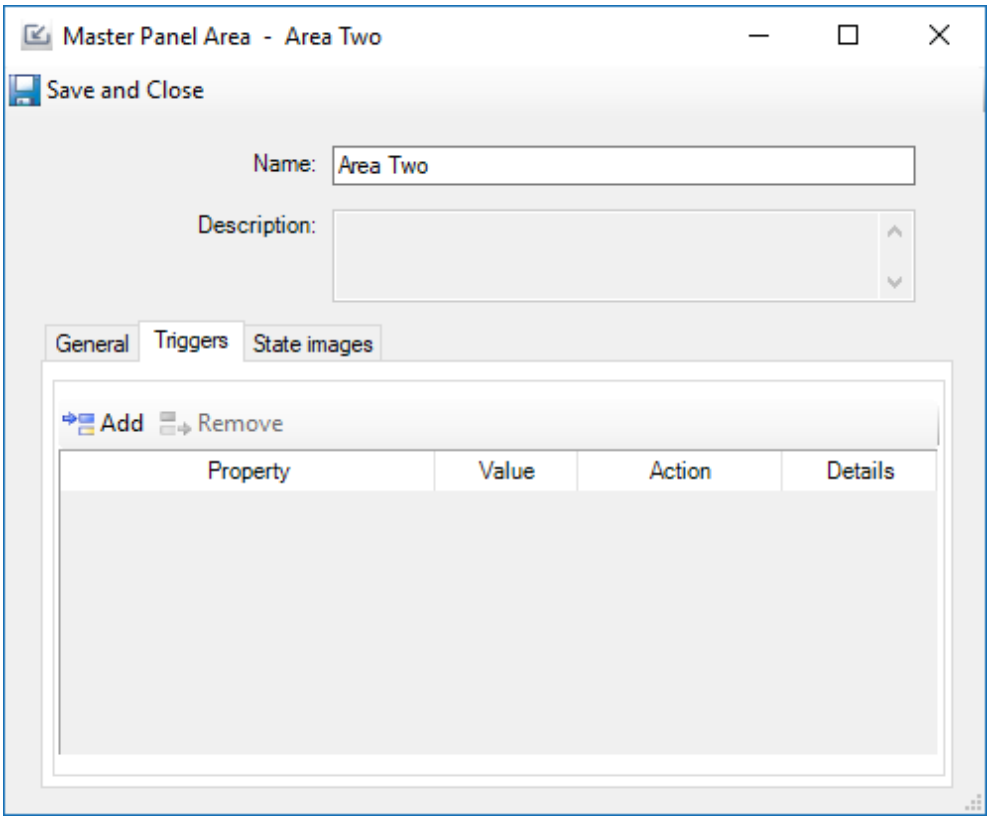
Master Area Tabs

This section describes the following tabs of a Master Panel:

- The Master Area Triggers Tab on page 54
- The Master Area State Images Tab on page 56

The Master Area Triggers Tab

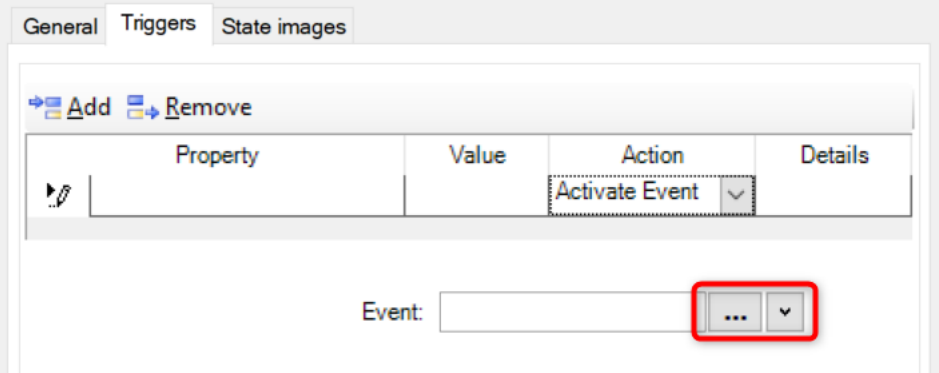
This tab is used to add triggers to the Master Area and works in the same way triggers are added for standard C•CURE9000 components.



The following trigger combinations can be configured:

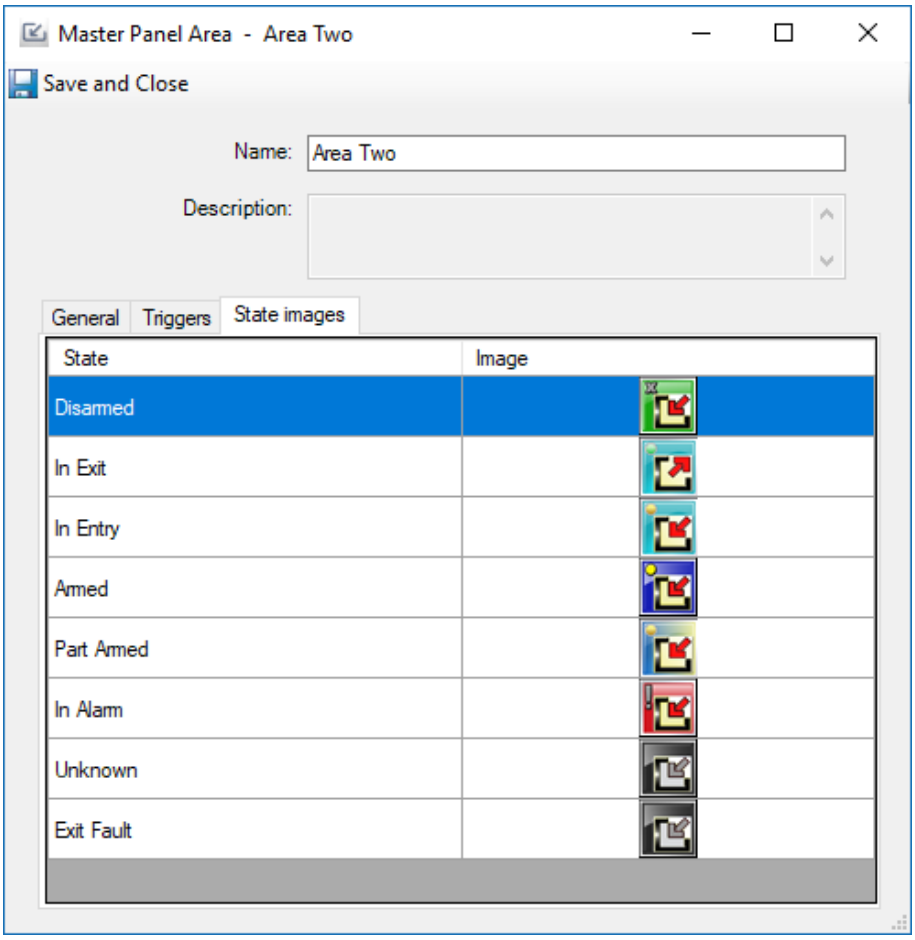
Property	Value	Action
Area State	▪ Armed ▪ Disarmed ▪ In Entry ▪ In Exit ▪ Part Armed ▪ In Alarm ▪ Exit Fault	Activate Event

The following options can be configured:

Configuration option	Description
Property	The property of the Master Area for which to configure a trigger. The available properties depend on the object type you are configuring.
Value	The value of the property upon which the trigger is activated. The available values depend on the selected property you are configuring.
Action	The Action to activate when the property and value combination evaluate to TRUE. The available actions depend on the object type you are configuring. When selecting an action that requires a target, a selection control will appear below the Action table.  Press the ... button to bring up the target selection dialog. Press the ˅ button to create a new object you want to use as the target object.
Details	This field displays the selected target object for the configured Action.

The Master Area State Images Tab

This tab allows you to customize the state images of the Master Area as displayed in activity viewers or maps. It is based on the Monitoring State of the area.



Master Area Tasks

The following sections describe the tasks performed in a Master Area:

- Creating a Master Area on page 57
- Accessing a Master Area on page 57
- Deleting a Master Area on page 60
- Arming/Disarming a Master Area on page 60
- Defining Triggers for a Master Area on page 60
- Removing Triggers for a Master Area on page 61
- Customizing Master Area State Images on page 62

Creating a Master Area

Master Areas cannot be created manually. You need to synchronize the panel in order to create them.

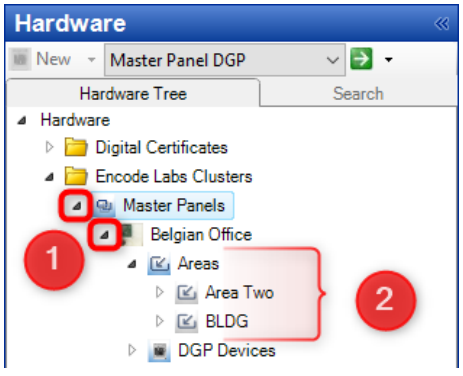
Accessing a Master Area

A Master Area can be accessed from several locations:

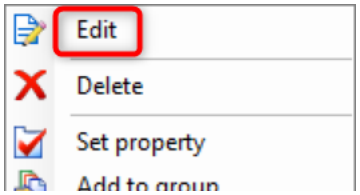
- From the hardware tree (see page 57)
- From the Dynamic View (see page 58)
- From the activity monitoring (see page 58)
- From the panel monitoring menu (see page 59)
- From a Map (see page 59)

From the hardware tree

1. Navigate to the Master Panel group from the hardware tree, click the arrow to open the "Master Panels" node
2. Open the Areas group and double click the area you want to edit

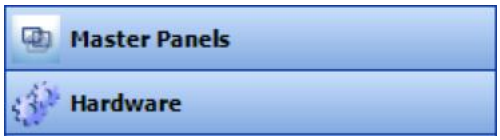


3. You can also right click the Master Area and select "Edit" from the popup menu



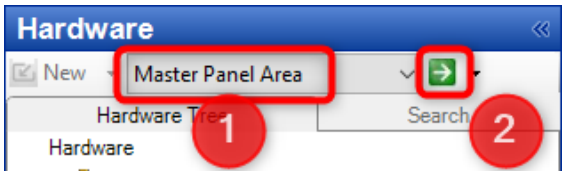
From the Dynamic View

Select the Master Panels or Hardware pane

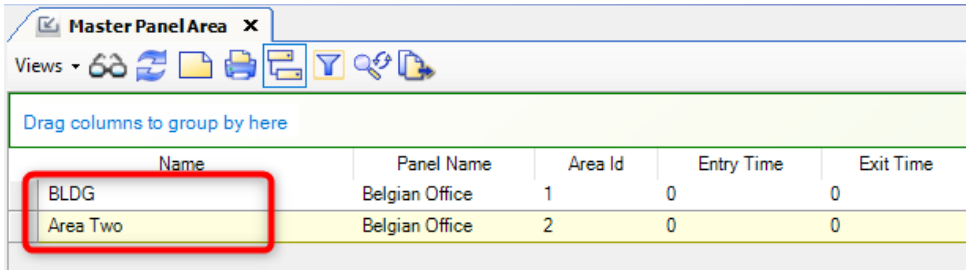


From the drop-down menu:

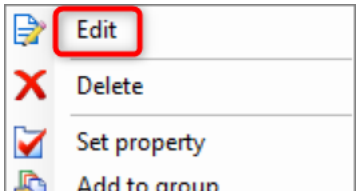
1. Select Master Panel Area
2. Click the green arrow to display all areas in the Dynamic View



3. In the resulting Master Panel list, double click on any panel

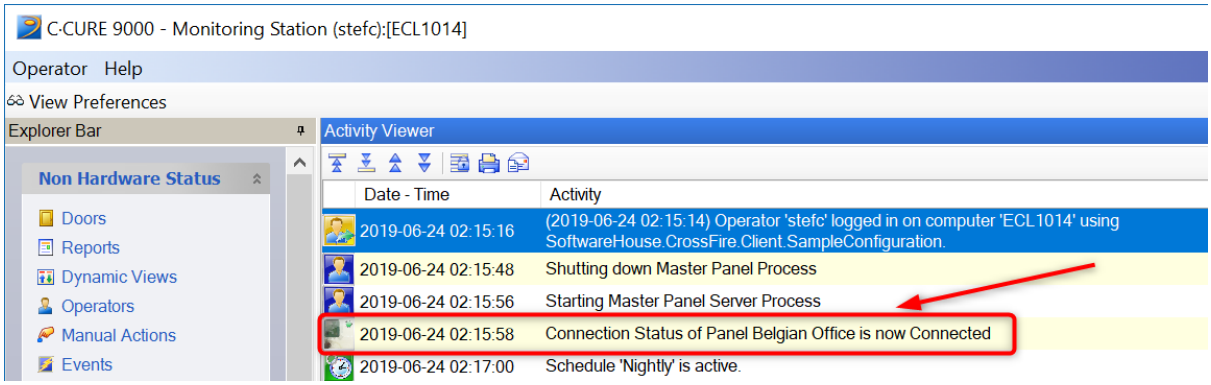


4. You can also right click any panel and select "Edit" from the popup menu



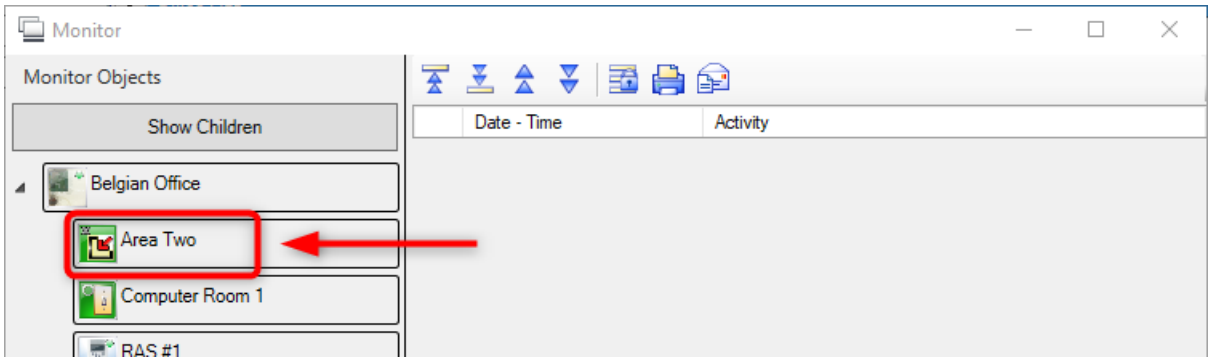
From the activity monitoring

Whenever a status image is present from a Master Area, you can select it and access functions by right-clicking the icon.



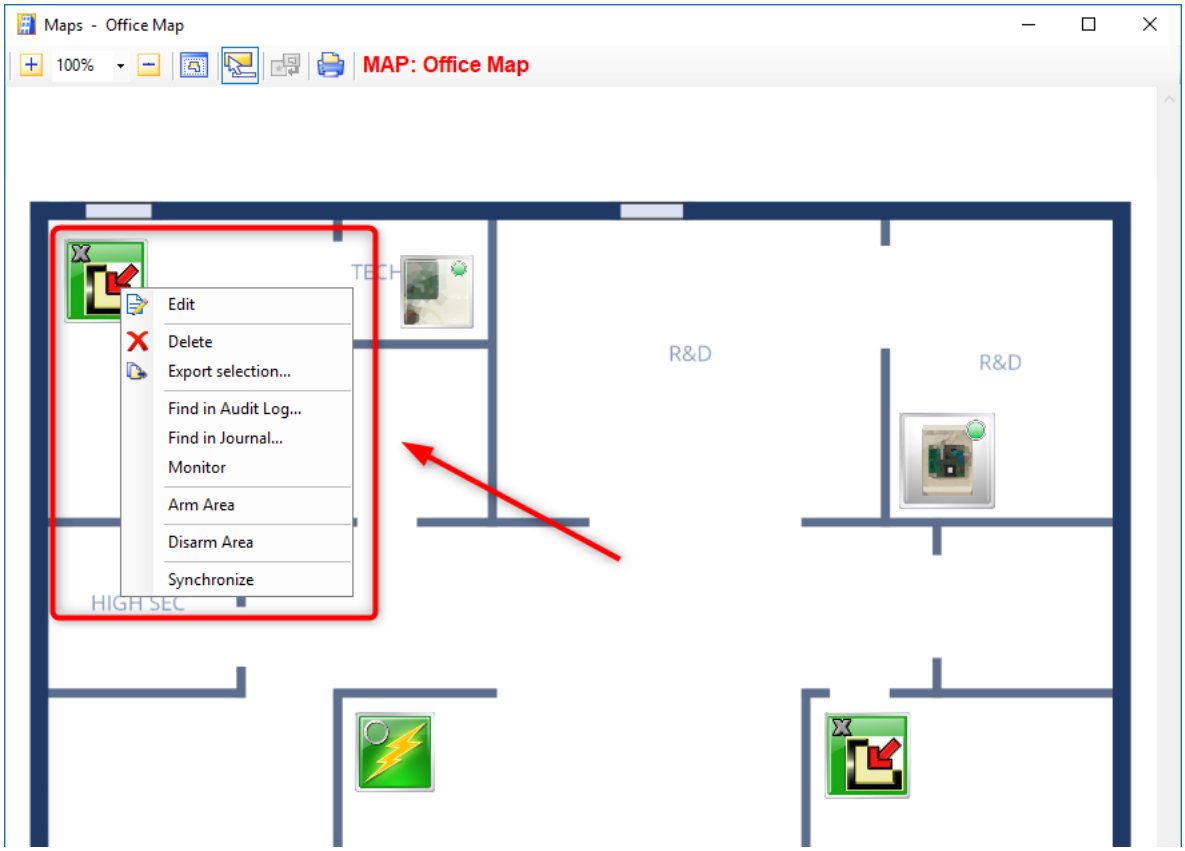
From the panel monitoring menu

Any object can be selected from the "Monitoring Objects" list, even if they appear in child nodes.



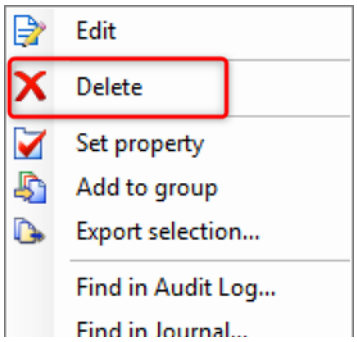
From a Map

To access the popup menu of the Master Area, right click the icon on the map.



Deleting a Master Area

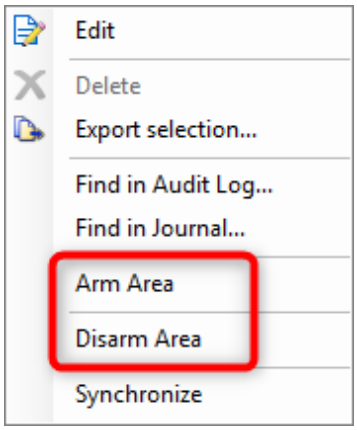
Access a Master Area through any method as documented in Accessing a Master Area on page 57 and select the popup menu option, then select "Delete".



You can also unconfigure the area from the Master itself and perform a synchronization. The driver will then delete any missing areas.

Arming/Disarming a Master Area

Access a Master Area through any method as documented in Accessing a Master Area on page 57 and select the popup menu option, then select "Arm Area" or "Disarm Area".



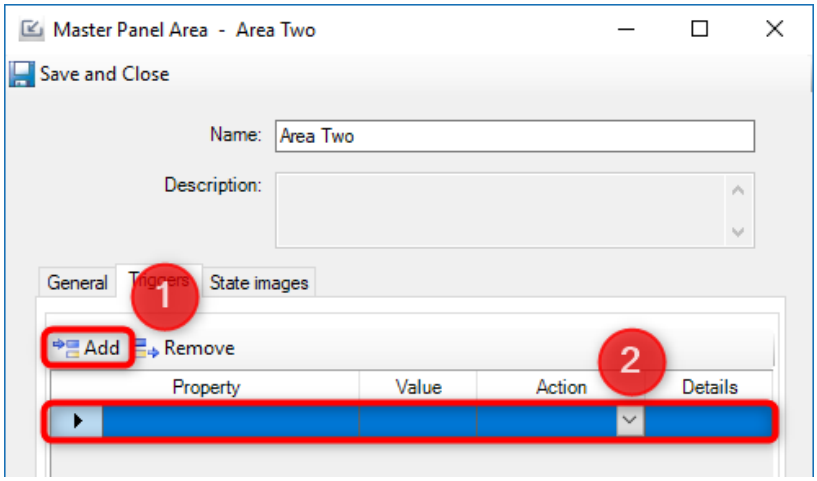
Defining Triggers for a Master Area

Property triggers can be added to the area from the Triggers tab. They are used to activate events based on certain property states of the Master object.

Adding a trigger

Go to the Trigger tab

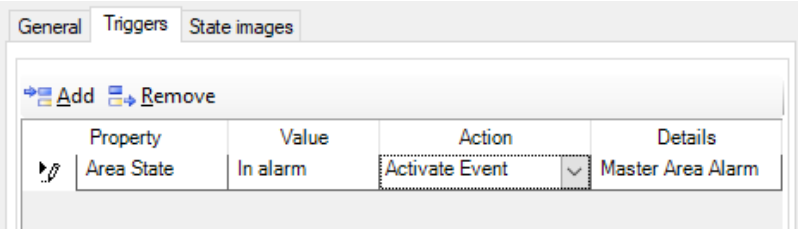
1. Click Add
2. Configure the options for the trigger



The following trigger combinations can be configured:

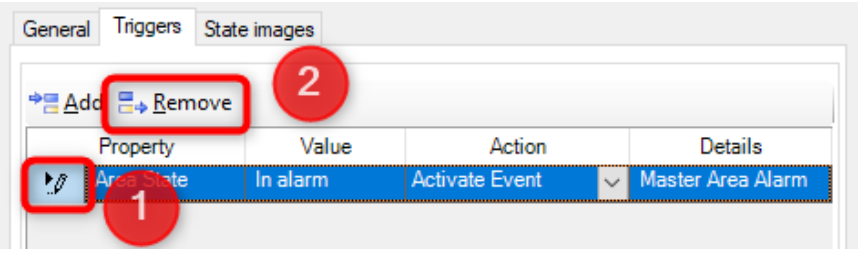
Property	Value	Action
Area State	▪ Armed ▪ Disarmed ▪ In Entry ▪ In Exit ▪ Part Armed ▪ In Alarm ▪ Exit Fault	Activate Event

Example: Activate an Alarm event when the area is "in alarm".



Removing Triggers for a Master Area

1. On the trigger tab, select the trigger you want to remove from the list by clicking the arrow next to the trigger line
    a. The complete line will be selected (here in blue)
2. Click "Remove"

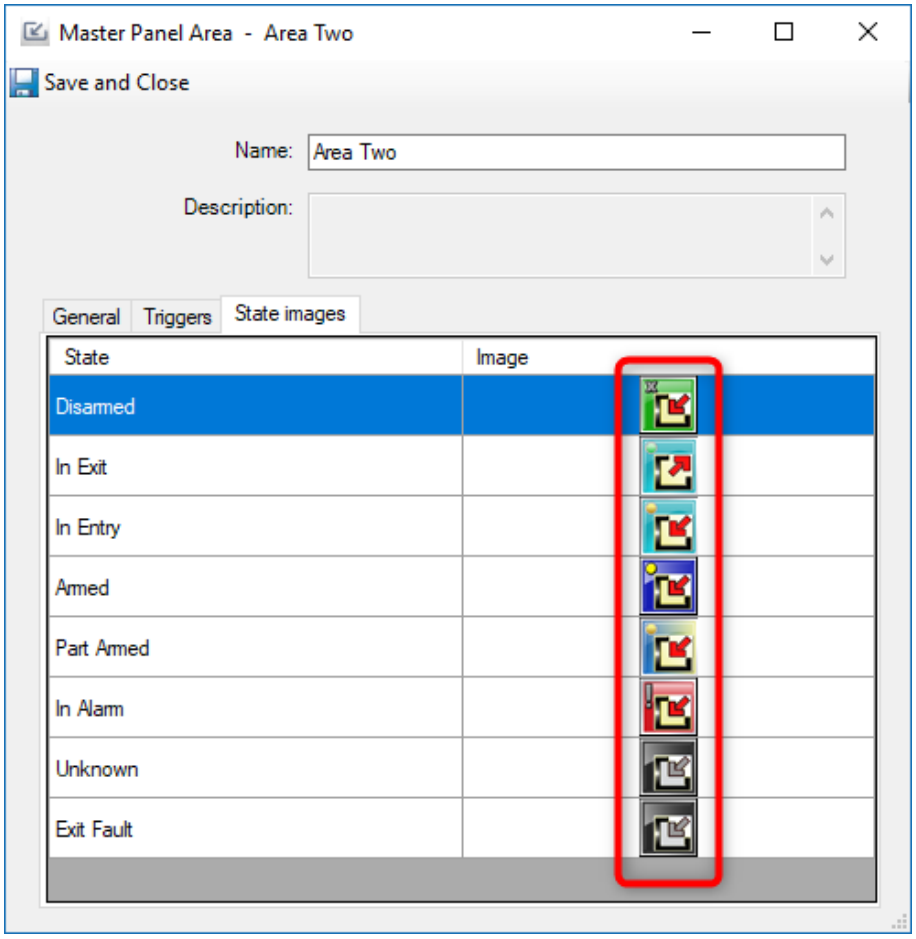


After saving the area, the trigger will be removed.

Customizing Master Area State Images

Navigate to the State Images tab.

Double click on the State image you want to change



Select the image you want from the file dialog.

Chapter 7

Master Zone

Overview

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Customizing Master Zone State Images *73*

Master Zone Overview

The Master Zones are created automatically upon synchronization with the Master Panel.

The section on Master Area Tabs starts on page 54

The section on Master Area Tasks starts on page 57

Tabs

The following sections provide more information about the Master Panel tabs and how to use them:

- The Master Area Triggers Tab on page 54
- The Master Area State Images Tab on page 56

Tasks

The following sections describe the tasks performed in the Master Panel form:

- Creating a Master Area on page 57
- Accessing a Master Area on page 57
- Deleting a Master Area on page 60
- Arming/Disarming a Master Area on page 60
- Defining Triggers for a Master Area on page 60
- Removing Triggers for a Master Area on page 61
- Customizing Master Area State Images on page 62

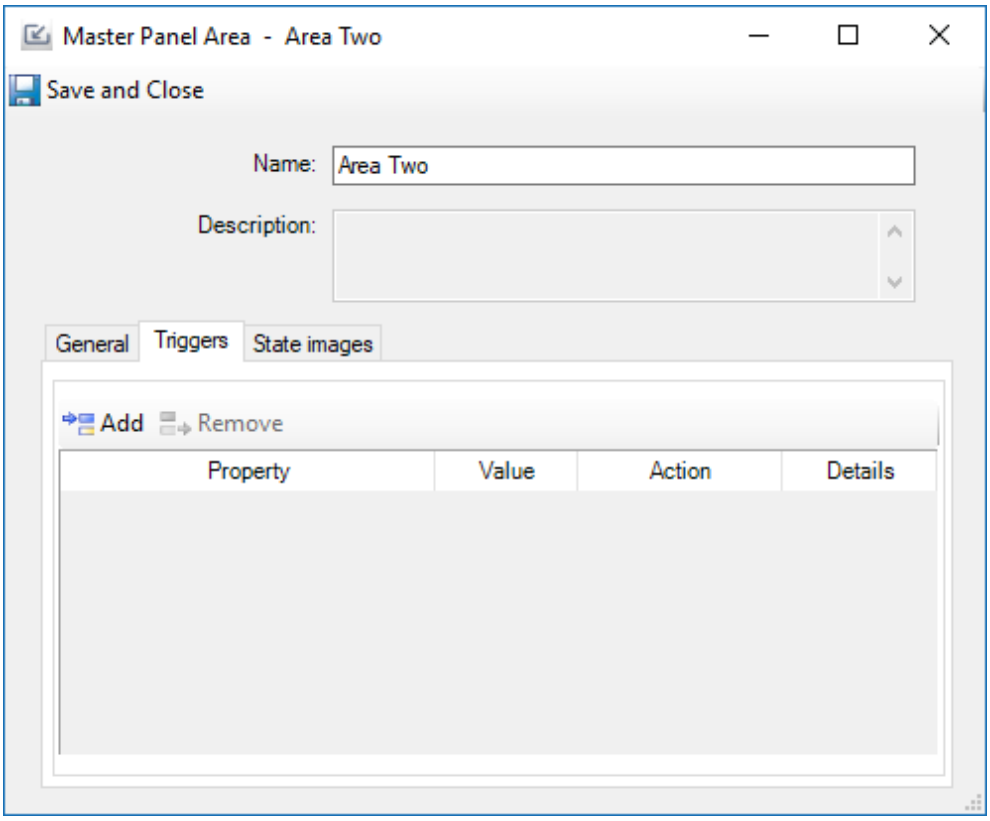
Master Zone Tabs

This section describes the following tabs of a Master Panel:

- The Master Area Triggers Tab on page 54
- The Master Area State Images Tab on page 56

The Master Zone Triggers Tab

This tab is used to add triggers to the Master Area and works in the same way triggers are added for standard C•CURE9000 components.



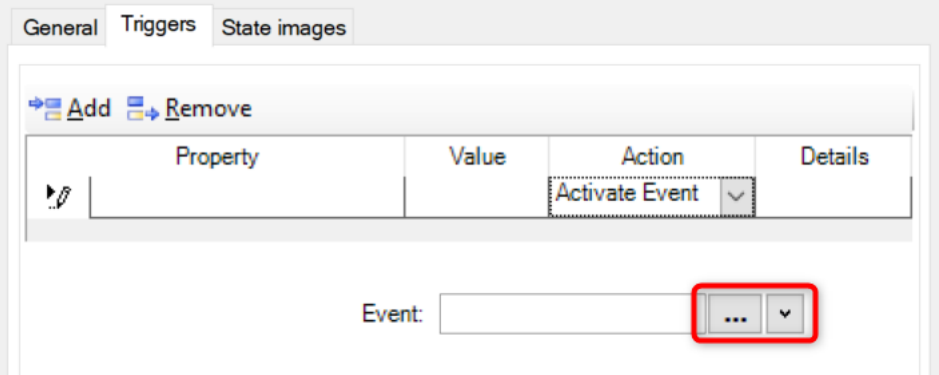
Zones will only send certain updates when the area they belong to is armed. When disarmed for instance, regular zone activations will not be sent to the driver. Take this into account when programming the triggers, and ALWAYS test the triggers you program in the conditions you want them to work.

The following trigger combinations can be configured:

Property	Value	Action
Latched Status	▪ Tamper ▪ In Alarm ▪ Inactive ▪ Night Holdup ▪ Local Alarm ▪ Inhibited	Activate Event

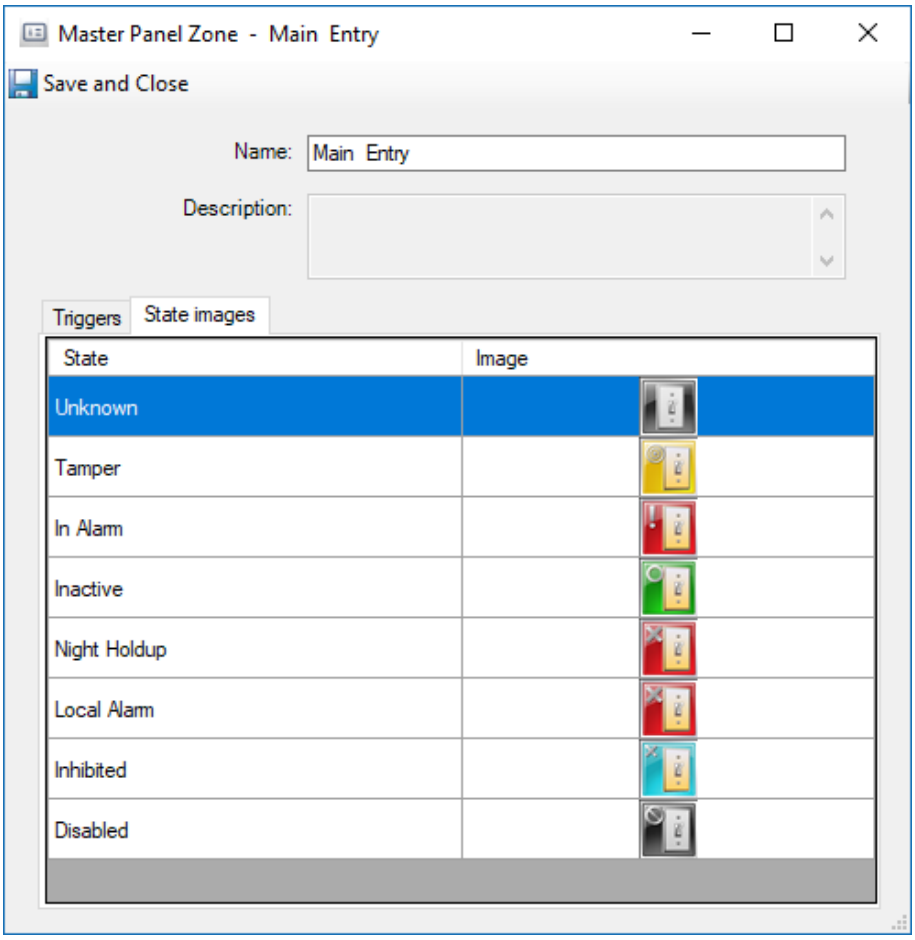
Property	Value	Action
Supervision State	▪ Normal ▪ Short Supervision ▪ Input Fault ▪ Input Mask ▪ Mask Trouble	Activate Event

The following options can be configured:

Configuration option	Description
Property	The property of the Master Zone for which to configure a trigger. The available properties depend on the object type you are configuring.
Value	The value of the property upon which the trigger is activated. The available values depend on the selected property you are configuring.
Action	The Action to activate when the property and value combination evaluate to TRUE. The available actions depend on the object type you are configuring. When selecting an action that requires a target, a selection control will appear below the Action table.  Press the ... button to bring up the target selection dialog. Press the ˅ button to create a new object you want to use as the target object.
Details	This field displays the selected target object for the configured Action.

The Master Zone State Images Tab

This tab allows you to customize the state images of the Master Zone as displayed in activity viewers or maps. It is based on the Monitoring State of the zone.



Master Zone Tasks

The following sections describe the tasks performed in a Master Area:

- Creating a Master Area on page 57
- Accessing a Master Area on page 57
- Deleting a Master Area on page 60
- Arming/Disarming a Master Area on page 60
- Defining Triggers for a Master Area on page 60
- Removing Triggers for a Master Area on page 61
- Customizing Master Area State Images on page 62

Creating a Master Zone

Master Zones cannot be created manually. You need to synchronize the panel in order to create them.

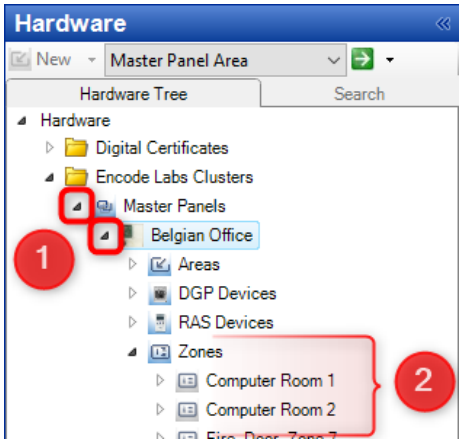
Accessing a Master Zone

A Master Zone can be accessed from several locations:

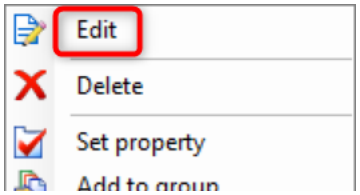
- From the hardware tree (see page 57)
- From the Dynamic View (see page 58)
- From the activity monitoring (see page 58)
- From the panel monitoring menu (see page 59)
- From a Map (see page 59)

From the hardware tree

1. Navigate to the Master Panel group from the hardware tree, click the arrow to open the "Master Panels" node and open the panel
2. Open the zone group and double click the zone you want to edit

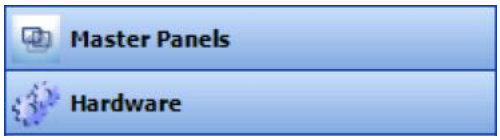


3. You can also right click the Master Zone and select "Edit" from the popup menu



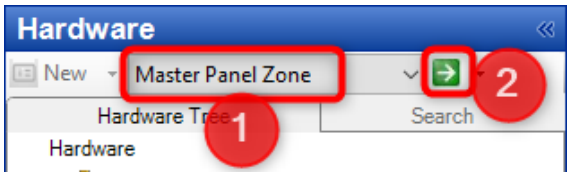
From the Dynamic View

Select the Master Panels or Hardware pane

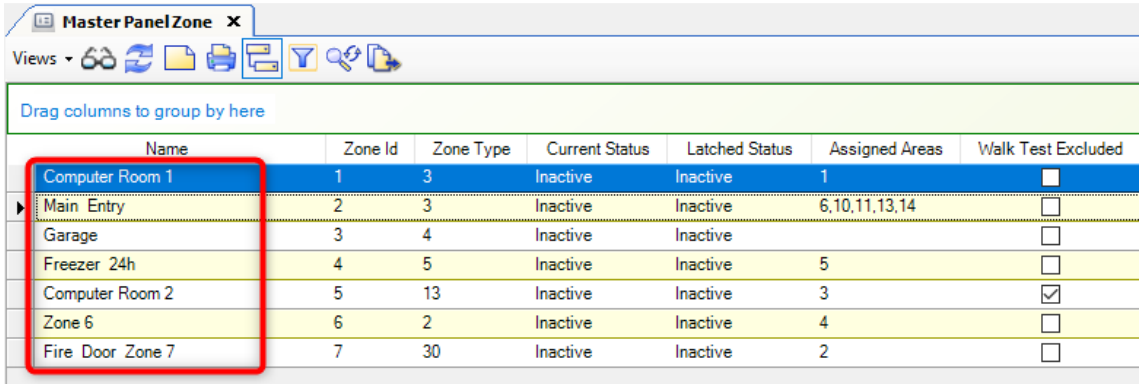


From the drop-down menu:

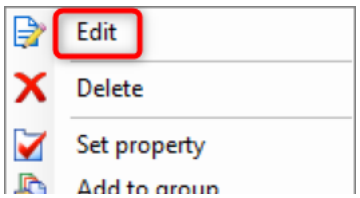
1. Select Master Panel Area
2. Click the green arrow to display all areas in the Dynamic View



3. In the resulting Master Panel list, double click on any panel

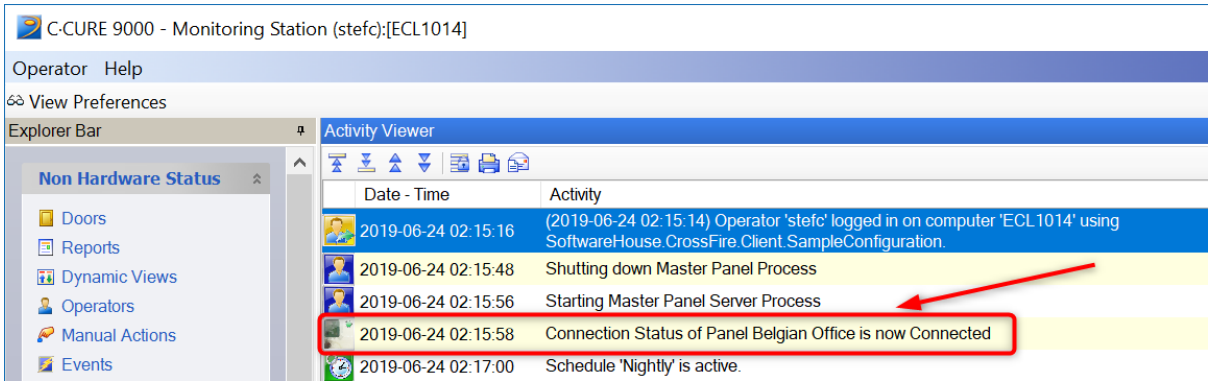


4. You can also right click any panel and select "Edit" from the popup menu



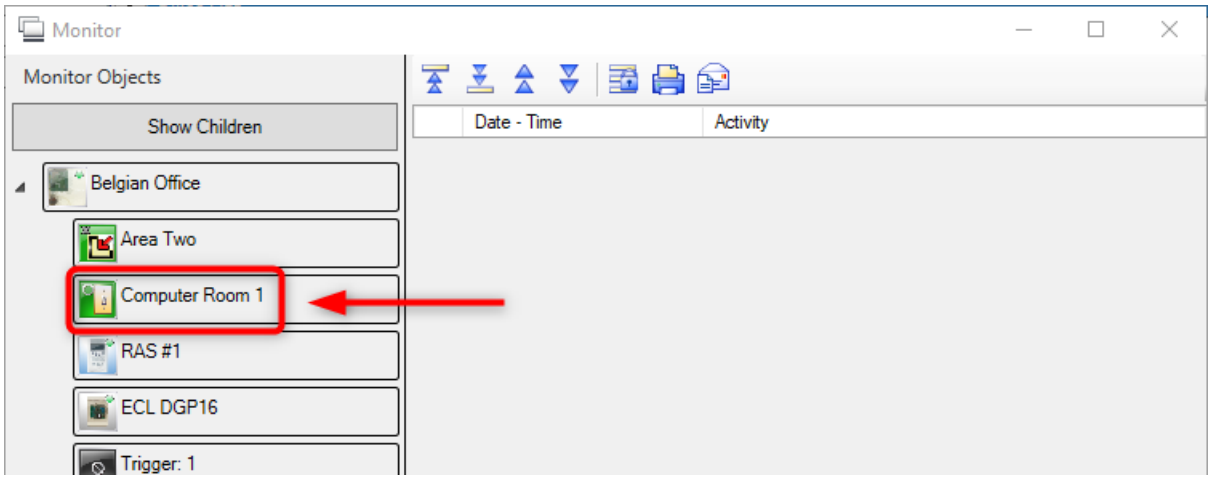
From the activity monitoring

Whenever a status image is present from a Master Zone, you can select it and access functions by right-clicking the icon.



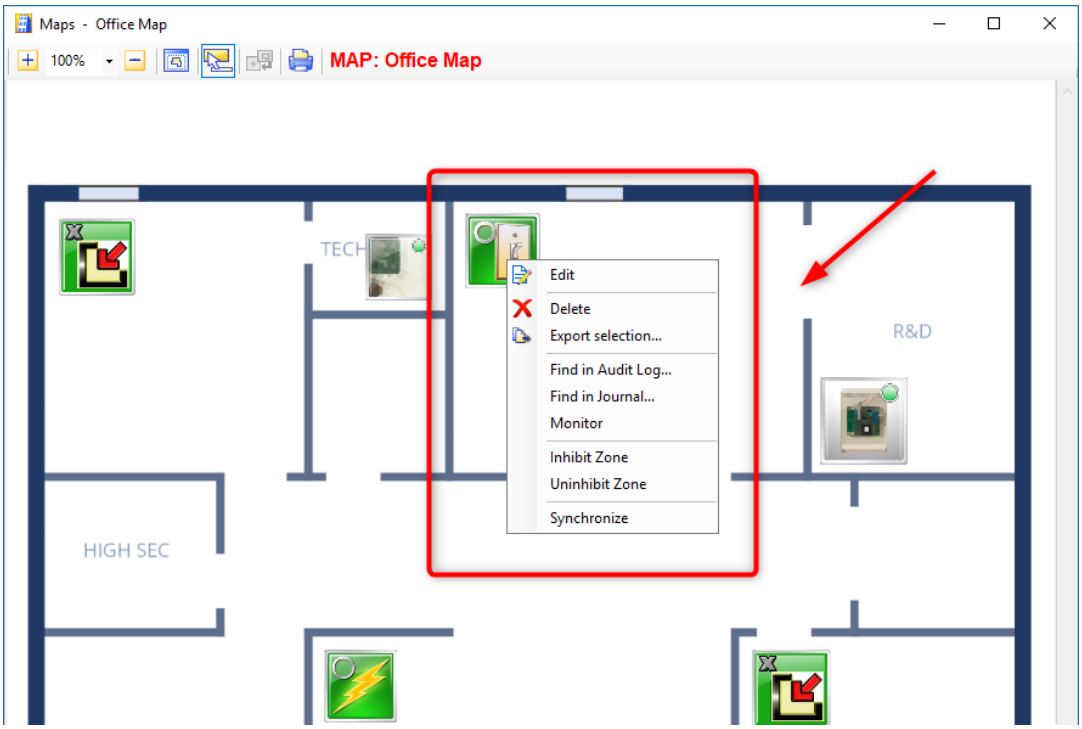
From the panel monitoring menu

Any object can be selected from the "Monitoring Objects" list, even if they appear in child nodes.



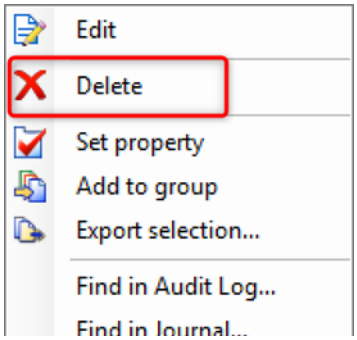
From a Map

To access the popup menu of the Master Zone, right click the icon on the map.



Deleting a Master Zone

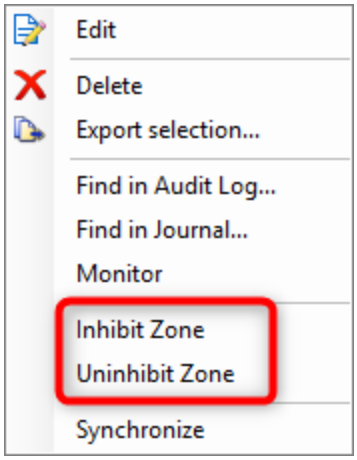
Access a Master Zone through any method as documented in Accessing a Master Zone on page 68 and select the popup menu option, then select "Delete".



You can also unconfigure the zone from the Master itself and perform a synchronization. The driver will then delete any missing zones.

(un)inhibiting a Master Zone

Access a Master Zone through any method as documented in Accessing a Master Zone on page 68 and select the popup menu option, then select "inhibit zone" or "uninhibit zone".



Defining Triggers for a Master Zone

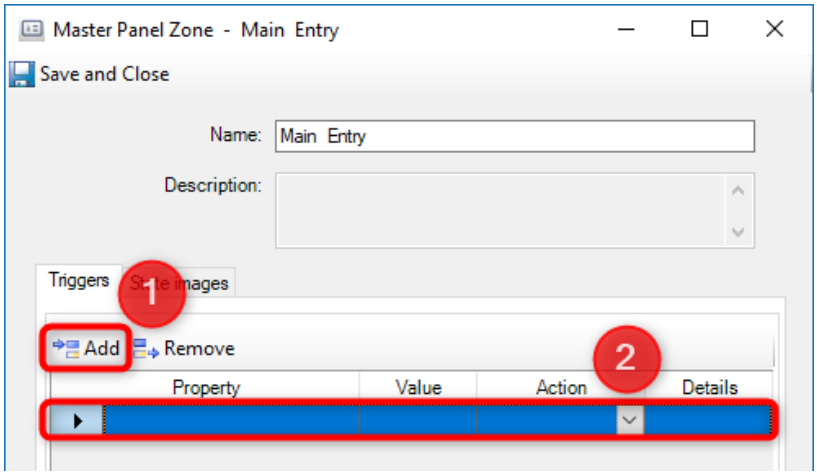
Property triggers can be added to the zone from the Triggers tab. They are used to activate events based on certain property states of the Master object.

Zones will only send certain updates when the area they belong to is armed. When disarmed for instance, regular zone activations will not be sent to the driver. Take this into account when programming the triggers, and ALWAYS test the triggers you program in the conditions you want them to work.

Adding a trigger

Go to the Trigger tab

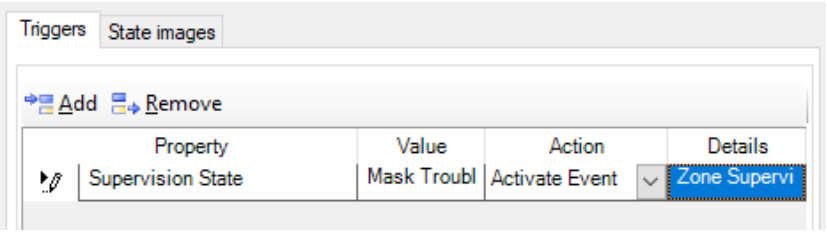
1. Click Add
2. Configure the options for the trigger



The following trigger combinations can be configured:

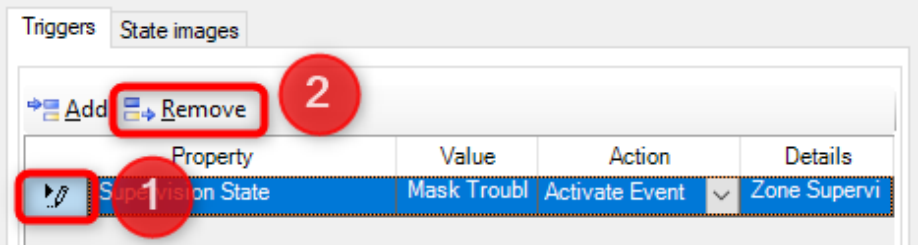
Property	Value	Action
Latched Status	▪ Tamper ▪ In Alarm ▪ Inactive ▪ Night Holdup ▪ Local Alarm ▪ Inhibited	Activate Event
Supervision State	▪ Normal ▪ Short Supervision ▪ Input Fault ▪ Input Mask ▪ Mask Trouble	Activate Event

Example: Activate an Alarm event when the area is "in alarm".



Removing Triggers for a Master Zone

3. On the trigger tab, select the trigger you want to remove from the list by clicking the arrow next to the trigger line
    a. The complete line will be selected (here in blue)
4. Click "Remove"

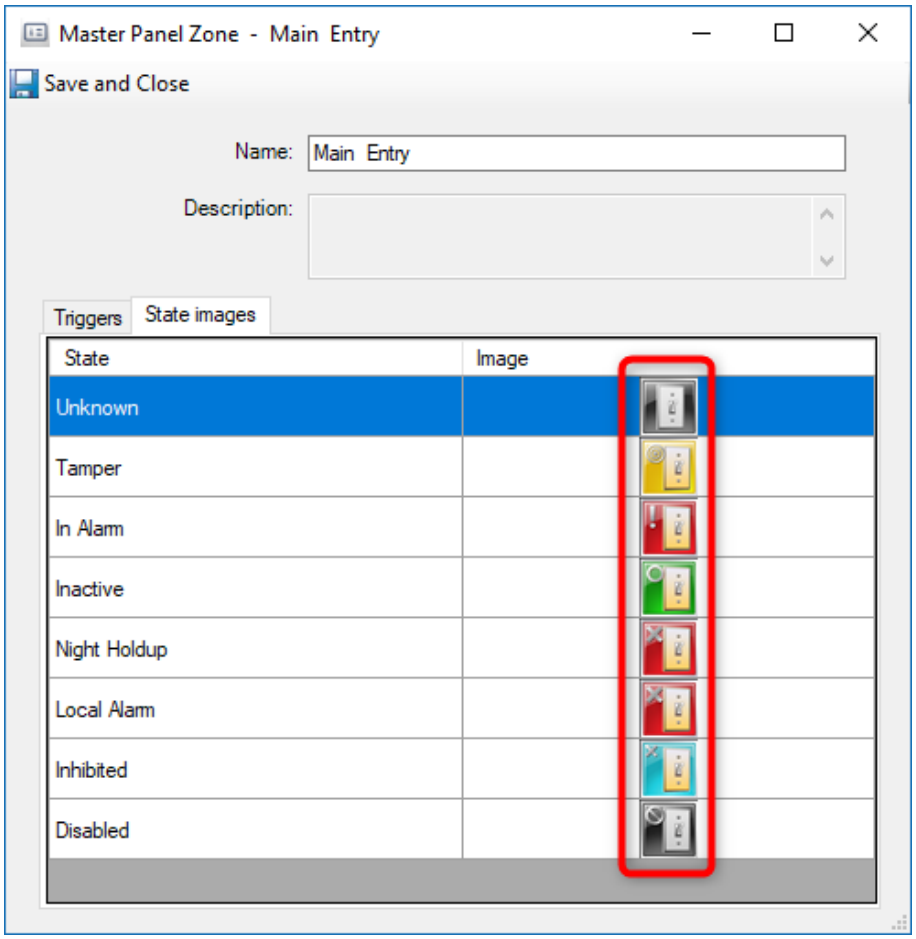


After saving the area, the trigger will be removed.

Customizing Master Zone State Images

Navigate to the State Images tab.

Double click on the State image you want to change



Select the image you want from the file dialog.

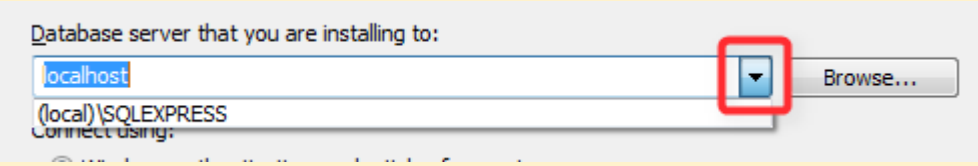
Appendix A

Considerations for SQL Express

When using SQL Express, you must enter the named instance of the server as well.

The default value is `(local)\SQLEXPRESS`

You can select the name by selecting the server name from the dropdown box when it is installed on the same server, or by clicking "Browse..." and browsing for the correct named instance.

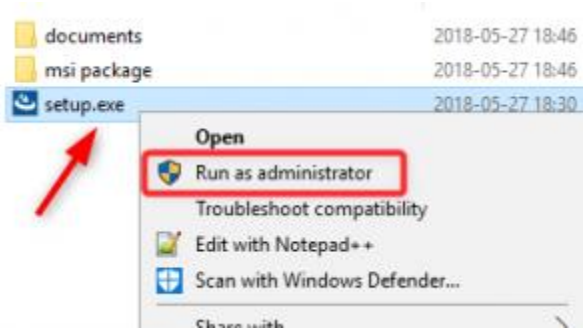


Avoiding UAC issues

When performing the installation on a system that has User Account Control (UAC) activated, you need to run the installer as an administrator.

But this is not possible by default from an msi installer package:

There is a setup.exe containing the same msi installer inside of it, so you can run the installation as admin.



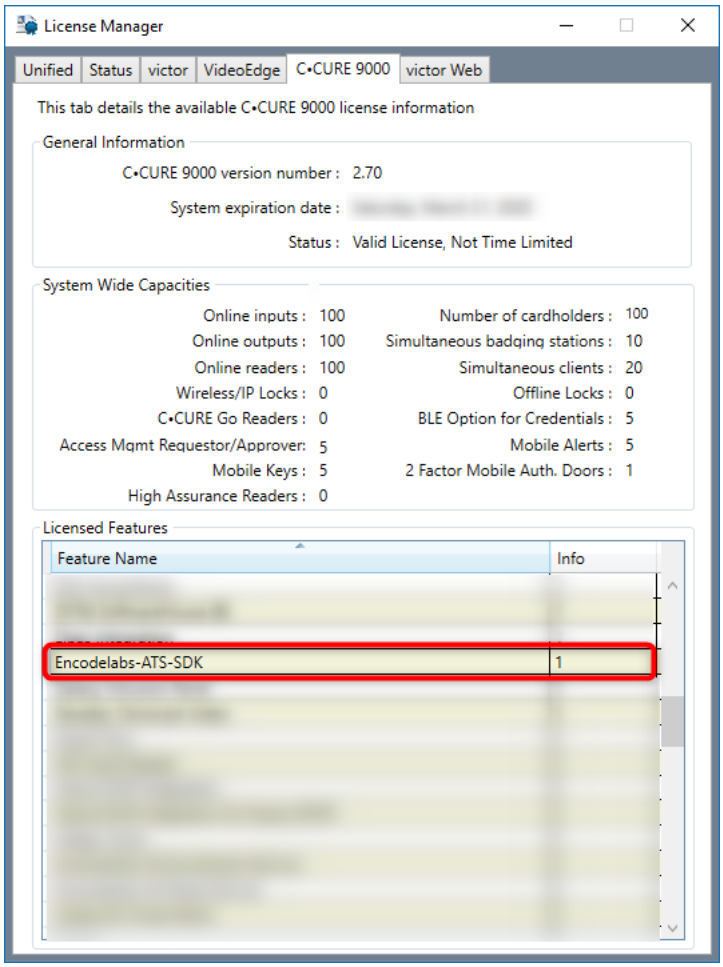
You can also run the msi installer manually from an Administrative command prompt to force it to run with admin privileges:

If not launched as an admin, the installer will fail due to missing access rights:

Verifying the Plugin License

Run the C•CURE9000 Licensing application:

- On the C•CURE9000 Tab
- under "Licensed Features"
- you should have the option "Encodelabs-ATS-SDK"



Supported Messages

The driver only supports a limited set of commands. Below is the list of supported commands:

Detail	Component	Implement	Handler
zone-in-alarm	ZONE	YES	YES
zone-in-fault	ZONE	YES	YES
zone-alarm-restored	ZONE	YES	YES
zone-fault-restored	ZONE	YES	YES
zone-arm-alarm	ZONE	YES	YES
zone-arm-alarm-restored	ZONE	YES	YES
zone-inhibited	ZONE	YES	YES
zone-uninhibited	ZONE	YES	YES
duress-code-entered	RAS	YES	YES
duress-code-restored	RAS	YES	YES
area-armed	AREA	YES	YES
area-disarmed	AREA	YES	YES
ras-offline	RAS	YES	YES
ras-online	RAS	YES	YES
dgp-offline	DGP	YES	YES
dgp-online	DGP	YES	YES
dgp-mains-fail	DGP	YES	YES
dgp-mains-restore	DGP	YES	YES
dgp-batt-low	DGP	YES	YES
dgp-batt-restore	DGP	YES	YES
dgp-fuse-fail	DGP	YES	YES
dgp-fuse-restore	DGP	YES	YES
dgp-siren-monitor-fail	DGP	YES	YES
dgp-siren-monitor-restore	DGP	YES	YES
dgp-tamper	DGP	YES	YES
dgp-tamper-restore	DGP	YES	YES
dgp-cpu-restart	DGP	YES	YES
dgp-inhibited	DGP	YES	YES
dgp-uninhibited	DGP	YES	YES
ras-tamper	RAS	YES	YES
ras-tamper-restore	RAS	YES	YES
ras-cpu-restart	RAS	YES	YES
ras-de-polled	RAS	YES	YES
ras-polled	RAS	YES	YES
ras-inhibited	RAS	YES	YES
ras-uninhibited	RAS	YES	YES
area-disarmed-after-during-alarm	AREA	YES	YES
area-armed-automatically-by-tz	AREA	YES	YES
area-disarmed-automatically-by-tz	AREA	YES	YES
burglar-cancel	AREA	YES	YES
exit-fault	AREA	YES	YES
confirmation-alarm	AREA/ZONE	YES	YES

Detail	Component	Implement	Handler
confirmation-alarm-restore	AREA/ZONE	YES	YES
zone-in-mask-trouble	ZONE	YES	YES
zone-in-mask-trouble-restore	ZONE	YES	YES
short-supervision	ZONE	YES	YES
short-supervision-restore	ZONE	YES	YES
area-secured-partset	AREA	YES	YES
input-mask	ZONE	YES	YES
input-mask-restore	ZONE	YES	YES
input-fault	ZONE	YES	YES
input-fault-restore	ZONE	YES	YES
dgp-batt-missing	DGP	YES	YES
dgp-batt-missing-restore	DGP	YES	YES
dgp-power-unit-failure	DGP	YES	YES
dgp-power-unit-restore	DGP	YES	YES
confirm-panic-alarm-zone	ZONE	YES	YES
confirm-panic-alarm-zone-restore	ZONE	YES	YES
output-active	OUTPUT	YES	YES
output-reset	OUTPUT	YES	YES
zone-in-local-alarm	ZONE	YES	YES
zone-in-local-alarm-restored	ZONE	YES	YES
zone-in-alarm-whilst-in-exit	AREA/ZONE	YES	N.A.
area-armed-whilst-in-exit-time	AREA	YES	YES
area-disarmed-whilst-in-exit-time	AREA	YES	YES
all-armed	AREA	YES	YES
exit-area-fault	AREA	YES	YES
cpu-restart	SYSTEM	YES	YES
network-down	HARDWARE IP CARD	YES	YES
auto-reset	SYSTEM	YES	YES
program-mode-entered	SYSTEM	YES	YES
program-mode-exited	SYSTEM	YES	YES
ats1806-serial-comms-fail	HARDWARE IP CARD	YES	YES
ats1806-serial-comms-restore	HARDWARE IP CARD	YES	YES
ats1806-receiver-station-fail	HARDWARE IP CARD	YES	YES
ats1806-receiver-station-restore	HARDWARE IP CARD	YES	YES
eng-reset-code-requested	SYSTEM	YES	YES
management-software-connected	CENTRAL STATION	YES	YES
management-software-disconnected	CENTRAL STATION	YES	YES
ats1806-hardware-fail	HARDWARE IP CARD	YES	YES
ats1806-hardware-restore	HARDWARE IP CARD	YES	YES
ats1806-link-fail	HARDWARE IP CARD	YES	YES
ats1806-link-restore	HARDWARE IP CARD	YES	YES
ats1806-receiver-fail	HARDWARE IP CARD	YES	YES
ats1806-receiver-restore	HARDWARE IP CARD	YES	YES
ats1806-no-ack-detected	HARDWARE IP CARD	YES	YES
ats1806-retry-attempt	HARDWARE IP CARD	YES	YES

Detail	Component	Implement	Handler
ras-tamper-inhibit	RAS	YES	YES
ras-tamper-inhibit-restore	RAS	YES	YES
dgp-tamper-inhibit	DGP	YES	YES
dgp-tamper-inhibit-restore	DGP	YES	YES
failure-to-communicate-fail	CENTRAL STATION	YES	YES
failure-to-communicate-restore	CENTRAL STATION	YES	YES
am-offline	CENTRAL STATION	YES	YES
am-online	CENTRAL STATION	YES	YES

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