OnGuard SEI Plugin Setup Guide

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Reviewer			
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1 Introduction

This document includes all information needed to understand, install and use the OnGuard SEI Plugin, which is the integration interface between Ocularis and OnGuard.

1.1 Who Should Read This Guide

The information and procedures described in this document are for use by qualified Ocularis system administrators and professional services engineers.

2 Overview

The plugin uses the SEI Interface to connect to Ocularis.

The plugin uses the OpenAccess API (REST web services, SingalR event bridge) to connect to OnGuard.

The plugin supports only transient event subscription to OnGuard. This means that the plugin will only receive events while the connection to OnGuard is active. Sustained subscription is not supported. The plugin supports the hardware events only.

CAUTION: This integration supports up to 1,000 OnGuard devices. If more devices are connected to your OnGuard system, a performance issue may occur.

The integration of Ocularis with OnGuard provides users with the following capabilities:

- Obtain a list of devices from OnGuard
- Obtain a list of event types from XML configuration file
- Send both lists to Ocularis
- Select devices to receive events from OnGuard
- Select which hardware statuses will be pushed into Ocularis
- Select which events will be pushed into Ocularis
- Send events from OnGuard to Ocularis
- Send commands from Ocularis to OnGuard

The following Item Types are available in the OnGuard SEI Plugin:

- Panel
- Reader
- Reader Input 1
- Reader Input 2
- Reader Output 1
- Reader Output 2
- Alarm Panel
- Alarm Input
- Alarm Output
- OffBoard Relay
- OnBoard Relay
- Intrusion Area
- Intrusion Door
- Intrusion Zone
- Elevator Terminal

Upon startup, the plugin automatically synchronizes the items (Hardware) for all supported item types from OnGuard to Ocularis. If the hardware configuration changes in OnGuard (e.g. hardware is renamed, removed, or added), the VMS_VA service needs to be restarted.

The Action Types supported by the plugin are specific to Item Types. Below, the supported Action Types are listed for each Item Type:

1. Alarm Input
    - Mask
    - Unmask
2. Alarm Output
    - Activate
    - Deactivate
    - Pulse
3. Elevator Terminal
    - Set Terminal Mode: Default floor only
    - Set Terminal Mode: Access to authorized floors
    - Set Terminal Mode: User entry of destination floor
    - Set Terminal Mode: Default floor or user entry of destination floor
4. Intrusion Area
    - Perimeter Arm
    - Entire Partition Arm
    - Master Delay Arm
    - Master Instant Arm
    - Perimeter Delay Arm
    - Perimeter Instant Arm
    - Partial Arm
    - Away Arm
    - Away Forced Arm
    - Stay Arm
    - Stay Forced Arm
    - Disarm
    - Silence Alarms
5. Intrusion Door
    - Open
    - Door Lock
    - Door Unlock
    - Set Door Secure
6. Intrusion Zone
    - Bypass
    - Un-bypass
7. Off-Board Relay
    - Activate
    - Deactivate
    - Toggle

8. On-Board Relay
    - Activate
    - Deactivate
9. Panel
    - Download Firmware
    - Download Database
    - Reset Use Limit
    - Update Hardware Status
    - Connect
    - Disconnect
    - Set Clock
10. Reader
    - Open Door
    - Set Mode: Locked
    - Set Mode: Card only
    - Set Mode: PIN or card
    - Set Mode: PIN and card
    - Set Mode: Unlocked
    - Set Mode: Faccode only
    - Set Mode: Cypherlock
    - Set Mode: Automatic
    - Enable Biometric Verify Mode
    - Disable Biometric Verify Mode
    - Enable First Card Unlock Mode
    - Disable First Card Unlock Mode
    - Download Firmware
11. Reader Input
    - Mask
    - Unmask
12. Reader Output
    - Activate
    - Deactivate
    - Pulse

To send a command in OnGuard you need to open a map in OC Client (64-bit) and click on the device.

2.1 Supported Versions

The supported versions required for this integration are listed in the following table.

Table 2-1: Supported Versions

Integration Components	Versions
Ocularis	6.0
OnGuard (OpenAccess API v.1.0)	7.6

2.2 Operating System Support

The plugin supports the following 64-bit operating systems:

- Windows 10, Windows Server 2016
- The plugin was tested on Windows Server 2016.

2.3 Software Prerequisites

The OnGuard SEI Plugin installation requires:

- Ocularis Base
- Ocularis Recorder
- Ocularis Recorder Proxy
- Ocularis Client

3 Installation

The flow for installing the Ocularis\OnGuard integration is as follows:

1. Install the OnGuard system
2. Install the Ocularis system
3. Install the OnGuard SEI Plugin

3.1 SEI Plugin Installation

In the following procedure, the plugin must be copied to the installation directory of Ocularis. The plugin consists of several dll and xml files that handle the communication between the OnGuard and Ocularis system in both directions.

1. Open the Windows Explorer and navigate to the Qognify installation directory. Default: *C:\Program Files\Qognify*
2. Check if the following path exists, otherwise create the missing folders. *C:\Program Files\Qognify\OcularisRecorder\VersatileApplications64\EventPlugins\SeeTec.Lenel OnGuard.SEIPlugin*
3. Extract the plugin zip file to this folder without creating additional subfolders.

Only a 64 bit version of the plugin is available.

3.2 Licensing

- After installation of Ocularis, you can use the software 30 days as a trial version without limitations. When the trial period is over, you must order a valid license that includes the feature “Event Interface”.
- For OnGuard a license file is required that contains the OpenAccess feature.

3.3 Logging

Plugin log files can be found in the *log* folder under the Ocularis Recorder *installation* folder (*C:\Program Files\Qognify\Ocularis Recorder\log*):

- For Ocularis plugin host service – *va.log*
- For the plugin – *VA_EI_*Module ID*.log*

The default logs level is INFO, you can change it to DEBUG in the OC Recorder Manager.

4 Supported Functionality

Plugin operations supported by this integration are outlined in the table below.

Y equals yes

N equals no

Table 4-1: Supported Operations

Systems	
System Communication	
Connect and authenticate	Y
Connect/disconnect status detection	Y
Discovery	
OnGuard devices discovery	Y
OnGuard event types discovery	Y
Filters	
Device filters	Y
Event type filters	Y
Events\Alarms	
Send events from OnGuard to Ocularis	Y
Commands	
Send commands from Ocularis to OnGuard	Y

5 Configurations

This chapter describes the configurations that must be made to the following components in order for the plugin to work properly:

- OnGuard system
- OnGuard SEI Plugin
- Ocularis system

5.1 OnGuard System

The following configurations need to be made in the OnGuard system:

1. Verify OnGuard license
2. Define OpenAccess host

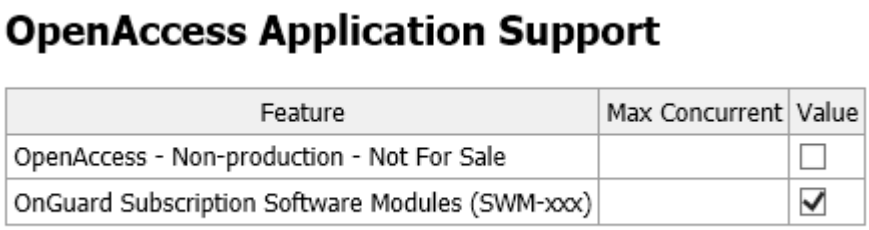
5.1.1 Verify OnGuard License

This integration requires an OnGuard license with OpenAccess features enabled.

▶ To verify OnGuard license:

1. Open the **License Administration** page**.**
2. Click **View** and find the **OpenAccess Application Support** section.
3. Verify that OpenAccess features are supported by your license:

Figure 5-1: OnGuard license



OpenAccess Application Support

Feature	Max Concurrent	Value
OpenAccess - Non-production - Not For Sale		☐
OnGuard Subscription Software Modules (SWM-xxx)		☑

5.1.2 Define OpenAccess Host

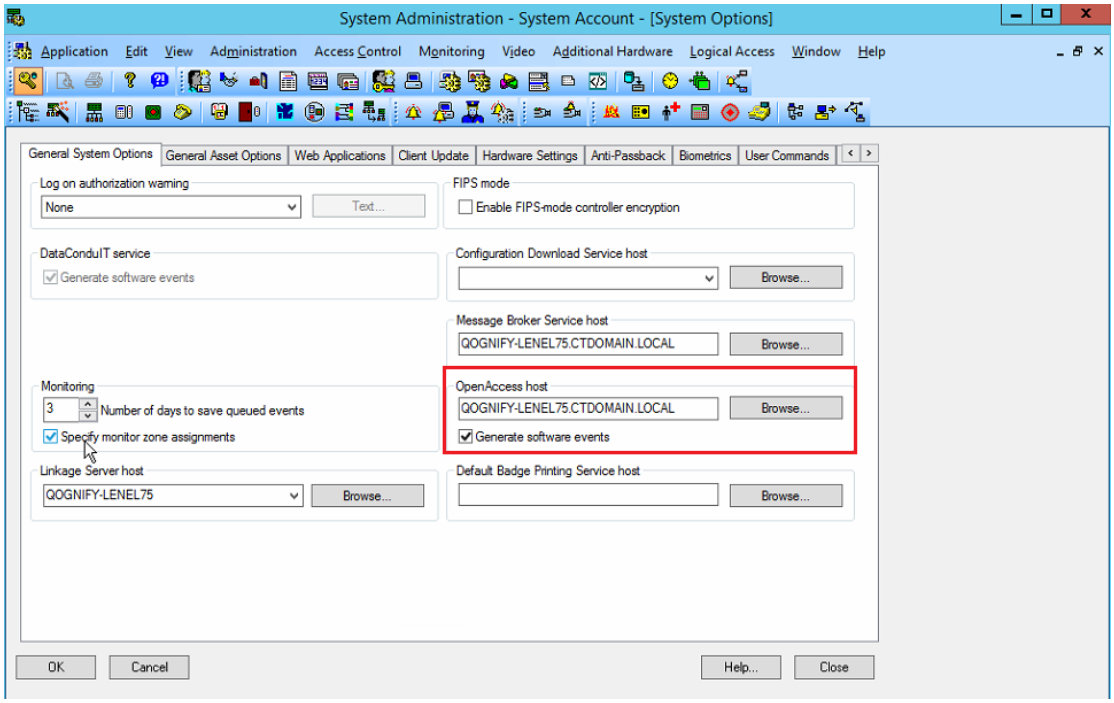
To be able to work with OnGuard, you must define an **OpenAccess host**.

▶ To define an OpenAccess host:

1. Open the **System Administration** application.
2. Navigate to **Administration > System Options**.

3. In the **General System Options** tab, define the **OpenAccess host**.

Figure 5-2: OpenAccess Host



4. Click **OK** and restart the LS Communication Server

5. To verify that OpenAccess service is configured correctly, open the following URL: "*https://<servername>:8080/api/openaccess/version?version=1.0*", where <servername> is the name of the OnGuard server where OpenAccess is running. The parameters **product name** and **product version** should be displayed.

5.2 OnGuard SEI Plugin

The following configurations need to be made in the SEI Plugin:

1. Add Event Interface
2. Configure connection
3. Select devices from OnGuard
4. Select states and events

5.2.1 Add Event Interface

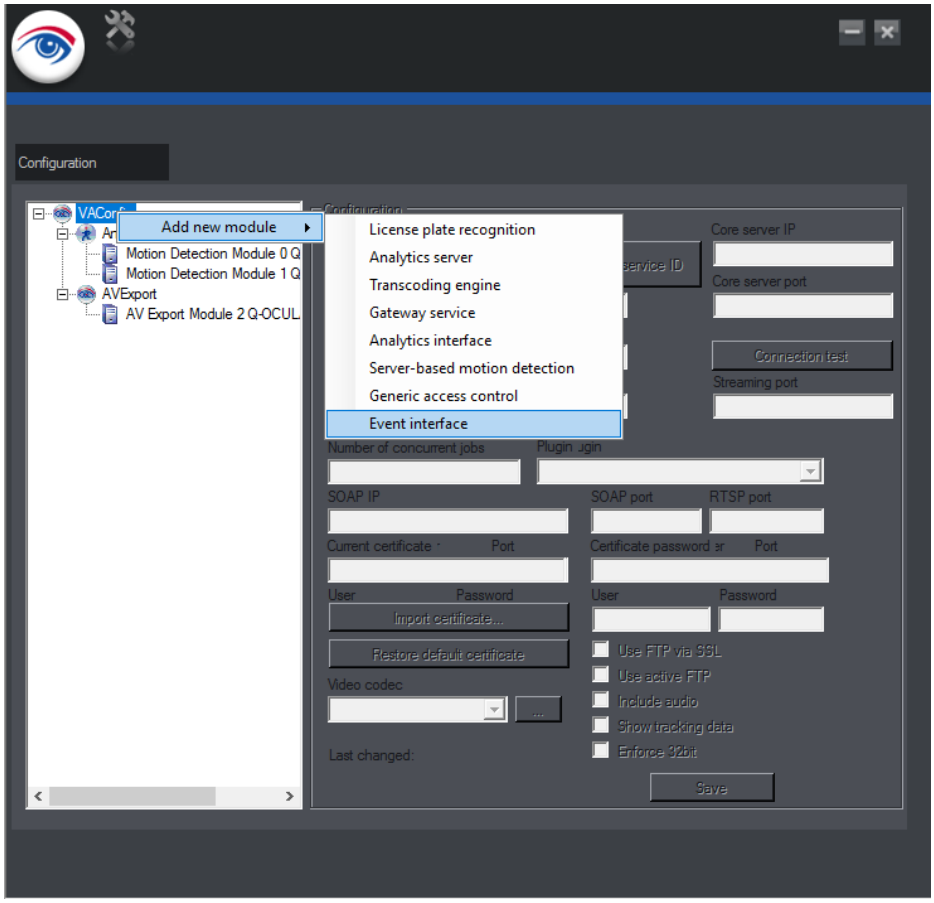
To add a new event interface, you need first to add a new event interface module to the Ocularis Recorder.

- To add event interface:

1. Open the OC Recorder VA Admin Tool.

2. Right click **VAConfig** and select **Add new module->Event interface**.

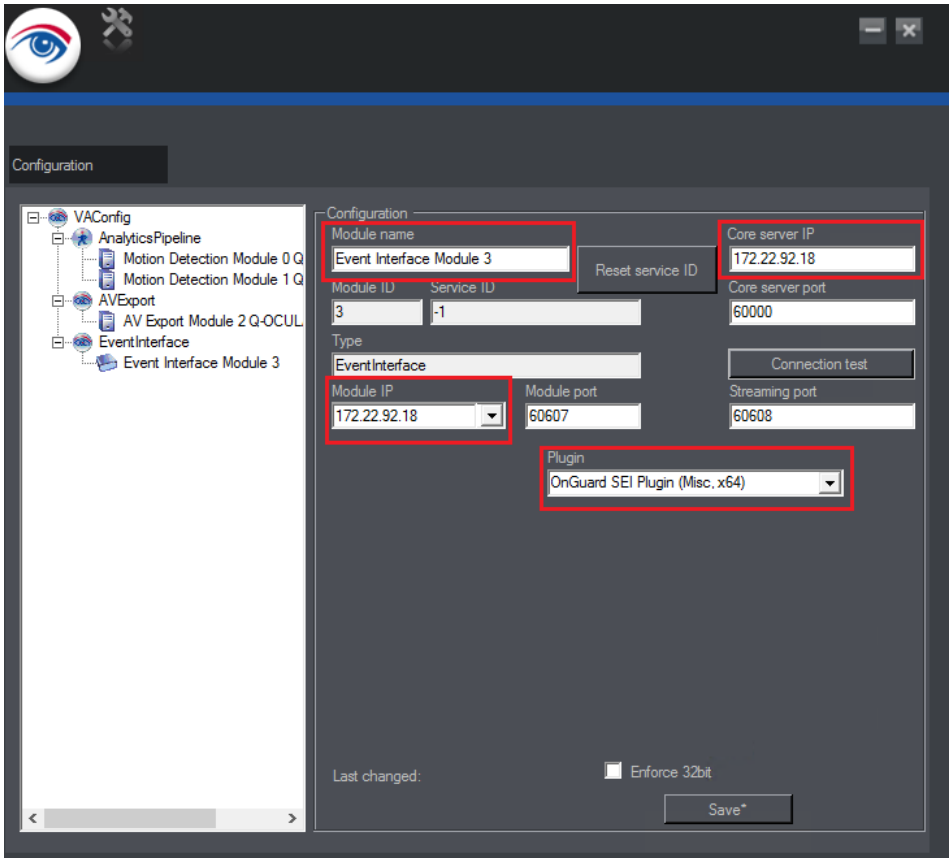
Figure 5-3: Add Event Interface Module



3. Specify the following parameters:

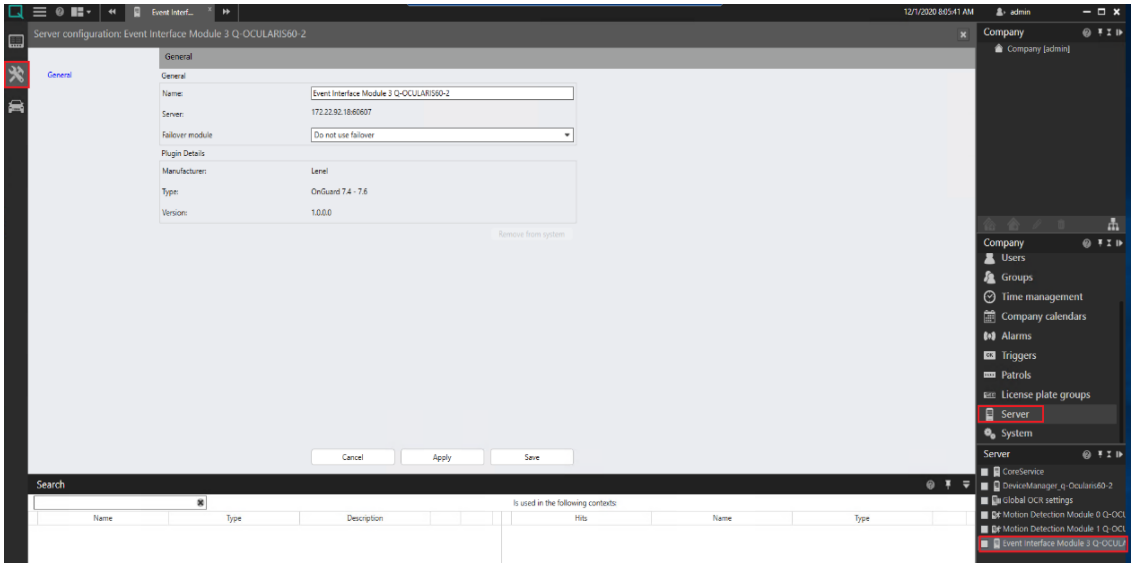
   - **Module name** – any name.
   - **Core server IP** – IP address of Ocularis server.
   - **Module IP** – local IP address.
   - **Plugin** – select the OnGuard SEI Plugin.

Figure 5-4: Event Interface Module Parameters



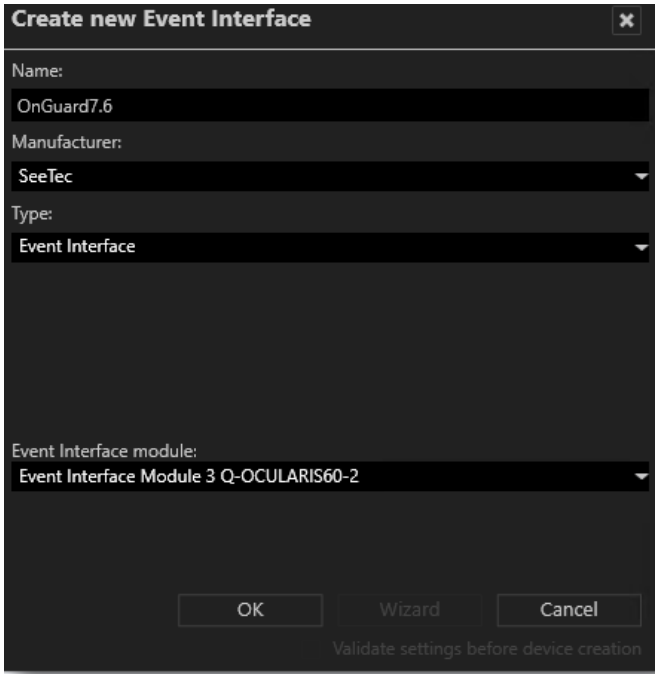
4. Click **Save** and close the **OC Recorder VA Admin Tool**.
5. Restart the **VMS_VA** service.
6. Open the **OC Recorder Manager** (64-bit).
7. Go to **Configuration mode** tab, select **Server** and make sure that there is a new module. Check if the **Event Interface Module** is running (no yellow triangle and IP address and port are visualized like in the following screenshot).

Figure 5-5: Event Interface Module



8. Select **Event Interfaces** and click **Create New Object** button. In the opened window, specify any **Name** and select your **Event Interface module**.

Figure 5-6: Create New Object



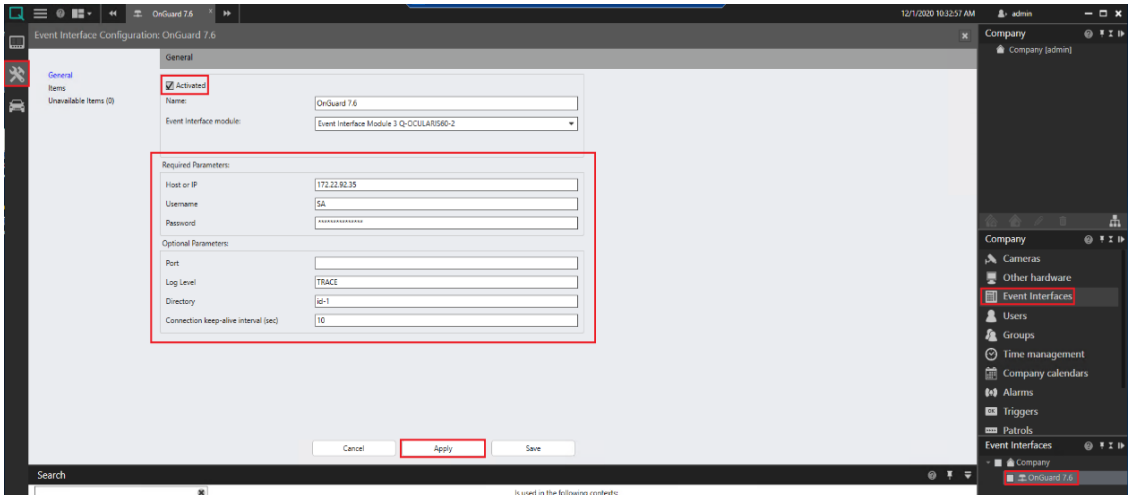
9. Click **OK**.

5.2.2 Configure Connection to OnGuard

To configure the connection:

1. In the **OC Recorder Manager (64-bit)** go to the **Configuration mode** tab, select **Event Interfaces** and double-click on your interface.

Figure 5-7: Event Interface General



2. In the **General** tab specify the following connection parameters for OnGuard:
   - **Host or IP** – IP address or hostname of OnGuard system
   - **Username** – username for connection to OnGuard system
   - **Password** – password for connection to OnGuard system
   - **Directory** – directory ID in OnGuard system. If you use OnGuard internal credentials, specify the Internal directory “id-1”. If you use Windows credentials, select a specific Windows directory. The list of available OnGuard directories is printed in the logs.
   - **Port** – port configured for the OnGuard web service. Default is **8080** if field is empty.
   - **Log Level** – level of details for the logging. Possible values (case insensitive): ERROR, WARN, INFO, DEBUG, TRACE. It’s recommended to use INFO as log level to see the progress at the first synchronization of a new device.
   - **Connection keep-alive interval** – this is the interval in which the SEI Plugin sends keep-alive messages to the OnGuard system. Default is **30** seconds if field is empty.
3. Check the box **Activated** and click **Apply**.

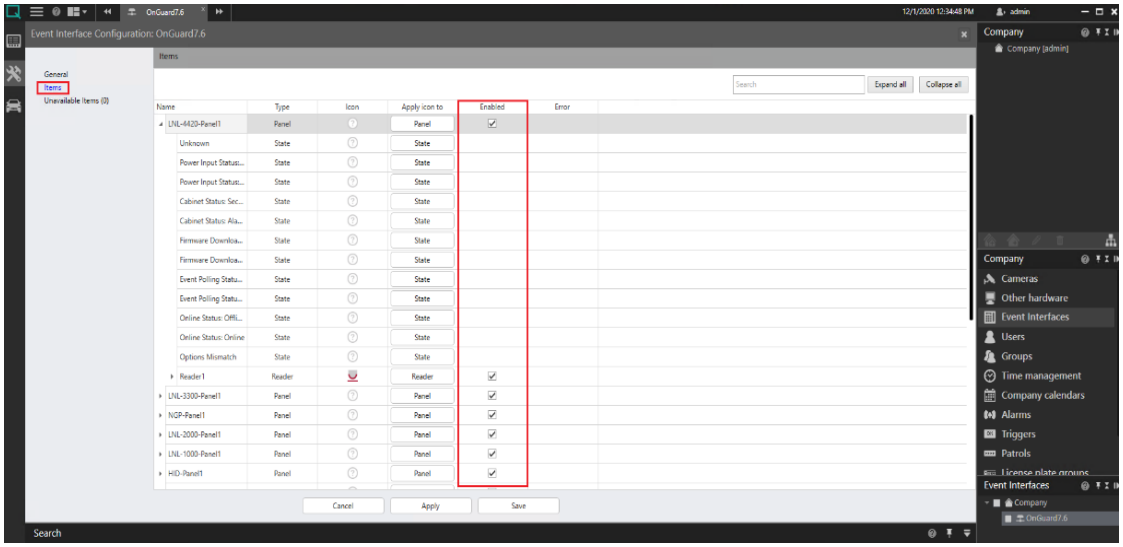
5.2.3 Select Devices from OnGuard

When a new hardware, e.g. a controller, is added, modified or deleted to the OnGuard after the initial synchronization the **VMS_VA** service needs to be restarted to trigger a resynchronization.

- To select devices:

1. In the **OC Recorder Manager (64-bit)** select the **Configuration mode** tab, select **Event Interfaces** and double-click on your interface.
2. Select the **Items** tab.

Figure 5-8: Event Interface Items



3. Select the **Enabled** boxes for the devices for which you want to receive events from OnGuard.

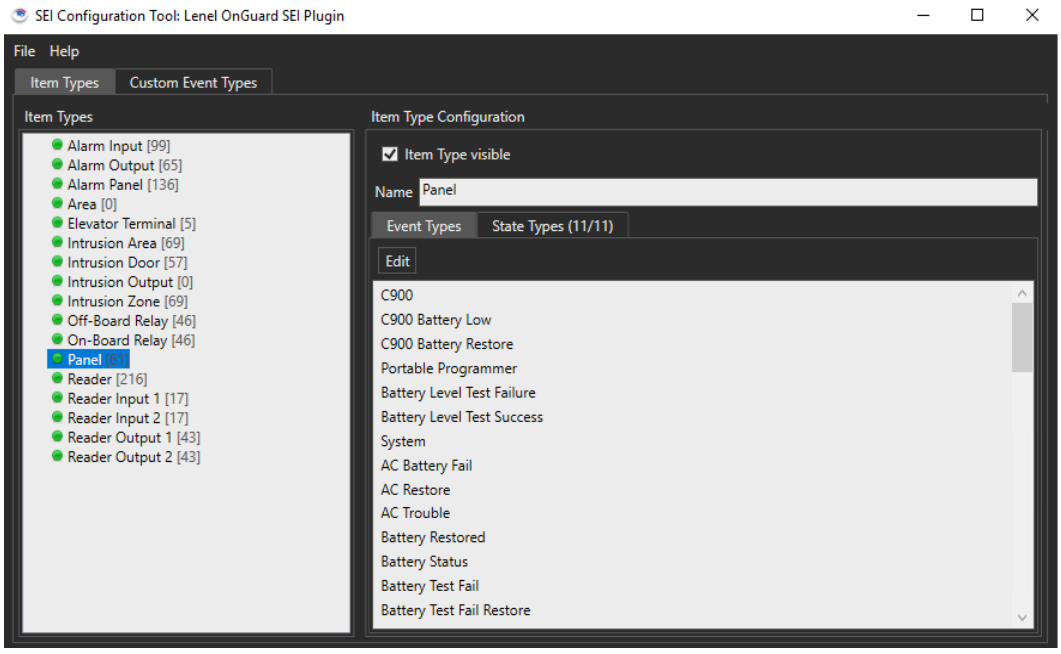
NOTE: Please note that some devices are located under parent devices, like the LNL-4420-Panel1 and Reader1 on the screenshot above. To enable this reader device you need to first expand panel device.

5.2.4 Select States and Events

- To select states and events:

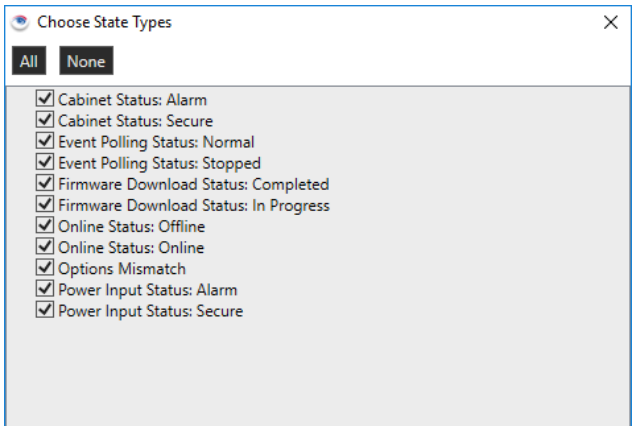
1. Open the **SEI Configuration Tool** and load your plugin configuration.
2. Select the device type from **Item Types** list.

Figure 5-9: SEI Configuration Tool



3. Select the **State Types** tab and click **Edit**.

Figure 5-10: Choose State Types

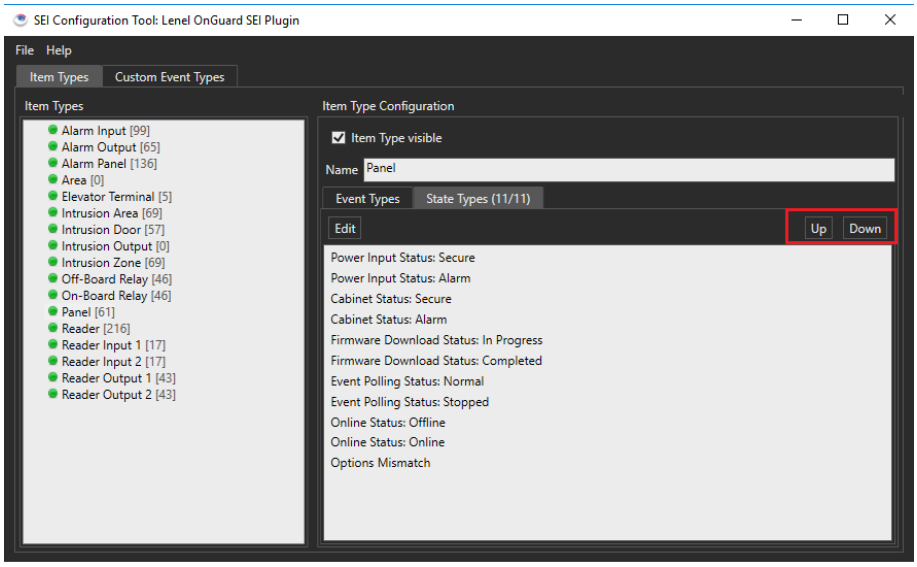


4. Choose states for current device type and click **OK**.

NOTE: The “Unknown” state is a fallback state used if the state cannot be retrieved from the panel.

5. Since an Item can potentially be in more than one of the State Types at one time, but only a distinct state can be reported to Ocularis, the states need to be prioritized. E.g. a Reader can be “Online” and “Reader Tamper” at the same time. To prioritize state type use the **Up** and **Down** buttons.

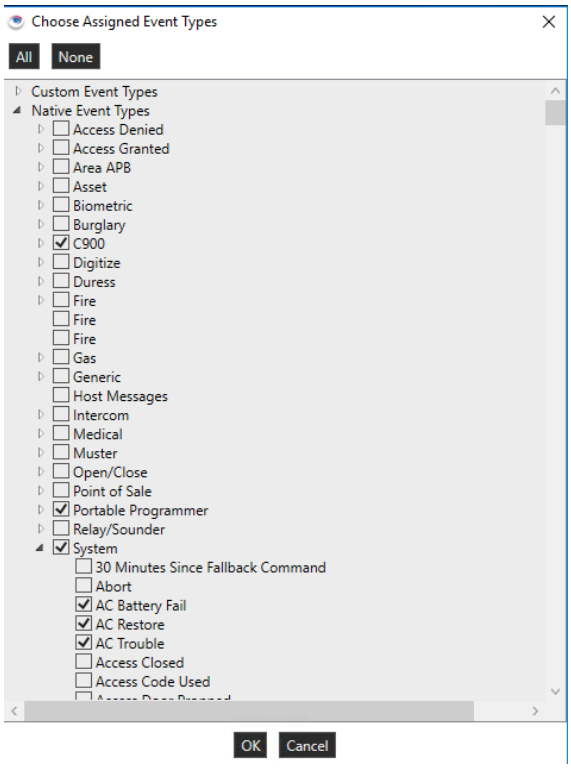
Figure 5-11: Prioritize state types



NOTE: Only the highest priority state currently in effect is reported to Ocularis.

6. Select the **Event Types** tab and click **Edit**.

Figure 5-12: Choose Assigned Event Types

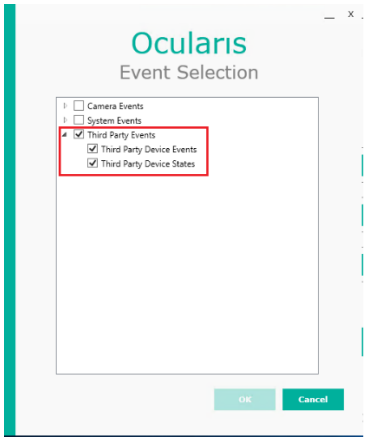


7. Choose event types for current device type and click **OK**.
8. Click **Save**.
9. Restart the **VMS_VA** service.

10. Open the **OC Recorder Proxy (64-bit)**.

11. Click on the **Event Filters** and select the **Third Party Device Events** and **Third Party Device States**. Click OK.

Figure 5-13: Recorder Event Filters



12. Restart **Recorder Proxy** service.

5.3 Ocularis System

The following Ocularis configurations are required:

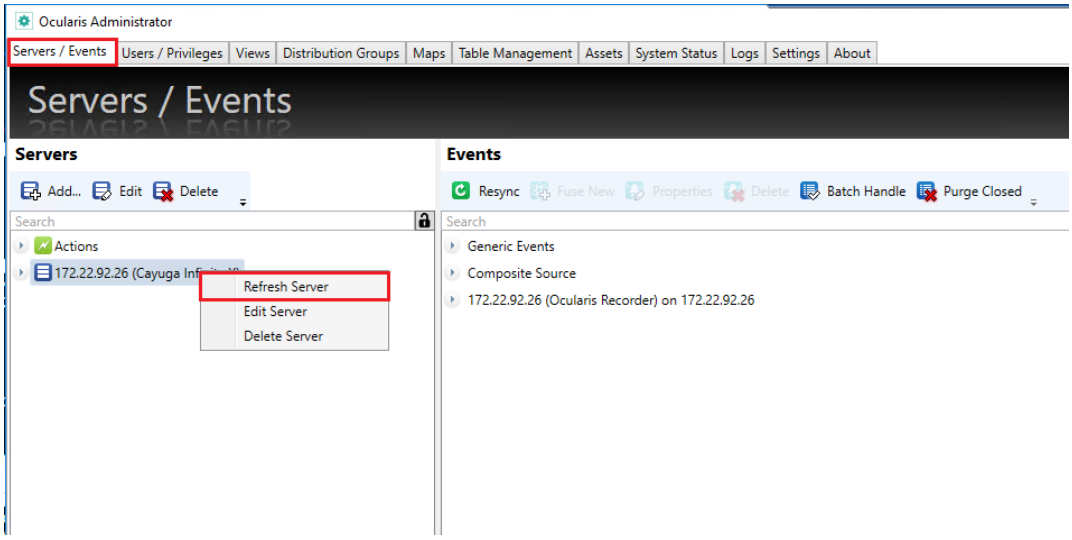
1. Discover OnGuard devices and events in Ocularis
2. Associate camera(s) with OnGuard devices
3. Add OnGuard events to Distribution Groups
4. Add devices on a map

5.3.1 Discover OnGuard devices and events in Ocularis

To discover devices and events:

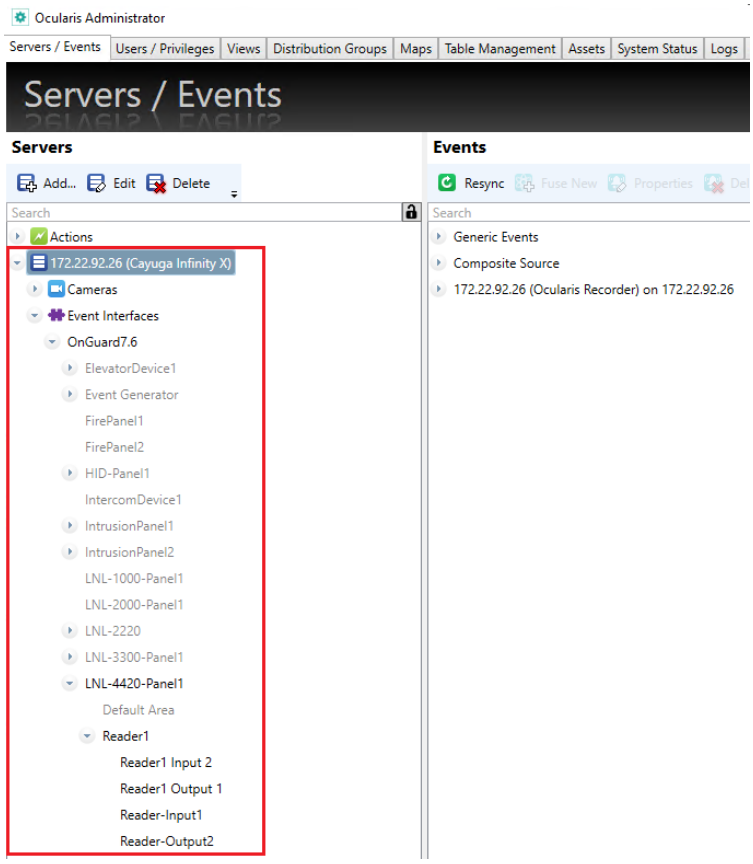
1. Open the **OC Administrator (64-bit)**.
2. In the **Servers/Events** tab, right-click on your recorder and click **Refresh Server**.

Figure 5-14: Refresh Server



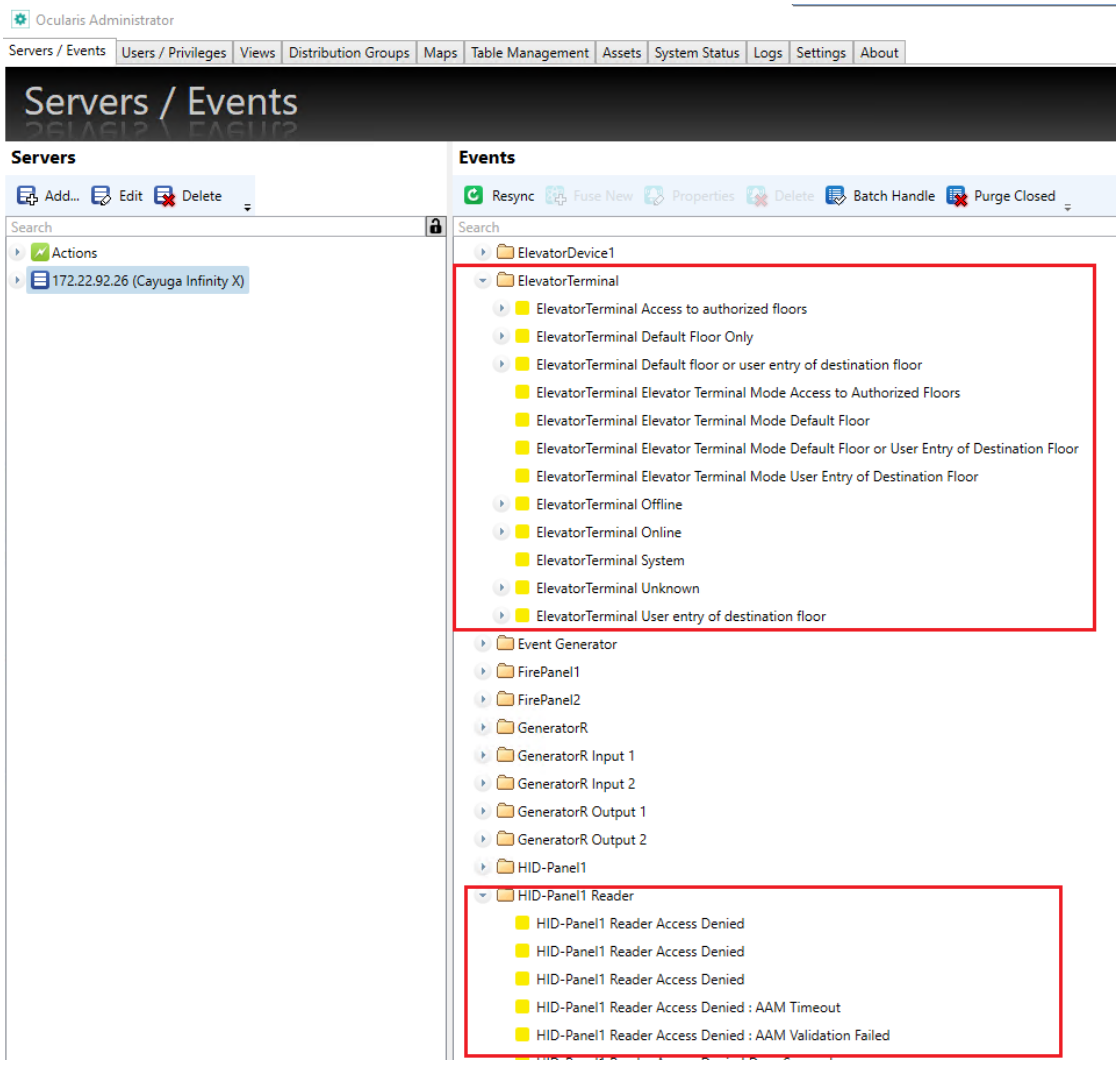
3. Verify that all enabled devices appear under the recorder in the *Servers* section.

Figure 5-15: Devices in Servers



4. Then click **Resync** button and verify that all selected states and events appear under the recorder in **Events** section.

Figure 5-16: Verifying Selected States and Events



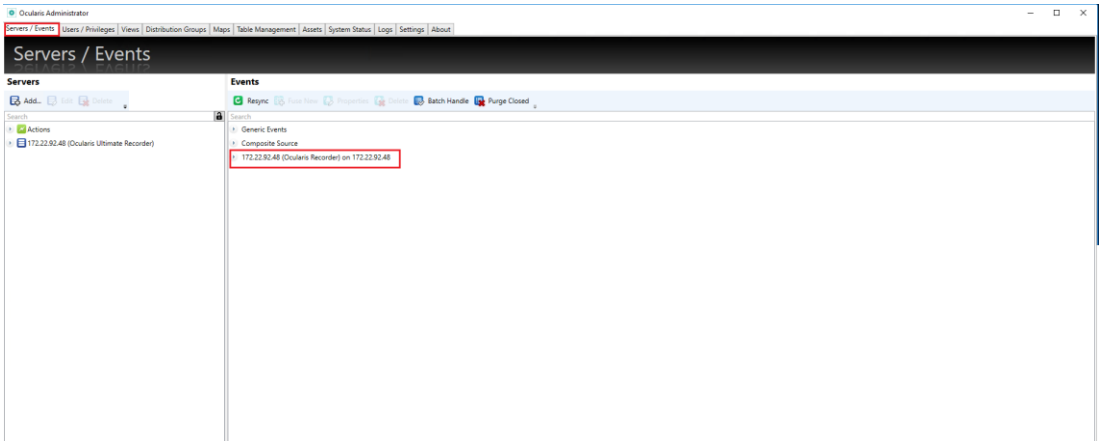
5.3.2 Associate Camera with OnGuard Devices

At least one connected camera is required in Ocularis (for instructions on adding a camera, refer to the Ocularis Administrator User Manual).

- To associate camera(s) with OnGuard devices:

  1. Open the **OC Administrator (64-bit)**.
  2. The **Server/Events** tab displays a list with OnGuard devices and event types.

Figure 5-17: Server / Events tab



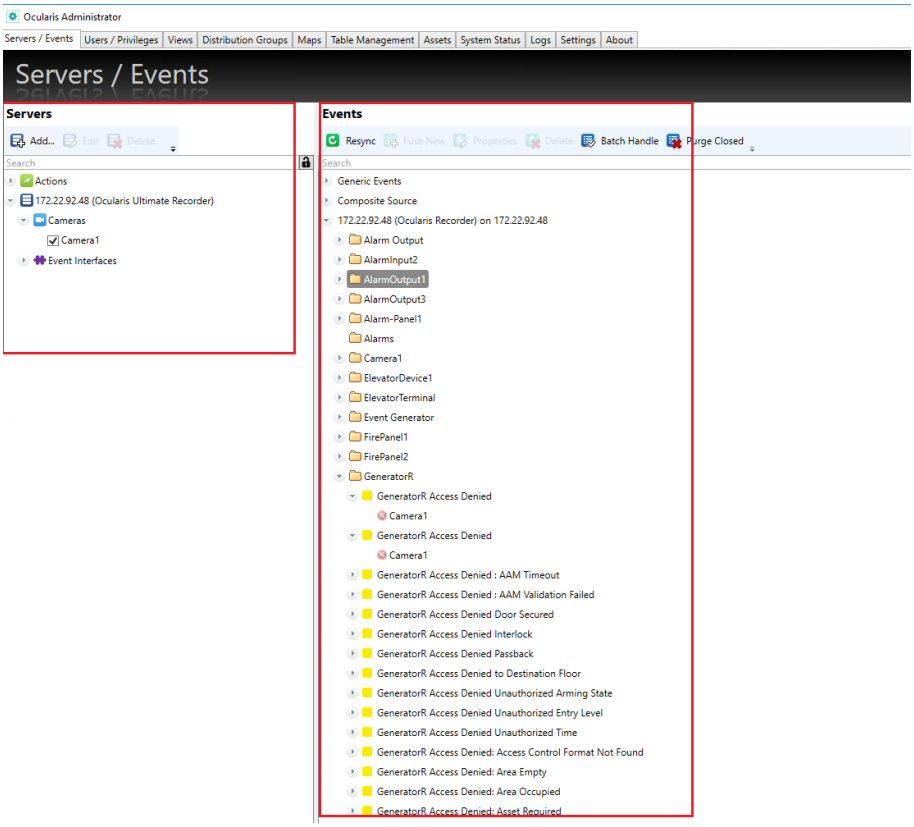
NOTE: The list displays only those devices and event types that were previously selected in the OC Recorder Manager (64-bit) and SEI Configuration Tool.

3. Expand the list and drag a camera from the **Servers** section to the desired device or event type in the **Events** section:

   – If you associate the camera with a *device* – you will receive all device events on this camera.

   – If you associate the camera with specific *types of device events* - you will receive only associated events on this camera.

Figure 5-18: Camera Association



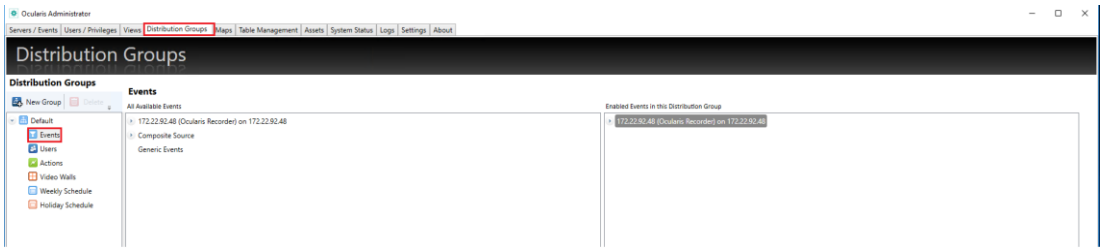
5.3.3 Add OnGuard Events to Distribution Groups

To add events:

1. Open the **Distribution Groups** tab, choose the group to which OnGuard events should be distributed, and click **Events.**

   The window displays the list with OnGuard devices and event types.

Figure 5-19: Distribution Groups Tab



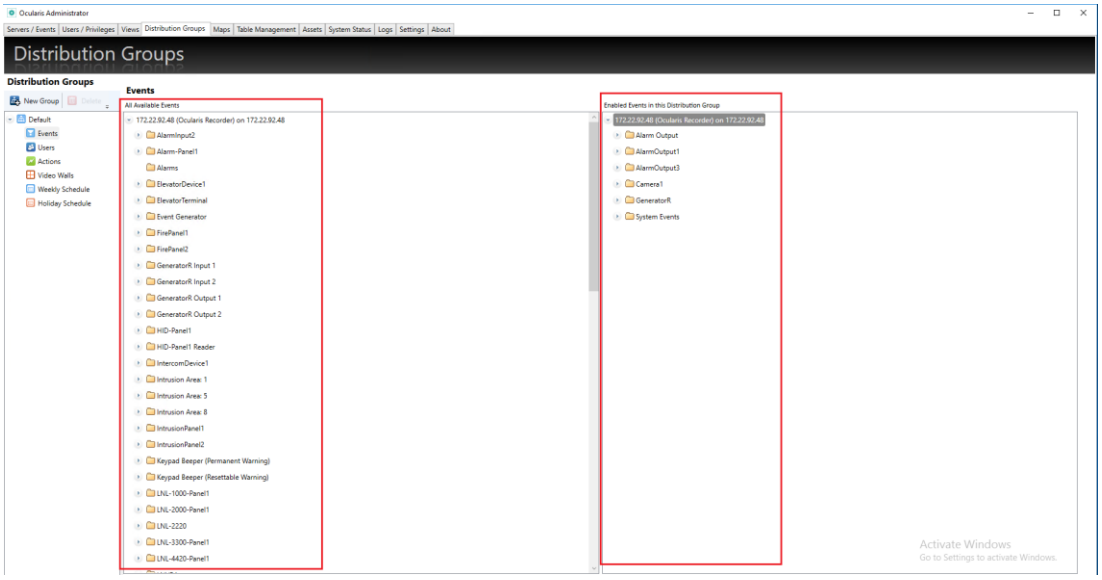
2. To view OnGuard events in the Ocularis Client, expand the trees and drag events from the **All Available Events** section to the **Enabled Events** section. The following options are available:

   – Add all events from the entire list

   – Add all events for a specific device

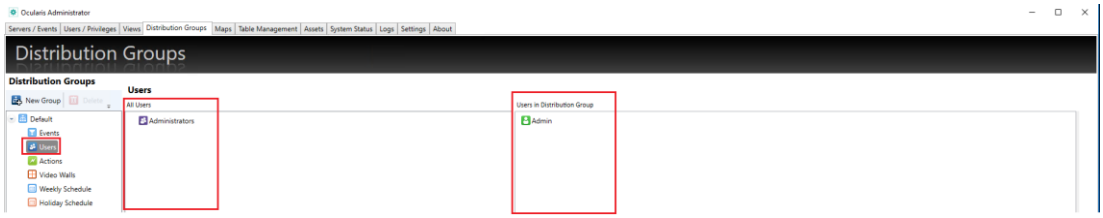
   – Add a specific events type for any device

Figure 5-20: Adding Events



3. After adding events to the distribution group, you need to add a user to this group. Click **Users** and drag a user from the **All Users** section to the **Users in Distribution Group**.

Figure 5-21: Adding User



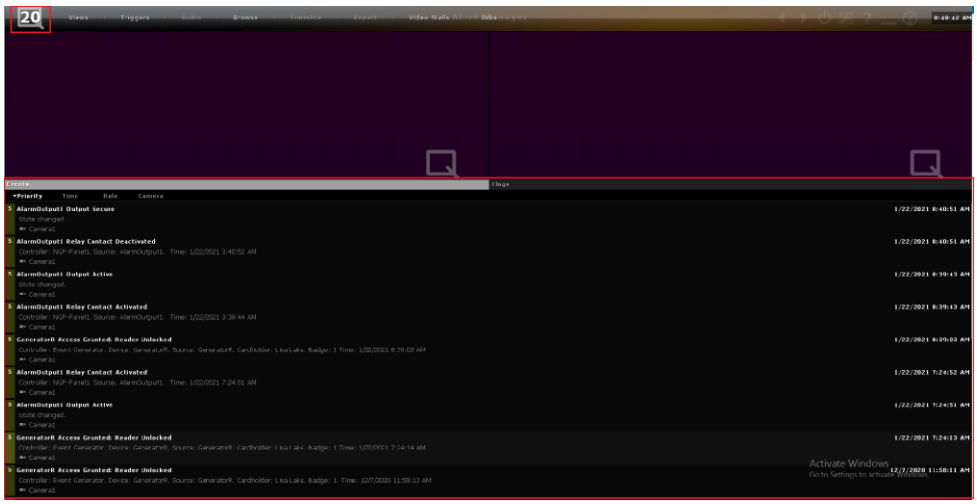
4. Restart the **Event Coordinator Service**.

5. To view OnGuard events in Ocularis, open the **OC Client (64-bit)** and log in.

Figure 5-22: OC Client Login

6. Click the **Alert Counter** in the upper-left corner of the *OC Client* screen. The *Alert Manager* screen opens, displaying all the configured OnGuard events.

Figure 5-23: Alert Manager

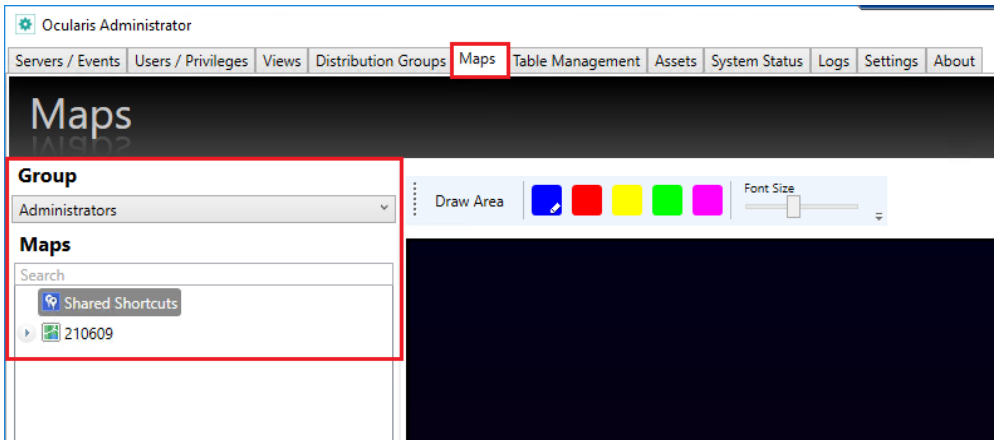


5.3.4 Add Devices on a Map

To add a device on a map:

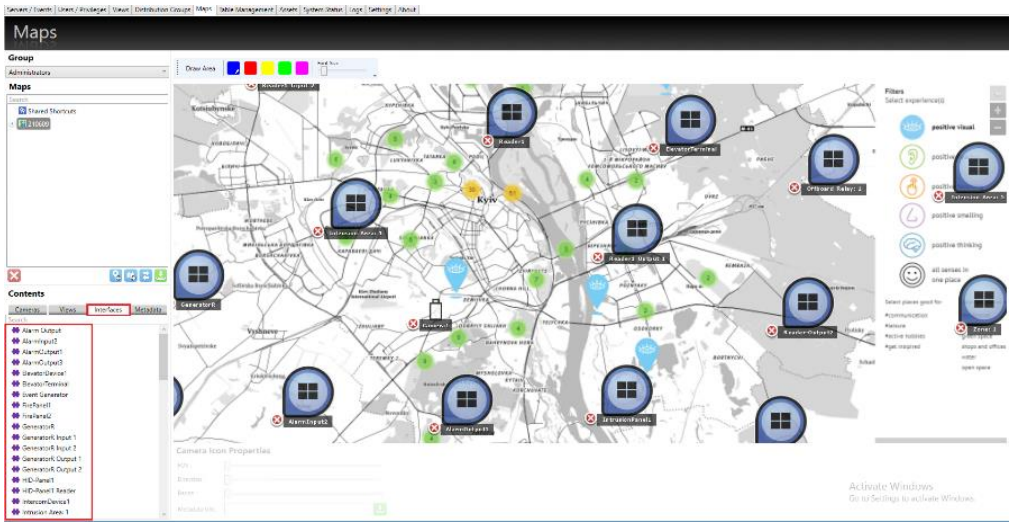
1. Open the **OC Administrator (64-bit)**.
2. In the **Maps tab**, select your map.

Figure 5-24: Select Map



3. Click **Interfaces** and drag the devices onto the map.

Figure 5-25: Map in Administrator



4. To view this map in client, open the **OC Client (64-bit)** and select your map under the **Ocularis Maps**.

Figure 5-26: Map in Client

6 Notes and Known Limitations

- The plugin supports 64-bit Operating Systems only.
- The plugin supports hardware events from OnGuard only; software events are not supported.
- The plugin does not support acknowledge and reset events.
- The plugin only supports real-time events transmission. Events that occur when the plugin is offline or logged-out are not supported.
- For intrusion doors, the plugin only supports online and offline hardware statuses.
- The plugin supports up to 1,000 OnGuard devices to work properly.