Luxriot ®

Luxriot Evo with Gallagher

How-to

28 Jan 2025

Table of Contents

> **!N.B.**   Please Inform Gallagher representatives about using it with the Luxriot Evo VDMS when buying your license.

Overview

Access Controls are a frequent addition to the VDMS and a vital part of any security system. They are responsible for multiple complex processes and have their own extended interfaces, but the tasks they manage frequently overlap with the VDMS functionality. To simplify security management for the specialists, we cross-pollinated the Gallagher Command Centre and Luxriot Evo systems, using the data and UX of both interfaces. This document focuses on the bidirectional integration of the Gallagher Command Centre with the Luxriot Evo VDMS.

The integration itself ensures a two-way information exchange between Luxriot Evo servers and Access Control software servers:

- **Luxriot Evo Server** receives events, doors list and status, and cardholders list
- In **Luxriot Evo Console**, you can see door status, add them to maps and geo maps, as well as create door-related events and actions
    - E&A events help monitor the changes in the door status
    - E&A actions and maps allow you to change the door status (lock/unlock)
- in **Luxriot Evo Monitor**, you can search door and cardholder events for the desired period
- In **Gallagher Command Centre,** you can add Luxriot Evo Channels, call for live view and playback modes, and use PTZ camera controls directly from Luxriot Evo VDMS. You also can send events to and receive Actions from Luxriot Evo VDMS.

Minimum software versions:
Gallagher Command Centre version: vEL8.90.1318
**Luxriot Evo version:** 1.29.1

The details below will help you set up Luxriot Evo to work with the Gallagher software. It is presumed that you already have the Gallagher Command Centre up and running and are familiar with its initial configuration process. For details on the Gallagher software setup, please see its supporting documentation.

> **!N.B.**   This article explains how to connect Gallaher with the Luxriot Evo. For the backward integration - please contact our representatives for the plugin and consult the Gallaher documentation.

1. Gallagher Configuration

## Configuration via the Configuration Client

1. The first step is to download and install *EvoVMSProxyInstaller.msi.* Download the file and follow the installation instructions.

2. Open the Command Centre Configuration Client, navigate *External Systems,* and set up the Luxriot Evo server and video channels. If the installation went correctly, you should see Luxriot Evo listed when connecting with the Evo server. Create a DVR System to represent Luxriot Evo.

   a. DVR System: Defines the third-party system.

   b. DVR Camera: Represents individual cameras or streams.
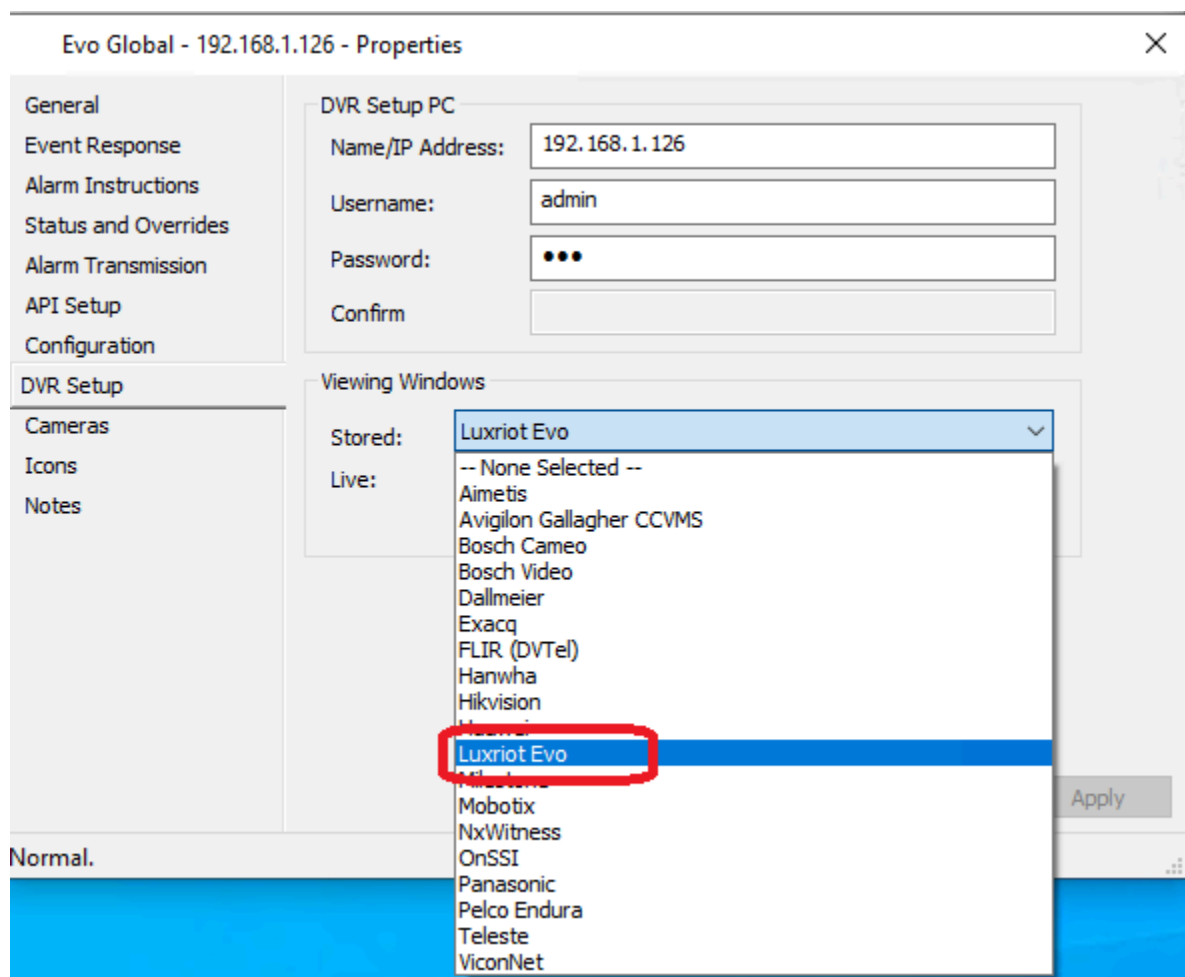
Configuration of a DVR system

First, the Gallagher side should set up a few things so that the two servers can communicate. The integration operates over secure HTTP; therefore, from Gallagher's point of view, Luxriot Evo will act as a REST API Client. The steps here describe the necessary settings in the Gallagher software.

1. Run Gallagher Configuration Client and log in using your username and password.
2. In the panel containing the main menu, go to *File -> Server Properties* and select *Web Services* on the left. Turn *ON* the *Enable REST API* setting and specify a *HTTPS port* for server-to-server communication.
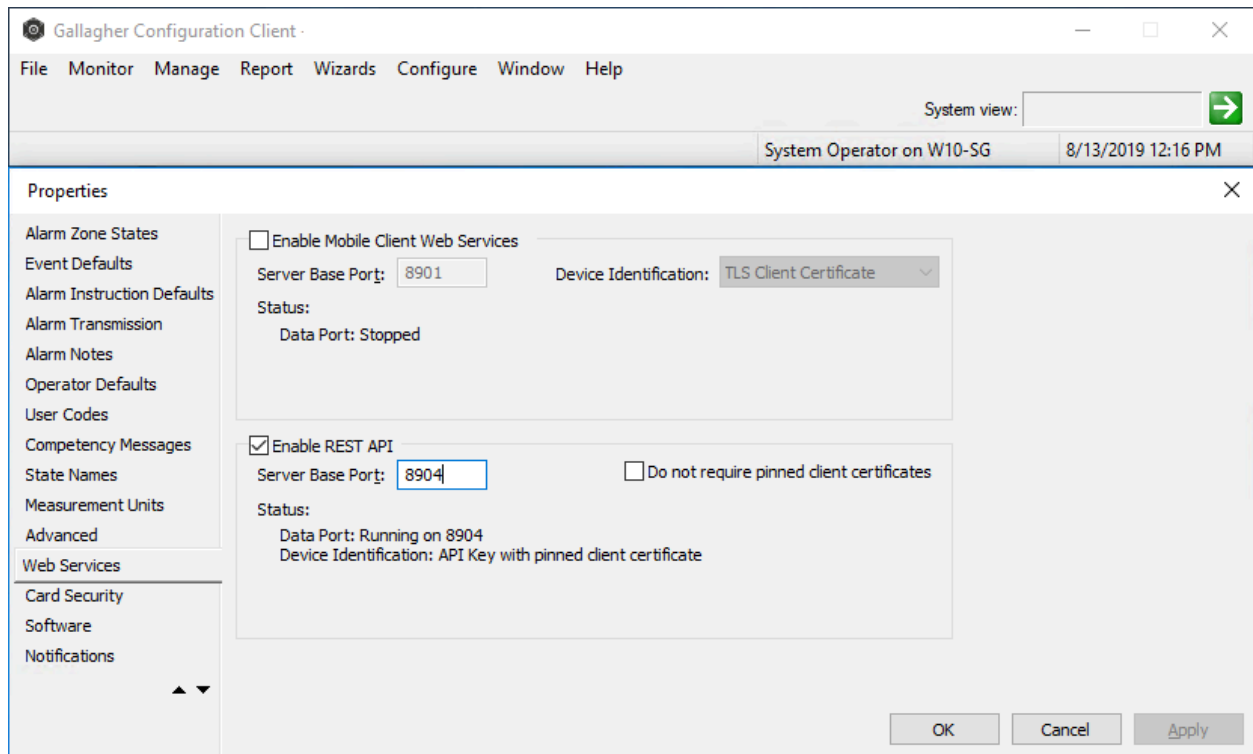

Enable REST API and specify a HTTPS port.

3. Next, go to the main menu *Configure -> Services & Workstations.* In the dialog box that appears, right-click anywhere and select *New -> REST Client.*
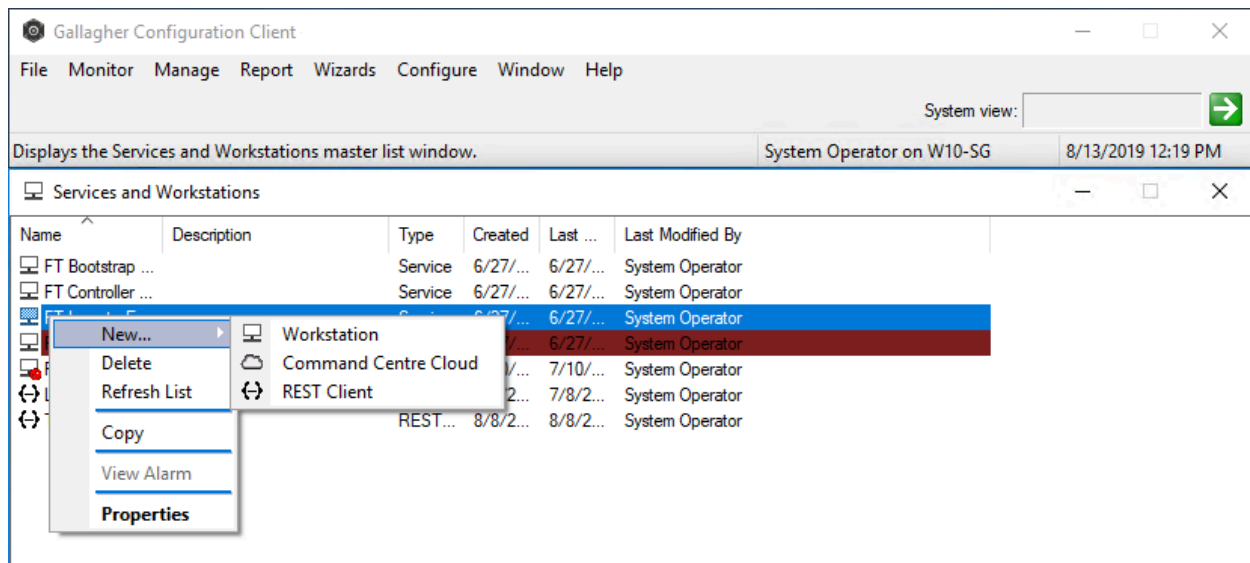
Add a new REST API Client.

4. All settings here are up to you or default, except those in the *API Key* tab:

   a. Copy the *API Key* from the read-only field and save it for later to paste it into Luxriot Evo Console

   b. Drag and drop your desired operator* into the *REST Client Operator* field from the main menu *Manage -> Cardholders*
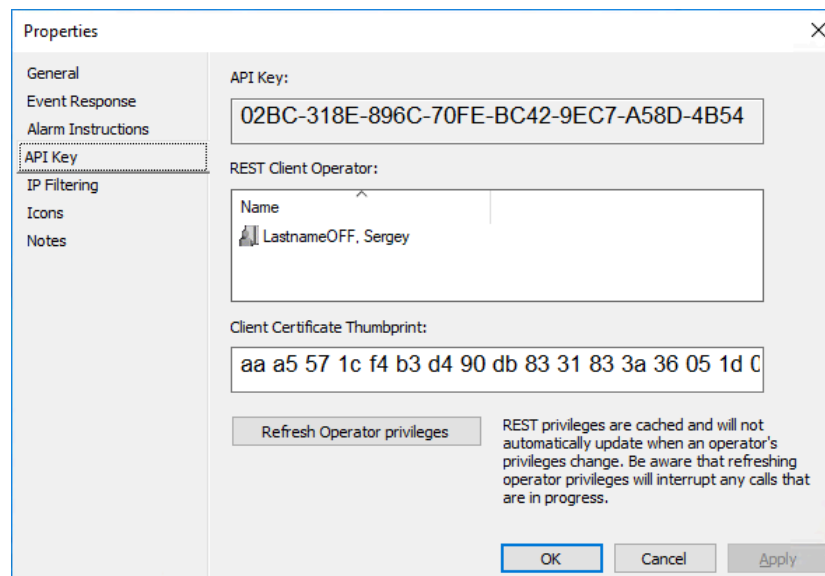
Copy the API key from the REST API Client settings to Luxriot Evo Console.

The certificate thumbprint is hard-coded into Luxriot Evo, and Luxriot is responsible for its renewal. You do not have to obtain your own certificate; simply copy the alphanumeric API key from the Gallagher configuration dialog box in the Luxriot Evo Console.

> **!N.B.** *For the REST API integration to work correctly, the cardholder acting as the operator must have the Advanced user privilege.

The rest of these settings are default/up to you.
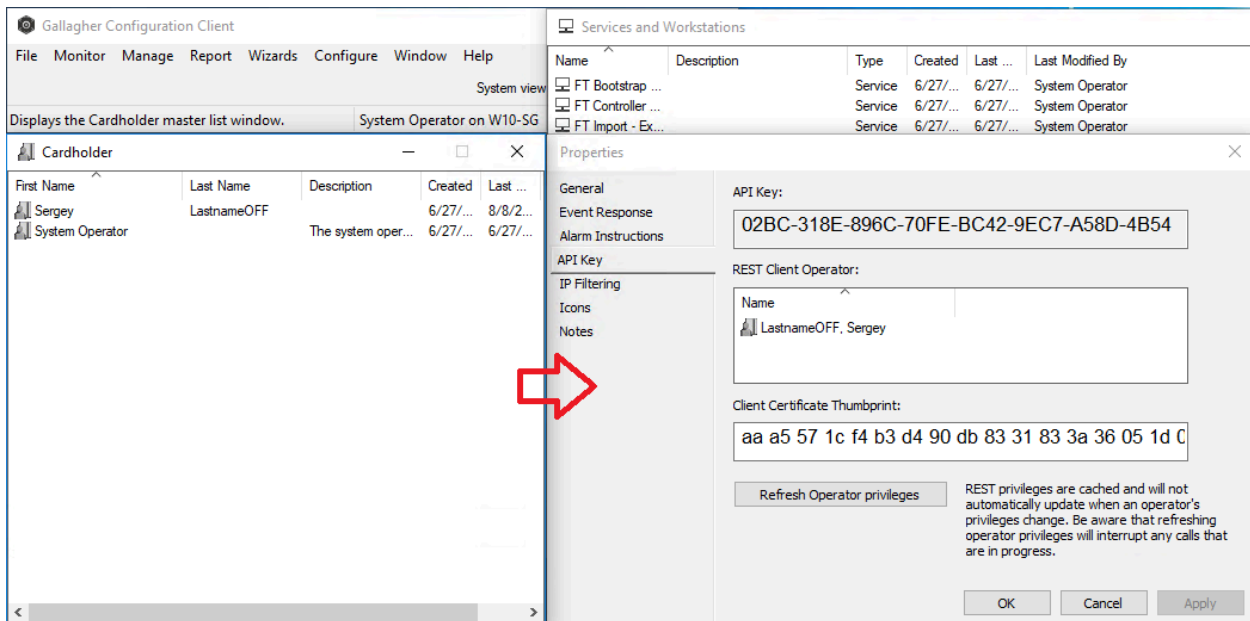
Drag the Cardholder to the REST API Client settings.

Adding DVR Camera

You must add cameras via the Configuration Client before using them inside the Command Centre. Please note that Camera names must match Luxriot Evo camera names exactly, or you can use Luxriot Channel ID instead. Select the cameras you want to see inside the Gallagher Command Centre and confirm your selection.
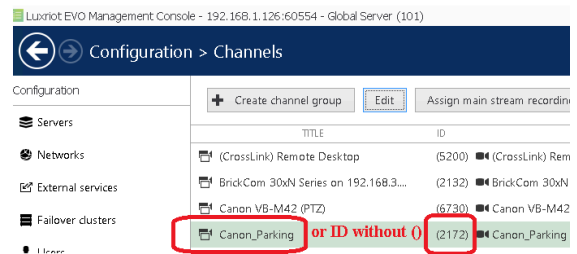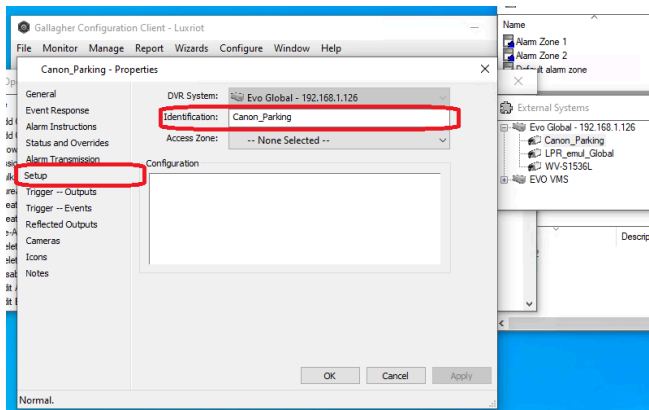
Configuring Tiles via the Command Centre Client

The Command Centre Client interface has been optimized so that operators can be shown real-time information for their site in a manner that is easy to understand and highly configurable.
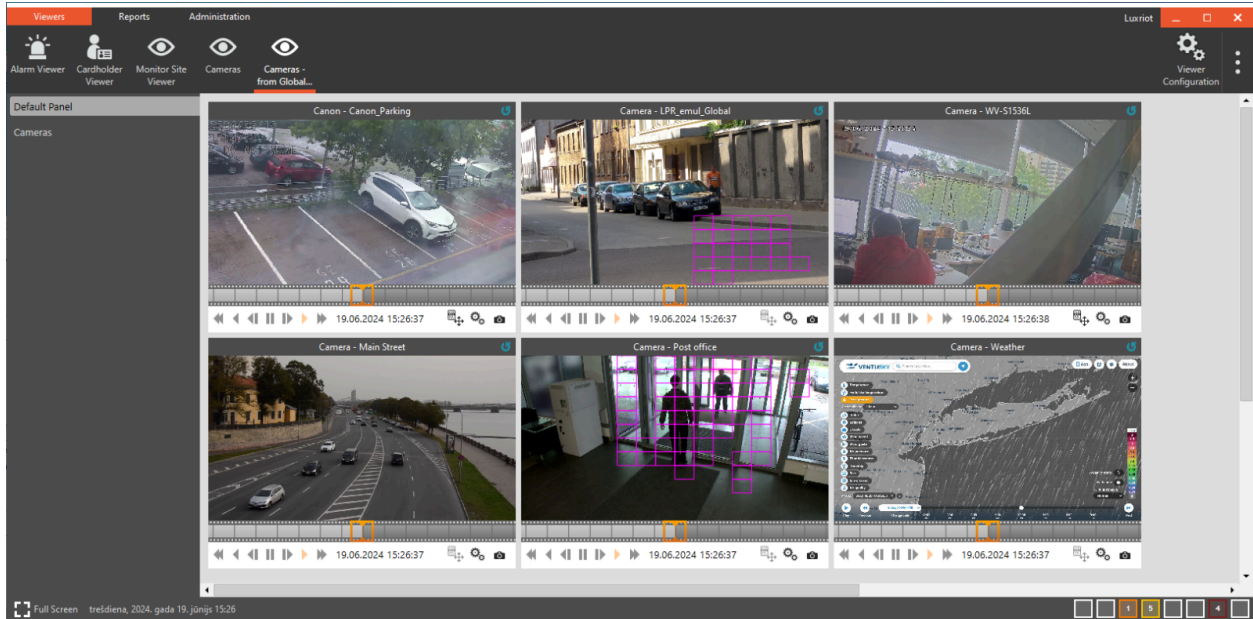
The three primary elements of this interface are Viewers, Panels, and Tiles. A Panel is simply a collection and arrangement of Tiles. Viewers are screen-sized windows that show the appropriate Panel of Tiles in any given situation. Tiles are small windows arranged within a Panel. A Tile displays information relevant to the context in which it is placed.

Many types of tiles are specific to certain Viewers, and not all viewers can accommodate all types of tiles. We will focus on a camera Tile. As the name suggests, the Camera Tile displays a video feed in a designated screen area.

To add a Camera Tile to the Panel:

1. Select the target panel and click the *Viewer Configuration* button in the top right corner.
2. Select the *Camera* from the *Tile Box*
3. After the Camera Tile appears on Canvas, use the *Click to configure* button,
4. Inside a new window, click the *'Please select a camera'* button, select a previously connected camera from the list, and confirm your selection.
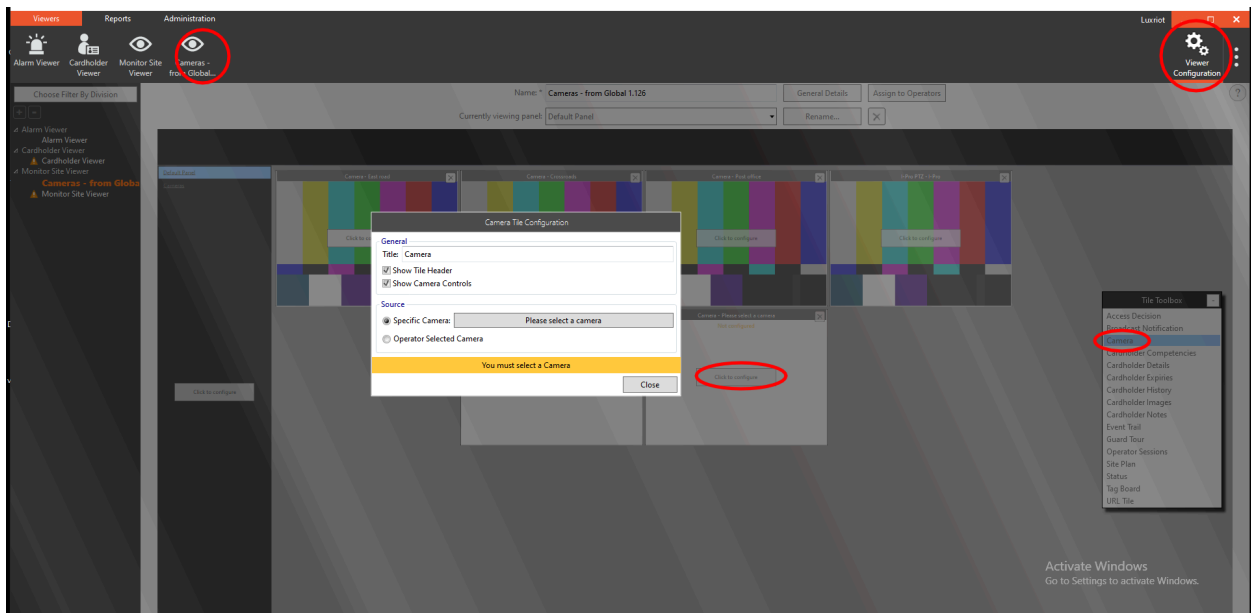
2. Luxriot Evo server Configuration

The rest of the setup will be on the Luxriot Evo Console side. The Luxriot Evo Server must have an Evo Global or a Standalone license applied to it for you to have the *Access Control* tab. If you are running Luxriot Evo Global, connect to the *Central Server* and use a privileged user account.

Creating a new Gallagher connection

Open the Configuration section in your Luxriot Evo Console and select the *Access Control* component on the left. In the upper panel, click the *New Access Control Configuration* button and fill in the settings in the dialog box.

- **Title**: user-defined service name, which will appear in Luxriot Evo Console
- **Access control type**: Gallagher
- **Host**: IP or hostname of the Gallagher server
- **Port**: server base port from the REST API settings (as specified above)
- **API key**: copy from the Gallagher configuration, as shown above
- **Client certificate thumbprint**: Hardcoded into the system - no need to change anything
- **Use Integration License:** Mark the checkbox if your Gallagher connection was set up before v.1.29.1.. Please contact our support team if you can't connect to the Gallagher with both - marked and unmarked checkboxes.
- **Merge**: enable this option if you have multiple access control systems and you want to have them all in a single tab in the Luxriot Evo Monitor application

*Create a new Gallagher Access Control connection*

When done, click OK to save the settings and close the dialog box. The newly created connection will appear in the list. Use the buttons on the upper panel to alter the connection details and temporarily disable it if necessary.

Adding Access Control Actions (Called "Patterns" on the GCC side).

To call GCC *Patterns* from Luxriot Evo *Events & Actions*, you must pre-configure specific actions on the Luxriot Evo side. To do so:

1. Go to *Configuration -> Access Control -> Gallagher* instance and click the Edit button at the top. I*n* the new popup window, select the Actions tab and preconfigure the specific Gallagher event to make it actionable.
   a. Click the *+Action* button at the top,
   b. and fill in relevant fields inside the *Edit action* panel from the left.
   c. Apply your configuration with the *Apply* button inside the *Edit Action* panel

d. Confirm with the *OK* button under the *Actions* panel.
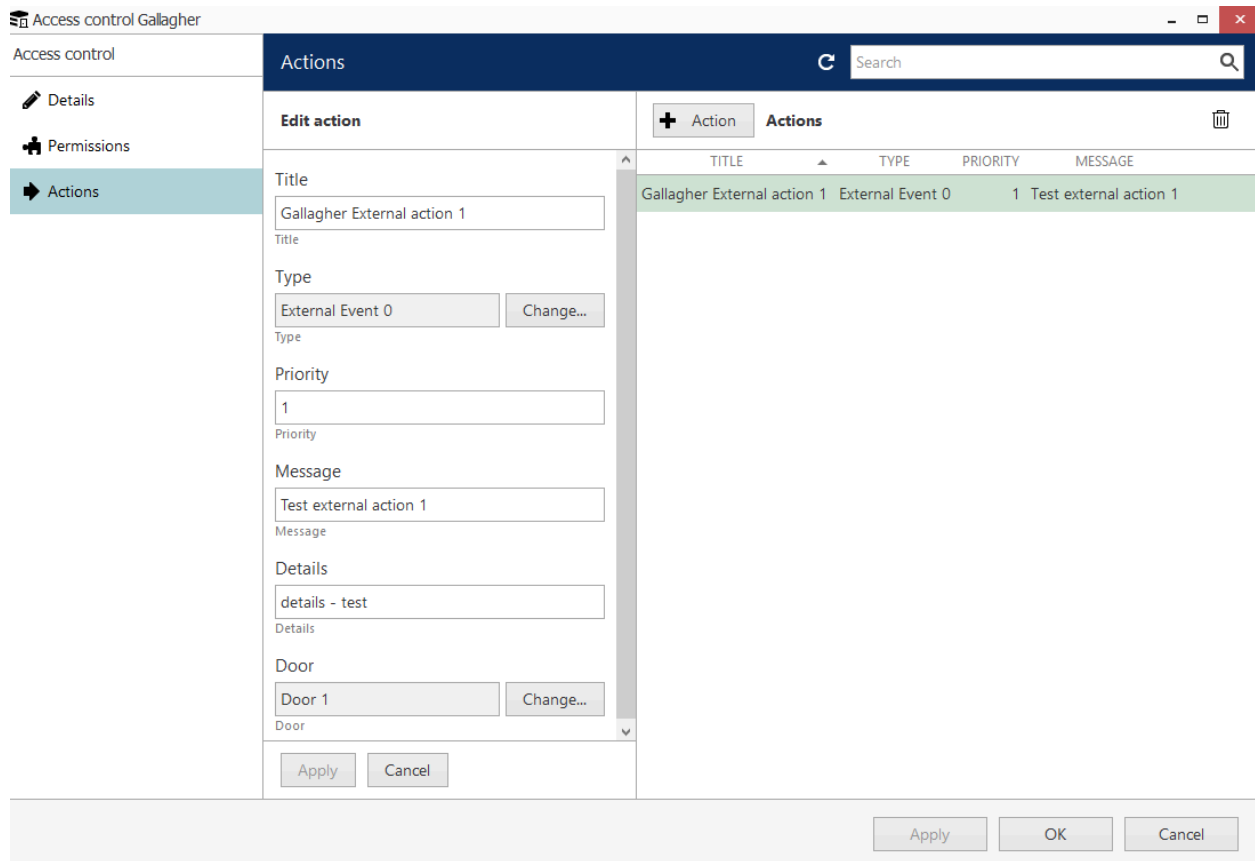
After preconfiguring the GCC event as a Luxriot Evo Action, it will become visible inside the *Events & Actions -> Actions -> Access Control Action* and can be usede as any other Luxriot Evo action.

Adding Doors to the System

Once the Gallagher connection is created, you can start adding **doors**. To do so, stay in the same section of Luxriot Evo Console: *Configuration > Access control*, click the *Drop-down List* icon (down arrow) next to the *New access control* configuration, and select the *New door* option. A dialog box will pop up, allowing you to enter the door configuration. Note that an active connection to the target Gallagher instance must be present for Luxriot Evo to retrieve the existing door list.

The following settings should be specified for each door:

- **Title**: user-defined door name, which will appear in Luxriot Evo
- **Access control**: select your Gallagher connection from the list

- **System ID**: door identifier in the access control software; choose one from the list
- **Channel**: select one of your video channels to associate it with the target door (they will appear linked in Luxriot Evo Monitor)

If the door list appears empty, check for:

- The doors are present in the Gallagher configuration
- you have added a REST API Client with a privileged operator, and it has the certificate thumbprint copied from Luxriot Evo Console, as described above
- you have copied the correct API key from that REST API Client into the Gallagher configuration in the Luxriot Evo Console
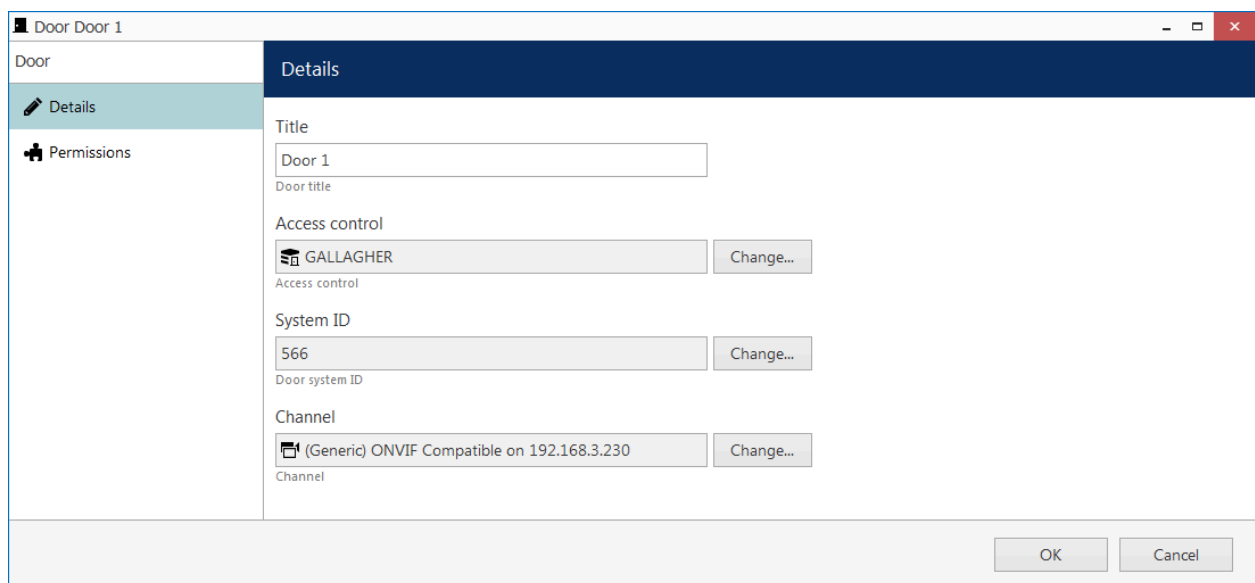
Adding the new Door

Use the *Disable/Enable* button on the upper panel to temporarily turn off or restore the connection. The recycle bin button removes doors and/or access control connection entries from the Luxriot Evo configuration.

To see the **status of the doors** you have added to the Luxriot Evo server configuration, go to the *Monitoring* section of the Luxriot Evo Console and select the *Access Control* component on the left. You can see the **current** door lock **state** and related **alert flags**. Pay attention to the status **update time**. If a door status shows *Unknown*, it can mean that the Gallagher service is not connected, or the door may have been removed from the Gallagher configuration.

Check the door status in the Luxriot Evo Console.

3. Setting E&A and Doors inside the Luxriot Evo console

After you have added Gallagher doors to the Luxriot Evo Server configuration, there are several ways to utilize it.

Adding Doors to Maps

You can place **door markers** on *Maps* and *Geo maps*. These markers will reflect the current **door status** in the Luxriot Evo Monitor and provide interactive **actions** upon a single or double click.

Adding the Door markers to Maps or Geo maps

To put a marker onto the *Map*, **drag and drop** it from the panel above. In the settings on the right, select the *Target Door* from the list. You can also adjust the **marker appearance** for each door state by choosing the target icon and its color.

Events & Actions

Luxriot Evo Event & Action Manager (E&A) provides support for:

- The *Door Events* (status changes)
- The *Access Control Event* (other events sent by the Access Controls)
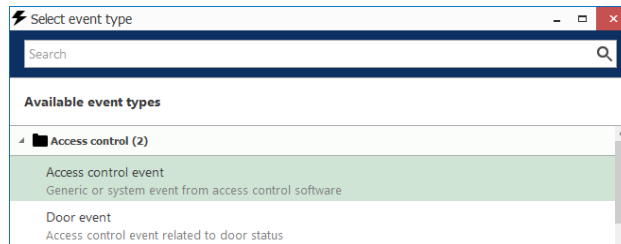
- The *Door Actions* (change door state)
- The *Access Control Action* (preconfigured Access Control GCC *Patterns*)
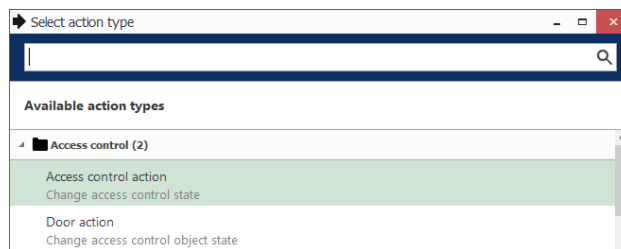
Changes in the *Door status* are sent from Gallagher to Luxriot Evo. You can set up different code reactions via Luxriot Evo *Event & Actions Configurator*. Later, these events can be used to build rules, e.g., log the Events in Luxriot Evo, bookmark them, automatically interact with other system components, etc.
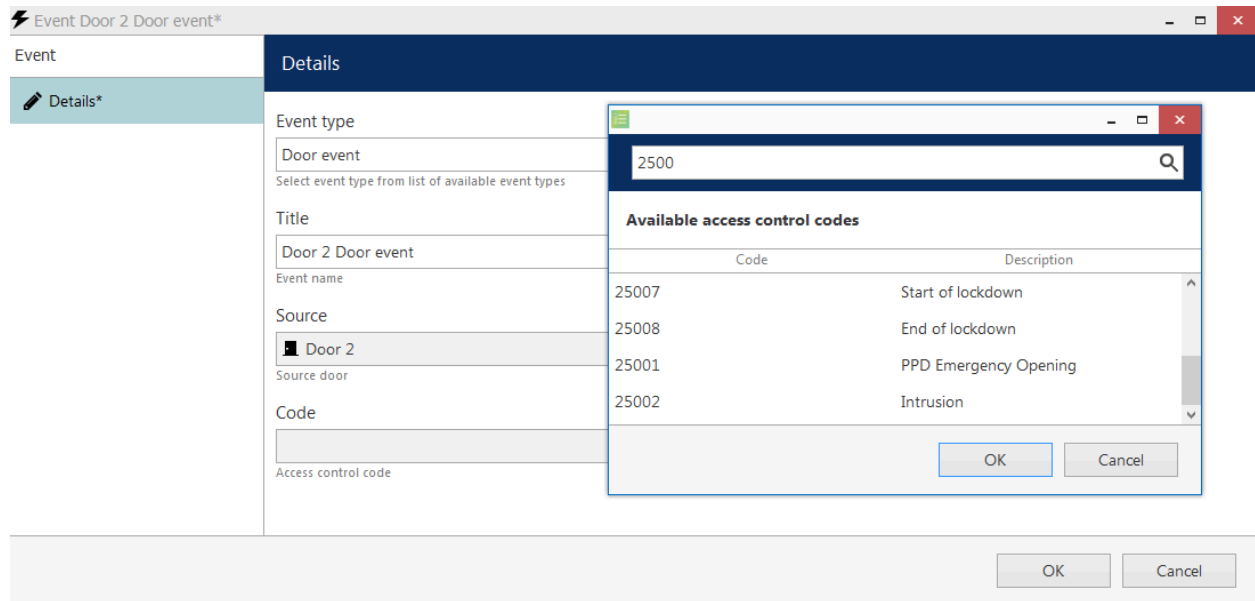
Adding the Door event in E&A

To create a new **door event** in Luxriot Evo Console, go to the *Events & Actions* section > *Events* > click the + *New event* button on the upper panel. Inside the appeared dialog box, fill in the settings:

- **Event type**: Door event
- **Title**: user-defined event name to be used in E&A Configurator
- **Source**: select a door from the list
- **Code**: desired door status change code received from Gallagher, select one from the list.

Thus, such events will be triggered each time the corresponding code is received from Gallagher. One event corresponds to one code from a specific door; create multiple events if required.

Adding the Door Action in E&A

Door action can be created from the *Events & Actions* section -> *Actions* -> the + *New action* button from the upper panel -> *Door action*. Available settings:

- **Action type**: Door action
- **Title**: user-defined action name, which will appear in E&A Configurator
- **Target**: your Gallagher connection
- **Code**: select the desired action from the list
  - *Lock*: change the door state to *Locked*
  - *Unlock*: change the door state to *Unlocked*
  - *TempUnlock*: open (unlock) the door temporarily, then lock it back after ~5 sec.

> **!N.B.** The *Lock* and *Unlock* actions will only operate if the target door is the only **one** in the target **access zone** in the Gallagher configuration. If multiple doors are in the same access zone, these actions will still be available in the Luxriot Evo Console but will not work. For **multi-door** areas, use the *TempUnlock* action (open the door and close it automatically after a short timeout).

To create *Actions* based on the preconfigured GCC Patterns, go to:

1. *Events and Actions -> Actions -> +New action.*

2. Select the *Access Control Action* from the list.

3. Fill in the *Title* field, select Gallagher as a *Target*

4. Select your preconfigured GCC Pattern inside the Action field.

Access control Action Example

Finally, go to the *Events & Actions* section -> choose *Rules* -> click the *Open Configurator* button on the upper panel to bring up the *E&A Configurator* dialog box.

You can use all your Events and Actions, including those related to Gallagher, to build automated scenarios here. Every rule can also have modifiers: a *Delay timer*, a *Condition*, and a *Schedule*.

Rules 🔍

RULE

▲ 📷 **Uniview IPC6222ER-X on 192.168.3.237 >> FR: Staff member**

  🗄 GALLAGHER >> TEMP unlock door

    🕐 *Working hours only* 🚪 *target door* 🚪 *Door 3*

▲ 🖱 **OPEN DOOR >> User button clicked**

  🗄 GALLAGHER >> GALLAGHER Door action OPEN

    🚪 *target door* 🚪 *Door 1*

▲ 🚪 **Door 2 >> Door 2 OPENED**

  📷 (Generic) ONVIF Compatible on 192.168.3.229 >> Pop-up on screen

▲ 🚪 **Door 2 >> Door 2 OPENED**

  📷 (Generic) ONVIF Compatible on 192.168.3.230 >> Pop-up on screen

    ⌛ *00:00:03 extend*

Create rules using door Events and Actions.

Example: You can temporarily unlock a door by clicking a user button or opening it automatically when a face from the staff database is recognized.

> **!N.B.** To utilize Luxriot Evo Events & Actions configurator *Access Control Action,* it must be preconfigured as described earlier in the corresponding chapter.

4. Gallagher inside Luxriot Evo Monitor

Once your Gallagher service is paired with Luxriot Evo, a new tab will appear in the Luxriot Evo Monitor. If it doesn't, make sure you are connected to the correct Luxriot Evo Server.

Switch to the *Access Control* tab to start working with its contents. Similarly to other access control integrations, there are three subsections here:

- **Events**: all events received from Gallagher
- **Doors**: the door list and related actions
- **Cardholders**: the list of cardholders

Note that the door list here will be loaded according to the user permissions. There are two user permissions for each door resource in the Luxriot Evo Console:

- **View:** see the door and its status in Luxriot Evo Monitor
- **Door actions:** have the *Lock/Unlock/Temporarily Unlock* buttons in the Luxriot Evo Monitor

Apart from this permission management via Luxriot Evo Console, you can hide the *Access control* tab from all users via Luxriot Evo Monitor Restrictions (main menu *Tools > Administration Tool*).

Events

This section is almost identical to the *Event Trail* section in the Gallagher Command Centre. Here, you will find door **events** - status changes, *lock/unlock* operations, etc. - and other Gallagher events, such as database maintenance notifications, configuration changes (e.g., new cardholder added), etc.

Enter the search **time range** and **criteria** at the bottom and click *Search*. The results will appear as a list. Use the *Reset* button to **discard** any entered criteria and use the default search settings (any event type, past 24 hours).

Gallagher events in the Luxriot Evo Monitor

Click any event in the list to see **details** on the right. If the clicked event is related to a door, the linked channel's video will appear in the **instant playback** mode. Click the *View door events* button below to view the target door events for the past 24 hours.
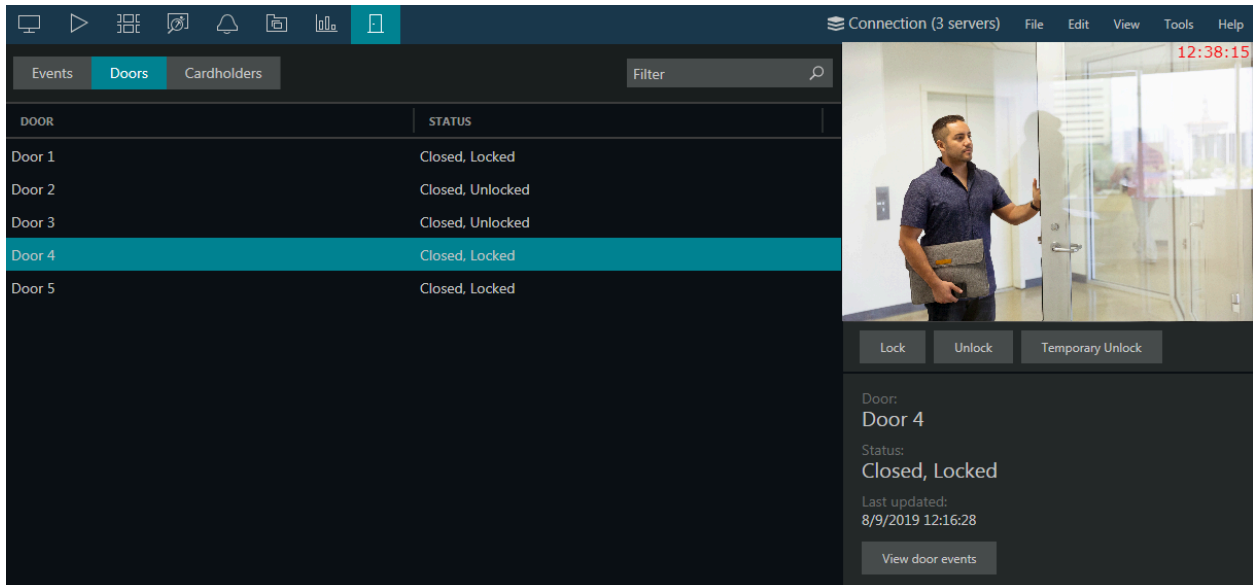
Doors

This tab contains the **list of doors** retrieved from Gallagher. The Status tab reflects each door's current state.

Click any door to see more details on the right:

- see the live video from the associated video channel
- click the *Lock*, *Unlock*, or *Temporarily Unlock* buttons to perform the corresponding action (similarly to E&A actions, *Lock/Unlock* will only work for single door zones)
- Click the *View door events* button to switch to the *Events* tab. Target door events for the past 24 hours will be displayed automatically.

The Door list inside the Access Control tab.

Cardholders

Here, you will see all existing cardholders fetched from Gallagher. Since there are no cardholder-associated actions, the extra details will be the name and picture.

Click the *View cardholder events* button to switch to the *Events* tab and view related events for the past 24 hours. Then, use the *Refresh* button at the bottom to **reload** the cardholder list and details. This will be useful if there are changes on the Gallagher side that have not yet been synchronized with Luxriot Evo.
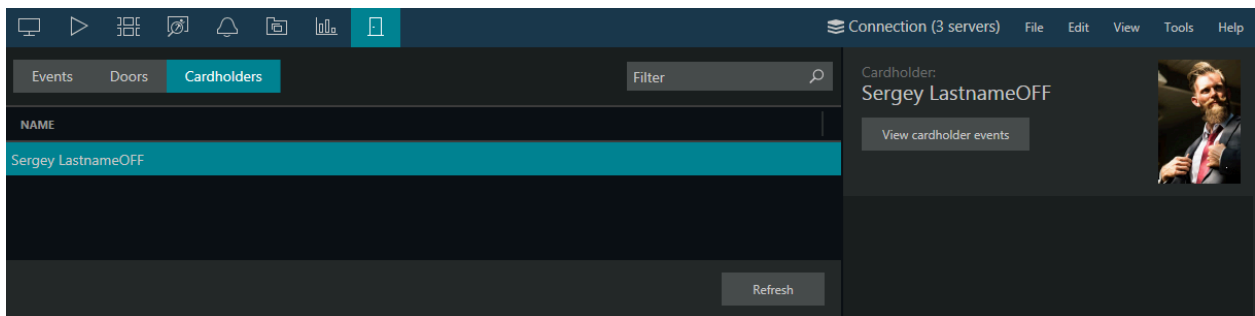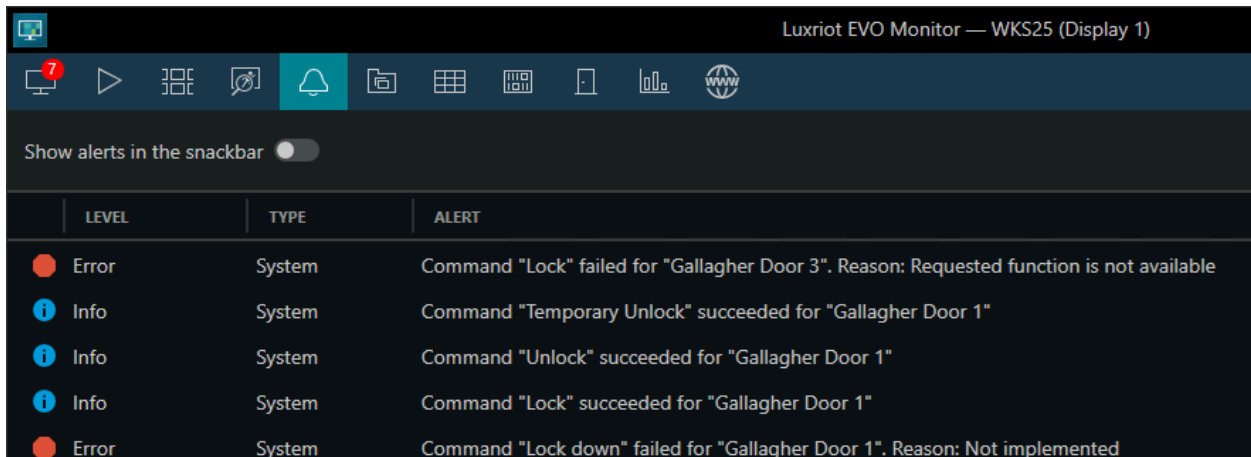

List of cardholders

Maps

If you have created **maps** with **door markers**, you can use these maps in the *Live* and *Playback* tabs, as usual. Each door marker, when clicked (or double-clicked, depending on your application setting), will provide an opportunity to *lock, unlock, temporarily unlock*, or *Lock Down* the target door. This functionality is identical to door actions in E&A and door buttons in the *Access Control* tab.
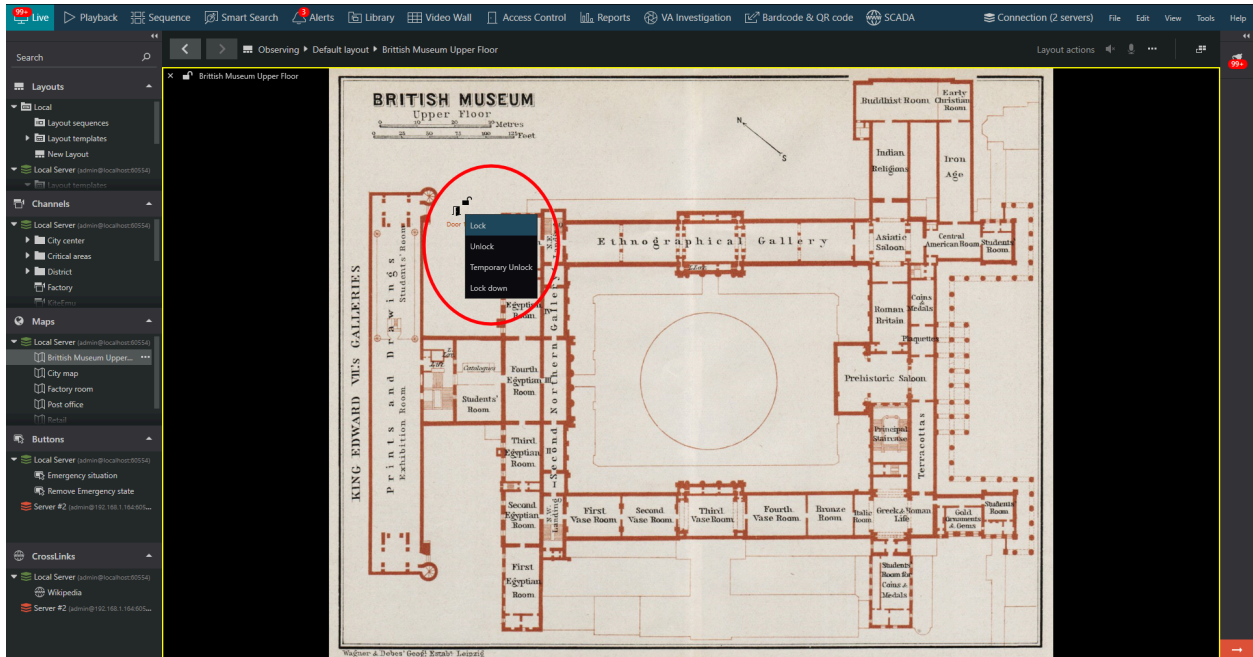
Maps with the door actions

5. Basic Troubleshoot

You can visit the Alerts tab to learn more about any Events & Actions behavior deviations. The most common errors are displayed in the snapshot below.

Alerts tab with the Access Control errors

1. **Reason: The requested function is unavailable, so** the system can't address such an option to the Gallegher. Please check your Gallagher configuration and make sure all the settings are correct.

2. **Reason: Not implemented,** which means that this feature is not implemented for this particular integration.