

# EVAC<sup>cloud</sup>

## Cloud

### User's Manual

EVAC CLOUD CONNECT

Remote connection application for EVAC Cloud systems

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## 1 INTRODUCTION

**EVAC Cloud Connect** is an application that allows remote connections to be established with **EVAC Core** devices associated with user accounts registered in the **LDA Audio Tech cloud**.

Once the connection with the **EVAC Core** device is established, we will have the possibility to initiate **UDP** or **TCP** communications with endpoints located on its **local network (LAN)**. These remote endpoints will be defined by an **IP address** on the **EVAC Core** system's **local network (LAN)**, a **port** and the **communications protocol** to be used.

The connection endpoints will correspond to:

- **LDA devices** physically detected on the **local network (LAN)** of the **EVAC Core** system using the **LDA Discover v1** protocol.
- Manually configured endpoints on the **EVAC Core** system configuration web page. These can be used to provide remote access to LDA devices not found using the **LDA Discover v1** protocol, or to communicate with **other devices or applications**.

For the correct functioning of **EVAC Cloud Connect**, it is essential to run it under the **Windows 11 operating system or later**.

**NOTE:** The images and directions in this manual are described with the **EVAC Cloud Connect v1.1.1.2 software version**.

## 2 AUTHENTICATION

When starting the application, you may see the notification:

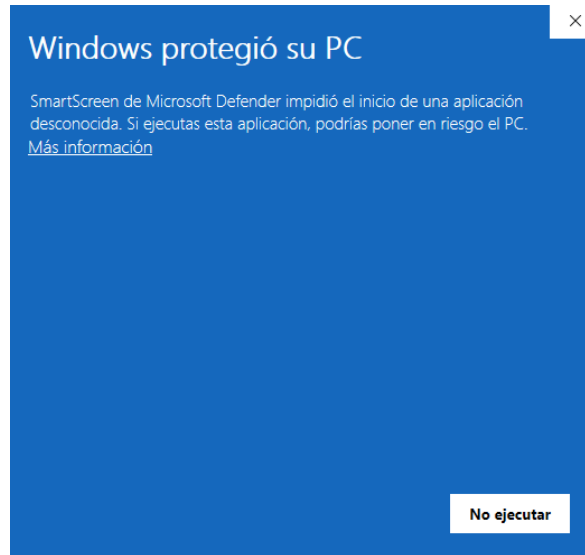


Figure 1. Windows SmartScreen notification

This notification is due to the Windows service that notifies that the application has no signature. To run the application safely, click on the link with the text "More information", and the "Run anyway" button appears.

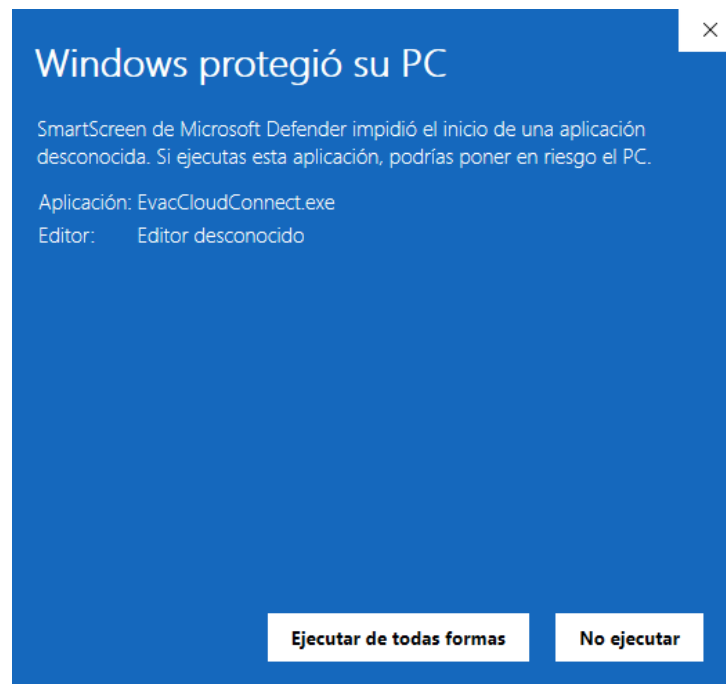


Figure 2. SmartScreen Notification – More Options

After pressing this button, the authentication form will be displayed in which the credentials of a **user registered on the EVAC Cloud platform ([evaccloud.com](https://evaccloud.com))** must be entered.

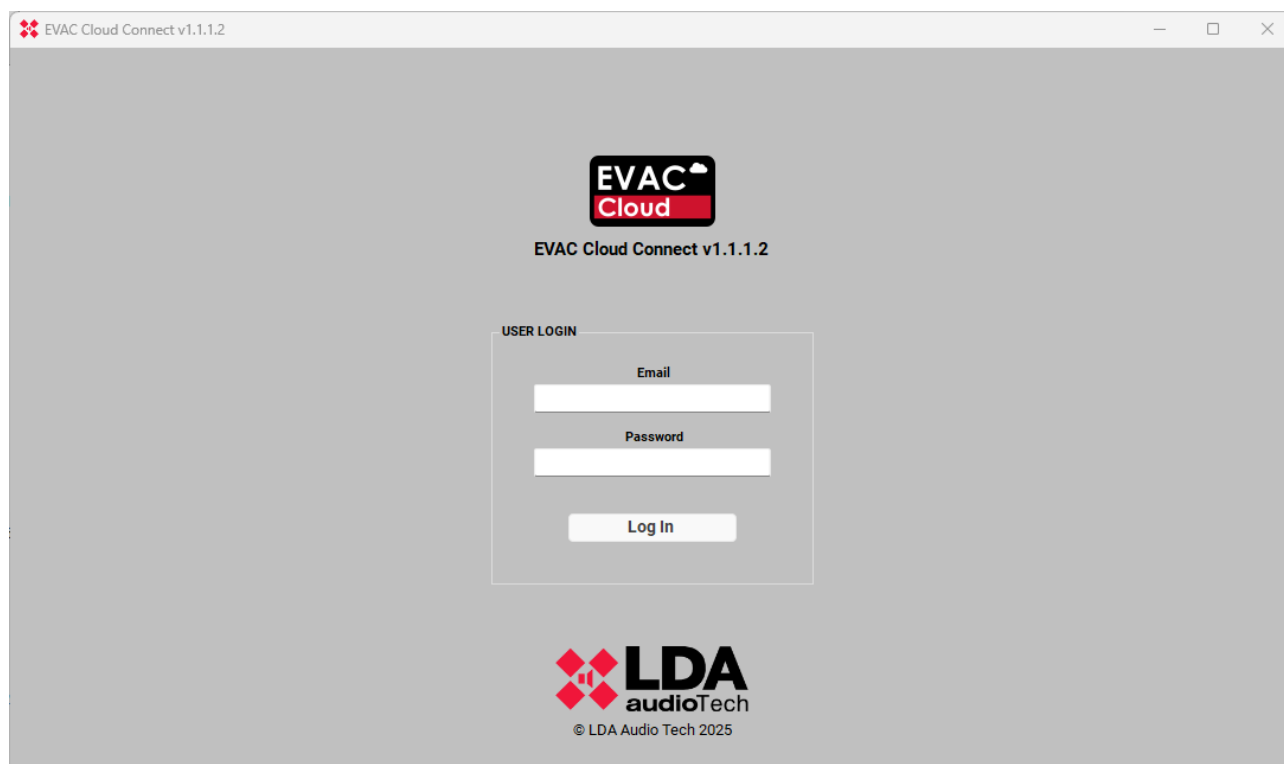


Figure 3. User authentication

Once the login credentials have been entered and validated, the **EVAC Core** systems associated with the authenticated user's account will be displayed.

If authentication fails, the following message will be displayed:

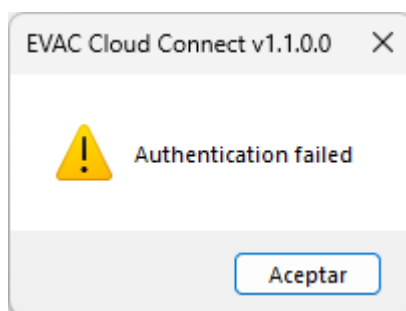


Figure 4. Authentication Failed Message

### 3 EVAC CORE SYSTEM SELECTION

After successful authentication of the user account, the list of **EVAC Core** systems associated with that account will be displayed.

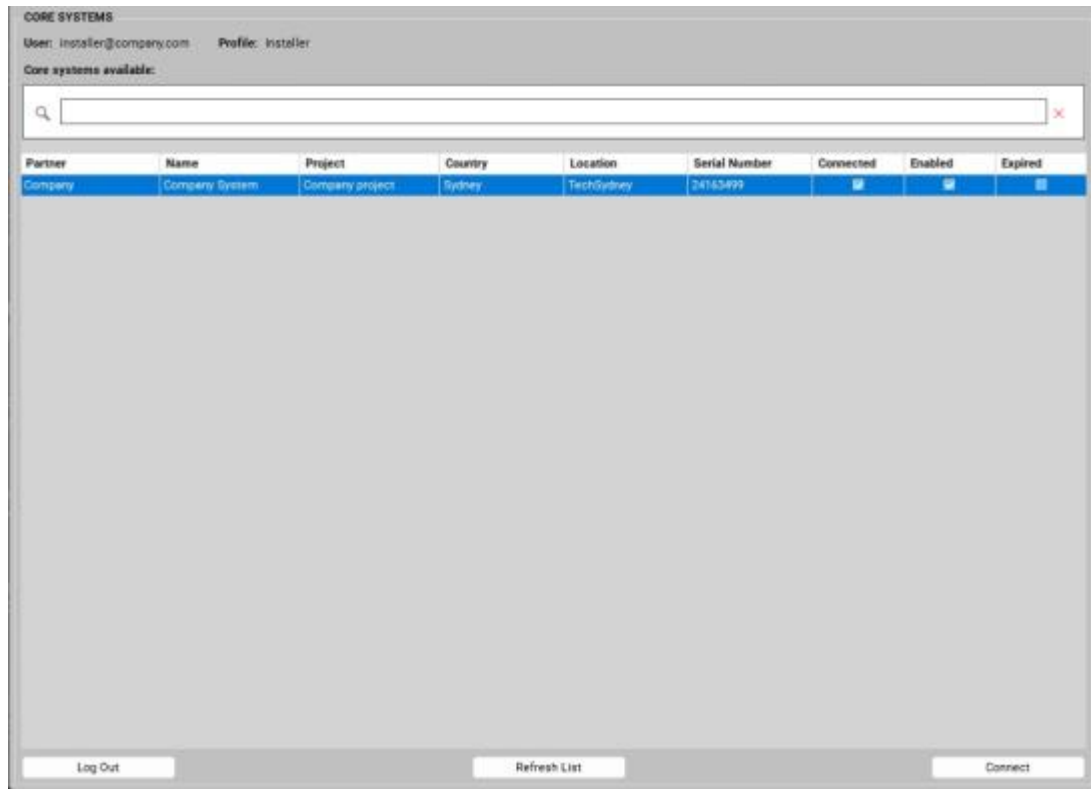


Figure 5. EVAC Core System Selection

At the top of the window, the **name** and **profile** of the **authenticated** user account are displayed.

In the center is shown the list of **EVAC Core** systems in which it offers various information related to each of them and organized by columns:

- **Partner:** Partner to which the system belongs.
- **Name:** Name given to the system.
- **Project:** Project in which the system has been included.
- **Country:** Country where the system is located.
- **Location:** More precise location where the system is located.
- **Serial Number:** Serial number of the device.
- **Connected:** **EVAC Core** systems notify LDA **Audio Tech's** cloud infrastructure of their presence approximately every 15 minutes. This field indicates that the corresponding system verified your connection to the cloud in the last 15 minutes, so if all goes well, a remote connection can be established with it.
- **Enabled:** Indicates whether the system is enabled for a remote connection. The connection with **EVAC Core** systems can be enabled or disabled from the **LDA Audio Tech** infrastructure management website in the cloud.

- **Expired:** Indicates if the system license has expired, in which case it will not be possible to make a remote connection to the system until it is renewed.

At the bottom there are three buttons with which we can perform the following actions:

- **Log Out:** Log out with the currently authenticated user. This will return us to the initial user authentication screen.
- **Refresh List:** Updates the list of EVAC Core systems.
- **Connect:** Initiates the connection with the EVAC Core system selected in the list. It is also possible to initiate the connection to a system by double-clicking directly on it in the list of systems.

If for any reason it is not possible to make a successful connection with the selected EVAC Core system, the following message will be displayed on the screen:

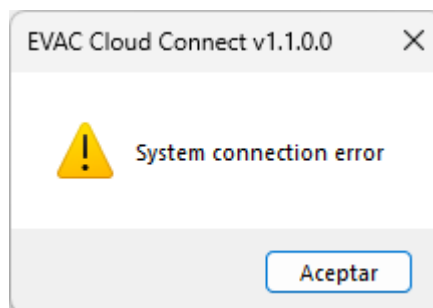


Figure 6. Failed connection with EVAC Core system

Connection to **EVAC Core** systems via this app is only allowed for users with an **Installer profile or higher**. With unauthorized profiles, any attempt to connect to a system will show an authentication error.

## 4 CONNECTING TO AN EVAC CORE SYSTEM

Once the connection to the **EVAC Core** system has been successfully established, the app will display a screen like the following:

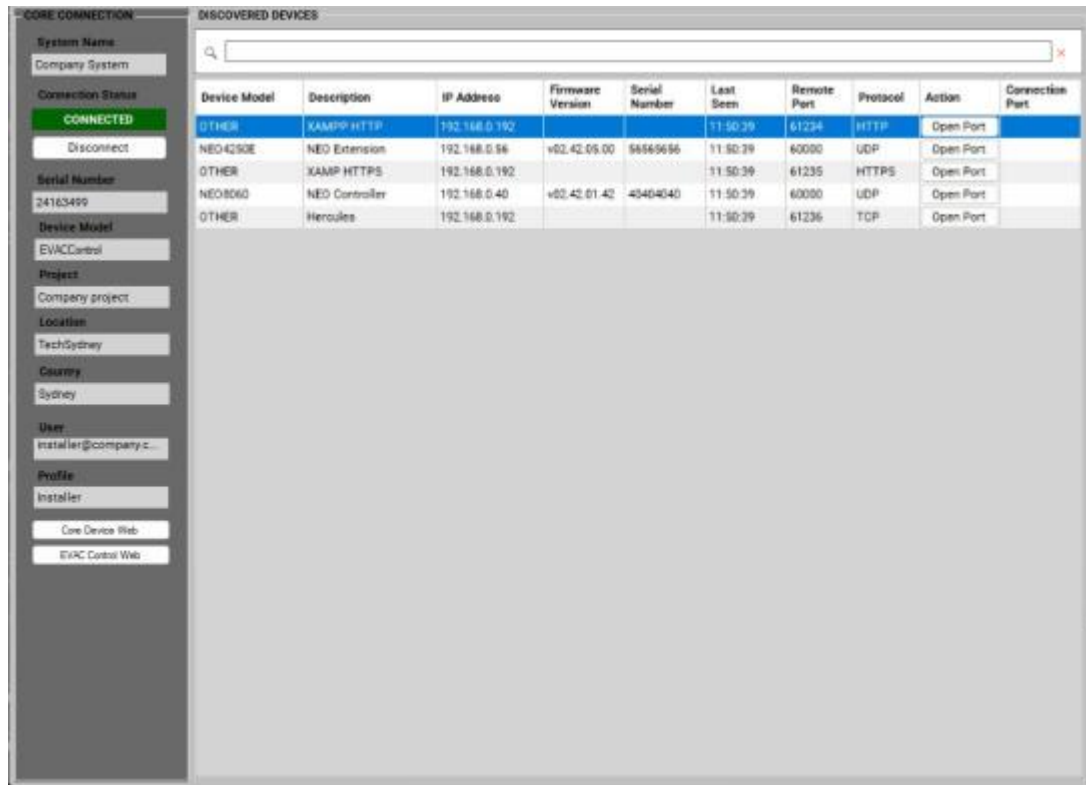


Figure 7. Connection window with an EVAC Core system

The left panel ("**CORE CONNECTION**") displays various information about the **EVAC Core** system and the **authenticated user**, as well as several buttons to perform different actions:

- **System Name:** Name given to the **EVAC Core** system.
- **Connection Status:** This section shows the status of the connection with the **EVAC Core system**; "**Connected**" (in green) / "**Disconnected**" (in red).  
Also included is the "**Disconnect**" button, which when pressed will terminate the connection to the **EVAC Core** system, returning the application to the system selection window.
- **Serial Number:** Serial number of the **EVAC Core system**.
- **Device Model:** Exact model of the **EVAC Core** system. The models that offer remote connection through the cloud from **LDA Audio Tech** are **EVAC Cloud** and **EVAC Control**.
- **Project:** Project to which the **EVAC Core** system belongs.
- **Location:** The location where the system is located.
- **Country:** Country in which the system is located.
- **User:** Authenticated user account with which we have made the connection with the system.
- **Profile:** Profile of the authenticated user.



- **Core Cfg Web:** Pressing this button will open a window with the default browser of the operating system in which the EVAC Core system configuration website will be remotely loaded. Authentication on this website will be carried out automatically with the user account with which the remote connection has been made. The user account is valid for a maximum of 24 hours from the authentication in the application.

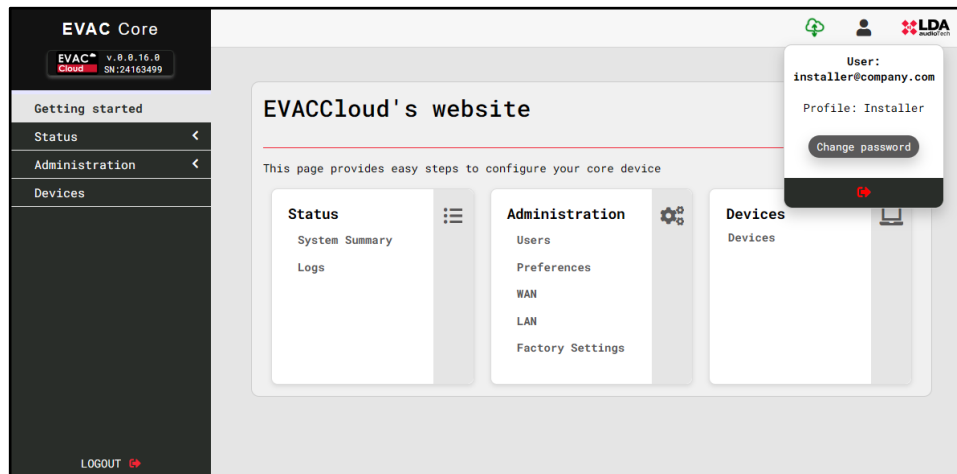


Figure 8. EVAC Core configuration webpage loaded remotely

- **EVAC Control Web:** This button appears only on **EVAC Control** devices and is responsible for remotely opening the EVAC Control web. Authentication on this website will be carried out automatically with the user account with which the remote connection has been made. The user account is valid for a maximum of 24 hours from the authentication in the application.

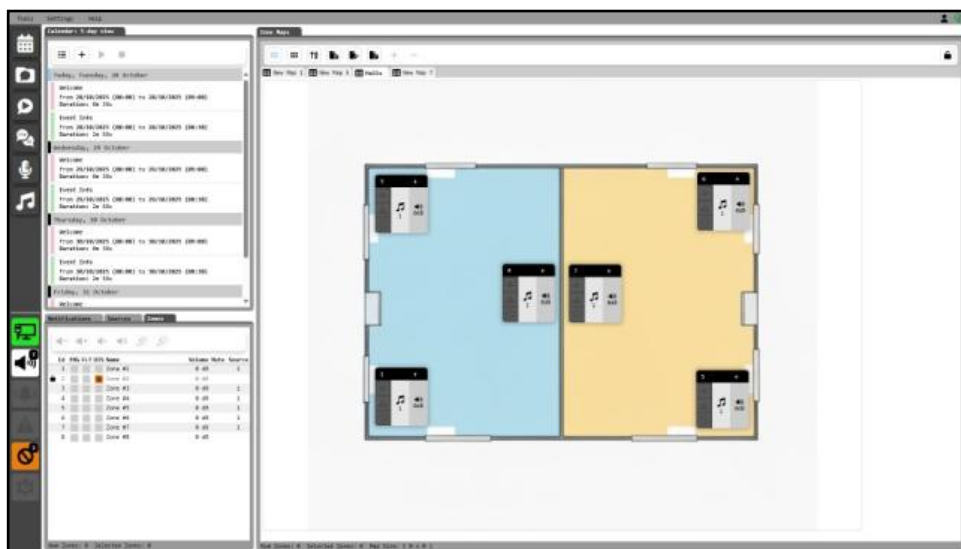


Figure 9. EVAC Control webpage loaded remotely

The central panel ("**DISCOVERED DEVICES**") shows the list of access points with which remote connections can be made through the **LDA Audio Tech cloud**. These access points will correspond to both **LDA devices**, found on the **EVAC Core LAN** using the **LDA Discover v1** protocol, and access points added manually using the **EVAC Core configuration web page**. For each of them, the following information will be displayed, organized in columns:

DISCOVERED DEVICES									
Device Model	Description	IP Address	Firmware Version	Serial Number	Last Seen	Remote Port	Protocol	Action	Connection Port
OTHER	XAMPP HTTP	192.168.0.192			11:56:39	61234	HTTP	Open Port	
NEO4250E	NEO Extension	192.168.0.56	v02.42.05.00	56565656	11:56:39	60000	UDP	Open Port	
OTHER	XAMP HTTPS	192.168.0.192			11:56:39	61235	HTTPS	Open Port	
NEO8060	NEO Controller	192.168.0.40	v02.42.01.42	40404040	11:56:39	60000	UDP	Open Port	
OTHER	Hercules	192.168.0.192			11:56:39	61236	TCP	Open Port	

Figure 10. Found devices and endpoints

- **Device Model:** Model corresponding to the device or endpoint.
  - For **LDA Audio Tech** equipment found using the **LDA Discover v1 protocol**, the text string obtained through the LDA Audio Tech protocol will be displayed. For example, for NEO series devices we will have **NEO8060**, **NEO8250E**, **NEO8120E models**, etc.
  - If manually added access points correspond to **LDA Audio Tech** equipment models, text strings equivalent to the previous case will be displayed depending on the selected model.
  - For access points that **do not correspond to LDA Audio Tech** equipment, the text **"OTHER"** will be displayed.
- **Description:** Brief descriptive text of the team. For manually added endpoints, the text entered at the time of creation will be displayed.
- **IP Address:** IP address that the device or connection point has on the **EVAC Core** system's **LAN** network.
- **Firmware Version:** Firmware version of the computer. It will only be displayed for physical devices found on the **EVAC Core** system's **LAN** network.
- **Serial Number:** Serial number of the equipment. It will only be displayed for physical devices found on the **EVAC Core** system's **LAN** network.
- **Last Seen:** Last time a piece of equipment or connection point has been detected by the **EVAC Core** system. The automatic search for equipment on the **LAN** network of the **EVAC Core** system is performed approximately every **30 seconds**.
- **Remote Port:** Port used for connection to the device or connection point on the **LAN** network of the **EVAC Core** system.
- **Protocol:** Protocol that must be used to make a remote connection with the equipment or connection point. The possible options are: **UDP**, **TCP**, **HTTP** and **HTTPS**.
- **Action:** This column shows a button that offers two possible actions,
  - **Open Port:** Open a local port to make a remote connection to the corresponding equipment or endpoint in the **EVAC Core** system using the specified protocol.
  - **Close Port:** Close a previously opened local port for remote connection.
- **Connection Port:** Will display the local port open for remote connection after performing the **"Open Port"** action. In any other case, it will appear blank.

## 4.1 Open a Remote Connection port

As indicated above, to initiate remote communication with a device or connection point on the **LAN** network of an **EVAC Core** system, you will have to click on the **"Open Port"** button corresponding to it in the **"DISCOVERED DEVICES"** list. Once this is done, the **"Connection Port"** column will show the port number that we can use to initiate this communication:

Device Model	Description	IP Address	Firmware Version	Serial Number	Last Seen	Remote Port	Protocol	Action	Connection Port
OTHER	XAMPP HTTP	192.168.0.192			11:52:09	61234	HTTP	Close Port	58703
NEO4250E	NEO Extension	192.168.0.56	v02.42.05.00	56565656	11:52:09	60000	UDP	Close Port	60285
OTHER	XAMP HTTPS	192.168.0.192			11:52:09	61235	HTTPS	Open Port	
NEO8060	NEO Controller	192.168.0.40	v02.42.01.42	40404040	11:52:09	60000	UDP	Open Port	
OTHER	Hercules	192.168.0.192			11:52:09	61236	TCP	Close Port	58704

Figure 11. Devices and endpoints with open ports for remote connections

Right-clicking on the cell with the connection port will display a context menu that allows you to copy the **connection port number** or a text string that combines the **local loop address 127.0.0.1 with the open connection port**. This makes it easier to use the connection port in the application that is ultimately going to be used for remote communication.

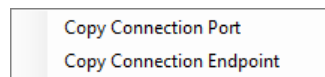


Figure 12. Context menu for copying port or remote connection string

With the **"Copy Connection Endpoint" option**, and depending on the corresponding protocol, connection strings such as the following will be obtained:

- **TCP and UDP:**        127.0.0.1:58703
- **HTTP:**             http://127.0.0.1:58703
- **HTTPS:**            https://127.0.0.1:58703

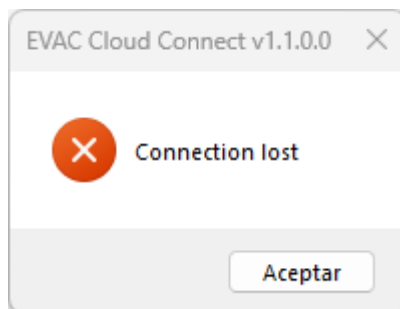
If after opening a port **there is no data transmission** for approximately **1 minute**, the communications channel **will be automatically closed**, and the current port will have to be closed and a new port opened to initiate a new remote communication.

## 4.2 Close a Remote Connection port

Clicking the **"Close Port"** action button on one of the entries in the **"CONNECTED DEVICES"** list that has an open connection port will close that port and immediately terminate any established communication using it.

## 4.3 Loss of connection with an EVAC Core system

If for any reason the connection to the **EVAC Core system is lost**, the following message will be displayed on the screen:



*Figure 13. Message of loss of connection with EVAC Core system*

By clicking on "**OK**" the application will return to the system selection screen.

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