



# Implementation Guide

Document Version 1.4



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The following words and symbols mark special messages throughout this guide:

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**Warning:** Text set off in this manner indicates that failure to follow directions could result in damage to persons or equipment.

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**Note:** Text set off in this manner indicates special instructions which should be paid attention to.

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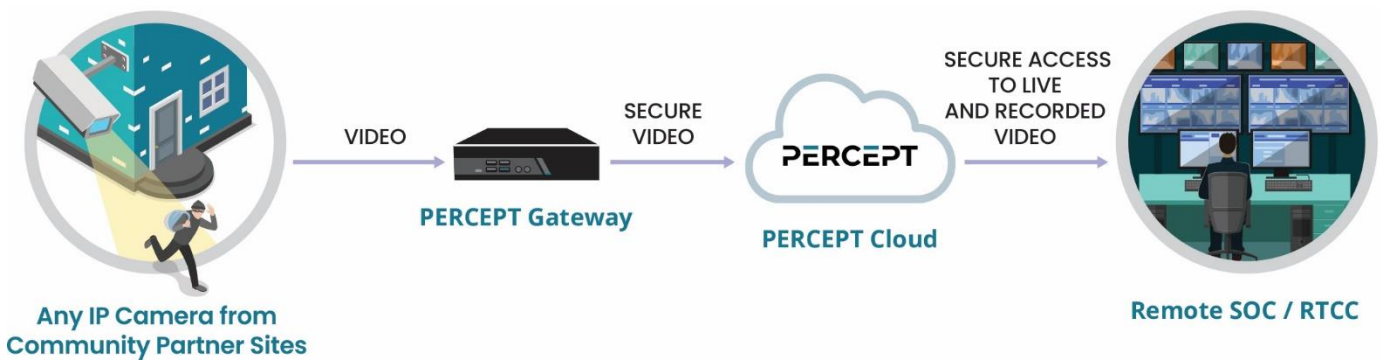
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# 1 About IONODES CitySafe

IONODES CitySafe is a platform designed to securely share video with law enforcement Real-Time Crime Centers to create safer, more prosperous urban environments. With IONODES CitySafe, municipalities and law enforcement, as well as retailers, enterprises, and educational institutions can view and share live and recorded streams to reduce incident response times, streamline threat identification, deter crime, and aid prosecutions. Featuring built-in Genetec Security Center integration, IONODES CitySafe provides instant access to live and recorded video from any connected camera, from any remote site connected to IONODES CitySafe.

## 1.1 How it works



IONODES CitySafe starts with the PERCEPT Gateway, a small onsite edge appliance installed at each remote location that seamlessly connects to local IP cameras in a few short steps, without an onsite IT specialist. A secure and encrypted gateway for live video, the PERCEPT Gateway also keeps a local recording of all connected cameras, providing quick on-demand access to live or recorded video. The goal of the PERCEPT Gateway is to provide on-demand access to live and recorded video to remote clients, it is not intended to replace a local video recorder such as an NVR or DVR.

Secure remote access to PERCEPT Gateways is provided by PERCEPT Cloud, a cloud-based device and video management platform that provides centralized management for any number of remote site gateways and cameras. PERCEPT Cloud offers device management and instant access to live and recorded video stored on every gateway through a simple, powerful web-based interface. The PERCEPT Gateway is connected to PERCEPT Cloud through your local internet connection, either via Wi-Fi or via Ethernet. For situations where

local internet connectivity is not available or is down, a backup cellular 4G/LTE connection is provided to maintain the ability to remotely manage the PERCEPT Gateway. The cellular connection can also be used for video streaming should it be required; this function is disabled by default but can be activated if needed (additional LTE data costs are applicable).

Linking local IP cameras to the PERCEPT Gateway is achieved by triggering an ONVIF scan from the PERCEPT Cloud interface, allowing for easy remote enrollment. The PERCEPT Gateway will not interfere with the configuration (read-only) of local IP cameras, however cameras must have spare streaming capacity to not affect any local NVR or DVR functions.

IONODES CitySafe includes native support through a Genetec Security Center VMS plugin that allows your Genetec system to securely connect to PERCEPT Cloud to access on-demand, live or recorded video from any camera, from any enrolled PERCEPT Gateway. This native integration allows you to leverage the powerful feature set of Genetec Security Center and makes monitoring seamless to law enforcement officers trained on Security Desk.

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**Note:** No video is recorded in PERCEPT Cloud nor in Genetec Security Center for security purposes. Recorded video is kept exclusively at the PERCEPT Gateway.

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## 2 What is included with the PERCEPT Gateway?

Qty	Description
1x	IONODES PERCEPT Gateway appliance (GW8 or GW32 model)
1x	Quick Install Sheet
1x	Cellular modem USB dongle with pre-installed and pre-activated SIM card
1x	90-degree angle USB adapter for cellular modem USB dongle
1x	Wi-Fi antenna
1x	20V AC/DC power adapter (150W)
1x	VESA / Wall mounting bracket and screws

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**Note:** When unpacking, inspect the shipment box and product to identify any possible damages due to shipping. Make sure all items have been delivered and that no items are missing. Contact your IONODES reseller should you find any damages or defects.

**Warning:** Operation, maintenance, and servicing of this device must be done by a trained professional, following proper safeguards to avoid unintended damage.

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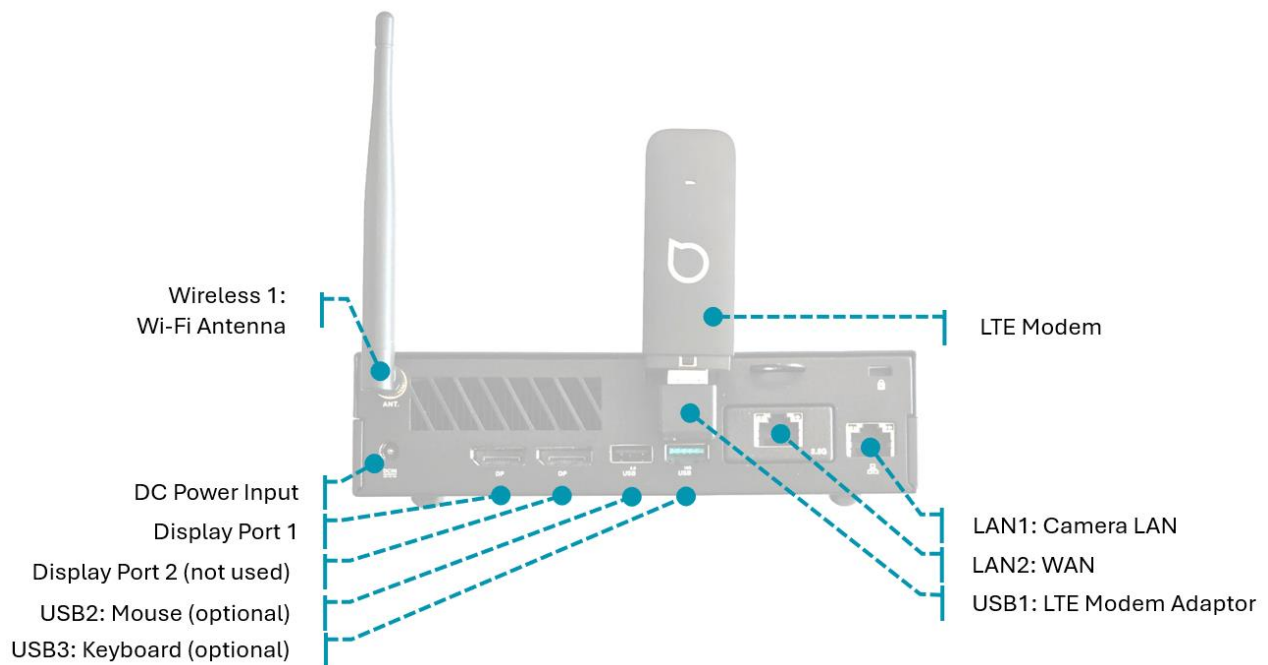
### 3 Installing the PERCEPT Gateway

The PERCEPT Gateway can be placed on a flat surface, such as a desktop, or mounted via the available mounting bracket. When installing the PERCEPT Gateway, position the unit to allow for cable clearance at the rear of the unit. Make sure the air vents on top and front of the unit are not obstructed. **It is recommended to connect the AC/DC power adapter only after all other connections listed below have been made as the PERCEPT Gateway boots up as soon as power is available.**

**Note:** If you plan on mounting the unit with the included bracket, do not to discard the original box. A label with scannable QR code is located on the underside of the PERCEPT Gateway and on the box to facilitate enrolment in PERCEPT Cloud. Alternatively, the PERCEPT Gateway can be pre-enrolled in PERCEPT Cloud (see section 4) before mounting and powering it on.

Connect the following items to the gateway prior to powering it on:

1. Wireless 1: Wi-Fi antenna
2. USB1: Cellular modem dongle using the USB 90-degree angle adapter
3. LAN1: Connect the camera LAN (network where local IP cameras are found)
4. LAN2: Connect the WAN (network with internet access, unless LAN provides internet access)
5. Connect the AC/DC power supply to the DC power input





## 4 Enrolling the PERCEPT Gateway to PERCEPT Cloud

The following steps are required to enroll the PERCEPT Gateway on your PERCEPT Cloud account:

1. Register an account, or login with your existing account.
2. Create an organization, or log into your existing organization.
3. Claim the PERCEPT Gateway.

### 4.1 Internet Endpoints

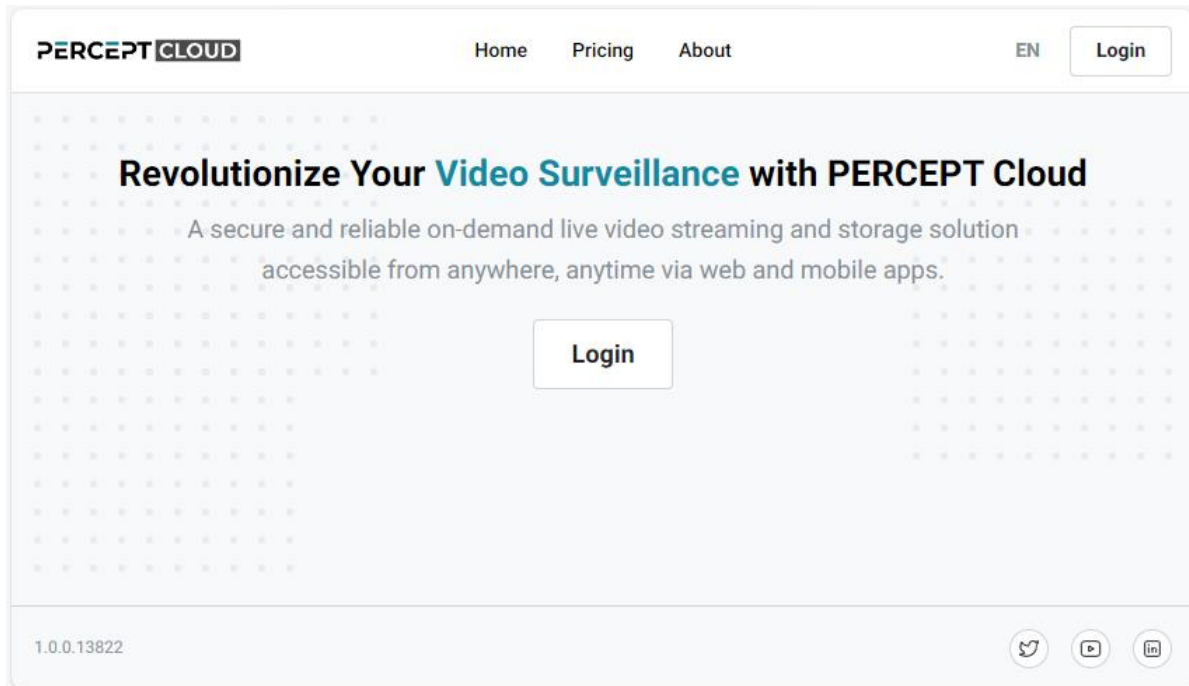
The PERCEPT Gateway and Genetec IONODES CitySafe Connector plugin connect to internet cloud services for proper functionalities. The following internet URL endpoints shall be whitelisted:

- \*.perceptcloud.net:443
  - application-client.api.east-us.perceptcloud.net:443
  - device.api.east-us.perceptcloud.net:443
  - documentation.api.east-us.perceptcloud.net:443
  - global-device-provisioning.api.east-us.perceptcloud.net:443
  - media.api.east-us.perceptcloud.net:443
  - organization.api.east-us.perceptcloud.net:443
  - product-management.api.east-us.perceptcloud.net:443
  - registration.api.east-us.perceptcloud.net:443
  - tenant.api.east-us.perceptcloud.net:443
  - user.api.east-us.perceptcloud.net:443
  - keycloak.east-us.perceptcloud.net:443
- live-iad-1.millicast.com:443
- global.stun.twilio.com:3478
- global.turn.twilio.com:443 and 3478
- turn-iad-1.dolby.io: 443 and 3478
- prod-east-us-iot-hub.azure-devices.net:443
- prod-east-us-iot-hub-dps.azure-devices-provisioning.net:443
- global.azure-devices-provisioning.net:443
- perceptprodeastus.blob.core.windows.net:443

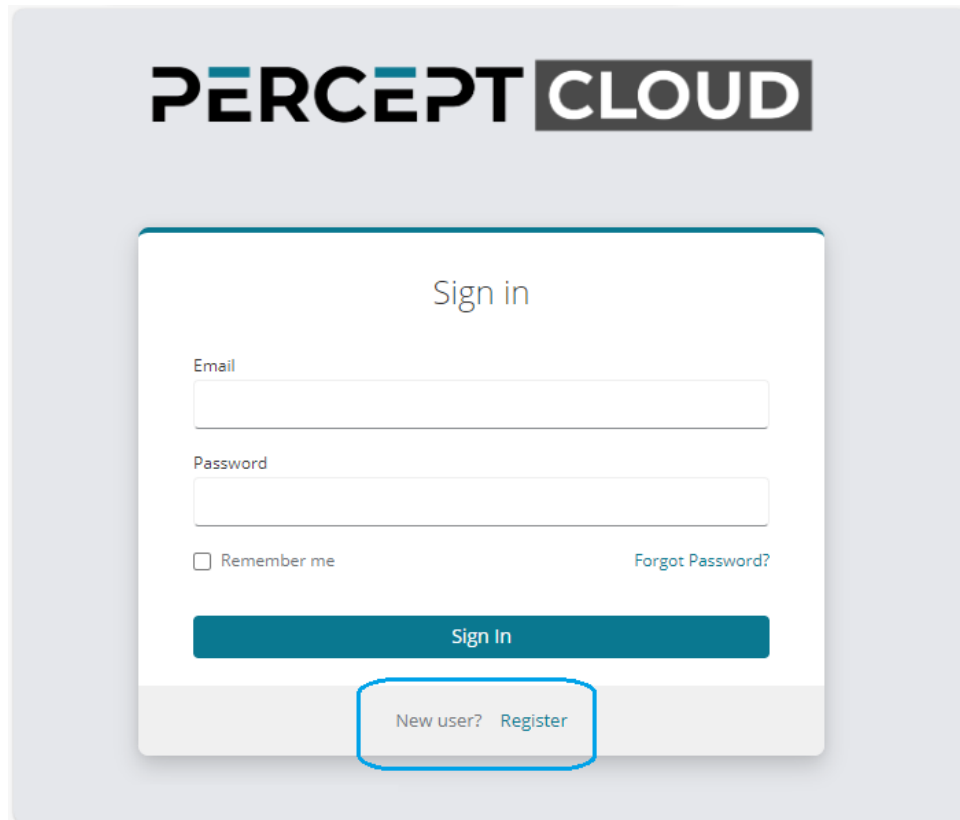
- prodgleastus.blob.core.windows.net:443

## 4.2 Registering a new PERCEPT Cloud user account

Open your browser to the PERCEPT Cloud web application found at <https://perceptcloud.io/> and click on the **Login** button in the main page or top-right corner.



In the **Sign in** page, enter your existing user credentials and click on the **Sign In** button, or click on the **Register** hyperlink at the bottom to register a new account.



**PERCEPT CLOUD**

Sign in

Email

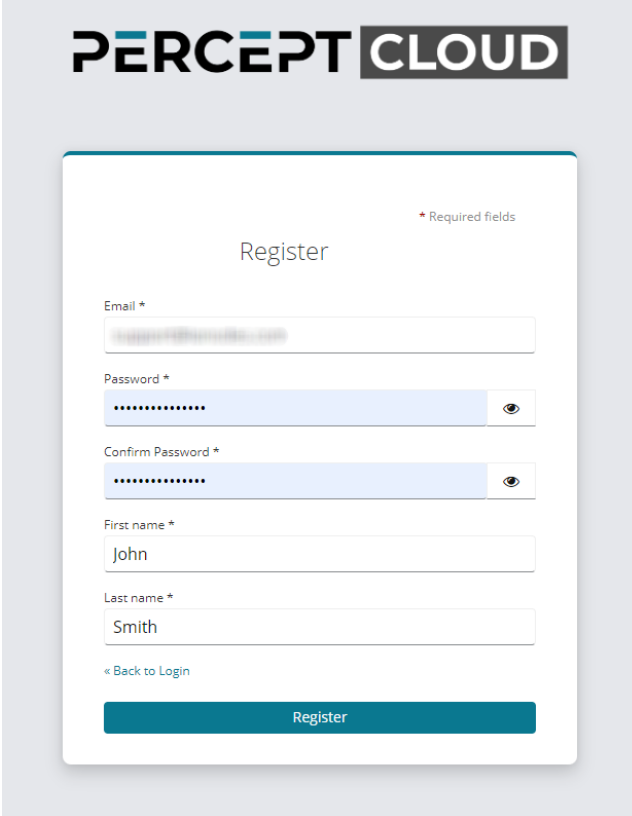
Password

Remember me [Forgot Password?](#)

**Sign In**

New user? [Register](#)

In the **Register** page, enter the required information and click on the **Register** button.



PERCEPT CLOUD

Register

\* Required fields

Email \*

Password \*

Confirm Password \*

First name \*

Last name \*

« Back to Login

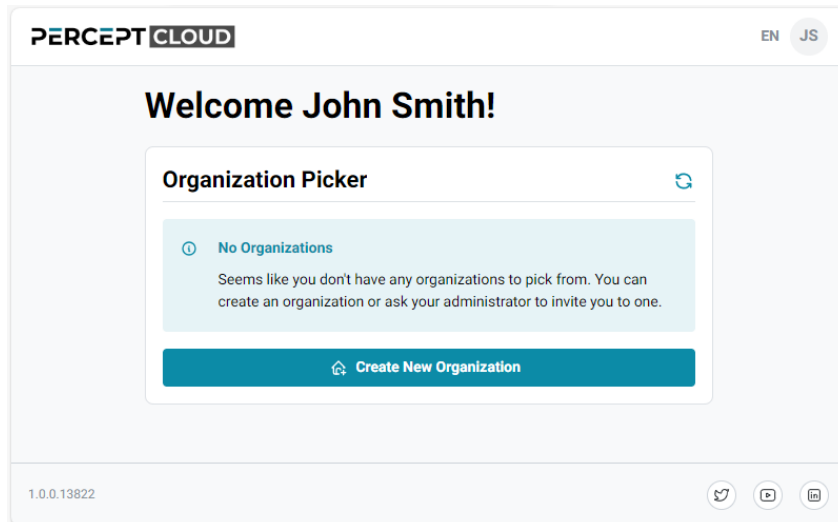
Register

On the next page, you will be prompted to read and accept the End User License Agreement (EULA). Once accepted, a verification email will be sent to the address you are registering for. Follow the instructions in the email to confirm and finalize registration of your new user account. Upon clicking on the confirmation link, you will be logged in to your new user account.

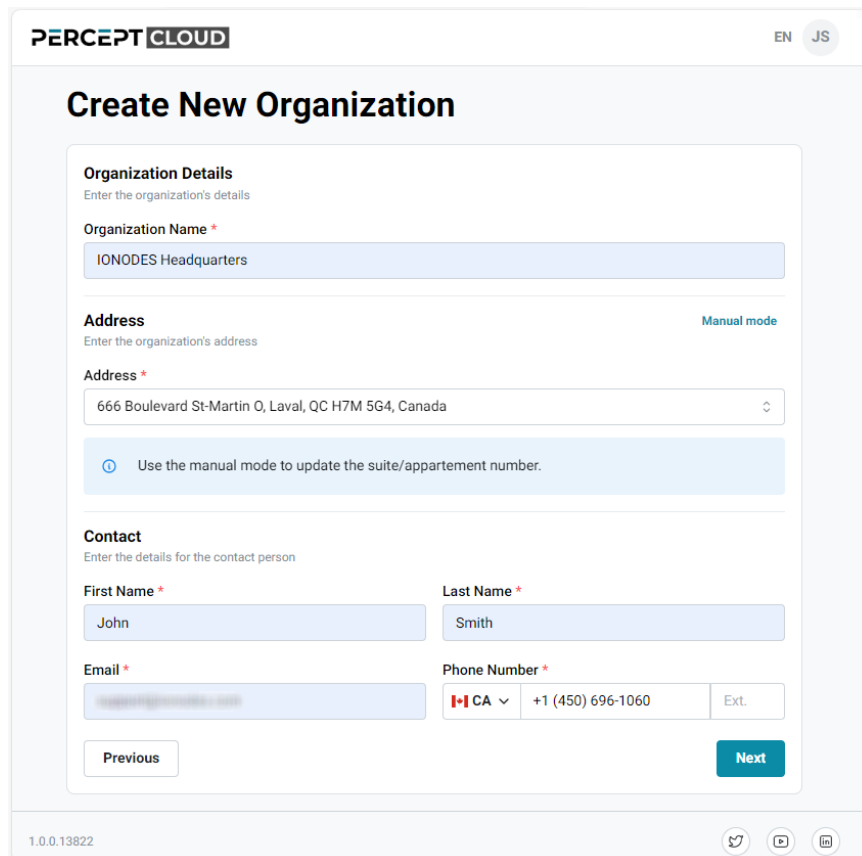
### 4.3 Creating a new PERCEPT Cloud organization

An organization in PERCEPT Cloud represents an entity in which you can enroll PERCEPT Gateways and share access to live and recorded video with your partners and / or with Genetec Security Center.

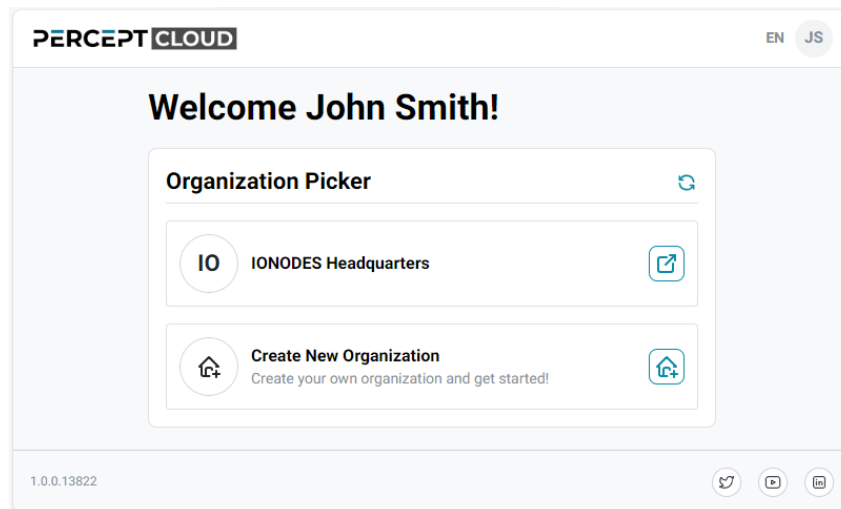
Upon logging into PERCEPT Cloud you are greeted with the **Organization Picker** page. This page lists all organizations that your account is authorized to access. Click on the **Create New Organization** button.



Fill out the form for your organization account. Click **Next** when completed.



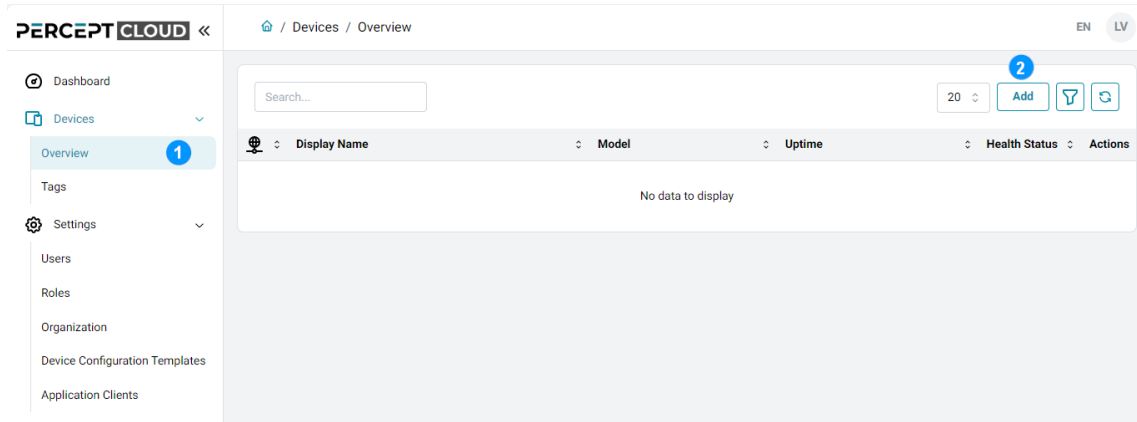
On the next screen, review the information and click **Submit** to complete organization creation and return to the **Organization Picker** page. Select your newly created organization.



### 4.4 Claiming a PERCEPT Gateway into your organization

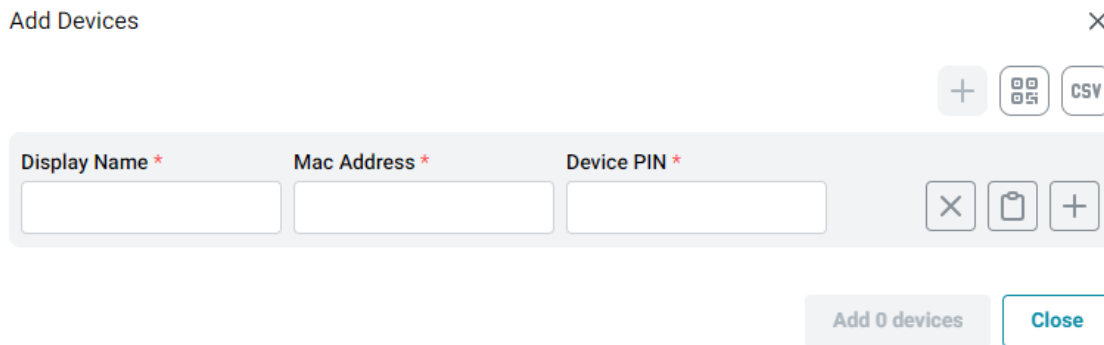
To attach a PERCEPT Gateway to your organization, log into PERCEPT Cloud and follow these steps:

1. Expand **Devices** and select **Overview**.
2. From the / **Devices / Overview** page, click the **Add** button.



The following fields are required to add a PERCEPT Gateway to your organization:

- Display Name: Friendly name to be displayed in PERCEPT Cloud
- MAC Address: MAC address of the PERCEPT Gateway (see the product label)
- Device PIN: Security PIN associated with a PERCEPT Gateway (see the product label)

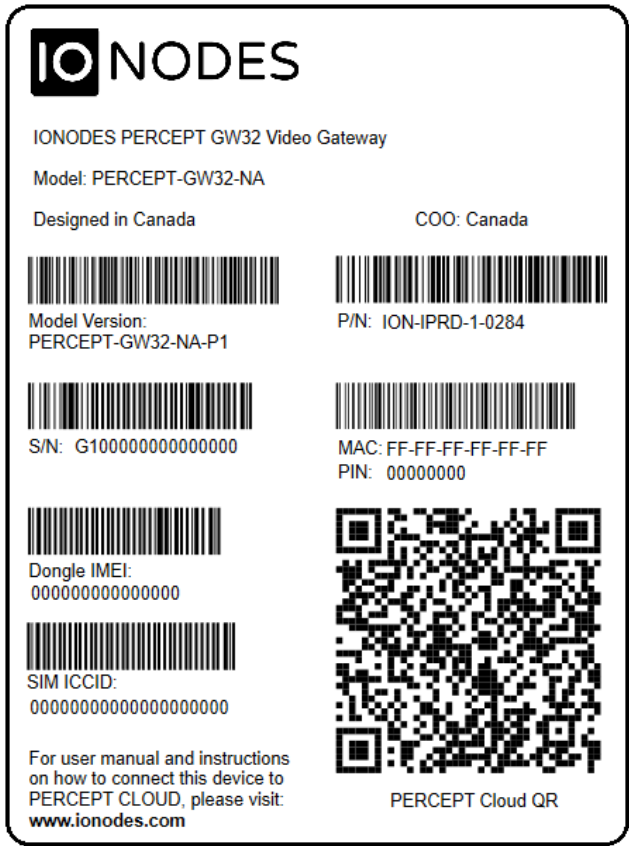
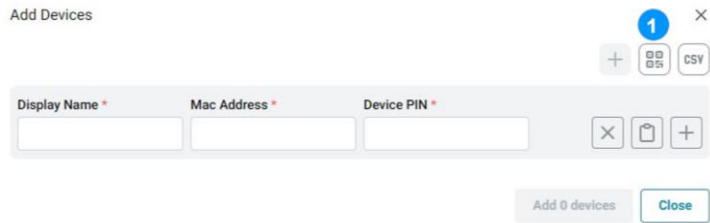


The device information can be entered using 4 methods.

1. By scanning the QR code found on the label affixed to your PERCEPT Gateway (preferred method)
2. By entering the MAC address and PIN located on the label affixed to your PERCEPT Gateway
3. By copying the configuration string from the PERCEPT Gateway interface (See Appendix 1 for instructions)
4. By loading a CSV file containing the registration information of one or more PERCEPT Gateways

### 4.4.1 Adding a PERCEPT Gateway using a QR scan

1. In the PERCEPT Cloud **Add Devices** dialog, click on the **QR Code Mode** button (1). If prompted, grant your web browser access to your device's camera.
2. Scan the QR code found on the label affixed to the bottom of the PERCEPT Gateway

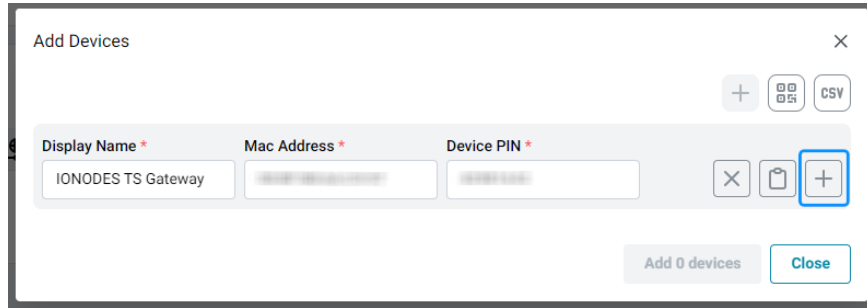


QR Code label example

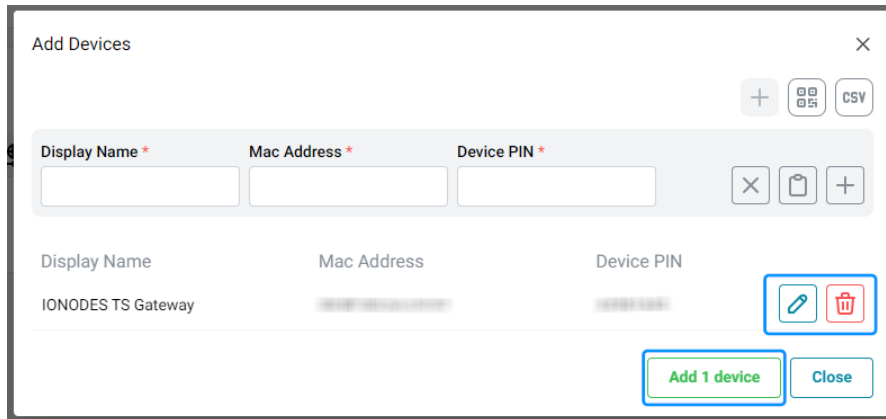


#### 4.4.2 Completing the onboarding of your PERCEPT Gateway

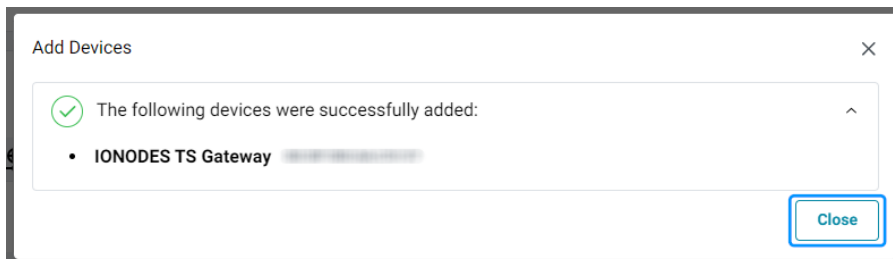
Once the device configuration code is entered in PERCEPT Cloud using one of the above methods, a default **Display Name** will be generated. It consists of 'Device\_' followed by the PERCEPT Gateway's MAC address. This can be updated to a friendlier, meaningful name before pressing on the + button.



The preceding steps can be repeated to add other PERCEPT Gateways to your PERCEPT Cloud organization. It is also possible to remove or edit a device from that dialog before finalizing. Once all devices are added, click on the **Add device(s)** button.



Upon successful addition, click on the **Close** button.



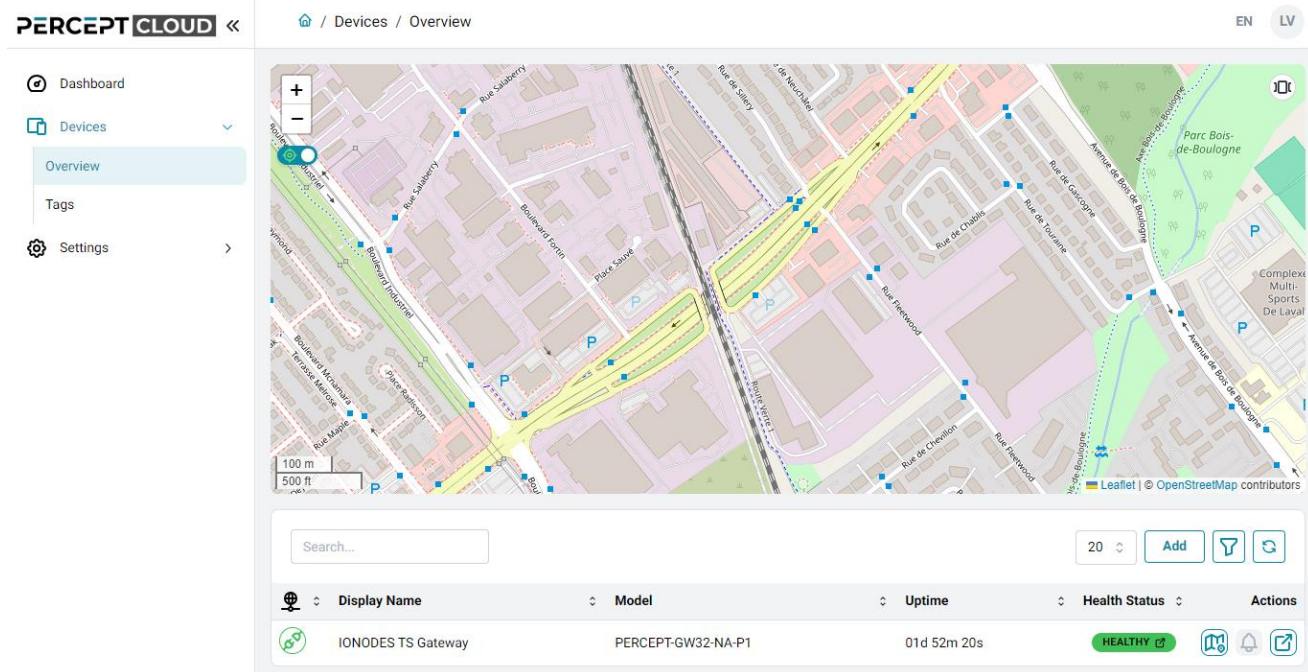
## 5 Powering and connecting for the first time

Upon power up, the PERCEPT Gateway will seek to connect to PERCEPT Cloud automatically by the following methods, in that order:

1. DHCP over the WAN (LAN1) or the Camera LAN (LAN2)
2. LTE modem

If a special configuration is required (e.g. Wi-Fi or Fixed IP, please follow instructions in Appendix 2)

Once the PERCEPT Gateway is powered on, it may take a few minutes for it to connect to your PERCEPT Cloud account. Once fully onboarded in PERCEPT Cloud, it will appear in the devices overview page as shown below, with a green status. If after a few minutes, the PERCEPT Gateway does not connect automatically, a manual diagnostic is required (see Appendix 2)

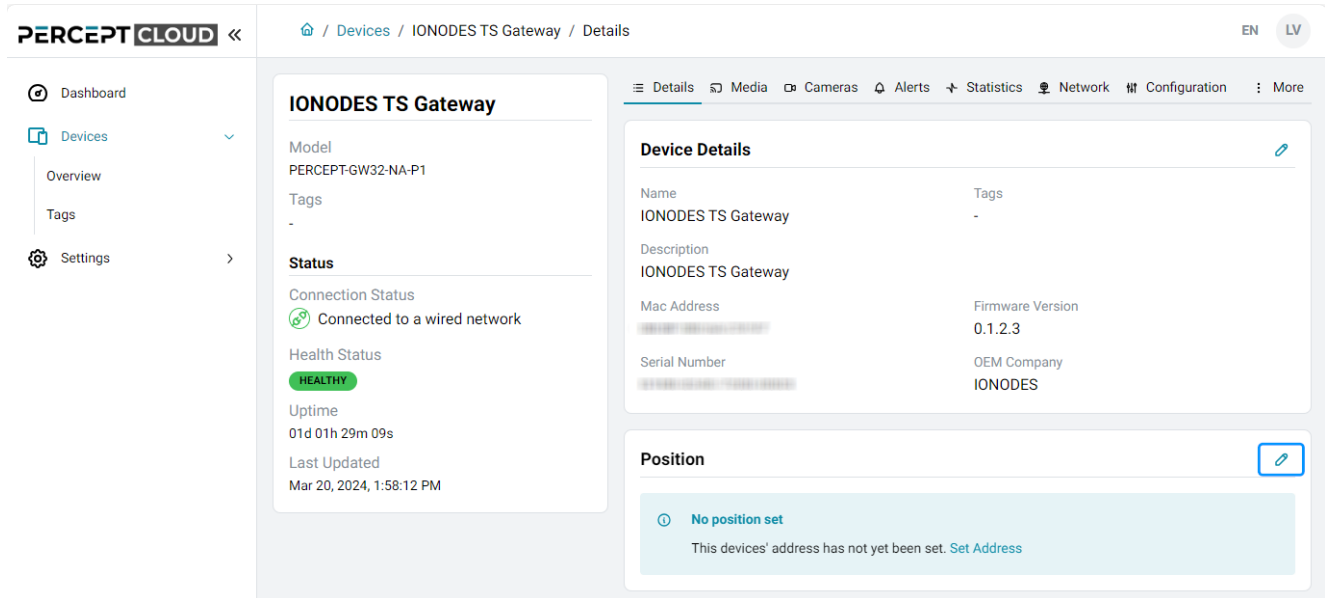


If the web browser is granted access to its device location, a map of the surrounding area will be shown. Before a PERCEPT Gateway’s location can be shown on the map, its coordinates and/or street address need to be configured as described in the following sections.

## 6 Managing your PERCEPT Gateways

From the devices overview page shown in the previous section, click on the desired PERCEPT Gateway's **Open Device Profile** button. The device profile will open on the **Details** tab.

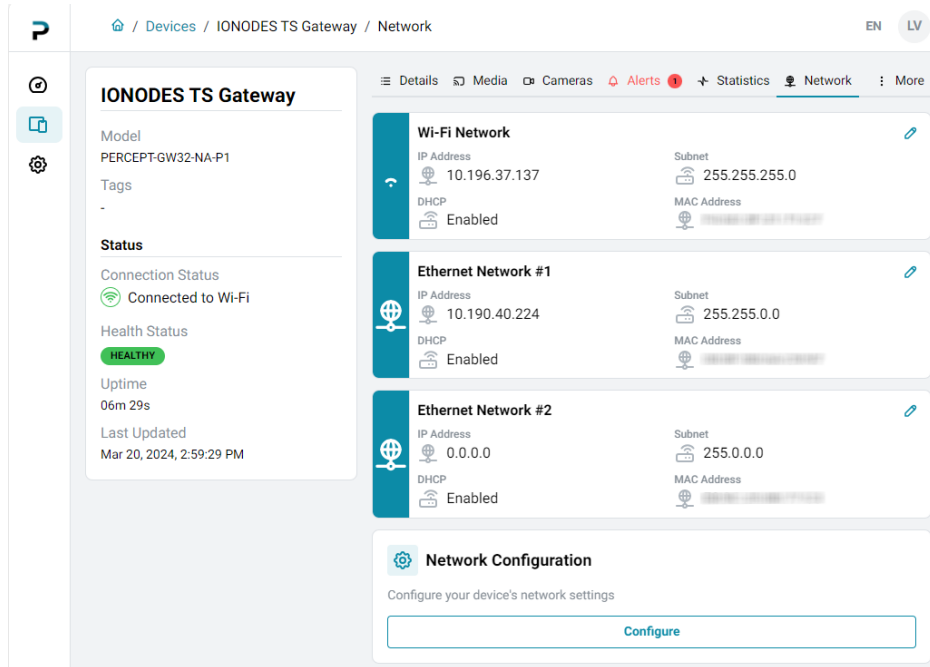
### 6.1 Setting the PERCEPT Gateway's geolocation



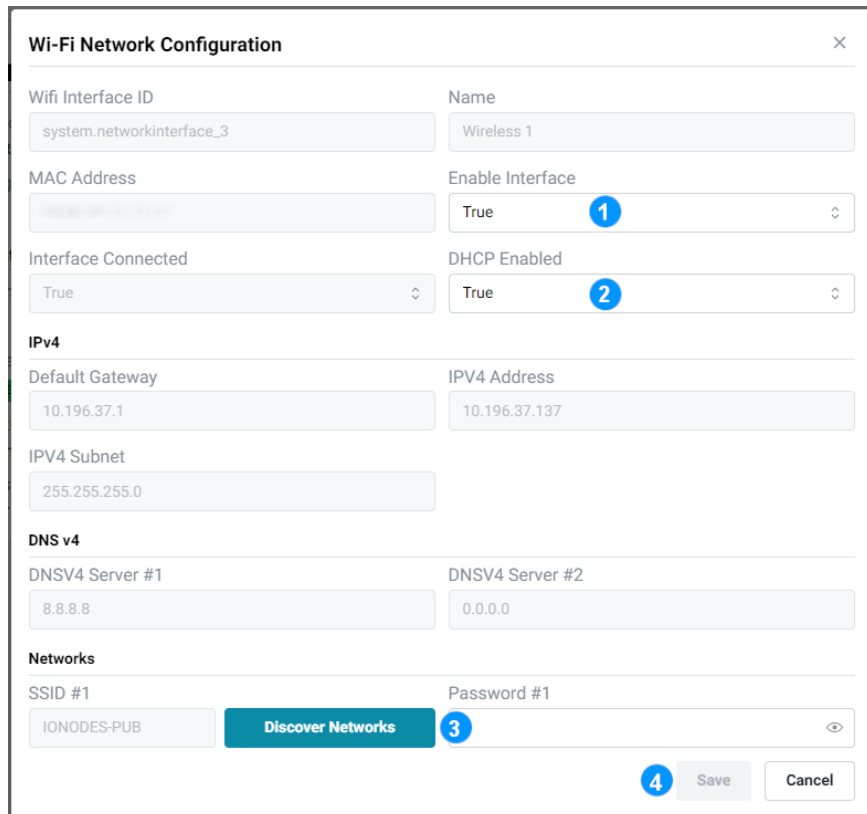
From the device's **Details** tab. Click on the icon to edit its **Position**. If the web browser is **granted access to its device location**, auto-completion of address is supported. To add more detailed information, such as floor or suite number, select manual mode.

## 6.2 Configuring the PERCEPT Gateway's network settings

From the device's **Network** tab, verify status and configuration of network interfaces.



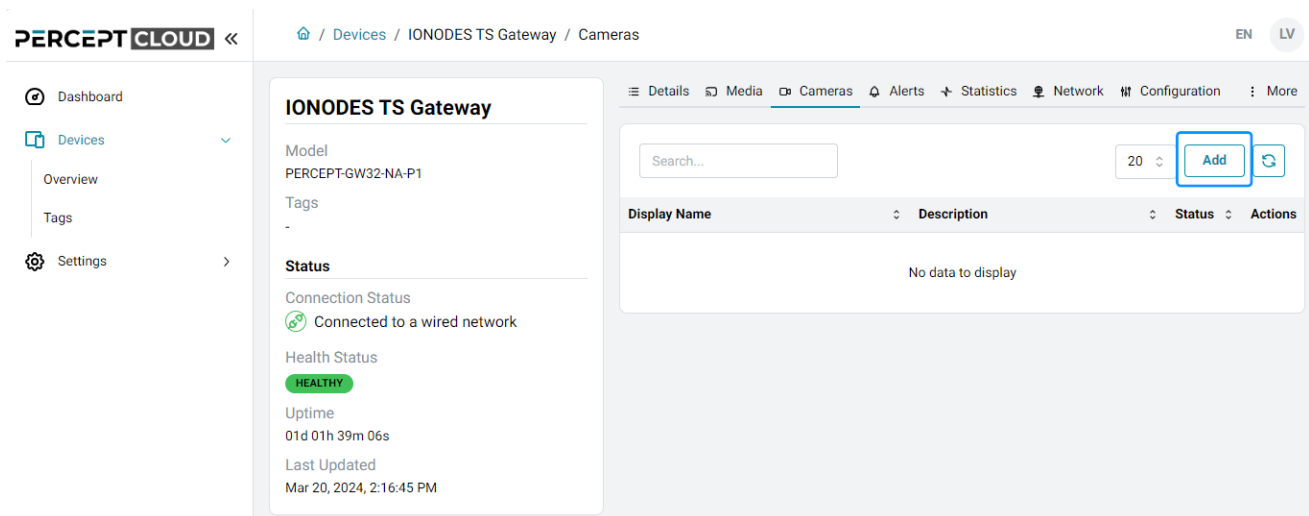
To view further details on a specific network interface, click on its **Edit** icon. In the following dialog window, click again on the **Edit** icon to change this network interface's settings.



1. Enable / Disable the current network interface
2. Enable / Disable DHCP on the network interface. When DHCP is disabled, the IPv4 and DNS v4 sections underneath will become editable to configure static IP settings
3. For the wireless network adapter, use the **Discover Networks** to scan for and select Wi-Fi networks within range of the PERCEPT Gateway
4. When done, click **Save** or **Cancel**

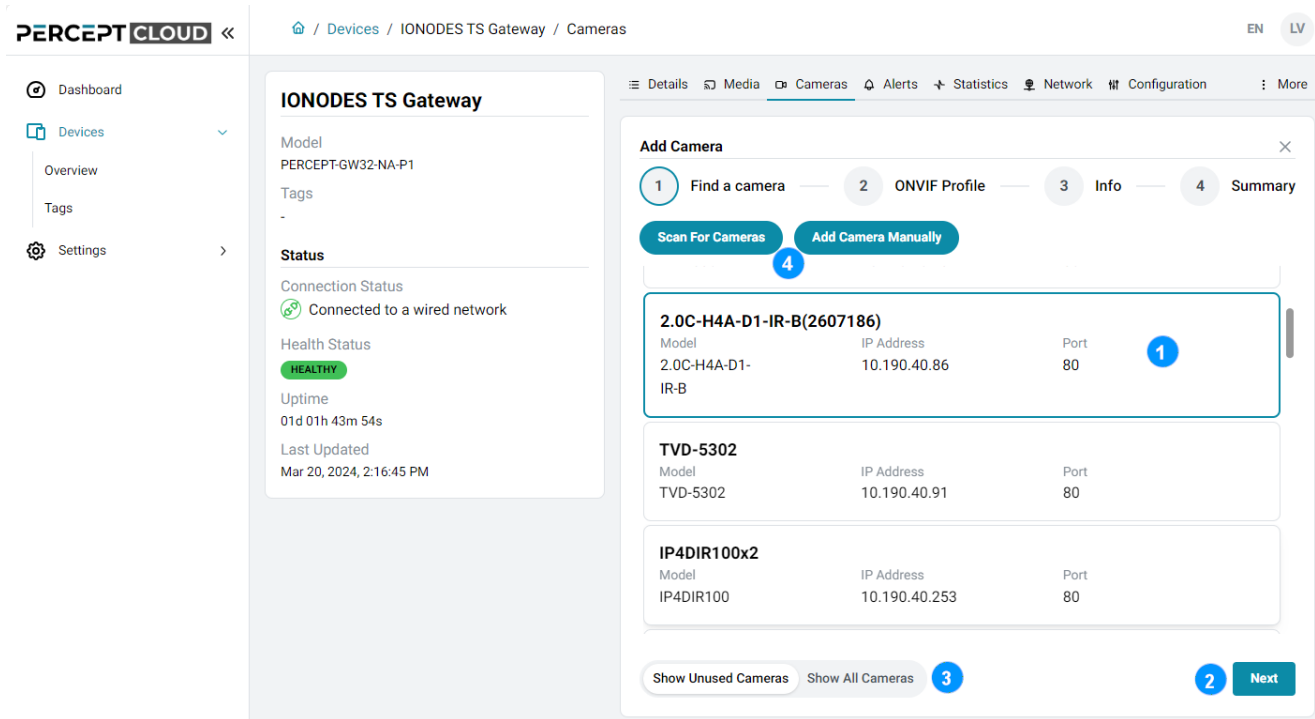
### 6.3 Attaching IP cameras to your PERCEPT Gateway

From the device's **Cameras** tab. Click on the **Add** button.

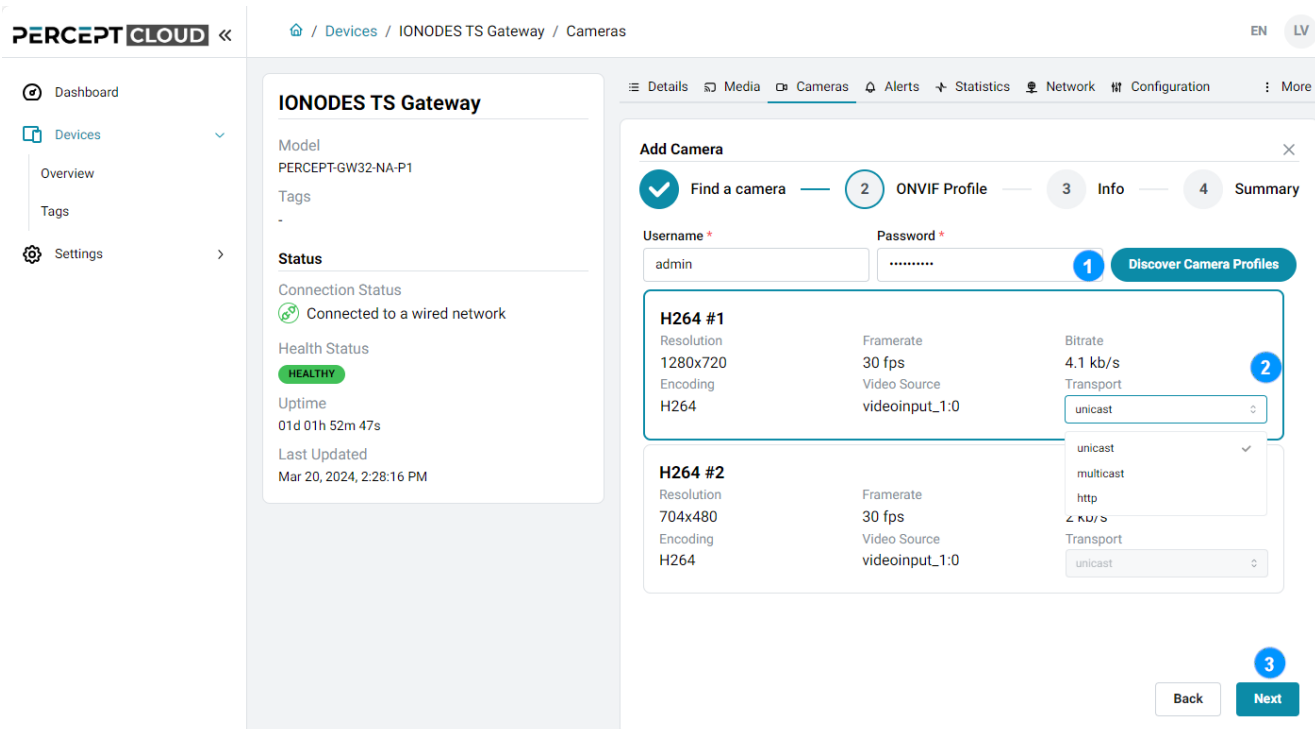


The screenshot shows the PERCEPT Cloud interface. On the left is a navigation menu with 'Dashboard', 'Devices', 'Overview', 'Tags', and 'Settings'. The main content area is titled 'IONODES TS Gateway' and shows details like Model (PERCEPT-GW32-NA-P1), Tags, and Status (Connected to a wired network, HEALTHY). The 'Cameras' tab is active, displaying a search bar, a '20' dropdown, and an 'Add' button highlighted with a blue box. Below the search bar is a table with columns 'Display Name', 'Description', 'Status', and 'Actions', which currently shows 'No data to display'.

The PERCEPT Gateway will list all ONVIF-compatible devices discoverable via its network interfaces.



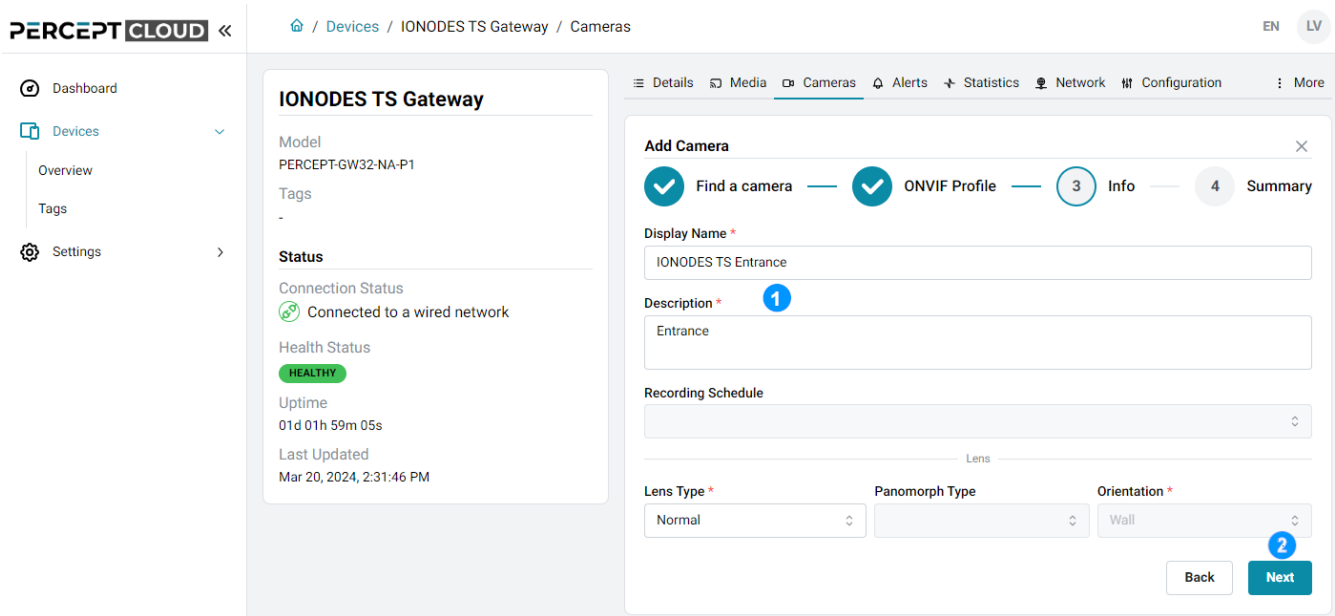
1. Select the camera from the list. Cameras must support ONVIF discovery to appear in the list.
2. Click **Next**
3. Cameras already added are not shown by default. This filter can be toggled to show all cameras.
4. It is also possible to manually **Scan For Cameras** on the networks, and to **Add Camera Manually** if a camera's IP address is known, it supports ONVIF, but discovery is disabled for that camera



1. Enter credentials of an ONVIF user valid for the selected camera, then click **Discover Camera Profiles**
2. Select the desired ONVIF media profile and the desired **Transport** mode (unicast recommended)
3. Click **Next**

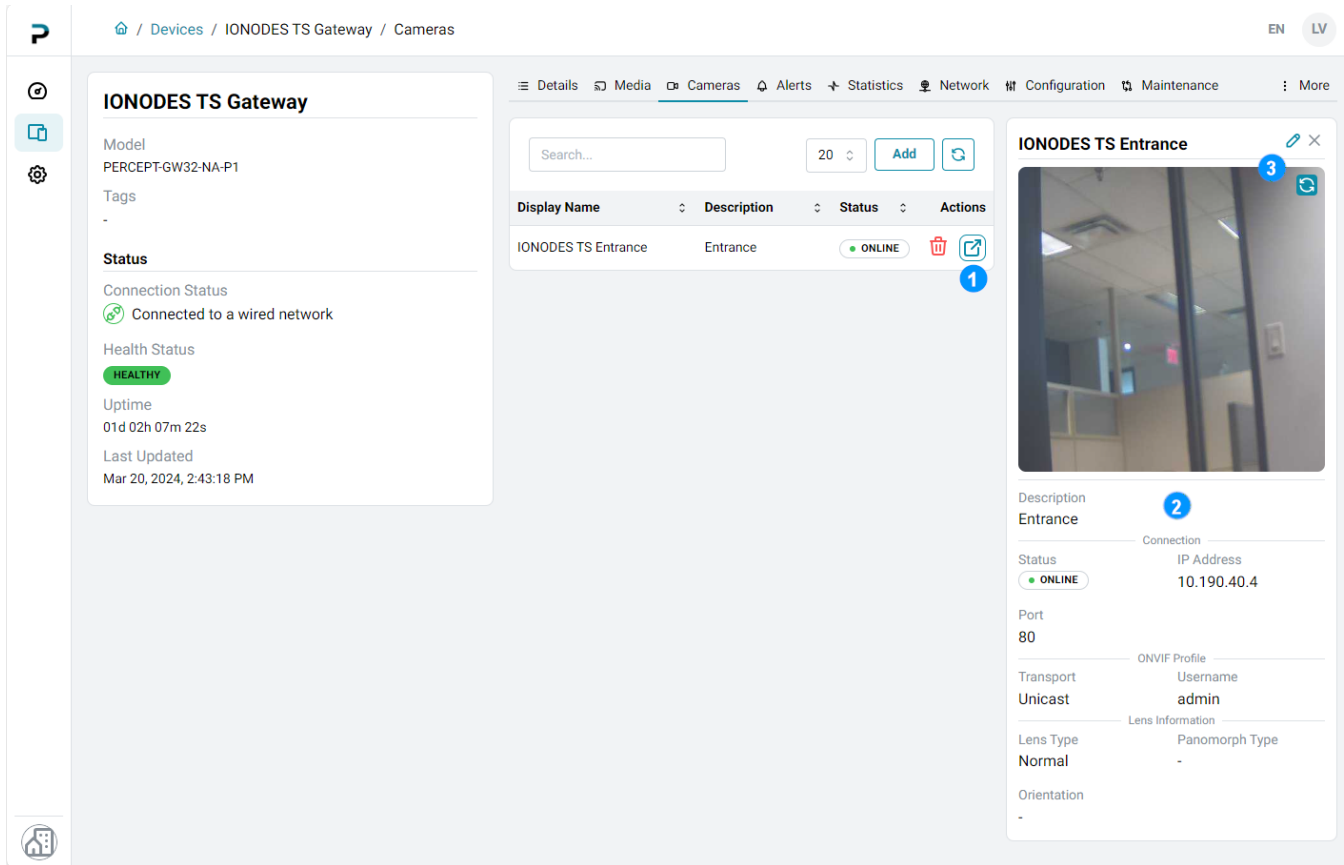
**Note:** The IONODES CitySafe solution supports only H.264 video codec. Only profiles using that codec will be listed.

**Note:** The IONODES CitySafe solution is intended to provide real-time situational awareness to remote users over the internet. For optimal performance, it is recommended to select camera media profiles that meet this objective with low bandwidth usage. Recommended settings: Max. 1080p resolution at 10fps and 2 Mbps.



1. Enter a friendly **Display Name** and **Description** for this camera.
2. Click **Next**

In the Summary tab, verify entered info and click **Done** to add the camera. If needed, use the **Back** button to correct any oversight or change settings before finalizing.

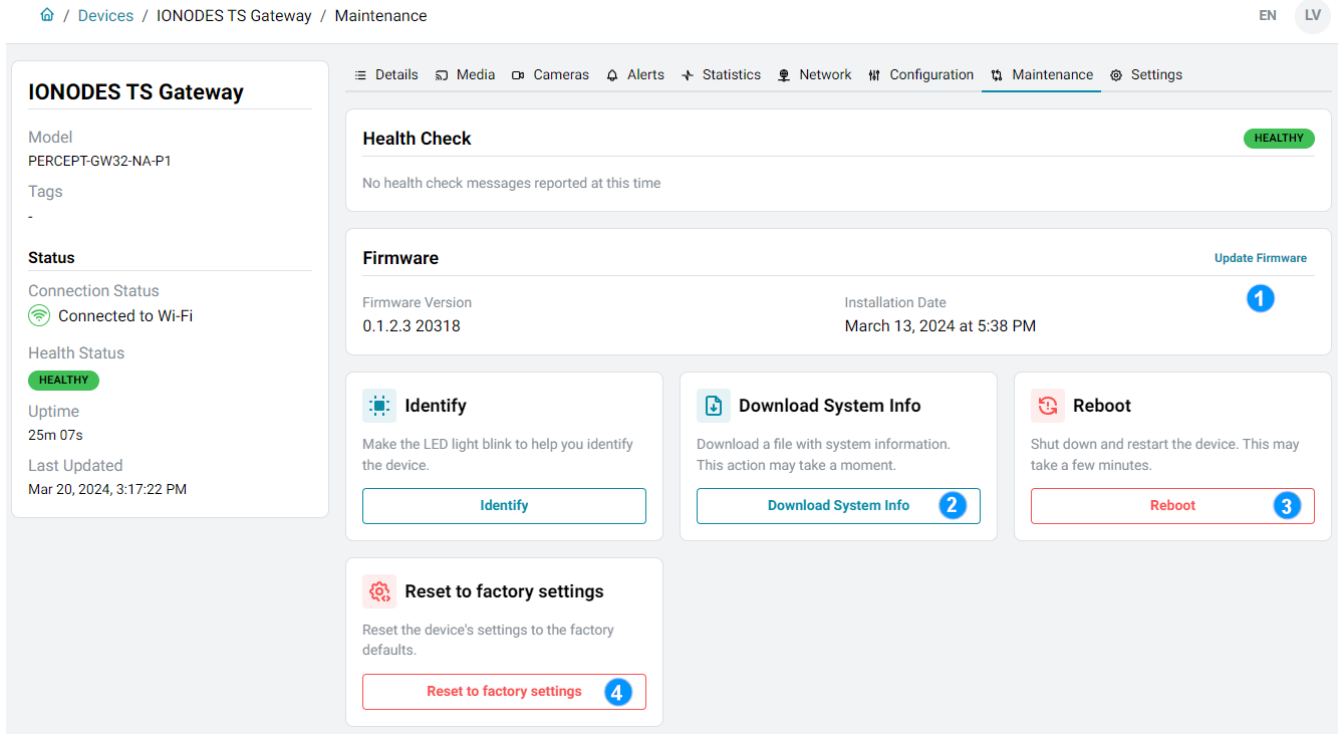


1. The newly added camera will appear in the list. Click on the **Open Camera Profile** button to view more information for that camera.
2. Camera information and preview snapshot will be shown.
3. Use icon buttons to refresh the preview snapshot, edit camera information or close camera profile.



## 6.4 Performing maintenance operations on your PERCEPT Gateway

The following operations are available from the device's **Maintenance** tab.



1. Display and Update firmware, view current version and installation date. Available firmware versions are provided through PERCEPT Cloud, no additional download or files are required.
2. Download System Info. This downloads an encrypted file containing detailed configuration and logs. IONODES technical support may request this file when assisting with a support request.
3. Reboot. Shuts down and restarts the device.
4. Reset to factory settings. A dialog will open prompting if this operation shall also reset network settings and delete recorded data (video). These are retained by default.

## 7 Integrating with Genetec Security Center

### 7.1 Installing the IONODES CitySafe Connector plugin on Genetec Security Center

To ensure that the IONODES CitySafe Connector plugin component performs as expected, the plugin must be installed on a computer that meets the recommended specifications for Security Center. Before installing the plugin, you must update your Security Center license to include the required certificates. To update your license, contact your Genetec representative.

The plugin roles must be hosted on the expansion server running the Archiver role that will be used to enroll the cameras. To install the plugin on a Security Center server:

1. Contact your Genetec representative for the official plugin download link.
2. Click the downloaded executable file to unzip it.  
By default, the file is unzipped to C:\Genetec.
3. Close Security Desk and Config Tool.
4. Open the extracted folder, right-click the setup.exe file, and select Run as administrator.
5. Follow the installation instructions.
6. On the Installation Wizard Completed page, click Finish.

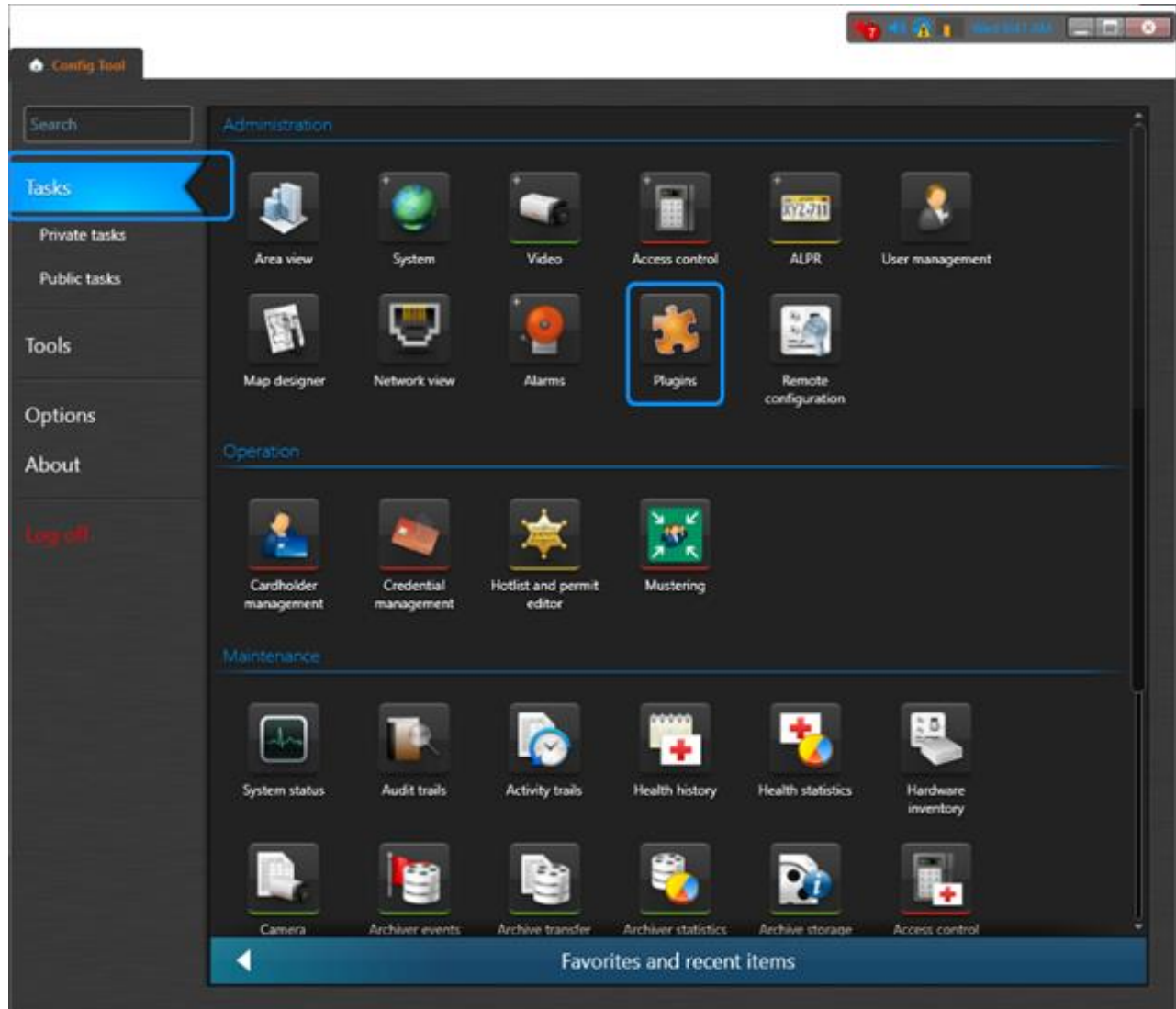
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**Note:** The *Restart Genetec™ Server* option is selected by default. You can clear this option if you do not want to restart the Genetec™ Server process immediately. However, the process must be restarted to complete the installation.

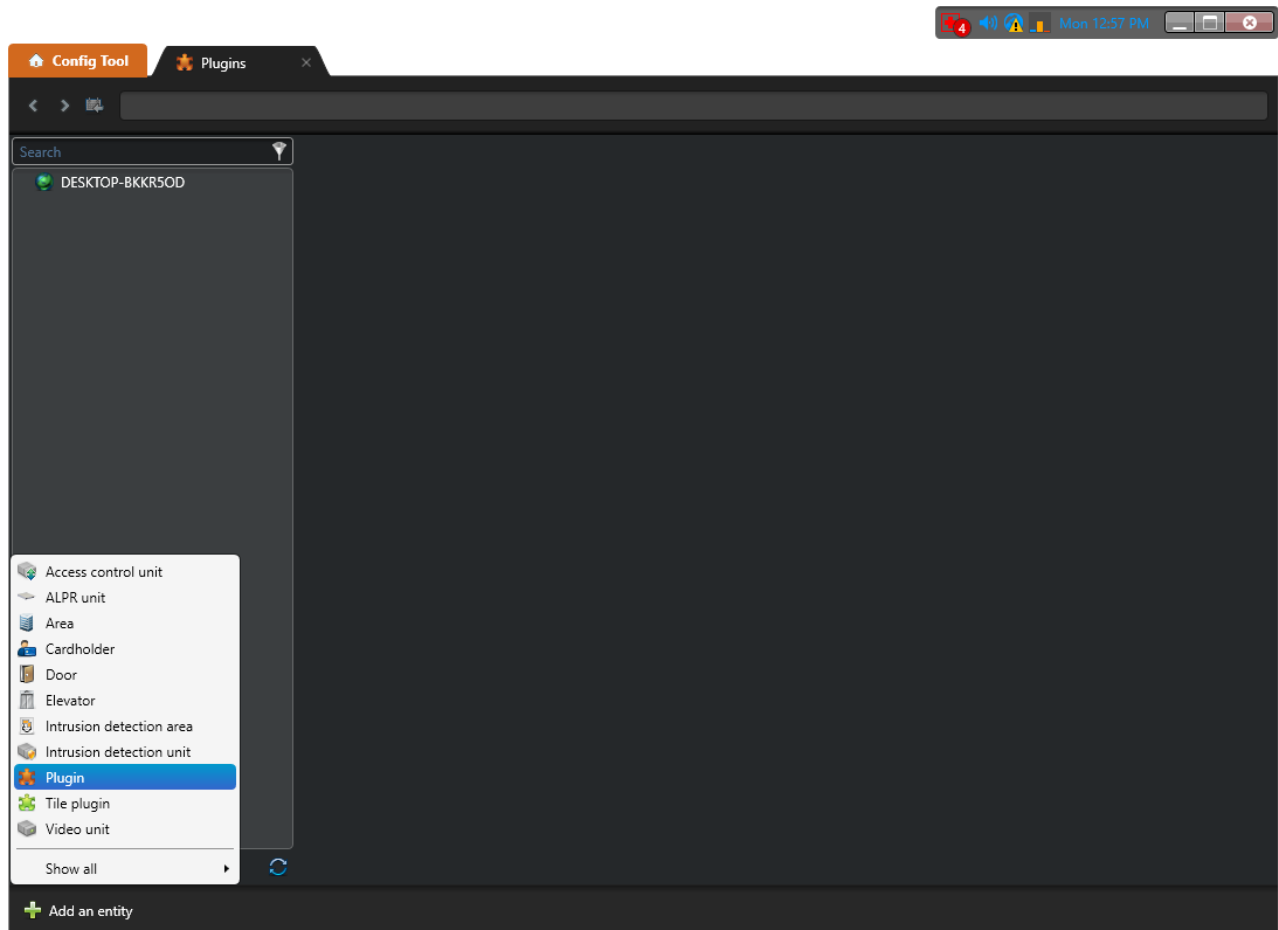
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## 7.2 Configuring the plugin in Genetec Security Center

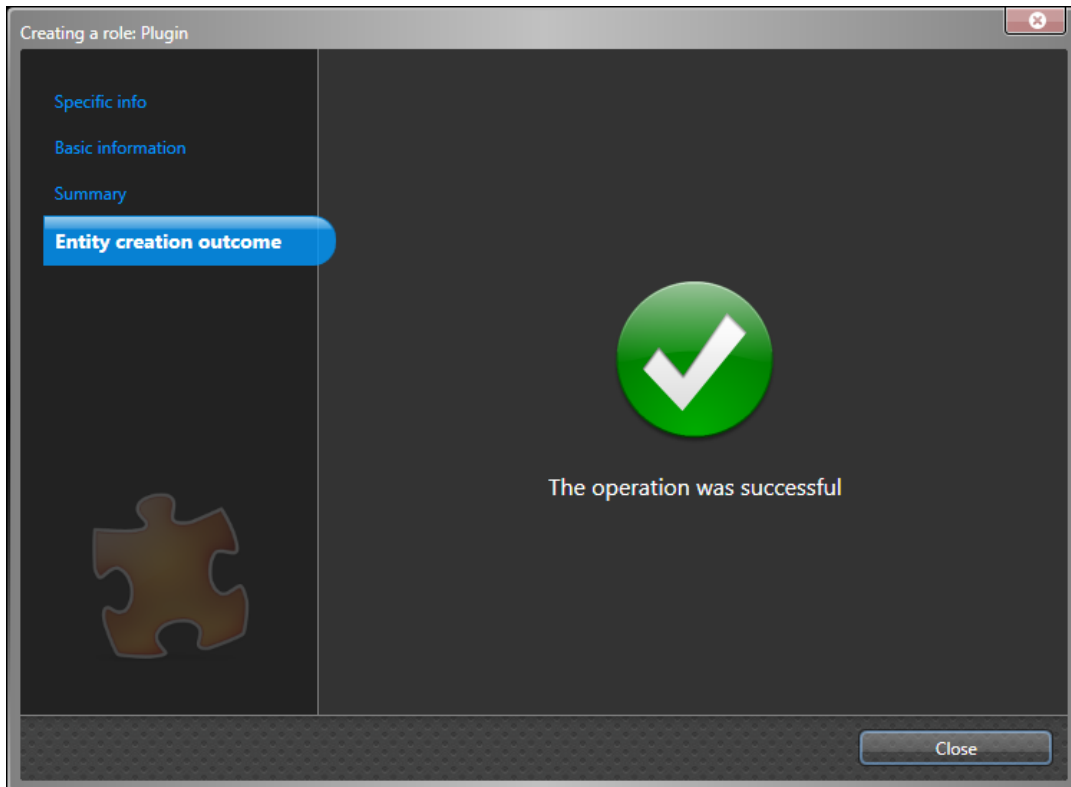
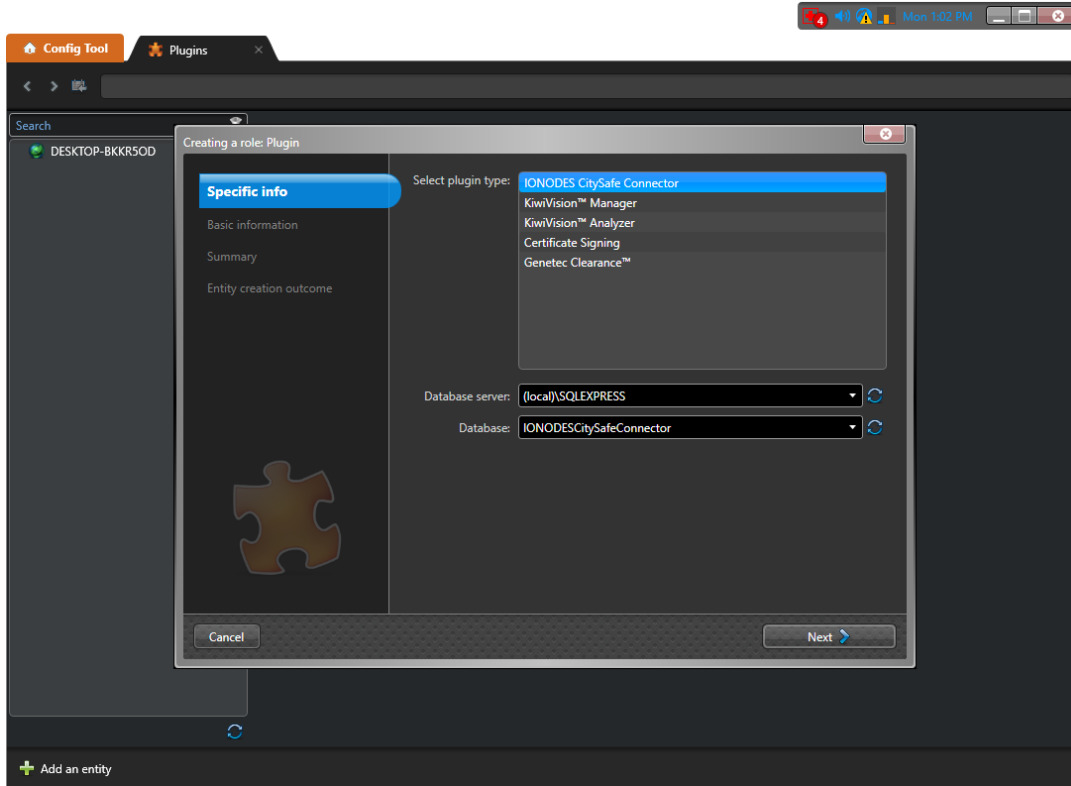
1. In the Genetec Config Tool, from the **Tasks** pane, select **Plugins**.



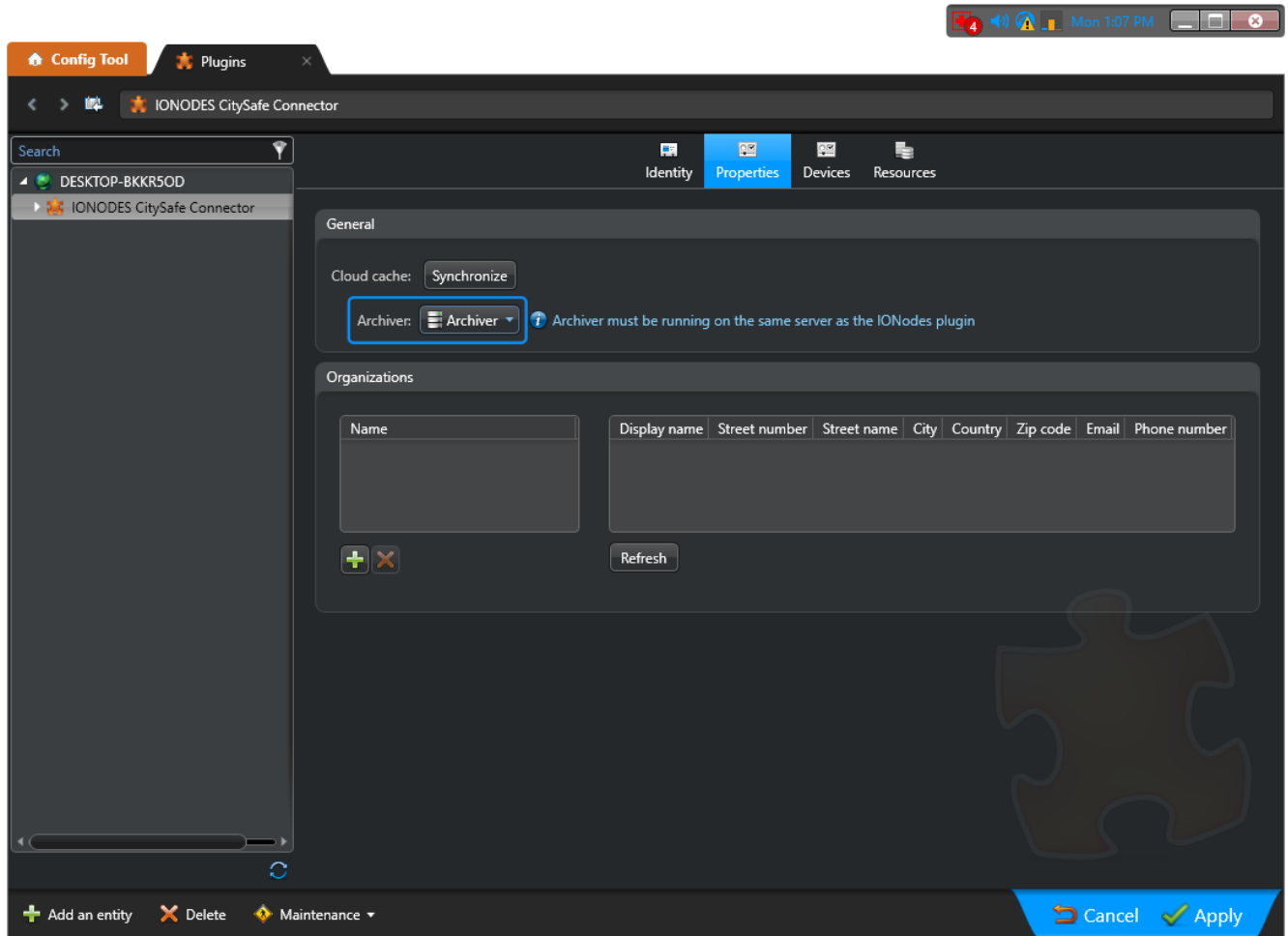
2. Click Add an entity, then Plugin:



3. Select the plugin type **IONODES CitySafe Connector**. Click **Next**, at the bottom of this dialog and the following one, leaving all settings to default, and finally clicking **Create**.



4. The plugin roles must be hosted on the server running the Archiver role that will be used to enroll the cameras. If multiple Archiver roles will be used to enroll cameras, repeat the previous steps to create a plugin role for each of them.
5. In the **Properties** tab of the plugin, assign the **Archiver** role then click **Apply** in the bottom-right corner. Repeat for each **IONODES CitySafe Connector** plugin role.

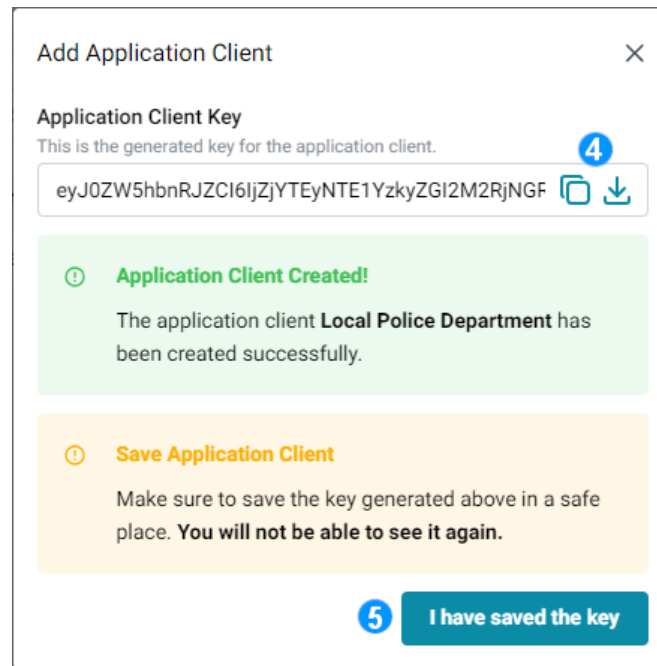


### 7.3 Generating an APP Key in PERCEPT Cloud

Integration with Genetec Security Center requires generating an application key in PERCEPT Cloud and sharing it with the remote Genetec Security Center PERCEPT Cloud plugin. The application key and associated permissions can be deleted at any time to revoke access. The key provides access to real-time streams and recorded video on all PERCEPT Gateways registered with the organization. The APP key does not provide access to PERCEPT Cloud management platform and user management.

The screenshot displays the PERCEPT Cloud web interface. On the left, a navigation sidebar has 'Settings' expanded, and 'Application Clients' is highlighted with a blue circle and the number '1'. The main content area shows the 'Settings / Application Clients' page. At the top right, there are language and user profile indicators ('EN', 'LV'). Below the breadcrumb, there is a search bar and a table. The table has a search bar, a '20' dropdown, an 'Add' button (2), and a refresh icon. The table header has 'Name' and 'Actions'. The table body is empty, displaying 'No data to display'. An 'Add Application Client' dialog box is open in the foreground, containing a 'Name' field with a red asterisk, a text input field containing 'Local Police Department' (3), and 'Add' and 'Close' buttons.

1. Expand **Settings** and select **Application Clients**
2. From the **Settings / Application Clients** page, click **Add**
3. In the **Add Application Client** dialog window, enter a **Name** for the application or partner that will receive this application key then click **Add**



4. In the expanded **Add Application Client** dialog window, retrieve the **Application Client Key** by either copying it to the clipboard or saving it to a file.
5. Click on **I have saved the key** to close this dialog window. The key will be displayed only once. If lost, it must be deleted, recreated and reshared.

---

**Note:** After closing this dialog window, the new **Application Client** will appear in the **/ Settings / Application Clients** page. It can be deleted at any time to revoke permissions.

**Warning:** Deleting an **Application Client** is irreversible. Granting access back requires generating and sharing a new key.

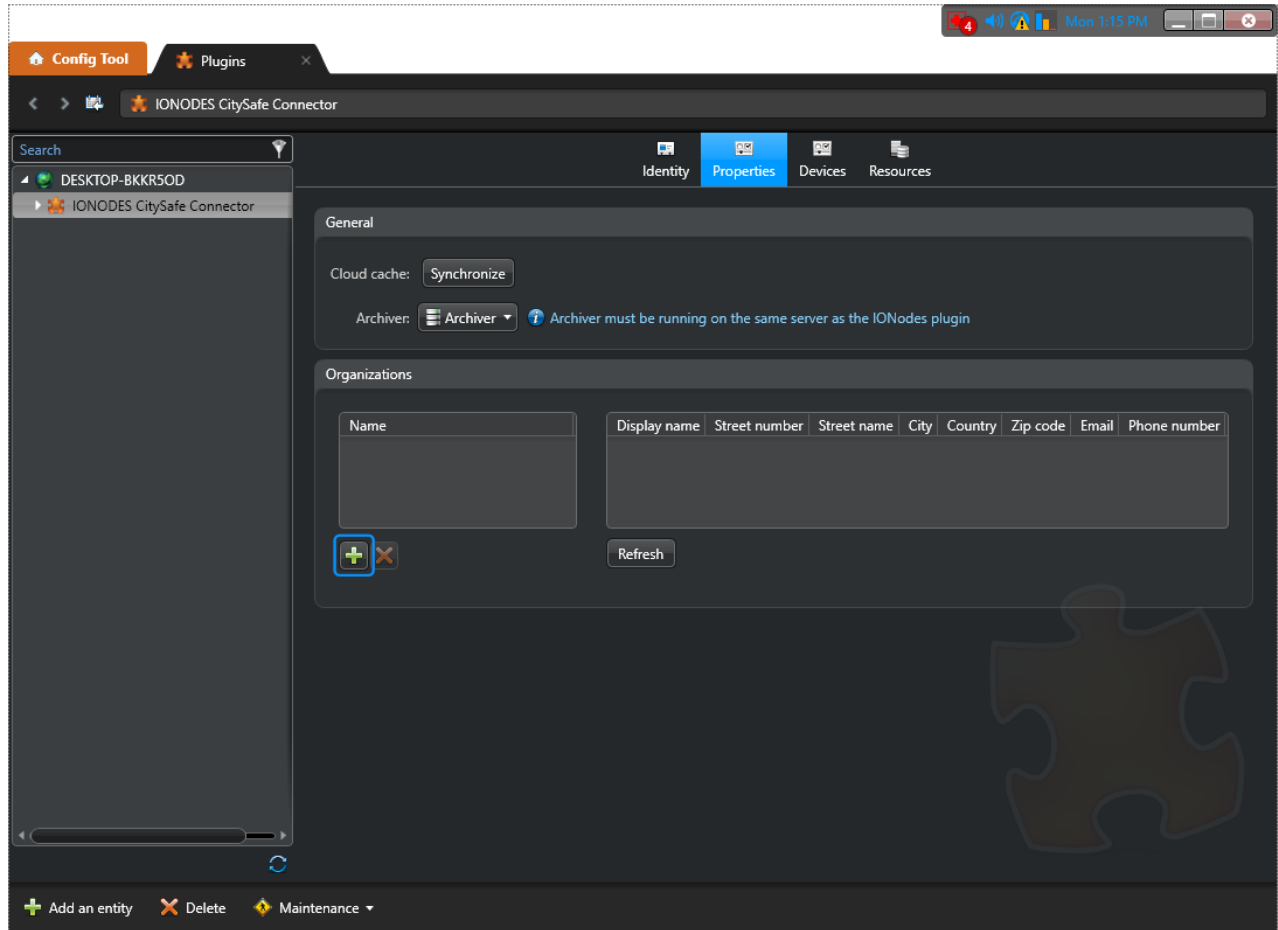
---

The **Application Client Key** generated and saved in steps above can now be used to configure the Genetec Security Center IONODES PERCEPT Cloud Plugin.

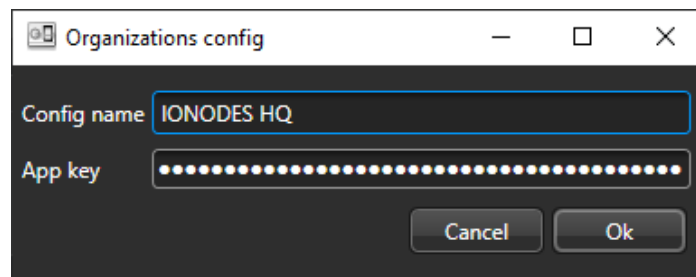


### 7.4 Configuring the APP Key in Genetec Security Center

Click on the green “+” button to add a new organization.

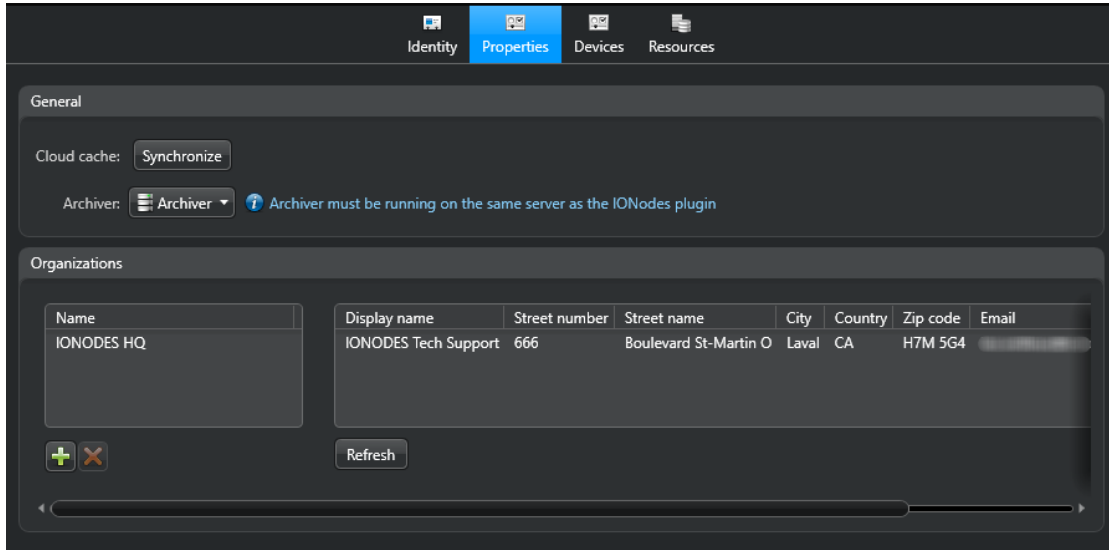


Provide a **Config name** for the connection and paste the **App Key** generated in PERCEPT Cloud then click **Ok** in the **Organisations config** dialog and **Apply** in the bottom-right corner.

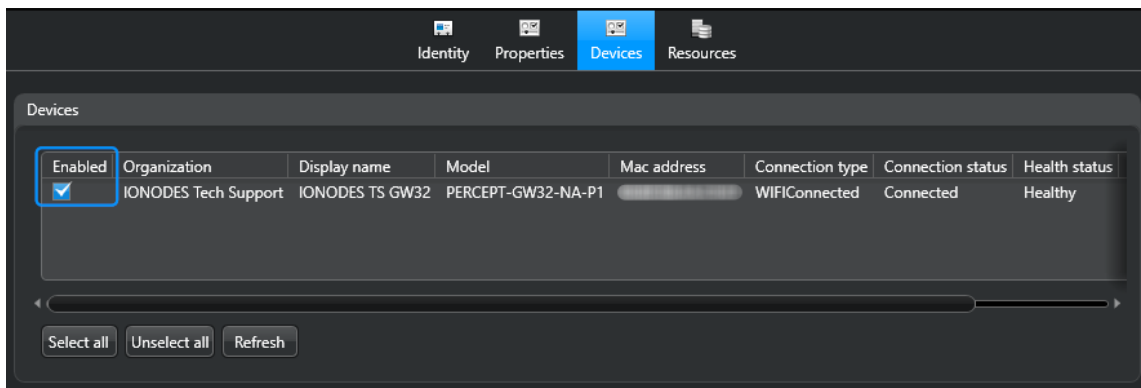


## 7.5 Confirming the installation

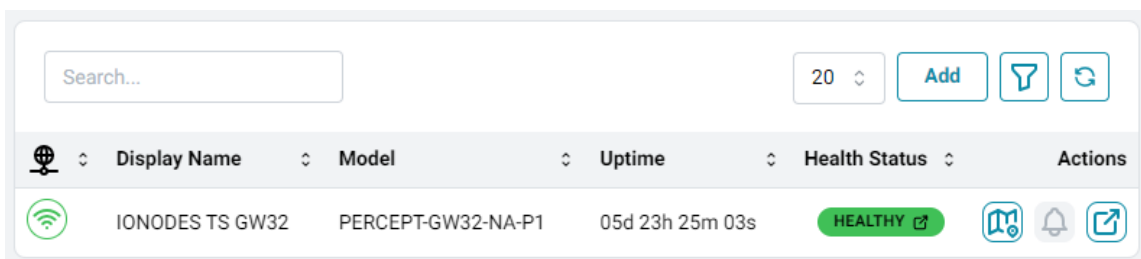
Once the key is entered, the organization should be visible in the right table. Note that it can take up to one minute for the data to refresh.



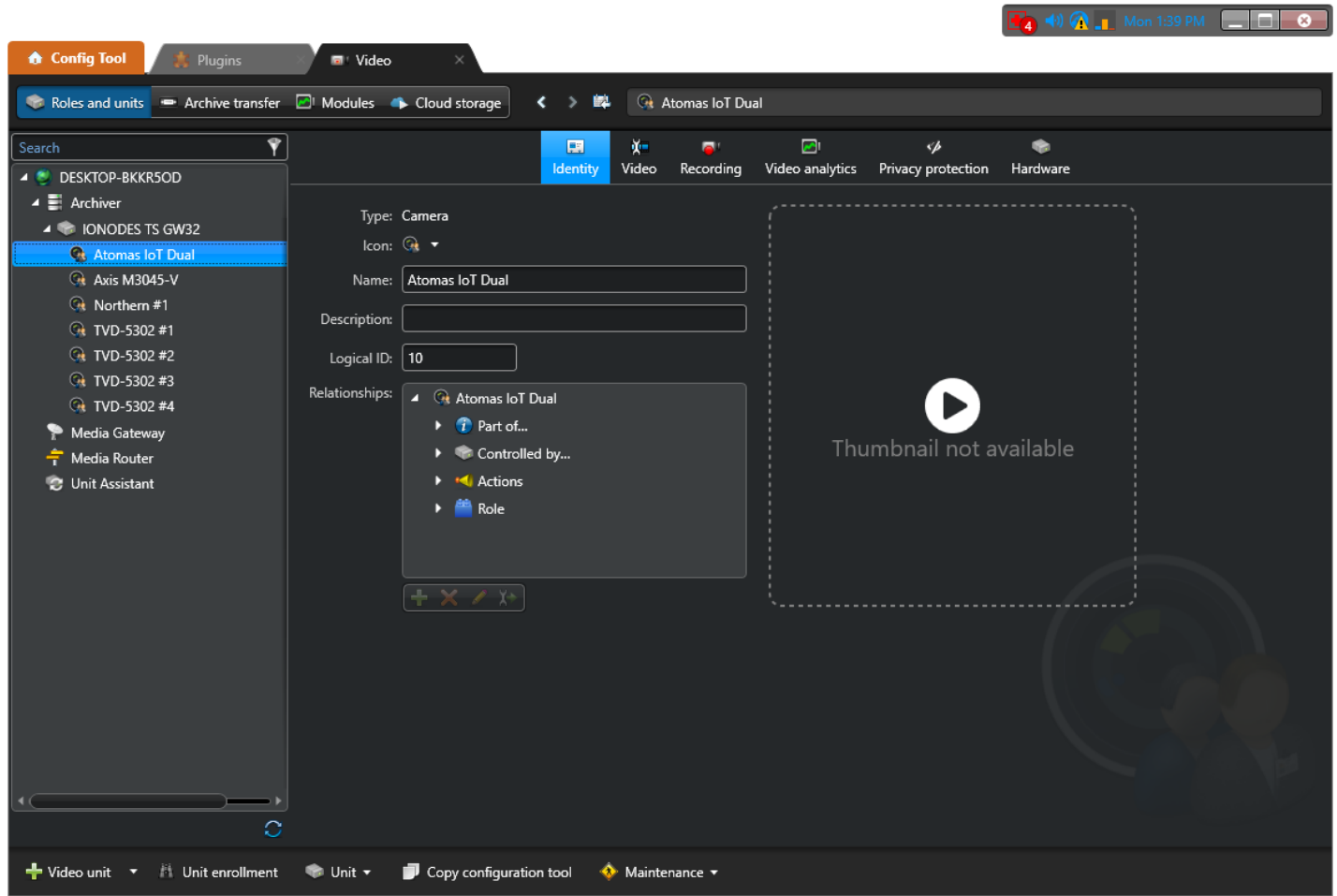
Once the organization details are populated, the list of available PERCEPT Gateways will be available in the **Devices** tab. It may take a few minutes for PERCEPT Gateway data to be displayed. The **Refresh** button can be clicked to refresh the data. **Enable** devices that you wish to view from the plugin role then click **Apply** in the bottom right corner.



The list of detected devices should be the same as the one in PERCEPT Cloud.



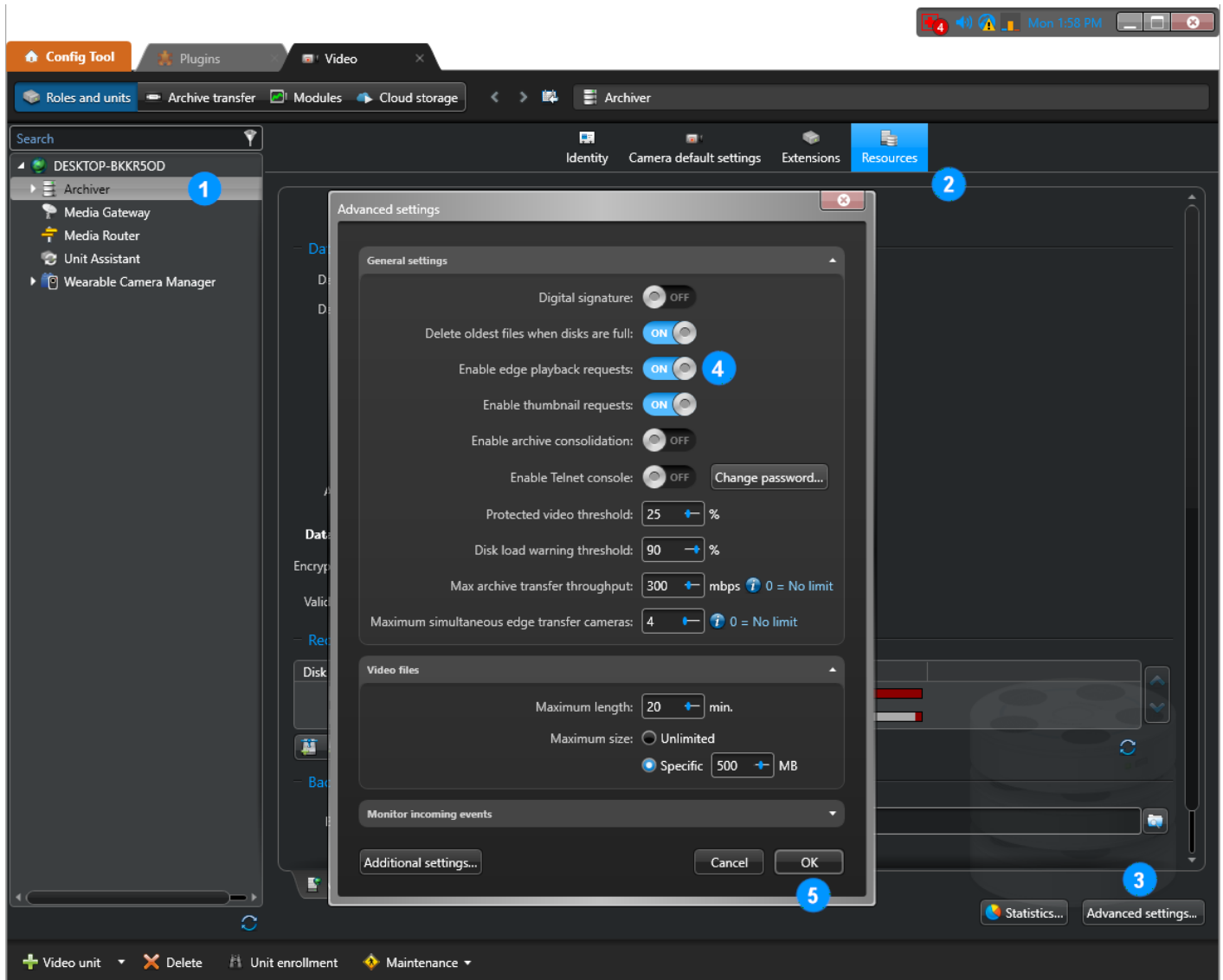
In Genetec Security Center's Config Tool, open the **Roles and units** tab of the **Video** task to confirm that the PERCEPT Gateways and associated cameras are visible.



**Note:** Only currently online PERCEPT Gateways are visible.

## 7.6 Enabling playback of recorded video

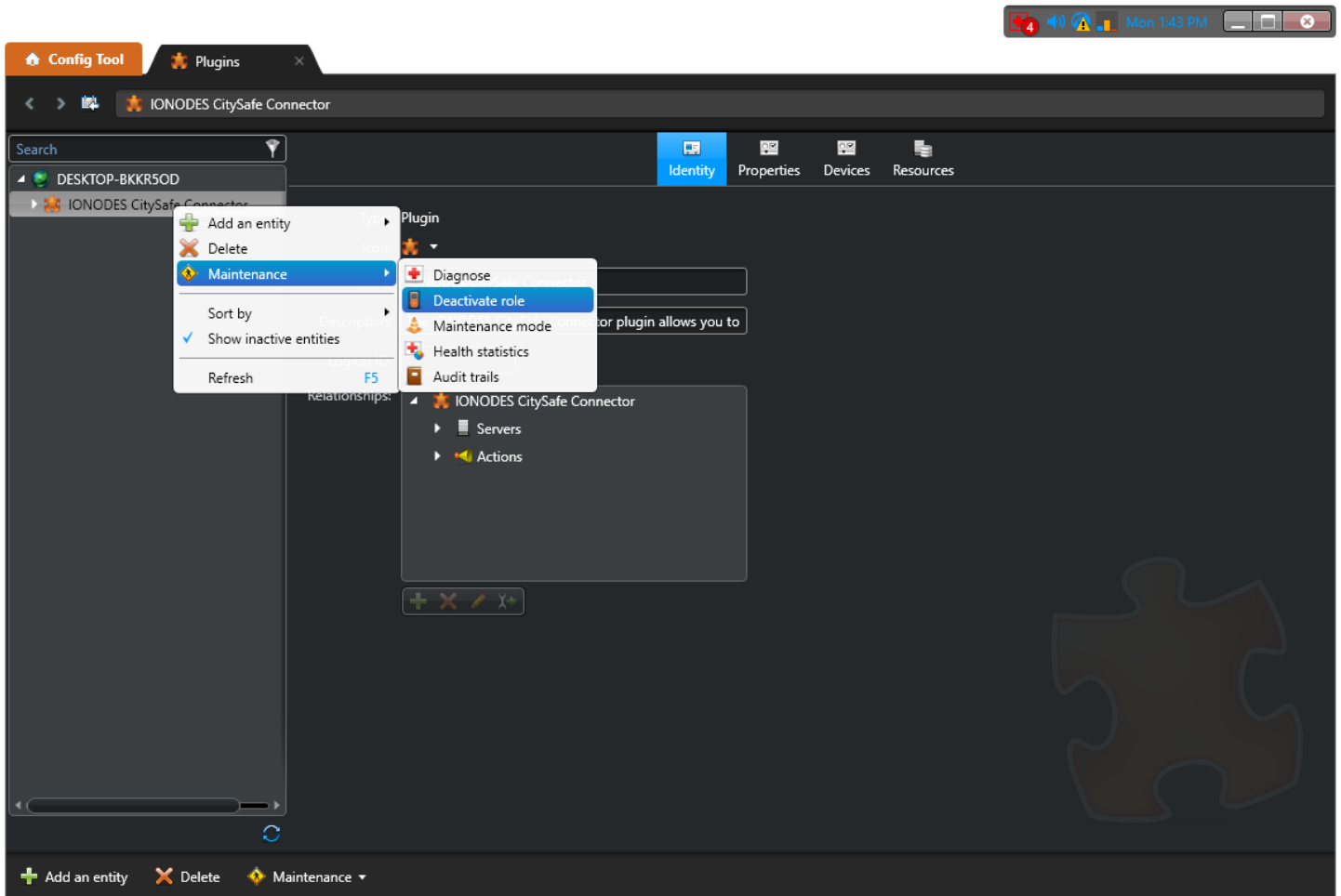
The PERCEPT Gateway records video on its local storage. These recordings are viewed as edge storage recordings by Genetec Security Center, in the same manner as a camera recording on its installed micro-SD card. Follow these steps to enable edge playback requests.



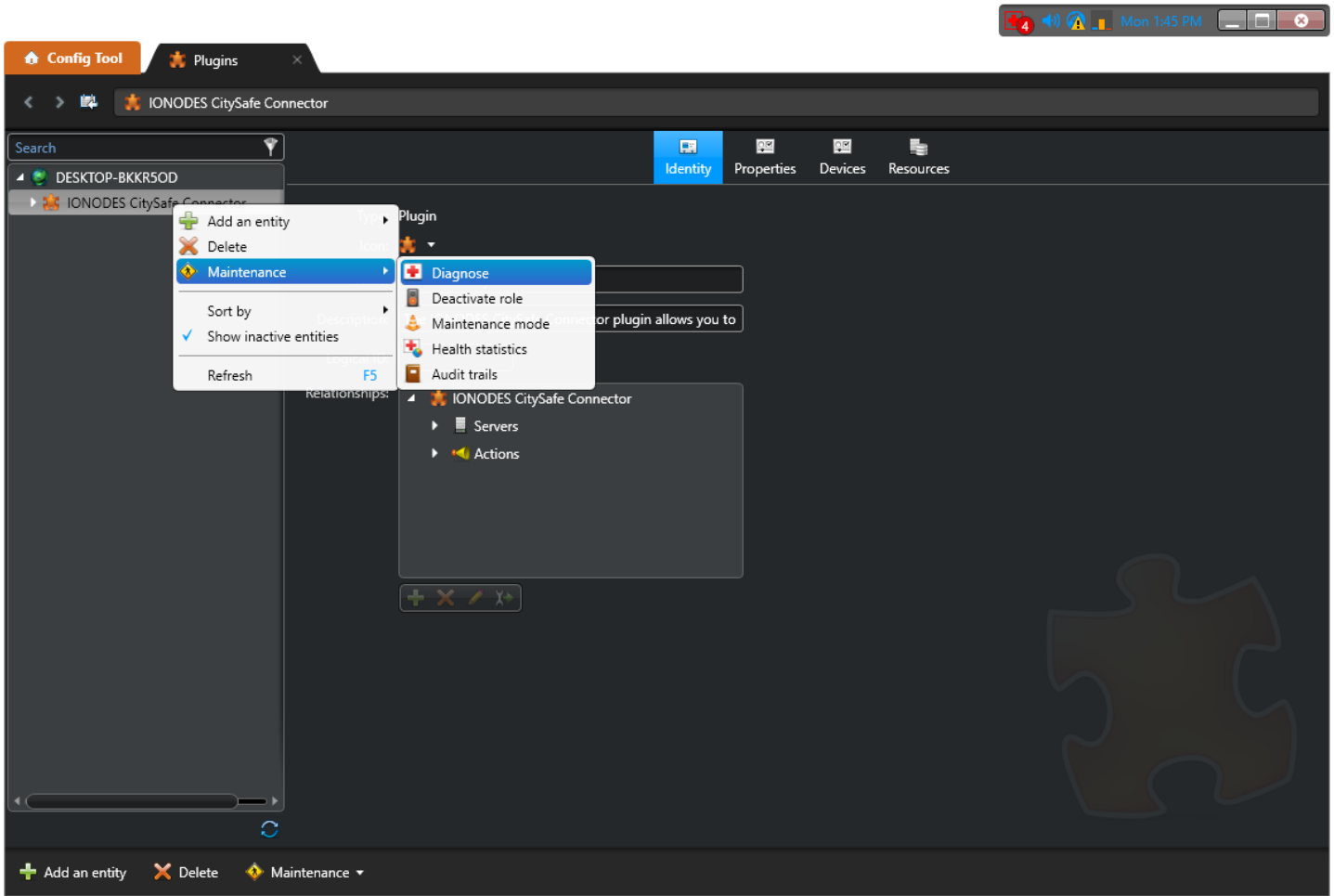
1. Open the **Roles and units** tab of the **Video** task and select the archiver.
2. Open the archiver's **Resources** tab.
3. Click on **Advanced settings...**
4. In the **Advanced settings** window, toggle the **Enable edge playback requests** slider to **ON**.
5. Click **OK** to close the window then **Apply** in the bottom right corner.

## 7.7 Troubleshooting the IONODES CitySafe Connector plugin

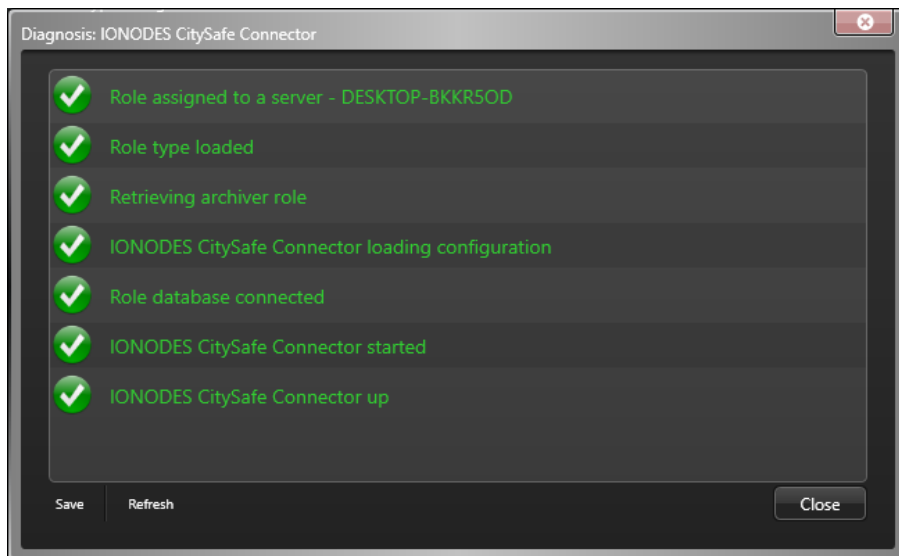
In some cases, it could be required to refresh the plugin's configuration. To achieve this, from the **Plugins** task, right-click on the **IONODES CitySafe Connector** plugin, select **Maintenance**, then **Deactivate Role**. Once the Plugin is deactivated, it can be re-activated following the same process.



The diagnostic menu can be used to validate the plugin state.



Expected output:



## Appendix 1 Local Device Connection

The PERCEPT Gateway is configured to automatically connect to PERCEPT Cloud. In some cases, it might be required to manually configure the device to diagnose or setup its connectivity. The following methods are available to configure the device locally:

1. Configuring the PERCEPT Gateway using Access Point Mode
2. Configuring the PERCEPT Gateway using a monitor, mouse, and keyboard

### Configuring the PERCEPT Gateway using Access Point Mode

If all three local network interfaces (LAN1, LAN2 and Wireless 1) are disconnected upon power up, the PERCEPT Gateway will automatically activate Access Point Mode for 15 minutes. Devices (laptop, tablet, mobile, etc.) can connect to this wireless access point and reach the PERCEPT Gateway's management interface. Access point settings:

- **SSID:** 'ION-' followed by the 16 characters of the device's serial number
- **Password:** 8-number PIN located on the label affixed to the bottom of the device
- **Default IP address:** 192.168.137.1
- Once connected to the PERCEPT Gateway's access point, open its management interface by entering its IP address in a web browser

If a monitor is connected, it will display the following message:

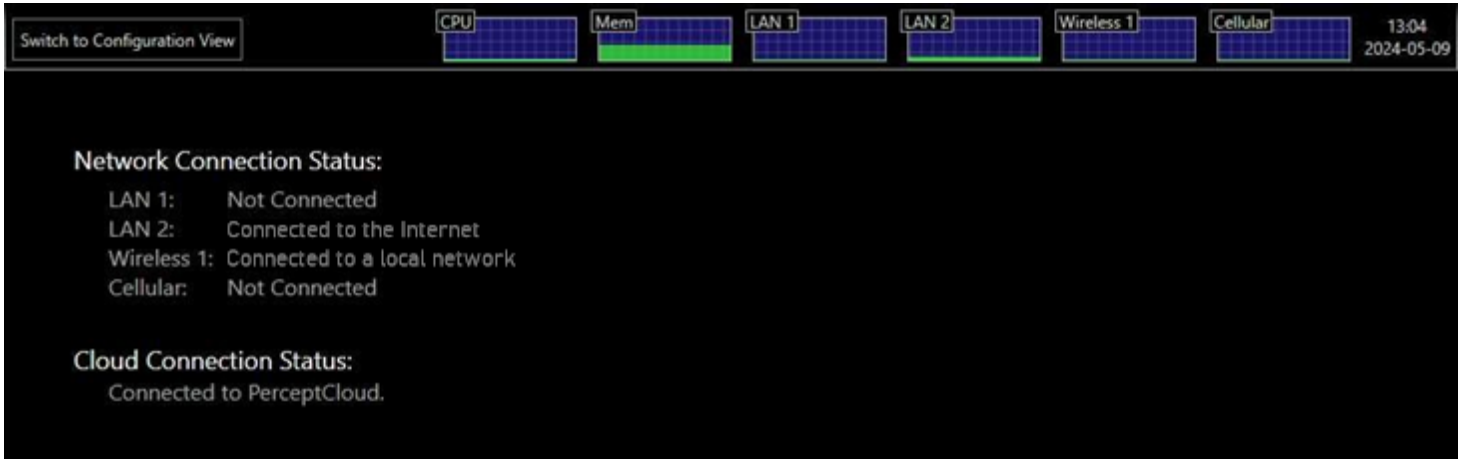


The screenshot displays the device's management interface. At the top, there are status indicators for CPU, Mem, LAN 1, LAN 2, Wireless 1, and Cellular, along with a clock showing 14:47 on 2024-05-09. A button labeled 'Switch to Configuration View' is in the top left. The main content area is titled 'Network Connection Status:' and lists: LAN 1: Not Connected, LAN 2: Not Connected, Wireless 1: Not Connected, and Cellular: Connected. Below this is a message box with a Wi-Fi icon stating: 'Your device is having difficulty connecting to a network. To help you configure its network settings, your device has temporarily enabled its Access Point mode. In this mode your device creates its own Wifi network. You can connect to this network as you would any Wifi network, but you will only have access to the device configuration interface.' The message box contains the following information: Name (SSID): ION-C100 02 10 F200 0000, Passkey: 10001010, and Device Address: 192.168.137.1. A note at the bottom of the message box says '(Accessible only through the Access Point network.)'. At the bottom of the screen, the 'Cloud Connection Status:' is shown as 'Attempting to connect to PerceptCloud...'.

Follow instructions in Appendix 2 to continue configuration.

## Configuring the PERCEPT Gateway using a monitor, mouse and keyboard

When a monitor is connected, the PERCEPT Gateway will show network and PERCEPT Cloud connection status. Below is an example from an already configured PERCEPT Gateway.



Each network interface can show the following statuses:

- Connected to the Internet: Interface is enabled and connected, with internet access.
- Connected to a local network: Interface is enabled and connected, without internet access.
- Not Connected: Interface is enabled but there is no cable connected or no valid wireless connection setting.
- Disabled: Interface is disabled in the PERCEPT Gateway configuration. By default, all network interfaces are enabled.

Cloud Connection can show the following statuses:

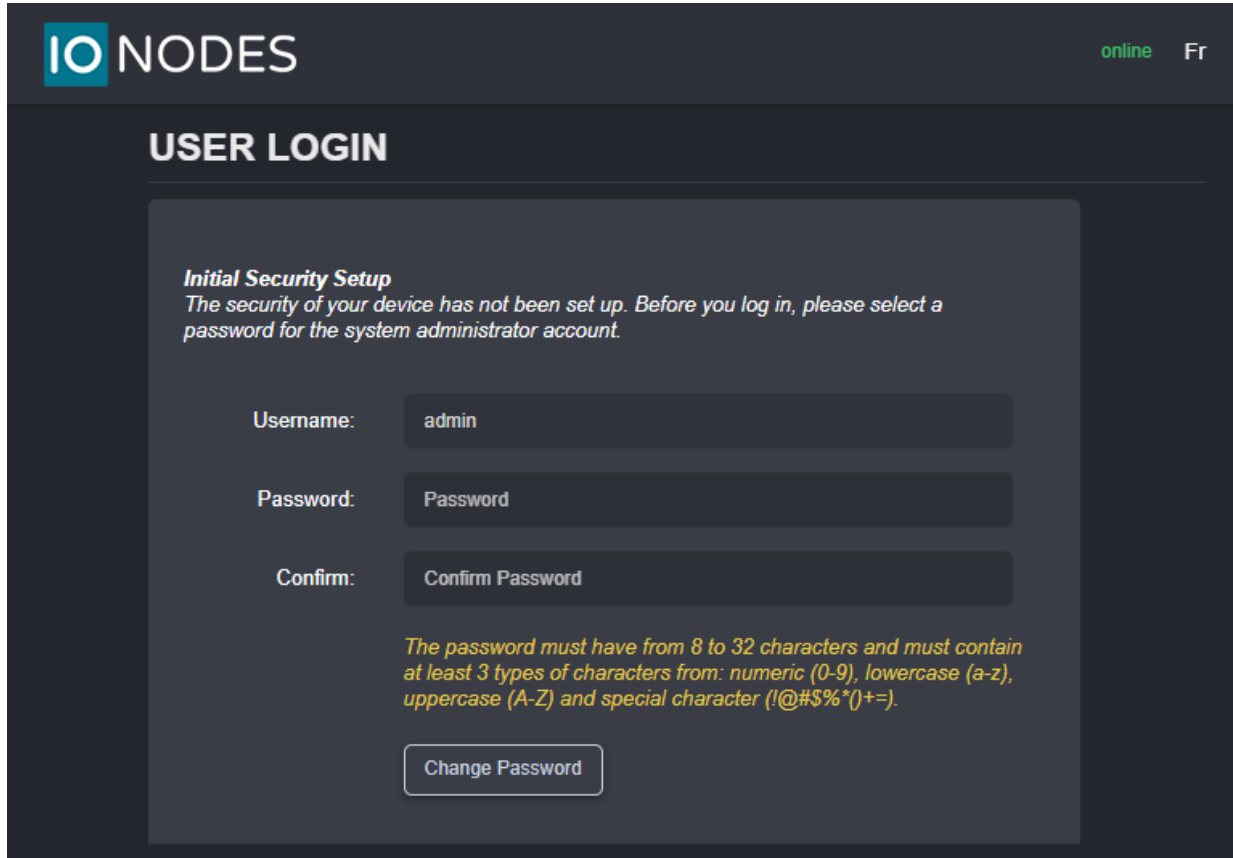
- Disabled: PERCEPT Cloud connectivity disabled in the PERCEPT Gateway configuration.
- Connecting or connection lost: The PERCEPT Gateway is attempting to connect to PERCEPT Cloud.
- Connected: The PERCEPT Gateway is connected to PERCEPT Cloud.

Click on the top-left '*Switch to Configuration View*' button to access the local management interface then follow instructions in Appendix 2 to continue configuration.

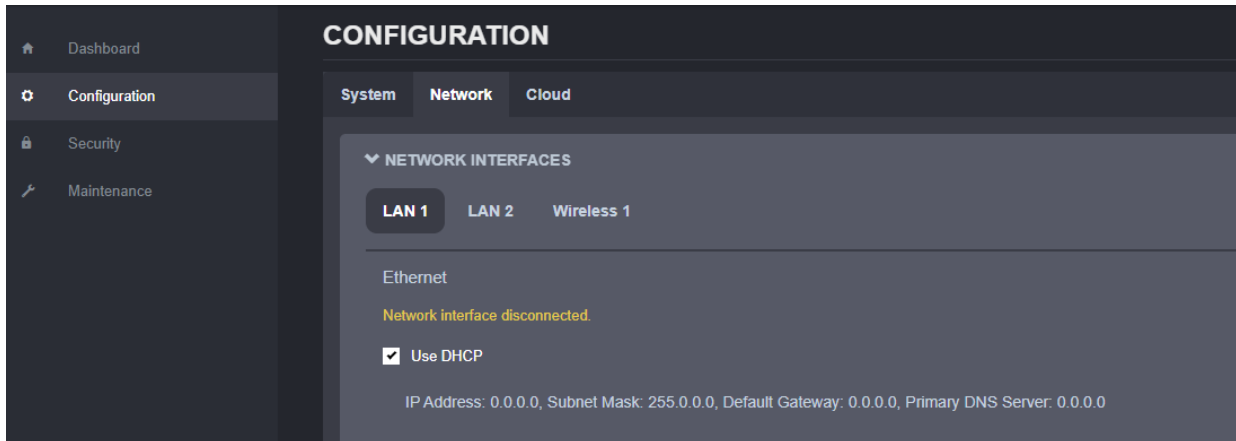


## Appendix 2 Setup the Initial Device Password

Upon first connection, the PERCEPT Gateway will request setting the 'admin' password.

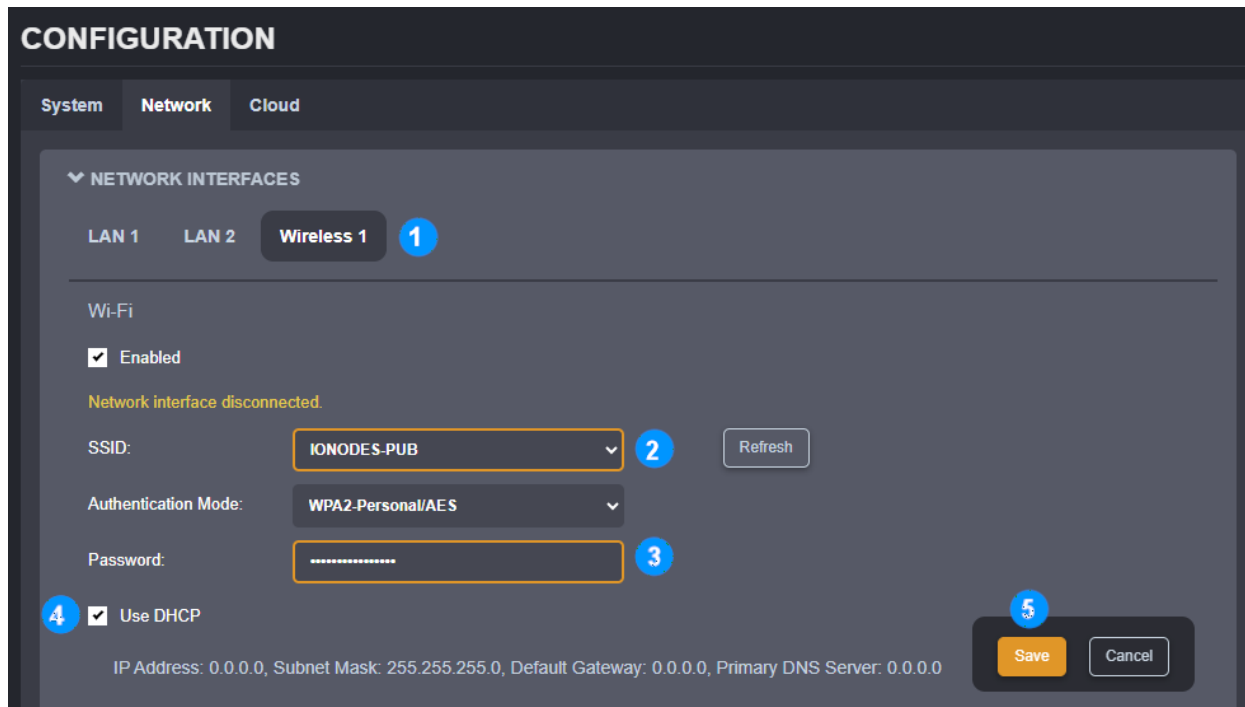


Upon setting the 'admin' password, the management interface will open to its **Dashboard** page, showing information such as model / serial numbers, MAC address, hardware, and firmware versions, etc. Select the **Configuration** page, **Network** tab.



## Appendix 3 Configuring Wi-Fi Connectivity (optional)

**Note:** Start at Appendix 1 for steps to connect to the PERCEPT Gateway management interface.

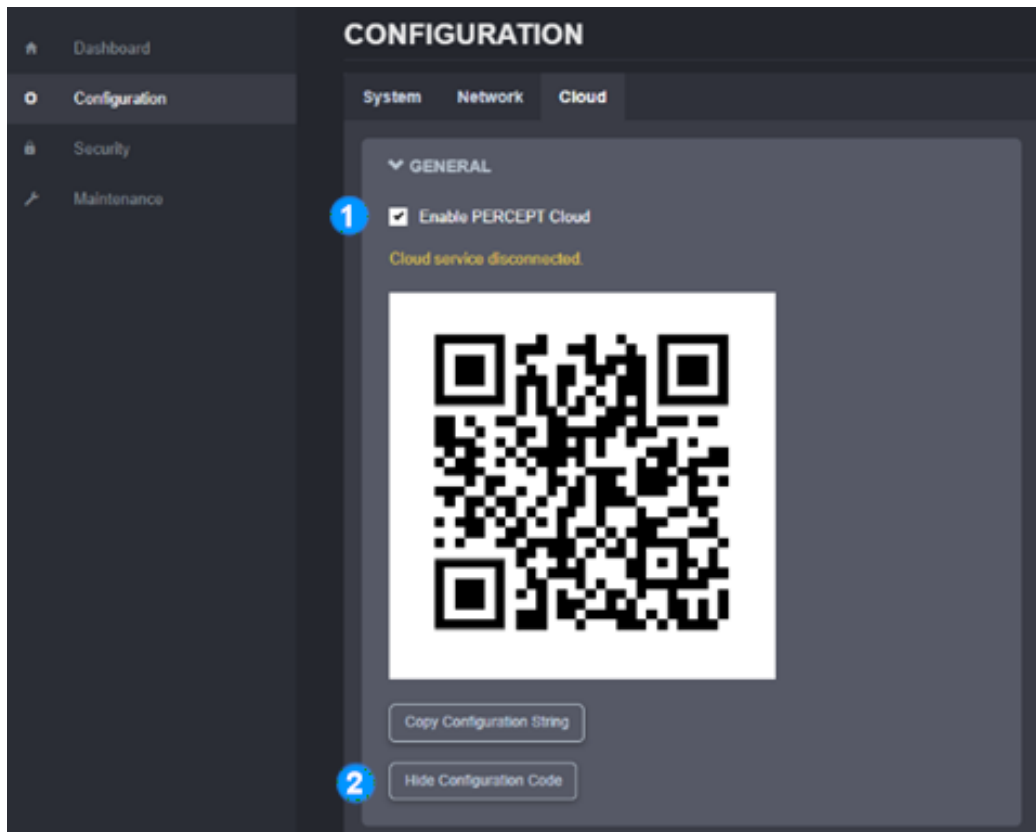


1. From the **Network Interfaces** section, select the **Wireless 1** button.
2. Select the desired wireless network **SSID** from the drop-down menu list. Clicking the **Refresh** button will force a rescan of available SSIDs within range.
3. Enter the **Password** for this SSID.
4. By default, the wireless network is configured to use DHCP. To use static IP instead, uncheck this box and enter the static IP settings.
5. Click **Save**

Changing network settings restarts the PERCEPT Gateway's web services. This forces a logout of the management interface. Re-enter credentials to log back in if needed.

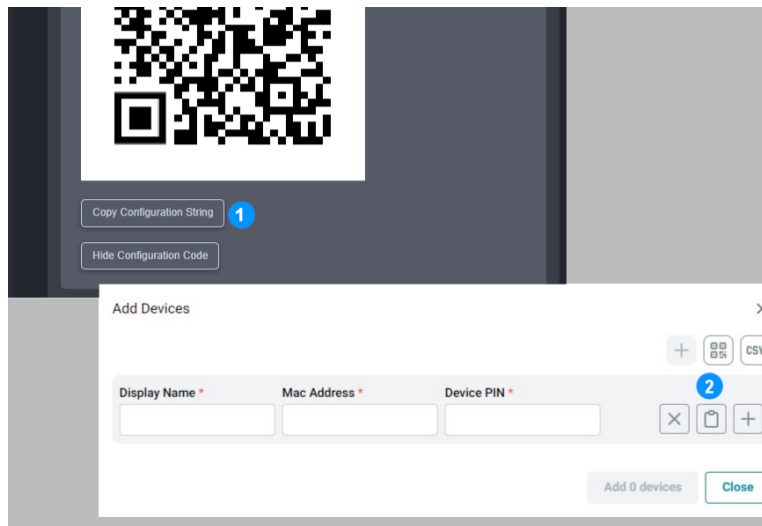
## Appendix 4 Retrieving Connection Information

In case the device label is not available, connection information can be retrieved directly from the PERCEPT Gateway management interface.



1. From the **Cloud** tab of the **Configuration** page, ensure the **Enable PERCEPT Cloud** box is checked
2. Click on the **Show Configuration Code** button to expose the QR code and the button to copy configuration information to the clipboard (already shown in image above)

if PERCEPT Cloud is accessed from a device (tablet, mobile, etc.) equipped with a camera, this QR code can be scanned to add this PERCEPT Gateway to the organization (refer to section 4.4.1). If PERCEPT Cloud is accessed from the same computer that is connected to the PERCEPT Gateway's local management interface, the configuration string can be copied and pasted instead of using the QR code.



1. From the PERCEPT Gateway's management interface, click on **Copy Configuration String**
2. In the PERCEPT Cloud **Add Devices** dialog, click on the **Paste** button

## Appendix 5 Resetting Device to Factory Settings

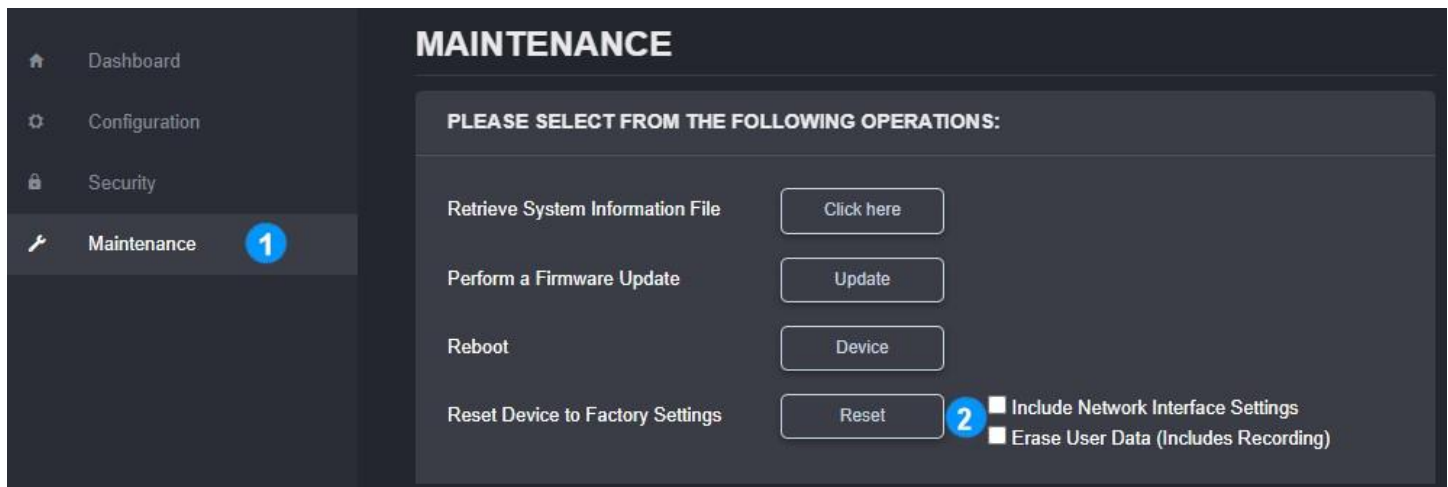
Resetting the PERCEPT Gateway to factory settings can be warranted in certain circumstances, such as loss of login credentials, or configuring from a clean slate.

### From PERCEPT Cloud

If the device is claimed by a PERCEPT Cloud organization, see section 6.4 to reset from PERCEPT Cloud.

### From Management Interface

If credentials for the PERCEPT Gateway's *'admin'* account are known, reset can be performed from its management interface's Maintenance tab.

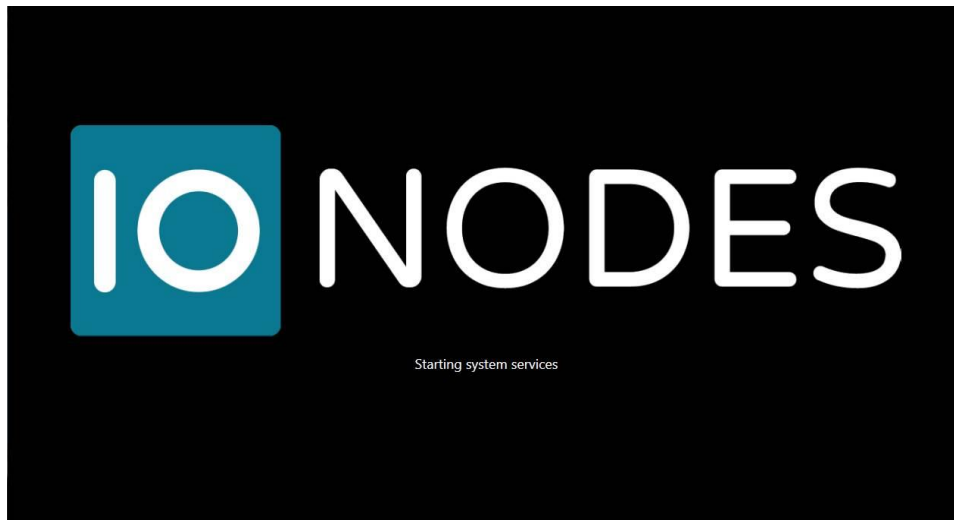


1. Once logged in to the PERCEPT Gateway management interface, either directly on the device with connected USB keyboard, mouse, and monitor, or remotely from its IP address or access point, open the **Maintenance** page.
2. Check boxes of desired reset options, then click on the **Reset** button.
  - a. Include Network Interface Settings will reset all network settings and revert to DHCP.
  - b. Erase User Data will discard all video recordings saved on the device's storage.

## From Safe Mode

If the PERCEPT Gateway is not claimed by a PERCEPT Cloud organization, and its '*admin*' account credentials are lost, it can be reset to factory settings from Safe Mode.

1. Power OFF the PERCEPT Gateway
2. Connect a monitor, USB keyboard and USB mouse
3. Power ON the PERCEPT Gateway
4. When the device displays the 'IONODES Starting system services' splash screen shown below, press and hold both the **LEFT SHIFT** and **RIGHT SHIFT** keys on the keyboard



5. When the PERCEPT Gateway completes start-up, bring the mouse pointer towards the top of the screen, where a banner showing a **Reset to Factory Settings** button will appear.



6. Click on the **Reset to Factory Settings** button. In the pop-up dialog box, check boxes of desired reset options:
  - a. Include Network Interface Settings will reset all network settings and revert to DHCP
  - b. Erase User Data will discard all video recordings saved on the device's storage

## Appendix 6 Product Compliance

### FCC Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. Changes or modifications to this product not authorized by IONODES could void the electromagnetic compatibility (EMC) and wireless compliance and negate your authority to operate the product.

## Appendix 7 Industry Canada Compliance Statement

The product has been tested to comply to ICES-3(B)/NMB-3(B). This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the interference-causing equipment standard entitled: "Digital Apparatus," ICES-003 of the Canadian Department of Communications.



## Appendix 8 Statement Limited Warranty

Please visit <https://www.ionodes.com/limited-hardware-warranty/> for the latest warranty information.