

HOW TO.

Configure Vaxtor Automatic license plate recognition in AXIS Camera Station

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Introduction

This how to document will show you how to set up the selected device(s) as a Vaxtor Automatic license plate recognition and how to configure license plate as a credential within Axis Camera Station.

Prerequisites

AXIS Barcode supported Intercom or Camera

AXIS A1601 Door Controller x.x.x.x or later

AXIS Camera Station 5.49 or later

Vaxtor Automatic license plate recognition ACAP x.x.x or later

AXIS License Plate Verifier License

Please note that Axis doesn't take any responsibility for how this configuration may affect your system. If the modification fails or if you get other unexpected results, you may have to restore the settings to default.

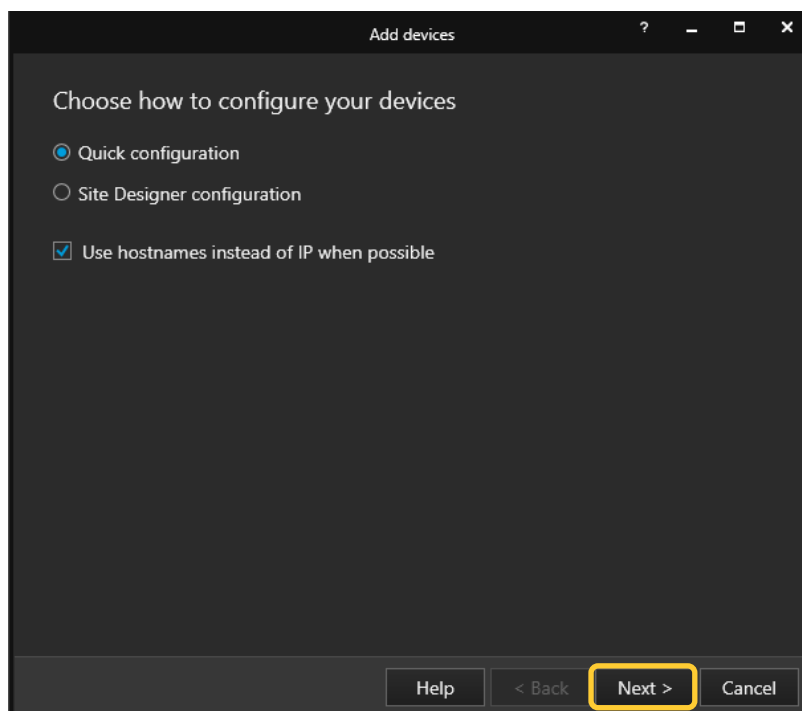
Step 1 – Adding/updating & setting up devices

Start by adding the unit(s) to Axis Camera Station and ensuring that they are running the latest firmware. For the devices used we require the use of HTTPS for end-to-end security, these devices should also use ACS as an NTP. Only the door controller is required to be added to Axis Camera Station, but the intercom or camera can be added. Ensure either way that all devices are on the latest firmware.

To add the devices

Follow these steps if you need to add the devices:

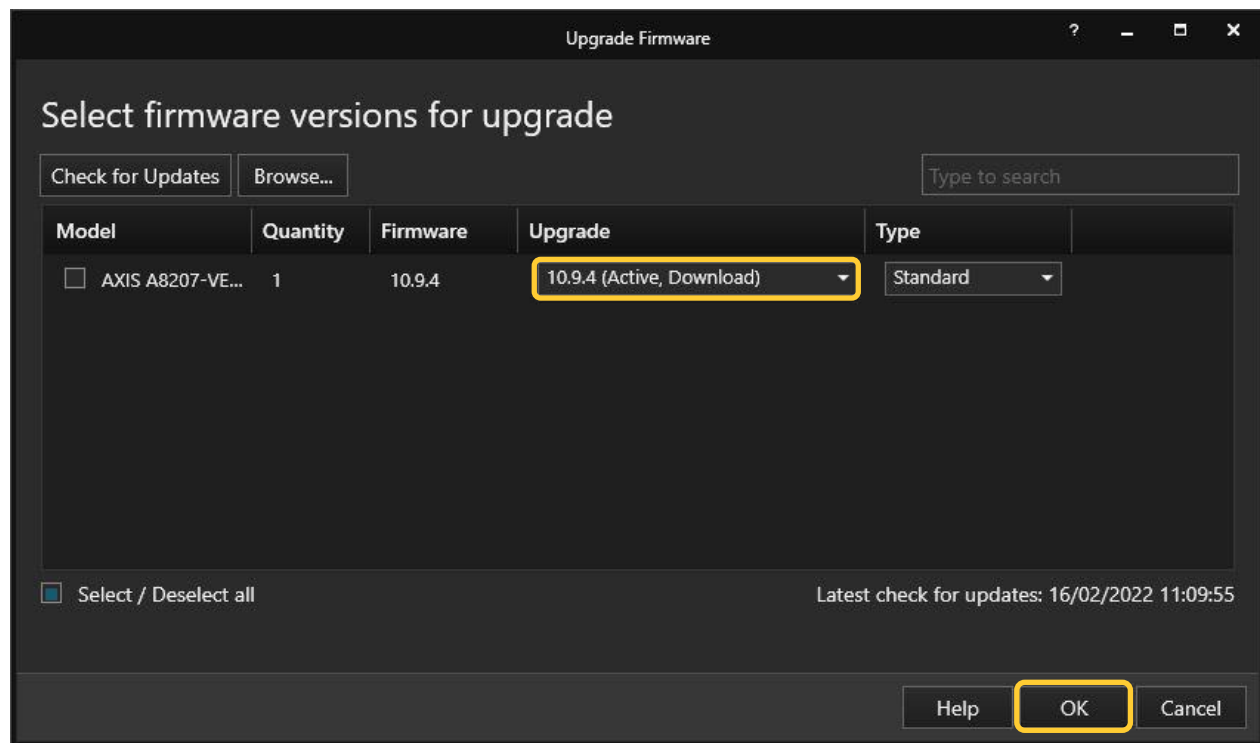
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Devices” and under this drop-down select “Add Devices”
3. On this page if the units are in your network, you should see them, if they are missing then you can try do a manual search via the button “Manual Search”. If they still cannot be found, please check the units are powered and are on the same network.
4. If the units are greyed out, this means they require the password for the unit, this is entered by clicking on the “Enter password” under status for the unit.
5. Once you see the units you wish to add, you can hold down the “ctrl” key and select the units, then click add found on the bottom left.
6. Follow the pop-up wizard to add these devices



To update the devices

Follow these steps to update your devices:

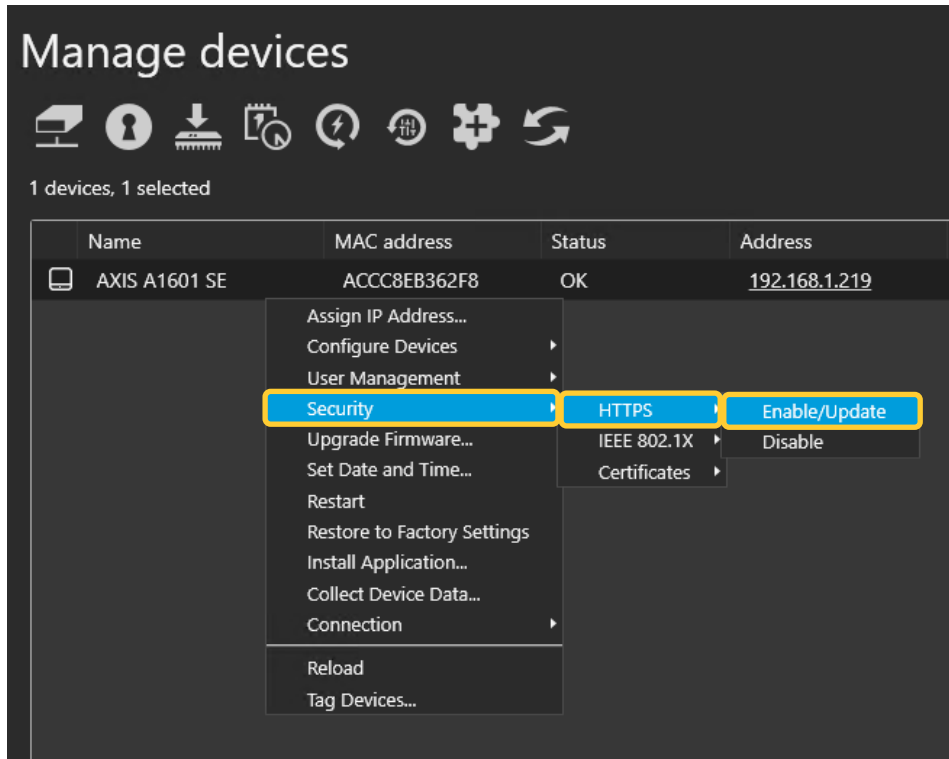
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Devices” and under this drop-down select “Management”
3. From this page hold “ctrl” and select the devices, once selected press the update firmware button.
4. In the popup select the latest firmware in the list for each device (for the A1601 ensure to select the latest Secure Entry track) and press “OK”
5. The update can be monitored via the “tasks”



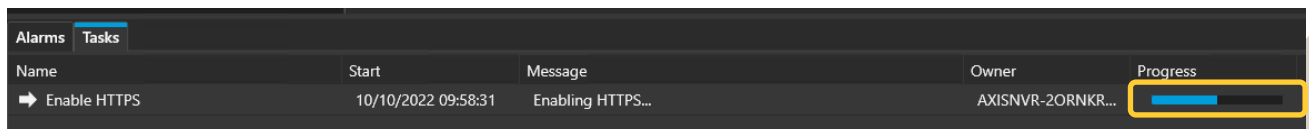
To setup the devices

Follow these steps to setup your devices:

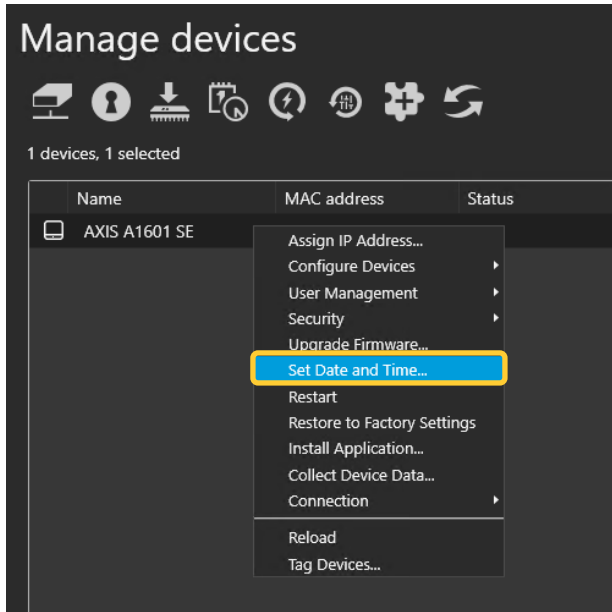
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Devices” and under this drop-down select “Management”
3. Right click on the device and select “Security – HTTPS – Enable/Update”



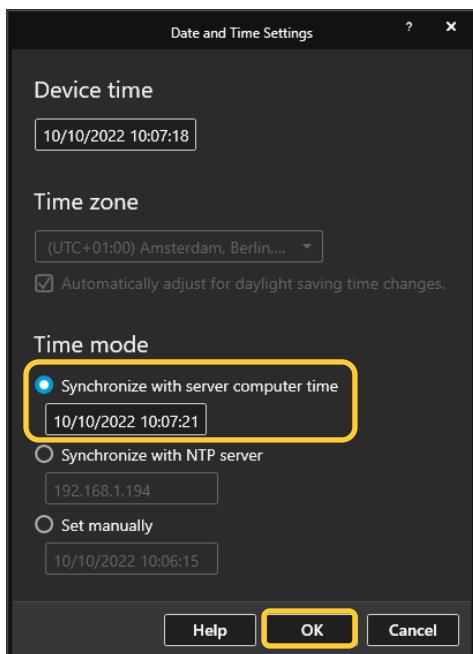
4. This will create a task in the task and alarms, once this has completed, HTTPS is enabled on this device.



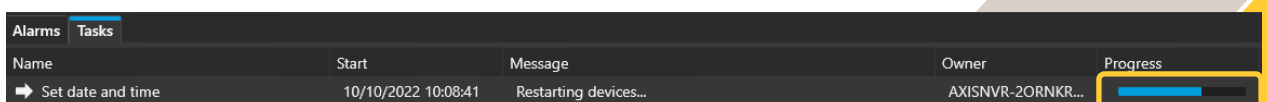
- Next to setup is the time & date on the device, we do this but right clicking on the device in Devices – Management and selecting “Set Date and Time...”



- In the pop-up select yes, In the next pop-up under “Time Mode” choose the first option, “Synchronize with server computer time”



- This will then add a task in the task and alarms, once completed the time will now be synced with the computer server time.



Step 2 – How to create/edit a schedule

Creating/editing a schedule to use in Secure Entry

These schedules would be used for setting specified time periods for identification profiles and access times for cardholders or door unlock schedules.

Follow these steps to create a schedule:

1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Recording and events” and under this drop-down select “Schedules”
3. To edit a schedule, highlight the schedule you wish to edit, if you wish to create a new schedule, press new.
4. To edit this schedule hold and drag the cursor along the time for each day that you want the schedule to be running. Blue highlighted will be the active times on each day.
5. Once you are happy with your schedule you can provide it with a new name in the name field and click apply.

The screenshot displays the 'Schedules' configuration page in Axis Camera Station. At the top, there is a search bar labeled 'Type to search'. Below it, a list of existing schedules is shown: 'Office Hours', 'Weekends', and 'New schedule'. The 'Office Hours' schedule is selected and highlighted in blue. Below the list, there are 'New' and 'Remove' buttons. The main area shows the 'Week schedule' for 'Office Hours'. The name field is set to 'Office Hours'. There are checkboxes for 'Schedule on' (checked) and 'Schedule off'. The 'Override schedule' section has an 'Add...' button. The week schedule is visualized as a grid with time slots from 00:00 to 06:00. Blue bars indicate the active schedule periods: Monday (06:00-18:00), Tuesday (06:00-18:00), Wednesday (06:00-18:00), Thursday (06:00-18:00), and Friday (06:00-18:00). Saturday and Sunday are empty. At the bottom, there is an 'Apply' button.

Step 3 – Configuring VaxALPR identification profile

To create the VaxALPR identification profile

If you are wanting a multi-factor authentication or multiple types of credentials (card or License Plate) you will need to create a new identification profile, the license plate credential can be used with any of the other types to add another level of security.

Follow these steps to create:

1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
1. From the left menu select “Access control” and under this drop-down select “Identification Profiles”
2. On this page license plate as an identification alone exists, to create a new identification type select “+ Create identification profile”
3. Give the profile a name and for each side configure the required credentials using the “+ Add” then in the drop-down tick the identification types you wish to be presented to grant access, after select the schedule this applies too. Then select “Ok” in the bottom right.

Identification profiles

Create identification profiles to configure how and when to access a door from a specific side.

+ Create identification profile

New identification profile

Licence Plate + Card Always

Side A

Configure identification profiles for accessing the door from side A.

Identification type	Schedule
Card & License plate number	Always

Side B

Configure identification profiles for accessing the door from side B.

Identification type	Schedule
Card & License plate number	Always

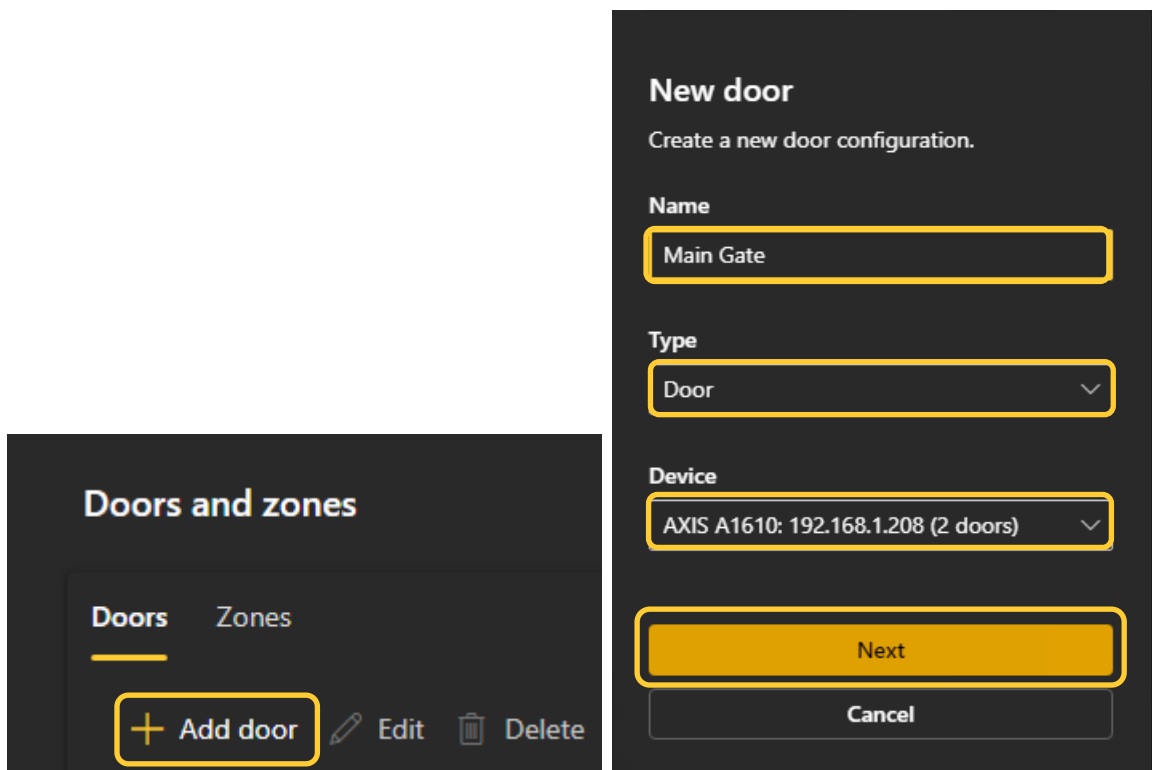
Step 4 – Creating a door with a license plate reader

To create a door/add a license plate reader to an existing door

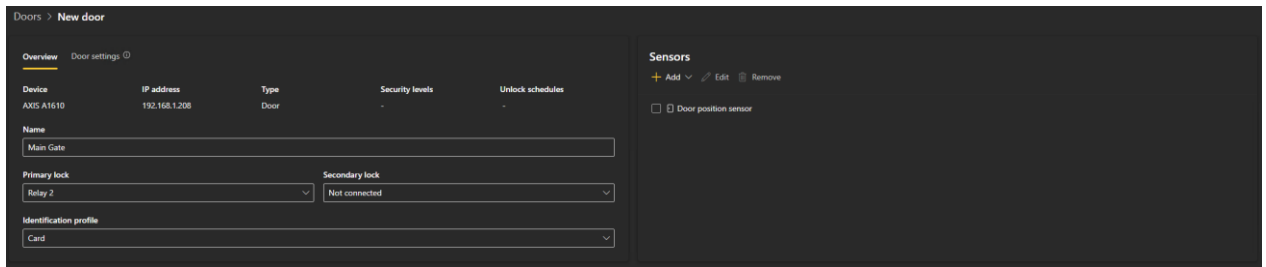
If you have a door already configured in your system and wish to add the license plate reader, click on the three dots and select “edit” once on the config screen follow from step 5

Follow these steps to create a door:

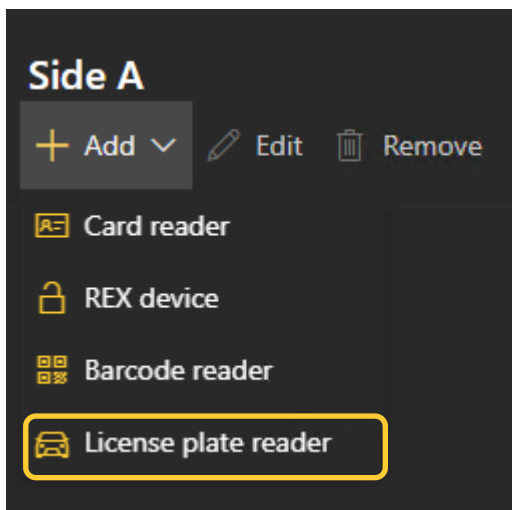
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Access control” and under this drop-down select “Doors and zones”
3. On this page press “+ Add door” and in the pop-up give the door a relative name, select the Type “Door and select the door controller in the third drop down, then press “Next”



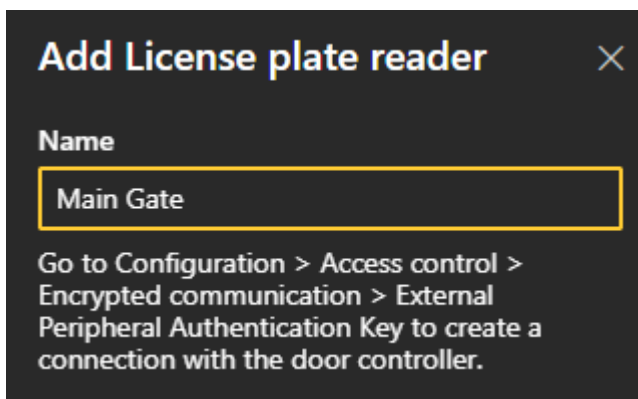
- Proceed to configure the locks with the correct relay and door monitors (if used)



- On the side you wish to have the license plate reader select "+Add" and select "license plate reader"



- On the right pop-up select reader Provide the Reader a name and click "Add"



- Once created, in the first tile, you can change the “identification profile” to License plate.

The screenshot shows the 'Door settings' configuration page. At the top, there are tabs for 'Overview' and 'Door settings'. Below this is a table with columns: Device, IP address, Type, Security levels, and Unlock schedules. The device is 'AXIS A1610' with IP '192.168.1.208' and Type 'Door'. Below the table, there is a 'Name' field containing 'Main Gate'. There are two dropdown menus for 'Primary lock' (set to 'Relay 2') and 'Secondary lock' (set to 'Not connected'). At the bottom, the 'Identification profile' dropdown menu is highlighted in yellow and set to 'License plate'.

To apply License plate identification profile to door after the door is created

If you create a new identification profile or wish to change to another after creating the door, this can be done from the Doors and zones page.

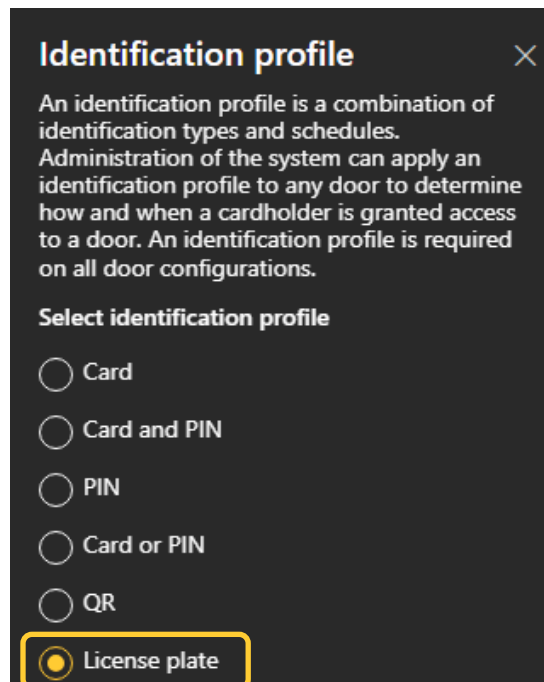
Follow these steps to apply:

- In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
- From the left menu select “Access control” and under this drop-down select “Doors and zones
- Highlight the specific door and click “identification profile”

The screenshot shows the 'Doors and zones' configuration page. At the top, there are tabs for 'Doors' and 'Zones'. Below this is a toolbar with buttons: '+ Add door', 'Edit', 'Delete', 'Pin chart', 'Identification profile' (highlighted in yellow), 'Secure Channel', and 'Unlock schedules'. Below the toolbar is a table with columns: Name, Type, Device, and IP address. The table contains three rows: 'Lab Room', 'Main Entrance', and 'Main Gate'. The 'Main Gate' row is selected with a checkmark in the first column.

Name ↑	Type	Device	IP address
<input type="checkbox"/> Lab Room	Door	AXIS A1601	192.168.1.219
<input type="checkbox"/> Main Entrance	Door	AXIS A1610	192.168.1.208
<input checked="" type="checkbox"/> Main Gate	Door	AXIS A1610	192.168.1.208

4. In the side menu select the identification profile you wish to use, and click “Apply”



Step 5 – Configuring the VaxALPR License Plate Verifier ACAP

To configure the ACAP

Next we need to configure the ACAP (Axis Camera Application Platform) this is installed and configured directly on the device which will be reading the license plate credentials, as this is used to connect the created reader in AXIS Camera Station to the device allowing the license plate access.

The installation and licensing of the ACAP can be done via ACS or directly on the device.

Follow these steps to install via ACS:

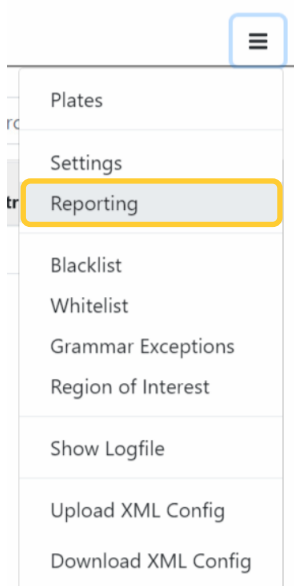
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Devices” and under this drop-down select “Management”
3. Highlight the device and click the install application symbol (puzzle piece with +)
4. Choose “Browse to Application” select the barcode ACAP file and press “Next”.
5. Say yes to installing licenses and press “Next”
6. Click “Browse” and select the license file, then press “Next”
7. Finally click “Finish”

Follow these steps to install via the webpage:

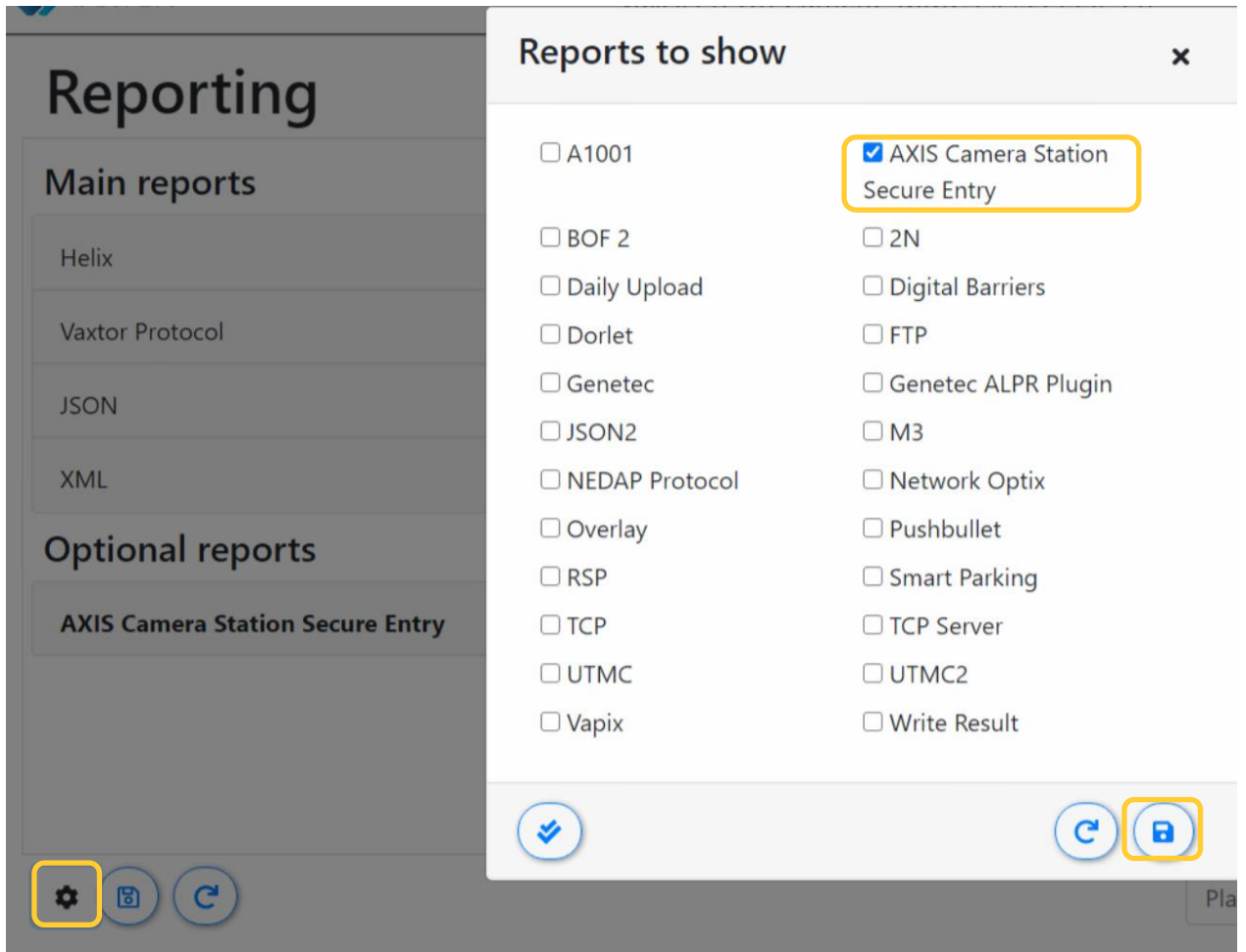
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Devices” and under this drop-down select “Management”
3. Then click on the IP address of the supported device (you can access this via a browser instead)
4. On this tab select “Apps” then “+ Install app” on the next page select the AXIS Barcode ACAP file and click “Install”
5. Once installed, from the services page select “settings” on the AXIS License Plate Verifier ACAP.
6. Click “Activate Licence” on this page select the licence file or enter in the licence key and click “Ok”

Follow these steps to configure:

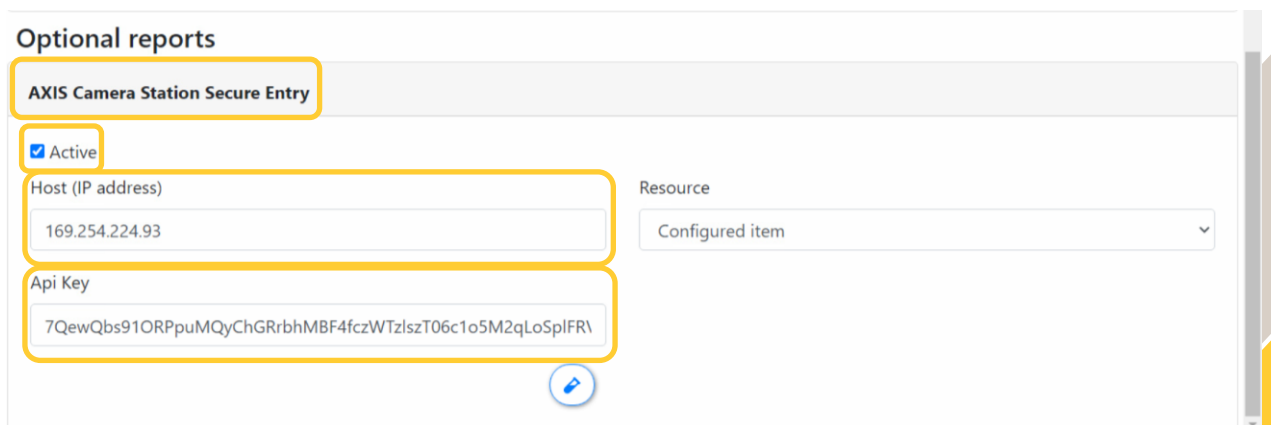
1. From the management page in ACS, click on the IP address of the device to open a new tab displaying the web GUI, from here select “Apps”
2. Now you can start the VaxALPR On Camera ACAP and select “Open”
3. Press “OK” on the pop-ups that appear, then press “Skip” system setup. Then click on “Settings” and “OK” on the pop-up.
4. From the settings menu, select the burger/three bars top right and select the “reporting” option.



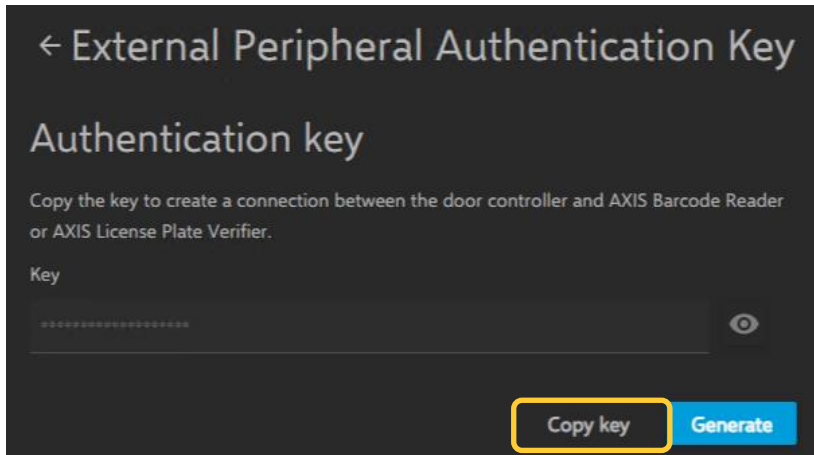
- On this page select the cog bottom left, in the pop-up tick “AXIS Camera Station Secure Entry” and press the Save icon to confirm.



- Now in reporting you will see AXIS Camera Station Secure Entry, click on this to expand the option fields. Tick the active box and provide the IP address of the controller this will be connecting to and retrieve the API key from ACS. Please see the next step on how to retrieve this key. Finally click the save icon below the settings.



7. The authentication key can be retrieved from the Configuration tab under “Access Control” – “Encrypted communication” and selecting “Show authentication key” then click the “Copy key” button then return to the ALPV tab/webpage and paste this key.



NOTE

For more details on how to configure the AXIS License Plate Verifier ACAP please visit the product page on [Axis.com](https://www.axis.com)

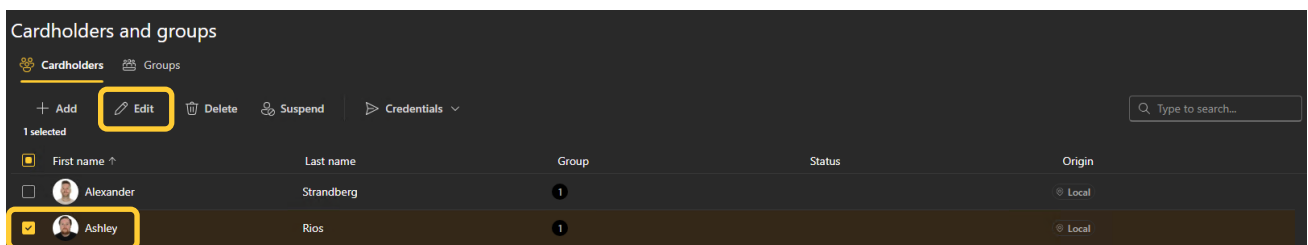
Step 6 – Creating License plate credential

To create the license plate credential

Now we can provide the license plate credential to either new or existing cardholders.

Follow these steps to create:

1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen. And select “Access management”
2. From this page you can either create a new cardholder via the “+Add” button. If you wish to add a license plate to an existing cardholder, find them in the cardholder highlight the cardholder and select “edit”.



3. In the cardholder, fill out the name fields, then under credentials click the “+” and select the license plate symbol button.

Save Cancel

Cardholders and groups > Ashley Rios

Ashley Rios
Local

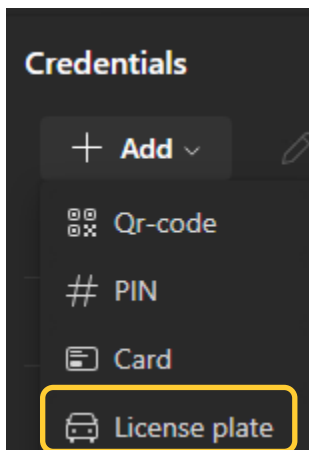
Cardholder picture

General Advanced

First name
Ashley

Last name
Rios

Email
ashley.rios@axis.com



4. Give the license plate a name, under you can provide the license plate number of the cardholders vehicle. Then decide the expiration date in the below fields. Finally click "Add" then click "Save" top left.

The image shows a 'New license plate' form with a close button (X) in the top right corner. The form contains the following fields:

- Credential name:** A text input field containing 'My Car'.
- License plate number:** A text input field containing 'ABC 123'.
- Valid from:** A date and time selection area. The date field contains '2024/12/03' and the time dropdown contains '12:00 AM'.
- Valid to:** A dropdown menu containing 'No end date'.

Considerations and limitations

1. The use of a Door Controller requires HTTPS to be enabled
2. Support up to one license plate credential per cardholder and in total 5 credentials (including card, PIN and license plate) per cardholder.