

HOW TO.

Configure AXIS License Plate Verifier access solution 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 an AXIS License Plate Verifier reader and how to configure license plate as a credential within Axis Camera Station.

Prerequisites

- AXIS Barcode supported Intercom or Camera
- AXIS A1601 Door Controller 11.2.5.1 or later
- AXIS Camera Station 5.49 or later
- AXIS License Plate Verifier ACAP 2.6.0 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.

Preview

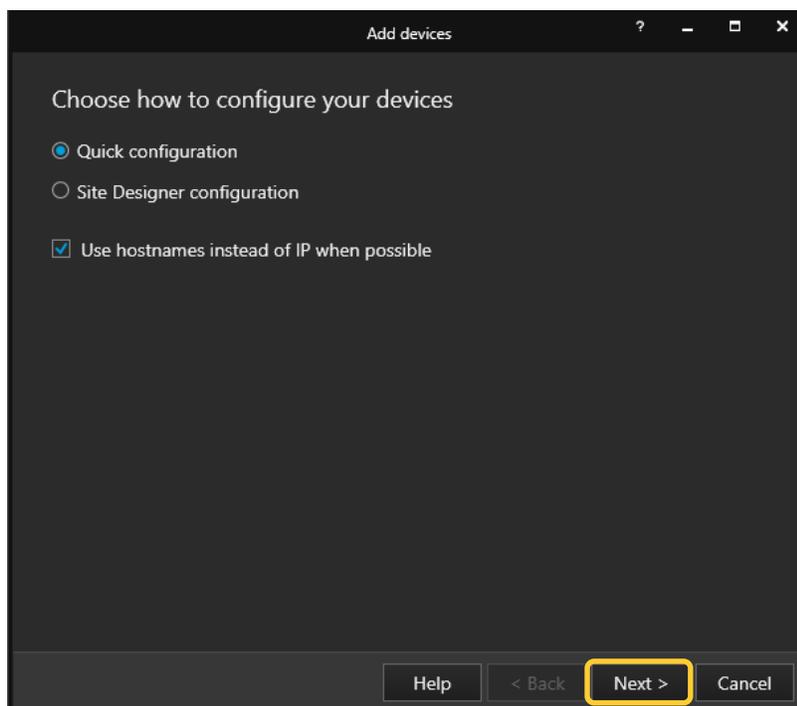
Step 1 – Adding/updating & setting up devices

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

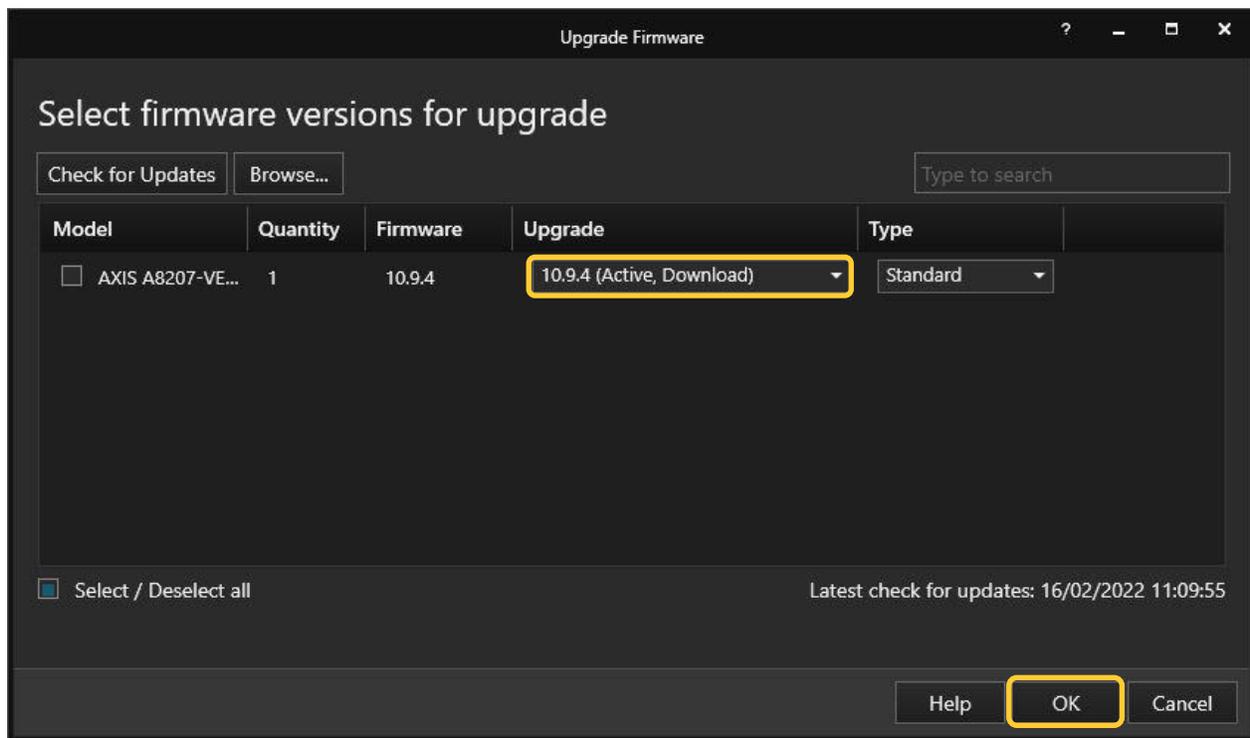


Preview

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”

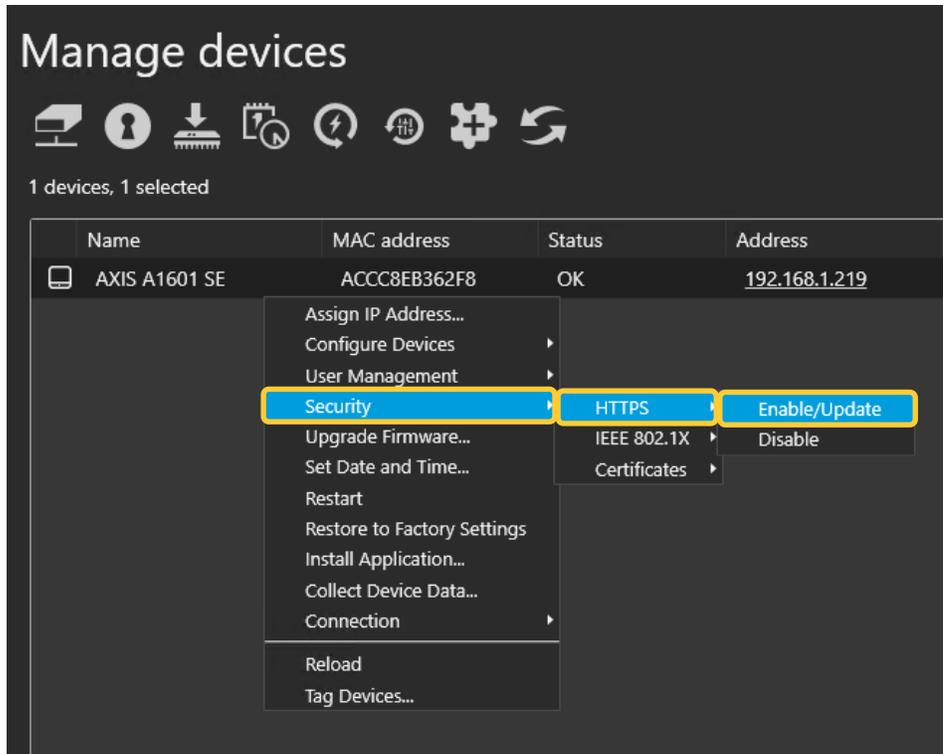


Preview

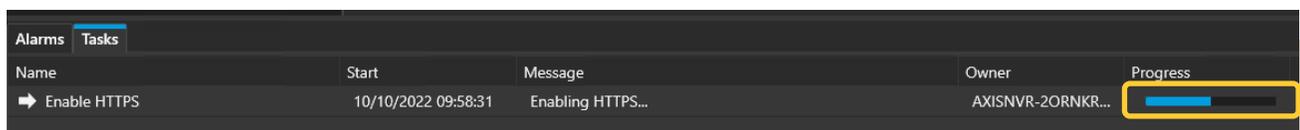
To setup the devices

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”

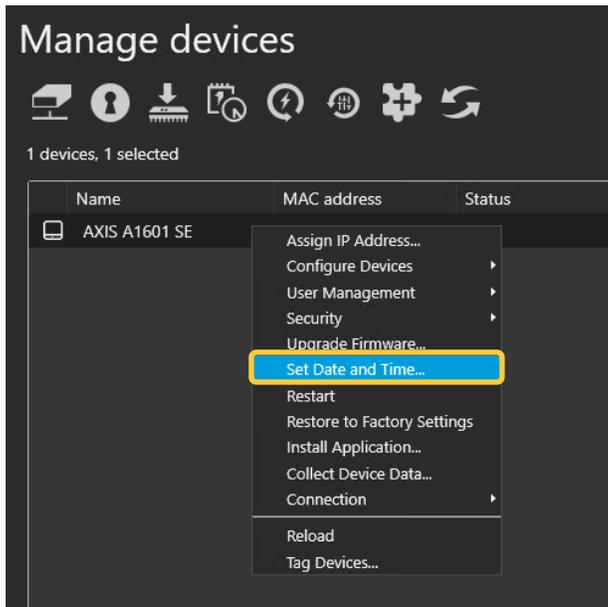


4. This will create a task in the task and alarms, once this has completed, HTTPS is enabled on this device.

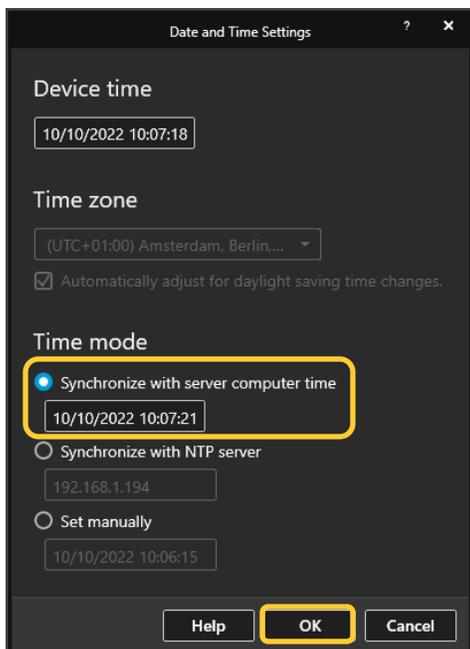


Preview

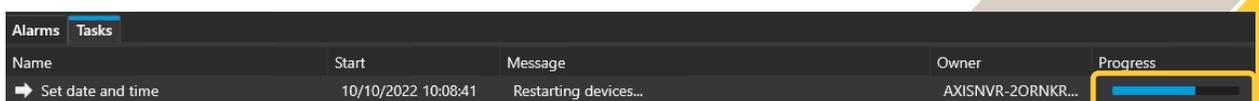
- Next to setup is the time & date on the device, we do this but right clicking on the device in Devices – Management and selecting “Set Date and Time...”



- 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.



Preview

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 window. At the top, there is a search bar labeled 'Type to search'. Below it, a list of existing schedules is shown with columns for 'Name' and 'Used'. The listed schedules are 'Office Hours', 'Weekends', and 'New schedule'. At the bottom of the window, there are 'New' and 'Remove' buttons.

The 'Office Hours' schedule is selected and its configuration is shown in a detailed view. The 'Name' field is set to 'Office Hours'. There are checkboxes for 'Schedule on' (checked) and 'Schedule off'. 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 marked as 'Schedule off'. An 'Override schedule' section with an 'Add...' button is also visible. At the bottom right of the configuration view, there is an 'Apply' button.

Hold Ctrl to select 5 minute intervals. To copy and paste day schedules, use right click.

Preview

Step 3 – Configuring ALPV identification profile

To create the ALPV 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

Preview

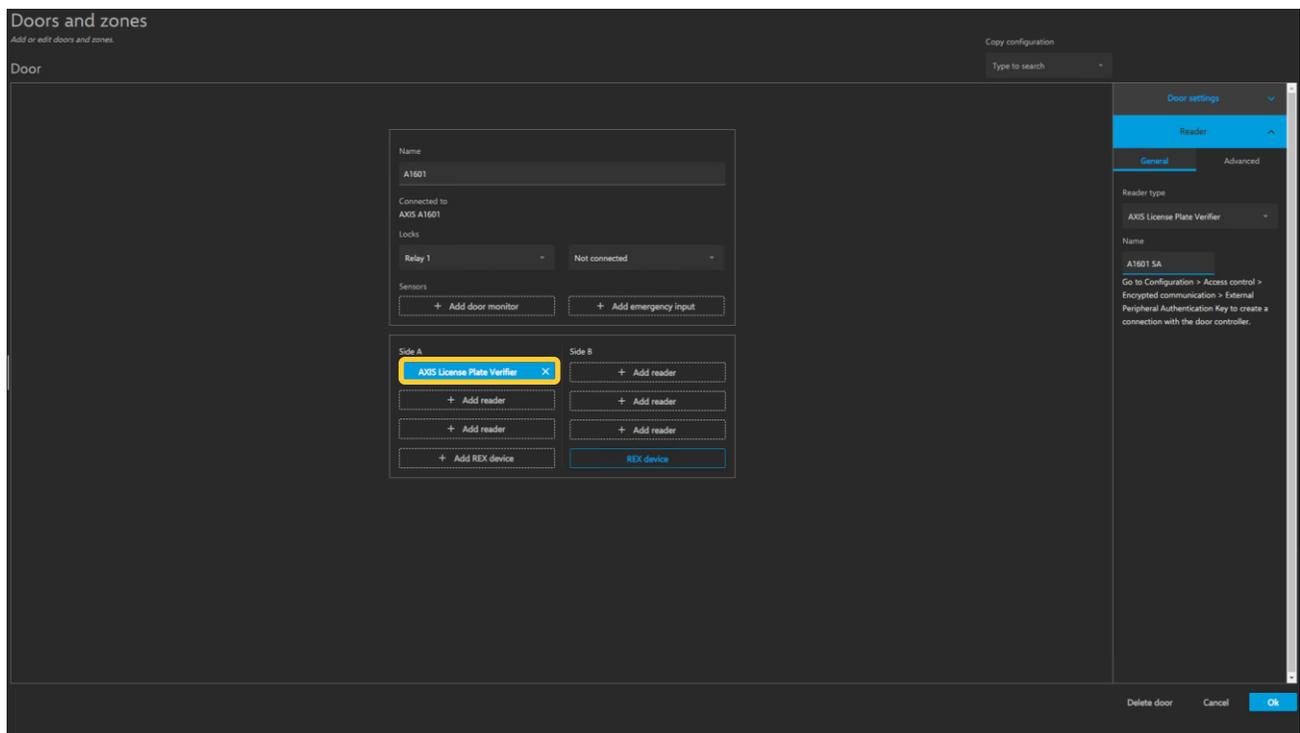
Step 4 – Creating a door with a license plate reader

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

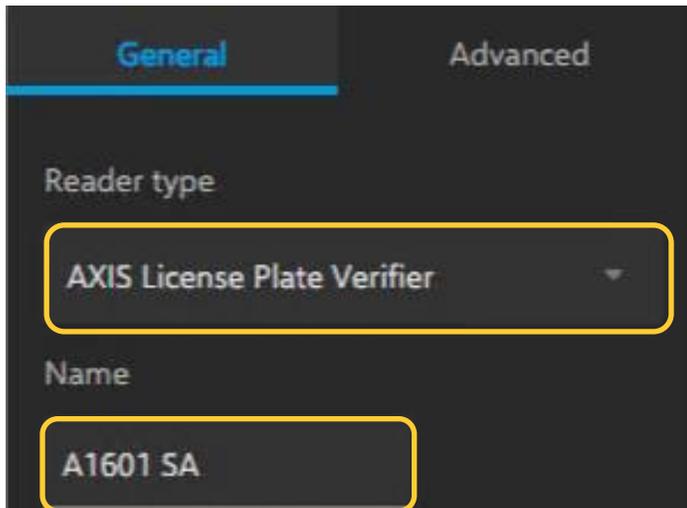
Follow these steps to create a door:

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 and select the A1601 door controller in the second drop down, then press “Next”
4. Proceed to configure the locks with the correct relay and door monitors (if used)
5. On the side you wish to have the license plate reader select “Add reader”

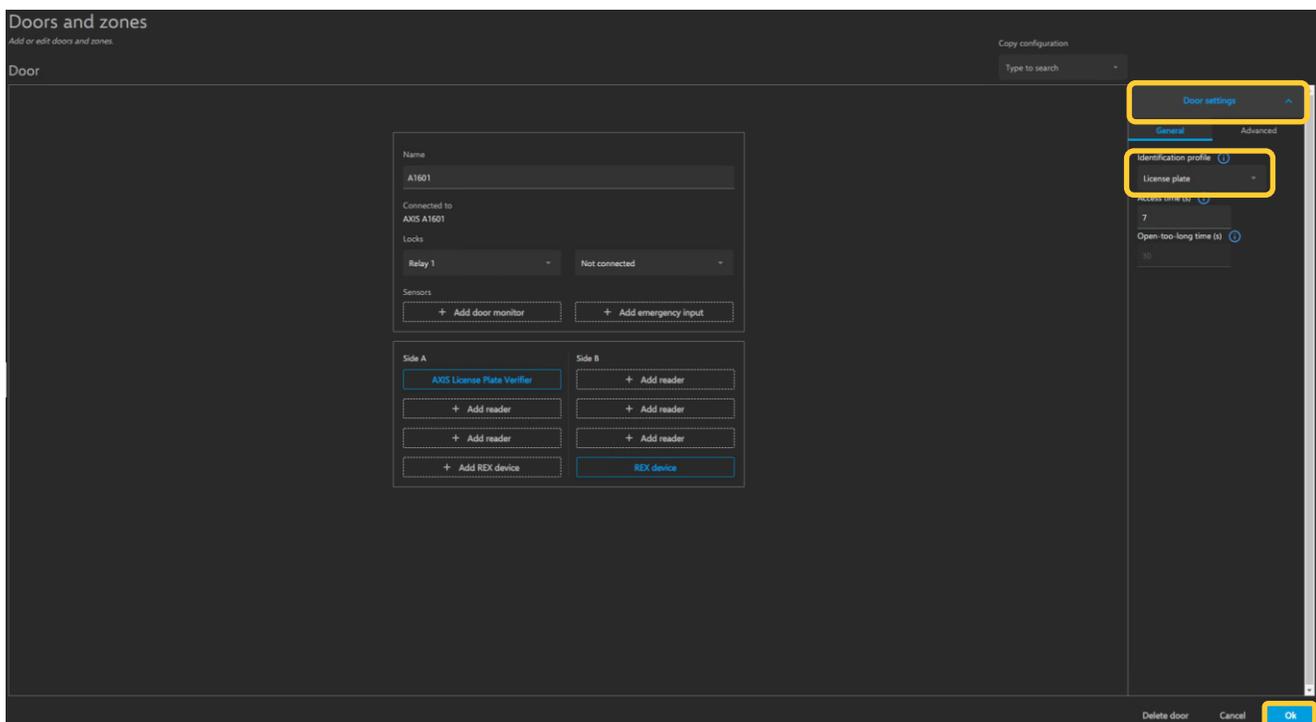


Preview

6. On the right pop-up select reader type “Axis License Plate Verifier”



7. Give this reader a relative name, continue to configure any remaining readers and/or REX and finish by selecting “Ok” bottom right.
8. Once created, open the “door settings” drop-down on the right. In this drop-down you can change the “identification profile” to License plate.
9. You can also add any additional readers/inputs you may have connected to this door such as a card reader or REX.



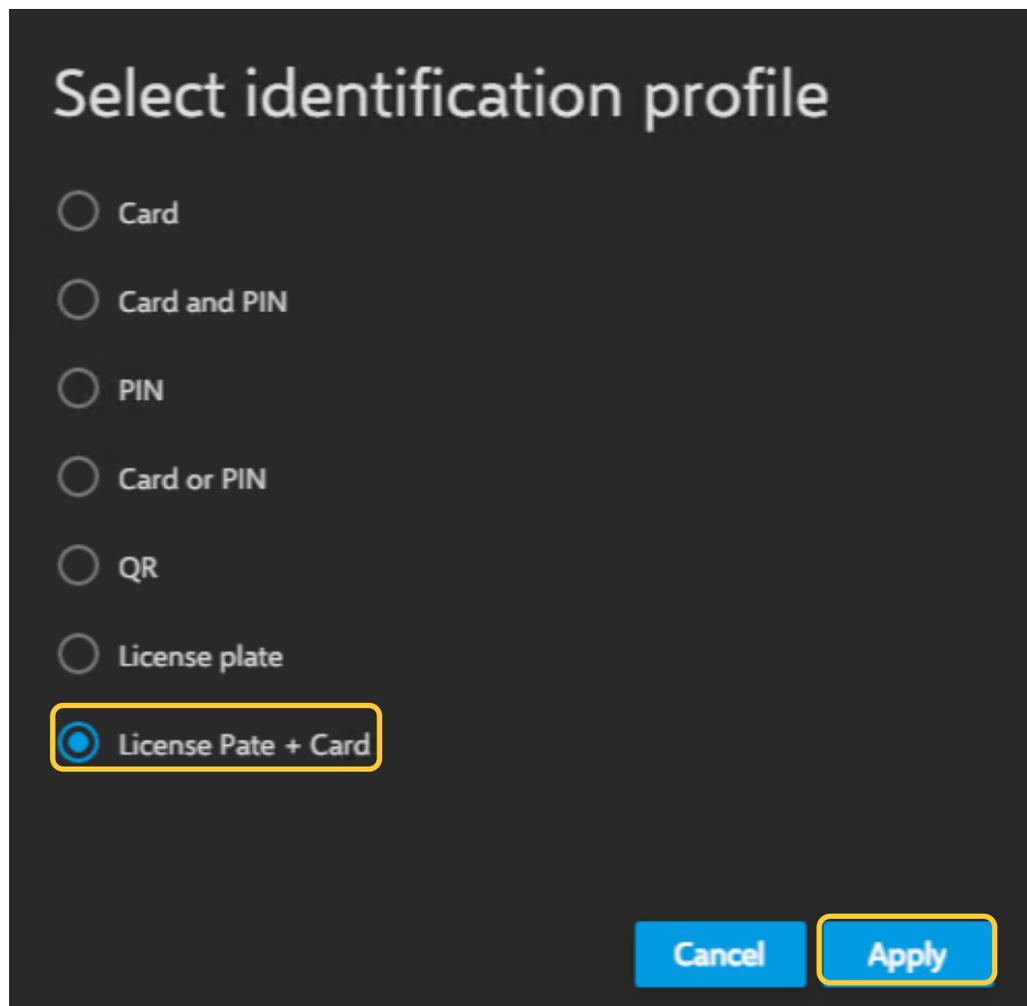
Preview

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:

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. Highlight the specific door and click “Select identification profile”
4. In the pop-up window select the identification profile you wish to use, and click “Apply”



Step 5 – Configuring the AXIS 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”

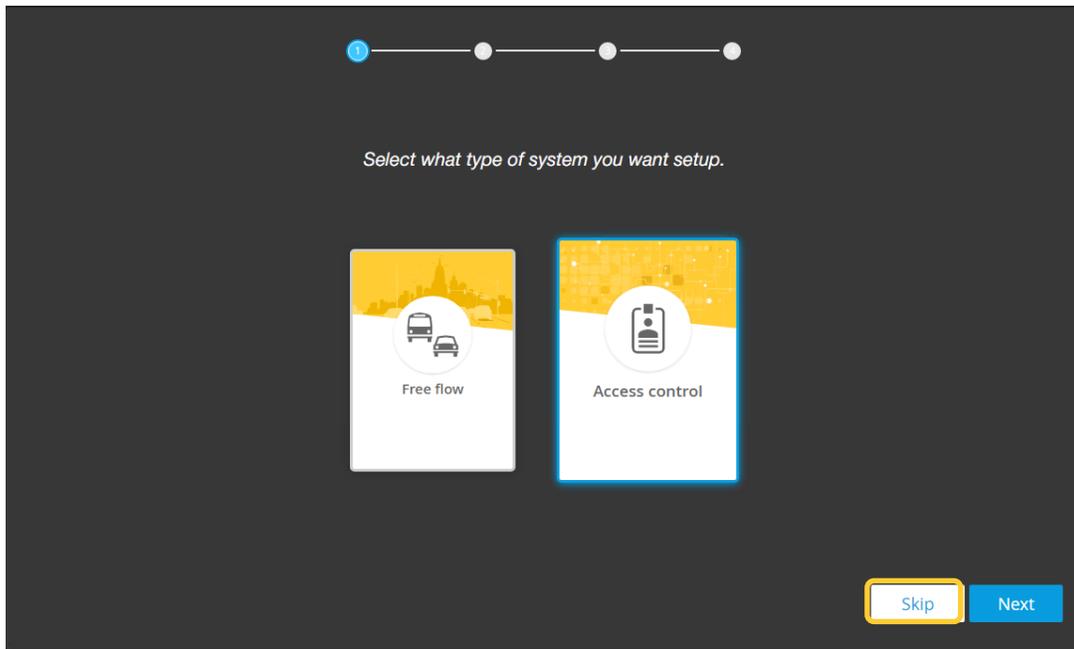
Follow these steps to install via the webpage:

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 “Services” 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”

Preview

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 “services”
2. Now you can start the AXIS License Plate Verifier 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.



Preview

- From the settings menu, in the “Access control” panel change the type to “Secure Entry”. The IP address and Authentication key fields will now be available, in the IP address use the IP of the A1601 controller with the previously configured ALPV reader.

The screenshot shows the 'Settings' tab in the 'Access control' section. The 'Type' dropdown is highlighted with a yellow box and set to 'Secure Entry'. The 'IP address' field is also highlighted with a yellow box and contains '192.168.1.202'. Other visible fields include 'I/O output #' (2), 'Virtual port #' (None), 'Barrier mode' (1. Do not open bar...), 'Vehicle direction' (any), 'ROI' (any), 'Door controller name' (Please Select), 'Reader name' (Please Select), 'Turn on integration' (toggle off), and 'Test integration' (AXIS1234). A 'Connect' button is visible next to the 'Authentication key' field.

- 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.

The screenshot shows the 'External Peripheral Authentication Key' screen. It displays the title 'Authentication key' and instructions: 'Copy the key to create a connection between the door controller and AXIS Barcode Reader or AXIS License Plate Verifier.' Below this is a 'Key' field with a masked key (*****). At the bottom, there are 'Copy key' and 'Generate' buttons. The 'Copy key' button is highlighted with a yellow box.

Preview

- Once the IP and authentication key have been provided, press “connect”, now under will be “Door controller name” select the controller with Licence plate configured. Then under “Reader name” select the reader configured. Finally turn on the integration.

Access control

Type: Secure Entry

I/O output #: 2

Virtual port #: None

Barrier mode: 1. Do not open bar...

Vehicle direction: any

ROI: any

IP address: 192.168.1.202

Authentication key: Z0FB6qE68XGMyedBYswWP7XuNAIQS6YgeWwZyo7aVOse9!

Connect

Door controller name: A1601

Reader name: A1601 SA

Turn on integration:

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)

Preview

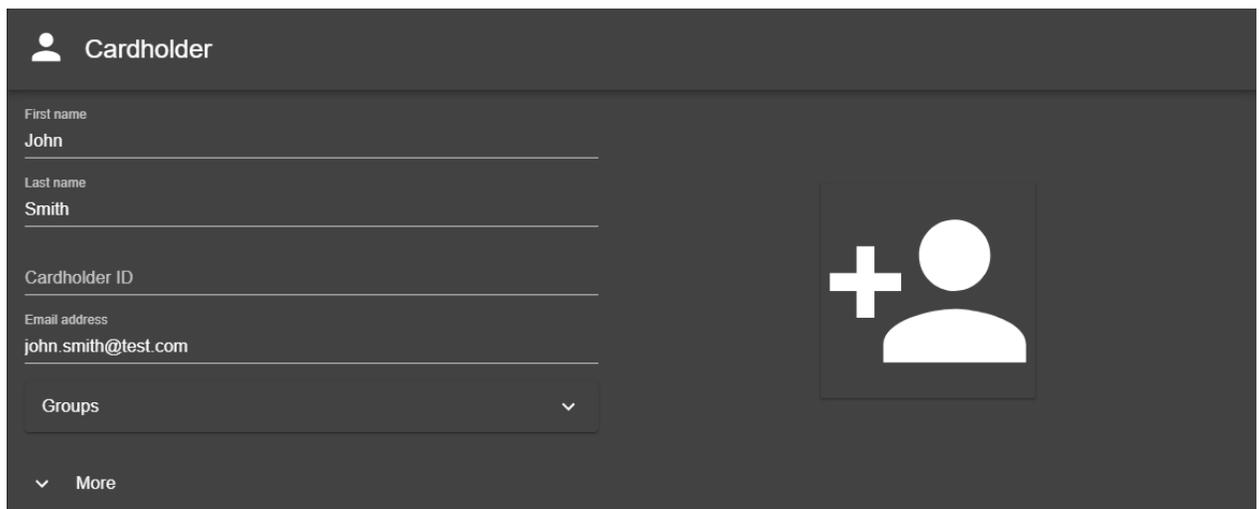
Step 6 – Creating License plate credential

To create the license plate credential

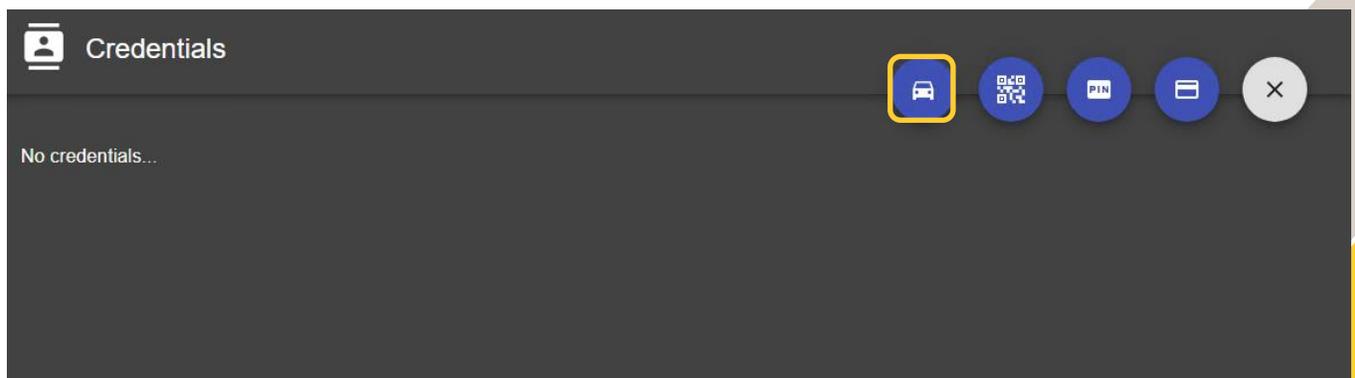
Now we can provide the license plate credential to either new or existing cardholders.

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 plus button on the cardholder area and select the cardholder bubble. If you wish to add a license plate to an existing cardholder, find them in the cardholder area and click the three dots and “edit”.
3. In the cardholder, fill out the name fields, then under credentials click the “+” and select the license plate symbol button.



The screenshot shows the 'Cardholder' configuration interface. It features a dark grey background with white text and icons. At the top left, there is a person icon and the title 'Cardholder'. Below this, there are several input fields: 'First name' with the value 'John', 'Last name' with the value 'Smith', 'Cardholder ID', and 'Email address' with the value 'john.smith@test.com'. A 'Groups' dropdown menu is visible below the email field. To the right of the input fields, there is a large white icon consisting of a plus sign and a person silhouette. At the bottom left, there is a 'More' dropdown menu.



Preview

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 “Add” top left.

The screenshot shows a dark-themed interface for adding a new license plate. At the top left, there is a car icon and the text "New license plate" with a "PREVIEW" label. Below this are three input fields, each highlighted with a yellow border. The first field is labeled "Name" and contains the text "My Car". The second field is labeled "License plate number" and contains "123 ABC". The third section is titled "Expiration date" with a clock icon. It contains two fields: "Valid from" with the date "2022/11/22 00:00" and a calendar icon, and "Valid to" with the text "No end date" and a dropdown arrow. At the bottom right, there are two buttons: a "Cancel" button and a blue "Add" button.

Considerations and limitations

1. The use of the A1601 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.