HOW TO.

Configure QR code 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 a QR reader and how to configure QR code as a credential within Axis Camera Station.

AXIS Camera Station Secure Entry offers reliable, convenient and cost-effective, QR code based access solution for visitors. It allowing you to provide QR code credential and access management without the complications, or waste of purchasing, managing, and disposing of physical cards.

It's ideally suited to a mobile-first society: in advance of a visit, trusted guests are sent a QR code with a specific date of validity from AXIS Camera Station Secure Entry, which they can store on a mobile device or print. When they present the code to the camera or intercom, with AXIS Barcode Reader ACAP installed, during the valid window, relevant data is sent to an Axis door controller, granting access.

Please find below as the system structure of QR code access solution.



Prerequisites

AXIS Barcode supported Intercom or Camera

AXIS A1601 Door Controller v10.11.9.0 or latest

AXIS Camera Station v5.44 or latest

AXIS Barcode Reader ACAP v1.0.6 or latest

AXIS Barcode Reader ACAP 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.

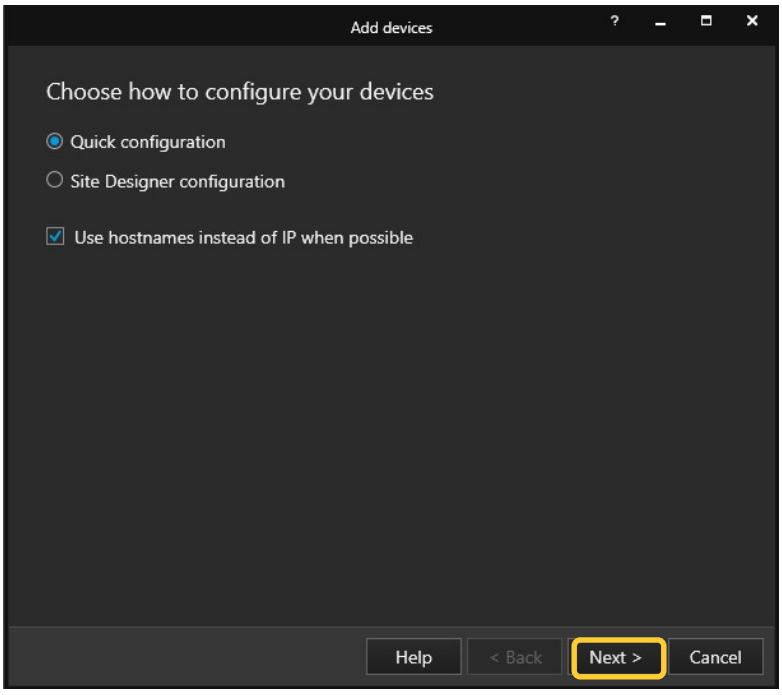
Step 1 – Adding & Updating devices

Start by adding the unit(s) to Axis Camera Station and ensuring that they are running the latest firmware. 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. Make sure to enable HTTPS on all devices before getting started. AXIS Camera Station can enable HTTPS on all the devices.

To add the devices

Follow these steps if you need to add the devices:

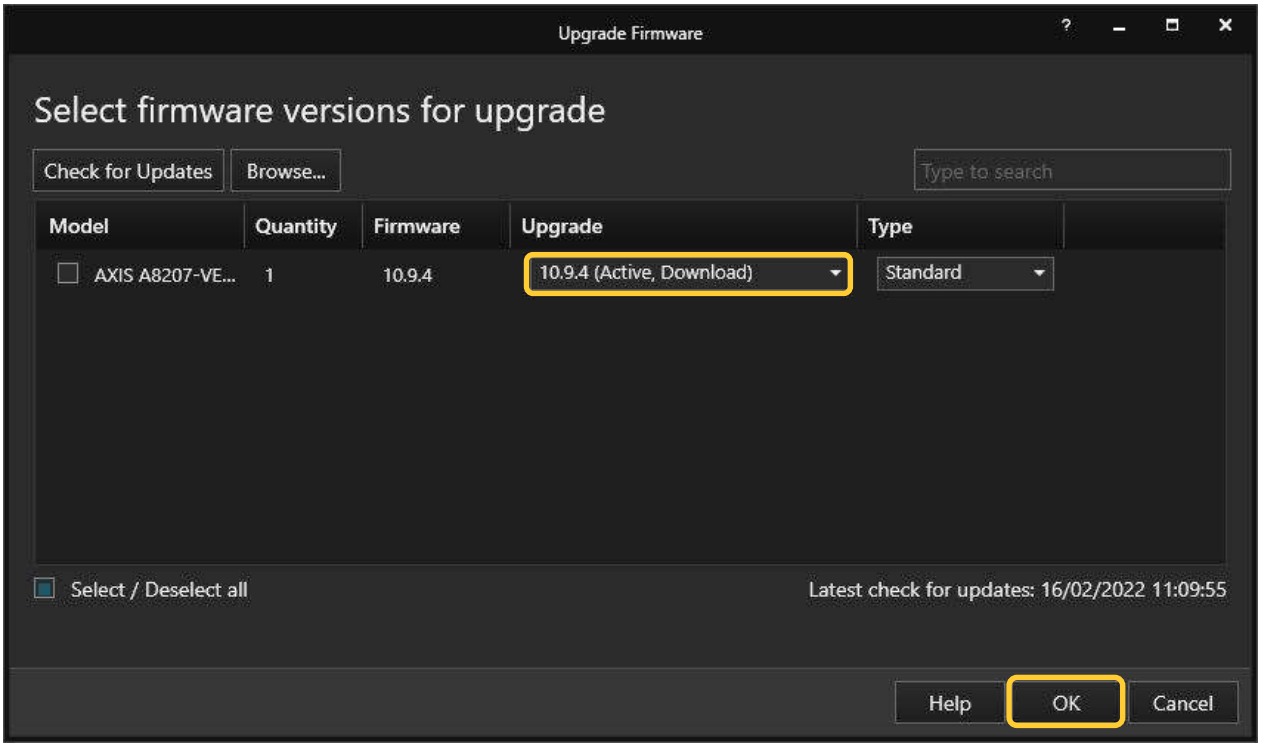
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Devices” and under this drop-down select “Add Devices”
3. On this page if the units are in your network, you should see them, if they are missing then you can try do a 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”



Step 2 – Creating a door with a barcode reader

To create a door

With the release of the QR code credential we have also released multi-reader support which increased from 2 readers per side to 4, allowing a total of 8 readers per door. This allows you to add barcode functionality to pre-existing door configurations that may have the original 2 reader slots taken.

Follow these steps to create a door:

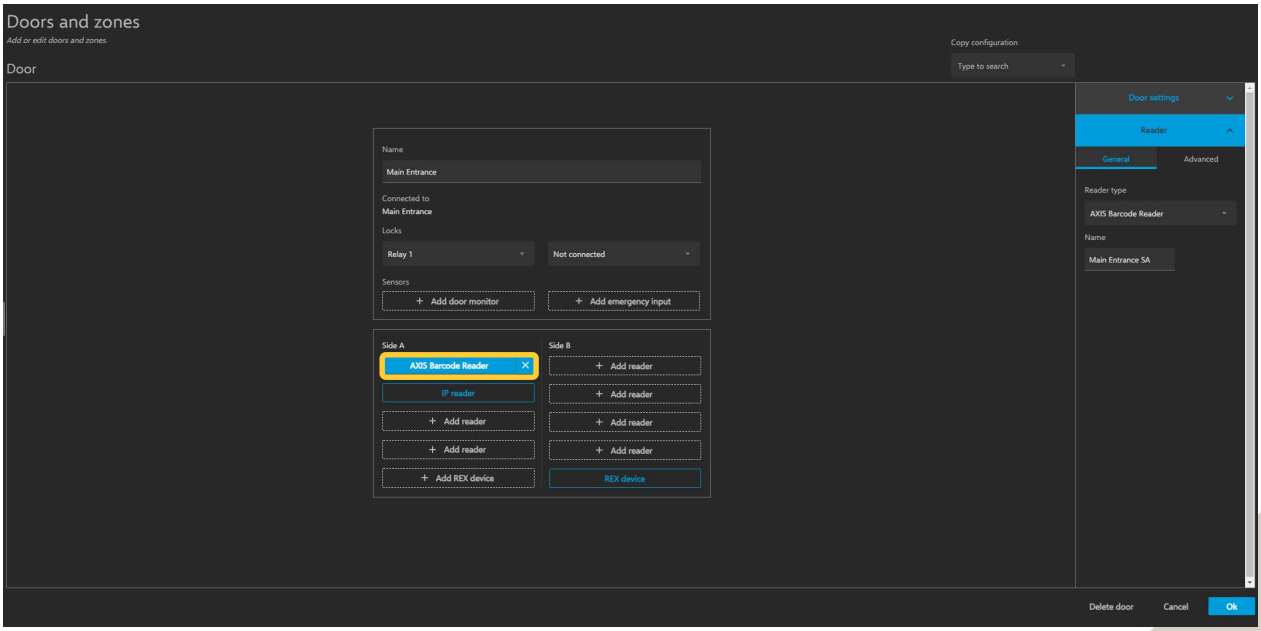
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.

2. From the left menu select “Access control” and under this drop-down select “Doors and zones”

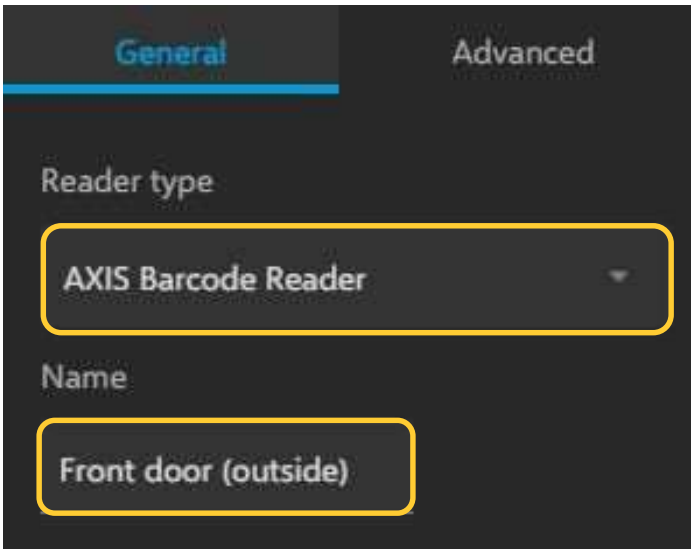
3. On this page press “+ Add door” and in the pop-up give the door a relative name and select the A1601 door controller in the second drop down, then press “Next”

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

5. On the side you wish to have the barcode reader select “Add reader”

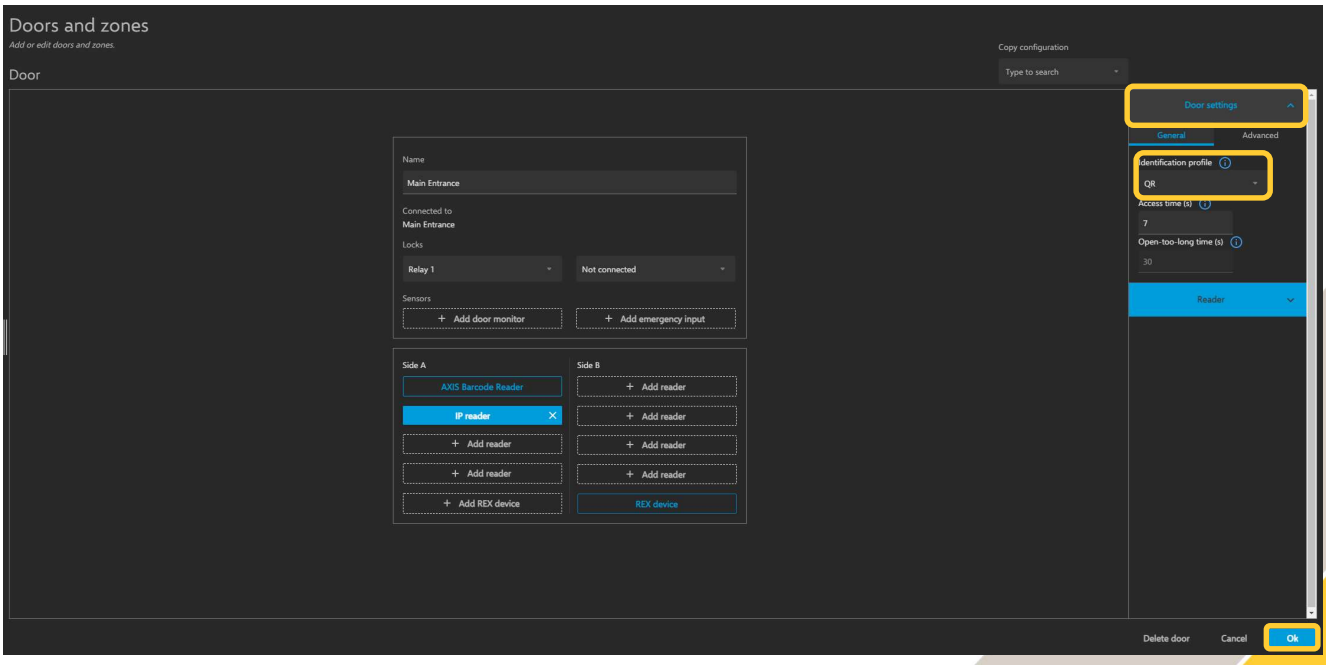


6. On the right pop-up select reader type “Axis Barcode Reader”



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 QR, if you wish to have multi-factor authentication, please see step 6?



Step 3 – Configuring the AXIS Barcode ACAP

To configure the ACAP

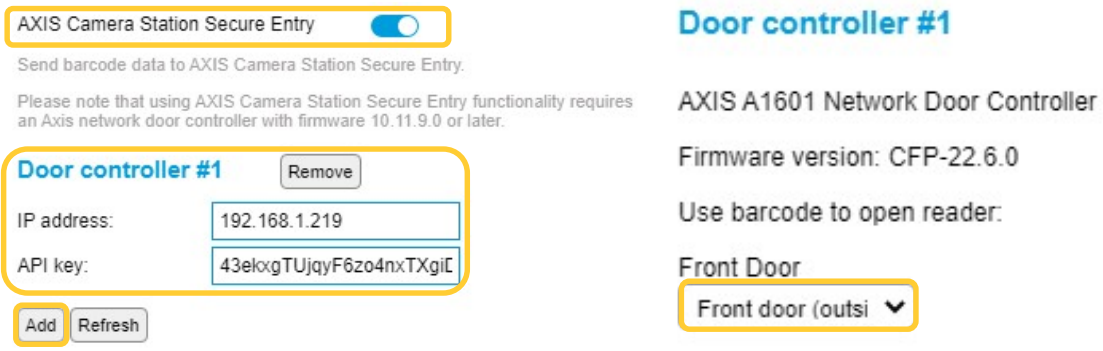
Next we need to configure the ACAP (Axis Camera Application Platform) which is installed and configured directly on the device which will be reading the QR code credentials, as this is used to connect the created reader in AXIS Camera Station to the device allowing the QR code access. The ACAP allows us to connect up to 5 AXIS A1601 Door Controllers to a single device using the ACAP

Follow these steps to configure:

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 Barcode Reader ACAP.
6. Click "Activate Licence" on this page select the licence file or enter in the licence key and click "Ok"
7. Now you can start the ACAP and select "Open"
8. Under "Integration" toggle on "AXIS Camera Station Secure Entry" now under "Door Controller #1" add the IP address of the AXIS A1601 Door Controller used to create the door previously. (The IP address can be found in AXIS Camera Station under Configuration – Devices – Management)
9. To get the Authentication key, in AXIS Camera Station under the "Configuration" tab select "Access control" then "Encrypted communication" on this page select "show ACAP key" under "Barcode communication" and press "copy key"

NOTE For more details on how to configure the AXIS Barcode Reader ACAP please visit the product page on Axis.com

10. Return to the ACAP tab/webpage and paste in the Authentication key, now on the right should be the controller with the name given to the door, use the drop down to select the barcode reader we had created previously.



11. From this ACAP we can also add up to 5 door controllers using the add button, each one added in the same way as we did with the 1st controller. This allows one ACAP to control 5 different doors.



Step 4 – Configuring SMTP Server

To configure SMTP server

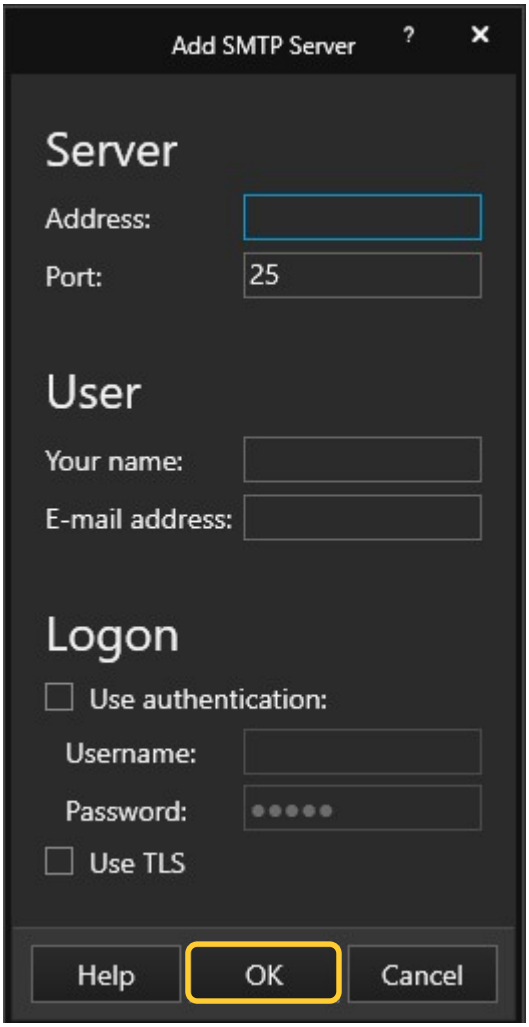
To be able to send out the QR code credentials we need an SMTP (Simple Mail Transfer Protocol) to be configured as this allows AXIS Camera Station to have a chosen mail address to distribute the credentials from, please note that this is not something Axis Communications provides.

Follow these steps to configure SMTP server:

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 “Server” and under this drop-down select “Settings”

3. On this page press “Add..” under “SMTP servers” and in this pop-up fill in your SMTP server details and press “OK”



Step 5 – Creating and sending the QR code credential

To create the QR Code credential

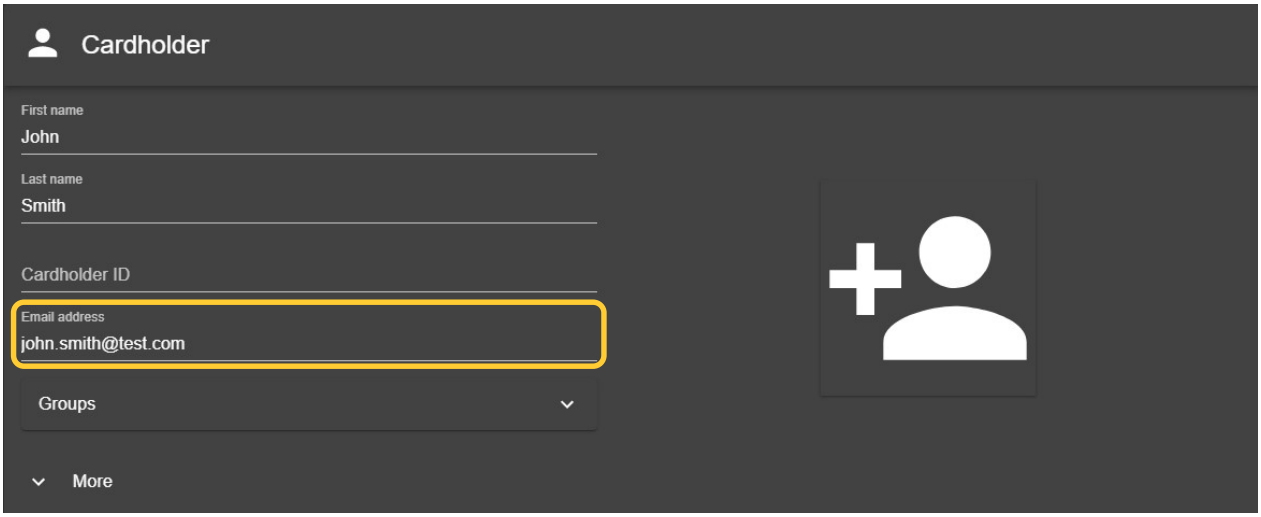
Now we can provide the QR code credential to either new or existing cardholders. These credentials allow quick safe access to your premise without the need for physical credentials.

Follow these steps to create:

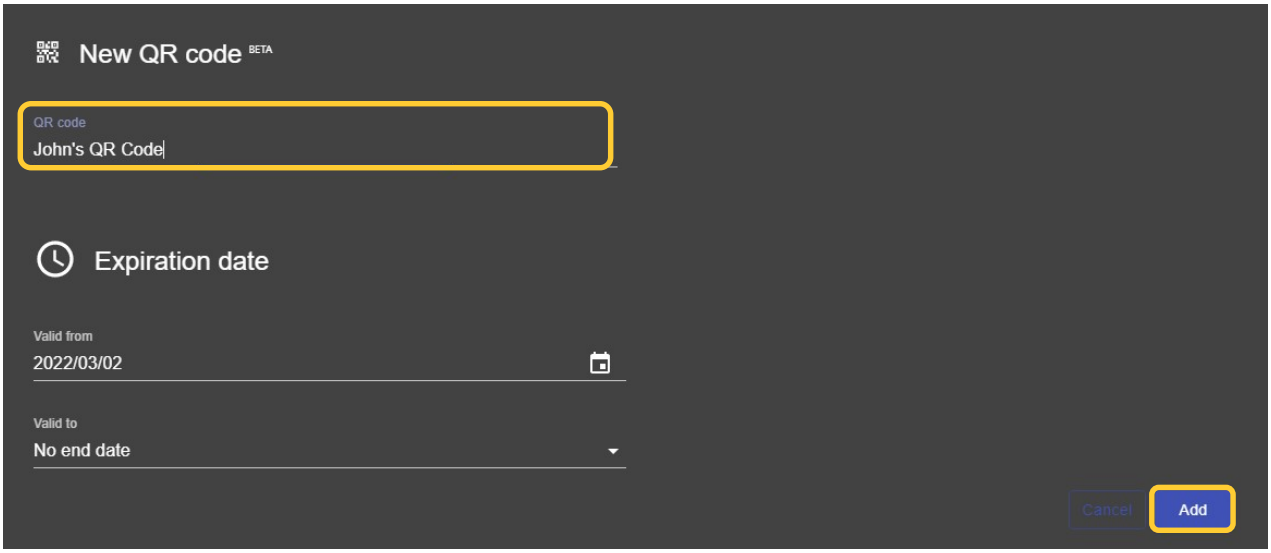
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen. And select “Access management”

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 QR code to an existing cardholder, find them in the cardholder area and click the three dots and “edit”.

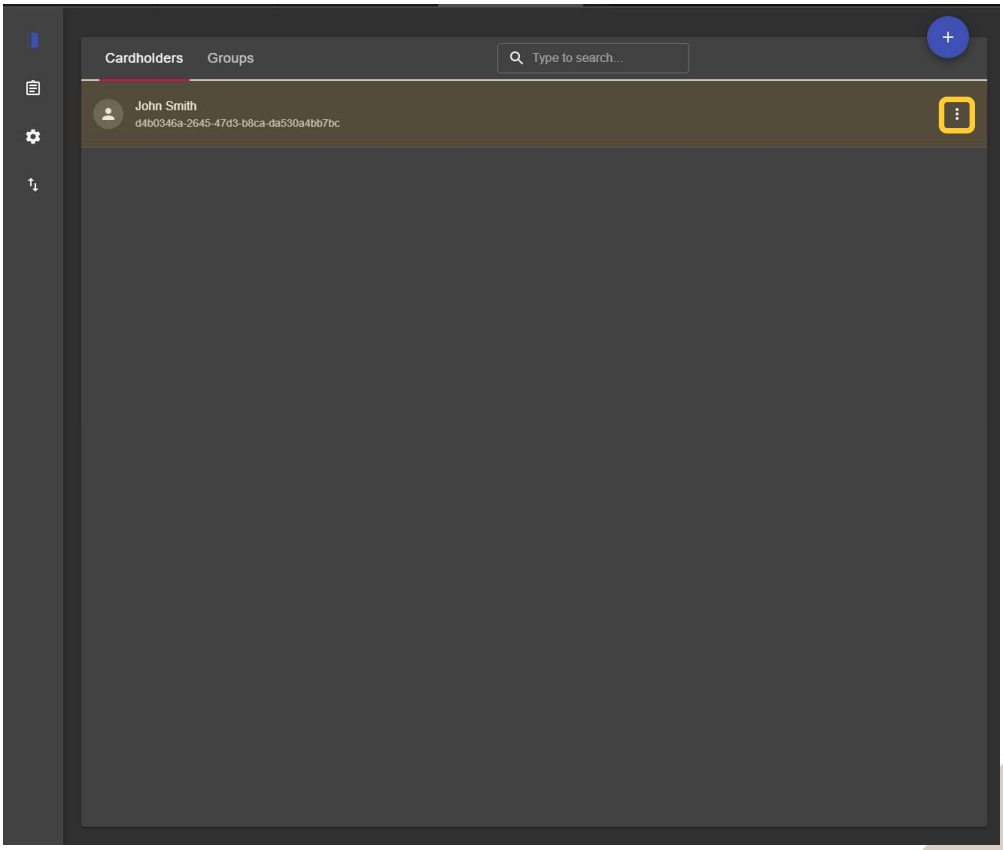
3. In the cardholder, fill out the name and email address fields, (the email address is required to be able to send QR code credentials to cardholders) then under credentials click the “+” and select the QR symbol button.

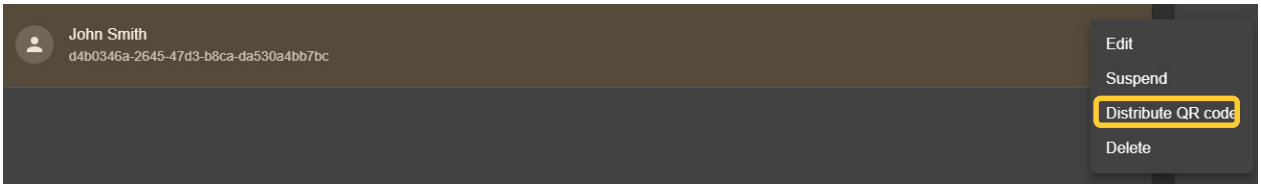


4. Then give the QR code a name and decide the expiration date once ready click “Add” then click “Add” top left.

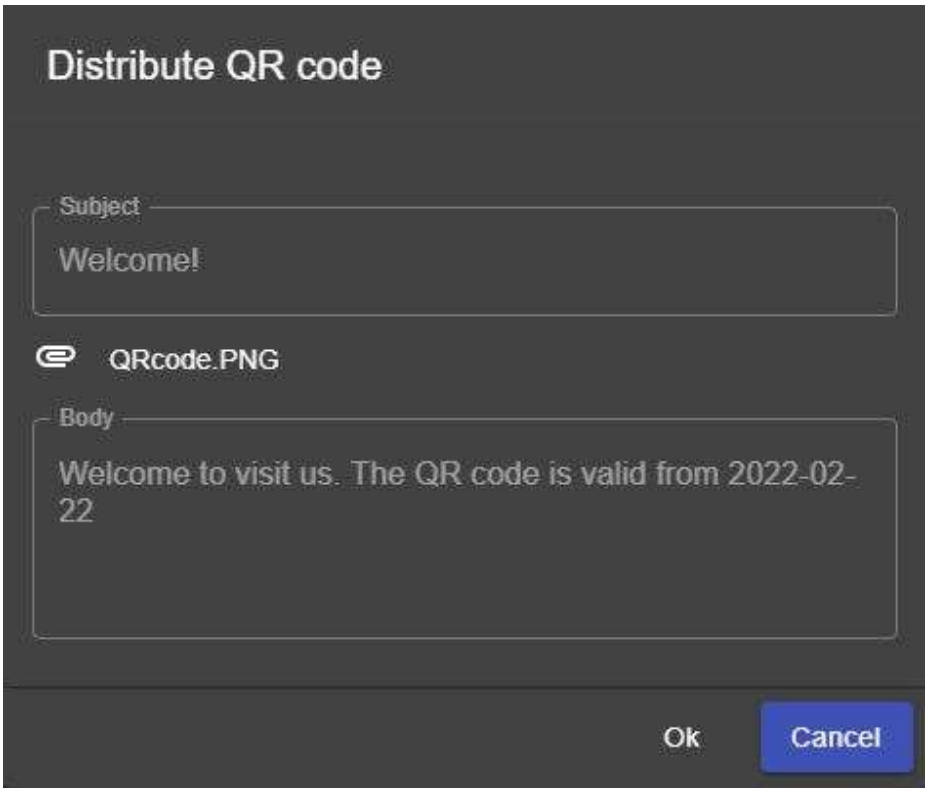


5. Now to send the QR code click on the three dots next to the cardholder and select “Distribute QR code” in the pop-up confirm the details and press “Ok”





6. If you wish to change the QR code email message template this can be edited by clicking the settings symbol from the left bar and editing the “Email template”



Step 6 – Configuring QR identification profile (optional if needed)

To create the QR identification profile

If you are wanting a multi-factor authentication then you will need to create a new identification profile, the QR code credential can be used with any of the other types such as “pin” to add another level of security.

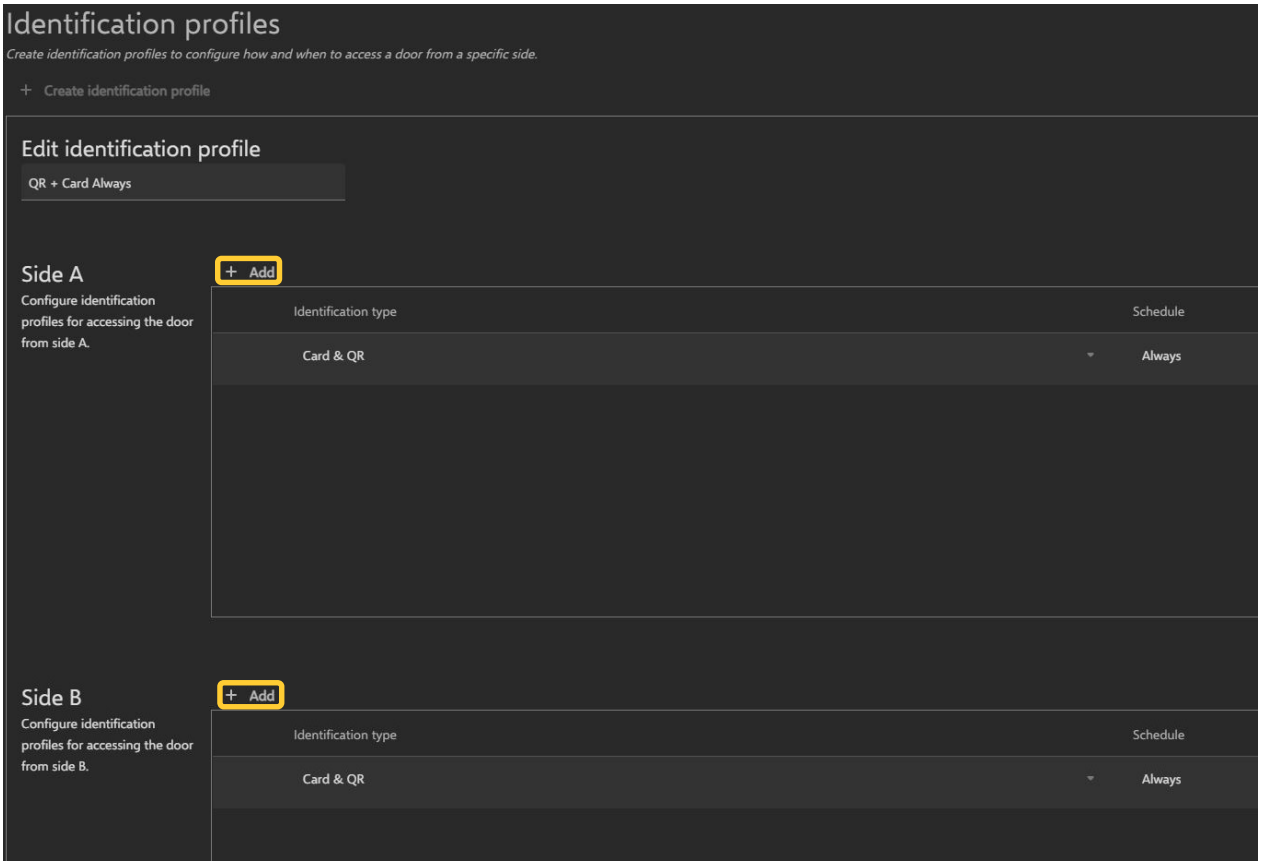
Follow these steps to create:

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 QR as an identification alone exists, to create a new identification type select “+ Create identification profile”

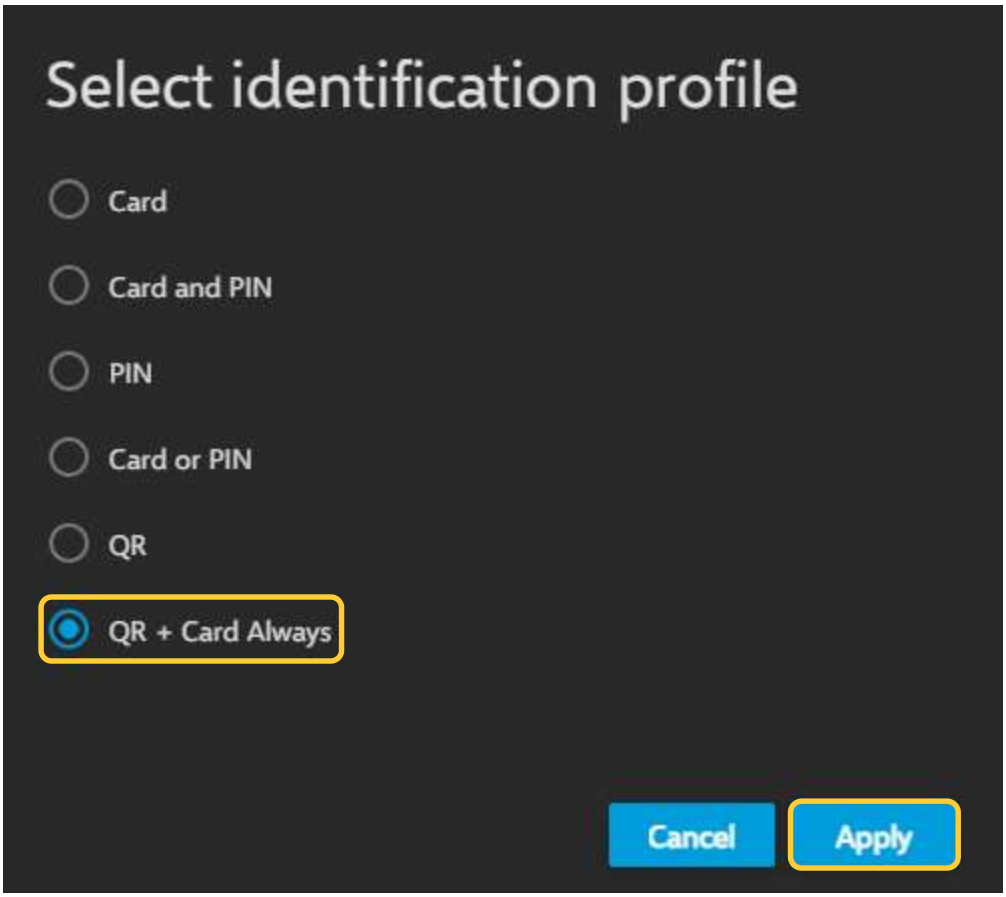
3. Give the profile a name and for each side configure the required credentials using the “+ Add” then in the drop-down tick the identification types you wish to be presented to grant access, after select the schedule this applies too. Then select “Ok” in the bottom right.



To apply QR identification profile to door

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”



Considerations and limitations

1. The use of the A1601 requires HTTPS to be enabled
2. To be able to send the QR codes, SMTP must be configured in AXIS Camera Station
3. The AXIS Barcode Reader ACAP can be connected to up to 5 AXIS A1601 units
4. To get reader LED and buzzer feedback on the AXIS A8207, you will need to connect the A8207 as a card reader to the same door as the QR Barcode Reader as an IP, OSDP or Wiegand connection.

5. Support up to one QR code credential per cardholder and in total 5 credentials (including card, PIN and QR code) per cardholder.
6. Time validity of QR code credential is not supported in the first release, to be added in later release.
7. AXIS Barcode Rader ACAP works on selected Axis Intercoms and cameras including AXIS A8105-E Network Video Door Station, AXIS A8207-VE MKII Network Video Door Station and AXIS I8016-LVE Network Video Intercom. More Axis intercom and camera will be added to the supported list in later release.
8. AXIS Barcode Reader ACAP with AXIS A8207-VE MKII Network Video Door Station supports injecting QR code via the OSDP/Wiegand reader interface to Axis or 3rd party door controller.