

How-to Configure Encrypted Credentials BETA

AXIS Camera Station Pro Secure Entry
October 2026

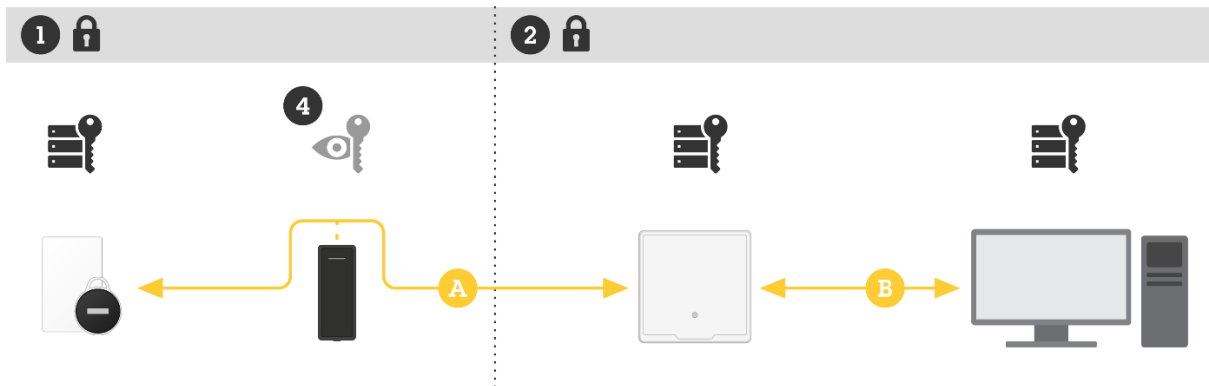


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Introduction

AXIS Camera Station Pro Secure Entry now supports encrypted credentials. This document will help you to configure both the hardware and the software components. Please note that this document is for the BETA release, the required steps provided in this guide may change or not be required in the official release. This is achieved via SSCP Transparent mode.



Prerequisites

AXIS Camera Station 6.20

AXIS Door Controller 12.11.119.4

AXIS Reader A4030/A4130/A4131

2N USB Card Reader

2N USB Card Reader programming software and file

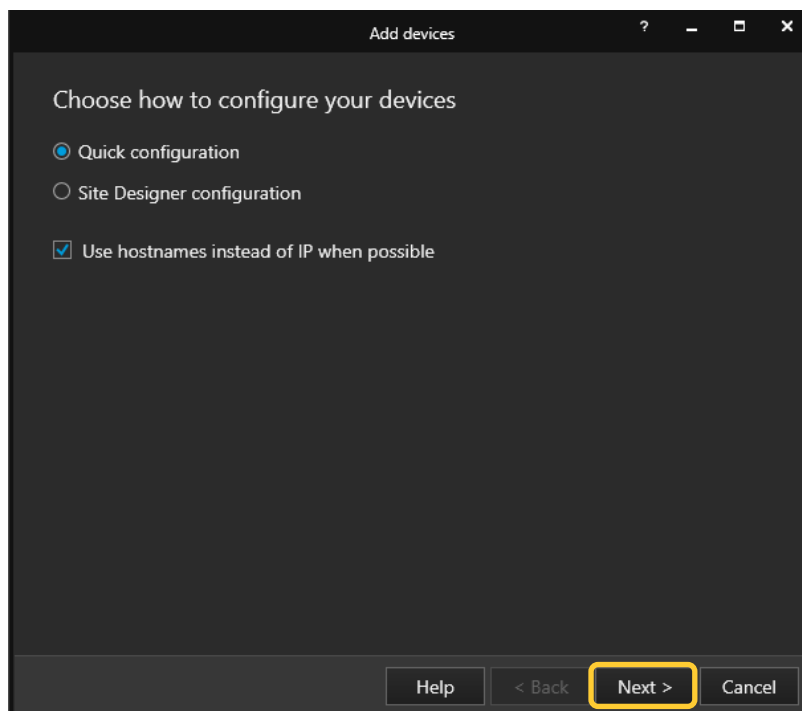
Step 1 – Adding/updating & setting up devices

Start by adding the controllers to Axis Camera Station and ensuring that they are running the latest firmware. For the controllers used we require the use of HTTPS for end-to-end security, these controllers should also use ACS as an NTP.

To add the Controllers

Follow these steps if you need to add the controllers:

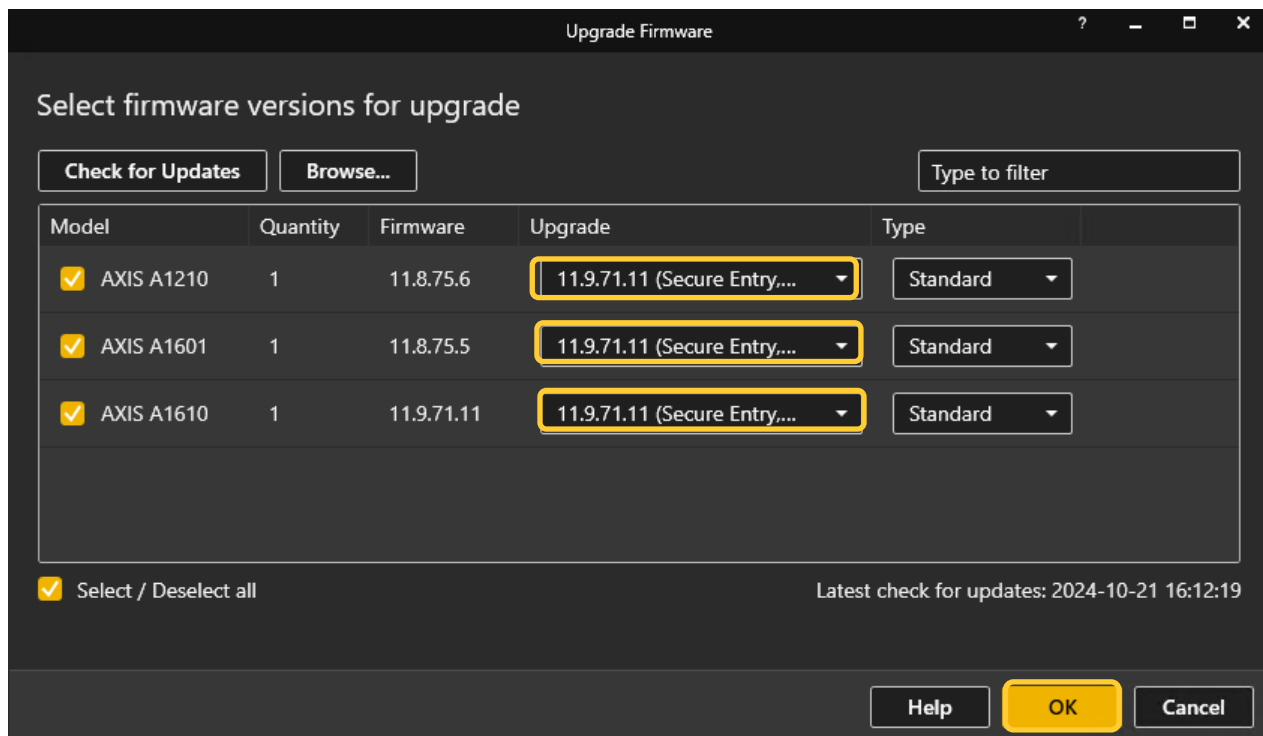
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Devices” and under this drop-down select “Add Devices”
3. On this page if the units are in your network, you should see the controllers, if they are missing then you can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



To update the controllers

Follow these steps to update your devices:

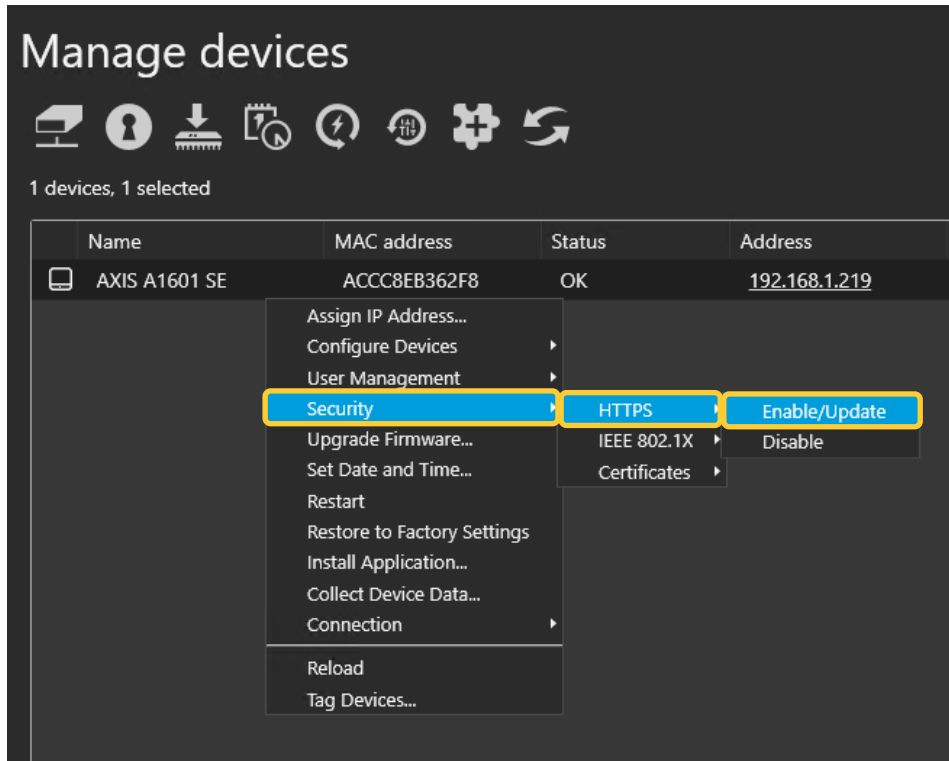
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Devices” and under this drop-down select “Management”
3. From this page hold “ctrl” and select the controllers, once selected press the update firmware button.
4. In the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



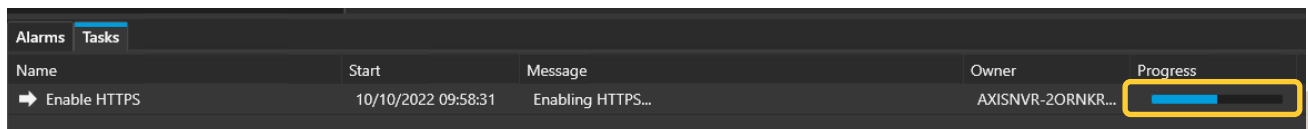
To setup the controllers

Follow these steps to setup your controllers:

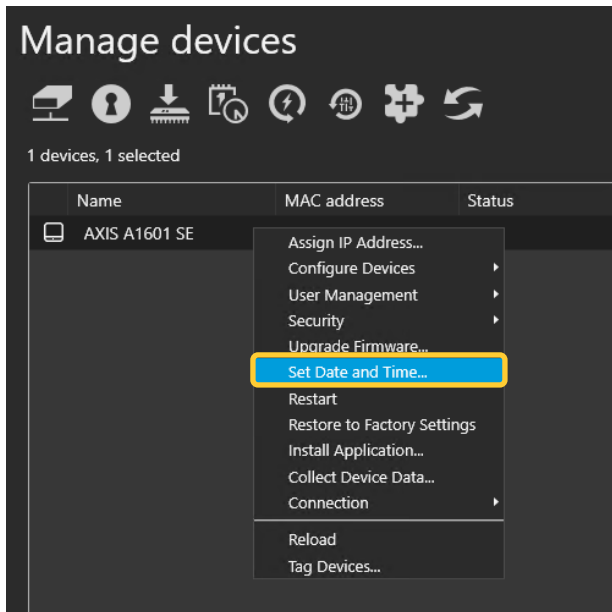
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Devices” and under this drop-down select “Management”
3. Right click on the controller and select “Security – HTTPS – Enable/Update”



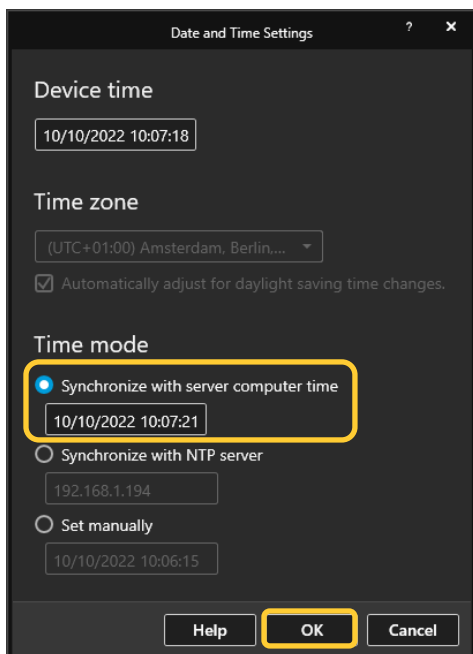
4. This will create a task in the task and alarms, once this has completed, HTTPS is enabled on this device.



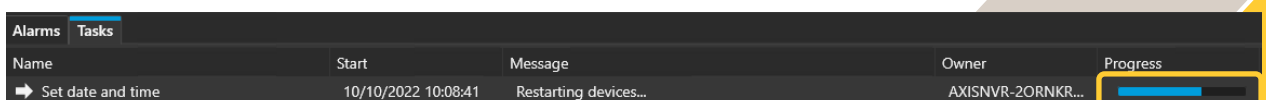
- Next to setup is the time & date on the controller, we do this but right clicking on the device in Devices – Management and selecting “Set Date and Time...”



- 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 synched with the computer server time.



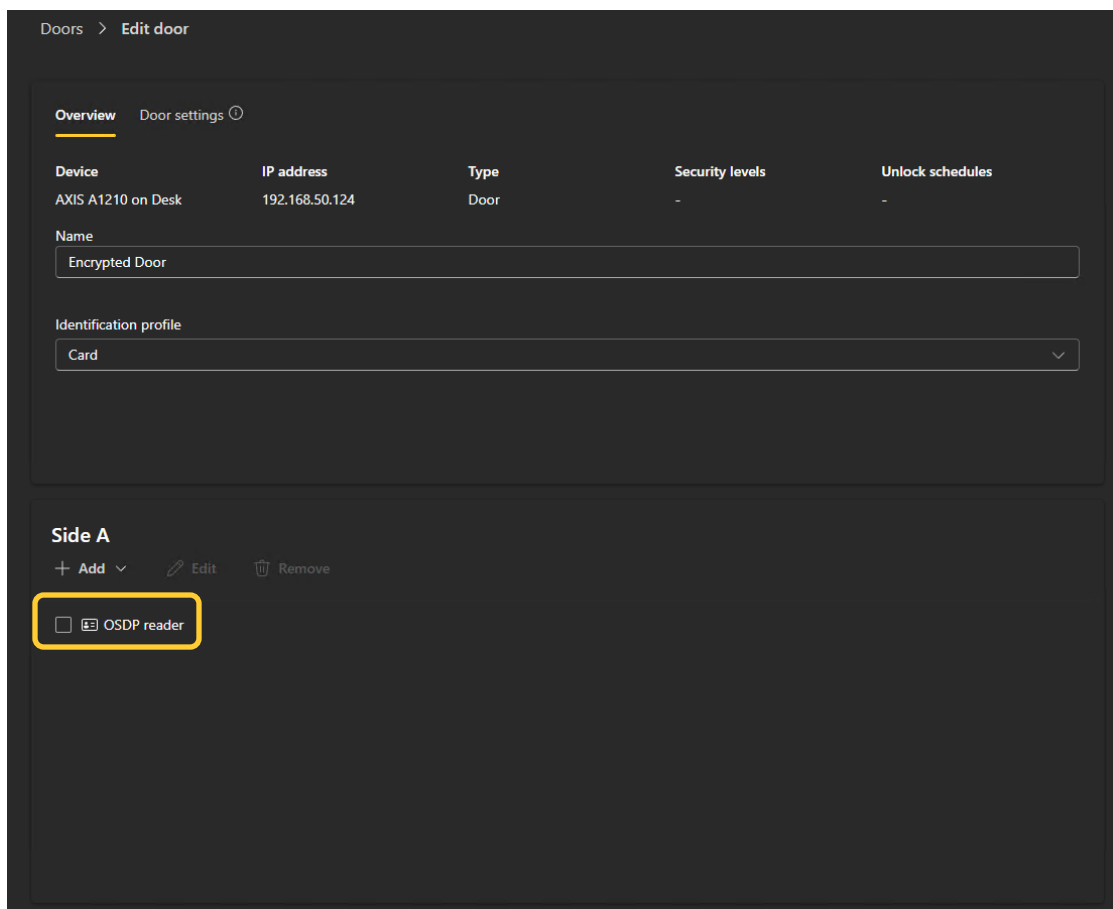
Step 2 – Door creation, upgrading the reader and setting to SSCP

With the controller upgraded, we need to update the reader to the latest firmware to allow us to configure the reader for SSCP, needed for encrypted credentials. For this process we need to first configure the door with an OSDP reader. (this is a beta only requirement)

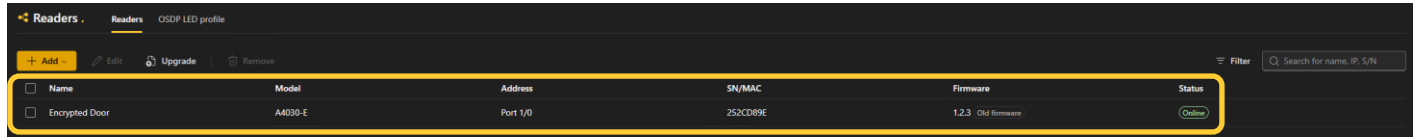
To Upgrade the reader and configure SSCP

Follow these steps if you need to upgrade the reader and configure SSCP:

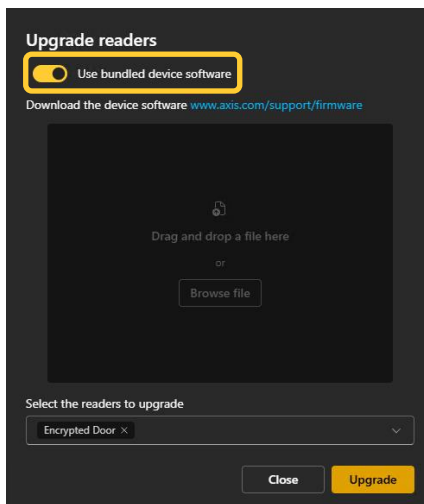
1. In Axis Camera Station open the configuration tab via the “+” symbol found at the top of the screen.
2. From the left menu select “Access control” and under this drop-down select “Doors and zones”
3. On this page press “+ Add door” and in the pop-up give the door a relative name and select the door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



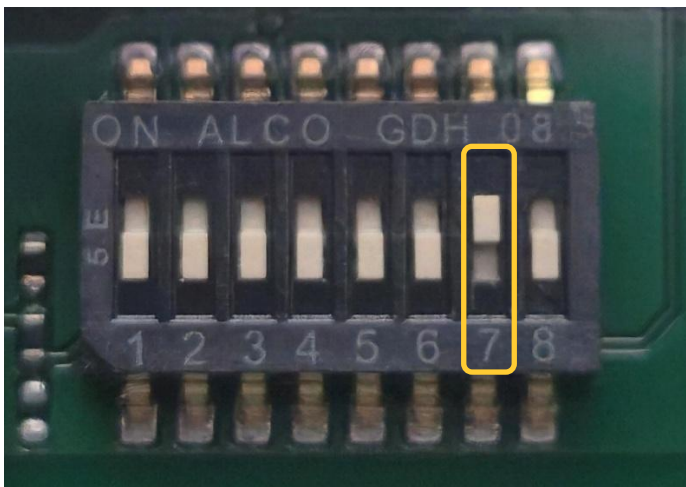
5. Then go to the webpage of the controller, this can be done via the management section under devices, or via your browser using the IP address of the controller.
6. From the webpage navigate to “Peripherals” then “Readers”, here you should see the door you created with the reader stating, “Old firmware”.



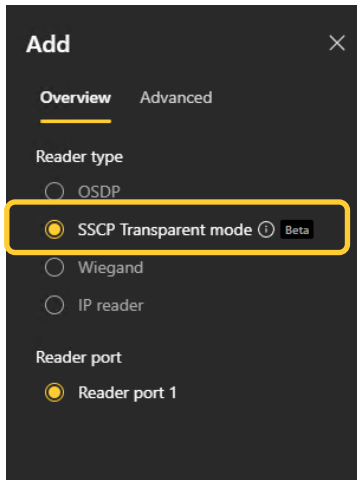
7. Highlight the door and select the upgrade icon, in the popup the toggle for “Use bundled device software” should be on, then press “Upgrade”.



8. Next we need to physically change DIP switch 7 on the reader to the up position



9. Then we can go back to the door we created in “Doors and zones” and edit the door we created, remove the OSDP reader, then add a new card reader, but select SSCP Transparent mode and save the door configuration.



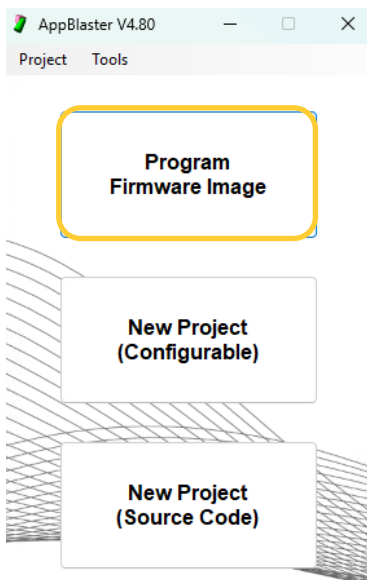
Step 3 – Configuring the USB Reader for Encryption

Using the 2N USB reader we can encrypt cards, to be able to do this we need to configure the 2N USB reader with the correct image.

To program the USB Reader

Follow these steps to program the USB Reader:

1. Connect the USB reader to the computer via a USB port.
2. Open the “AppBlaster” tool, and select “program Firmware Image”



- Click “Select Image” and choose the provided file, once selected press “Program Image”

The screenshot shows a two-step process for programming firmware. Step 1 includes a text field for the firmware image path, which is set to 'C:\Users\ashleyr\Desktop\TWN4_xCx507_PRs104_Multi_CDC_Simple_Protocol.bix', and a 'Select Image' button. Step 2 features a 'Program Image' button.

Step 1

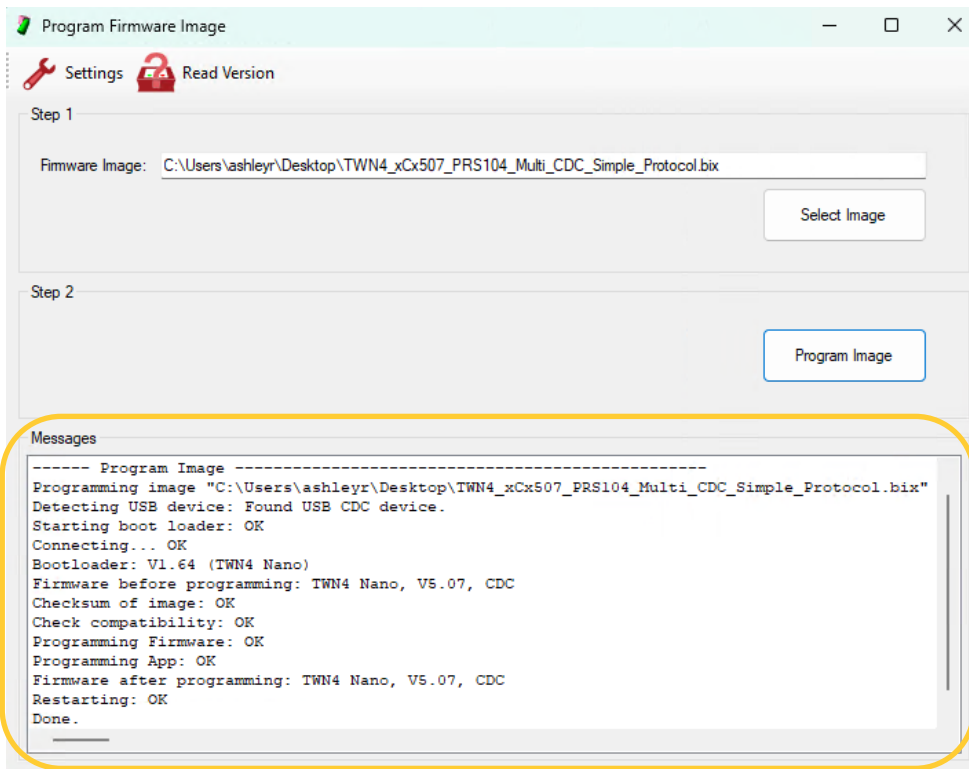
Firmware Image: C:\Users\ashleyr\Desktop\TWN4_xCx507_PRs104_Multi_CDC_Simple_Protocol.bix

Select Image

Step 2

Program Image

- The message box should state that the process is done, then you can close this tool.



Step 4 – Creating encrypted cards

With the USB reader now programmed we can now encrypt our cardholders cards.

To encrypt cards via the USB reader

Follow these steps to encrypt cards:

1. In Axis Camera Station open the Access management via the “+” symbol found at the top of the screen.
2. From this screen either create or edit the cardholder, in the cardholder screen click “+Add” and choose “Card”
3. Using the Radio button select the card type as “Encrypted card”

New card credential ✕

Credential name

Card type
☐ Card
☒ **Encrypted card** Beta

USB reader
COM5 - TWN4/B1.64/NCF5.07/PRS1 ▾

i Place card on reader to encrypt it.

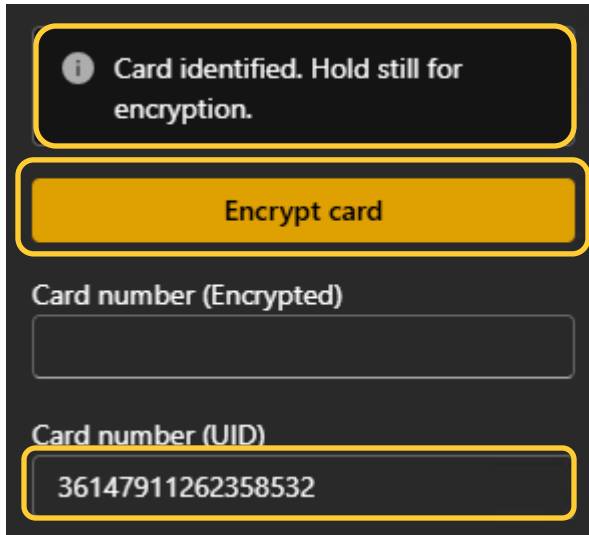
Encrypt card

Card number (Encrypted)

Card number (UID)

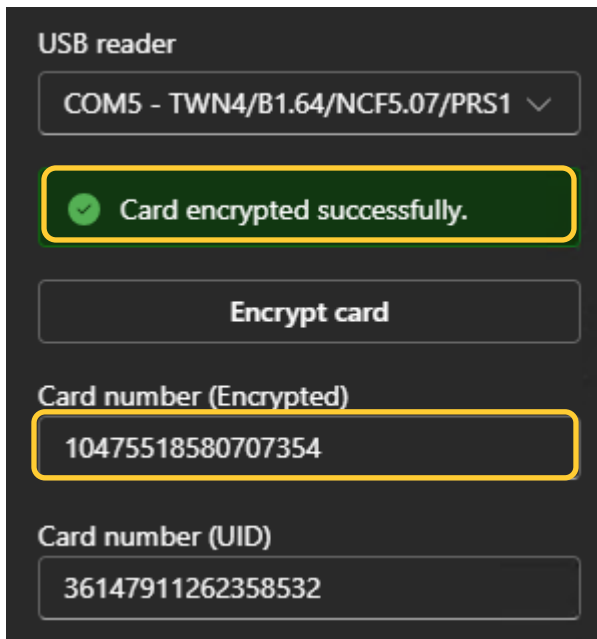
4. Check the USB Reader has the USB reader you just programmed selected.

- Following the info box, place your card on the reader, this will update the step, provide the UID number and highlight the encrypt button.



A screenshot of a software interface for card encryption. At the top, a dark grey box with a yellow border contains an information icon and the text "Card identified. Hold still for encryption." Below this is a large yellow button labeled "Encrypt card". Underneath the button, the text "Card number (Encrypted)" is followed by an empty input field. Further down, the text "Card number (UID)" is followed by an input field containing the number "36147911262358532". The entire interface has a dark grey background.

- Then press encrypt, this will display a loading bar while it encrypts and finally will display that the card has been successfully encrypted and displays the encrypted card number.



A screenshot of the same software interface, now showing a successful encryption. At the top, a dark grey box with a yellow border contains a green checkmark icon and the text "Card encrypted successfully." Below this is a grey button labeled "Encrypt card". Underneath the button, the text "Card number (Encrypted)" is followed by an input field containing the number "10475518580707354". Further down, the text "Card number (UID)" is followed by an input field containing the number "36147911262358532". The entire interface has a dark grey background.

Considerations and limitations

1. For the beta, we only support the A4030/A4130/A4131 reader models.
2. For the beta, you are required to change DIP switch 7 to enable SSCP.
3. For the beta, an OSDP reader must first be configured to allow you to manually upgrade the reader to the required firmware to support SSCP.
4. For already existing doors, Secure channel must be disabled prior to following this How-to.
5. For the beta, the PICC key will be auto generated by Secure Entry.
6. Only AXIS DESfire EV2 & EV3 cards are currently supported.
7. For the beta, readers configured with SSCP may need to be reconfigured in later releases.
8. For the beta, controllers configured for SSCP may need to be factory defaulted in later releases.
9. Using an encrypted card at a reader must be held until the status of the reader updates, removing early can lead to denied access.