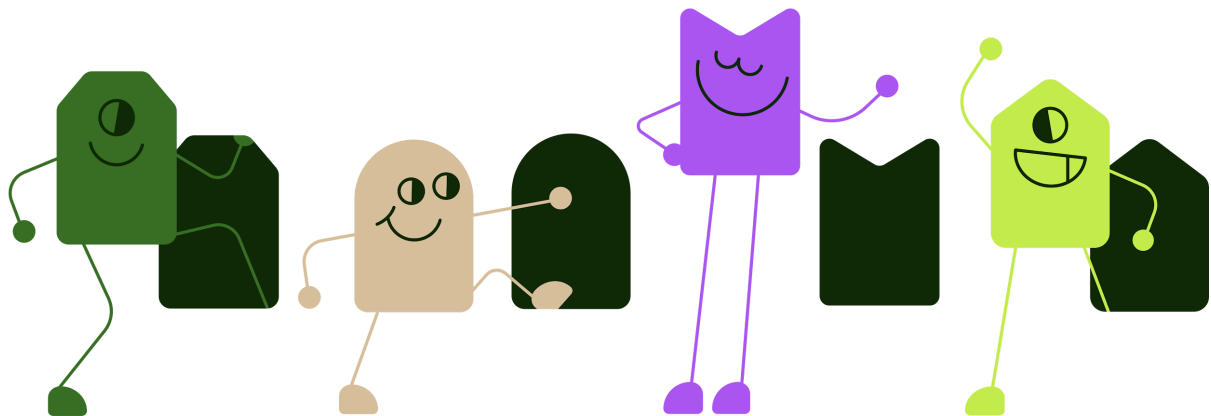


# How to onboard Salto Space with Unloc








## Version

This is version 7 of this document for Salto Unloc Proxy v1.0.3. This [link](#) will always point to the latest available documentation online.

## What is it?

Salto Space is an on-prem solution running on a Windows machine. Unloc has implemented a system, the SALTO Unloc Proxy, that communicates with the on-prem machine in order to create, revoke and refresh keys. The Unloc Salto Proxy runs as a service alongside the other SALTO services on the server.

 RPC Endpoint Mapper	Resolves RPC interfaces identifiers t...	Running	Automatic	Network Service
 SALTO Local IO Bridge	Enables communication bridges bet...	Running	Automatic	Local System
 SALTO ProAccess Space Service	Provides access-plan management ...	Running	Automatic	NT SERVICE\ProAc...
 SALTO Unloc Proxy	Enables Unloc functionality for this ...	Running	Automatic	Local System
 Secondary Logon	Enables starting processes under alt...		Manual	Local System

Screenshot from the Windows Management Console.

## Requirements

A Salto Space installation can use Unloc, given the following requirements.

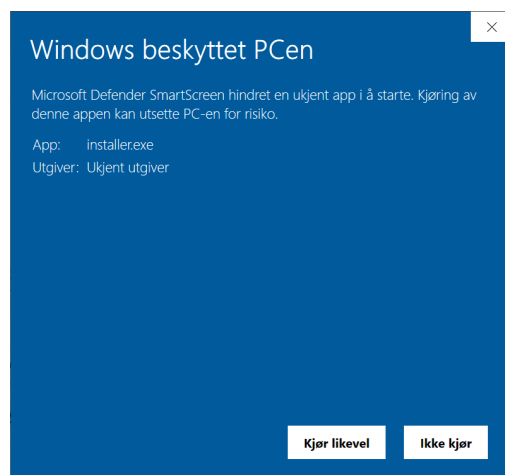
1. The site server must be running Salto Pro Access SPACE version 6.9.1.0. or later.
2. The site server is permanently turned on.
3. The site server has an internet connection.  
The site owners must purchase a SHIP license from Salto. The SHIP license is an extension to the Salto Pro Access SPACE software.
4. The site server must run Windows 10 or newer
5. Encoder must be ethernet-type (not USB)
6. Locks must be BLE-enabled

## Files

- Installer.exe
- config.json
- credentials.json

## Installation

1. You should have received the files as a password protected zip file. Make sure to unzip the content using the password you received from Unloc.
2. Run the provided installer.exe executable on the same machine running Salto SPACE. The installer will copy necessary files to c:\program files\unloc. You may need to run the installer.exe as an administrator.
  - a. NOTE: Later versions of Windows may attempt to block the opening of installer.exe with a warning. If this happens, then click "More info" and "Run anyway". See the below screenshot (in Norwegian).



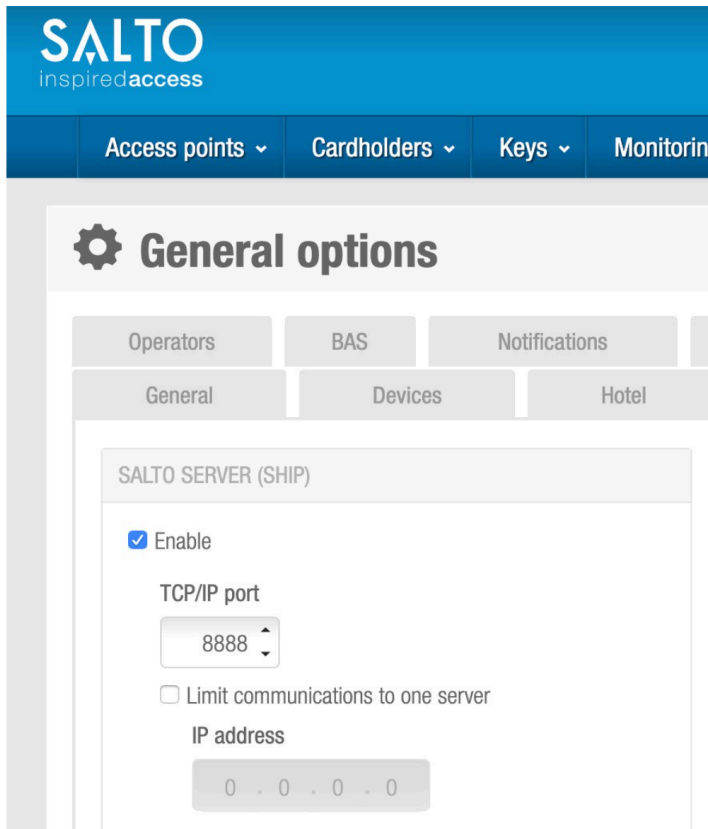
3. Copy the two provided files: "config.json" and "credentials.json" to the installation directory c:\program files\unloc. These are configuration files specific for this installation and allow the installation to communicate with the Unloc platform. **Note:** These files should be considered confidential, so please do not copy or share these files with anybody else.
4. Open c:\program files\unloc and launch c:\program files\unloc\setup.bat. This will install and start the SALTO Unloc Proxy as a Windows service.

## Salto Pro Access SPACE configuration

In order for Unloc to be able to interact with Salto Pro Access SPACE, the following configurations need to be made.

### Connection configuration

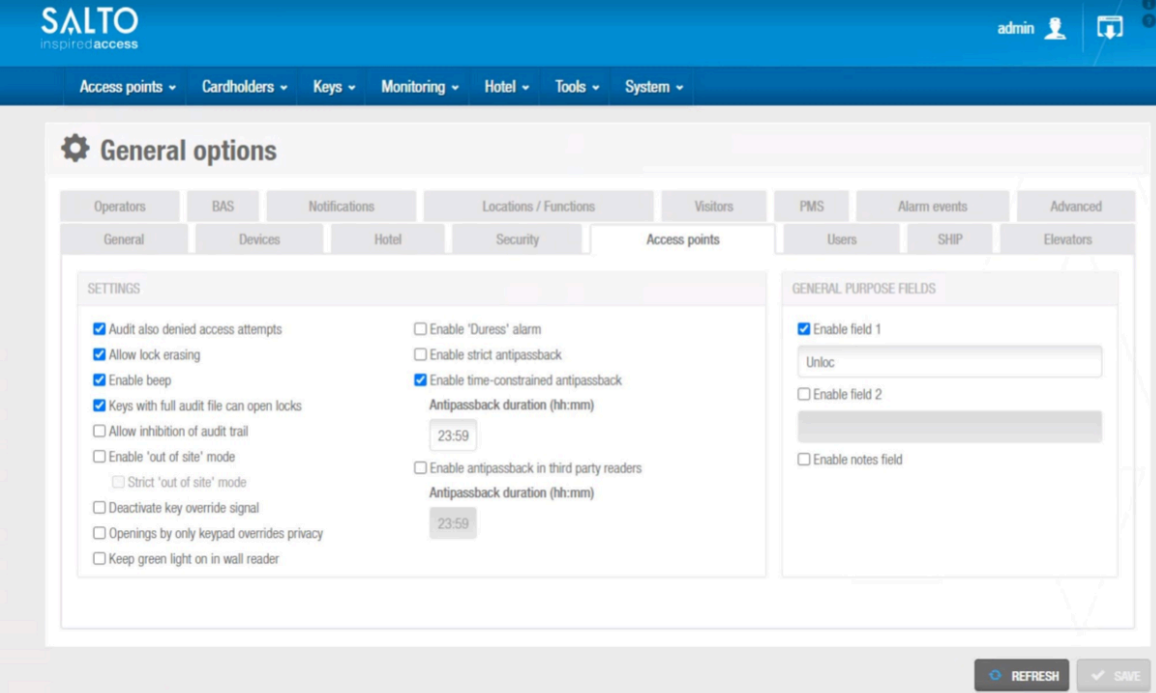
Under System/General Options/SHIP: enable SALTO SERVER (SHIP) on port 8888.



The screenshot shows the Salto Pro Access SPACE configuration interface. The top navigation bar includes 'Access points', 'Cardholders', 'Keys', and 'Monitoring'. The main section is titled 'General options' with a gear icon. Below this, there are tabs for 'Operators', 'BAS', 'Notifications', 'General', 'Devices', and 'Hotel'. The 'General' tab is selected, and the 'SALTO SERVER (SHIP)' section is expanded. This section contains the following settings:

- ☒ Enable
- TCP/IP port: 8888
- ☐ Limit communications to one server
- IP address: 0 . 0 . 0 . 0

## Lock configuration



**SALTO**  
inspired access

admin

Access points ▾ Cardholders ▾ Keys ▾ Monitoring ▾ Hotel ▾ Tools ▾ System ▾

### General options

Operators BAS Notifications Locations / Functions Visitors PMS Alarm events Advanced

General Devices Hotel Security Access points Users SHIP Elevators

**SETTINGS**

- ☒ Audit also denied access attempts
- ☒ Allow lock erasing
- ☒ Enable beep
- ☒ Keys with full audit file can open locks
- ☐ Allow inhibition of audit trail
- ☐ Enable 'out of site' mode
  - ☐ Strict 'out of site' mode
- ☐ Deactivate key override signal
- ☐ Openings by only keypad overrides privacy
- ☐ Keep green light on in wall reader
- ☐ Enable 'Duress' alarm
- ☐ Enable strict antipassback
- ☒ Enable time-constrained antipassback
 

Antipassback duration (hh:mm)

23:59
- ☐ Enable antipassback in third party readers
 

Antipassback duration (hh:mm)

23:59

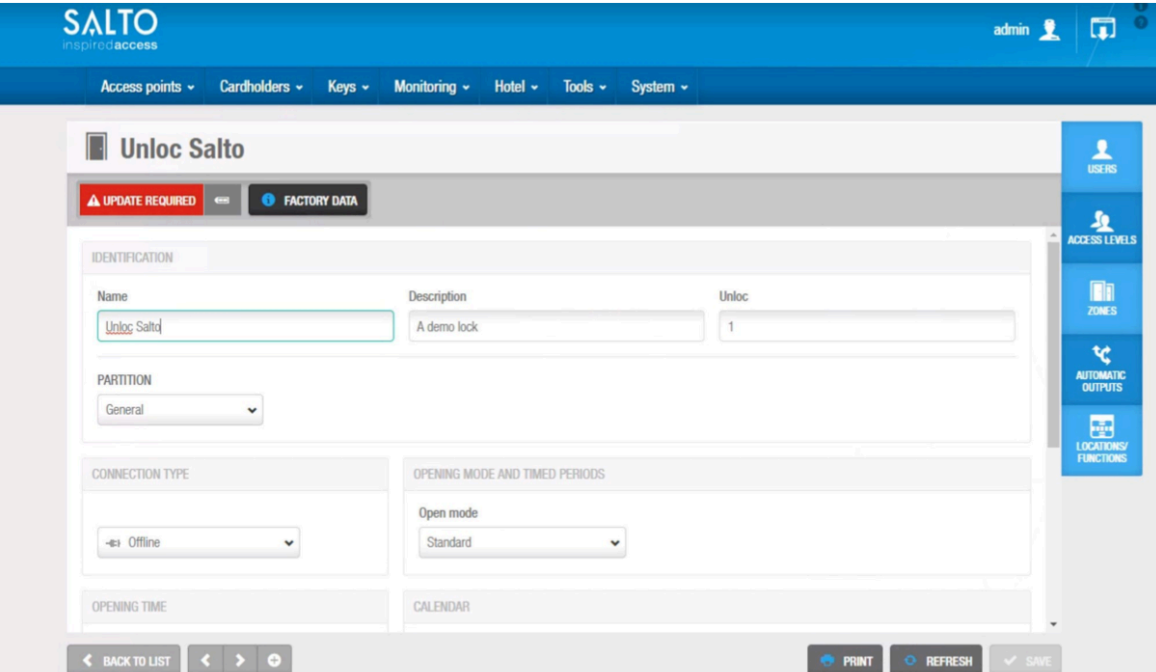
**GENERAL PURPOSE FIELDS**

- ☒ Enable field 1
 

Unloc
- ☐ Enable field 2
- ☐ Enable notes field

REFRESH SAVE

Navigate to system → General Options → Access points, then under "General Purpose Fields", check "Enable field 1" and put "Unloc" into the text field.



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Access points ▾ Cardholders ▾ Keys ▾ Monitoring ▾ Hotel ▾ Tools ▾ System ▾

### Unloc Salto

UPDATE REQUIRED FACTORY DATA

**IDENTIFICATION**

Name: Unloc Salto Description: A demo lock Unloc: 1

**PARTITION**

General

**CONNECTION TYPE**

Offline

**OPENING MODE AND TIMED PERIODS**

Open mode: Standard

**OPENING TIME**

CALENDAR

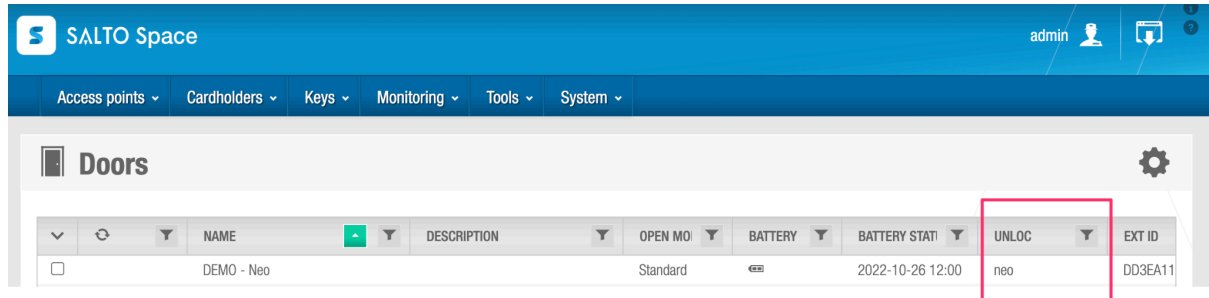
BACK TO LIST PRINT REFRESH SAVE

USERS ACCESS LEVELS ZONES AUTOMATIC OUTPUTS LOCATIONS/FUNCTIONS

## Set lock type

Each lock (under Access Point/Doors) that should be Unloc-compatible needs to set the field "Unloc" to the correct lock type id. The lock type id used should correspond to the actual lock that is installed.

For example, if an Access Point named "Office One" is a Salto NEO Cylinder, then the lock type id for that lock should be set to "neo":




The list of available lock type id's is listed below. Use "generic" if you're unsure which lock type to select.


Lock Type IDs
generic
neo
neoxx
mini
aelement
one
original
original-keypad
locker
wallreader
wallreader-keypad


## Enable audit on keys

To get correct key events and battery status reported back to the unloc platform you also need to enable “Audit on keys” on all doors that are used within Unloc. This will require you to update the doors with a PPD.




### DEMO - XS4 Original


**UPDATE REQUIRED**


**FACTORY DATA**

#### CONNECTION TYPE


Offline

☐ Extended expiration (offline)

#### OPENING TIME

Open time

6

seconds

Increased open time

20

seconds

#### DOOR OPTIONS

☒ Audit on keys

☐ IButton key detection: pulsed mode

☐ Audit inside handle opening

☐ Admit expired keys

0

days

☐ Limit user access

5

users

#### ADVANCED OPTIONS

☐ Configure inputs and relays (for controllers only)

#### OPENING MODE AND TIMED PERIODS

Open mode

Standard

#### CALENDAR AND TIME ZONE

Calendar

Calendar0000

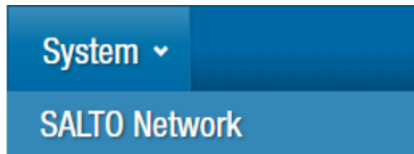
#### ANTIPASSBACK

☐ Enable antipassback

## Encoder configuration

In order to generate and encrypt the data needed to open a lock with the Unloc app, you need to set up a network encoder, **defined as a dongle**.

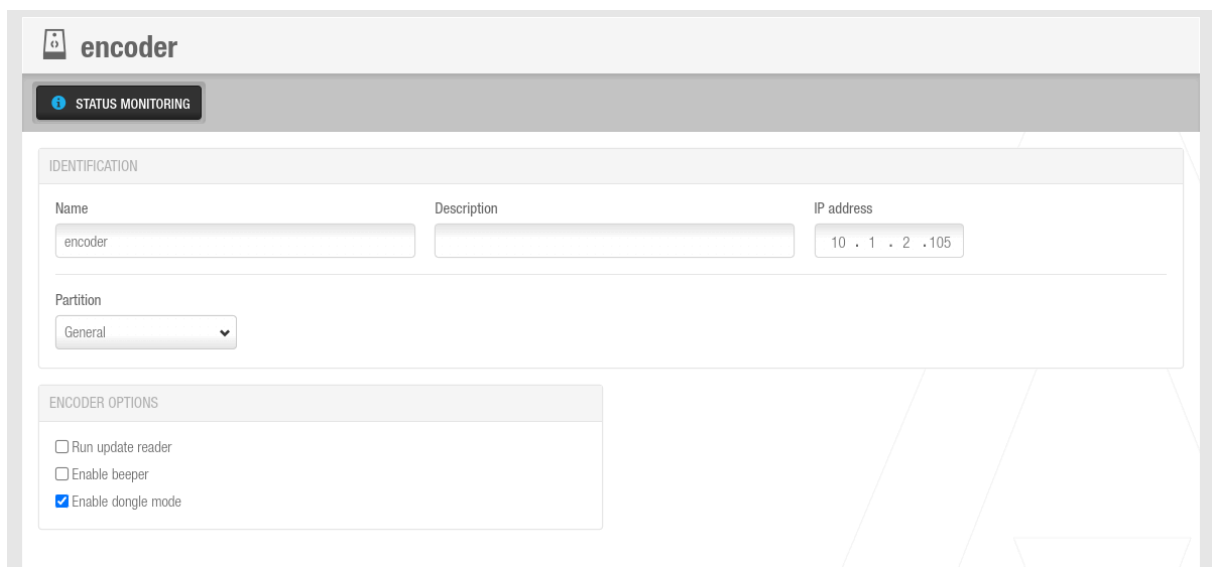
1. Go to System → Salto Network



2. Then add a new network device of type "Encoder". Give it a name, an IP address and then save. Hold the CLR-button on the encoder until the light blinks, then click on "assign IP address".



3. Go to System → Salto Network
4. Choose an online encoder you want to dedicate to creation of unloc Keys and check the "Enable dongle mode" checkbox



Next, we need to activate BLE and NFC functions in the locks, so that the Unloc app is able to communicate with the lock.

1. Go to System → SAM & Issuing options



- Under "inactive keys" you will find BLE and HCE. Mark both of these so that they move up into "active keys", then save. Update all doors with PPD.

**INACTIVE KEYS**


☐ BLE

☐ HCE

## Denylist configuration

Keys created by Unloc should not occupy slots on the denylist. In order to ensure this, you must follow these steps:

- Go to System → General Options → Advanced
- Add a new parameter: MORE\_THAN\_64K\_USERS and set its value to 1
- The result should look something like this:

 **General options**

General
 Devices
 Security
 Access points
 Users
 SHIP
 Operators
 Notifications
 Visitors
 Advanced

PARAMETERS

PARAMETER	VALUE
PROX_ANTICLONING	1
AUTO_LOGOFF_TIMEOUT	999999
PPD_RESET_LOCKS	1
MORE_THAN_64K_USERS	1

– DELETE PARAMETER

+ ADD PARAMETER

## Final step

The last step is to restart Salto ProAccess Space Service (select Services from Windows start menu).

## Naming locks on hosted server

If you have a hosted solution with several customers on the same server you need to give the locks a prefix that makes it possible for us to identify all the

locks connected to a specific customer. Prefixes can be numbers or letters as long as they are unique per customer (e.g 220 or CBT).

All locks connected to that customer have to start with the same prefix for us to understand who it is connected to, Unloc does not see the information written in "Description" on the Salto site.

## Uninstall

From a terminal:

1. Enter the Unloc installation directory: `cd "c:\program files\unloc"`
2. Stop the service: `.\nssm stop "SALTO Unloc Proxy"`
3. Remove the service: `.\nssm remove "SALTO Unloc Proxy"`