



# SmartIntego SVCN Step by step

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Manual

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**Simons  Voss**  
technologies

## Contents

<b>1</b>	<b>General safety instructions.....</b>	<b>4</b>
<b>2</b>	<b>Meaning of the text formatting .....</b>	<b>6</b>
<b>3</b>	<b>SmartIntego Tech Kit.....</b>	<b>7</b>
<b>4</b>	<b>Planning a SmartIntego project .....</b>	<b>8</b>
4.1	Check conditions on site.....	8
4.2	Measure doors .....	8
4.3	Ordering components.....	10
4.4	Plan the installation procedure.....	10
<b>5</b>	<b>Start up the SmartIntego project.....</b>	<b>12</b>
5.1	Document system .....	12
5.2	Install SmartIntego Tool (SVCN) .....	12
5.3	Creating a SmartIntego project (SVCN) .....	13
5.4	Updating a SmartIntego project.....	15
5.4.1	Lock-GatewayKey Configuration .....	15
5.4.2	Different keys in the basic configuration.....	16
5.5	Migrating a project subsequently to AX configuration .....	16
5.6	Setting up the card configuration .....	18
5.6.1	Manual setup.....	18
5.6.2	Import from integrator system .....	19
5.6.3	Creating and loading a template for card configurations.....	19
5.6.4	Entering card data .....	21
5.6.5	Protecting card configuration .....	22
5.7	Encrypting the transfer between SmartIntego tool (SVCN) and integrator system .....	23
5.8	Automatically save and load XML file for transmission between SmartIntego tool (SVCN) and integrator system .....	24
5.9	Add locking devices .....	25
5.10	Programming locking devices.....	29
<b>6</b>	<b>Maintaining a SmartIntego project .....</b>	<b>31</b>
6.1	Changing the configuration of a locking device .....	31
6.2	Setting up Escape and Return.....	32
6.3	Import access list .....	33
6.4	Set time on locking devices .....	34
6.5	Replacing the locking device .....	35
6.5.1	Mechanical defect .....	36

6.5.2	Electronic defect.....	37
6.6	Performing an emergency opening.....	38
6.7	Resetting locking devices.....	39
6.7.1	Reset with integrator system .....	40
6.7.2	Reset with locking system password.....	40
6.8	Battery change and battery replacement card .....	41
6.8.1	Creating a battery replacement card.....	42
6.8.2	Battery replacement.....	42
6.9	Creating and restoring a backup .....	42
6.9.1	Creating a backup.....	43
6.9.2	Restoring a backup.....	43
7	<b>Changelog .....</b>	<b>45</b>
8	<b>Help and other information .....</b>	<b>46</b>

## 1 General safety instructions

Signal word (ANSI Z535.6)	Possible immediate effects of non-compliance
DANGER	Death or serious injury (likely)
WARNING	Death or serious injury (possible, but unlikely)
CAUTION	Minor injury
IMPORTANT	Property damage or malfunction
NOTE	Low or none



### WARNING

#### Blocked access

Access through a door may stay blocked due to incorrectly fitted and/or incorrectly programmed components. SimonsVoss Technologies GmbH is not liable for the consequences of blocked access such as access to injured or endangered persons, material damage or other damage!

#### Blocked access through manipulation of the product

If you change the product on your own, malfunctions can occur and access through a door can be blocked.

- ❑ Modify the product only when needed and only in the manner described in the documentation.



### NOTE

#### Intended use

SmartIntego-products are designed exclusively for opening and closing doors and similar objects.

- ❑ Do not use SmartIntego products for any other purposes.

#### Different times for G2 locks

The internal time unit of the G2 locks has a technical tolerance of up to  $\pm 15$  minutes per year.

#### Qualifications required

The installation and commissioning requires specialized knowledge.

- ❑ Only trained personnel may install and commission the product.

Modifications or further technical developments cannot be excluded and may be implemented without notice.

The German language version is the original instruction manual. Other languages (drafting in the contract language) are translations of the original instructions.

Read and follow all installation, installation, and commissioning instructions. Pass these instructions and any maintenance instructions to the user.

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## 2 Meaning of the text formatting

This documentation uses text formatting and design elements to facilitate understanding. The table explains the meaning of possible text formatting:

Example	button
<input checked="" type="checkbox"/> Example	checkbox
<input type="checkbox"/> Example	
<input checked="" type="radio"/> Example	Option
[Example]	Tab
"Example"	Name of a displayed window
Example	Upper programme bar
Example	Entry in the expanded upper programme bar
Example	Context menu entry
▼ Example	Name of a drop-down menu
"Example"	Selection option in a drop-down menu
"Example"	Area
Example	Field
Example	Name of a (Windows) service
Example	Commands (e.g. Windows CMD commands)
Example	Database entry
[Example]	MobileKey type selection

## 3 SmartIntego Tech Kit

The SmartIntego Tech-Kit helps you to perform the initial operation and operate your SmartIntego locking system.

It contains:

- Configuration Software
- System description
- Step-by-step instructions
- Manuals

### Versioning

You can recognise the current version in the file name (year month, e.g. 20-01). You can find the latest version of the SmartIntego-TechKit in the partner section of the SmartIntego website (<https://www.smartintego.com/int/home/home>).

## 4 Planning a SmartIntego project

The successful implementation of your SmartIntego project requires detailed planning. This planning consists of several steps:

1. Check the conditions on site (see [Check conditions on site \[► 8\]](#)).
2. Measure the doors (see [Measure doors \[► 8\]](#)).
3. Order your SmartIntego components (see [Ordering components \[► 10\]](#)).

Other parameters may be important. However, this document is limited to the technical conditions of the SmartIntego components and their configuration.

### 4.1 Check conditions on site

Consider the following things when checking:

Environment	Required SmartIntego components
<ul style="list-style-type: none"> <li>❑ Floor plans</li> <li>❑ Different areas</li> <li>❑ Fire protection regulations</li> <li>❑ Escape routes</li> <li>❑ Design/Architecture constraints <ul style="list-style-type: none"> <li>❑ Installation of the infrastructure hidden or visible</li> <li>❑ Uniform design of all locks (also mechanical)</li> </ul> </li> <li>❑ Special features in the IT environment</li> <li>❑ Type of doors</li> <li>❑ System functionalities</li> </ul>	<ul style="list-style-type: none"> <li>❑ Locking cylinder</li> <li>❑ SmartHandles</li> </ul>

### 4.2 Measure doors

1. Measure each door in the project individually (values to be measured depend on the locking device type, see table).
2. Enter the results of the measurement directly in the SmartIntego-Order-Tool.

Measure the following values:



Locking cylinder	SmartHandle
<ul style="list-style-type: none"> <li>❑ Profile (Euro profile, Swiss round profile, ...)</li> <li>❑ SmartIntego technology (SmartIntego Virtual Card Network)</li> <li>❑ Desired characteristics of the locking cylinder (see price list) <ul style="list-style-type: none"> <li>❑ CO (Comfort = One side mechanically permanently engaged)</li> <li>❑ AP2 (anti-panic version)</li> <li>❑ HZ (Half cylinder)</li> <li>❑ ...</li> </ul> </li> <li>❑ External dimensions</li> <li>❑ Inside dimension</li> </ul>	<ul style="list-style-type: none"> <li>❑ Profile (Euro profile, Swiss round profile, Mechanical...)</li> <li>❑ Desired mechanical sealability (MO)</li> <li>❑ SmartIntego technology (SmartIntego Virtual Card Network)</li> <li>❑ Desired features of the SmartHandles (see price list) <ul style="list-style-type: none"> <li>❑ SI-S2 (SmartHandle AX) ER (Escape and Return = time-controlled return function) ...</li> <li>❑ SH (SmartHandle 3062) ER (Escape and Return = time-controlled return function) WP (Weatherproof = protection against environmental influences) ...</li> </ul> </li> <li>❑ Door thickness</li> <li>❑ Spindle</li> <li>❑ Fastening</li> <li>❑ Centres distance</li> <li>❑ Version</li> <li>❑ Handle design outside</li> <li>❑ Handle design on the inside</li> <li>❑ Surface (colour, finish)</li> <li>❑ Options</li> <li>❑ Cover (narrow or wide)</li> </ul>

## 4.3 Ordering components

- Use the SmartIntego ordering tool . This way you avoid wrong quantities and/or order codes. You can get the order tool in the partner area on <https://www.smartintego.com>.
- Please consider the delivery times.
- Make sure that the SmartIntego components you require are compatible with the integrator system. Integrators can integrate different types of SmartIntego components.

## 4.4 Plan the installation procedure

In SmartIntego projects set up on a SmartIntego Virtual Card Network (SVCN), you can prepare everything before installation. In general, commissioning consists of two main steps:

### Infrastructure

First, create the conditions for installing a SmartIntego system:

1. Install the integrator system.
2. Configure the integrator system.
3. Install the updater (= gateway where the cards are updated. Provided by the integrator or a third party manufacturer).
4. Programme the cards.
5. Hand out the cards (if not done yet).

### Locking devices

1. Receive the locks.
2. Programme the locking devices.
3. Mount the locking devices.

In general, the following steps are necessary during the setup of a SmartIntego project based on the SmartIntego Virtual Card Network:

1. Label the components.
2. Create the system documentation (see [Document system \[► 12\]](#)).  
The system documentation shows what has been installed where.
3. Install the SmartIntego tool (SVCN) (see [Install SmartIntego Tool \(SVCN\) \[► 12\]](#)).
4. Create a SmartIntego project.
5. Set up your map configuration.
6. Create your locking devices in the integrator's door administration system.
7. Import the lock data into the SmartIntego tool (SVCN)
8. Programme the locking devices.

## 9. Export the lock data to the integrator's system



### NOTE

#### Functional test before installation

Before installing the lock in the door, a function test of the system (Lock, Card and Integrator System together) is strongly recommended. Without the function test, when installing the lock in the door, there is a risk that you may lock yourself out and no longer be able to open the door.

## 5 Start up the SmartIntego project

### 5.1 Document system

Operating a digital locking system without system documentation is not practical. System documentation (whether on paper or digitally) greatly facilitates subsequent maintenance and modification work.

The system documentation must contain the following information:

Component information	Installation information
Source: Stickers on the packaging	Source: Environment
<ul style="list-style-type: none"> <li>■ Order code</li> <li>■ PHI (Physical Hardware Identifier = serial number)</li> <li>■ Firmware version at delivery</li> </ul> <p>Optional, but helpful: Deviations from the order code (e.g. subsequently changed covers for SmartHandles)</p>	<ul style="list-style-type: none"> <li>■ Door names (e.g. <i>Office Max Mustermann</i>)</li> <li>■ Door code (Unique number with which the door can be clearly identified, e.g. <i>B1-2-42</i> for Building 1 - Floor 2 - Room 421)</li> </ul> <p>Optional, but helpful:</p> <ul style="list-style-type: none"> <li>■ Position in the building plan</li> <li>■ Escape routes</li> </ul>

### 5.2 Install SmartIntego Tool (SVCN)

With the SmartIntego tool (SVCN) you configure SmartIntego systems that are based on a virtual network.

To do this you must install the SmartIntego tool (SVCN) on a physical PC.

- ✓ Operating system Windows 10 or later.
- ✓ Administrator rights available.

1. Execute the file **SmartIntego\_setup\_X\_X\_vcn.exe**.
2. Follow the instructions.
  - ↳ SmartIntego tool (SVCN) installed.
  - ↳ SmartIntego-Config-Tool installed (optional).
  - ↳ Driver for SI.SmartCD installed.
  - ↳ Baltech driver for SmartCD.HF installed.
3. After installation, connect the SI.SmartCD programming device.



## NOTE

### Descriptions in this document

The descriptions in this document refer to version 3.0 (or later) of the SmartIntego tool (SVCN).

- Use the latest version of the SmartIntego tool (SVCN).



## NOTE

### Description of door management with SmartIntego Config Tool

The door management descriptions in this document refer to the SmartIntego Config Tool. Generally, your integrator has its own door management software, the operation of which may differ.

1. Read the documentation for the integrator system used.
2. Only use this chapter if your integrator absolutely needs the SmartIntego Config tool.

## 5.3 Creating a SmartIntego project (SVCN)

1. Open the SmartIntego tool (SVCN).
2. Via | File | select the entry **New**.
  - ↳ The view for creating a new project opens.

New Project - SmartIntego Tool VCN V3.0.7261.25067

Project:

Name:

Password:

Confirm password:

Locking system passwords:

Wireless Online Virtual Card Network

Password:

Confirm password:

**Attention! Please store your passwords in a safe place!**  
**When you lost passwords, you will not be able to program your locking system.**

Passwords hint:

☐ Create as project template  
☐ Launch SmartIntego Manager  
☐ Open this project as default

Create Cancel

3. Assign a project name.
4. Assign a login password (project password).
5. Change to tab [SI-Tool - Projekt erstellen: Virtual Card Network [often]].
6. Assign a locking system password.



## NOTE

### Loss of passwords

Your passwords are the basis for managing your locking system. Lost or publicly known passwords are a serious security risk and/or lead to loss of control over the system.

1. Make a note of your passwords.
2. Store your passwords in a safe place.
7. Provide a password hint.

8. Click on the button **Create**.
  - ↳ The Explorer opens.
9. Select an output directory for your project file.
10. Click on the button **Save**.
  - ↳ The Explorer closes.
- ↳ Project is created (\*.ikp).

## 5.4 Updating a SmartIntego project

- ✓ Backup of project file has been created (see [Creating a backup \[► 43\]](#)).
- 1. Open the new SmartIntego tool (SVCN).
- 2. Open an existing project.
- 3. Log on with the project password.
  - ↳ SmartIntego-Tool (SVCN) automatically checks the used card configuration.
- ↳ Depending on your previous card configuration (see [Lock-GatewayKey Configuration \[► 15\]](#) or [Different keys in the basic configuration \[► 16\]](#)), the data is automatically converted for use in AX locking devices.

### 5.4.1 Lock-GatewayKey Configuration

If a lock gateway key configuration is found during the update check, the data is automatically converted to AX format.

The update changes the card configuration of the locking devices:

Properties	Value after update
Maximum readable file size (per file)	8192 bytes
File type for ID and access file	Standard
Keys used so far	Unified to LockGateway key (only if all keys match).
Previously used key numbers	Unified to LockGateway key number (only if all key numbers match).
All other values	Will be adopted unchanged.

The changes are transferred to the locking devices during programming. You do not have to programme the locking devices immediately. Test the changes on some selected locking devices anyway.

You only need to reprogram the locking devices after the update if you change the cards or card configurations yourself. In this case, you must transfer the new card configuration to the locking devices.



## NOTE

### Programming requirement not displayed

The locking devices in your project are not managed in the SmartIntego tool (SVCN). Therefore, the SmartIntego tool (SVCN) does not "know" whether programming is required after changes to the card configuration.

#### 5.4.2 Different keys in the basic configuration

If no Lock-GatewayKey configuration is found during the update check, the previous card configuration (SmartIntego II) is still used. This card configuration allows you to continue working normally, but you cannot use AX locks.

#### Remedy

1. Check the options for your card configuration with your integrator.
2. Create a second card configuration (AX card configuration).
3. Program cards with this second card configuration.
4. Make sure that only cards with this card configuration are used on AX locks.
  - ↳ Cards with AX configuration can be used for AX as well as older locking devices.
5. Check the options for your card configuration with your integrator.

New AX locks automatically use AX card configuration. Older locking devices continue to use SmartIntego II card configuration.

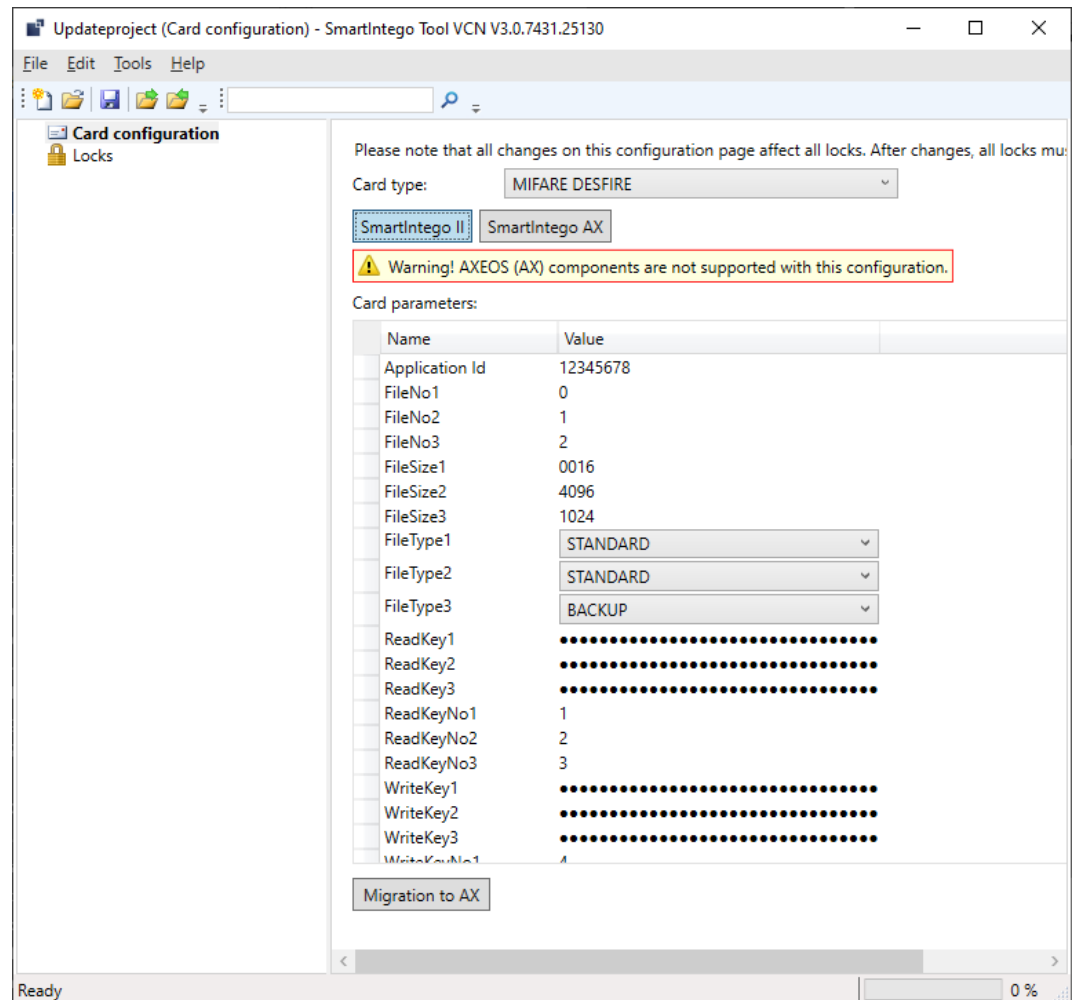
#### 5.5 Migrating a project subsequently to AX configuration

Parallel operation is possible to make a possible changeover in the project "soft" (see *Different keys in the basic configuration* [▶ 16]). In order to use only one card configuration at a time, the project can be migrated to AX card configuration. This is also possible "soft" (with a gradual transition).



✓ All cards in the system have SmartIntego II and AX card configuration.

1. Click on the **Migrate to AX** button.



→ Information messages are displayed.

2. Read the notifications.

3. If you meet the requirements, continue.

→ SmartIntego II card configuration is blocked and deleted after restarting the SmartIntego tool (SVCN).

→ From this moment on, all locking devices only use the AX card configuration.

4. Reprogram all older locking devices.

The cards are compatible with both card configurations. You can therefore also reprogramme older locking devices later. SimonsVoss nevertheless recommends systematically reprogramming.



## NOTE

### Programming requirement not displayed

The locking devices in your project are not managed in the SmartIntego tool (SVCN). Therefore, the SmartIntego tool (SVCN) does not "know" whether programming is required after changes to the card configuration.

## 5.6 Setting up the card configuration

Set up your card configuration with various options:

- Manual (see *Manual setup* [► 18])
- Imported (see *Import from integrator system* [► 19])
- Template file (no change, see *Creating and loading a template for card configurations* [► 19])



## NOTE

### Programming requirement not displayed

The locking devices in your project are not managed in the SmartIntego tool (SVCN). Therefore, the SmartIntego tool (SVCN) does not "know" whether programming is required after changes to the card configuration.

### 5.6.1 Manual setup

#### MIFARE Classic

Parameters to be entered (entry in hexadecimal notation):

- Application code (first two bytes of the application identifier)
  - Function cluster code (last two bytes of the application identifier)
  - Lock-GatewayKey
  - ✓ SmartIntego Tool (SVCN) opened.
  - ✓ **Card Configuration** selected.
1. In the dropdown menu ▼ **Card type** select the entry "SI-Tool: Card type - MIFARE Classic [offen]".
  2. In the area "SI-Tool: Kartenkonfiguration - Card parameters [offen]" enter the card parameters (also see *Entering card data* [► 21]).
  3. Assign a password (see *Protecting card configuration* [► 22]).
    - ↳ Unintentional changes excluded.
    - ↳ Classic card configuration set up.

## MIFARE DESFire

Parameters to be entered:

- Application ID (consisting of application code and function cluster code), entry in decimal notation
  - ID file
  - Access file
  - Upstream file
  - File type of the upstream file: **STANDARD** or **BACKUP**
  - Lock-GatewayKey
  - Lock Gateway Key Number
  - ✓ SmartIntego Tool (SVCN) opened.
  - ✓ **Card Configuration** selected.
1. In the dropdown menu ▼ **Card type** select the entry "SI-Tool: Card type - MIFARE DESFire [offen]".
  2. In the area "SI-Tool: Kartenkonfiguration - Card parameters [offen]" enter the card parameters.
  3. Assign a password (see [Protecting card configuration \[► 22\]](#)).
    - ↳ Unintentional changes excluded.
- ↳ DESFire card configuration is set up.

### 5.6.2 Import from integrator system

If the integrator system supports the export of the map configuration, you can simply import the required map configuration into the SmartIntego tool (SVCN).

- ✓ SmartIntego Tool (SVCN) opened.
1. Select via | File | - **Import** - **VCN Configuration**.
  2. Navigate to the file exported from the integrator system.
  3. Assign a password (see [Protecting card configuration \[► 22\]](#)).
    - ↳ Unintentional changes excluded.
- ↳ Map configuration imported.

### 5.6.3 Creating and loading a template for card configurations

#### 5.6.3.1 Create template (integrator)

- ✓ SmartIntego Tool (SVCN) opened.
1. Select via | File | - **New**.
    - ↳ A window for creating a project opens.
  2. Assign a name to the template.

3. Assign a project password for the template.



## NOTE

### Loss of passwords

Your passwords are the basis for managing your locking system. Lost or publicly known passwords are a serious security risk and/or lead to loss of control over the system.

1. Make a note of your passwords.
  2. Store your passwords in a safe place.
- 
4. Activate the checkbox ☒ SI-Tool: Create as project template [offen].

**New Project - SmartIntego V2.2.6969.23430**

Project:

Name:

Password:

Confirm password:

Locking system passwords:

Password:

Confirm password:

**Attention! Please store your passwords in a safe place!**  
When you lost passwords, you will not be able to program your locking system.

Passwords hint:

☒ Create as project template  
☐ Launch SmartIntego Manager  
☒ Open this project as default

5. Click on the button **Create**.
  6. Enter the card configuration (see [Manual setup \[► 18\]](#)).
  7. Assign a password (see [Protecting card configuration \[► 22\]](#)).
- ↳ Unintentional changes excluded.

8. Save the template file (\*.ikt).

↳ Template created.

### 5.6.3.2 Import template (installer)

✓ SmartIntego Tool (SVCN) opened.

1. Select via | File | - **Open**.

↳ The Explorer opens.

2. Navigate to your template file (\*.ikt)

3. Load the template file.

4. Log on with the project password.

5. Click the button **Yes** to create a new project based on the template file.

6. Assign a project name.

7. Assign a locking system password.



#### NOTE

##### Loss of passwords

Your passwords are the basis for managing your locking system. Lost or publicly known passwords are a serious security risk and/or lead to loss of control over the system.

1. Make a note of your passwords.

2. Store your passwords in a safe place.

↳ Project created based on template file.

### 5.6.4 Entering card data

Access to the card data is generally provided by the integrator or the cardholder. Your SmartIntego locking devices only need a small part of the data on the card to identify them (settings in ▼ **Card data** - "SI-Tool: Card data - Data from Setup [offen]").

The data (in particular the application ID) is always entered in decimal notation in the SmartIntego

tool: 0 1 2 3 4 5 6 7 8 9

Other manufacturers often use a hexadecimal notation:

0 1 2 3 4 5 6 7 8 9 A B C D E F

You must convert the data from hexadecimal to decimal to be able to enter the data in the SmartIntego tool.

The special feature of this hexadecimal notation is that it can be read in both directions. The reading direction is specified in the card configuration. The result of the conversion to decimal notation depends on the reading direction. There are two read types:

- MSByte first (Most Significant Byte first): Highest byte first, corresponds to reading direction from left to right
- LSByte first (Least Significant Byte first): Lowest byte first, corresponds to reading direction from right to left

## Example

Example								
Hex	A4BC							
Hex split	MSByte first				LSByte first			
	A	4	B	C	B	C	A	4
	10*4096	4*256	11*16	12*1	11*4096	12*256	10*16	4*1
Decimal split	40960	1024	176	12	45056	3072	160	4
Decimal	42172				48292			

### 5.6.5 Protecting card configuration

Protect your card configuration with a password to prevent unintentional changes.



#### NOTE

#### Loss of passwords

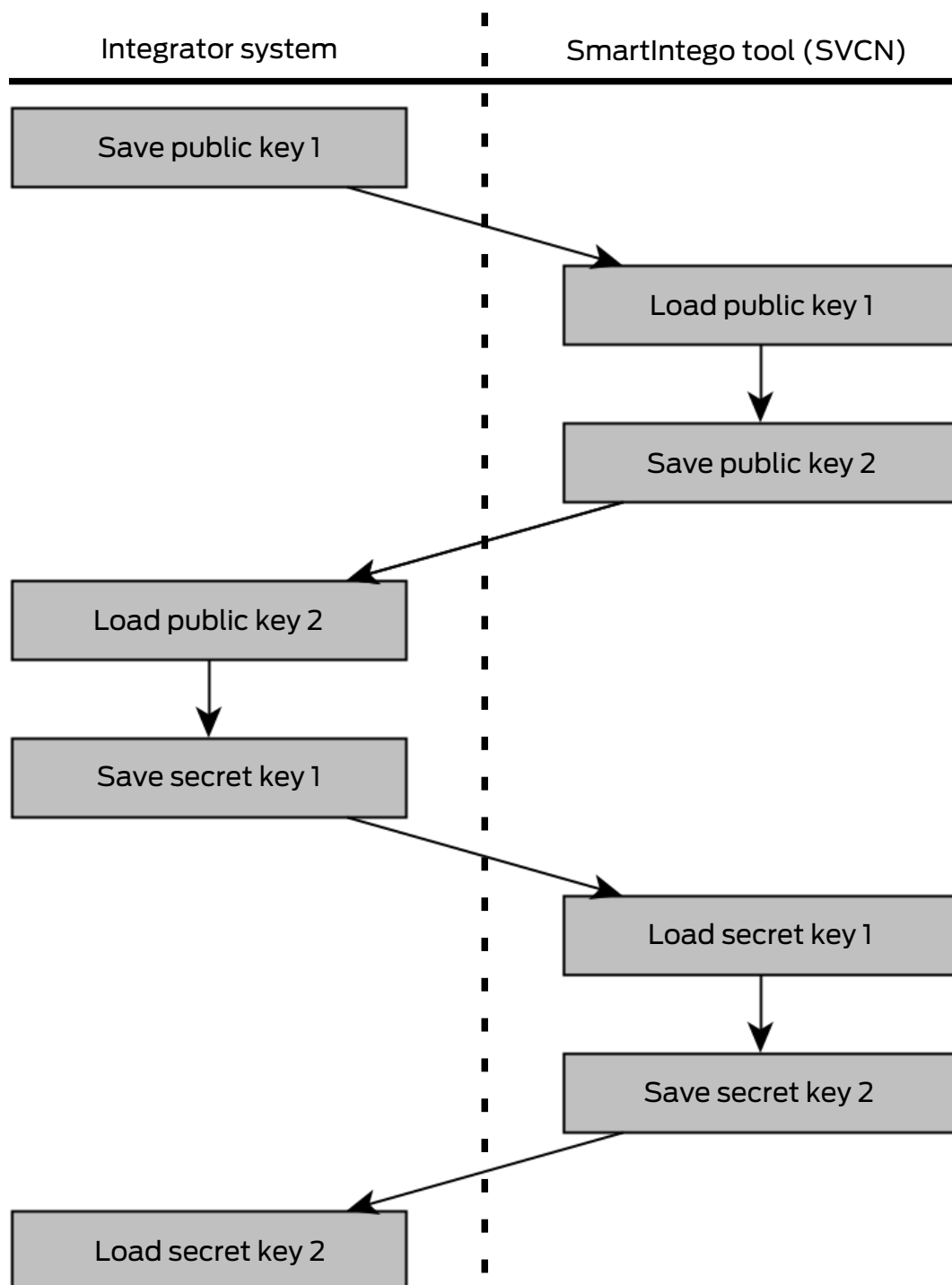
Your passwords are the basis for managing your locking system. Lost or publicly known passwords are a serious security risk and/or lead to loss of control over the system.

1. Make a note of your passwords.
2. Store your passwords in a safe place.

1. Via | Tools | call up the entry **Options** and **Project**.
  2. In the area "SI-Tools: Tools Options Project - Passwords [offen]", switch to tab [SI-Tools: Tools Options Project Passwords - Card configuration [offen]].
  3. Enter the desired passwords.
- Card configuration saved.

## 5.7 Encrypting the transfer between SmartIntego tool (SVCN) and integrator system

Data is transferred between the SmartIntego tool (SVCN) and the integrator system in an XML file. If the integrator system supports encryption, you can transfer the data in encrypted form.



1. In the integrator system, export the key via **Save Public Key 1**.  
 ↳ Public key 1 exported.

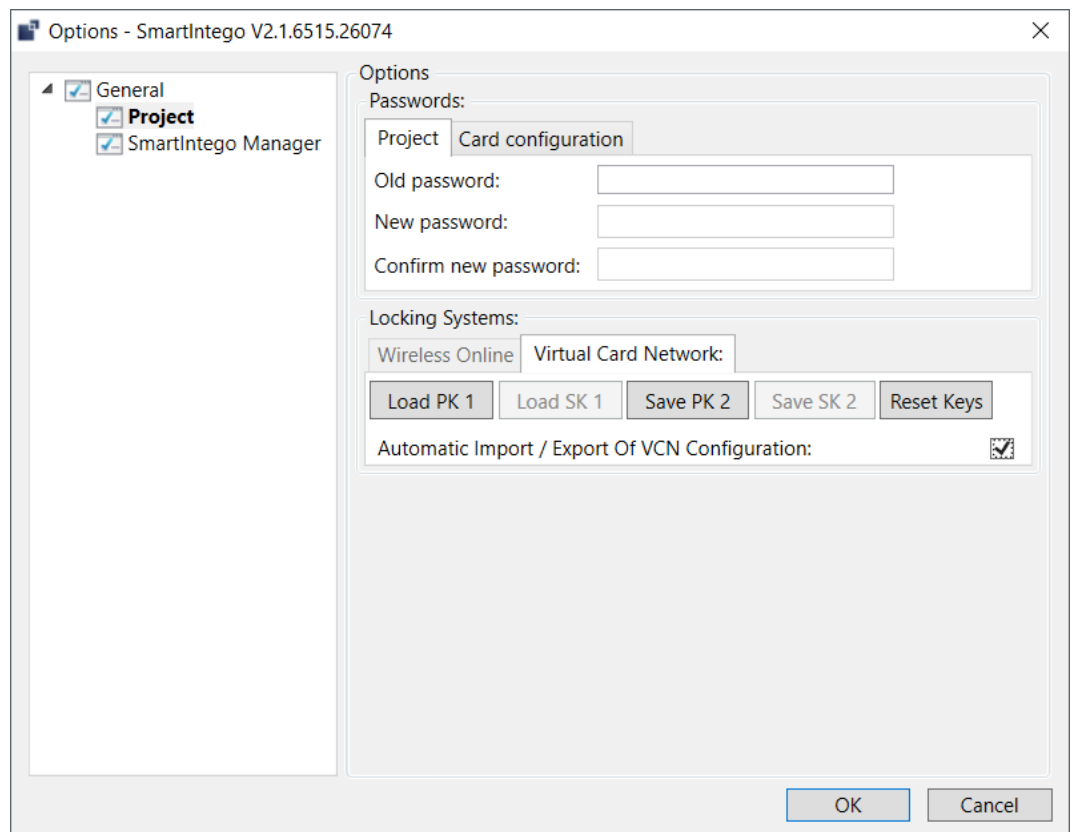
2. In the SmartIntego tool (SVCN) via | Tools | select the entry **Options** - **Project** - **Load Public Key 1**.  
↳ Public key 1 imported.
3. In the SmartIntego tool (SVCN) via | Tools | select the entry **Options** - **Project** - **Save Public Key 2**.
4. Define an output directory.
5. Click on the button **OK**.  
↳ Public key 2 exported.
6. In the integrator system, import the key via **Load Public Key 2**.  
↳ Public key 2 imported.
7. In the integrator system, export the key via **Save Secret Key 1**.  
↳ Secret key 1 exported.
8. In the SmartIntego tool (SVCN) via | Tools | select the entry **Options** - **Project** - **Load Secret Key 1**.  
↳ Secret key 1 imported.
9. In the SmartIntego tool (SVCN) via | Tools | select the entry **Options** - **Project** - **Save Secret Key 2**.  
↳ Secret key 2 exported.
10. In the integrator system import via **Load Secret Key 2**.  
↳ Secret key 2 imported.
- ↳ Key for encrypted communication exchanged.

## 5.8 Automatically save and load XML file for transmission between SmartIntego tool (SVCN) and integrator system

You can automatically save the XML file for data transfer and import it automatically.

- ✓ SmartIntego Tool (SVCN) opened.
- 1. Via | Tools | select the entry **Options**.  
↳ The message window opens.





2. Activate the checkbox ☒ Automatic Import / Export of VCN Configuration.
  3. Click on the button **OK**.
- ➡ Automatic saving activated.

This file must be imported manually in the SmartIntego tool (SVCN) once. It is then automatically read in every time it is started.

## 5.9 Add locking devices



### NOTE

#### Description of door management with SmartIntego Config Tool

The door management descriptions in this document refer to the SmartIntego Config Tool. Generally, your integrator has its own door management software, the operation of which may differ.

1. Read the documentation for the integrator system used.
2. Only use this chapter if your integrator absolutely needs the SmartIntego Config tool.



## NOTE

### Electronics for SI Digital Cylinder AX with reader on both sides

In the version with a reader on both sides, the SI Digital Cylinder AX is equipped with an electronic reader thumb-turn on the outside and an electronic reader thumb-turn on the inside. Both thumb-turns are independent of each other.

1. Create and configure the two electronic reader thumb-turns separately.
2. Program the two electronic reader thumb-turns separately.


You create new locking devices in the integrator system. The following points should be adjustable or at least visible:

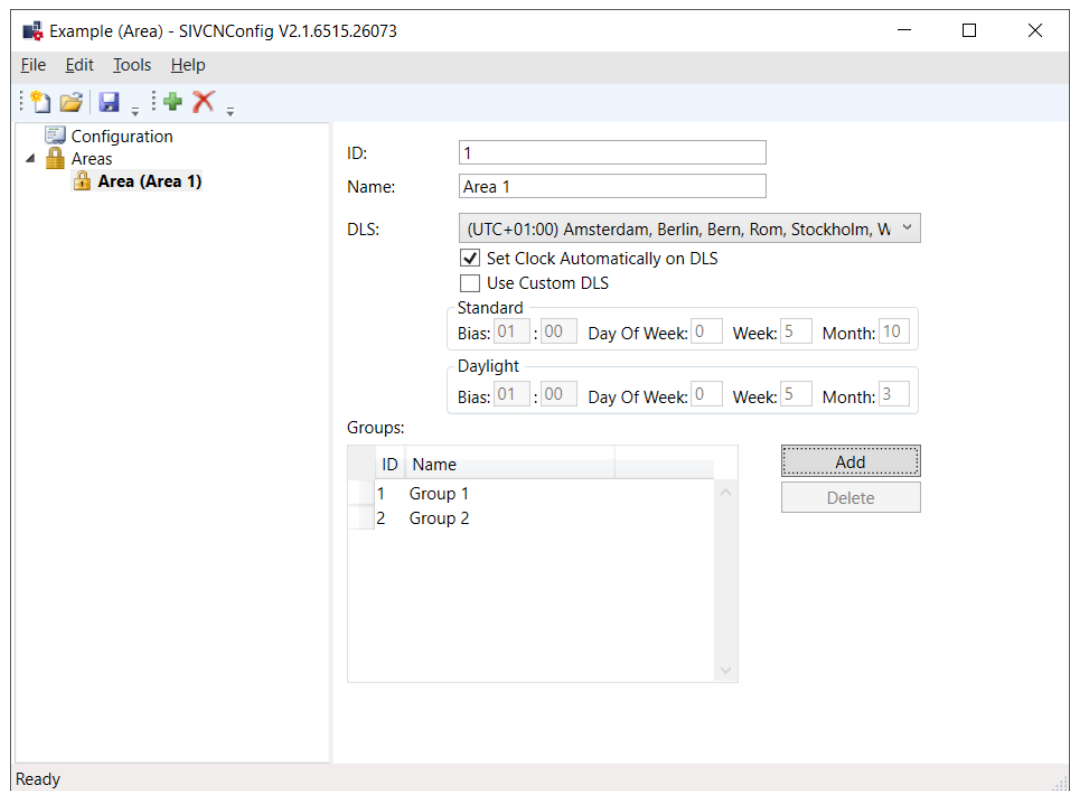
- ▣ Hardware properties
- ▣ Authorisations
- ▣ Tasks
- ▣ Access lists
- ▣ Status:
  - ▣ Programmed
  - ▣ Pending
  - ▣ Error
  - ▣ Battery warning
  - ▣ Deactivated
  - ▣ ...

Make sure that your system documentation is consistent and update it if necessary (see [Document system \[▶ 12\]](#)).

1. Open the SmartIntego-ConfigTool.
2. Via | File | select the entry **New**.
3. Assign a project name.

### Create areas


- ✓ Integrator system open.
  - ✓ Project created.
1. Select the area in the navigation area and click on the  button (green plus).
    - ➞ The window for creating areas opens.

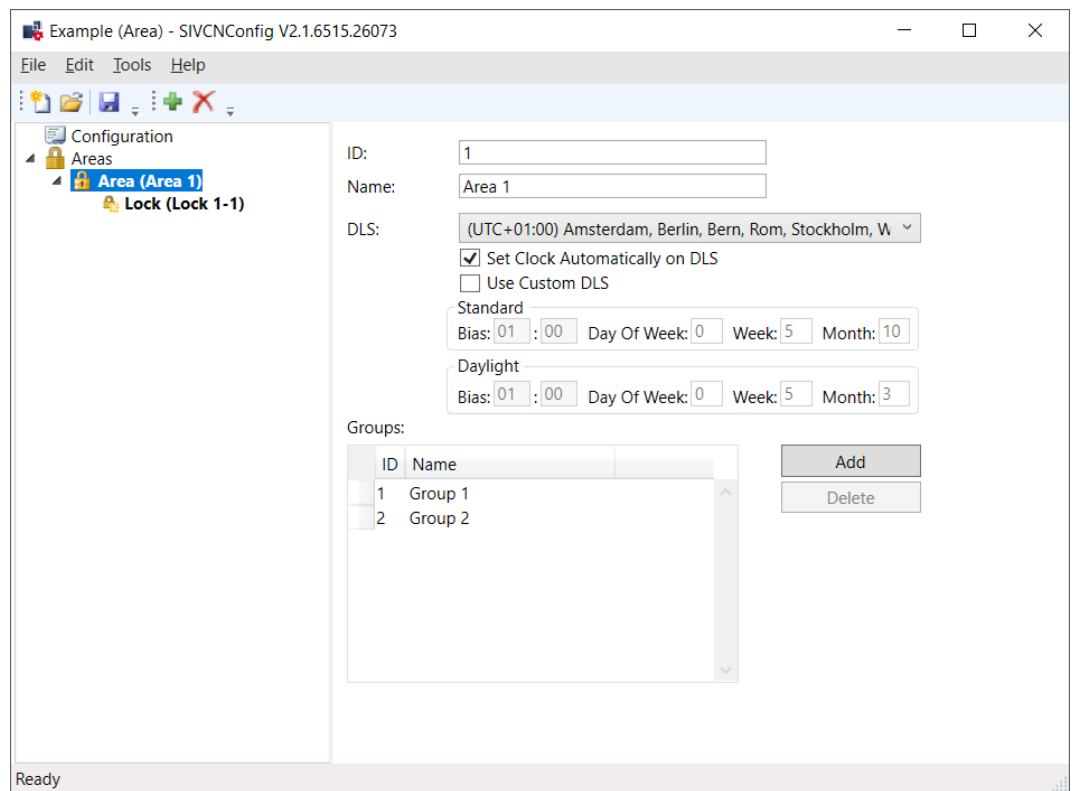


2. Assign an area ID.
3. Set your time zone and the daylight saving time in the ▼ DLS (Daylight Saving) (Daylight Saving) drop-down menu or set the time manually.
4. If necessary, create groups.

## Add locking devices

- ✓ Integrator system open.
- ✓ Project created.
- ✓ Area created.

1. Select the area in the navigation area in which you want to create the locks.
2. Click on the  button (green plus).
  - The window for creating locking devices opens.



➡ Locking device created in the selected area.

## Configuring locking devices

- ✓ Integrator system open.
- ✓ Project created.
- ✓ Area created.
- ✓ Locking device created.

1. Select the locking device that you want to configure in the navigation area.

➡ The window for configuring locking devices opens.

2. Assign a locking device name.

3. If necessary, set the Office Mode.

4. Create groups (separated by commas).

5. If necessary, make further settings.

6. With button **Add task** add the action "SI\_Tool: Task Program [offen]".

➡ Programming task created.

7. Save the XML file.

→ The XML file is later imported into the SmartIntego tool (SVCN).

## 5.10 Programming locking devices



### NOTE

#### Electronics for SI Digital Cylinder AX with reader on both sides

In the version with a reader on both sides, the SI Digital Cylinder AX is equipped with an electronic reader thumb-turn on the outside and an electronic reader thumb-turn on the inside. Both thumb-turns are independent of each other.

1. Create and configure the two electronic reader thumb-turns separately.
2. Program the two electronic reader thumb-turns separately.

- ✓ SmartIntego Tool (SVCN) opened.
- ✓ Project file loaded.
- ✓ Programming device (SI.SmartCD) is connected.

1. Manually import the locking device configuration using | File | and **Import** the entry **VCN Configuration**. If you have activated automatic import/export, import the XML file manually the first time you use it.  
→ XML transfer complete.
2. Select the locking device in the navigation area that you want to programme.
3. Select the assigned programming task.

4. Align the locking device and programming device with each other.

↳ Programming prepared.



5. Mark your programming device.
6. Click on the button **Execute task**.
7. Hold a blacklist card (contains all currently valid blacklist entries, comes from the integrator system) in front of the locking device (for locking devices that read on both sides: To both readers).  
↳ Blacklist in locking device updated.
8. If you have not activated automatic import/export (see ), select via and the entry *.Automatically save and load XML file for transmission between SmartIntego tool (SVCN) and integrator system [▶ 24]* File | **Export VCN Configuration**
9. Import the XML file into the integrator system.  
↳ Integrator system receives information that locking devices are programmed.
10. Check whether there is no longer any programming requirement for the locking device.  
↳ Locking device programmed.

## 6 Maintaining a SmartIntego project

During the operating time of your SmartIntego project, various maintenance tasks may occur, including

- Configuration changes (see *Changing the configuration of a locking device* [▶ 31] and *Setting up Escape and Return* [▶ 32])
- Replacement (see *Replacing the locking device* [▶ 35])
- Battery replacement (see *Battery change and battery replacement card* [▶ 41])
- Resetting (see *Resetting locking devices* [▶ 39])

### 6.1 Changing the configuration of a locking device



#### NOTE

##### Description of door management with SmartIntego Config Tool

The door management descriptions in this document refer to the SmartIntego Config Tool. Generally, your integrator has its own door management software, the operation of which may differ.

1. Read the documentation for the integrator system used.
2. Only use this chapter if your integrator absolutely needs the SmartIntego Config tool.



#### NOTE

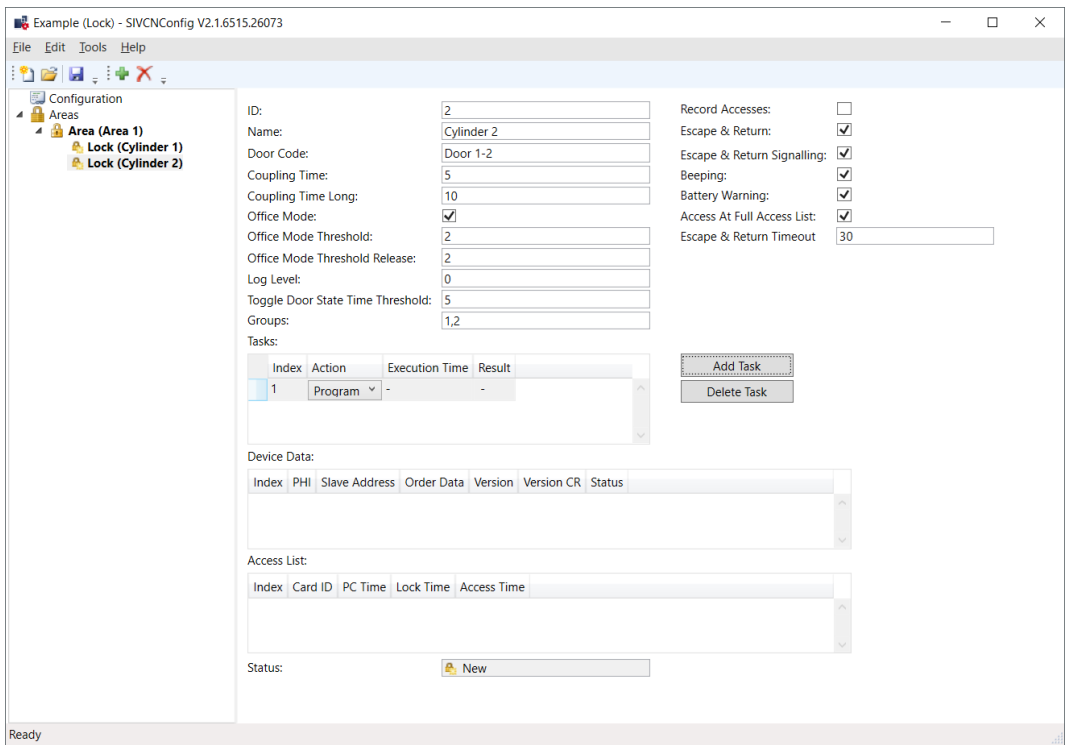
##### Electronics for SI Digital Cylinder AX with reader on both sides

In the version with a reader on both sides, the SI Digital Cylinder AX is equipped with an electronic reader thumb-turn on the outside and an electronic reader thumb-turn on the inside. Both thumb-turns are independent of each other.

1. Create and configure the two electronic reader thumb-turns separately.
2. Program the two electronic reader thumb-turns separately.

✓ Integrator system open.

1. Select the locking device.
2. Change the configuration as desired.
3. With button **Add task** add the action "SI\_Tool: Task Program [offen]".  
→ Programming task created.



- 4. Save the XML file.
- 5. Programme the locking device (see [Programming locking devices](#) [▶ 29]).
- 6. Hold a blacklist card (contains all currently valid blacklist entries, comes from the integrator system) in front of the locking device (for locking devices that read on both sides: To both readers).
  - ↳ Blacklist in locking device updated.
  - ↳ Configuration changed.

6.2 Setting up Escape and Return

You can set Escape & Return in the locking device configuration: ☒ Si-Tool Konfiguration: Escape & Return [offen] und ☒ SI-Tool Konfiguration: Escape & Return Signalling [offen]}.

3	Record Accesses:	<input checked="" type="checkbox"/>
Escape and Return Lock	Escape & Return:	<input checked="" type="checkbox"/>
Door 1-3	Escape & Return Signalling:	<input checked="" type="checkbox"/>
5	Beeping:	<input checked="" type="checkbox"/>
10	Battery Warning:	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Access At Full Access List:	<input checked="" type="checkbox"/>
2	Escape & Return Timeout	30





## NOTE

### Escape & Return: Legal situation

The Escape & Return Timeout can be between 1 s and 240 s. The use and configuration of Escape & Return may be subject to legal regulations (e.g. Norway).

- Inform yourself in advance about legal regulations.

To change the configuration:

- See [Add locking devices \[► 25\]](#), if you have not created your locking device yet.
- See [Changing the configuration of a locking device \[► 31\]](#), if you have created your locking device.

## 6.3 Import access list

The access list can be saved on the card and/or in the locking device. If the access list is stored on the locking device, you can read it using the SmartIntego tool (SVCN).



## NOTE

### Shared access list for cylinders with reader on both sides

Cylinders reading from both sides create a common access list for both readers.

### Preparation

- ✓ Integrator system open.
- 1. Select the locking device.
- 2. Create a task to read the locking device.
- 3. Click the button **Add task**, to add the task to the task list.
- 4. Save the XML file.
  - ↳ Readout prepared.

### Read

- ✓ SmartIntego Tool (SVCN) opened.
- ✓ Programming device (SI.SmartCD) is connected.
- 1. Manually import the locking device configuration using | File | and **Im-  
port** the entry **VCN Configuration**. If you have activated automatic im-  
port/export, import the XML file manually the first time you use it.
- 2. Select the locking device that you want to read out in the navigation area.

3. Select the imported task for reading out the locking device.
4. Align the locking device and programming device with each other.



5. Click on the button **Execute task**.
6. If you have not activated automatic import/export (see ), select via and the entry *.Automatically save and load XML file for transmission between SmartIntego tool (SVCN) and integrator system [▶ 24]* File | **Export** | **VCN Configuration**
7. Import the XML file into the integrator system.  
↳ Access list is displayed in the integrator system.

## 6.4 Set time on locking devices

Each programming resets the time of the locking devices. The clock in the locking devices can deviate from the real time by up to 15 minutes for technical reasons. With SmartIntego this has an effect on the:

- ❑ access lists (times of logged accesses differ)
- ❑ Start times of the battery measurement (Regularly between midnight and four o'clock)

Update the time of all locking devices annually. Once you synchronise the time of the locking devices, the locking devices will receive the time of the computer from which the synchronisation with the SmartIntego tool originates.

### Preparation

- ✓ Integrator system open.
1. Select the locking device.
  2. Create a task to set the time.
  3. Click the button **Add task**, to add the task to the task list.
  4. Save the XML file.

Set

- ✓ SmartIntego Tool (SVCN) opened.
- ✓ Programming device (SI.SmartCD) is connected.
- 1. Manually import the locking device configuration using | File | and **Im-  
port** the entry **VCN Configuration**. If you have activated automatic im-  
port/export, import the XML file manually the first time you use it.
- 2. Select the locking device that you want to read out in the navigation  
area.
- 3. Select the imported task for reading the locking device.
- 4. Align the locking device and programming device with each other.



- 5. Click on the button **Execute task**.
- 6. If you have not activated automatic import/export (see ), select via and  
the entry *.Automatically save and load XML file for transmission  
between SmartIntego tool (SVCN) and integrator system [▶ 24]* File |  
**Export VCN Configuration**
- 7. Import the XML file into the integrator system.
- ↳ Time updated in the locking device.

6.5 Replacing the locking device

A locking device may have to be replaced for various reasons:

Mechanical defect	The locking device is physically de- fective, but reacts to cards held in front of it.  For the procedure, see <i>Mechanical defect [▶ 36]</i> .
Electronic defect	The locking device no longer re- sponds to cards.  For the procedure, see <i>Electronic defect [▶ 37]</i> .



## NOTE

### Description of door management with SmartIntego Config Tool

The door management descriptions in this document refer to the SmartIntego Config Tool. Generally, your integrator has its own door management software, the operation of which may differ.

1. Read the documentation for the integrator system used.
2. Only use this chapter if your integrator absolutely needs the SmartIntego Config tool.

## 6.5.1 Mechanical defect

### Preparation

- ✓ Integrator system open.
1. Select the defective locking device.
  2. Create a task to reset the defective locking device.
  3. Click the button **Add task**, to add the task to the task list.
  4. Create a task to programme the replacement locking device.
  5. Click the button **Add task**, to add the task to the task list.
  6. Save the XML file.

### Reset

- ✓ SmartIntego Tool (SVCN) opened.
  - ✓ Replacement locking device exists.
  - ✓ Programming device (SI.SmartCD) is connected.
1. Manually import the locking device configuration using | File | and **Import** the entry **VCN Configuration**. If you have activated automatic import/export, import the XML file manually the first time you use it.
  2. Select the imported task to reset the defective locking device.
  3. Align the locking device and programming device with each other.



4. Click on the button **Execute task**.
5. Select the imported task for programming the replacement locking device.

6. Align the locking device and programming device with each other.



7. Click on the button **Execute task**.
8. Hold a blacklist card (contains all currently valid blacklist entries, comes from the integrator system) in front of the locking device (for locking devices that read on both sides: To both readers).  
↳ Blacklist in locking device updated.
9. If you have not activated automatic import/export (see ), select via and the entry *.Automatically save and load XML file for transmission between SmartIntego tool (SVCN) and integrator system [▶ 24]* | **File | Export | VCN Configuration**
10. Import the XML file into the integrator system.  
↳ The locking device is displayed with new data.

## 6.5.2 Electronic defect

### Preparation

- ✓ Integrator system open.
1. Select the faulty locking device.
  2. Mark the locking device as defective (e.g. in the name of the locking device, i.e. rename).
  3. Create an exchange lock.
  4. Configure the replacement lock.
  5. Create a task to program the replacement lock.
  6. Click the button **Add task**, to add the task to the task list.
  7. Save the XML file.

### Programming replacement locking device

- ✓ SmartIntego Tool (SVCN) opened.
  - ✓ Replacement lock available.
  - ✓ Programming device (SI.SmartCD) is connected.
1. Manually import the locking device configuration using | **File |** and **Im-  
port** the entry **VCN Configuration**. If you have activated automatic im-  
port/export, import the XML file manually the first time you use it.

2. Select the imported task for programming the replacement lock.
3. Align the locking device and programming device with each other.



4. Click on the button **Execute task**.
5. Hold a blacklist card (contains all currently valid blacklist entries, comes from the integrator system) in front of the locking device (for locking devices that read on both sides: To both readers).
  - ↳ Blacklist in locking device updated.
6. If you have not activated automatic import/export (see ), select via and the entry *.Automatically save and load XML file for transmission between SmartIntego tool (SVCN) and integrator system [▶ 24]* File | **Export VCN Configuration**
7. Import the XML file into the integrator system.
  - ↳ Locking device is displayed with new data.

Please also note:

- Authorisations/group memberships may still need to be set for the new locking device.
- If necessary, the cards must first be sent to the updater so that they are familiar with the new locking device.
- If the entry for the old locking device is no longer required, it can be deleted and the defective locking device disposed of properly.

## 6.6 Performing an emergency opening

You can also temporarily engage the locking device with an emergency opening using the SmartIntego tool (incl. the project file) and the SI.SmartCD. This type of emergency opening requires less energy and can still function even if the card reader of the locking device no longer functions due to low batteries.

Perform an emergency opening with the programming device on such discharged locking devices and replace the batteries (see *Battery change and battery replacement card [▶ 41]*).

Create an emergency opening task in the integrator system. Don't export this task for all locking devices because the export works like a master key.

## Preparation

- ✓ Integrator system open.
- 1. Select the locking device that you want to open.
- 2. Create an emergency opening task for the defective locking device.
- 3. Click the button **Add task**, to add the task to the task list.
- 4. Save the XML file.

## Performing an emergency opening

- ✓ SmartIntego Tool (SVCN) opened.
- ✓ Programming device (SI.SmartCD) is connected.
- 1. Manually import the locking device configuration using | File | and **Import** the entry **VCN Configuration**. If you have activated automatic import/export, import the XML file manually the first time you use it.
- 2. Select the imported task to perform an emergency opening of the defective locking device.
- 3. Align the locking device and programming device with each other.



- 4. Click on the button **Execute task**.
  - ↳ Emergency opening performed.
- 5. If you have not activated automatic import/export (see ), select via and the entry *.Automatically save and load XML file for transmission between SmartIntego tool (SVCN) and integrator system [▶ 24]* | File | **Export VCN Configuration**
- 6. Import the XML file into the integrator system.
  - ↳ The locking device is displayed with new data.

## 6.7 Resetting locking devices

If possible, reset locks with the integrator system (recommended). This means that the lock is also displayed as reset in the integrator system.

Alternatively, use the locking system password to reset the locks.

## 6.7.1 Reset with integrator system

### Preparation

- ✓ Integrator system open.
- 1. In the navigation area, select the locking device that you want to reset.
- 2. Create a task to reset the locking device.
- 3. Click the button **Add task**, to add the task to the task list.
- 4. Save the XML file.

### Reset

- ✓ SmartIntego Tool (SVCN) opened.
- ✓ Programming device (SI.SmartCD) is connected.
- 1. Manually import the locking device configuration using | File | and **Im-**  
**port** the entry **VCN Configuration**. If you have activated automatic im-  
port/export, import the XML file manually the first time you use it.
- 2. Select the imported task to reset the defective locking device.
- 3. Align the locking device and programming device with each other.



- 4. Click on the button **Execute task**.
  - ↳ Reset performed.
- 5. If you have not activated automatic import/export (see ), select via and the entry *.Automatically save and load XML file for transmission between SmartIntego tool (SVCN) and integrator system [▶ 24]* | File | **Export VCN Configuration**
- 6. Import the XML file into the integrator system.
  - ↳ Locking device is displayed as unprogrammed.
  - ↳ Locking device can be deleted.

## 6.7.2 Reset with locking system password

- ✓ SmartIntego Tool (SVCN) opened.
- ✓ Programming device (SI.SmartCD) is connected.
- 1. Create a new project.
- 2. Assign a project name (e.g. Reset).
- 3. Assign a project password.



4. Enter the locking system password used in the locking device as the locking system password.



#### NOTE

##### Loss of passwords

Your passwords are the basis for managing your locking system. Lost or publicly known passwords are a serious security risk and/or lead to loss of control over the system.

1. Make a note of your passwords.
  2. Store your passwords in a safe place.
- 
5. Save the project file (\*.ikp).
  6. Align the locking device and programming device with each other.



7. Via | Tools | and **Card Reader** select the entry **Read unknown lock**.  
↳ Locking device is read out.
8. Click on the button **Reset**.  
↳ Locking device is reset.

#### NOTE

##### The integrator system is not up to date

If you reset the locking device with the locking system password, the integrator system does not know that the locking device has been reset. The state stored there differs from the real state.

- Please refer to the documentation of the integrator system for the further procedure.

## 6.8 Battery change and battery replacement card

Battery warnings are displayed in the integrator system or on the locking device itself.

## 6.8.1 Creating a battery replacement card

You can start battery measurements manually with a battery replacement card.

It can be used independently of the SmartIntego project.

You no longer need a battery replacement card for AX locking devices.

- ✓ Empty MIFARE Classic card available (memory capacity not relevant).
- ✓ SmartIntego Tool (SVCN) opened.
- 1. Place the battery replacement card on the SI.SmartCD.
- 2. Create the battery replacement card using | Tools |, [Service Cards](#) and [Create Battery Over Change Card](#).
- 3. Follow the instructions.

## 6.8.2 Battery replacement

1. Open the locking device.
2. Change the battery as described in the quick guide or in the manual.  
(Remove the old batteries and insert the new batteries).
3. Hold the battery replacement card in front of the locking device (no longer necessary for AX).
  - ↳ Battery measurement is performed manually immediately.
  - ↳ Integrator system no longer receives false battery warnings.
4. Test the function of the lock with any authorised identification medium.
  - ↳ Battery replaced.

You can also temporarily engage the locking device with an emergency opening using the SmartIntego tool (incl. the project file) and the SI.SmartCD. This type of emergency opening requires less energy and can still function even if the card reader of the locking device no longer functions due to low batteries.

## 6.9 Creating and restoring a backup

Regular backups reduce the workload if the project file is lost, damaged or otherwise unusable.

The backup of the SmartIntego system is a copy of the project file (\*.ikp). This file contains relevant hardware configuration data, e.g:

- Passwords
- Card configurations
- Locking device information from the last XML import
- Lock information from the last readout of the locking device

It is protected with the project password.

## 6.9.1 Creating a backup

Copy the project file (\*.ikp) to a safe place and protect it from loss.

Your IT department can help you develop a backup strategy.

Create a backup when:

- you have created a new project.
- you have made global changes (map configuration).

## 6.9.2 Restoring a backup

If you encounter problems with the project file, you can import an existing backup or extract the project file from an existing XML configuration file exported from the SmartIntego tool (SVCN).

Both files are password protected. You still need the project password to recover/edit the project file.



### NOTE

#### Restoring old versions

The hardware configuration in old backup files may differ from the current hardware configuration.

1. You still need the project password to recover/edit the project file.
2. If necessary, correct existing differences manually.

#### Restoring a project with backup file

- ✓ Backup file available.
- 1. Copy the last backup file known to work into your working directory.
- 2. Open the backup file with the SmartIntego SVCN tool.
- 3. Enter the project password.
- ↳ Configuration loaded at time of backup.

#### Extracting a project from XML file

- ✓ XML file available (exported from SmartIntego SVCN tool).
- 1. Open the XML file with the SmartIntego Config Tool.
- 2. Via | File | and **Export** select the entry **SmartIntego Project File**.
  - ↳ Project file (\*.ikp) restored.
- 3. Continue restoring the backup with the extracted project file.



## NOTE

### Loss of the project file (\*.ikp)

If the project file is lost despite a backed up environment and backup, you will no longer be able to continue working with the existing project.

1. Reset the locking devices with the locking system password.
2. Then reprogram the entire locking system.

## 7 Changelog

Versions	Changes	Chapter
01.00	FIRST RELEASE	...
01.01	Bugfixes	Documents
01.02	Bugfixes	Documents
01.03	Restructuration of the document (document divided in System de- scription and Step-by- Step Guide)	Documents
	Additional information blacklist handling	<div> <div></div> <i>Programming locking devices [► 29]</i> </div> <div> <div></div> <i>Changing the configuration of a locking device [► 31]</i> </div> <div> <div></div> <i>Replacing the locking device [► 35]</i> </div>
	Adjustments regarding support for AX com- ponents	Documents
01.04	Card configuration	Documents

## 8 Help and other information

### Information material/documents

You will find detailed information on operation and configuration and other documents on the website:

[www.smartintego.com/int/home/infocenter/documentation](http://www.smartintego.com/int/home/infocenter/documentation)

### Software and drivers

Software and drivers can be found on the website:

[www.simons-voss.com/en/service/software-downloads.html](http://www.simons-voss.com/en/service/software-downloads.html)

### Declarations of conformity

You will find declarations of conformity and other certificates on the website:

[www.simons-voss.com/en/certificates.html](http://www.simons-voss.com/en/certificates.html)

### Hotline

Our hotline will be happy to help you (landline, costs depend on provider):

+49 (0) 89 / 99 228 333

### Email

You may prefer to send us an email.

[si-support-simonsvoss@allegion.com](mailto:si-support-simonsvoss@allegion.com)

### FAQs

You will find information and help in the FAQ section:

[faq.simons-voss.com/otrs/public.pl](http://faq.simons-voss.com/otrs/public.pl)

### Address

SimonsVoss Technologies GmbH  
Feringastr. 4  
D-85774 Unterfoehring  
Germany



## This is SimonsVoss

SimonsVoss, the pioneer in remote-controlled, cable-free locking technology provides system solutions with a wide range of products for SOHOs, SMEs, major companies and public institutions. SimonsVoss locking systems combine intelligent functionality, high quality and award-winning design Made in Germany.

As an innovative system provider, SimonsVoss focuses on scalable systems, high security, reliable components, powerful software and simple operation. As such, SimonsVoss is regarded as a technology leader in digital locking systems.

Our commercial success lies in the courage to innovate, sustainable thinking and action, and heartfelt appreciation of employees and partners.

SimonsVoss is a company in the ALLEGION Group, a globally active network in the security sector. Allegion is represented in around 130 countries worldwide ([www.allegion.com](http://www.allegion.com)).

### Made in Germany

SimonsVoss is truly committed to Germany as a manufacturing location: all products are developed and produced exclusively in Germany.

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