

**MANUAL LSM –
VN SERVER**

Version: May 2011

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NOTE:

In the explanations of the various functions of the system, the focus is on operating the software. Please refer to the individual product manuals for descriptions of the individual product features, fittings and functions.

It is important to comply with the product approvals and system requirements when installing and operating the products. SimonsVoss accepts no liability and cannot provide support for installation or operation which deviates from these instructions.

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The editors of this LSM manual took great care when compiling this text. However we cannot guarantee that it is free from errors. The LSM editing team is not liable for technical or printing errors in this manual. The descriptions provided in this manual are not of a guaranteed quality in the eyes of the law.

Please send any corrections or suggestions for improvement to Info@simons-voss.de.

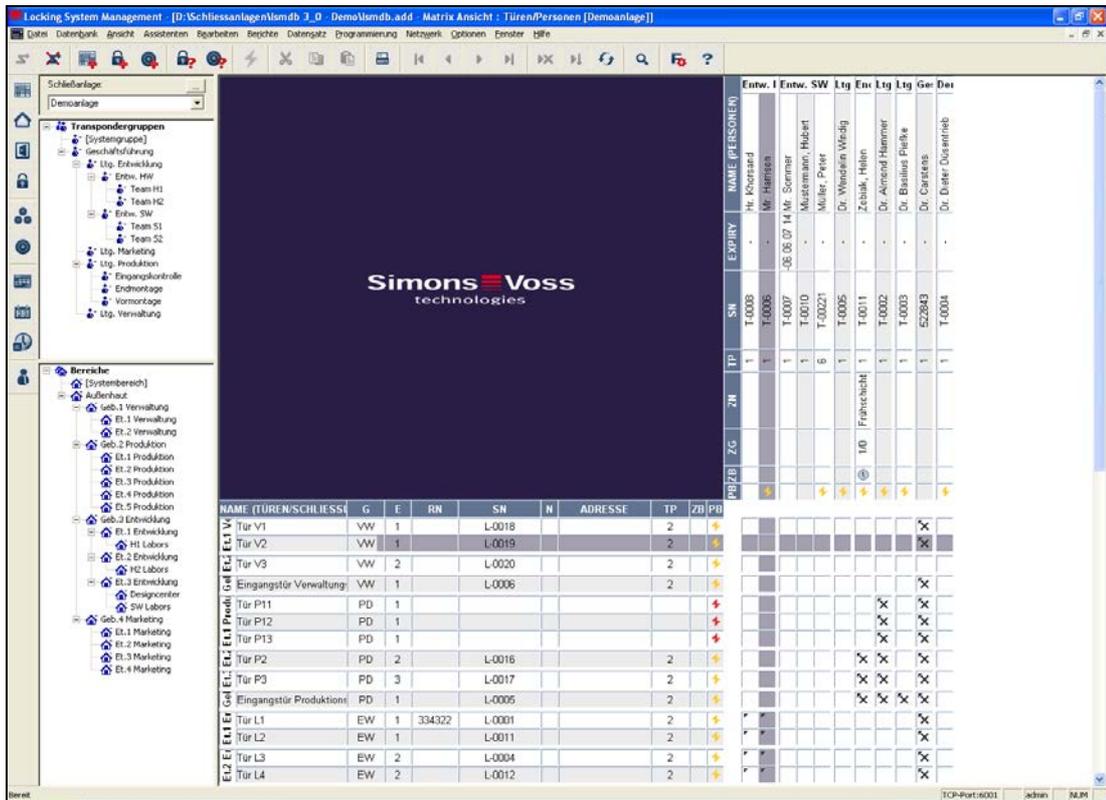
Thank you in advance for your support.

More information about SimonsVoss products can be found online at WWW.SIMONS-VOSS.DE

This manual applies to software without functional limitations. Functions or views in a customer's specific installation may deviate from these due to the software modules activated.

1.0 INTRODUCTION

Locking System Management (LSM) from SimonsVoss is a database-supported software package that enables you to create, manage and control complex locking plans efficiently. This documentation serves as a guide to help you structure and configure your locking plan. It will also assist you later on when it comes to monitoring and controlling the locking system, making management of the system easier.



1.1. IMPORTANT NOTE

SimonsVoss Technologies AG shall assume no liability for damage caused by incorrect assembly or installation.

Access through a door may be denied if components are incorrectly assembled or programmed. SimonsVoss AG shall assume no liability for the consequences of incorrect installation, such as denied access to injured persons or persons at risk, damage to property or any other form of damage.

2.0 UNDERSTANDING THIS MANUAL

➔ MENU ITEMS

The LSM menu items are indicated in this manual by the ➔ symbol.

EXAMPLES

- ➔ Edit
- ➔ Area

HEADINGS AND CHECKBOXES

Headings and checkboxes shown in the screenshots are differentiated by the use of inverted commas.

EXAMPLES

- “User Groups”
- “Areas”

BUTTONS

Buttons shown in the screenshots are highlighted in grey.

EXAMPLES

- OK
- Apply

KEY COMBINATIONS

The key combination you can use to start the required functions is shown in bold.

Ctrl+Shift+X

PATH SPECIFICATIONS

If an instruction refers to a directory on a drive, the path is provided in italics.

EXAMPLE

C:\Program files\SimonsVoss\LockSysGui

NOTE

The specification *[CDROM]* is a variable and describes the letter identifying the drive of the CDROM drive on the computer (e.g. “D”) on which installation is to be carried out.

3.0 ICONS

NOTE

Icons and entries in the menu only become active once an associated object is highlighted.

You can use Shift or Ctrl to highlight multiple table entries at the same time.

By double-clicking in the table you can jump to the object's properties.

EDIT TOOLBAR

Active icon	Inactive icon	Function	Shortcut
		Edit locking system	Ctrl+Shift+A
		Area	Ctrl+Shift+S
		Edit door	Ctrl+Shift+D
		Edit lock	Ctrl+Shift+C
		Edit transponder group	Ctrl+Shift+G
		Editing transponders	Ctrl+Shift+O
		Edit public holiday list	
		Edit public holiday	
		Edit time zones	
		Edit person	Ctrl+Shift+P

3.1. STANDARD TOOLBAR

Active icon	Inactive icon	Function	Shortcut
		Log on	
		Log off	
		New locking system	
		New lock	
		New transponder	
		Read lock	Ctrl+Shift+K
		Read transponder	Ctrl+Shift+R
		Program	
		Cut	
		Copy	
		Paste	
		Print matrix	
		First data record	
		Previous data record	
		Next data record	
		Last data record	
		Remove	
		Apply	
		Update	
		Browse	
		Filter not active	
		Filter active	
		Info	

3.2. AREAS / TRANSPONDER GROUP VIEW



A black cross with a circle inside it represents group authorisation.



A grey cross with a circle inside it stands for “inherited authorisation.

3.3. DOORS / PERSONS VIEW



Authorisation that has been enabled but not yet programmed into the lock



Authorisation that has been programmed into the lock



Authorisation that has been removed and not yet transferred to the lock



Authorisations that have not yet been programmed which comply with the group structure of the locking system, in other words that originate from the group view, are indicated by a small black triangle



Programmed authorisations that comply with the group structure of the locking system, in other words that originate from the group view, are indicated by a small black triangle



Removed authorisations that comply with the group structure of the locking system and have not yet been programmed



Authorisations that do not comply with the group structure of the locking system are indicated simply by a cross, with no black triangle (individual authorisation).



Authorisations that have been subsequently withdrawn, contrary to the group structure of the locking system, feature a black triangle but no cross indicating authorisation.



White (grey) box: authorisation can be enabled here.



Checked (greyed out) box: this field no longer belongs to the locking system and no authorisations can be enabled. You have no write permission or the locking plan blocks this box (e.g. when a transponder is deactivated).

3.4. GROUP AUTHORISATION TREE VIEW



Manually enabled (black)



Directly inherited (green)



Indirectly inherited – inherited via subordinate group (blue)



Directly and indirectly inherited (blue / green)

3.5. PROGRAMMING REQUIREMENT

EXPLANATION

There are various reasons why it may be necessary to program a transponder or lock. The programming lightning symbol is shown in different colours to indicate the different reasons why programming is required.

DISPLAY



Simple programming requirement for components



Transponder:

Validity expired
Deactivated

Lock

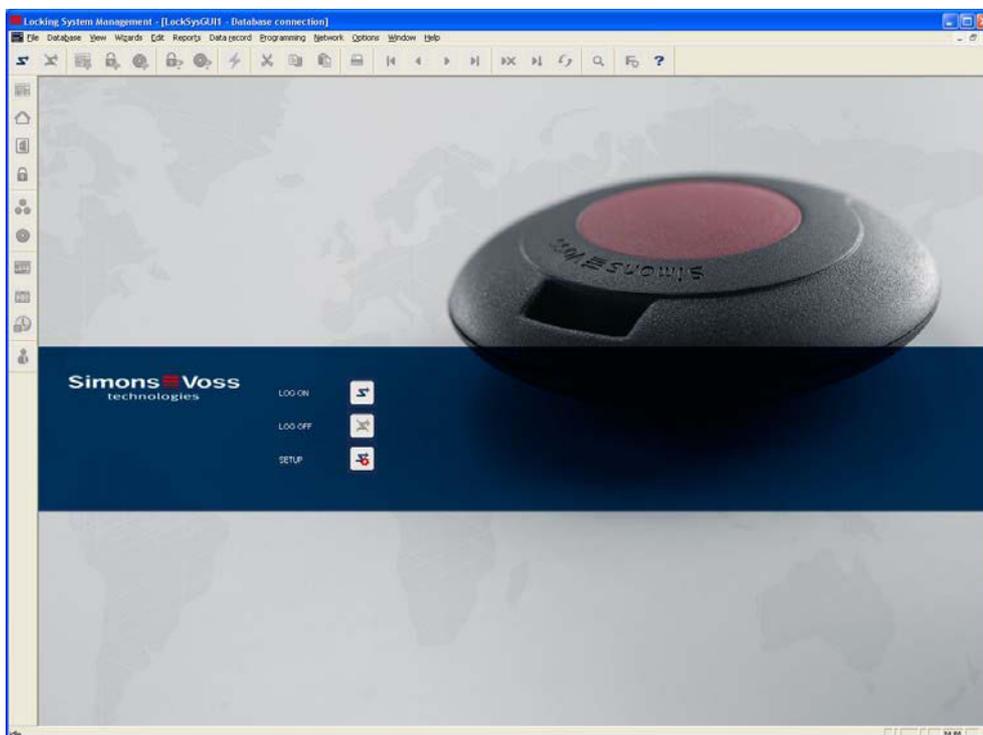
Only overall locking level assigned
Not assigned to any door
Not assigned to any locking system
Door without lock



Programming requirement on a lock after creating a replacement transponder in the overlay mode of a G1 system

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4.0 SETTING UP AND OPENING THE DATABASE



START SCREEN



Log on to the database, authentication then takes place when user data is entered

Log off the database

Settings for the database connection

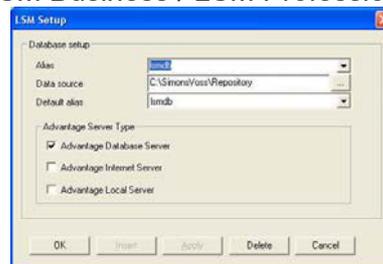
In the Setup dialogue you can set the connection to the database you want.

Your locking system administrator provides you with the necessary information.

LSM Basic



LSM Business / LSM Professional



NOTE

The software access data should be kept safe according to the valid IT guidelines and not made accessible to unauthorised persons.

5.0 INSTALLATION

5.1. SOFTWARE INSTALLATION

The VN server is part of the CommNode Server and is included in this installation routine as a component.

GENERAL

The CommNode Server is required to distribute tasks to the other network nodes and to forward feedback to the database. This can also be done using time-controlled tasks.

INSTALLATION

PROCEDURE

- Left-click the Windows **Start** button
- Select the **Run** menu item
- Enter and confirm the command
*[CDROM]:\ Software\
LSM_3.0_xxx\[language]\commNode_setup_3_0_[language].exe*
- in the “Open” dialogue field
- Follow the instructions
- Following successful installation, run the file “install_CommNodeSvr.bat” from the installation folder *C:\Programme\SimonsVoss\CommNodeSvr_3_0*.
- Enter and confirm the command *services.msc* in the “Open” dialogue field
- Right-click the “SimonsVoss CommNode Server” service “Properties”
- Check whether the “SimonsVoss CommNode Server” service is launched

CREATING CONFIGURATION FILES

GENERAL

The configuration files are required to inform the “SimonsVoss CommNode Server” service of which devices are connected and how it can access the database.

PROCEDURE

- Launch LSM
- Connect**
- Log on with user name and password
 - Network
 - Communication nodes
- New**
- Save configuration data
- Create and save **Config. files**
- Copy files (netcfg.xml, appcfg.xml, msgcfg.xml) to the installation directory of the “SimonsVoss CommNode Server”
- Left-click the Windows **Start** button
- Select the **Run** option
- Enter and **confirm** the command “services.msc” in the “Open” dialogue field

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Restart the “SimonsVoss CommNode Server” service

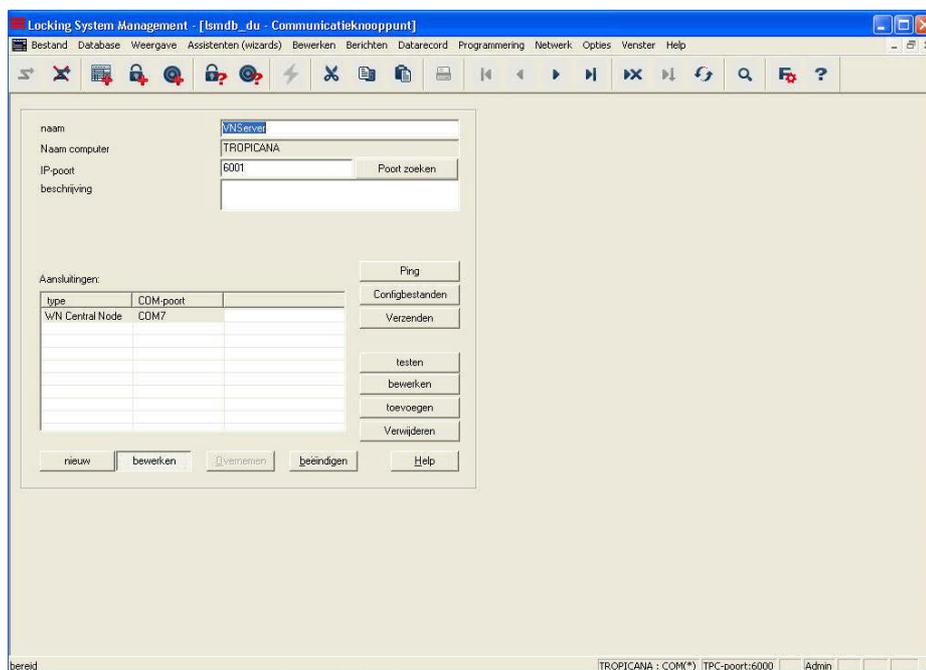
NOTE

The files can also be created on any computer with GUI and then saved across the network.

Each time the configuration of a CommNode is changed, the config. files must be recreated and copied or transferred to the CommNode directory.

The service must be stopped and restarted manually if major changes, such as changing the name of the computer, take place.

The user who starts the “SimonsVoss CommNode Server” service must be authorised to communicate across the network



EXPLANATION

- “Name” → Name of the local connection in the software
- “Computer name” → Name of computer on which the GUI is installed
- “IP port” → IP port which is used for communication
- “Description” → Free field for describing the connection
- “Connections” → Local connections via which the programming devices are addressed
- Ping → Tests the connection to LockSysGui.exe
- Config. files → Creates the configuration files
- Test → Tests the connection to the programming device
- Edit → Connection can be edited
- Add → Connection can be added

Remove

→ Connection can be removed

NOTE

The specification *[CDROM]* is a variable and describes the letter identifying the drive of the CDROM drive on the computer (e.g. "D") on which installation is to be carried out.

The specification *[SYSTEM]* is a variable and describes the letter identifying the drive on which the "Programs" system folder is located.

An environment variable "*COMPUTER NAME*" which contains the correct name of the computer must exist on the computer on which the CommNode Server or a CommNode runs.

If network messages are set up or planned as responses, the service must not run on the system account, but on a valid network account only. This account must be able to log on to the computers on which the EventAgent component is used. This can be enabled by assigning it to the domain.

Set the start type for the service to automatic.

If the advantage database server (service) has to be powered down (stopped) (e.g. for data backup purposes), the SV CommNodeSvr service must first be stopped. Once the advantage database server (service) is restarted, you can also restart the SV CommNodeSvr.

RECOMMENDATION

If the advantage database server and the CommNode Server are running on the same computer (recommended by SimonsVoss), a service dependency can be set. A registry entry must be adapted for this.

Call up *regedt32.exe* and go to the key:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\SVCommNodeSvr

Generate an entry called "*DependOnService*" of the type: *REG_MULTI_SZ*

Under "Data:", enter the name of the advantage database server service:

Advantage (see Microsoft Knowledge Base Article - 193888).

5.2. COMMUNICATION

The VN server and CommNode Server are installed on one computer. They communicate with one another via TCP/IP port 4000 (configuration can be changed). SVVNSrv.exe is the server for this, i.e. it opens the port, and CommNodeSvr.exe is the client, it connects to the port. You CANNOT use the normal CommNode or CommNode agent instead of the CommNode Server.

5.3. ACCESS RIGHTS

The VN server is started by the CommNode Server, which is why it runs under the same log-on name as the CommNode Server. By default, it is the system account. The VN server must have written access to the file VNSrv.svd in the installation directory. It must therefore be ensured that the user under which the CommNode Server is running has written access to the file VNSrv.svd. In addition, the VN server logs its activities in the file svnlog.txt. The user must also have written access to this file.

5.4. UPDATE

IMPORTING BEFORE INSTALLATION

If a VN server is being updated, an import / synchronisation must always be performed in advance otherwise the feedback not imported will be lost.

RESETTING AND EXPORTING FOLLOWING INSTALLATION

During installation, the VN database VNSrv.svd is overwritten by a fresh file. In order to adjust the data records in the VNSrv.svd and the LSM, a “Reset VN specification” must be performed following each update / installation. All incomplete tasks must then be exported again.

6.0 CONFIGURATION

6.1. PROCEDURE

Create CommNode Server under Communication nodes
Configure G2 services
If additional task and event managers are required, configure these services ON THE SAME CommNode Server (under Network/Task manager)
Create XML configuration files and save them in the CommNode Server's installation directory (NOT THE VN SERVER!!!)
Launch CommNode Server
Configure network
Assign network nodes to the gateways
For the locks, the gateway option must be selected under Configuration/Data.
If the lock is already programmed, it must first be reset and then reprogrammed.

6.2. G2 SERVICES

The screenshot shows the 'G2 services' configuration window. It includes the following fields and options:

- VN server:** TROPICANA: VNServer
- TCP/IP port:** 4000
- VNServer installation path:** C:\Programms\SimonsVoss\WNServer\SVVNSrv.exe
- Import / synchronisation:**
 - Perform import / synchronisation at regular intervals from the start time
 - Synchronisation interval: 1440 Minutes
 - Start time: 01:00
- Export:**
 - Perform the prepared export at a certain time
 - Time: 05:00

Buttons at the bottom: Apply, Test, OK, Cancel.

TCP/IP port can be freely configured.
The port is opened by SVVNSrv.exe; it may not be blocked by the local firewall.
VN server installation path
This is the path for the file SVVNSrv.exe on the server, NOT ON THE CLIENT, where the LSM is installed. The browse function [...] therefore only works when the LSM is running on the server.
Synchronisation interval.
Time interval in minutes for automatic synchronisation of the gateways with

the server. The same function is performed automatically, as under ☞ File ☞ Virtual network ☞ Import / Synchronisation Export
This is where the time can be set when a predefined export of authorisation changes is to be performed to the gateways

Note

Gateways may not respond to transponders during synchronisation!

7.0 FUNCTION

7.1. TASKS

There are two different types of task: deactivations and authorisation changes.

DEACTIVATIONS

Deactivations are collective tasks, i.e. they apply to all G2 locks. Deactivation can be made up of two tasks: deactivation of a particular G1 TID and deactivation of a particular G2 TID. All deactivations are entered in the VN database. Two of these are then written to each gateway. During each synchronisation with the gateways, other TIDs are written in for deactivation following an internal pattern in the gateways. This means that only two TIDs for deactivation are on the gateway at any given time, but all marked TIDs are rotated over time.

AUTHORISATION CHANGES

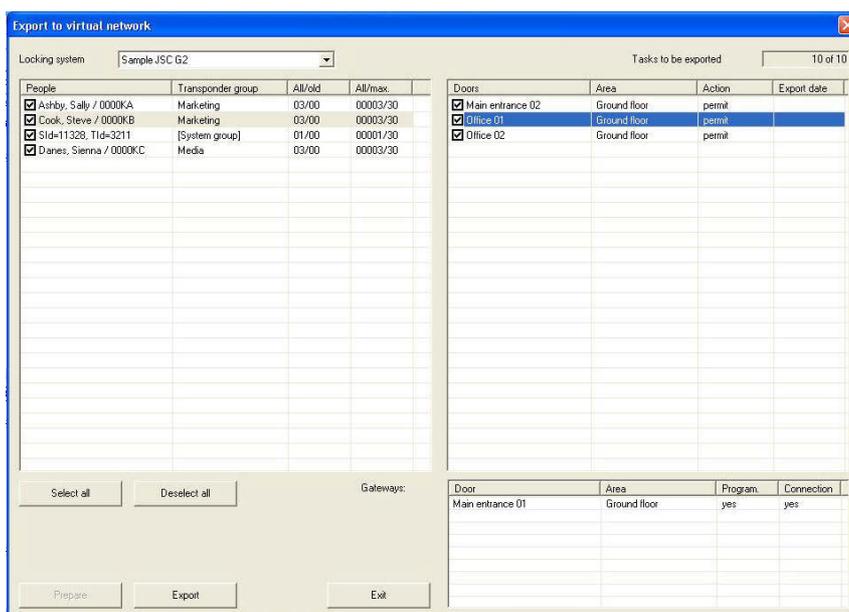
This includes assigning authorisations (operation “allow”) and withdrawing authorisations (operation “ban”). All authorisation changes which affect a transponder must be written to the transponder. At present, 30 authorisation changes for one transponder can be provided in the gateway at the same time. If you highlight a transponder in the left-hand list, all the tasks for this transponder are listed on the right. All authorisation assignments are listed first, followed by all authorisation withdrawals. Only the first 30 are automatically selected. Other tasks can be selected if necessary.

Only the deactivations and authorisation changes which have not yet been exported are available for exporting. If all of the listed tasks have already been exported, a new export cannot be undertaken. If you would like to perform an export, you must first perform a reset.

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7.2. EXPORT

Export to the virtual network is called up via **File** **Virtual network** **Export to V network**.



ALL/OLD COLUMN

All – the new and the old tasks
Old – the tasks for this transponder which have already been exported

ALL/MAX COLUMN

All – the new and the old tasks
Max – Maximum number of possible tasks per transponder (currently 30)

TASKS TO BE EXPORTED, X OUT OF Y

X – number of selected tasks
Y – total number of new tasks

GATEWAYS

Here, all the gateways are listed (in the target status, gateway option is selected).
Program column – whether the gateway is programmed (PHI is assigned)
Connection column – whether the gateway door is assigned to a network node

Note

If one of the conditions is not satisfied, the VN server cannot work with the gateway, which is why you get a warning message in this instance. If one of the conditions is not satisfied for all gateways, the export is denied.

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When the export is being performed, the following overview is displayed.

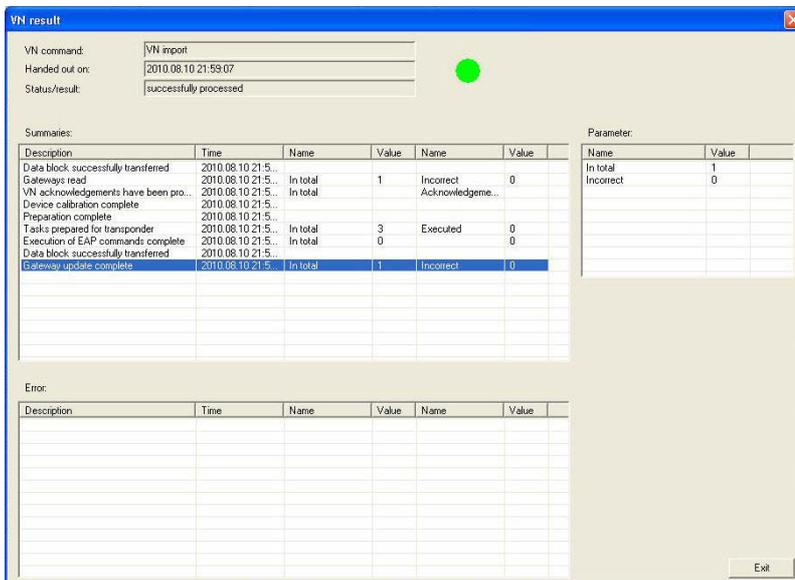
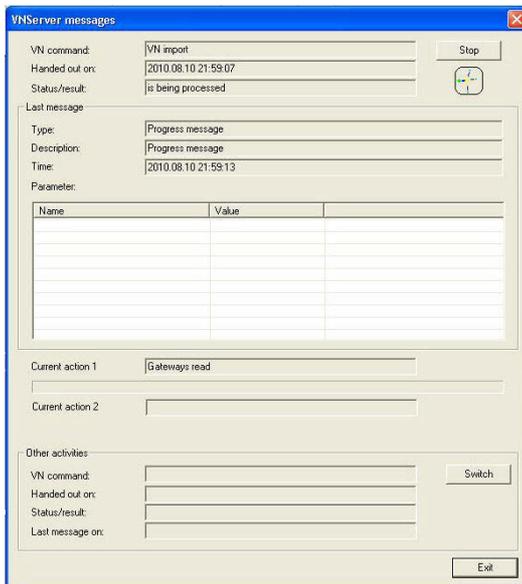
The screenshot shows a dialog box titled "VNServer messages" with a blue title bar and a close button (X) in the top right corner. The dialog is divided into several sections:

- Top section:** Contains three input fields: "VN command" with the value "VN import", "Handed out on:" with the value "2010.08.10 21:58:07", and "Status/result:" with the value "is being processed". To the right of these fields is a "Stop" button and a circular progress indicator.
- Last message section:** Contains three input fields: "Type:" with the value "Progress message", "Description:" with the value "Progress message", and "Time:" with the value "2010.08.10 21:58:13". Below these is a "Parameter:" label followed by a table.
- Table:** A table with two columns: "Name" and "Value". The table is currently empty.
- Current action section:** Contains two input fields: "Current action 1" with the value "Gateways read" and "Current action 2" which is empty.
- Other activities section:** Contains four input fields: "VN command", "Handed out on:", "Status/result:", and "Last message on:". To the right of these fields is a "Switch" button.
- Bottom right:** An "Exit" button.

7.3. IMPORT / SYNCHRONISATION

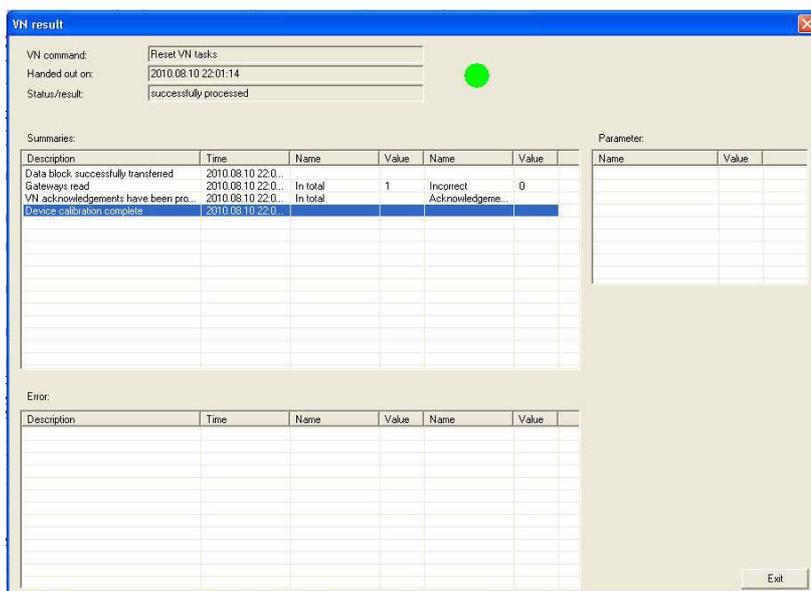
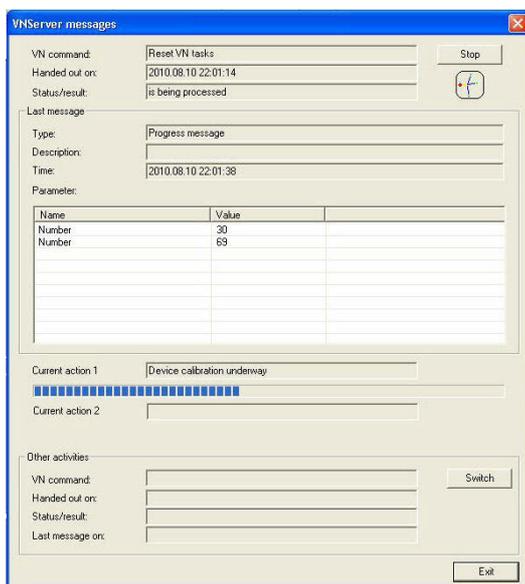
This function can either be performed manually via **File** **Virtual network** **Import / Synchronisation** or automatically on a regular basis according to the specified time interval. Several tasks are performed:

- Import of acknowledgements for completed tasks
- Processing of acknowledgements and entry into the LSM database
- Exporting to the gateways tasks which could not be transferred during previous exports (due to radio error, network error or because the gateway capacities were full)



7.4. RESET VN TASKS

This command deletes all exported VN tasks in the LSM database and the VN server database. This enables a clean restart. As described above, a VN reset must be performed following each upgrade to the CommNode Server. Another possible reason for calling up the VN reset is an authorisation change not being accepted by the transponder. Because this task is already exported but not completed, it cannot be exported again. This is where the VN reset helps. All incomplete tasks can then be re-exported.



7.6. CAPACITIES (DEPENDING ON THE COMPONENTS' VERSION STATUS)

TRANSPONDER

Authorisation changes

The transponder can record and process around 30 authorisation changes. To transfer the next 30 changes to the transponder, the following three steps must be performed:

1. Import the tasks that have already been completed
2. Export the 30 new changes
3. Activate the transponder on the gateway

Acknowledgements:

Up to a maximum of around 50 acknowledgements relating to performed deactivations can be saved. Out of these acknowledgements, only a maximum of 6 items per activation are transferred to the gateway.

SMART RELAIS (GATEWAY)

Authorisation changes: up to 2000 authorisation changes (e.g. 20 changes each for 100 transponders).

VN upstream packages for collection via the VN server. 3000 elements, e.g. acknowledgements relating to performed deactivations

The authorisation changes that could be transferred to the gateway are put into interim storage in the VN server. During the next communication with the gateway (export/import), an attempt will be made to transfer them again.

7.7. DISPLAY IN THE MATRIX

The status of the VN tasks is displayed in the matrix by means of a number in the bottom right of the authorisation box. Meaning of number:

0 – exported from the LSM into own database. VN server has not processed the task.

1 – VN server has accepted the task. It is not certain whether the task was also written to the gateway or not.

8.0 SERVICE AND SUPPORT

PRODUCT SUPPORT

If customers have any questions relating to products from SimonsVoss Technologies AG, the general support team will be happy to help:

Telephone +49 (0) 1805 78 3060

The product hotline does not offer support for the LSM Business and Professional software.

SOFTWARE SUPPORT

SUPPORT STANDARD

For customers with a chargeable Support Standard software agreement, the following support options are also available:

E-mail ism-support@simons-voss.de
Telephone +49 (0) 1805 57 3060

SUPPORT PREMIUM

For customers with a chargeable Support Premium software agreement, the following support options are also available:

E-mail ism-support@simons-voss.de
Telephone +49 (0) 1805 57 3060

Online support tool
Short call to LSM hotline
Launch LSM
➔ areas,
➔ SimonsVoss Online Support

9.0 GLOSSARY

This list is not exhaustive.

A

Access lists

Storage of transponder data in the locks with access control function. Please note the valid health and safety and data protection regulations when using this data.

Alerts

You can use alerts to promptly display certain statuses.

Area

The area is a combination of several doors.

Audit-compliant

A log is described as audit-compliant if the information about changes in a system in the database is archived such that it can be found again and traced, cannot be changed and is protected from falsification.

C

Checkbox

Option of selecting a property in the graphic interface

D

Database-supported

Software that stores data in a specified structure, the database. The locking system database includes the locking plan and the locking systems.

Door

You have the option of saving additional information on the door, which also manages the locks.

E

Emergency opening

Procedure for opening a lock without an authorised transponder. Emergency opening is protected by passwords.

Event

An event is a change in status reported to LSM via the network.

Export

During the export process, the selected locking plan data is transferred to the PocketPC.

F

Filter

A filter limits the view to data grouped / sorted by the selected property

G

Group authorisation

Group authorisations provide the option of authorising several transponders to several locks at the same time.

GUI

Graphical User Interface for operating the software.

H

Handheld

A handheld / PocketPC is a small computer that can be used for mobile programming.

Hierarchy

Hierarchy is a system of elements that are superordinate or subordinate to one another.

I

Import

During the import process the exported locks are transferred back to the locking system after processing.

L

Lock

Lock can be understood as meaning SimonsVoss products that evaluate an authorisation and enable opening.

Locking plan

The locking plan contains all the authorisation and system information, user management and may include several locking systems.

Locking system

The locking system structures the created transponders and doors and manages access authorisations.

LON

LON is a wired communication system for building automation. SimonsVoss components can network technology and products that meet this standard and therefore be operated online

LSM Mobile

Software for a handheld / PocketPC for mobile management and programming of the locking system.

M

Matrix

The matrix is the graphical view of authorisations in LSM.

N

Network

The SimonsVoss network enables the locks to be directly addressed without the programming device.

Network address

The network address allows you to clearly recognise each lock node, which is fitted on the door and stored in the software as being assigned to the door.

O

OMRON mode

All product versions can be operated in OMRON mode. If you would like the Smart Relay to transfer the transponder data to an external system and a remote opening command to be sent to the cylinder when transfer is activated from the Smart Relay by the external system, select this option on both the Smart Relay and the cylinder. Please note: If you use this configuration, it is no longer possible to open the cylinder using the transponder! Please refer to the Smart Relay Manual for an exact description.

Overlay mode

In overlay mode 8 transponder IDs are reserved for a created transponder and programmed into the authorised locks. If the first transponder is lost, the transponder ID is deactivated in the software and the new transponder is assigned the next transponder ID from the reserve TIDs. When the transponder is used to open a lock, the system recognises that this is one of the 7 reserve TIDs and deactivates the previous transponder ID.

P

Password

The security of passwords depends on the complexity and length of the password. Passwords are used to protect the locking system in several parts of the system

Period of validity

The period of validity is a time frame in which the transponder will function. The transponder is deactivated outside this time frame.

Person

Person allows you to store additional information about a user.

PocketPC

A handheld / PocketPC is a small computer that can be used for mobile programming of locks.

Programming requirement

Programming is required if there is a difference between the actual and target status, either due to a change in access authorisations or configurations.

Public holiday

National or company-specific holiday or period of several days off.

Public holiday list

A public holiday list is a compilation of selected public holidays and is used in the time zone plans.

R

Reserve

A reserve shows the number of G1 transponder IDs in the selected transponder group.

Reset

During the reset process the data on the object is deleted and the actual status of the software set to “unprogrammed”

S

Search

Search enables you to jump directly to an object in the locking system or database

T

Task list

List of tasks available in the system

Time group

A transponder can be assigned to a time group and when used in conjunction with a time zone plan, creates time-controlled access.

Time group name

Time group name is the pre-defined time group name assigned to the time group number of a transponder

Time group number

The time group number of a transponder can be set individually and is specified by the administrator. The transponder is approved or rejected in a lock time zone plan according to this group.

Time zone

Time zones are areas that can only be accessed by certain transponder groups at certain times.

Time zone plan

Object for time-controlled access on locks for areas and transponders. Public holiday lists can also be incorporated here.

Transponder

The transponder is the “electronic key” in the system 3060.

Transponder group

The transponder groups is a combination of several transponders for managing group rights.

W

WaveNet

WaveNet is an extremely flexible SimonsVoss network that can use both wired and wireless connections.

Write access

The right to make changes. Certain roles in LSM user management, such as using handheld devices, managing a network or configuring a network, require write access in the database before they can be performed.