MANUAL LSM
IT-ADMINISTRATION

VERSION: FEBRUARY 2012

SimonsVoss technologies

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IT ADMINISTRATION

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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.

SimonsVoss Technologies AG reserves the right to make modifications to the product without notice. Consequently, descriptions and representations in this documentation may vary from the most recent product and software versions. As a general principle, the original German version shall apply in the event of any doubt. Subject to errors and misspellings.

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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.

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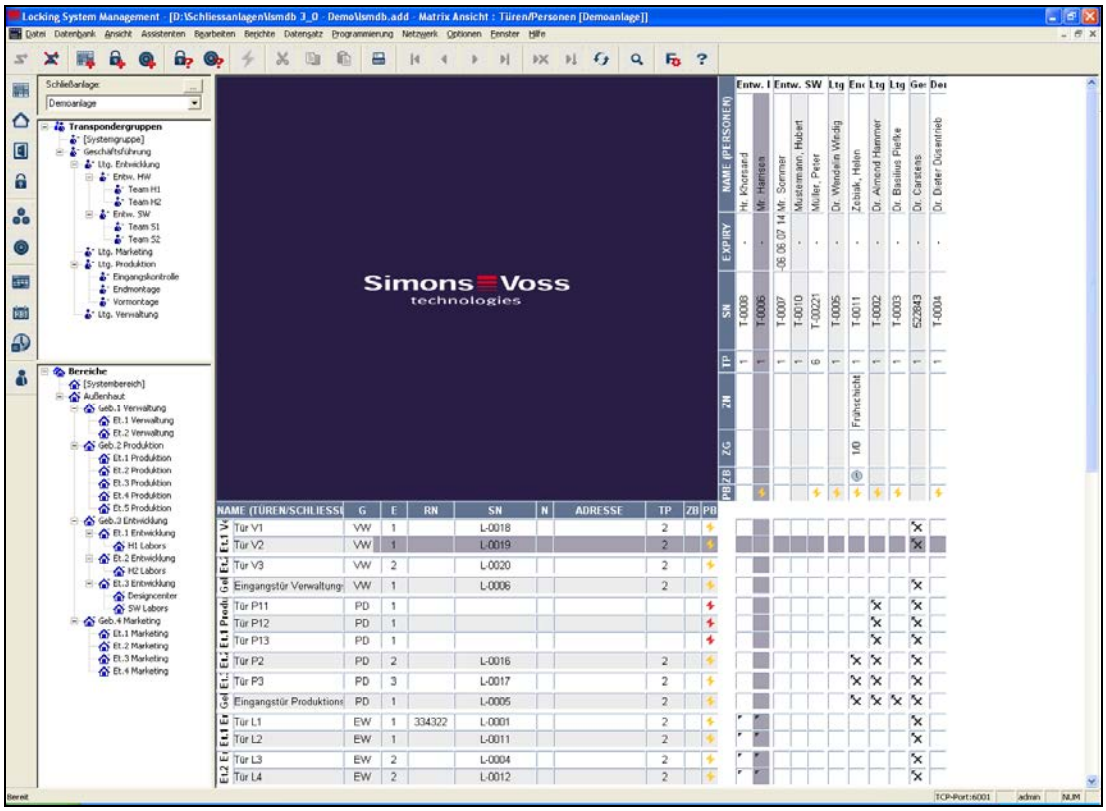
1.0 INTRODUCTION

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.

1.2. 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.

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1.3. 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.

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2.0 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**

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2.1. 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	

2.2. 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.

2.3. 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).

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2.4. GROUP AUTHORISATION TREE VIEW

Manually enabled (black)

Directly inherited (green)

Indirectly inherited – inherited via subordinate group (blue)

Directly and indirectly inherited (blue / green)

2.5. 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:

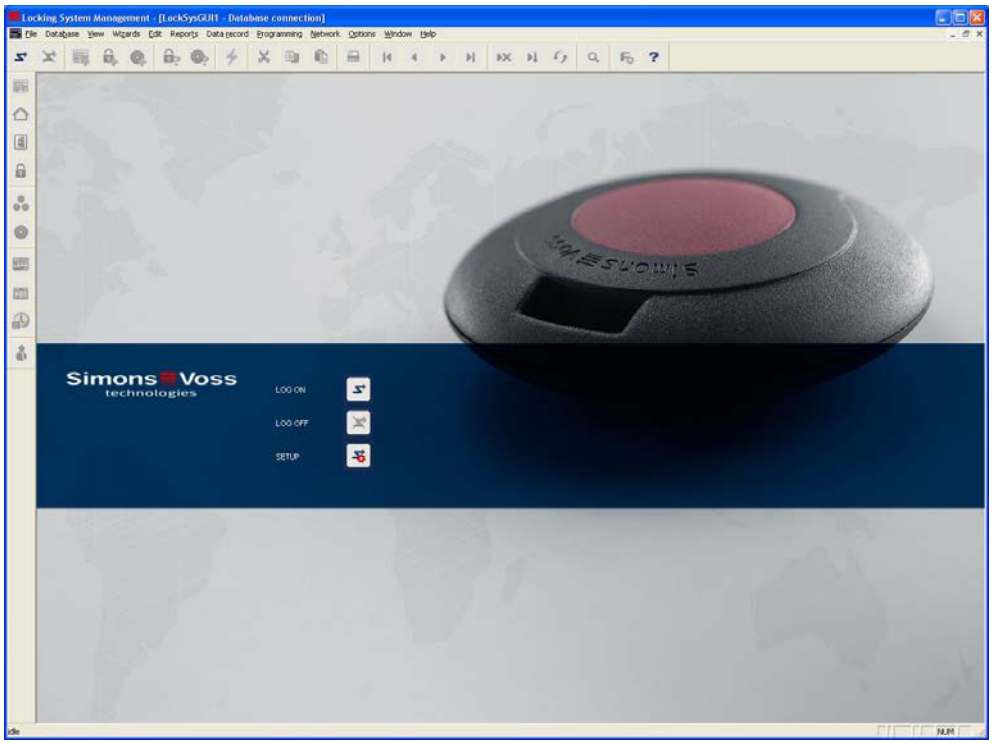
- Validity expired
- Deactivated

Lock

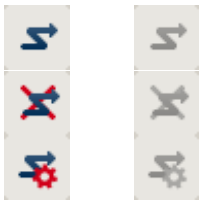
- Only overall locking level assigned
- Not assigned to any door
- Not assigned to any locking system
- Door without lock

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

3.0 SETTING UP AND OPENING THE DATABASE



START SCREED



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

Log off the database

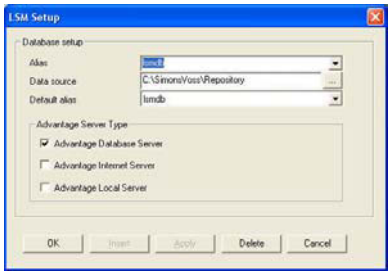
Settings for the database connection

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.

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4.0 PRINCIPLES OF LSM

4.1. SYSTEM REQUIREMENTS: LSM 3.1 OR HIGHER (SUBJECT TO CHANGE)

GENERAL

- Local administrator rights for installation
- Communication: TCP/IP (NetBios active), LAN (recommended: 100 Mbit/s)
- Windows domain
- Name resolution
- .NET Framework 2.0 min., 3.5 recommended
- MS ActiveSync 4.2 in conjunction with a PocketPC
- RS-232 and / or USB interface

CLIENT (LSM BASIC, LSM BUSINESS, LSM PROFESSIONAL)

Minimum hardware requirements

- Monitor min. 19” (48 cm) (or larger for matrix view display)
- Minimum screen resolution: 1024x768, recommended: 1280x1024
- Processor: at least 2.66 GHz (or faster)
- At least 2 GB RAM (or more)
- Hard disk capacity approx. 500 MB (approx. 1 GB during installation), database depends on the volume of data to be processed (approx. 30 MB)
- MS Windows XP Prof. SP3
- MS Windows Vista (Business, Ultimate), 32 or 64 bit
- MS Windows 7 (Professional, Ultimate), 32 or 64 bit

SERVER (DATABASE SERVER: LSM BUSINESS OR HIGHER)

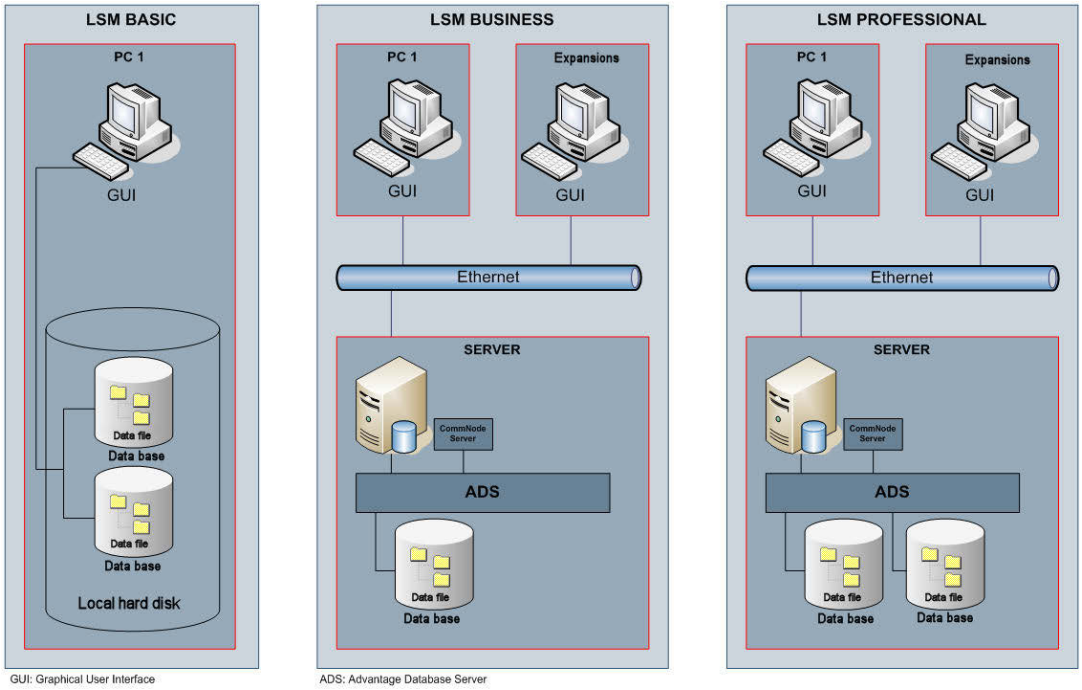
Minimum hardware requirements

- Processor: at least 2.66 GHz (or faster)
- At least 2 GB RAM (or more)
- Hard disk capacity approx. 300 MB (approx. 450 MB during installation), database depends on the volume of data to be processed (approx. 30 MB)
- MS Windows Server 2003
- MS Windows Server 2008
- MS Windows Server 2008 R2
- .NET Framework when using the CommNode Server at least 3.5
- Server-based application: Server-based application: approval is required on the ADS server for a database directory (approval does not does not require rights)

NOTE

If using firewalls between the client and server, please refer to chapter 2.4 IT Network Configuration or contact the LSM technical support team at SimonsVoss Technologies AG.
Please note that it is not permitted to use the software in virtual environments.

4.2. SAMPLE INSTALLATIONS



GUI: Graphical User Interface

ADS: Advantage Database Server

Further components may be required when using networked products (CentralNodes, RouterNodes, LockNodes) in addition the IT infrastructure shown above.

4.3. OVERVIEW OF LSM SOFTWARE

The SimonsVoss range of software has had a modular structure since the introduction of version 3.0. It comprises various editions and optional modules providing a variety of system functions. Please refer to the product catalogue for a precise description of the functions offered.

LSM editions
- LSM Basic Edition
- LSM Business Edition
- LSM Professional Edition
- LSM Mobile Edition

LSM modules
- LSM Monitor
- LSM Report
- LSM Database
- LSM Network 48 / 128 / Enterprise
- LSM Card
- LSM VN Server
- LSM Resource Management
- LSM Extension 5 / 10 / Enterprise CommNodes
- LSM Extension 3 / 5 / 10 / 25 / 50 Clients

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4.4. COMPONENTS (SOME INCLUDED IN SETUP)

LSM BASIC EDITION:

.NET Framework 2.0,
recommended: 3.5
Advantage OLEDB Driver
Advantage Data Provider
Crystal Reports
LSM software

FROM LSM BUSINESS EDITION ONWARDS

.NET Framework 2.0,
recommended: 3.5
Advantage Database Server
Advantage OLEDB Driver
Advantage Data Provider
Crystal Reports
LSM software

Other components may be required depending on the module.

4.5. DESCRIPTION OF COMPONENTS

4.5.1 ADVANTAGE DATABASE SERVER

The Advantage Database Server is the database operating system and forms the basis of data management. Data is stored on this server in tables and can be accessed again via the OLEDB interface.

4.5.2 ADVANTAGE DATA ARCHITECT

Advantage Data Architect is an Advantage tool for undertaking update, maintenance and repair work during servicing.

4.5.3 ADVANTAGE DATA PROVIDER

Advantage Data Provider is an additional component for accessing the data structure.

4.5.4 OLEDB DRIVER

The OLEDB Provider for all computers which are to run the GUI and / or run the CommNode Server, acts as an interface between the client and server.

4.5.5 CRYSTAL REPORTS

Each time a database is used, there is the concept of also evaluating the stored data and displaying it in an analytical manner. Crystal Reports is a powerful reporting tool which allows users to create flexible, meaningful reports quickly and easily. Tried-and-tested query technology ensures access to practically any data source, in this instance, the locking plan. Crystal Reports is integrated using the LSM GUI, without the need for adjustments within Crystal Reports. Crystal Reports is required on all computers which have the GUI installed to allow users to view the reports in LSM.

4.5.6 LSM GUI

The LSM GUI (Graphical User Interface) is the graphical interface for configuring the locking system.

4.5.7 LSM COMMNODE SERVER

The CommNode Server guides the user through the scheduled network tasks, manages events and controls the VN Server.

4.5.8 LSM COMMNODE

The CommNode software is the interface to a SimonsVoss network.

4.5.9 LSM VN SERVER

The LSM VN Server enables the necessary tasks to be processed in order to distribute the information in the locking plan to the components.

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5.0 INSTALLATION AND CONFIGURATION

5.1. GENERAL

5.1.1 DEFINITION OF "DATABASE-BASED SOFTWARE SYSTEMS"

DATABASES

Databases are structured memories for large quantities of data about objects in our environment. They are structured by arranging the data into tables which are made up of a certain number of data records. The data records are in turn made up of data fields. This allows the individual data to be queried, modified and compared with ease.
Example
The *Deutsches Telefonverzeichnis* (German phone directory) database is made up of a certain number of tables (local phone books), these tables are made up of data records (personal entries), the data records are in turn made up of data fields (surname, first name, address, phone number).

DATABASE SYSTEMS

Database systems are made up of the data (database) and a so-called database management system.

Behind the database management system (or database engine) is a program which helps to create, modify and evaluate data. These types of systems include e.g. the Microsoft SQL Server, or, in the case of the LSM software system, the Advantage Database Server from Sybase.

The interface to the user or to the user software (GUI in the case of the LSM software system), is a query language, e.g. SQL (Structured Query Language). This language allows databases to query and evaluate or modify content.

The database contains the data itself. Relational databases, such as the Microsoft SQL Server or Sybase's Advantage Database Server, store data in the form of tables. It is possible to create, link and query several tables. Together, these tables form the database. LSM, which manages a locking plan, has to write and link together in corresponding tables all the relevant data, such as transponder data, personal data and information about locks, doors, areas and groups.

If a new person is created, all the detailed information such as employee number, name, date of birth etc. is entered as a new row in the corresponding Persons table and thereby adopted as a new data record. This data record is then of course available to the Transponder table as a new possible transponder owner. LSM will check that even though one person can own more than one transponder, one transponder can only have one owner. The relationship between the Transponder and Locks tables is different. On the one hand, one transponder can of course trigger several locks, but on the other hand one lock will of course respond to several transponders. LSM must therefore check the authorisations as well as the assignment. All of this happens automatically in the background and at first the user

only requires information on how to create objects and which program functions can write, modify or remove data records in the corresponding tables.

DATABASE-BASED SOFTWARE SYSTEMS

Database-based software systems are made up of one database system and other modules (e.g. user interface and interface module), which are installed on one or several computers distributed in the network and communicate with one another via the TCP/IP network protocol.
LSM is this type of database-based software system.

Structure of the LSM database-based software system
The Locking System Management (LSM) software consists of three modules

- Main program (Locking System Manager), basically contains the graphical user interface (GUI) and the locking system management functions.
- Database engine (Advantage Database Server),
- Communication node (CommNode Server, CommNode), to which a programming device, a handheld docking station or the CentralNode for a local LON or WaveNet network can be connected.

All three modules can also run in full on different computers. They communicate with one another via TCP/IP network protocols. User interfaces and communication nodes can be distributed in larger numbers on the Intranet.

5.2. INSTALLING LSM BASIC EDITION

5.2.1 CLIENT INSTALLATION

5.2.1.1 LOCKING SYSTEM MANAGEMENT

PROCEDURE

- Install the software (see the following process)
- Install Crystal Reports bugfix
- Start the software after installation
- Please refer to the Licences and Registration chapter for registration
- Load the licence file you received
- Set up the database connection

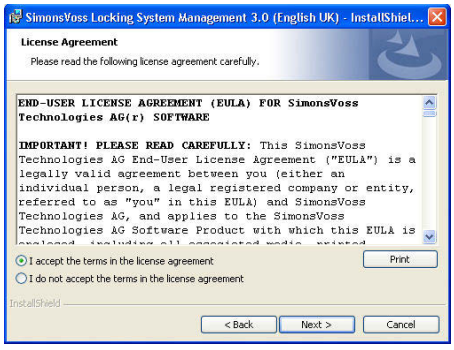
SOFTWARE INSTALLATION

- The contents of the software DVD are displayed in the browser when it is inserted
- You will find a direct link to the setup routine in the software area

Alternatively, you can also invoke installation directly
[CDROM]:\Software\ LSM3x_BASIC*[language]\lsm_setup_basic_3_x_xx.exe*

- Start installation
- Perform the individual steps

Confirm by clicking on Next to launch installation.



Read the licence agreement and accept the terms.
Then select Next.

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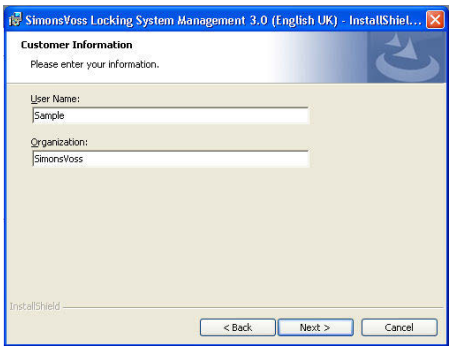
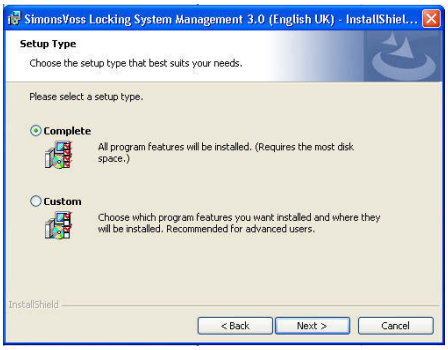
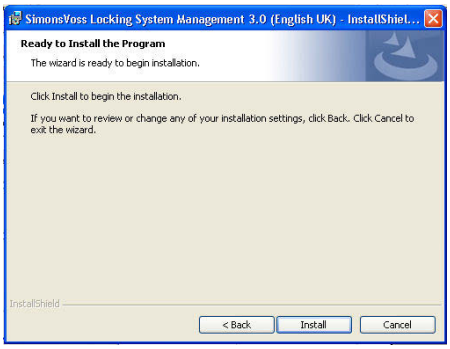


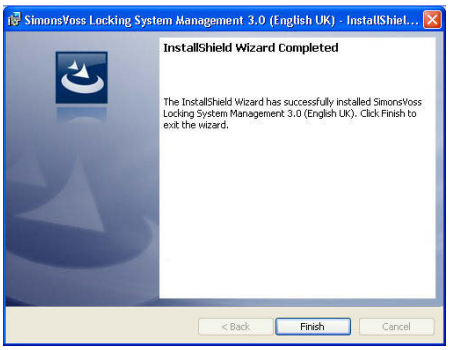
Enter the user information and then select Next.



Confirm by clicking on Next.



Confirm by clicking on Install.



Confirm by clicking on Finish to complete the installation.

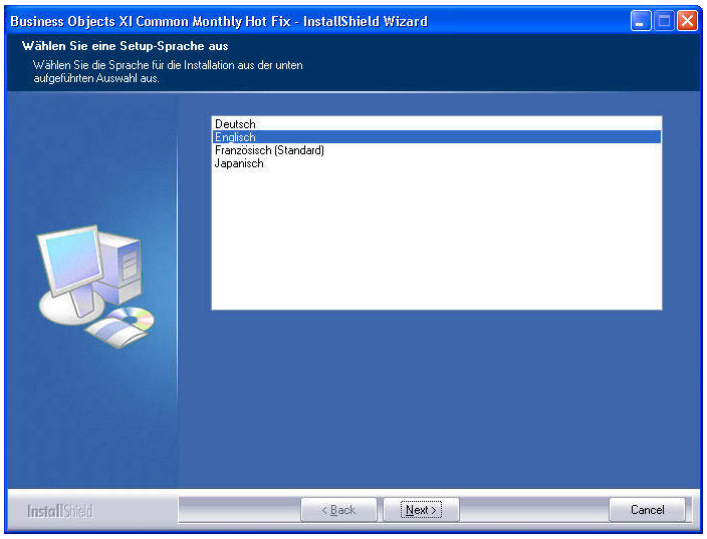
5.2.1.2 CRYSTAL REPORTS BUGFIX INSTALLATION

PROCEDURE

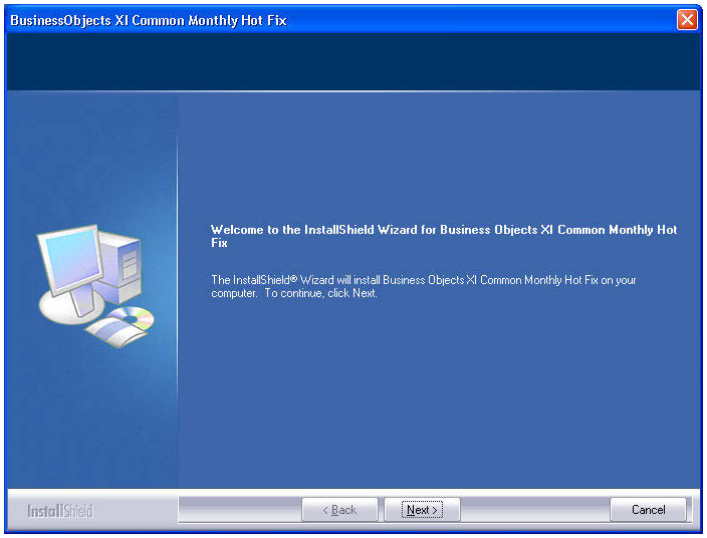
- The contents of the software DVD are displayed in the browser when it is inserted
- You will find a direct link to the setup routine in the software area

Alternatively, you can also invoke installation directly
[CDROM]:\ Software LSM3x_BASIC*Crystal_HotFix11\setup.exe*

- Start installation
- Perform the individual steps



Select the language (English) and confirm by clicking on Next.



Confirm by clicking on Next to launch installation.

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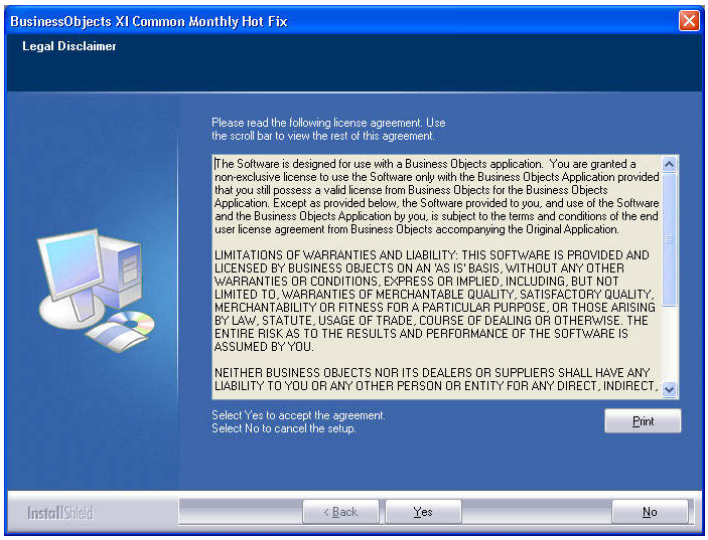
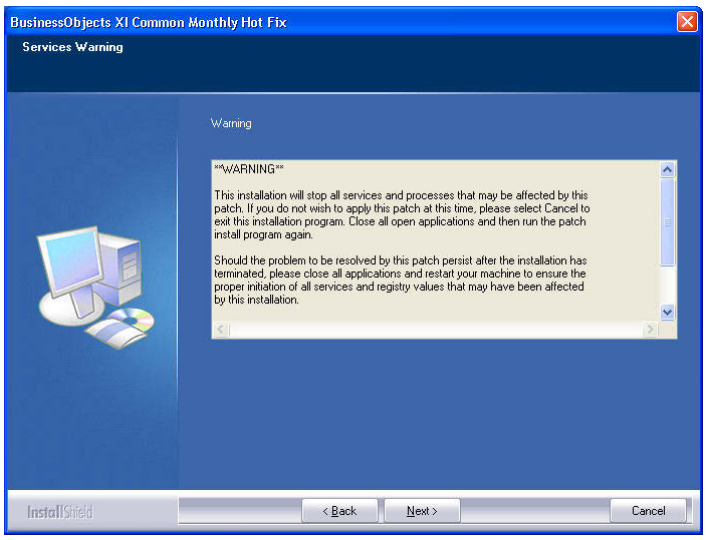


Read the licence agreement and accept the terms by clicking on Yes.



Then select Next.

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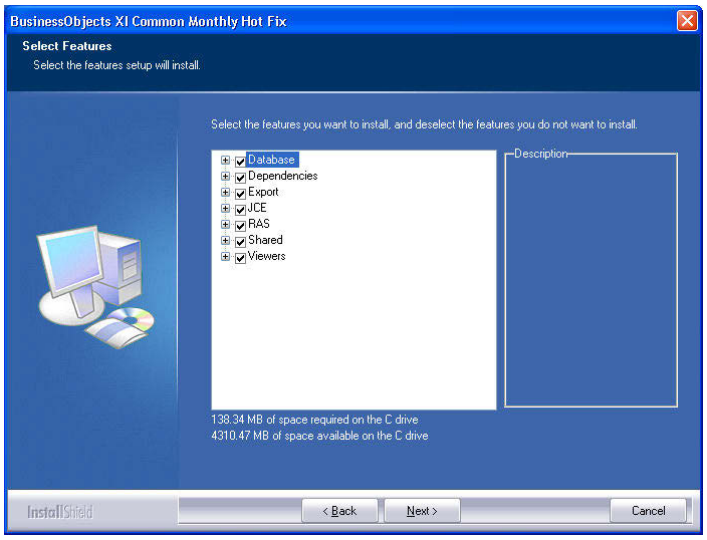
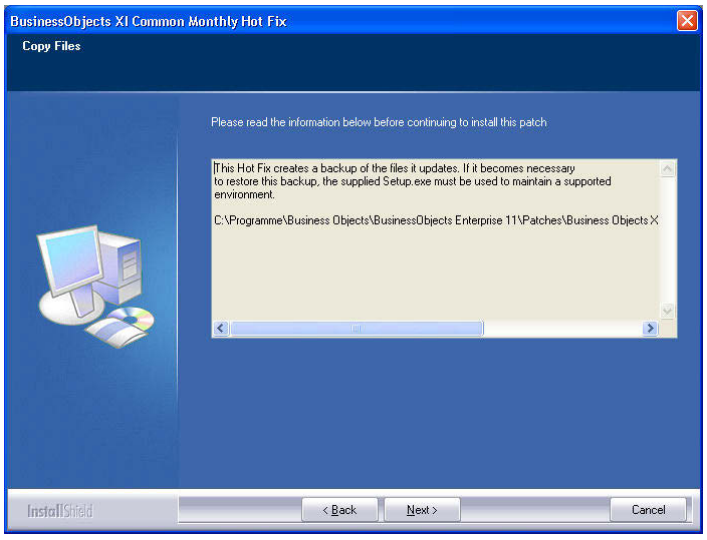
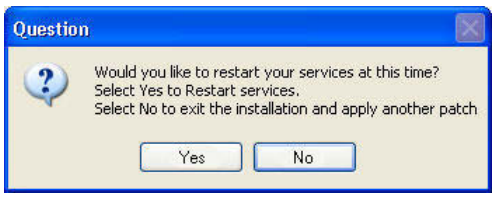


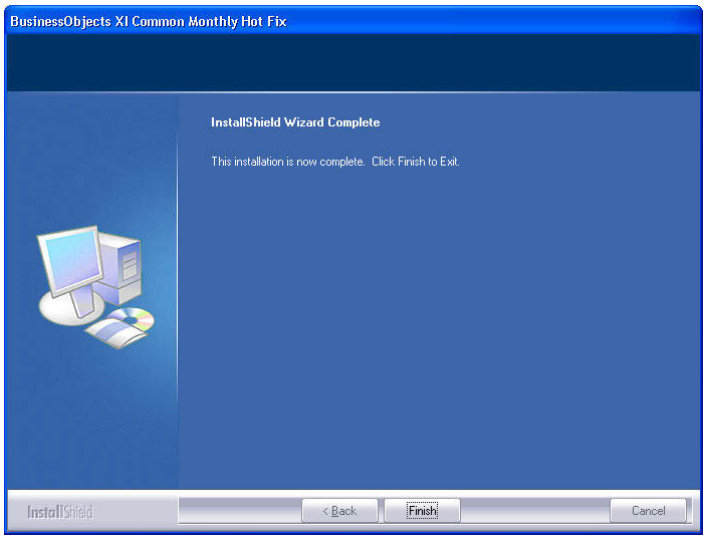
Confirm the complete installation, then select Next.



Once you have finished reading, confirm by clicking on Next.
The following steps may take several minutes depending on the system.



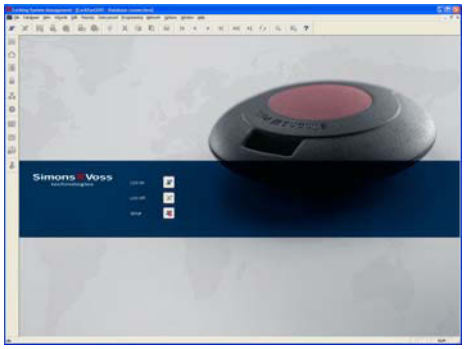
Confirm by clicking on Yes to restart the service.



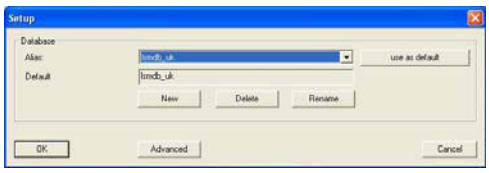
Confirm by clicking on Finish to complete the installation.

5.2.2 SETTING UP THE DATABASE (LSM BASIC EDITION)

PROCEDURE



Start the software. Please select Setup in the LSM start window to configure the database connection.



Select New and enter a name for the database under Alias. This database is specified as the default by clicking on Apply as default button.

MANUAL LSM
IT ADMINISTRATION

5.3. INSTALLING LSM BUSINESS EDITION / LSM PROFESSIONAL EDITION

5.3.1 SERVER INSTALLATION

The server only has to be installed as from the LSM Business Edition; a data structure which is stored locally on the workstation computer is used for LSM Basic Edition. It is therefore only necessary to install the client when using LSM Basic Edition (see chapter 2.3.3 Client installation)

PROCEDURE

The following points must be carried out to install a database server.

- Install the ADS Server
- Install Data Architect (if required)
- Adjust the database values
- Set the service start to automatic
- Set up the database

ADVANTAGE DATABASE SERVER (ADS)

PROCEDURE

- When the software DVD is inserted, the content appears in the browser
- In the software area you will find a direct link to the setup

[CDROM]:\Software\LSM3x_BUSINESS\ADS\adswin_x86_32.exe

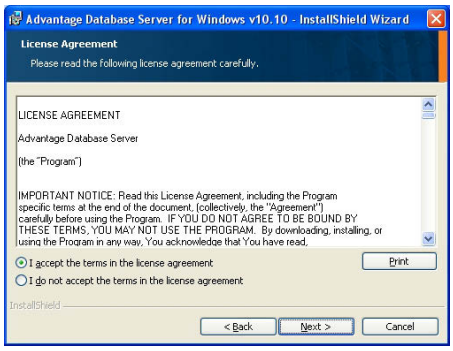
- Start installation
- Perform the individual steps
- Enter the licence data
- Select the language configuration

NOTE

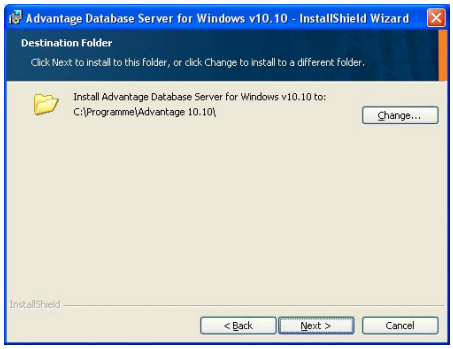
The specification *[CDROM]* is a variable and describes the letter identifying the drive of the CDROM drive on the computer (e.g. “D”) on which installation is to be carried out.

5.3.1.1 INSTALLING ADVANTAGE DATABASE SERVER (ADS)

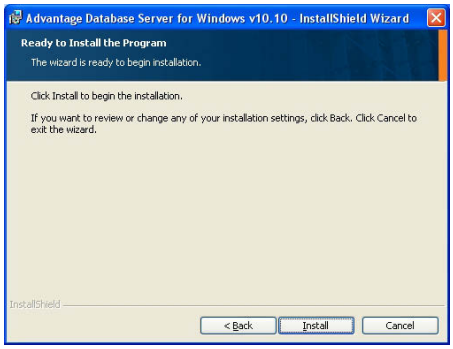
Confirm by clicking on Next to start the installation.



Read the licence agreement and accept the terms. Then select Next.

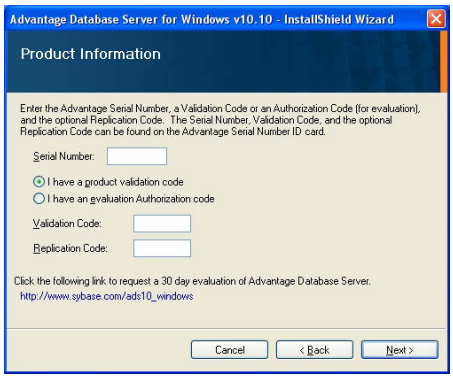


Then confirm by clicking on Next.

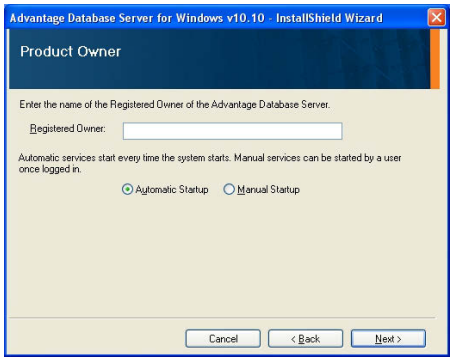


Confirm by clicking on Install.

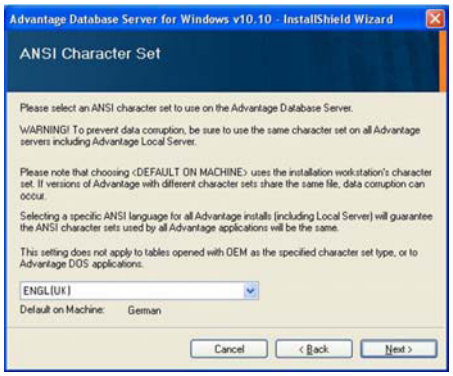
MANUAL LSM
IT ADMINISTRATION



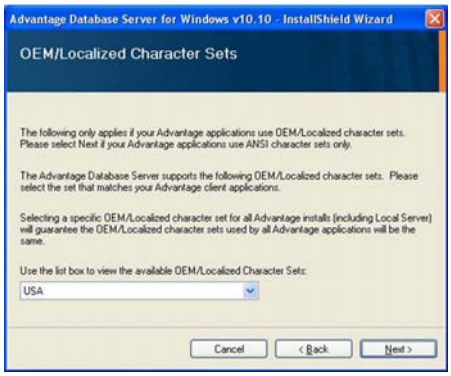
Enter the licence data you received.
Confirm by clicking on Next.



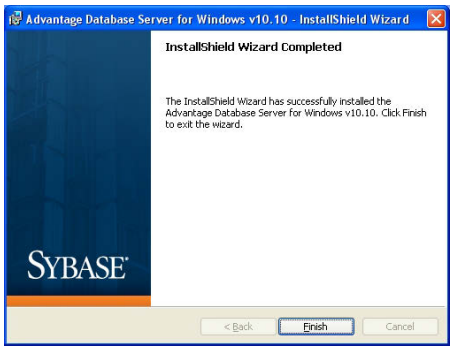
Enter your company as a registered user.
Confirm by clicking on Next.



Select “English”.
Confirm by clicking on Next.



Select “English”.
Confirm by clicking on Next.



Confirm by clicking on Finish to end the installation.

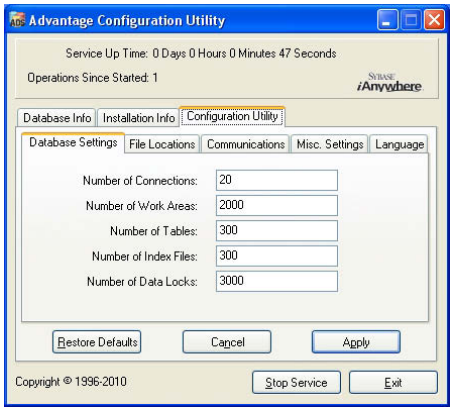
5.3.1.2 ADJUSTING THE DATABASE VALUES

PROCEDURE

- Left-click the Windows Start button
  - ➲ All programs (Windows XP)
  - ➲ Advantage Database Server 9.1
  - ➲ Advantage Configuration Utility
- "Configuration Utility" tab
- "Database Settings" tab
- Adjust the values as described below
- Apply and Exit

IMPORTANT
Enter the following values:

Number of Connections	20
Number of Work Areas	2000
Number of Tables	300
Number of Index Files	300
Number of Data Locks	3000

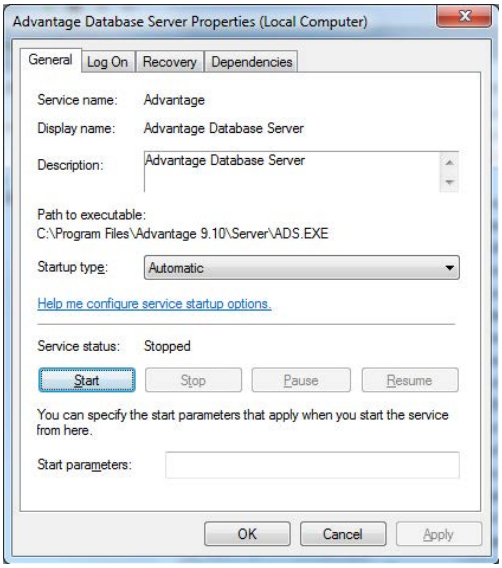


Adjust the existing values accordingly and confirm by clicking on Apply. Exit the settings by clicking on Exit.

5.3.1.3 SETTING THE SERVICE START TO AUTOMATIC

PROCEDURE

- Left-click the Windows Start button
- Select the Run option
- Enter and confirm the command “services.msc” in the “Open” dialogue field
- Right-click on the “Advantage Database Server” service
- “Properties”
- Select “Properties” for the start type



5.3.2 SETTING UP THE DATABASE

PROCEDURE

- Using a workstation on the server, create a folder in the desired location (e.g. *D:\SimonsVoss_DB*). This folder should not be located in a directory that is protected by the system (e.g. *C:\Windows*, *C:\Programs*).
- Unzip the lsmdb.zip file from the *C:\Programs\SimonsVoss\LockSysMgr_3_x\db* folder into the new folder.
- Approve the folder (here: D:\SimonsVoss_DB) (approval name)
- Read access for everyone (optional)
- Hidden approval can be used

NOTE

Enter the setup path under 2.3.4 Setting up the database connection as follows:
\\[SERVER NAME]\\approval_name\SimonsVoss_DB\lsmdb\lsmdb.add

5.3.3 CLIENT INSTALLATION (FROM LSM BUSINESS EDITION ONWARDS)

5.3.3.1 INSTALLING LOCKING SYSTEM MANAGEMENT

PROCEDURE

- Install the software (see the following process)
- Install Crystal Reports Bugfix
- Start the software after installation
- Please refer to the Licences and Registration chapter for registration
- Load the licence file you received
- Set up the database connection

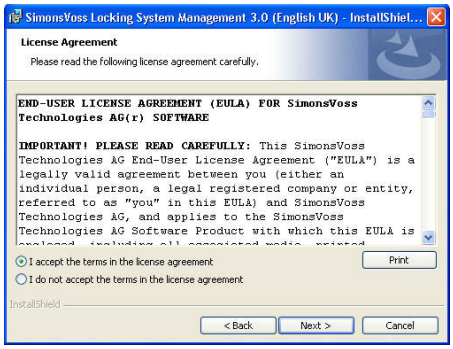
INSTALLING SOFTWARE

- When the software DVD is inserted, the content appears in the browser
- In the software area you will find a direct link to the setup

Alternatively, you can also call up installation directly
[CDROM]:\Software\ LSM3x_BUSINESS\[*language]\lsm_setup_3_x_xx.exe*

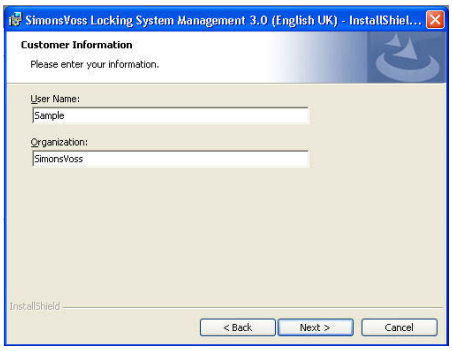
- Start installation
- Perform the individual steps

Confirm by clicking on Next to start the installation.

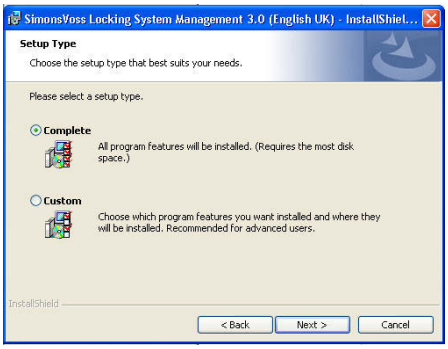


Read the licence agreement and accept the terms.
Then select Next.

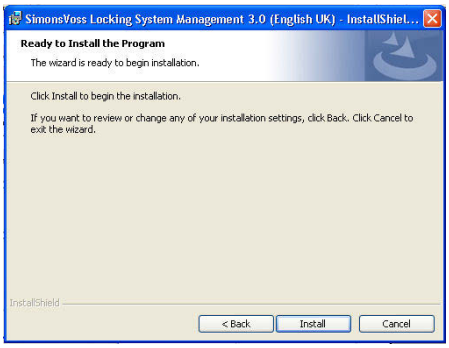
MANUAL LSM
IT ADMINISTRATION



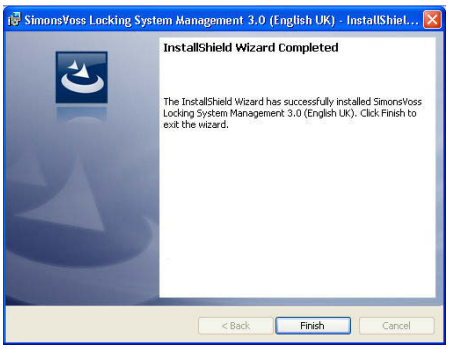
Enter the user information and then select Next.



Then confirm by clicking on Next.



Confirm by clicking on Install.



Confirm by clicking on Finish to end the installation.

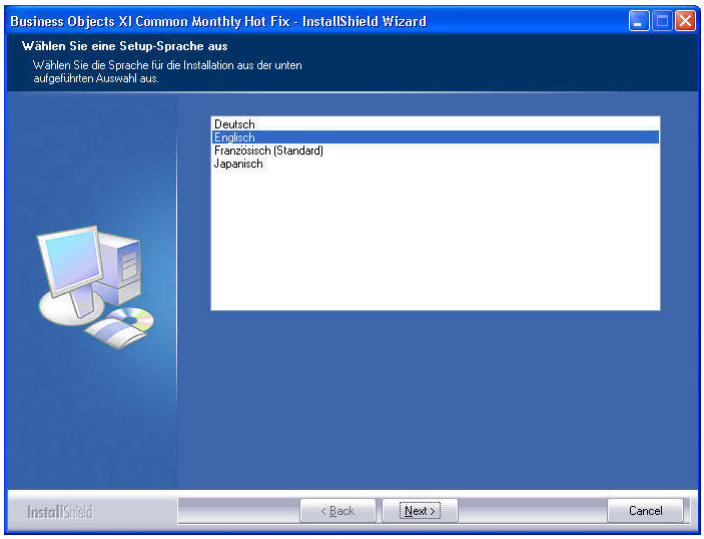
5.3.3.2 INSTALLING CRYSTAL REPORTS BUGFIX

PROCEDURE

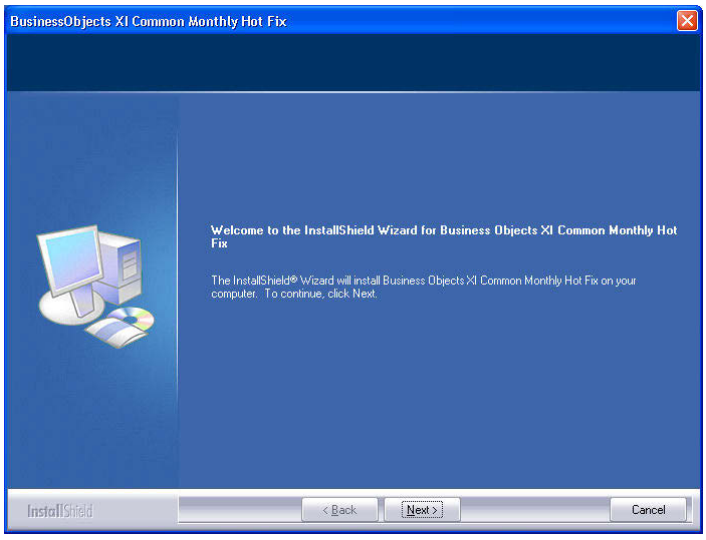
- When the software DVD is inserted, the content appears in the browser
- In the software area you will find a direct link to the setup

Alternatively, you can also call up installation directly
[CDROM]:\ Software LSM3x_BUSINESS*Crystal_HotFix11\setup.exe*

- Start installation
- Perform the individual steps

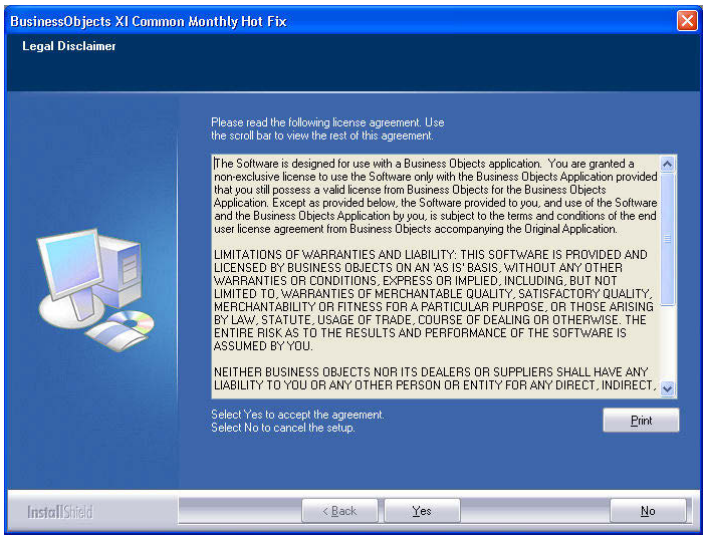


Select the language (English) and confirm by clicking on Next.

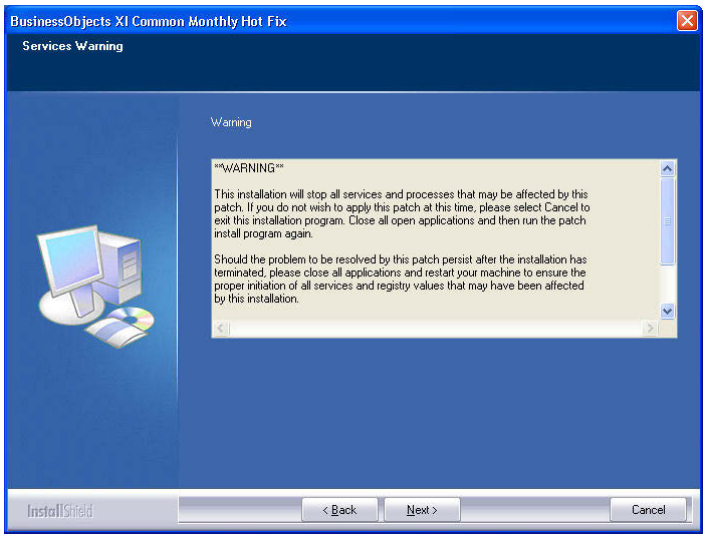


Confirm by clicking on Next to start the installation.

MANUAL LSM
IT ADMINISTRATION

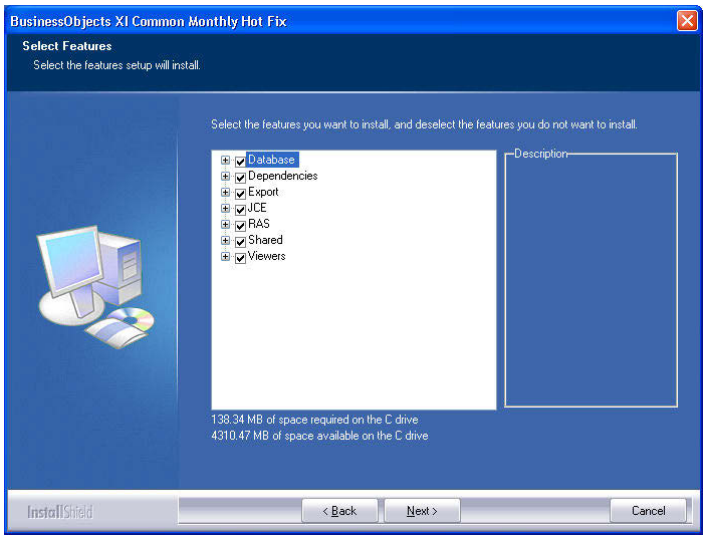


Read the licence agreement and accept the terms by clicking on Yes.

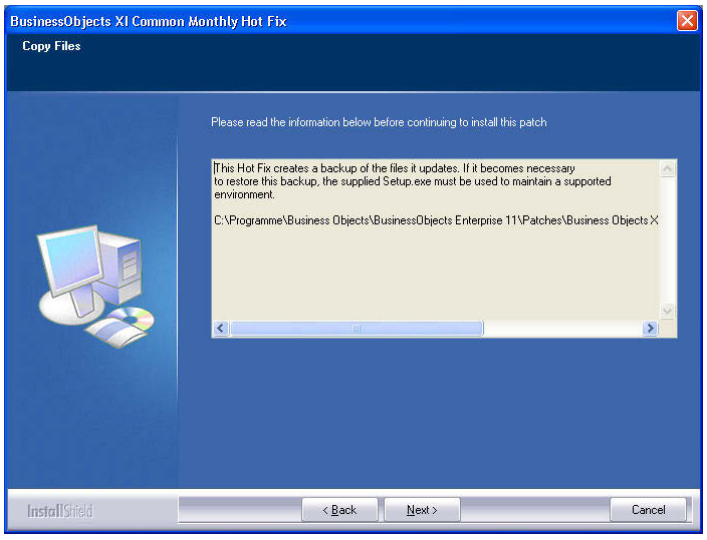


Then select Next.

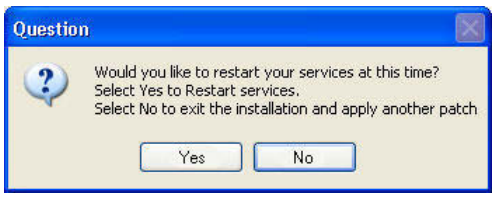
MANUAL LSM
IT ADMINISTRATION



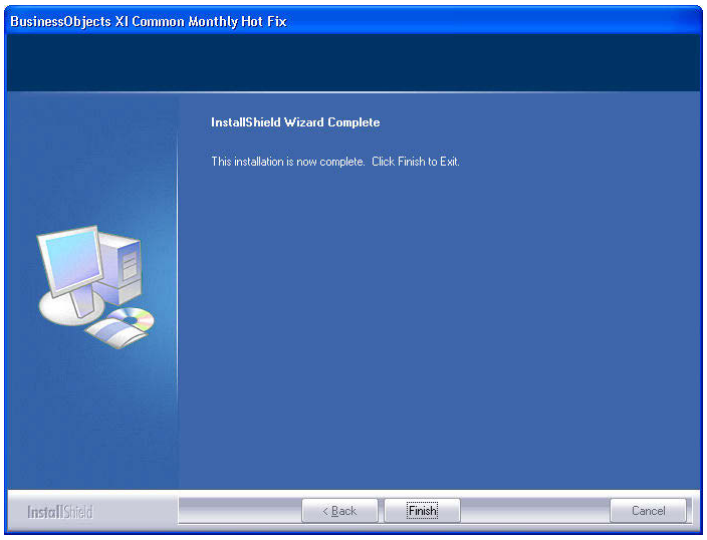
Confirm the complete installation, then select Next.



Once you have finished reading, confirm by clicking on Next.
The following steps may take several minutes depending on the system.

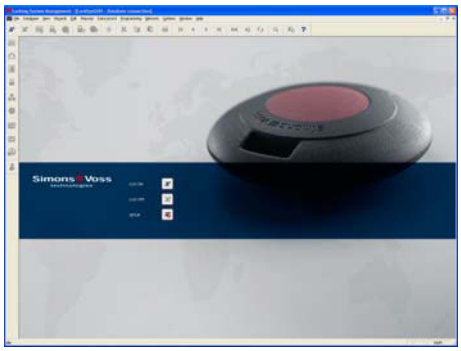


Confirm by clicking on Yes to restart the service.

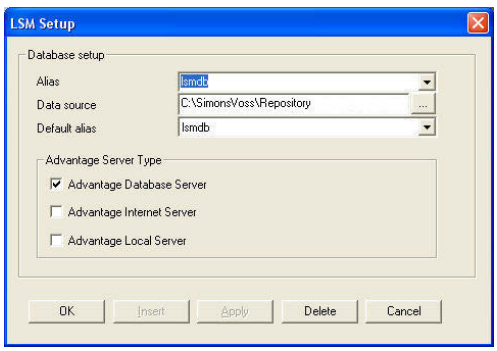


Confirm by clicking on Finish to end the installation.

5.3.4 SETTING UP THE DATABASE (FROM LSM BUSINESS EDITION ONWARDS)

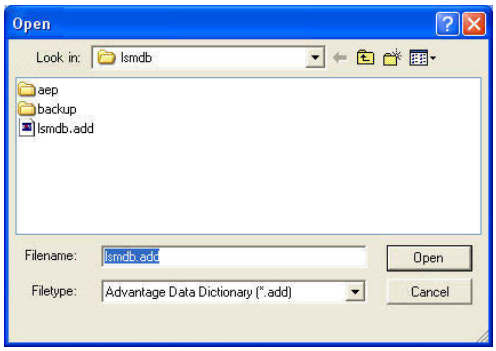


Start the software. In the LSM start window, please select Setup to configure the database connection.

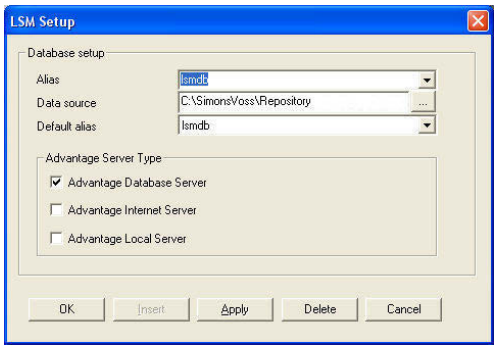


Enter a name for the database under Alias. Then select the storage location for the LSM database (folder structure) using the folder navigation ...
\\[SERVER NAME]\\approval_name\SimonsVoss_DB\lsmdb\lsmdb.add

MANUAL LSM
IT ADMINISTRATION



Here, select the “lsmdb.add” file, followed by Open.



Now select Apply and save the settings. Close this dialogue and return to the log on screen by clicking on OK. With the Connect button, you can now log on to the database.

MANUAL LSM
IT ADMINISTRATION

5.4. IT NETWORK CONFIGURATION

Communication between the client and server must be assured when there is a separate installation for the graphical user interface (GUI) and the database server. The following overview lists the settings required for configuring any firewalls.

Client / Server

- Advantage Database Server UDP/TCP , 6262
- LSM Software, TCP 6000
  (Under --> Network --> Local connections --> IP Port, or TCP Port at the bottom right of the software)
- CommNode Server, TCP 6001
  Under --> Network --> Communication nodes --> IP Port), IP port range can be configured, TCP 6000 to 6100 (under --> Options --> Network)
- VN Server, TCP 4000
  (Under --> Network --> G2 services --> TCP/IP Port)

WaveNet (Server / Terminal)

- TCP socket, TCP 2001, TCP 2101 and TCP 2601
- Real port, TCP 771

5.5. LOGGING ON TO THE DATABASE

Standard log-on information
User Admin
Password system3060

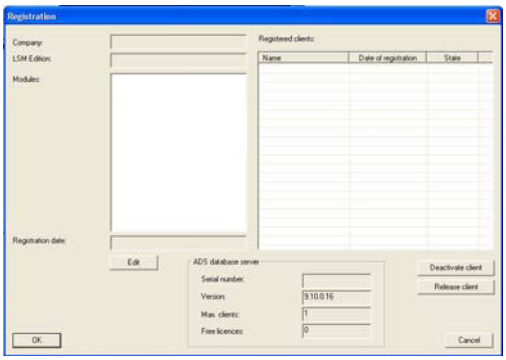
Note
This password must be changed immediately in productive systems to prevent unauthorised access to the locking system data. Retaining the default password compromises the security of the locking systems managed in the database.

5.6. LICENCES AND REGISTRATION

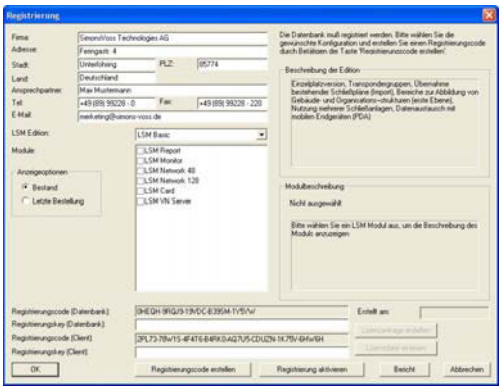
PROCEDURE

- Start the software after installation
- Call up the registration dialogue using the menu item ➲Help ➲Registration

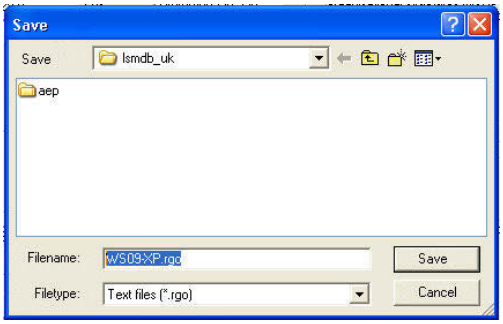
MANUAL LSM
IT ADMINISTRATION



This view provides you with information about the current licensing. Edit takes you to the licensing dialogue.



You must enter your customer details here the first time you register.
Please select the edition and any modules you have purchased.
Create the file with the registration data by clicking on Produce licence query.



Select a storage location for the registration file.

MANUAL LSM
IT ADMINISTRATION

Please confirm this message if you would like to create a new registration code.

Please forward this file with the registration information supplied in paper form relating to your edition to the e-mail address below:

LSM Basic edition:
registration@simons-voss.de

From LSM BUSINESS Edition onwards:
lsm-support@simons-voss.de

You receive a licence file from SimonsVoss which you use to activate the software by clicking on Load licence file.

This message appears if you have already requested a registration code which has not yet been activated.

This message appears if you made another request after your registration request, and are now wanting to enter a registration for the first request.

To upgrade your software, call up the registration dialogue described above again and select the software modules you want. Report provides you with an overview which allows you to place the order with your dealer. Once you receive confirmation of the order from your dealer, carry out the registration process again using the licence file.

5.7. THE PROGRAMMING DEVICE

5.7.1 COMMISSIONING THE PROGRAMMING DEVICE

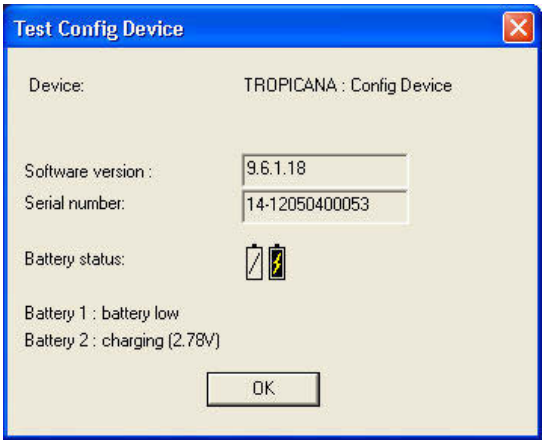
EXPLANATION

You can connect a programming device to any computer with a graphical user interface (GUI). To do this, the computer must have a USB interface. The programming device transfers the settings and authorisations undertaken in the GUI to the components (cylinder, transponder, etc.). This is also possible via the LSM Mobile Edition or the SimonsVoss WaveNet network for locks which have already been programmed. In the software, a SmartCD is automatically created as a programming device to COM(*).

Please check the function of your programming device.

PROCEDURE

- ➲ Program
- ➲ Test config device
- If the programming device was detected successfully, you receive the following feedback



You can view the configuration of your programming device as follows

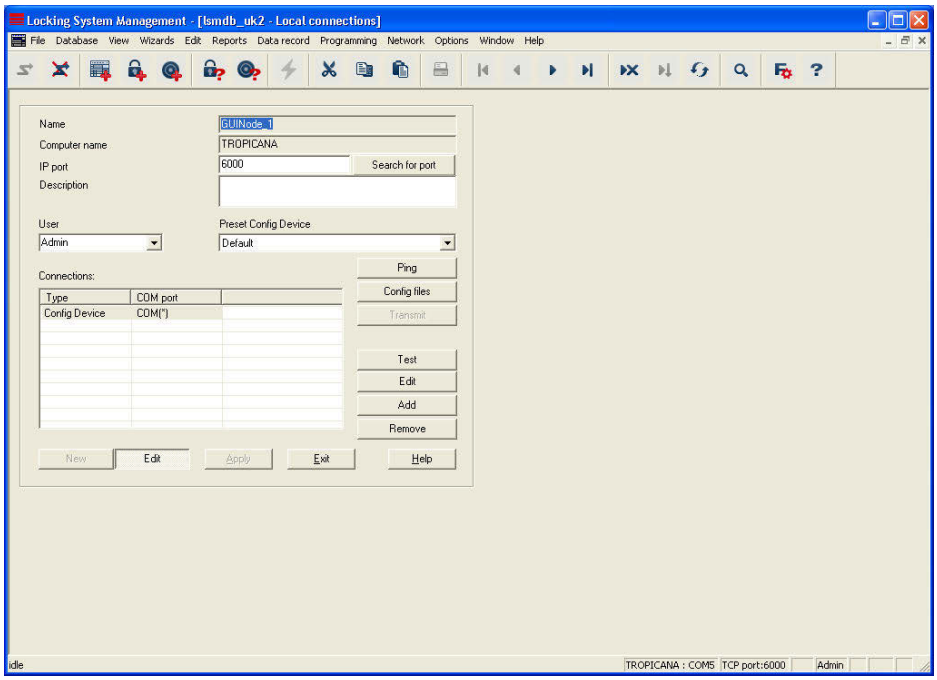
- ➲ Network
- ➲ Local connections
- Use the arrow keys to select your computer
- Highlight your programming device
- Test
- You then also receive the above result overview

5.7.2 MANUALLY COMMISSIONING THE PROGRAMMING DEVICE

Manual adaptation is only necessary in special cases

PROCEDURE

- ➲ Network
- ➲ Local connections
- Use the arrow keys to select your computer
- Add
- Search SmartCD
- OK
- Close



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
"User"	→	LSM user
"Default config."	→	The "default" is the locally installed programming device
"Connections"	→	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

5.7.3 TESTING THE PROGRAMMING DEVICE

PROCEDURE

- ➲ Network
- ➲ Local connections
- Highlight device
- Test

or

- ➲ Program
- ➲ Test config device

5.8. COMMUNICATION NODES

5.8.1 COMMNODE SERVER

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. It is also required to edit events and responses with the Event Manager and for the VN Server.

INSTALLATION

PROCEDURE

- Left-click the Windows Start button
- Select the Run menu item
- Enter and confirm the command
  [CDROM]:\ *Software*\ LSM3x_BUSINESS\[*language]**CommNode_setup_3_x_xx.exe*
  in the “Open” dialogue field
- Follow the instructions
- Following successful installation, run the file “install_CommNodeSvr.bat” from the installation folder *C:**Programs**SimonsVoss**CommNodeSvr_3_0*.
- Enter and confirm the command *services.msc* in the “Open” dialogue field
- Right-click on the “SimonsVoss CommNode Server” “Properties”
- Check whether the “SimonsVoss CommNode Server” service is launched

INSTALLING SOFTWARE

- The contents of the software DVD are displayed in the browser when it is inserted
- You will find a direct link to the setup routine in the software area

Alternatively, you can also invoke installation directly
*[CDROM]:**Software*\ LSM3x_BUSINESS\[*language]**commnode_setup_3_x_xx.exe*

- Start installation
- Perform the individual steps

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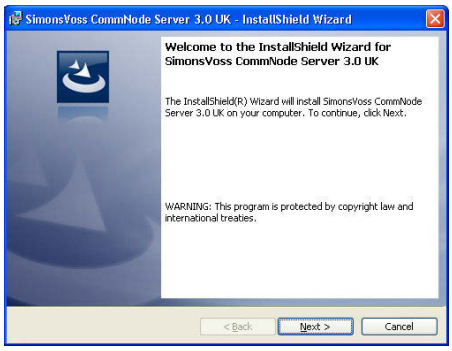
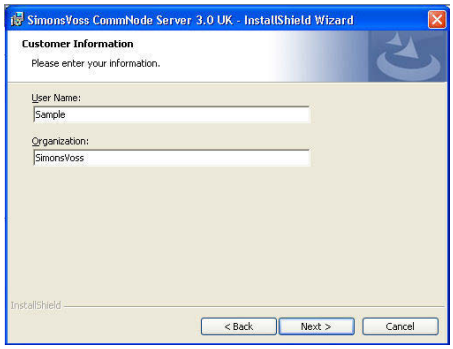
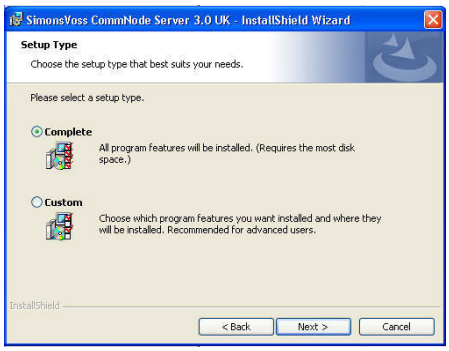


Confirm by clicking on Next to launch installation.

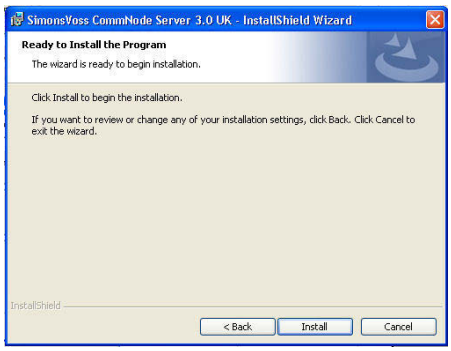
Read the licence agreement and accept the terms.
Then select Next.



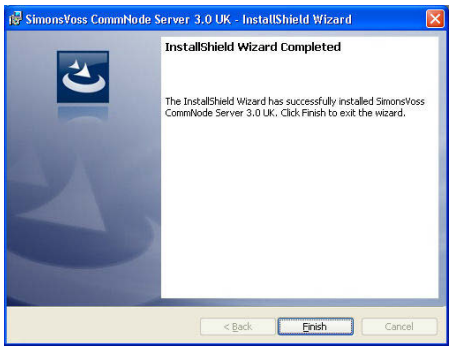
Enter the user information and then select Next.



Confirm by clicking on Next.



Confirm by clicking on Install.



Confirm by clicking on Finish to complete the installation.

5.8.2 CREATING CONFIGURATION FILES

GENERAL

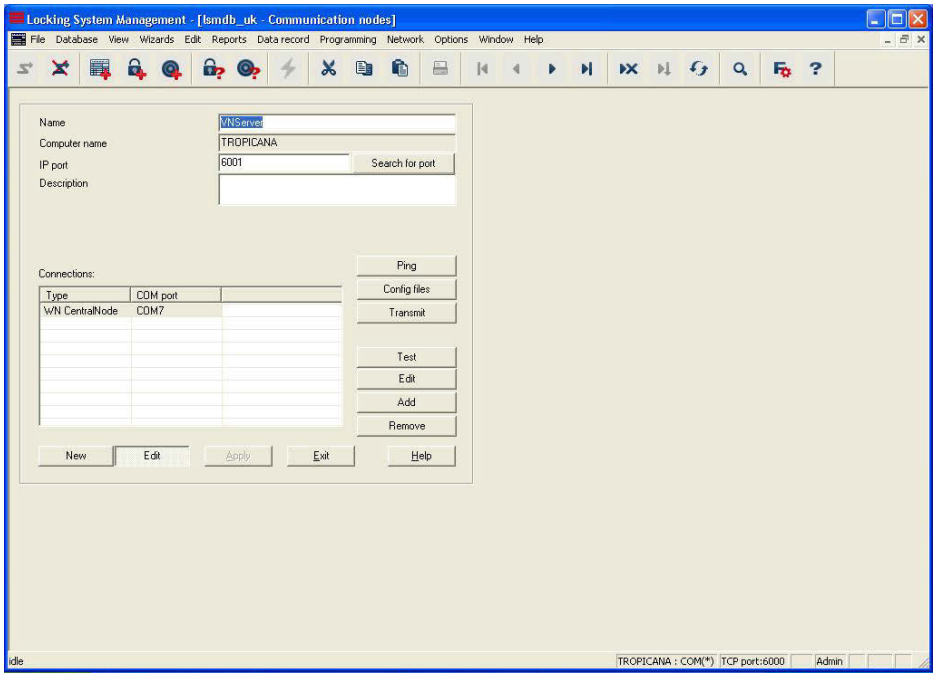
The configuration files are required to inform the “SimonsVoss CommNode Server” service of which devices are connected and how it can access the database.

PROCEDURE

- Launch LSM
- Connect
- Log on with user name and password
- ➲ Network
- ➲ Communication nodes
- New
- Assign the CommNode Server in Task manager (under Network)
- Copy the 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
- Restart the “SimonsVoss CommNode Server” service

NOTE

- The files can also be created on any computer with GUI and can then be saved via 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 occur, such as changing the name of the computer. Administrator rights are required to do this.
- The “SimonsVoss CommNode Server” service must have administrator rights.



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 the CommNode
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*” containing 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 service start type to automatic.
- If the Advantage Database Server (service) has to be powered down (stopped) (e.g. for data backup purposes), the SV CommNode Server service must first be stopped. Once the Advantage Database Server (service) is restarted, you can also restart the SV CommNode Server.

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).

5.8.3 COMMUNICATION NODES (COMMNODE)

EXPLANATION

The communication node software (CommNode) forms the interface between the locking system administration software and the SimonsVoss hardware components. This is run in the background and should be installed throughout the network on computers wherever read-out devices (CentralNodes, SmartCDs) are installed.

POSSIBLE CONNECTION LOCATIONS

- Computers to which a CentralNode of a SimonsVoss network (LON or WaveNet) is to be connected.

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TASKS

- Receiving commands from the GUI or CommNode Server and forwarding them to the SimonsVoss hardware components. Upon completion, the result of the action is sent back to the originator.
- Receiving, processing and forwarding events.

CONFIGURATION

PROCEDURE

- ➲ Network
- ➲ Communication nodes
- New
- Enter “name”
- Enter “computer name”
- Apply
- Search port
- Create and save Config. files
- Select path where the configuration files are to be saved
- Copy the files appcfg.xml, msgcfg.xml und netcfg.xml to the directory *[SYSTEM]:\Programs\SimonsVoss\CommNode*

NOTE

- The files can also be created on any computer with GUI and can then be saved via 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 occur, such as changing the name of the computer.
- The user who started the “SimonsVoss CommNode” service must either be a member of the administrator group or have the special right to stop and start the service.

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6.0 DATABASE

The ADS multi-user version of the database engine is based on a client/server architecture. This minimises the network traffic between the client and server and controls transaction management. Each instance of database access is usually linked to several actions, which together form a transaction. If the client computer which runs the LSM software is interrupted during this type of transaction, the database can be completely reverted to the status it was in before the transaction was started, thereby retaining data consistency in full.

6.1. STRUCTURE

- **Tables**
  The data is kept in the database in the form of tables.

- **Indices**
  To speed up the search for certain entries, indices are created for the relevant columns.

- **Referential integrity**
  Relationships between the tables are set up. The database engine uses these to ensure data consistency.

- **Stored procedures**
  Stored procedures are functions which handle complex tasks. They are saved directly in the database and can be called up by LSM with ease. This includes e.g. the task of authorising a transponder for a lock.

6.2. SECURITY

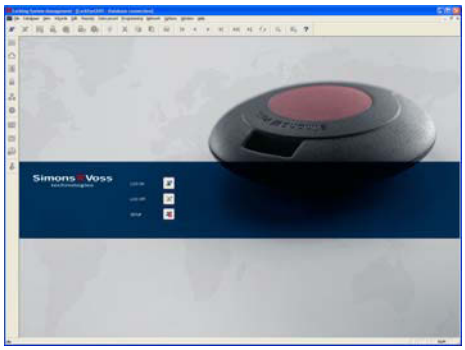
- **User-oriented access to data**
  Individual rights can be assigned to each software user. After logging on with his or her database log-on name and password, the user can then access the database with his or her individual rights.

- **Encrypting tables and communication**
  The tables in the database and all application communication with the database via the network is encrypted with a 160-bit password and data is only transferred incrementally, so any data which is tapped is not useful.

6.3. CREATING AND CONFIGURING THE DATABASE (LSM BASIC EDITION)

PROCEDURE

- Launch LSM
- Setup
- New
- Assign a new alias name
- Use this as default
- OK



Start the software. Please select Setup in the LSM start window to configure the database connection.

Select New and enter a name for the database under Alias. This database is specified as the default by clicking on Apply as default button.

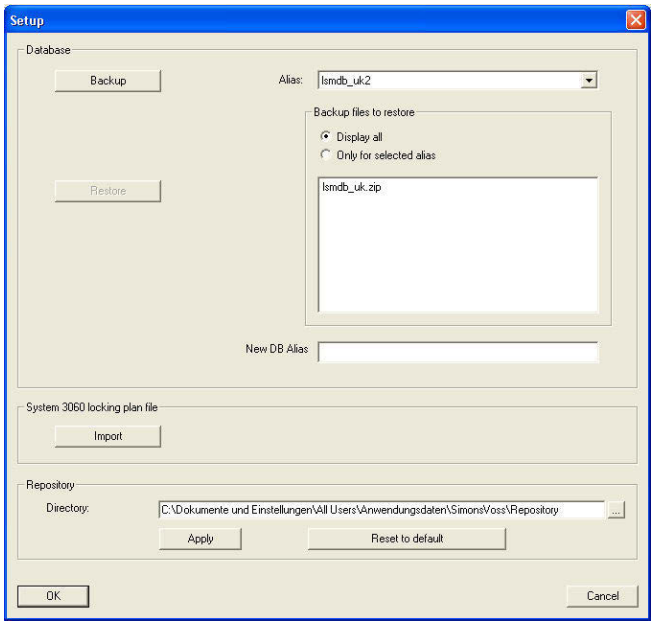
Note:
Data directory:
C:\Documents and Settings\All Users\Application Data\SimonsVoss\Repository

Backup directory:
C:\Documents and Settings\All Users\Application Data\SimonsVoss\Repository\Backup

6.4. BACKING UP THE DATABASE (LSM BASIC EDITION)

PROCEDURE

- Launch LSM
- Import all mobile data sets (LSM Mobile Edition)
- Setup
- Select alias
- Backup
- OK



Note:
Backing up the database is in principle the responsibility of the customer's IT team. SimonsVoss accepts no liability for missed, incomplete or faulty backups.
Please check at regular intervals whether the backups created can also be restored.

6.5. RESTORING THE DATABASE (LSM BASIC EDITION)

PROCEDURE

- Launch LSM
- Setup
- Select backup file
- Check new DB alias and rename if necessary
- Restore
- OK

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6.6. CREATING A DATABASE (FROM LSM BUSINESS EDITION ONWARDS)

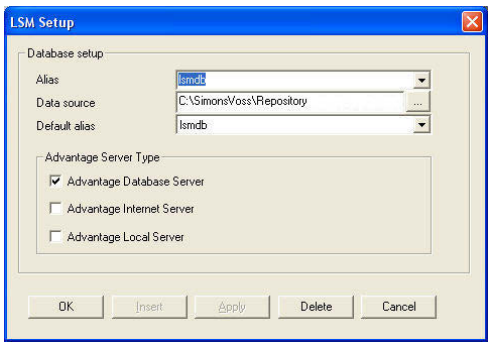
PROCEDURE

- Using a workstation on the server, create a folder in the desired location (e.g. *D:\SimonsVoss_DB*). This folder should not be located in a directory that is protected by the system (e.g. *C:\Windows*, *C:\Programs*).
- Unzip the lsmdb.zip file from the *C:\Programs\SimonsVoss\LockSysMgr_3_0\db* folder into the new folder.
- Approve folder (here: D:\SimonsVoss_DB) (approval name)
- Read access for everyone (optional)
- Hidden approval can be used

6.7. SETTING UP THE DATABASE (FROM LSM BUSINESS EDITION ONWARDS)

PROCEDURE

- Launch LSM
- Setup
- Assign alias
- …
- Select “lsmdb.add” database file
- Select “Advantage Database Server”
- Insert



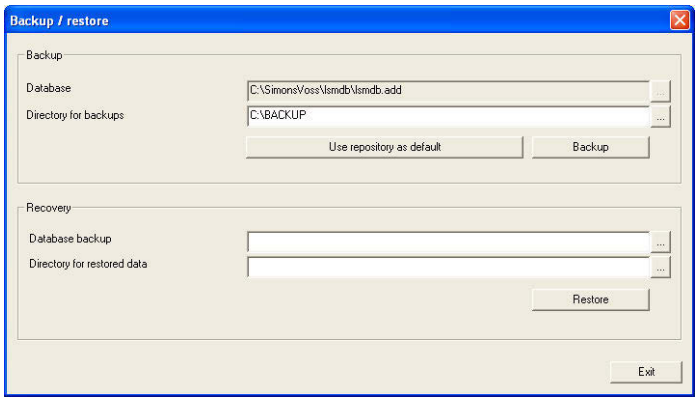
RECOMMENDATION

- Enter UNC path. (e.g. \\Server name\Approval\lsmdb.add)
- Use hidden approval

6.8. BACKING UP THE DATABASE (FROM LSM BUSINESS EDITION ONWARDS)

PROCEDURE

- Launch LSM
- Log on to the database
- Import all mobile data sets (LSM Mobile Edition)
- ➲ Database
- ➲ Backup
- Select database
- Specify directory for backup
- The directory can also be predefined as Use directory as default
- Save
- Close



Note:
Backing up the database is in principle the responsibility of the customer's IT team. SimonsVoss accepts no liability for missed, incomplete or faulty backups.
Please check at regular intervals whether the backups created can also be restored.

6.9. BACKING UP THE DATABASE (FROM LSM BUSINESS EDITION)

PROCEDURE

- Import the PDA databases, if necessary
- Cut off all access to the LockSysGUI (lock log-on)
- Stop the SV CommNodeSvr (if available)
- Stop the Advantage Database service (if available)
- Back up the database. You can do this by copying the entire directory containing the lsmdb.add to another location.

These processes can be carried out manually or automatically, as is described in the next point.

Create a *DB_backup.bat* with the local circumstances.

When running the *DB_backup.bat* file, a log file, *db_backup.txt*, is created. It is possible to determine whether or not the backup was successful by evaluating this file.

Examples of the *DB_backup.bat* file:

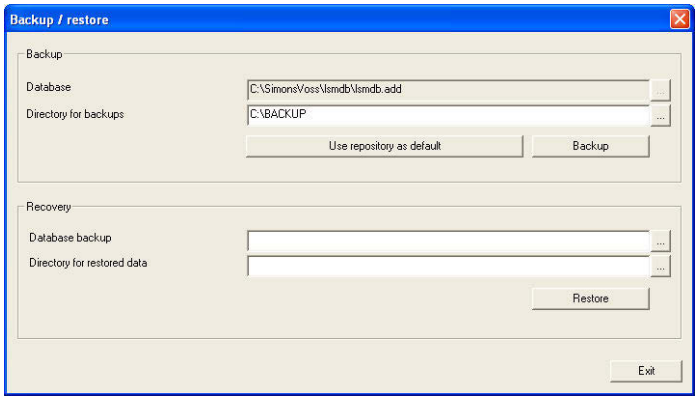
```
E:
cd E:\svdb\lsmdb_sv
net stop SVCommNodeSvr /y        >> db_backup.txt
net stop Advantage               >> db_backup.txt
copy *.* .\db_backup\                  >> db_backup.txt
net start Advantage /y                 >> db_backup.txt
net stop SVCommNodeSvr /y        >> db_backup.txt
```

If necessary, an automatic backup can be planned via the Windows task planner.

6.10. RESTORING THE DATABASE (FROM LSM BUSINESS EDITION ONWARDS)

PROCEDURE

- Launch LSM
- Log on to the database
- ➲ Database
- ➲ Backup
- Select database backup
- Specify directory for backup
- Restore
- Close



6.11. OPTIMISING THE DATABASE

Please ensure that you always have a current and functional backup before performing optimisation.
Always contact your SimonsVoss support contact if you have any questions concerning optimisation.

6.11.1 OPTIMISING THE AUTHORISATIONS

EXPLANATION

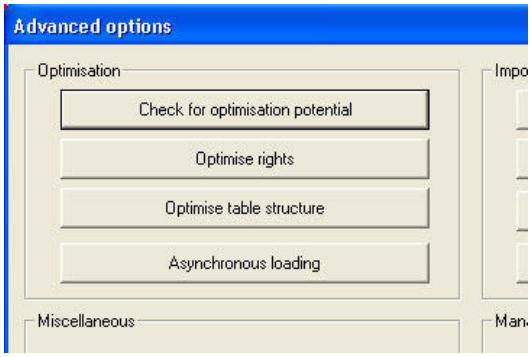
Users who have been using LSM for a long time may occasionally question the performance of the database application. Restructuring in particular can result in more data (authorisation crosses) and an increased strain on the database. Users can thereby give authorisation to a transponder group and give explicit individual authorisation to one person in this group. This means that the person in question has two independent authorisations for the same door. This is not only confusing, but also unnecessary.

PROCEDURE

- Options
- ➲ Advanced
- Check optimisation requirement
- OK

then, if required

- Optimise authorisations
- OK



NOTE

In some circumstances it may take several hours to check the need for optimisation and should be carried out with the “Advantage Local Server” configuration.

6.11.2 OPTIMISING THE TABLE STRUCTURE

EXPLANATION

Using a database for long periods can cause irregularities in the individual tables. Optimising the structure resets the table indices and removes any data inconsistencies.

PROCEDURE

- Options
- ➲ Advanced
- Optimise table structure
- OK

7.0 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 LSM-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 lsm-support@simons-voss.de
Telephone +49 (0) 1805 57 3060

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