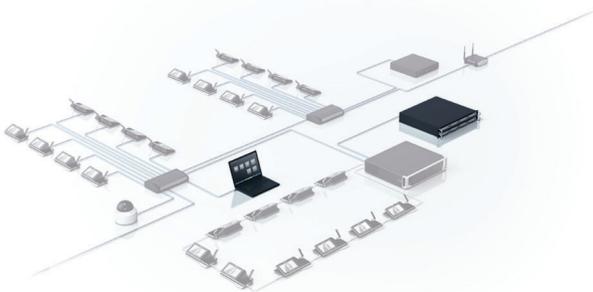


# DCNM-LSYS System server software license

[www.boschsecurity.com](http://www.boschsecurity.com)



**BOSCH**  
Invented for life



- ▶ Automatic device discovery
- ▶ Controls up to 750 DICENTIS devices for participants
- ▶ Client server solution
- ▶ No user interaction needed to run the system
- ▶ Dante™ inputs and outputs for floor audio

The DICENTIS System Software is used as a platform for controlling the entire DICENTIS Conference System. Basic functions are included; additional functions can be added depending on the required functionality.

## System overview

The DICENTIS Conference System can be kept up-to-date by means of regular software updates. These software updates are free-of-charge for the first year after activating the DICENTIS system. After the first year, Software Maintenance Agreements (SMAs) can be purchased for one (DCNM-1SMA), two (DCNM-2SMA), or five (DCNM-5SMA) years. For more information, refer to the product related information on [www.boschsecurity.com](http://www.boschsecurity.com).

## Functions

DICENTIS System Software is a server client solution and consists of two main components: The Server Software and the Meeting Application.

### Server Software

The Server Software is a set of Windows services. The individual services do not have user interfaces and are run in the background to control and monitor all

DICENTIS components and optionally the Meeting Application(s) running on client PCs. A user interface is present for system state and diagnostics. The Server Software also contains a license activation module. This module is needed to activate the license of a complete DICENTIS Conference System. Once, the Server Software has been configured by means of the Meeting Application, the Server Software can run autonomic without any user intervention.

### Meeting Application

The Meeting Application acts as a PC user interface, and is used to configure the system and manage and prepare meetings. Besides the Multimedia device, this application is the user interface of the system. To prepare and manage a meeting from the Meeting Application, the DICENTIS Meeting Preparation and Management software module is needed.

If required, the software server and meeting application(s) can be run on separate computers. This allows functionality to be assigned to different users and/or PCs – for instance, one or more users can configure the system (configure), while other users:

- register persons and assign them as participants (prepare meeting).
- manage the meeting (manage meeting) on a separate PC.

The system software contains the following basic functionality:

**Configuration from the Meeting application:**

- Devices are automatically discovered and can be automatically or manually assigned to a seat.
- Setup chairperson seat.
- User management.
- Setup volumes of multimedia loudspeakers and sound reinforcement output on DCNM-APS (both Line Input /Output and Dante Input / Output are available).
- Enable/disable Acoustic feedback suppression.
- 5-band parametric room equalization.
- User definable priority and summon tones.
- Speech timer per speaking turn, to distribute speaking time more evenly amongst participants and make the meeting more efficient.

**Functions that can be accessed from a multimedia device which is setup as a chairperson seat:**

- Microphone modes:
  - Open mode automatic, Open mode manual managed, Override mode, Voice mode.
- Number of open microphones: 1 to 25.
- Number of waiting speakers: 0 to 200.
- Enable/disable automatic microphone off after 30 seconds.
- Enable/disable priority tone.
- Master volume control.
- Initiate a summon chime.

The PC running the software server must be activated with a license before it can be used. When DCNM-LSYS DICENTIS system software is ordered, it is sent by e-mail; the e-mail contains all information how to activate the system.

If the PC running the software server needs to be replaced, an easy-to-use solution is in place to activate the replacement PC, without the need to order new software. Your Bosch representative can provide more information on this, if required.

**Web based synoptic microphone control**

The Server also hosts a web server which allows for web based synoptic microphone control. The web based synoptic microphone control has the following functionality:

- Enabling and disabling microphones
- Displaying the microphone state of the seat
- Uploading a background to mimic the room layout
- Automatically scaling the layout to the used target device
- Displaying if the discussion device is in error state
- Updating the user rights automatically upon activating and deactivating meetings
- Displaying participant pictures

**Web server for meeting documents**

The Server also hosts a web server that allows for storing and retrieving documents related to the meeting. Web based synoptic microphone control. The web server has the following functionality:

- Uploading meeting related documents

- Linking web pages and documents to meetings and agenda items

**Parts included**

Quantity	Component
1	E-mail with license activation information.

**Technical specifications**

**Technical**

This section lists the minimal requirements for each part of the system. For an overview of which parts are required or optional, see the DICENTIS manual System Overview sections.

**PC**

A PC can be used for three purposes:

1. PC running the server software in a multi-PC system.
2. Client PC (running the Meeting Application only).
3. Single PC used for both above purposes.

For each use there are minimal requirements as listed in the following table.

Single PC system running server software and meeting application:	<ul style="list-style-type: none"> <li>• Windows server 2008 R2 64 bits, or:</li> <li>• Windows server 2012 R2 64 bits (including .NET Framework 3.5 feature):</li> <li>• Processor i7 4 cores 2.5 GHZ.</li> <li>• 16 GByte RAM.</li> <li>• 20 GB free disk space.</li> <li>• 1 GB Ethernet card.</li> </ul>
PC running the server software in a multi-PC system:	<ul style="list-style-type: none"> <li>• Windows server 2008 R2 64 bits, or:</li> <li>• Windows server 2012 R2 64 bits (including .NET Framework 3.5 feature):</li> <li>• Processor i7 4 cores, 2.5 GHZ.</li> <li>• 16 GByte RAM.</li> <li>• 20 GB free disk space.</li> <li>• 1 GB Ethernet card.</li> </ul>
PC running the meeting application only:	<ul style="list-style-type: none"> <li>• Windows 7 home premium 64 bits, or</li> <li>• Windows 8.1 Pro/ Windows 10 Pro 64 bits (including .NET Framework 3.5 feature):</li> <li>• Processor i5 4 cores, 2.4 GHZ.</li> <li>• 8 GByte RAM.</li> <li>• 20 GB free disk space.</li> <li>• 1 GB Ethernet card.</li> </ul> <p><b>Note:</b> Windows 10 is only suitable for use with the client PC.</p>

**Switches**

The following minimal requirements apply to switches:

- 1 Gbit or higher with hardware switching capabilities.

- Quality of Service through differentiated services with 4 or more output queues and strict priority packet scheduling.
- (Optional) IGMPv3 or IGMPv2 snooping. To optimize bandwidth usage, IGMP snooping can be used. This is useful in systems with >10 multicast streams, although not absolutely required. Sufficient performance for handling a large number of IGMP query responses, depending on the number of (directly or indirectly) connected devices to that switch. Hardware support for IGMP is strongly recommended.
- VLAN separation is recommended instead of IGMP, because most switches are unable to handle the multicast changes in the system. Filtering multicast data may be necessary for some devices, such as 100 Mb devices (Sony cameras, TVOne, AMX, and others).
- (Rapid) Spanning tree needs to be DISABLED for optimal operation. When enabled, it can cause slow connections to the switch. In case of a redundant network where you would require RSTP, configure the switch to use the “portfast” mode.
- (Optional) SNMPv3 support for switch supervision purposes.

#### Routers

The following minimal requirements apply to routers:

- 1 Gbit or higher Ethernet ports.
- Supports PIM-DM or Bidirectional PIM.
- Performs IP routing in hardware (i.e. a ‘layer 3 switch’) to minimize the routing delay.
- Packet forwarding rate > 1,000,000 packets per second per port (e.g. 8 Mpps for an 8-port router).
- Non-blocking backplane per switching port, i.e. 2 Gbit per port (e.g. 16 Gbps for an 8-port router).
- MAC address table of at least 1000 addresses per directly connected subnet.

#### Ordering information

##### System server software license

DICENTIS System Software, software platform for controlling the DICENTIS system. Additional software modules can be added to extend functionality. The system is configured with the Meeting Application. Order number **DCNM-LSYS**

##### Software Options

##### Meeting preparation and manage license

The DICENTIS Meeting Preparation and Management software module enables the prepare and manage meetings functions in the Meeting Application. Requires system license DCNM-LSYS. Order number **DCNM-LMPM**

##### Participant database license

DICENTIS Participant Database gives the ability to define participant’s names and assign participants to seats. Requires system licenses DCNM-LSYS and DCNM-LMPM. Order number **DCNM-LPD**

##### Presenter license

DICENTIS Media Sharing enables the display of a remote presentation computer to be shared on all DICENTIS Multimedia devices. Requires system license DCNM-LSYS. Order number **DCNM-LMS**

##### Camera control license

DICENTIS Camera Control enables the use of Bosch Onvif compliant cameras in the DICENTIS Conference System and DICENTIS Wireless System. DCNM systems require system license DCNM LSYS. Order number **DCNM-LCC**

##### License for voting at 1 seat

DICENTIS software license for enabling voting at seat in the DICENTIS Multimedia, DICENTIS Discussion device with touchscreen, and DICENTIS wireless Extended. The DICENTIS Discussion device with voting has the functionality built-in. Order number **DCNM-LSVT**

##### License for identification at 1 seat

DICENTIS software license for enabling identification at seat in the DICENTIS Discussion device with voting, DICENTIS Discussion device with language selector, DICENTIS Discussion device with touchscreen, DICENTIS Multimedia device, and DICENTIS wireless Extended. Order number **DCNM-LSID**

##### License for language selector at 1 seat

The DICENTIS Select Language at Seat license enables the language selection feature of the DICENTIS Multimedia and DICENTIS Discussion device with touchscreen. The DICENTIS Discussion device with language selector has the functionality built-in. Requires system license DCNM-LSYS. Order number **DCNM-LSSL**

##### Voting preparation and manage license

Enables the preparation and management of voting rounds. Requires system licenses DCNM-LSYS, DCNM-LMPM, and DCNM-LPD. An individual seat license (DCNM-LSVT) is required for each DICENTIS Discussion device with touchscreen and/or Multimedia device, the Meeting Application, and the API client. Order number **DCNM-LVPM**

##### Software maintenance agreement 1 year

DICENTIS Software Maintenance Agreement for one additional year. Includes the licensed system and seat software upgrades, as well as third-party compatible updates. Order number **DCNM-1SMA**

**Software maintenance agreement 2 years**

DICENTIS Software Maintenance Agreement for two additional years. Includes the licensed system and seat software upgrades, as well as third-party compatible updates.

Order number **DCNM-2SMA**

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**Software maintenance agreement 5 years**

DICENTIS Software Maintenance Agreement for five additional years. Includes the licensed system and seat software upgrades, as well as third-party compatible updates.

Order number **DCNM-5SMA**

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