



AudioVisual

conference automation

Software description and requirements

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Supported Conference systems and available features through EasyConf_Base

	Bosch DCN-NG	Bosch CCS1000	Bosch Dicontis Wireless	Bosch Dicontis wired	Shure MXC	Shure MXCW	Televic Cocon	Televic Confero	Audio Technica
Direct connection to the Central Controller	X	X	X		X	X		X	X
Connection to conference software-api				X			X		
Meeting and Agenda preparation including delegate database	X	X	X	X	X	X	X	X	X
Voting and voting preparation support	X		X	X		X	X		X
EasyConf Speech time support.	X	X	X	X	X	X	X	X	X
ID card support (free seating)	X		X	X		X	X		X
Fixed seating. Live Drag-drop delegate move and un-assign possibilities.	X	X	X	X	X	X	X	X	X
Suprema fingerprint possibilities.	X	X	X	X	X				X
(synoptic) Microphone control	X	X	X	X	X	X	X	X	X
(synoptic) Request list control	X	X	X	X		X	X	X	X
Per-delegate manage, speech and voting rights.	X	X*	X**	X	X*	X	X	X	X
EasyConf Connect support	X	X***	X	X	X***	X	X	X***	X
Report attendance results to PDF, Word, PowerPoint, Excel, and text files and/or directly to printer.	X	X	X	X	X	X	X	X	X

(*) Limited individual delegate voting-right support when using dual-delegate mode

(**) Individual Speech time right supported

(***) Remote voting support, not in conference system



About the MVI AudioVisual Software Suite and the licensing system

The MVI AudioVisual Software Suite contains the range of solutions that allows:

- full control of conference systems, including microphone control, request list management and (group) speech time management
- Its delegate database, meeting database and voting preparation
- Hall presentation of voting results, speaker activity, agenda items and speech times
- When combined with EasyCam, full integration of conference systems and automated camera control, name and title overlaying, and hall display layered over the camera feeds.
- When combined with EasyConf Connect, full control over all microphones including remote microphones from people participating from a remote location including speech times.

EasyConf Conference system uniformity

Nearly all MVI AudioVisual products described below behave and look the same when used with most kinds of supported conference systems, because it is just one-and-the-same software suite that controls it all.

For either of these conference systems there is camera and name displaying, dome control, 2-speaker view, Excel meeting preparation, start and stopping of meetings/agenda items and voting sessions. Presenting on hall displays and paperless reporting

Once you know how to use EasyConf with one conference system, you will know how to control most conference systems.

Possible HYBRID conference system operation

When multiple EasyConf licenses are used, it is possible to prepare and control separate Bosch conference systems at the same time, as if it's one conference system. (With limitations, please ask us about the possibilities)

This environment allows meeting preparation and delegate-seat assignments to unique seat-names on both systems, a shared request list, shared speaker list and more!



EasyConf

EasyConf_Base

This license adds the ability to control various types of conference systems using our custom designed user-interfaces.

It allows multiple user-interfaces running on different devices to control the system at the same time if needed. This can be the chairman behind an MMD device, an operator behind a PC or even an operator using an Android tablet.

A supplied template editor allows custom screens and user interfaces to be build, where the user can jump between controls for speakers, seats, timers, dome-cameras, meeting, agenda, and voting, ...

Feature list:

- Individual and group speech time setup and control.
- Live Drag and drop seat assignment when people shift seats.
- Synoptic microphone control per seat.
- Optional use of photos of individuals or political parties for seats and different kind of lists (voting results, active speakers...).
- Speaker-list and request list, including touch control to disable a speaker or enable a request delegate.
- Selection, starting and stopping of prepared meetings, agenda items and voting sessions.
- The look-and-feel of the user-interface is fully customizable using the supplied template editor. The user/controller can switch to other templates where needed.
- Control camera prepositions from any control client including a live feed of the video (Requires EasyCam).
- Centralized delegate and meeting database
- Allows the import and export of meetings using simple Excel files.
- Delegates can be directly added to conference system seats, including speaker, voting and manage rights.
- Allows adhoc voting and agenda items.
- Allows the conference system(s) to be controlled by Windows clients, Bosch MMD device and Android tablets using fully customizable user interfaces.
- Allows Bosch DCN-NG chip-cards to be read and written. (*Requires ACR32 reader, not included*)
- Allows NFC cards for Bosch Dicientis Wired and wireless to be configured, for instance at a reception desk or operator position. Android tablet NFC is supported. (*Requires ACR122 reader, not included*)

EasyConf_Advanced

Adds voting capabilities to EasyConf_Base (and EasyConf Connect)

This license allows voting sessions to be performed inside the Dicensis Wired, Dicensis wireless and DCN-NG conference system. Voting sessions can be prepared before the meeting by the supplied software or by loading an Excel file with the meeting details including the voting sessions. On DCN Multimedia devices we run our own android-app to perform the voting sessions.

Features:

- Allows for Parliamentary “yes/no” and “yes/no/abstain” style voting. (Can be translated to any language)
- Multiple choice voting up to 5 answers for NG and 25 answers for DCN-MMD devices running our modern app.
- X out of Y voting which allows more than 1 answer on a given question (DCN-MMD only)
- Preparation of voting sessions in the program and by using prepared Excel files. When using Excel, multiple-choice answers can be defined per voting session.
- Voting control by the operator/chairman using the PC MVI-Client or an MMD device which is set as ‘control’.
- Flexible layout of the User Interface of MMD delegates and MMD chairman using the supplied template editor.
- Optional unique background image on MMD devices based on the political party of the user.

Adds (PDF) reporting to EasyConf_Base

This license adds voting reporting/printing capabilities and adds participant and speech time reporting features.

These reports will automatically be created as PDF, Word and PowerPoint files in a pre-defined folder, can be printed to a pre-defined printer and even emailed.

Features:

- Voting results reporting, including group voting results and individual voting results
- Attendance reporting, including in and out times
- Agenda items including voting results summary for that agenda item
- Reporting in PDF, Word, PPT, Excel and plain text
- Allows the automatic reporting of meetings and voting sessions. This way the end-user doesn’t even need to use the software.
- Optional emailing and printing of automatically generated reports
- Acts as a meeting and voting archive
- Allows for a customer specific watermark in the reports to give it the look-and-feel of your end customer standard documentation
- Custom reports can be made on request

Adds hall-presentation capabilities to EasyConf_Base

Features:

- Allows meeting information like speakers, speech times, attendance, voting results, current agenda item and other data from the conference system to be presented on large hall displays
- Enables custom hall display UI design, allowing templates to be designed specifically for the requirements of the end customer
- Allows similar hall display templates to be used inside the EasyCam camera application as a layer over the camera feeds, even with (semi) transparent overlaying
- Hall-display clients can be configured with automatic triggers based on meeting changes like start/stop voting, agenda, and meetings so the switching behaviour can be made automatic
- Hall displays can also be manually switched to another template using the EasyConf control UI

Adds Suprema fingerprint scanner support and advanced login for Delegate-UI devices

MVI supports the latest Suprema BioStar 2 compatible devices like the BioEntry W2. This allows fingerprint scanning, phone authentication and even face recognition to be used for identification and authorization to use a conference seat/device.

This feature adds advanced login capabilities on the MMD devices like delegate selection from lists and filtering methods.



EasyConf_DeIU_seat

This license lets us take-over the User Interface of Bosch MMD devices and run it with our own custom generated user interface. A license-per-seat is required for each MMD device used in the system.

This allows a custom look-and-feel of the conference system, targeted towards the look-and-feel requirements of the customer. This concept allows a simplified form of operation for the end-user on Bosch MMD devices, while still offering flexibility and custom actions, like our own parliamentary and multi-voting offering.

Features:

- Customizable user interface for meeting delegates.
- Use your logos and your house-style into the conference system design.
- Custom voting screens and voting options.
- When combined with EasyConf Connect, shows correct voting results on MMD devices when remote votes are cast and mixed with the conference system
- Custom welcome screen and login mode.
- Screen background can be unique per country or political party.
- Full-screen or windowed live-video and presentation feed. (Requires EasyCam-Video)
- Let the user control their own UI or let the chairman device what screen the user looks at.



EasyCam_Base

EasyCam is a PC software-based software can directly control and display multiple cameras connected to a PC using HD-SDI video or H264/H265 live video to multiple connected displays.

The software acts as a seamless video switcher to select cameras, and as a video scaler and as a character generator. All inputs' resolutions and framerates may be unique and different from the output frequency. In addition, EasyCam can overlay the name of the current speaker on top of the camera footage using HD generated text and the logo of the political party. This results in a broadcast quality camera-and title display for the hall to see.

Features:

- Shows name, title, and logo of the current speaker on the PC screen output, based on microphone activity from the conference system
- Acts as a video switcher when using more than one camera HD-SDI input, up to 7 inputs and 1 extra for presentation input.
- Acts as a video scalar: Any camera can have its own resolution
- Fully automatic or manual dome control.
- Support for a wide range of IP cameras such as Lumens, Avonic, Sony and many more
- Shows the full title and name of the speaker on screen
- Split-screen mode, to show more than one speaker simultaneously
- Multi-display output for clean-feed and a mosaic viewing
- Low-latency video-over-ip displaying, up to 8 inputs @ 1080p60

EasyCam_Advanced

This license expands the basic features of EasyCam_Base and adds some unique features.

Features:

- 24 camera/input support (see requirements).
- 4K display support and full 4K camera support. Up to 8 cameras @ 4k60 or 16 cameras @ 4k30 mode using our video-over-ip solution.
- Multi-room layout.
- Per preposition color control. Easy sit/stand setup and corresponding preposition.
- Professional Skaarhoj camera control, using our own custom created firmware which perfectly matches the behaviour of the camera and LED feedback with EasyCam.



EasyConf Connect

EasyConf Connect: our hybrid remote participation AV solution for your conference systems.

EasyConf Connect allows up to 150 delegates to enter the meeting from a remote location as if they are part of the meeting room.

With EasyConf Connect, the remote participant is part of your AV and conference system as if the person is in the room. It doesn't matter for the flow of the meeting if the speaker is remotely present or present in the hall:

- If the person is in the hall, a conference system microphone is used. When its microphone is enabled, a dome camera will show the speaker and the conference unit is used to cast votes.
- If this person is participating from a remote location, the remote webcam and its microphone are used and EasyConf Connect is used to cast votes.

For the chairman, the audience, the recording, live-stream, and the conference and voting system there is no difference: all will look and work the same if the person is either remotely present or participating in the hall. That is what we call **Easy!**

Features:

- Up to **150 remote delegates** connected, even in a mosaic view while the meeting itself may contain 500 delegates
- Integrated hybrid voting solution in which votes from remote delegates are combined into the conference system. We combine and correctly display the voting results
- Full chairman control over the room conference units, remote microphones, and request list
- Microphone, meeting and voting control works the same for remote and hall delegates
- Individual and group speech time support, no matter where you sit
- Interpretation channel support for remote participants, who can tune-in on their own selected channel
- Mosaic view, multi video outputs. Mosaic view is nicely sorted by (political) group and alphabetically.
- Local hosting support. We supply the distribution server software so hosting can be managed by the end-customer or AV integrator to allow full control over your own data. Perfect for big institutions to keep your data in your own network
- Integrated Acoustic Echo Suppression for the conference system and remote delegates
- Customizable UI to allow for custom look-and-feel for remote users
- User interface for delegates available in multiple languages

EasyConf Connect MVI Hosting

This is a service offered by MVI AudioVisual to host an EasyConf Connect server to allow remote delegates to join the meeting in the room.

MVI AudioVisual takes care of:

- Hosting on a server in your country. Current supported countries are Germany, France, Finland, UK, and The Netherlands. On request, we can use a VPS hosting provider in your country (if available) to meet any government requirements which states that hosting must be performed from a server inside your country.
- Availability: 24 hours availability of the services 6 days in the week. Sundays are maintenance days to allow us to upgrade and maintain our network which may lead to temporary loss of service.
- X509 Certificate management and keeping certificates up to date. We secure our servers and remote connections to our servers with 2048bit X509 certificates and TLS 1.2/1.3 security.
- Support from 09:00 till 22:00 on weekdays Amsterdam time.
- Server maintenance and latest Windows updates are done by us on our weekly maintenance schedule on Sundays.
- Required bandwidth availability for maximum use of EasyConf Connect.

MVI hosting is priced per-connected-delegate-per-year. This means in a meeting with 100 persons and 20 MVI Hosting delegates, any of the 100 delegates may connect remotely up to 20 delegates at the same time.

EasyConf Connect Self-hosting

EasyConf Connect self-hosting is an advanced concept where you or your end customer wants or needs to self-host our server.

This allows the customer to use our hosting server inside their own network. Or making it even part of a VPN network where delegates first need to enter the VPN network before they can even access the servers.

We need to emphasise that Self-hosting makes the hosting **your responsibility**. E.g., all the added benefit points of MVI Hosting becomes your responsibility to manage and requires advanced IT integration knowledge.

Self-hosting allows for 150 remote connections and is priced per-room-per-year and comes with an installation manual.



System requirements

All Windows based application require Windows Server 2019 desktop edition or Windows 10 Pro 64-bit.

Our software can be shared with other software running on the same PC, if the total CPU and GPU consumption never exceeds 70%.

We recommend the use of Windows Server 2019 over Windows 10. This platform is more clean, easier to maintain and has less major changes over time in respect to Windows 10.

Note: Windows Server 2022 and Windows 11 are currently not supported for EasyCam.

EasyConf for Windows

- Minimal 8 Gbyte memory.
- Minimal Dual core 2Gz Intel (i-core or XEON) processor. (2 or more real CPU cores)

EasyConf_DelegateUI for Windows

Between 1-50 DelegateUI MMD devices

- Minimal 8 Gbyte memory.
- Minimal Quad core Intel (i-core or XEON) processor. (4 real CPU cores)

Between 51-300 DelegateUI MMD devices

- Minimal 16 Gbyte memory.
- Minimal Octa core Intel (i-core or XEON) processor. (8 real CPU cores)

Between 301-600 DelegateUI MMD devices

- Minimal 16 Gbyte memory.
- Minimal 12- core Intel (i-core or XEON) processor. (12 real CPU cores)

EasyConf Control Windows client

- Minimal 2 Gbyte memory.
- Minimal Dual-Core CPU
- Optional available USB connector for a card reader
- Windows 10-home supported.

EasyConf Control Android app requirements

- Android 4.1.2 or higher
- Minimal Quad core processor

The required .APK files can be found here:

www.mvi-audiovisual.com/android/landscape.apk or www.mvi-audiovisual.com/android/portrait.apk

The landscape android app is recommended since all example UI templates are in landscape mode. There are many android device manufacturers, it will be impossible to guarantee support for all android devices. **We recommend testing your preferred android device first** before selling this to your end customer.

EasyCam

- 16 Gbyte memory.
- Quad core Intel processor. (4 real processors). When combined with EasyConf_DelegateUI and more than 50 screens, please add extra cores, see EasyConf_DelegateUI system requirements.
 - When using BlackMagic design capture devices, we recommend an Intel XEON CPU
 - Check <https://www.blackmagicdesign.com/support/note/9568> for recommended hardware and workstations.
- Nvidia Quadro T600, P2200/A2000 graphics card (for Full-HD) or Nvidia Quadro RTX4000 (for 4k) or better.
- Note: The T600 and P2200/A2000 can be used up to 12 camera inputs. The RTX4000 up to 24 Full-HD inputs or 8 4K video-over-IP inputs. Note that the T600 and T1000 are limited to a mix of maximum 3 encode streams; The P2200/A2000/RTX4000 don't have this limitation and are recommended.
- Laptops equipped with GTX 1060, GTX 1660, RTX2060 or RTX3060 (or better) combined with an Intel CPU can be used for testing and demonstrations, they have the same 3 encode-streams (outbound) limitations.

EasyCam + EasyConf Connect

- Specs same as EasyCam.
- Quadro P2200/A2000/RTX4000 or better make this system EasyConf Connect certified and prepared for many future feature updates like room-coupling.

EasyConf Connect server

- Windows 10 64-bit, Windows server 2019. Can be a virtual machine or Virtual Private Server.
- Dual core (2 physical cores), minimal 2.5 Ghz
- 4 Gbyte memory.
- High throughput internet connection, up and downlink, recommended minimum 100 Mbit up/down up to 20 remote delegates and 250Mbit up to 100.



EasyConf Connect client

- Windows 10,11: Home or professional
- MacOS 12 / iOS 15
- Dual core (2 physical cores), minimal 2 Ghz. Preferred intel Core i3 or better.
- 4 Gbyte memory
- (embedded) webcam and (embedded) microphone
Recommended: USB headset use for best meeting experience.

Conference system license requirements

Below is a quick list of individual licenses you will need to purchase for your selected conference system brand. We cannot be held responsible for third party software of licensing needs to connect to our software.

Bosch

Please ask your Bosch representative about Bosch licenses.

- MM / Dicontis wired:
To be able to use the MVI software suites on the Bosch Dicontis-wired system (including Bosch Multimedia), the Bosch DCNM-LSYS, DCNM-LMPM and DCNM-LPD licenses are minimally required.
The Bosch Voting-per-seat and Bosch voting preparation license is required for all units when at least 1 Bosch Dicontis wired unit is used for voting. This license is not required when only MMD units are used and the MVI voting methods are used.
The Bosch-ID-per-seat license is required when identification using NFC cards is required.
- NG:
To be able to use the MVI software suites on the Bosch DCN-NG system, the Bosch Open Interface (LBB4187) license is required.
- CCS1000:
No Bosch licenses required
- Dicontis wireless:
When applicable: voting-per-seat, identification-per-seat and/or dual-seat per unit license. Ask you Bosch representative.

Televic

Please ask your Televic representative about required Televic licenses.

- CoCon:
Discussion license
Voting license
Authentication license
For Flex wired/Flex wireless: When applicable: voting-per-seat, identification-per-seat and/or dual-seat per unit license.
- Confero:
Confero 360 license
For Flex wired/Flex wireless: When applicable: voting-per-seat, identification-per-seat and/or dual-seat per unit license.

Shure

No additional licenses are needed for the supported MXCW system.

AudioTechnica

No software licenses required; our solutions take full control.