DICENTIS Conference System 6.21

BOSCH

en Release Notes

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1 History

Release	Release Date	Release Comments
6.21.34	2024-09-05	Improvements: • Fixed issue with DCNM-CRN where the number of participants to a meeting was limited to 100. Corrected it to 1500.
6.20.27	2024-08-06	Added functionality: **Synoptic control** • Meeting and agenda control added to Synoptic control. • Presentation control for Premium and Ultimate licenses added to Synoptic control. • Voting control added to Synoptic control. **Meeting application** • Create a meeting with participants which starts automatically, with a single button click. **DCNM-CRN** • DCNM-CRN is changed from seat based to (1500) participant based to enable Hybrid meetings in released countries. **INT-TXO** • New web based user interface for configuration. • Integrus can be used with Dante sources in Manually controlled mode. • Integrus can be used with a combination of DICENTIS and Dante sources in Manually controlled mode. • Analog Aux input can be routed to all transmitted channels via contact input. Improvements: • Fixed issue where the DCNM-FBD2 can give "crackling sound" and occasionally not recover during a meeting. • Fixed issue that Multimedia device (DCNM-MMD2) becomes slow during voting rounds when a URL is added to the voting round. • Updated the NuGet packages to solve potential security issues. • Improved feedback upon importing persons in Meeting Application. • Improved behavior of deleting empty seats. • Fixed issue where Meeting application shows different quantity of licenses than Activation tool. • Fixed majority expression validation in languages other than English. • Fixed issue in Conference protocol and Synoptic control that that old Booth and Desks are present when new database with different Booth ID's and Desk IDs are imported. This is represented as multiple booths or desks with the same number. • Improved logging of DCNM-MMD; not supported and not relevant messages are not logged to prevent confusion. • Fixed issue with changing discussion settings via a Multimedia device on a system with DCNM-RENTAL license.

Release	Release Date	Release Comments
6.11.37	2024-03-29	Added functionality: **Media gateway** • Media gateway can be configured using a webpage (https://<server-ip>:31416/mediagateway) • Media gateway configuration file location changed to C:\ProgramData\Bosch\DICENTIS\MediaGateway\ **DICENTIS Hybrid meetings** • Interpreted language selection for remote participants. Improvements: • Fixed issue with discussion setting Multimedia device and meeting application options for DCNM-CRN and DCNM-RENTAL license. • Fixed issue that system is operational, but Server console shows waiting for connection. • Fixed issue that seats are removed from Synoptic control when Synoptic control is in configuration mode and a meeting is activated or seats are renamed or deleted. • Fixed issue that Lithuanian UI-language was missing on Multimedia device and displayed incorrectly on Discussion device with touchscreen. • Changed Abstain in Spanish to Abstención on the Multimedia device • Fixed issue with opening documents on Multimedia device. • Fixed missing MMD Android-API information and files in the Tools directory.

Release	Release Date	Release Comments
6.10.12309	2024-02-07	Added functionality: **Voting** - Voting can be configured to enable/disable changing the vote after casting. - Voting answer set A-B, A-B-C, A-B-C-D added. - Voting can be configured to automatically cast a preconfigured vote (e.g. Abstain) for all present participants that did not cast a vote when the voting round is closed. **DICENTIS webserver, synoptic control** - Discussion management via right mouse click. Add speakers queue, remove from speakers queue, add to responders queue, remove from speakers queue. - Microphone sensitivity can be controlled via Synoptic (and .NET API and Conference protocol). **DICENTIS** - Database management: import, export, delete, create new via the server console. - Lithuanian UI language for Meeting application, Synoptic, Multimedia device and Discussion device with touchscreen. - Extended the languages of the installer application so that it matches the Meeting application. Improvements: - Fixed quantities of multiple DCNM-LDANTE activation IDs are summed up. - Fixed log off functionality on DCNM-DE in combination with identification via 3rd party system. - Fixed DCNM-DE shows DICENTIS logo screen with identification via 3rd party system. - Fixed Registered system with DCNM-LDANTE licenses does not operate, no devices are discovered. - Fixed microphone remains open when a participant without discuss rights logs off while the microphone is open. - Fixed fingerprint middleware does not start if middleware configuration file is updated while middleware is stopped. - Removed Presentation source dialog in Meeting application for new premium and Ultimate feature packages. - Added Dante input numbers in Meeting application for processed and unprocessed languages. - Fixed issue where the Dante licenses where not added together. - Removed "unknown plugin" messages from logviewer logfile. - Fixed refresh behavior of Synoptic to prevent that a clean browser cache needs to be done. - Added AKG K15 interpreter headphone and renamed Sennheiser HD3000 to HD300. - Fixed issues with discussion settings (speech timer, response mode) when the system is both Registered as well as having a DCNM-RENTAL license.
6.01.36674	2023-12-01	Improvements: Fixed issue for the Integrus receiver not receiving audio anymore after removing and inserting the headphones or turning it off and on. This issue was introduced in version 5.00 and fixed in 6.01.

Release	Release Date	Release Comments
6.00.36472	2023-11-09	Added functionality: **DICENTIS** • Support for Hybrid meetings in DICENTIS Conference System. **Licensing** • DICENTIS system needs to be registered before licenses can be added. Licenses are added and removed via the Activation site. Improvements: • Selecting "Secret voting" presets button sets the Store results to Only totals. • Modified the Activation tool. Registering the system is done via the Activation tool. Adding licenses / Activation IDs is done via the Activation site • Remote participants can login regardless of the identification settings. One exception: When no identification is configured and a participant is assigned to a seat in the room, then he cannot login from remote. • Only the video switching software, included in the Premium and Ultimate licenses, restarts when an error occurs instead of all DICENTIS services. • Activation tool shows progress indicator for online registration and refresh. • Activation tool shows progress for offline processing of license files. • Participants preferred headphone language is selected on DCNM-FSL.

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5.10.35949	2023-09-29	Added functionality: **DICENTIS** • DCNM-MMD2 with hardware version 03/00 supported. This Multimedia device does not have a camera. **Interpreting** • Added B&O A8, Creative Aurvana Air, Sennheiser HD300, Sennheiser HD2.10, Shure IH6500 headphones to the interpreter desk headphone selection • Notification on interpreter desk when headphones with no protection are selected. • DICENTIS webserver, Synoptic shows which headphones are selected on an interpreter desk. • Meeting notes xml file logs which headphones are selected on which Booth/desk. • Interpreter can select on the interpreter desk if the headset microphone is automatically selected upon connecting a headset. • Headphone selection screen stays open after inserting headphones so that the interpreter can select the correct headphones. In previous versions it closed after 5 seconds. • Enable configuration from desk (B – B) can be disabled (requires Ultimate package). When disabled, then B – B will (only) show system information and set display brightness. • The list of headphones out of which the interpreter can select can be configured (requires Ultimate package). **Identification** • Support of Suprema BioStar 2.9.3.26 software for use of Suprema biometric readers for identification. Improvements: • Fixed issue where DCNM-FBD2 without any connected CAN-bus panels goes through reset after a period of time. • Reduced file size of previous software images so that they can be downloaded from the software site. • Fixed issue with Integrus (INT-TXO) in a setup with 6 languages where language 5 is also distributed on language 1. • Fixed issue with licensing the Integrus (INT-TXO) when special, non-ASCII characters are used for customer information. • Fixed voting column is displayed on the Seats and devices page when DCNM-DVT devices are connected and the system is only Registered. • Fixed issue that language selection on participant devices does not function in the default meeting when the system is both Registered as well as having a DCNM-LSYS license. • Fixed issues with discussion settings when the system is both Registered as well as having a DCNM-LSYS or DCNM-RENTAL or DCNM-CRN license. • Fixed issue that you cannot import persons after you: first import persons, then delete all the persons and then import the persons again. • Prepare agenda added to API demonstrator and documentation. • Extended API documentation with information about "attributes". Devices report to the services which "attributes" they have so that functionality (e.g. power on, volume control, voting, identification) can be shown or hidden on the Meeting application. E.g. a 3rd party application wanting to control the volume should notify that it has the volume control attribute. • Shortcut to Conference Protocol demonstrator via DICENTIS webserver when log in with Configure system rights. • DCNM-RENTAL license increased to 300 DCNM-LSSL, 300 DCNM-LSID, 300 DCNM-DCNM-LSVT and 150 DCNM-LSDU.

Release	Release Date	Release Comments

5.00.35160	2023-07-14	Added functionality:
		   DICENTIS
		• New participant based license structure implemented.
		    o Discuss functionality with camera control does not require a license, but does require registering the system using the Activation Tool. No licenses required. Do not enter an activation ID and press the register button.
		    o Premium functionality becomes available upon activating Premium licenses. 1 license per participant required.
		    o Ultimate functionality becomes available upon activating Ultimate licenses. 1 license per participant required.
		• DCNM-DEMO license updated to reflect participant based structure. DCNM-DEMO provides Ultimate functionality for 6 participants.
		• New video switching functionality implemented for Premium and Ultimate licenses. It provides SDI-video switching and software video switching. The software video switching enables multiple cameras in 1 view. Instruction is part of this release notes.
		• Flush base device is set to dual use when 2 microphone buttons are connected to the same side.
		Improvements:
		• Speechtime of speaking participant is reduced with 20 seconds when the participant settings are changed.
		• Prevent activating of incorrect combinations of licenses. The 4.10 Activation site filters out incorrect combination when you use the Add licenses functionality on the Manage devices page to add licenses to a system.
		• New audio mode for Dante Input 2 / output 2 added. Mix - Minus unprocessed: only for Dante In 2 / Out 2. When selected it increases the input delay to 15m seconds and inserts the Dante audio after the local acoustical feedback suppression, to improve the audio when the system is used for hybrid meetings.
		• Fingerprint middleware is removed from Tools directory as it interfaces with BioStar 1.x software which is no longer supported by Suprema.
		• Fixed behavior that using the right mouse control in Synoptic for Interpreter desks looked strange; the languages were presented like URL's.

4.41.34871	2023-06-20	Improvements: • DCNM-DE with hardware version 01/04 requires DICENTIS Software 4.41 or higher. • Headset microphone of HDP-IHDS is not always detected.

Release	Release Date	Release Comments
4.40.34349	2023-05-10	Added functionality: **DICENTIS Flush** • DICENTIS Flush panel for voting, DCNM-FVP, supported. DCNM-LSVT is required per seat • DICENTIS Flush panel for identification, DCNM-FIDP, supported. DCNM-LSID is required per seat. • DICENTIS Flush panel for language selection, DCNM-FSLP, supported. DCNM-LSSL is required per seat. • DICENTIS Flush panel for audio interface, DCNM-FAI, supported. Improvements: • New Flexera embedded license technology, FNE, supported. • Set a meeting to automatically activate (start) upon starting of the Server PC or using the (system) Power on command on Meeting Application, Synoptic control or API and Conference Protocol. • Fixed the logout time in the meeting notes. • Fixed that Apply screenline clears the speakers from the speakerslist on Meeting Application, DCNM-DE and DCNM-MMD. • Added functionality to automatically activate a meeting upon power up of the system. • Updated Nuget packages. • Increased Dante input latency to 4ms to improve interoperability with DVS (Dante Virtual Soundcard). • DCNM-CRN and DCNM-RENTAL licenses are extended with DCNM-LIMS license. • Fixed passwords over 20 characters are not accepted for DICENTIS Webserver. New maximum length is 50 characters. • Removed user Synoptic for Conference Protocol, DICENTIS Webserver from database for security reasons. The username and password is configure in this file (C:\ProgramData\Bosch\DICENTIS\API\Conference_Protocol_user.jsonc)on the Server PC. For security purposes limit the access to the Server PC and change the default password of the server PC.
4.30.33085	2023-02-20	Added functionality: **Discuss** • DICENTIS Flush devices DCNM-FBD2 supported.

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4.20.33007	2023-02-11	Added functionality: **Interpreting, language distributing** • INT-TXO Integrus OMNEO supported for wireless language distribution via infrared **DICENTIS webserver** • Using synoptic for hall display purposes: • Log in without requiring username & password • Bypassing the home screen • Full screen, hiding top and bottom navigation bars • Selecting a layout upon starting. Improvements: • Conference protocol: Speech timer added. • Conference protocol: Meeting and agenda control added. • Conference protocol: Voting control added. • History page added to API documentation. • Certficate manager updated to prevent same file name for Root and Server certificate. • Room audio settings and indicators improved. • Improved readability of speaker names in meeting application, manage meeting. • Fixed behavior of unknown participant in the voting results due to immediate log off of a participant after casting a vote. • Fixed issues with inserting Dante audio into DICENTIS language channel. • Fixed Japanese Yes/No translations in Meeting Application and Multimedia device. • Updated Nuget packages.
4.12.30606	2022-07-29	Improvements: • Fixed that the microphone is muted when both speakers, on a Discussion device in dual use, were speaking and 1 of them stops speaking.
4.11.30403	2022-07-01	Improvements: • Fixed that the unprocessed audio of the interpreter is not muted when the interpreter presses the mute button. Unprocessed audio is intended to be processed by external systems. • Improved firmware upload of DCNM-D, DCNM-DSL, DCNM-DVT, DCNM-DE and DCNM-FSL in multi subnet systems.

Release	Release Date	Release Comments
4.10.30149	2022-06-01	Added functionality: **Voting** • Support for voting for visual impaired participants. Improvements: • Windows Server 2022 supported. • Support of TLS1.3 (by default enabled) when DICENTIS is installed on a system with Microsoft Windows Server 2022. TLS1.2 is by default disabled on Microsoft Windows Server 2022. • Change over from SQL Server 2014 to SQL Server 2019 • Added large system blueprint using Cisco 9200L and Cisco CBS350. • Improved behavior of DCNM-FSL, DCNM-DSL, DCNM-DE in combination with Cisco 3560 switches: "wrong MAC address of multicast language streams". • Improved Cisco SG350 configuration file for small-medium systems: no audio with PoE powered devices due to IGMP messages. • Possibility to assign a room name to a system. • Possibility to add E-mail address to Persons. • Improved ONVIF camera discovery. • Fixed Camera & preposition view is incorrect for seats without devices. • Fixed create new meeting does not include all default meeting interpreter desk settings. • Fixed un assigning multiple interpreter desks does not work. • Improved Synoptic microphone control; Seat icons are always on top of other items like pie chart, bar graph and text items. • Changed deskType from number to text in Conference protocol. • Fixed Conference Protocol demonstrator cannot activate microphones. • Fixed continuous writing error "Exception in DiscoveryTimerElapsed. Is your network configuration set to 'public'?" in logfile.

Release	Release Date	Release Comments

4.00.29008	2021-12-20	Added functionality:
		Discuss
		• DICENTIS Flush devices supported:
		   ○ DCNM-FBD Flush base device
		   ○ DCNM-FMCP Flush microphone connection panel
		   ○ DCNM-FMICB Flush microphone button
		   ○ DCNM-FMPRIOB Flush priority button
		   ○ DCNM-FLSP Flush loudspeaker panel
		• DICENTIS Flush base device can be used to:
		   ○ Create 2 participant seats each with its own microphone
		   ○ Create 2 chairperson seats each with its own microphone
		   ○ Create 4 participant seats, where participants share the 2 microphones
		   ○ Create a participant or chairperson seat with 2 microphones (e.g. Rostrum)
		   ○ For language selection the DCNM-FSL can be assigned to the seat
		• Speaker queue can be configured from 0-200 to have an open mode (automatic) without a request list/queue.
		Interpreting
		• Interpreter can issue a Slow down or Speak slow request if the pace of the speaker is too fast. Requires DCNM-LIPM.
		• Assignable buttons (E-F-G) can be configured with the following functions to best suit the needs of the interpreter: Timer/clock, video/presentation, language overview, speak slow, headphone selection. Requires DCNM-LIPM.
		Voting
		• Answer sets extended with Yes/Abstain and For/Abstain.
		• Synoptic overview: show voted bar in bar chart.
		• Synoptic overview: display answer set with totals.
		
		Improvements:
		• Fingerprint middleware does not install on Spanish Operating System.
		• Improved Blueprints for Small & Medium and Large system. Available in DVD\Tools directory.
		• Present button also available for voting round in default meeting.
		• Improved video encoder support regarding encoder compatibility.
		• Fixed "no meeting notes and voting files are displayed" in DICENTIS webserver due to difference in date formatting between PC and browser.
		• Fixed 3 letter language abbreviation (ISO639-3) for Bosnian and Norwegian.
		• Preposition 0 can be used for overview camera preposition. If the camera supports preposition 0.
		• Fixed: Automatic seat assignment gets disabled after creating interpreter seats.
		• Phonecall and warning icon blink on the interpreter desk.
		• Meeting and agenda control added to API demonstrator.

Release	Release Date	Release Comments
3.70.27806	2021-07-03	Added functionality: **Discuss** • Speaker can be shown in voice mode to enable automatic camera control or send speaker information to external systems (e.g. for recording). Requires DCNM-LVAM. **Scalability** • System size is extended from 750 to 1500 devices. Improvements: • Updated Meeting Application Floor and language routing page to prevent routing DICENTIS I/O 1 and 2 to Dante gateway I/O 17-64. • Seat without participant cannot issue a request to speak in a meeting with participants. • API demonstrator cannot retrieve boothId and SeatId without only activate meeting rights. • Options in discussion settings are not getting applied when apply button is pressed. • No Floorfill when overriding a desk within the booth using a different language than the original desk interpreted on. • Conference protocol extended with voting timer information. • Participant using Meeting application sees the voting results according voting configuration. • Cannot install 3.51 or earlier on a Windows Server 2016 system after upgrading to 3.60 or later and removing it. The notification is *cannot connect to SQL server*. A tool is created to enable WeakCyphers so that older versions can be installed again. Run this tool prior to installing 3.51 or earlier. Check the Tools directory for EnableWeakCipher.bat and run it with admin / elevated user rights. • Improved installation process of ASP.NET on Windows Server 2016. • Improved Large system blueprint and extended with blueprint for Small & Medium system. Available in DVD\Tools directory.
3.61.27269	2021-04-28	Improvements: • Headphone volume knob behavior improved for interpreter desk. • Improved Large system blueprint added to DVD\Tools directory. • 3.60 DCNM-SW manuals added to Docs directory.

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3.60.26983	2021-03-15	**Added functionality:** Interpreting • Languages can be sourced from DICENTIS and Dante / OMNEO to enable relay interpretation from a local and remote source (DCNM-LIMS). • Support for DCNM-IDESKINT input out interface for phone ringing, alarm and booth in use light. • User interface languages: • Slovenian and Burmese UI language on Multimedia device, Discussion device with touchscreen, Meeting application and DICENTIS Webserver. DICENTIS Webserver / Synoptic Control • Display total voting results as pie-chart or bar graph. • Voting number, subject and description can be displayed. • Meeting subject and description can be displayed. • Agenda subject and description can be displayed. • Meeting notes and voting files can be viewed and printed via webserver. • Show if meeting notes and voting files are authentic. • Meeting notes and voting files use certificate technology for authentication. Conference Protocol • Majority information added to Adhoc voting round. • Version number added to Conference Protocol demonstrator. Security • Easy way to create and install secure certificates. • Meeting documents website is no longer installed by default. This website uses http which is less secure than https, therefor it is no longer installed by default. It can be installed by running DCNmMeetingDocuments.msi from the Installer directory. • Strict Transport Security enforced for webserver using HSTS. This requires Windows Server 2019 or 2016, because HSTS is not supported in the IIS of Windows Server 2012. • TLS1.2 supported and TLS1.0 disabled. • Obsolete participant images can be easily removed, check the hints & tips section of the DCNM-SW manual. Scalability • Large system blueprint added to DVD\Tools directory. **Improvements:** • Display Meeting notes & Voting results in Firefox, Chrome, Edge. • Participant Region information available in Voting and Meeting XML files and displayed via Voting and Meeting stylesheets. • Participant logout time is added to Meeting notes stylesheet. • .Net API, extended with prepare meeting. • .Net API, version added to UI of demonstrator. • Send to Dante works when the Source of the language is Dante. • HPD-IHDP (no pads) is the default interpreter headphone. • Multimedia device does not open documents. • Cannot login with NFC on Multimedia for NFC meeting. • Increased ONVIF discovery TTL from 1 to 3 to discover ONVIF cameras in connected to other switches. • DCNM-IDESKVID does not show video when connected to other VLAN than the DICENTIS server.
3.51.26670	2021-02-13	**Added functionality:** **UI languages** • Lao UI language on Multimedia device, Discussion device with touchscreen, Meeting application and Synoptic control. **Improvements:** • Meeting Application and API cannot connect from client PC.

Release	Release Date	Release Comments
3.50.25260	2020-09-03	Added functionality: Interpreting • Auto-relay, the Floor audio is automatically replace by the Auto-relay language when the Auto-relay booth starts interpreting on the B output language. Voting • Automatic Majority calculation. • Display that a vote is cast, but not the answer. • Automatic Quorum calculation Camera control • Support for Panasonic AW-UE-150 (video displayed on DCNM-MMD via special instruction from Panasonic). • Support for Lumens VC-A61P and Lumens VC-A71P. • Support for Sony BRC-X400. Conference Protocol • Extended participant information. • Show which seat is captured by the camera. • Show which participant image is displayed. • Show active voting round details (including ad hoc voting round). Other • New identification mode where the NFC card needs to stay in the reader range to remain logged in. DCNM-DE, DCNM-DSL, DCNM-DVT also supported in single user mode. • Windows Server 2019 is supported (Support for Windows Server 2012 is discontinued). • Change settings for multiple languages. Improvements: • Floor and language routing page is split into 2 tab-pages. • Support of non-ASCII characters in Activation Tool. • Synoptic and Image server did not function after upgrading to current version. • Unprocessed languages mapped to input 17 or higher of the OMN-DANTEGTW did not function properly.

Release	Release Date	Release Comments
3.40.24446	2020-06-03	• Added: Languages can be sent to OMNEO or Dante as unprocessed language with configurable headroom and optional floor filling. • Improved: Languages can be added and removed from meetings without the interpreter desk microphone switching off. • Added: Elapsed speech timer on the Interpretation desk. • Added: Interpretation desk A-B-C output control via Synoptic control. • Added: Bosch HDP-IHDS headset and HDP-IHDP headphones for hearing protection. • Added: Multiple layouts for Synoptic control. • Improved: User rights behavior in Synoptic. • Added: Ukrainian and Uzbek language to UI of Meeting Application, multimedia device, discussion device with touchscreen, synoptic control. • Added: Speech timer on Discussion device with touchscreen (DCNM-DE). • Added: Change settings for multiple participants and seats. • Added: New identification mode where the NFC card needs to stay in the reader range to remain logged in. Currently only for DCNM-MMD2. • Added: Control presentation via Conference protocol. • Added: who is seated where via Conference protocol. • Fixed: Conference Protocol does not show agenda item state correct. • Added: Support for Extron SMP 111 video encoder with these settings: Resolution: 1280x720, 30fps, GOP length: 30, Video Bitrate: 2500kbps, Rate Control: CBR, H.264: BASELINE, Profile level: 3.1 • Fixed: Discussion devices with touchscreen go through reset when the background image is missing/removed. • Fixed: No floor audio on multimedia device headphone in a system without languages. • Fixed: Values of voting results are cut off in bar graph on the Meeting Application. • Fixed: Voting results file is not stored when too many characters are entered in the number and subject field for ad hoc vote. Voting controls cannot be access when too many characters are entered in the description field for ad hoc vote.

Release	Release Date	Release Comments
3.30.23380	2020-01-31	• Added: Support for DCNM-FSL DICENTIS flush language selector. • Added: Croatian language to UI of Meeting Application, multimedia device, discussion device with touchscreen, synoptic control. • Added: Conference protocol, developer documentation. • Added: Master volume control via Conference protocol. • Added: Meeting & agenda information via Conference protocol. • Added: Voting information via Conference protocol. • Changed: URL Conference Protocol Demonstrator to: https://<server>:31416/Demonstrator/ConferenceProtocolDemonstrator.html. • Added: OMNEO input & output 1 & 2 added for connecting to OMN-DANTEGTW so that it no longer re-uses the Dante input & output 1 & 2. • Added: Automatic selection of headset microphone of interpreter desk can be disabled (requires DCNM-LIPM) • Added: Headphone volume control via touchscreen of DCNM-DE device. • Added: Left and right microphone button can be configured to behave as 1 button. • Added: API demonstrator can be run from different LAN by adding /server <DICENTIS server> to the startup command, similar to what is available for the Meeting Application. • Added: The services do not start if the preferred network connector does not receive an IP-address (e.g. the cable is not connected). • Improved: Server console; services check if a valid license is available and the SQL connection is ok. Otherwise the service do not run. • Improved: in RSTP setup Discussion devices (DCNM-DE, DCNM-DSL, DCNM-DVT and DCNM-D) can disconnect and reconnect due to badly connected cables. • Fixed: Interpreter desk signal can clip when speaking very loud into the microphone. • Fixed: Synoptic is not refreshed, showing new functionality, after upgrade to new version. • Fixed: Synoptic opens wrong url (https://172.16.4.1:31416/signalr/hubs) after upgrade • Fixed: updated license system (Flexera publisher) to latest version to fix vulnerability risk • Fixed: DICENTIS services do not run properly after SQL security update. This is fixed with the improved services which stop when the SQL connection is lost and restart when it is available again. • Fixed: PRS-4OMI4 loses a language channels. Behavior was present in 3.20, but not in 3.11 and previous versions. • Fixed: Offline activation fails when using "strange" characters in the file name and file location.

Release	Release Date	Release Comments
3.20.22282	2019-09-26	• Extended: Response mode implemented. Requires DICENTIS multimedia device or DICENTIS discussion device with touch screen. • Extended: Conference protocol, websocket based interface, implemented with manage discuss and interpretation functionality to facilitate interfacing with non-windows devices. • Extended: DICENTIS automatically powers off after being idle for a pre-configured time to save energy. By default this function is disabled. • Extended: Estonian, Latvian & Serbian language to UI of Meeting Application, multimedia device, discussion device with touchscreen, synoptic control. • Extended: presentation stream can be always available in the system so that the Interpreter can always switch to it. Activate presentation mode, switches the multimedia devices to the presentation stream. • Extended: DOCENT analyses tool is part of the installation. • Extended: DeviceBrowser application available. • Extended: Voting xml filenames with reference number. • Extended: Speech time extended to 99 minutes. • Extended: Support for OMN-DANTEGTW Omneo Dante Gateway. • Extended: Support for DCNM-FSL DICENTIS flush language selector. • Extended: Display of DCNM-DSL language selector turns off when it is not used for 10 seconds. • Extended: Display of DCNM-DSL shows headphone volume level when it is changed. • Fixed: Cannot activate a meeting with a user defined language without abbreviation. • Fixed: tick box "dempen" overlaps in Dutch UI language. • Fixed: multimedia devices and interpreter desks show incorrect time due to Windows time service being active. • Fixed: Fingerprint middleware service does not recognize "finger only" as valid input. • Fixed: Fingerprint reader to DICENTIS seat mapping. • Extended: Biostar 1.93 supported. • Fixed: Welcome screen in Italian is not gender neutral, changed to "Benvenuto/a". • Fixed: Abstain text in Hebrew. • Fixed: HeadphoneUiLanguage property name changed to HeadphoneLanguage. • Fixed: Attendance information not stored in Meeting notes when log in via external system. • Fixed: Preset / preposition number in browser and Meeting Application are not equal for Panasonic camera. • Fixed: Improvements on services.
3.11.21469	2019-06-17	• Extended: DICENTIS Conference System size is extended to 450 nodes before an ARNI is required. Please refer to DCNM-HW manual of 3.20 for more information. • Fixed: DICENTIS Dante streams disappear when removing disconnected Dante sources using Dante Controller. • Fixed: DICENTIS Dante streams not available after upgrade to 3.10, because Dante Virtual Device software is not upgraded to correct version. • Fixed: 3rd party MMD applications no longer work after upgrade to version 3.10.

Release	Release Date	Release Comments
3.10.21060	2019-05-01	• Extended: upto 100 DICENTIS interpreted languages can be sent to multicast Dante streams. Requires DCNM-LDANTE license. • Extended: upto 100 multicast Dante streams can be received by DICENTIS as interpreted languages. Requires DCNM-LDANTE license. • Fixed: Cannot export persons in Spanish, French, Italian, Polish, Portuguese (Brazilian), Russian, Slovak, Hungarian, due to too long names for Excel tab pages.
3.00.20482	2019-02-22	• Extended: DICENTIS portfolio is extended with DCNM-IDESK and DCNM-IDESKVID interpreter desks. • Extended: Interpretation can be configured using Meeting Application and API when system is licensed with DCNM-LIPM. • Extended: persons details with UI language to change the UI language of the DCNM-DE and DCNM-MMD2 upon login. • Extended: persons details with headphone language to change the headphone language of the DCNM-DSL, DCNM-DE and DCNM-MMD2 upon login. • Extended: OMNEO interface functionality to route interpreted languages from DICENTIS to DCN NG • Extended: RSTP can be enabled by setting it as an environment variable DCNM_RSTP_ENABLED • Extended: the RTSP-stream of an ONVIF camera can be copied so you can paste it in a player application for testing purposes • Fixed: User with prepare meetings can delete but not add persons. • Fixed: Voting column is not displayed on Seats & Devices page in a system with only DCNM-DVT devices and no DCNM-LSVT licenses. • Improved: RSTP behavior of DCNM-Dx devices. • Fixed: Panasonic camera will not connect properly. • Fixed: Panasonic camera cannot connect when authentication mode is enabled • Fixed: time drifts on multimedia device which it is powered on multiple days. • Fixed: Laptop cannot connect to 2nd Ethernet port of DCNM-Dx and DCNM-DCNM-IDESKx devices.
2.80.19734	2018-11-09	• Extended: Hebrew, Hungarian, Romanian and Traditional Chinese language to UI of Meeting Application, multimedia device, discussion device with touchscreen, synoptic control. • Extended: Synoptic control with add and remove seats. • Extended: Participant logged in on Meeting application can cast vote. • Extended: Dante inputs can be muted. • Extended: Licenses can be activated online. • Fixed: Sony SE-360SHE does not connect. • Fixed: Cannot export persons in Spanish UI. • Improved: connection behavior when using RSTP.

Release	Release Date	Release Comments
2.71.19040	2018-08-07	• Fixed: DICENTIS services do not startup properly if SQL database is not operational yet. • Improved support of ONVIF cameras. • Fixed: IP4000 and IP5000 cameras do not show video on Meeting Application. • Extended: Video of Panasonic AW-HE40SKE camera is displayed on MMD and MA. Configure H.264(2) H.264 transmission On Internet mode (over HTTP) On Image capture size 1280x720 Transmission priority Best effort Frame rate 25fps Max bit rate (per client) * Max 3072kbps - Min 1536kbps Image quality Motion priority Configure in MA: rtsp://<ip_address>/mediainput/h264/stream_2 • Fixed: dcnmdatabase.exe −b command does not make database backup when you do not specify the filename.
2.70.18617	2018-06-26	• Extended identification & verification with PIN for verification purposes (DCNM-MMD, DCNM-MMD2 and DCNM-DE). • Extended identification & verification with fixed and free seating. • Changed Identification in the API from device-based (AuthenticateParticipantAtDeviceAsync) to seat-based (AuthenticateParticipantAtSeatAsync). • Middleware, for interfacing with Suprema Biostar software, updated to work with new identification and verification settings. DICENTIS 2.7 requires middleware which is supplied with 2.7 DVD to work properly. • Extended meeting application with possibility to log of a single participants from the seat. • Extended API demonstrator with assign participants to meetings, IPrepareParticipants2. • Extended time to select an interpretation language on the MMD to 5 seconds. • Extended ONVIF support with username & password settings • Added support for Lumens VC-A50P camera. • Added support for Windows 2016 server. Support for Server 2008 is terminated. • Prevented recycle process of IIS to prevent that Synoptic control stops functioning. • Fixed: incorrect data is stored when a voting round is recalled. • Fixed: mismatch between API documentation and API demonstrator. • Fixed: voting results chart colors are black if you translate the answers in the stylesheet. • Fixed: Activation site does not accept diacritical characters. • Fixed: IP4000 and IP5000 cameras show video on Meeting Application and multimedia device. • Fixed: Seat results are shown in API demonstrator with (voting license) when the system has only DCNM-LSYS and DCNM-LVPM license. • Fixed: Maximum bandwidth setting implemented for participant pictures to prevent filling up the complete network in large systems.

Release	Release Date	Release Comments
2.60.17459	2018-02-07	• Extended voting with configuration of who can see the voting results during the voting round. • Extended configuration of showing/hiding queue for participants with VIP rights. • Participants can be imported from an XLS (Excel™) file in Meeting Application. • Fixed Discussion settings and speakerslist can be open simultaneously. • Extended time to select an interpretation language on the MMD to 5 seconds. • Improved behavior to clear queue and speakers by accident on the Meeting Application. • Fixed importing a pre 1.7 database with language distribution settings fails. • Fixed Panasonic AW-HE130KE does not connect to DICENTIS system. Note: the Panasonic AW-HE130KE needs to be in a separate VLAN, because it has difficulties with the multicast data. • Fixed back button behavior on the Meeting Application. • Removed reference to Xceed.wpf.toolkit in API demonstrator source code. • Fixed installation fails with error 1920 "insufficient priviledges". • Fixed IPreparePerson.CreatePersonAsync does not return the created GUIDs. • Extended API demonstrator IControlParticipant with ParticipantId and SeatIdxed.
2.50.17011	2017-12-27	• Not commercially released software version.
2.40.16360	2017-10-28	• Customer logo is shown on DCNM-DE device. • Vote weighing. • Transition from SQL2008 to SQL2014 • Changed interpretation configuration. Changes are now real time. • Fixed adjusting the speakers list, using meeting application, while the speakerslist changes can cause removal of all requests from the list. • Fixed individual results are not displayed on Synoptic Control due to removal of user synoptic. The user synoptic can no longer be deleted. • Fixed cannot scroll through languages on DCNM-DE the first time you open the list after power up of the system. • Fixed cannot unassign multiple participants. • Fixed displayed camera feed stays on when microphone is switched on and off fast. • Fixed all cameras are removed from external video switcher xml file when deleting a camera via Meeting Application.
2.31.15237	2017-06-15	• Fixed 2.30 software does not install on non-US Operating System due to different names for the Admin user.

Release	Release Date	Release Comments
2.30.15173	2017-06-07	• Request list can be hidden on multimedia device and DCNM-DE. • Microphone LED and microphone button can be configured to not-blink for the first in the request list. • Navigation buttons are disabled on multimedia device when a voting round is active. • Extended voting with 100% settings (all authorized participants, all present participants with voting authorization, all participants who press present, all cast votes) • Support for the 10" flush mount multimedia device. • Extended API, API-documentation and API-demonstrator with enable/disable presentation mode • Fixed language distribution cannot be configured when only DCNM-DSL devices are present • Fixed Meeting Application cannot connect to System with ARNI after being idle 2 days. • Fixed conflicts with port 9530-9550. DICENTIS now uses these 2 fixed ports 13 (Dante) and 9710 (services), others are variable. • Fixed Chinese and Japanese fonts are not displayed in DCNM-DSL device in 2.2 software.
2.20.14487	2017-02-28	• Dante Floor input and output added. • Added speech timer functionality. • Panasonic SDI/IP cameras are supported via Panasonic CGI commands. • Sony SDI/IP cameras are supported via Sony CGI commands. • Improved usability of adding participants to the speakers list and queue during a meeting. • Improved usability of synoptic control; can now be accessed using http://<hostname pc>/SynopticControl. • Fixed, camera does not move if display image or logo is configured. • Fixed cannot shift a request via synoptic control by selecting the microphone icon. • Fixed noise on APS analog outputs while it powers up. • Improved middleware software for interface to fingerprint readers. • Fixed, possible to create multiple users with the same username. • Fixed, too much diagnostic messages from NFC reader in logging file.
2.10.13715	2016-11-11	• Extended DICENTIS family with DICENTIS discussion device with voting and DICENTIS discussion device with language selection • Added displaying voting results to Synoptic Control. Webclient seat requires DCNM-LSVT license for this. • Added Power on/off to Synoptic Control. • Added illuminate device leds when moving the icon in the synoptic layout • Added support for Windows authentication when authentication with password is configured. • Added customer logo to login screen of multimedia device. • Added display participant image of active speaker on multimedia device. • Added attendance information to voting results XML. • Improved stability of Meeting Application. • Fixed cannot delete empty seats when they are used in a meeting. • Fixed installation fails when trying to install the software via index.htm. Please run the setup.exe.

Release	Release Date	Release Comments
2.01.13099	2016-09-19	• Fixed External SDI video switcher does not switch after upgrade to 2.0 (configuration file is not part of the upgrade process). • Fixed External Video Steam does not work after upgrade to 2.0 (configuration file is not part of the upgrade process). • Fixed Cancel request does not work in Open mode (without auto switch) and allow microphone is off. • Fixed Meeting Application stops working due to connection issues with server.
2.00.12812	2016-08-19	• Renamed DCN multimedia to DICENTIS. • Extended DICENTIS family with DICENTIS discussion Extended device and DICENTIS discussion basic device. • Added speakerslist, language selection, identification via NFC and confirmation on DICENTIS discussion Extended device. • Added web based synoptic microphone control. • Added participant pictures for multimedia device, meeting application and synoptic control. • Added renaming function for the seats. • Added customer logo in home screen and camera view. • Decreased video latency on multimedia device. Please refer to the manual on how to configure the settings. • Added configuration of system languages for interpretation. • Added Voting and Meeting Notes XML-files have the same storage location. • Updated the icons in the meeting application and multimedia device. • Fixed minor issues regarding voting and attendance registration. • Fixed Meeting Application and other API-clients disconnect from server. • Fixed participants microphone stays on when it turns it off in OPEN with allow microphone off mode. • Fixed interfacing with more than 99 fingerprint readers.
1.70.10710	2016-02-02	• Added attendance registration to prepared meetings. Absent present information is displayed in Meeting Application and MMD. • Added storing and displaying of meeting notes file which contains Meeting information, agenda items, present-absent information and all executed voting rounds. • Added Open voting with no interim results. • Added Vietnamese, Indonesian and Brazilian Portuguese to the MMD and Meeting Application UI language. • Added the possibility to run the Meeting Application from a different VLAN. • Added Windows 10 support for the Meeting Application. • Added headphone volume control and language selection to the MMD Android API. • Added MMD date and time format follows the server PC settings. • Fixed Additional video stream, configured via VideoStreamDeviceConfiguration.xml, does not work anymore • Fixed in a meeting with identification a seat without identification license (DCNM-LSID) and without a participant assigned to it is blocked. • Fixed in a meeting with identification a seat with voting license (DCNM-LSVT), but without identification license (DCNM-LSID) is not able to see voting results. • Improved the behavior of the audio when the audio input level of a microphone is too high. • Fixed minor issues regarding voting and identification.
1.61.9820	2015-11-13	• Fixed Omneo Media audio channels are sometimes swapped. • Fixed issue with touchscreen behavior.

Release	Release Date	Release Comments
1.60.9520	2015-10-04	• Added new identification method, external system, which enables connection to a 3rd party system for identification • Middleware application to interface with Bosch DCN multimedia and Bosch fingerprint reader software (BioStar 1.6); this makes use of the external identification method • Added new identification method, identification using NFC card, which requires the use of a DCNM-MMD2 (to be introduced later this year). • Improved usability of configuration of the cameras in DCN multimedia • Released Android API for custom build applications which integrate with DCN multimedia functionality • Fixed some defects in voting • Fixed some defects in activation website • Fixed access rights: Prepare Meeting and Agenda can now create persons • Improved upgrade of DCN multimedia devices • Fixed problem of losing interpreted languages after power cycling Omneo Media Interface multiple times • Fixed MeetingDocuments webserver is not installing in non-US language Operating systems
1.50.8700	2015-05-31	• Persons can be added to Groups • Groups results are available in API and voting results xml file • Voting rounds extended with: • Voting timer • Secret ballot (anonymous results) • Prevent influencing; cast vote is hidden and no individual intermediate results • Ad-Hoc voting functionality to create a voting round with name and description during a prepared meeting • PRS-4OMI4 supported for connection to DCN NG for interpreted languages when connected to DCN Next Generation • Added voice to the list of discussion modes for systems upto 50 multimedia devices • Dealers are informed by email that the Software Maintenance Agreement expires • New Think Free Office version 7 • Search bar for participants in the select from list identification usage on the multimedia device • Internet Information Server is by default installed • Fixed device not connect screen does not show link down • Fixed 3rd party apps disappear when the system language is changed • Improved firmware upgrade behavior • Changed the date format on the MMD from US to UK when English GUI language is selected • Fixed some defects in voting • Improved digital signal processing behavior of the DCNM-APS
1.42.8474	2015-04-08	• Functionality implemented during 1.4 is translated into local languages
1.41.8194	2015-02-25	• Solved issue with opening documents on the DCN multimedia device

Release	Release Date	Release Comments
1.40.8061	2015-01-31	• Voting preparation and management implemented (DCNM-LVPM) • TV One CORIOMatrix supported • Added Software maintenance agreement expiration messages to Activation tool and improved installer • Solved several issues regarding TV-One and Kramer MV-6 external video switchers • Improved identification • Solved DCN Next Generation does not receive the floor audio from DCN multimedia via the Omneo Media Interface
1.31.7498	2014-11-27	• Functionality implemented during 1.3 is translated into local languages • Solved translation mistakes in Russian translation • Solved Upgrading DCN multimedia system (including Bosch DCNM multimedia Ext.VideoSwitcher), fails • Solved several issues regarding TV-One and Kramer MV-6 external video switchers • Solved participant rights cannot be updated during a running meeting • Solved Meeting application starts without management rights because previous session has not exited properly • Solved unassigning and assigning participants to seats behavior upon disconnecting and reconnecting of DCN multimedia devices
1.30.6863	2014-10-02	• Added Language selection (seat license required) for interpreted languages when connected to DCN Next Generation • Added support for Kramer MV-6 video switch • Increased maximum number of open microphones from 10 to 25 • Support of all current Bosch Onvif cameras • Changed voting from seat based to participant based • Improved usability of ON/OFF toggles in configuration screen of Multimedia device • Solved temporary loss of speech • Solved problems on Equalizer page of the Meeting application • Solved problem of headphone volume control popping up after switching screens • Improved behavior of opening of documents on the Multimedia device • Improved sorting of seats and devices of the Meeting application • Improved DCNM-DEMO, DCNM-CRN, DCN-RENTAL licenses so that they can grow together with future system functionality • Improved performance of large systems (upto 750 seats) • Improved Ambient audio; ambient audio is not routed to DCN multimedia device loudspeaker
1.20.6092	2014-07-22	• Added Identification (seat license required) • Added For/Against/Abstain voting (seat license required) • Added support for short and long stem microphone. • Increased maximum system size to 750 devices • Added ambient microphone functionality (e.g. for DCN multimedia Webcasting) • Added support for Remote SQL server 2008 R2 • Rapid Spanning Tree Protocol (RSTP) support for redundant cabling of DCNM-MMDs
1.17.5730	2014-06-12	• Solved blocked welcome screen blocked in Russian language • Solved welcome screen does not react on language change • Solved power button visible without the rights

Release	Release Date	Release Comments
1.16.5521	2014-05-27	• New GUI items for Multimedia Devices, Meeting Application, Installer are translated in local language • Added Finnish and Arabic on the Multimedia Devices, Meeting Application, Installer • Corrected behavior of Granting speech to VIP or VIS • Solved reboot of DCN multimedia device when opening large files • Solved Activation Tool does not start on non-US Operating System • Solved Power Off button does not appear on Multimedia Device which has Power Off capabilities.
1.12.4325	2014-02-12	• Added welcome screen to show the name of the participant or seat • Added possibility to configure another presentation stream • Added possibility to configure other camera source than Bosch HD Conference Dome • Added support for Windows 8.0 Home, Windows 2008 Server R2 and Windows 2012 Server R2, 64 bit only • Added Copy meeting to the Meeting preparation application • Added Windows API • Added Repairing and Returning of licenses • Improved the URL linked to agenda's and agenda items • Added support for DCN multimedia Webcast application
1.00.1882	2013-10-23	• Initial version

2 Supported Operating Systems

Below overview lists the DICENTIS versions and Microsoft Operating Systems

DICENTIS	Windows Server 2022	Windows Server 2019	Windows Server 2016	Windows Server 2012	Windows Server 2008	SQL Server
6.21.34 6.20.27	**Yes**	**Yes**	Not supported	Not supported	Not supported	2019
6.11.37 6.10.12309 6.01.36674 6.00.36472 5.10.35949 5.00.35160 4.41.34871 4.40.34349 4.30.33085 4.20.33007 4.12.30606 4.11.30403 4.10.30149	**Yes**	**Yes**	**Yes**	Not supported	Not supported	2019
4.00.29008 3.70.27806 3.61.27269 3.60.26983 3.51.26670 3.50.25260	Not supported	**Yes**	**Yes**	Not supported	Not supported	2014
3.40.24446 3.30.23380 3.20.22282 3.11.21469 3.10.21060 3.00.20482 2.80.19734 2.71.19040 2.70.18617	Not supported	Not supported	**Yes**	**Yes**	Not supported	2014
2.60.17459 2.50.17011 2.40.16360	Not supported	Not supported	Not supported	**Yes**	**Yes**	2014

DICENTIS	Windows Server 2022	Windows Server 2019	Windows Server 2016	Windows Server 2012	Windows Server 2008	SQL Server
2.31.15237 2.30.15173 2.20.14487 2.10.13715 2.01.13099 2.00.12812 1.70.10710 1.61.9820 1.60.9520 1.50.8700 1.42.8474 1.41.8194 1.40.8061 1.31.7498 1.30.6863 1.20.6092 1.17.5730 1.16.5521 1.12.4325	Not supported	Not supported	Not supported	**Yes**	**Yes**	2008

3   Hardware / software support

It is always advised to upgrade the DICENTIS Conference system to the most recent version. Below table lists which minimum software version is required for the hardware versions.

Device	Hardware version	Requires DICENTIS software
DCNM-MMD2	03/00	5.10 or newer
DCNM-DE	01/04	4.41 or newer

4   Known issues

4.1   Security

Security:
A Command Injection vulnerability has been uncovered in the diagnostics interface of the Bosch Network Synchronizer (OMN-ARNI). This vulnerability allows unauthorized users full access to the device.
https://psirt.bosch.com/security-advisories/bosch-sa-152190-bt.html
Mitigation 1: Disable diagnostics interface
Disabling the diagnostics interface prevents the vulnerability from being available for misuse in older versions. Disabling the diagnostics interface can be done using the OMNEO ARNI Configuration Tool. Refer to the document ARNI Disable Diagnostics Interface (which can be found at the same download link as mentioned in this advisory) for detailed instructions on how to disable the interface. Note that the diagnostics interface is disabled by default.

The mitigation is fully effective since it completely removes the vulnerability from being available. Executing the software update will completely remove the vulnerability from the product, it is therefore advised to plan in a software update. It is however acceptable to defer an update to a next maintenance period if this mitigation can be executed.

Mitigation 2: Do not connect directly to the Internet and protect the local network
Isolating the Bosch Network Synchronizer from the Internet and protecting the local network from unauthorized access ensures that the vulnerability cannot be misused. Executing the software update will completely remove the vulnerability from the product, it is therefore advised to plan in a software update. It is however acceptable to defer an update to a next maintenance period if this mitigation can be executed.

Security:
TLS1.3 is by default enabled with Microsoft Windows Server 2022. TLS1.2 is enabled in Microsoft Windows Server 2016 and 2019. The DCNM-SERVER3 has Microsoft Windows Server 2022, meaning TLS1.3 is enabled.

More information can be found on the Microsoft website: https://learn.microsoft.com/en-us/windows/win32/secauthn/protocols-in-tls-ssl--schannel-ssp-

Security:
DICENTIS software 3.20 up to 4.12 contains Newton packages for which vulnerabilities have been found and fixes are available.
Solution:
Upgrading to 4.20 is the easiest solution.

If you cannot upgrade to 4.20 then you can install the security fixes manually:
1. Download the Newton vulnerability fix: https://licensing.boschsecurity.com/software/
2. Unpack it to c:\Temp\
3. Open a command prompt with elevated rights (Run as Administrator)
4. Navigate to the folder where the fix was unpacked and run the following command to run the upgrade script:
   ```
   powershell.exe –NoProfile -ExecutionPolicy RemoteSigned –File
   .\Dicentis_4.1x_FIX.ps1
   ```
   The script will stop the DICENTIS services (see Server Console icon), upgrade the software and restart the DICENTIS services after the upgrade.
5. Wait for the script to execute.

To validate if the upgrade succeeded:
- The new filesize of Newtosoft.Json.dll is 701992 bytes, the old filesize of Newtonsoft.Json.dll is 662528 bytes.
- In the C:\Program Files\Bosch\DICENTIS several .config files are added or modified (having date of execution).
- Same is applicable for SynopticControl (folder C:\inetpub\wwwroot\SynopticControl). web.config changed and .\bin\Newtosoft.Json.dll replaced.
- Same is applicable for ImageServer (folder C:\inetpub\wwwroot\ImageServer). web.config changed and .\bin\Newtosoft.Json.dll replaced.

## 4.2   DICENTIS Services restarting due to port exhaustion
Services restart due to port exhaustion:
Due to a port exhaustion the DICENTIS services can restart. This is visible in the Event viewer error with ID 4227. The cause of the port exhaustion problem has been identified in the OMNEO platform software. The port exhaustion issue is caused by the "Bosch NeighborDiscovery Service", this opens and closes ports, but at closing ports are left behind in BOUND status. (normally these bound port should be cleared as well). The number of these BOUND ports accumulates to a critical number over time which results in the observed issues.

Solution:
1. Start Services.mcs
2. Find the Bosch NeighborDiscovery Service in the list
3. Right click the line and Stop the service
4. Right click again, and open the properties
5. Set the Startup type to from Automatic to Manual (this prevents automatic start after server restart)
6. Restart the server machine

Note: Stopping this service impact the behavior of the Network Docent application, it will have no impact on the DICENITIS systems operation.
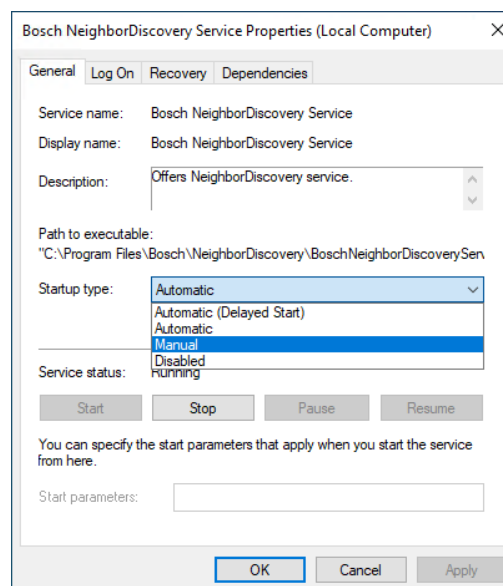
4.3   DICENTIS Server console
Server console icon not shown after re-installation
Sometimes the DICENTIS Service icon is not shown after a re-installation of the software. The system works correctly.
Solution:
Restart the computer.

4.4 DICENTIS Hybrid meetings

Issue:
Activating a meeting directly after deactivating a meeting will show error information in the Technical messages window of DICENTIS Webserver Synoptic control.
Reason:
This has to do with time-out behavior implemented to clean up meeting information of the de-activated meeting.
Workaround:
The error notification will be cleared when the de-activated meeting is cleared and the newly activated meeting is fully activated and ready for Hybrid meetings.

Issue:
The use of an ambient microphone might cause audio artifacts in combination with DICENTIS Hybrid meetings
Reason:
The ambient microphone signal that is connected to the APS is not switched off when a remote participant is speaking.

Issue:
The video of the 24th remote participant is not shown on the hall-display
Reason:
The number of remote participant's video is limited to 23.

Issue:
The shared screen of a PC keeps showing even after it is disconnected.
Reason:
Many H264/HDMI encoders keep on transmitting the latest video frame to the Media Gateway.
Workaround:
Lock the computer before disconnecting the computer from the encoder.

Issue:
The DICENTIS Hybrid meeting app does not work as expected.
Possible reason:
Some browser extension interfere with the DICENTIS Hybrid meeting application. Switching them off might solve the issue.

Issue:
The remaining speech time shown to the remote participants is significant decreased when priority is active.

Issue:
Presentation of a remote participant cannot be stopped from the Meeting application.
Workaround:
Request the remote participant to stop presenting or switch off the microphone of the remote participant.

Issue:
Mediocre video quality on hall-display when multiple remote participants are shown.
Possible reason:
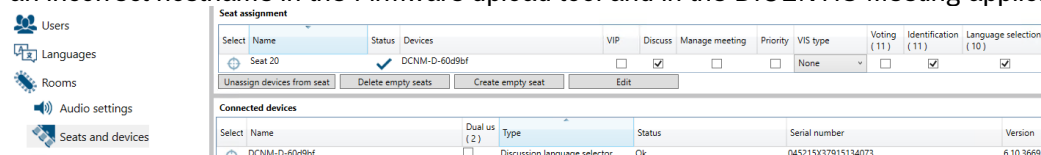Changing available bandwidth of the remote participants
Workaround:
Increase bandwidth of the remote participants

4.5   DCNM-DSL, DCNM-DVT and DCNM-FSL have DCNM-D as hostname

Issue:
DCNM-DSL, DCNM-DVT and DCNM-FSL devices produced during July – November 2023 show an incorrect hostname in the Firmware upload tool and in the DICENTIS Meeting application.


This incorrect (host)Name has no effect on the correct functioning of the device, because the device Type is correctly recognized by the software. The Meeting application screenshot below shows that the device is correctly recognized as a Discussion language selector (although the hostname is DCNM-D-xxxxxx)

Solution:
The hostname can be easily corrected. But this has to be done per device.

1. Reset the device to defaults by keeping the reset button pressed for 10 seconds while it is powered.
2. Power cycle the device. After the powercycle the device Name will be changed reflecting the type: DCNM-DSL-xxxxxx, DCNM-DVT-xxxxxx, DCNM-FSL-xxxxx.
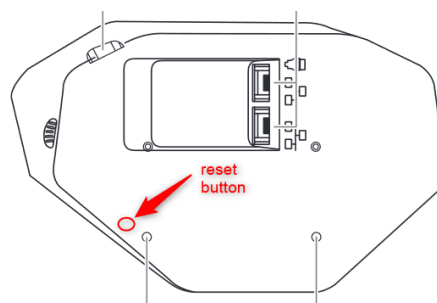
4.6   Led behavior

Issue:
LEDs of the DICENTIS microphone and button do not blink synchronous during the last minute of speech or the first in request when the seat has 2 microphones in a setup where both microphones are connected to the same DCNM-FBD2 device and with DCNM-FMICB and DCNM-FAI.

Solution:
Exchange the DCNM-FMICB, if it has hardware version HW01/00, with a DCNM-FMICB which has hardware version HW01/01.

4.7   Identification

Issue:
When you remove the identification tick mark from a seat based on a DCNM-FBD2 during a meeting with identification, then that seat will still take part in the identification process.
Solution:
Disable the identification tick mark prior to activating the meeting.

Issue:
Remote participant cannot login in a meeting without identification + when the participant is assigned to a seat in the meeting room.
Solution:
Remove the participant from the seat in the meeting room via Prepare meeting.

Issue:
When the Biostar biometric system is configured to login via fingerprint + NFC card, the participant cannot log out via presenting a non-configured, incorrect finger.
Solution:
Log out via the logout button on the participant device.

4.8   Voting

Issue:
When rapidly pressing the voting buttons on the DICENTIS flush voting panel (DCNM-FVP), then

it might happen that the LED of the cast vote remains off when the voting round is closed. The vote is properly received and stored in the voting results.

4.9   Software installation

Issue:

Installing 6.11.37 on a system which is downgraded from 6.20 or newer, but had 6.11 in the past fails with this notification:
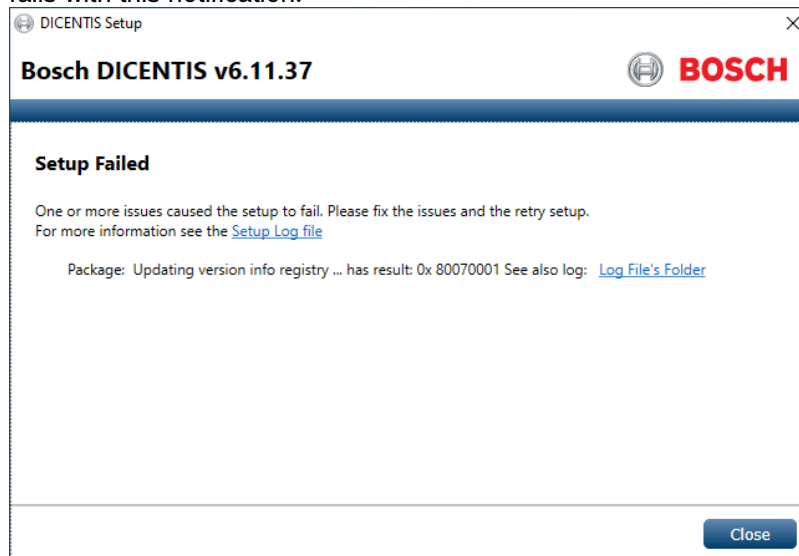
Solution:

Copy the 6.11.37 \Installer\ to the location where it was when 6.11.37 was installed the first time. How to find this location:

1. Open the Setup Log file
2. Search for the following Error

```
Error 0x80070002: Failed while prompting for source (original path
'[drive]:\<original directory>\Installer\RunUpdateVersionToRegistry.cmd').
```

3. Copy the 6.11.37 \Installer\ folder and its content to the same location as mentioned in number 2.

Issue:

Downgrading a system by removing DICENTIS software and then installing a previous version results in a installation failure with version issue on Microsoft Edge WebView2 Runtime.
This is the result that Microsoft Edge WebView2 Runtime is not automatically removed, because it can be used by other applications.

Solution:

Manually remove Microsoft Edge WebView2 Runtime software via add remove programs and then start the installation of the previous DICENTIS software.

Issue:

Installing software fails with a notification like this:
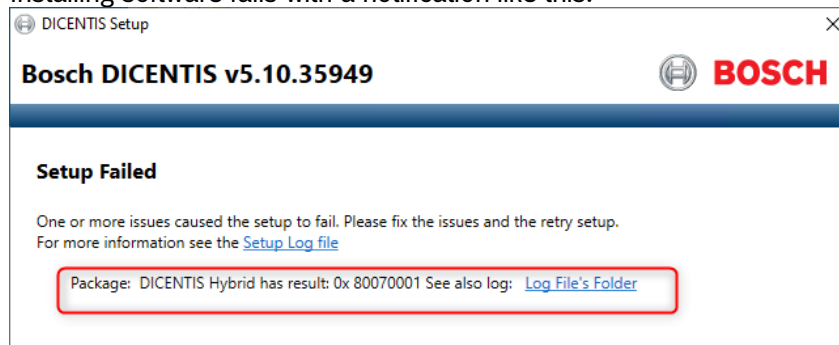
And the directory C:\ProgramData\Bosch\DICENTIS Server\LaunchProfiles contains manually created backups of launchprofiles. If you make copies of launchprofile files and keep the extension as json, then the services also try to execute the backup files.

Solution:

If you create backup of the launchprofile files, then rename the extension to something else than json (e.g. bak).
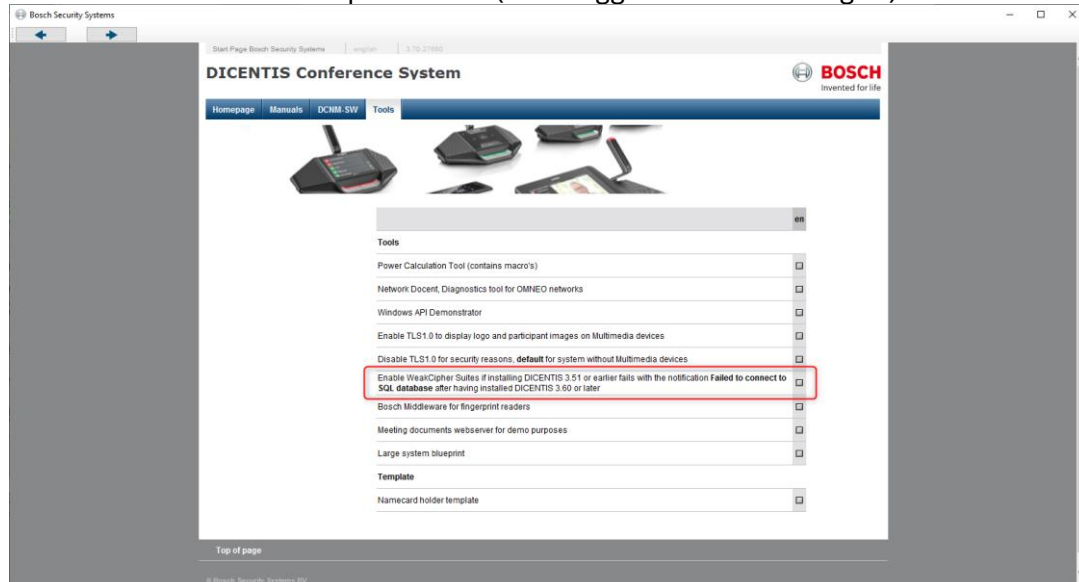
Issue:
Cannot install 3.51 or earlier on a Windows Server 2016 system after upgrading to 3.60 or later and removing it. The notification is cannot connect to SQL server.
Solution:
Enable WeakCyphers for the SQL database by either:
Running: Tools\WeakCipher\EnableWeakCipher.bat with admin / elevated rights. Or
Use the shortcut via the setup.exe menu (when logged in with admin rights):

This functionality is available on the 3.70 installation DVD.

Issue:
Upgrade of 2.4 (or previous) on the server computer fails, Setup Failed, with the following notification:
Installer error: Code 1923; Service ' Bosch DICENTIS Meeting Controller Service' (Bosch DICENTIS Meeting Controller Service) could not be installed. Verify that you have sufficient privileges to install system services.
Installer error: Code 1939; Service ' Bosch DICENTIS Meeting Controller Service' (Bosch DICENTIS Meeting Controller Service) could not be configured. Verify that you have sufficient privileges to configure system services.
Solution:
Remove 2.4 (or previous) via Programs and Features.
Restart the computer.
Install the DICENTIS software.

Issue:
Upgrading from 2.8 to 3.2 requires a restart of the server and this results in the software not properly being installed.
Solution:
Restart the installation of the DICENTIS software to complete the installation.

Issue:
Upgrading a 4.30 DICENTIS system, installed on a Virtual machine might result in a notification not being able to connect to SQL.
Solution:
Restart the DICENTIS Server a second time to resolve the issue.

4.10 Logging
Issue:
Logviewer does not open, but shows "unable to connect to database". Windows Event viewer shows error: "Cannot create file ……. DcnmLoggingDatabase.mdf, because it already exists."

Solution:
This happens when Windows SQL server is de installed. Un installing SQL removes references to the files, but the files still remain. Manually delete the files:
DcnmLoggingDatabase.mdf
DcnmLoggingDatabase_log.ldf

4.11 Audio issues
Issue:
Keeping the language selection buttons, DCNM-DSL, DCNM-FSLP, pressed while enabling the microphone might result in no microphone audio.
Solution:
Release the language selection buttons and request the floor again (press to turn the microphone off and press the button to request the floor).

Issue:
Unpredictable audio interruptions.
Solution:
These issues are often caused by using network switches which do not comply to the switch requirements mentioned in the DCNM-SW manual in the hardware requirements. Network switches which have home or small office as their intended use, are often not able to handle the multicast data in the DICENTIS system.

Issue:
Headphone audio on Multimedia device missing after upgrade.
Solution:
Powercycle the Multimedia device after upgrade.

4.12 Show active microphone in voice mode issues
Issue:
Replacing or adding a device while in voice mode can cause the device to operate incorrectly.
Solution:
Change the discussion mode to Open, press apply and back to Voice and press apply.

Issue:
1 seat is in the speakers list although no one is speaking.
Solution:
Due to its continuous sensing of the audio in the room it can happen that 1 seat is always shown in the speaker list. This seat is removed from the speakers list as soon as a participant starts speaking. Alternatively you can configure 1 seat as button operated and always put that seat in the speakers list, e.g. the Chairperson or the Judge.

Issue:
When you change from Voice mode without show active microphone to Voice mode with show active microphone a participant will be immediately added to the speakers list (before reaching the attack time) if they were already speaking.
Solution:
No solution required. New participants need to speak for at least the duration of the attack time before they are displayed in the speakers list. And speakers are removed upon reaching the release time.

4.13 Manage discuss
Issue:
Microphone will turn off upon assigning manage meeting rights to a participant.
Solution:
Do not grant manage meeting rights to a seat or participant when the microphone is active.

4.14 Network issues
Issue:
Device browser tool does not show all connected ARNI's.
Solution:
When the ARNI's have the same device name, then not all ARNI's are shown in the Device

browser tool. Please use a unique name for each ARNI. Best practice is to add the VLAN in the ARNI hostname, e.g. ARNI-64.

Issue:
Unpredictable audio interruptions in systems where IGMP has been configured.
Solution:
These issues are often caused by using network switches which do not comply to the switch requirements mentioned in the DCNM-SW manual in the hardware requirements. Network switches which have home or small office as their intended use, are often not able to handle the multicast data in the DICENTIS system.

Issue:
Meeting Application, API-client, API demonstrator cannot connect from client PC to DICENTIS services on Server computer after upgrade to version 3.50.

Check if the computer has the correct certificate:
1. Open Powershell
2. Run the command dir Cert\LocalMachine\my

```
PS C:\Users\Administrator> dir Cert:\LocalMachine\my


    PSParentPath: Microsoft.PowerShell.Security\Certificate::LocalMachine\my

Thumbprint                                Subject
----------                                -------
79E44A45A6FA12885B3920C1629C3E8CC0E4212F  CN=Bosch.DCNmultimedia
```

3. Check the "Thumbprint" for the CN= Bosch.DCNmultimedia
    a. If it lists: **79E44A45A6FA12885B3920C1629C3E8CC0E4212F**, then the certificate is **incorrect**
    b. If it lists **8A370DA8EA0457AD767CD8098D1A19DC82D2FDE**, then the certificate is **correct**.
4. Execute these steps on the Server as well as the clients.
If the certificate is incorrect, then please follow the steps in the Solution below.
Solution:
Run Setup.exe to de-install DICENTIS including the invalid certificate.
Run Setup.exe to install DICENTIS again and now with the correct certificate.
Note: De-installing DICENTIS will not delete your configuration or you license.
or
Upgrade to DICENTIS 3.51 or higher

4.15 Upgrade of DICENTIS devices
Issue:
While upgrading the DCNM-FBD2 devices, the green LED flashes or blinks rapidly. The green flashing indicates a "not registered network connection" which is the result of this phase of the upgrade process.
Work around:
Just wait a bit and then the device will have registered a network connection (received an IP-address) and then the fast green flashing/blinking stops.

Issue:
Not all connected flush panels are discovered after upgrading the DCNM-FBD2 device.
Work around:
Power cycle the DCNM-FBD2 devices after upgrading the firmware.

Issue:
Uploading of a INT-TXO might fail in a multi-subnet system when the INT-TXO is not in the same subnet as the PC running the firmware upload tool.
Work around:
Restart the upgrade. If it keeps failing, then move the INT-TXO to same subnet as the PC running the firmware upload tool.

Issue:
Uploading 4.10 firmware to DCNM-D, DCNM-DVT, DCNM-DSL, DCNM-DE, DCNM-FSL devices fails in multi subnet systems.

Work around:
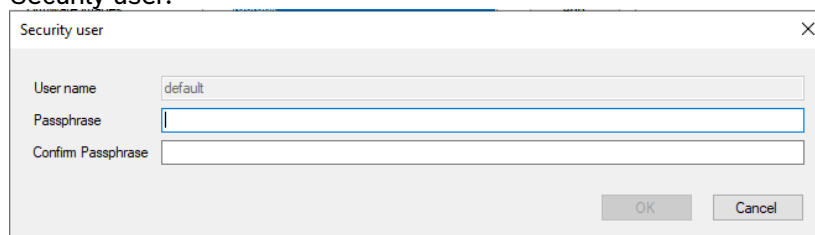Upgrade to 4.11. If it still fails, stop the DICENTIS services before uploading the firmware.

Issue:
OMNEO firmware Upload Tool does not discover any devices.
Solution:
Check via File \ Options if "use secure connection" is enabled. It should be enabled.

Issue:
OMNEO firmware Upload Tool does not discover any devices after adding a passphrase for the Security user.

Solution:
1. Stop the Firmware Upload Tool.
2. Delete the following file C:\Program Files\Bosch\OMNEO\Firmware Upload Tool\FirmwareUploadHIConfig.ini
3. Start the Firmware Upload ToolStop the Firmware Upload Tool.
4. Do not change the settings for the default user.

Issue:
Uploading of device keeps failing.
Solution:
1. Close the firmware upload tool.
2. Power cycle the failing devices.
3. Run the firmware upload tool again.
4. Upload the devices with the firmware.

Issue:
Upgrade of a PRS-4OMI4 from version lower than 2.30 to version 2.30 or higher fails. The device name of the PRS-4OMI4 is changed in version 2.3 or higher. In version 2.2 or lower it was OM1-xxxxxx. In version 2.3 or higher it is PRS-4OMI4-xxxxx. Therefor the first time you try to upgrade it fails. If you retry the upgrade it will go OK, because the name is changed after the first failed upgrade.
Solution:
Run the upgrade a second time and it will succeed, because after the failed upgrade, the name is changed.

Issue:
When upgrading the ARNI you can select 2 ARNI firmware files 5.01.4289 and 5.10.4908. Please select version 5.10.4908 to upgrade the ARNI-E and ARNI-S.

Issue:
DICENTIS multimedia device still shows previous speaker if a new speaker should be displayed. If the H.264 video stream of the new speaker is not compliant (e.g. too much bitrate or non-decodable H.264 stream) then the previous video stream will still be displayed.
Solution:
Configure a proper H.264 stream. temporary workaround is to refresh the MMD by pressing the home button and back-to-active (green) button.

Issue:
DICENTIS audio powering switch (DCNM-APS) and powering switch (DCNM-PS) reboot during upgrade from 2.10 to a newer version when the system is in RSTP.
Solution:
First upgrade the DCNM-APS, then upgrade the DCNM-PS. Then upgrade the other devices.

Issue:
Downloading 2.71 or earlier, firmware in a DCNM-MMD (produced in 2018 or later) fails.
Solution:
The best option is to upgrade your DICENTIS software to 2.8 or later. Check if you need to extend your Software maintenance agreement (SMA: DCNM-1SMA, DCNM-2SMA, DCNM-5SAM) for this.
Another option is first downloading 2.8 firmware and then 2.71 (or earlier) firmware:
1. Upload the DCNM-MMD with 2.8 firmware, to do this:
    a. Install DICENTIS 2.8 on another computer.
    b. Connect the DCNM-MMD via PoE to this computer.
    c. Start the firmware upgrade tool and download it with 2.8 firmware
2. Connect the DCNM-MMD to your DICENTIS system, open the firmware upload tool and upload it with the firmware of your system.

4.16 Licensing
Issue:
The system is not operational after replacing CPU, mainboard or a change in the Windows-UUID. This results in a change of the Device ID which will make the license not functional any more.
Workaround
First return the license before you change the CPU or Mainboard or move the software to a different virtual machine.

Issue:
The activation date displayed in the Activation tool is 1 day before activation.
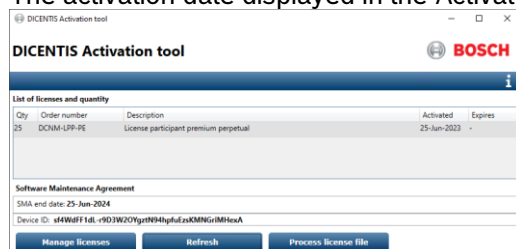
The activation site shows the correct date:

Workaround:
This has to do with the internal license store. The important part is that the end date of functionality or SMA is properly calculated.

Issue:
The activation site does not display the SMA expiration date of Perpetual licenses.
Workaround:
This will be fixed in an upcoming release of the Activation site. For now use the information on the Activation tool.

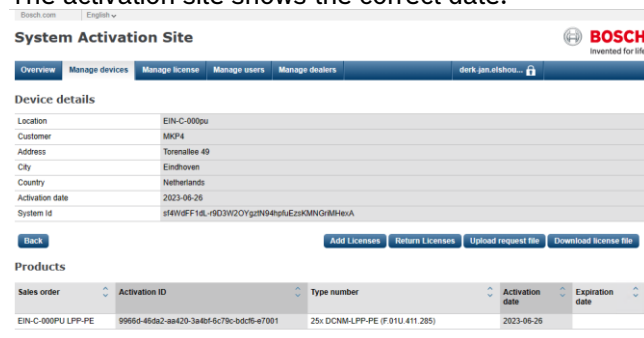**Issue:**
Licensing a INT-TXO fails when "special characters" like ë or é or è are used in the Customer info.
Workaround:
Please upgrade to DICENTIS 5.1 or use standard ASCI characters for entering the Customer info on the License page of the INT-TXO.

Issue:
Starting the services immediately after activating DCNM-LSYS does not result in a working system:
- Devices show Cannot connect to services
- Meeting application shows login screen with "connecting to system, please wait"

After activating the DCNM-LSYS license, the license store needs to be constructed, this can take some minutes.
Workaround:
Do not start the services, but just wait, the services will automatically start withing 30 minutes.
Or start and restart the services, that will also result in a working system.

Issue:
DICENTIS Activation Tool shows SMA end date with orange text on a Registered system after activating and returning a Premium or Ultimate license on the same day AND if the country is part of the countries where DICENTIS Hybrid is available.
Workaround:
Wait one more day and the notification is gone. The notification has no effect on the behavior or your system.

Issue:
After upgrading from 4.30 to 4.40 the services show a green tick mark (software installed on a Virtual Machine), but Meeting Application does not start.
Workaround:
Restart the computer.

Issue:
Activation tool of DICENTIS 4.30 shows "renew certificate" button.
Workaround:
This button has no function in this software.

Issue:
Cannot link a user to multiple accounts.
Workaround:
Please contact your local Bosch sales organization for support.

4.17 Language selection
Issue:
When you select the same headphone language as the other participant on using the device, then the headphone audio is shortly muted. This can occur in a DCNM-DE in dual use or on a DCNM-FBD2 with 2 language panels connect.

Issue:
DICENTIS discussion device with touch screen (DCNM-DE) is not properly displaying the following as languages in their original language.
- Sanskrit
- Nepali
- Marathi
- Konaki
- Georgian
- Armenian
- Hindi

Workaround:
Use the 3 letter abbreviation for displaying the languages when these languages are used. Or create a user defined language using ASCII characters.

Issue:
OMI configuration is empty after upgrading from 2.8 or lower to 2.9 or higher version.
Solution:
After upgrade of a 2.8 or older version to 2.9 or later version, the OMI configuration is cleared, because it would be incompatible with the configuration in the newer version. Therefore you need to configure to which OMI and OMI input you are sending your floor language and from which OMI and OMI outputs you are receiving your interpreted languages.

4.18 Display time on device

Issue:
The MMD clock is not automatically synchronized if the clock of the server is set back multiple hours.
The server triggers the multimedia device to synchronize every 10 minutes. If the clock is set backwards it will take until the server is at its original time + approximately 10 minutes to send this trigger again to the multimedia devices
Solution:.
Power cycle the multimedia devices if the server clock is set backwards more than 1 hour.

Issue:
The Clock of the Multimedia device and the Interpreter desk do not display the time of the server. In a DICENTIS system there is one time server, this is the DICENTIS server. It runs a 3rd party program called "NetTime" which acts as an NTP server for the DICENTIS system. If Windows time is enabled and conflicts with the NETTime application which provides the time to the Multimedia device and the Interpreter desk.
Solution:.
On the DICENTIS server, check if the program "Net Time" is running.
- Stop the DICENTIS services (right click on the 'Bosch-logo' at the bottom right of the screen, then stop services)
- Go to the servers' services and go to 'Bosch DICENTIS system time service', this service is still running, Stop this service manually.
- Stop the NetTime services
- Disable the Windows Time services
- Start the Nettime service
- after that start all other services (right click on the 'bosch-logo' at the bottom right of the screen, then start services)
- Wait until all services have started (green check-mark in the logo).
- Start the 'Bosch DICENTIS system time service' manually.
- Then power cycle the hardware (APS and PS's) or switch the device off and on via the meeting application.

Upgrade to DICENTIS Conference System 3.20 where the Windows time is automatically disabled.

4.19 Display of Multimedia devices turns off after 2 months of usage

Issue:
After 2 months of being powered on the screen of the Multimedia device turns off, but the microphone and loudspeaker remain operational.
Solution:.
Power off the Multimedia devices when they are not being used. This increases the lifetime of the devices and reduces power consumption. The system can be configured to power off automatically when there is no microphone activity via the Meeting Application
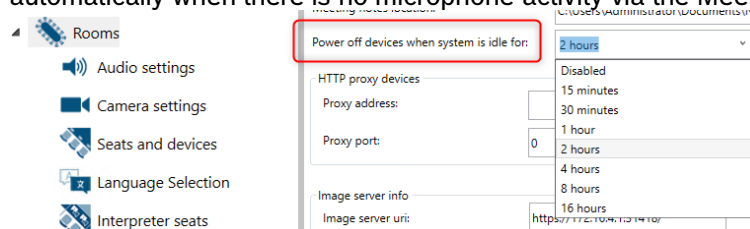
4.20 Meeting application

Issue:
GUI language and headphone language are not imported when importing a 3.51 or earlier persons Excel (xls) in 3.60 or later version.
Solution:
The resource names for Device GUI Language and Headphone language have changed between 3.51 and 3.60. Replace the column headers with the headers of an export template and try again.

Issue:
When you run the Meeting Application via a remote desktop, then Meeting application may stop displaying the video after some time. The video is still present in the system and is still displayed on multimedia device, interpreter desks with video output and Meeting application not run via remote desktop. Stopping and starting the Meeting application brings back the video on the Meeting application.
Solution:
Run the meeting application on your computer and not via a remote desktop.

4.21 DICENTIS Webserver, Synoptic Control

Issue:
Synoptic changes from voting view to discussion view when it is resized during a voting round.
Solution:
Manually switch to voting view after resizing.

Issue:
After upgrading to 4.40, the webclient has lost Volume control and Power off rights.
Solution:
Restart the computer.

Issue:
In version 3.51 to 4.0 it is not possible to activate microphones using the Conference protocol demonstrator. This is an issue in the demonstrator, not in the protocol. The issue is fixed in 4.1. Below how you can fix it in the 4.0 release.
Solution:
In C:\Inetpub\wwwroot\DcnmSynopticControl\Demonstrator\Controllers\conferenceController.js

Change:

```
    $scope.grantSpeech = function (seatId) {
        seatDetails = {
            seatId: seatId
        };
        conferenceServices.grantSpeech(seatDetails).then(function () { });
    }

    $scope.cancelSpeech = function (seatId) {
        seatDetails = {
            seatId: seatId
        };
        conferenceServices.cancelSpeaker(seatDetails).then(function () { });
    }

    $scope.activateMicrophone = function (seatId) {
        seatDetails = {
            seatId: seatId
        };
        conferenceServices.activateMicrophone(seatDetails).then(function () {
});
    }

    $scope.deactivateMicrophone = function (seatId) {
        seatDetails = {
            seatId: seatId
        };
        conferenceServices.deactivateMicrophone(seatDetails).then(function () {
});
    }
```

Into this:

```
$scope.grantSpeech = function (seatId) {
    seatDetails = {
        id: seatId
    };
    conferenceServices.grantSpeech(seatDetails).then(function () { });
}

$scope.cancelSpeech = function (seatId) {
    seatDetails = {
        id: seatId
    };
    conferenceServices.cancelSpeaker(seatDetails).then(function () { });
}

$scope.activateMicrophone = function (seatId) {
    seatDetails = {
        id: seatId
    };
    conferenceServices.activateMicrophone(seatDetails).then(function () {
});
}

$scope.deactivateMicrophone = function (seatId) {
    seatDetails = {
        id: seatId
    };
    conferenceServices.deactivateMicrophone(seatDetails).then(function () {
});
}
```

Issue:
Synoptic Control does not work if the API is not installed on the DICENTIS server PC.
Solution:
Install the DICENTIS API on the DICENTIS server PC. The DICENTIS API is an option which is by default selected to be installed during installation of the software.

Issue:
Synoptic Control does not work properly if Internet Explorer is used, because it does not support the websockets technology of the Synoptic control.
Solution:
Change to current version of Edge, Firefox or Chrome.

Issue:
Synoptic Control does not work when the website has two bindings. Server Error in '/' Application. Object reference not set to an instance of an object.
Solution:
Reboot the DICENTIS server after adding the additional bindings. If it then still occurs, press F5 in the browser multiple times when logging in.

Issue:
DICENTIS webserver does not show new functionality after upgrade. The cache of the browser contains the old website.
Solution:
Clear the cash of your browser using <CTRL> + F5 or <CTRL> + <SHIFT> + R on a windows PC or <CMD> + <SHIFT> + R on a MAC. Press F5 to refresh the browser.

4.22 Image server
Issue:
Invalid image server after creating a certificate using the Certificate Manager and using the same file name for both Root certificate as well as Server certificate.

Solution:
Use a different name for the Root certificate than the Server certificate. By default the Root certificate is customer related, so e.g. use the Customer name. The Server certificate is server related so e.g. use the hostname.

Issue:
Participant images are not displayed on Synoptic (DICENTIS Webserver) or Meeting application when you connect via the Office port of the DICENTIS server or another port than the port which runs the DICENTIS services. This is because the participant images are available via the port which runs the DICENTIS services and are not routed internally to other ports on the Server PC.
Solution:
If the images need to be available on a network other than the DICENTIS network, then use a setup as mentioned in the blueprints where a switch is configured to route between the DICENTIS network and an Office network.

Issue:
Enabling "Display image of newest speaker" creates high cpu load of DICENTIS server if the system has more than 500 Multimedia devices.
Solution:
Use a separate image server to reduce the load on the DICENTIS server. Check the DCNM-SW manual; Installing the image server on a different computer.

4.23 Certificate manager
Issue:
When you manually change the portnumber of the DcnmImageServer or SynopticControl webservers, then the certificates created using the Bosch Certificate Manager will not be installed.
Solution:
1. Set the portnumbers of the DcnmImageServer back to 31418
2. Set the SynopticControl back to 31416
3. Run the Bosch Certificate Manager tool
4. Set the portnumbers of the DcnmImageServer and SynopticControl back your own values

4.24 Dante
Issue:
Dante controller shows red error sign with "no audio" for Unproccessed language with floor fill disabled when the interpreter is not interpreting.
Rationale:
There is no audio on the Unprocessed language channel when there is no interpretation, because floor fill is disabled. And that results in the red sign. As soon as there is interpretation, then the green tick mark is shown.

Issue:
Linking 1 Dante source to both DICENTIS Dante input 1 and Dante input 2, when Dante Input 2 is in Mix – Minus Unprocessed mode, will set the latency of both inputs to the same value, while the Dante inputs have different latency for this configuration.
Solution:
There is no solution for this as both inputs direct to the same source and a source cannot have 2 different latencies. So do not link 1 source to both Dante Input 1 and Dante input 2 when Dante Input 2 is configured as Mix – Minus Unprocessed mode.

Issue:
Dante Virtual Soundcard (DVS) does not properly reconnect after a network recovery.
Solution:
Restart the DVS service using the DVS application. Or use the Dante VIA.

Issue:
Dante Controller does not discover devices when the Dante Controller application is run on the server computer and the Firmware upload tool is active.
The Firmware upload tool adds a second IP-address, link local, to the network adapter. This might cause issues for the Dante Controller application.
Solution:
Close the Firmware upload tool. Only open the firmware upload tool when upgrading the DICENTIS devices. Close it afterwards.

4.25 Camera Control
Issue:
ONVIF cameras not detected
when the PC on which the services are running is connected to "Unidentified networks" it can happen that ONVIF cameras are not automatically detected.
The following message might also be present in the logdump.
```
SystemLogMessages | 60 | 2022-02-01 15:53:50.3592 | ERROR |
DeviceServiceBase[111111111111]@172.16.4.1 | Exception in
DiscoveryTimerElapsed. Is your network configuration set to 'public'?
Then try setting it to private' or disable firewalls.
```
Solution:
Set the Unidentified network to Private.
1. Run Edit Group Policy / Local Group Policy Editor.
2. Navigate to Computer Configuration \ Windows Settings \ Security Settings \ Network List Manager Policies.
3. Select Unidentified Networks
4. Set the Location type to Private.
5. Restart the DICENTIS Services.

Issue:
Many messages in the logging.
```
SystemLogMessages | 60 | 2022-02-01 15:53:50.3592 | ERROR |
DeviceServiceBase[111111111111]@172.16.4.1 | Exception in
DiscoveryTimerElapsed. Is your network configuration set to 'public'?
Then try setting it to private' or disable firewalls.
```
Solution:
Set you network card to Private.
Open Settings from the Start menu.
6. From here, select the Network & Internet settings option.
7. Select Ethernet from the menu on the left.
8. Click on the name of your connection.
9. Select Private.

Issue:
Onvif cameras are not discovered in the DICENTIS Lan when the "Office" adapter is disabled (ethernet cable not connected) of the DICENTIS server.
Solution:
Possible solutions:
1. Connect the "Office" adapter to a network switch to discover the ONVIF cameras. Afterwards the connection can be removed again.
2. Download, install and run the Onvif Device Manager so that the DICENTIS server discovers the cameras.
3. Connect the cameras to the "Office" side of the DICENTIS server.

Issue:
Avonic camera is not discovered when camera is connected to ethernet switch with RSTP settings.
Solution:
Update the Avonic camera software to V3.2.6 which can be downloaded on the Avonic site.

Issue:
Lumens VC-A50P is not discovered by DICENTIS.
Solution:
The Lumens VC-A50P camera has issues with multicast data. The multicast data is stopping the

correct functioning of the camera. It no longer reacts to ping or the IR-remote control.
Filter the multicast using IGMP or connect the Lumens VC-A50P camera in a different subnet, e.g. to the Office side of the DICENTIS system server.

Issue:
ONVIF cameras are not discovered when connected to different switches.
Solution:
The TTL has been increased from 1 to 3 in version 3.60.
The TTL can be changed by creating an environment variable: DCNM_ONVIF_DISCOVERY_TTL

Issue:
Sony and Panasonic camera show red cross next to IP-address when the username & password is incorrect although the IP-address is correct.
Solution:
Enter the proper username and password for the Sony and Panasonic camera. To verify the connection with the Sony and Panasonic camera (when protocol Sony or Panasonic is selected) commands are used which require the correct username and password. Therefore you get the red cross next to the IP-address when username & password are not correct. You can test if the IP-address is correct by setting the protocol to unknown, but for correct functioning, the IP address, username & password and protocol need to be correct.

Issue:
H.264 video of Panasonic camera is not decoded on multimedia device DCNM-MMD/DCNM-MMD2.
Solution:
Upgrade the camera firmware to the July 2020 firmware and configure the Panasonic Camera according the special instructions from Panasonic. Available via Bosch After Sales Activities (ASA).

Issue:
Bosch HD Conference dome (VCD-811) does not respond in a system with a switch with IGMPv3 filtering.
Solution:
Change from IGMPv3 filtering to IGMPv2 filtering, because the HD Conference Dome does not respond to IGMPv3 query requests.

4.26 Mediagateway Video switching software

Issue:
The Mediagateway logfile reports the following Gstreamer warning.
[WRN] (path-to-executable:6404): GStreamer-WARNING **: 15:28:28.202: Failed to load plugin 'C:\Program Files (x86)\Bosch\DICENTIS Hybrid\MediaGateway\GStreamer-1.0\gstassrender.dll': The specified module could not be found. This usually means Windows was unable to find a DLL dependency of the plugin. Please check that PATH is correct. You can run 'dumpbin -dependents' (provided by the Visual Studio developer prompt) to list the DLL deps of any DLL. There are also some third-party GUIs to list and debug DLL dependencies recursively.
Solution:
This warning can be ignored.

Issue:
The Mediagateway crashes on a Server PC with NVIDIA GeForce GT 720 Graphics card.
Solution:
Currently we do not have a solution. We are analyzing this issue. Please use another video card or the on board graphics card.

Issue:
The Meeting application or computer showing the video on the big screen is not displaying the video properly. The Mediagateway will show an error similar to below:
```
ERROR rtspclient rtsp-client.c:1115:find_media: client 1357FAA8: can't prepare media
ERROR rtspclient rtsp-client.c:3412:handle_describe_request: client 1357FAA8: no media
```
Solution:
Please validate that the computer is using the correct and latest Graphics drivers for your video processor and not the default video drivers so that hardware acceleration is supported.

Issue:
The Mediagateway uses the Audinate DAL to exchange the audio between the local and remote participants. The Audinate DAL needs to have an internet connection without proxy to register the Audinate DAL. If the DICENTIS system is behind a proxy than the Audinate DAL cannot register itself.
Solution:
Preferred solution is a network without proxy. Manually configuring the http_proxy and https_proxy (with username and password if required) should also enable the registration process.

Issue:
The DcnmMediaPlayer.exe application fails to install due to absence of VC2015 runtime libraries. Upon installation the installer checks if the libraries are available and if not tries to download them. If this is not possible due to firewall settings or no connection to the internet, then the installation will fail.
Solution:
Download the Visual C++ 2015 and manually install it.

4.27 Control gateway Hybrid meetings
Issue:
The Control gateway logfile (C:\ProgramData\Bosch\DICENTIS\Logs\ControlGateway.log) shows error message: [ERR] Authentication expired followed by an Informational [INF] Authentication expired on message.
Solution:
This error message can be seen as an informational message and can be ignored.

4.28 Interpreter desk
Issue:
Unprocessed audio is not muted when the interpreter presses the mute button. Present in 3.40 upto 4.10.
Solution:
Upgrade to 4.11 or later software.

Issue:
Beeps are not heard when listening to a Language which is provided by Dante and not linked to a Dante source (using Dante controller).
Solution:
When there is no Dante source linked to a language which is configured as source Dante, then the headphone is muted when selecting that language. This results in also not providing the audible beeps. Link the language to a Dante source and the beeps will be audible.

Issue:
A laptop which is connected via CAT-5/6 to the second Ethernet port of and DCNM-IDESK does not get a network connection.
Solution:
Power the DCNM-IDESKs via PoE and connect the laptop to the PoE switch too.

4.29 Integrus frontpanel LED
Issue:
After powering up, booting, of the Integrus INT-TXO the frontpanel LEDs light up shortly from green to orange, showing an incorrect state.
Workaround:
This is resolved automatically within 5 seconds, so no action required.

4.30 Meeting notes and voting files
Issue:
Meeting notes and voting files are not properly displayed in Firefox or Chrome.
Workaround:
Change the local files security policy from true to false.

Firefox:
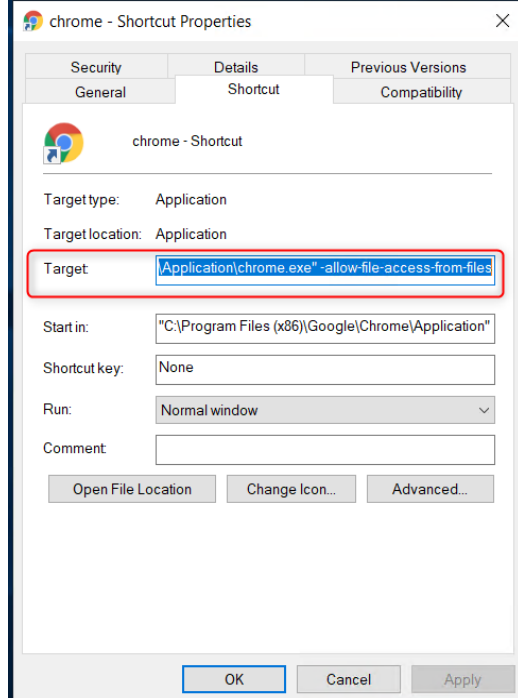   1.   Enter about:config in the navigation bar

2. Enter security.fileuri.strict_origin_policy in the search field
3. Change the value from True to false

Google Chrome
To display the meeting notes and voting results in Chrome.
Edit the shortcut to Chrome by extending the "Target" with -allow-file-access-from-files

Example:
" C:\Program Files (x86)\Google\Chrome\Application\chrome.exe " -allow-file-access-from-files
The blue text is the path to where Chrome is installed on your computer.
The red text is the addition with enables the correct display of the meeting notes.

Microsoft Edge
To display the meeting notes and voting results in Edge.
Edit the shortcut to Edge by extending the "Target" with -allow-file-access-from-files

Example:
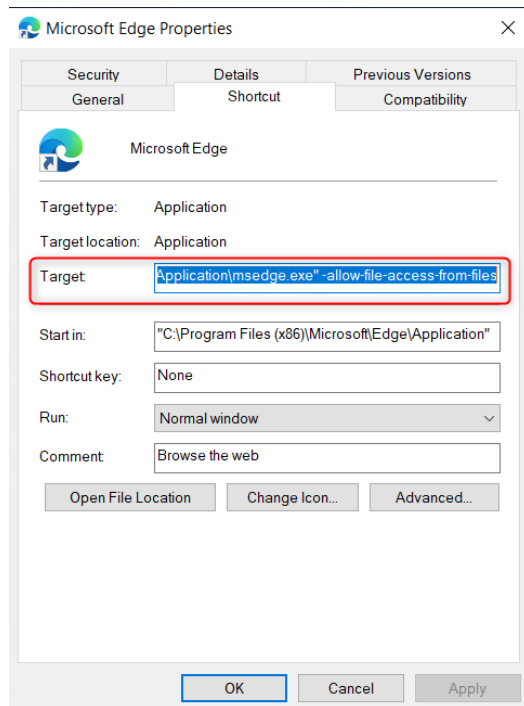"C:\Program Files (x86)\Microsoft\Edge\Application\msedge.exe" -allow-file-access-from-files

> The blue text is the path to where Edge is installed on your computer.
> The red text is the addition with enables the correct display of the meeting notes.

Issue:
Meeting notes and voting files are not properly displayed in Firefox or Chrome.
Workaround:
Convert the xml files to html using Microsofts' Command Line Transformation Utility (msxsl.exe)

- Download the Microsoft Command Line Transformation tool
  https://www.microsoft.com/en-us/download/details.aspx?id=21714
- Copy the tool, mscsl.exe, to the directory where the Meeting notes, Voting files and style sheets are stored. By default that is the C:\Programdata\Bosch\DICENTIS directory, but you can change that using the Meeting Application. It is in \ Configure \ Rooms \ Meeting notes location.
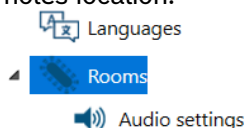
- The Meeting notes can be converted to html via this command:
  C:\<location of meeting notes> msxsl.exe <meeting notes filename>.xml MeetingResult.xslt -o <new file name>.html
- The Voting files can be converted to html via this command:
  C:\<location of meeting notes> msxsl.exe <Voting files filename>.xml VotingResult.xslt -o <new file name>.html
- You can automate this via a script to make it easier.

4.31 API
Issue:
Using the API it is possible to configure the same nfc-id to multiple persons.
Workaround:
Please prevent that your input file contains multiple persons with the same nfc-id.

4.32 Open source
Issue:
Downloading the Open source license file from a DCNM-FBD2 for a second time using Chrome or Edge results in a download failure.

Workround:
Either use Firefox to download the Open Source license file or power cycle the DCNM-FBD2 and try again.

4.33 HDMI to VGA converters
Issue:
Some HDMI to VGA converters do not work in combination with DCNM-IDESKVID
Reason:
The HDMI outgoing current is limited at 60mA; the official HDMI standard specifies 55mA.
Some HDMI to VGA converters may require more current which results in unexpected behavior or non-working converter.

4.34 Media player PC has significant delay
Issue:
The Media Player has a significant video delay.
Workaround:
Exit the full screen and re-enabled the full-screen mode.

4.35 Improve Media Gateway video quality
The Media Gateway video output stream is set to a bit-rate of 3000 in the Media Gateway example jsonc files. The video quality can be further improved by increasing the bit-rate to 6000.

5 Supported cameras, encoders, switchers and control equipment

5.1 Supported cameras

Supported cameras	DCNM-LCC, DCNM-RENTAL, Registered system	Premium and Ultimate feature packages, DCNM-DEMO, DCNM-CRN
ONVIF Profile-S		
Lumens VC-A53	6.2	Yes
Avonic AV- CM93-IP, AV-CM93-NDI and AV-CM93-DAV	5.1	Yes
AVER PTZ310	5.0	Yes (requires AVer v0.0.0000.90)
Lumens VC-TR40, Winsafe AMC-G320, Winsafe AMC-E200TV4	4.40	Yes
Lumens VC-R30	4.10	
Lumens VC-A51P, Avonic AV-CM70-NDI	4.00	Yes
Avonic AV-CM70-IP, Avonic AV-CM71-IP, Avonic AV-CM73-IP Lumens VC-A71P	3.50	Yes
Lumens VC-A61P	3.50	Yes (requires Lumens VCAW209)
Bosch IP 4000, Bosch IP 5000	2.71	
Username & Password authentication Lumens VC-A50P, Avonic AV-CM40-IP	2.70	Yes
Bosch ONVIF Profile-S cameras	1.30	Yes
Bosch VCD-811	1.00	Yes
Sony CGI commands		
Sony SRG-A12	6.2	yes

Sony SRG-A40	5.1	Yes
BRC-X400, SRG-X400, SRG-X120	3.50	Yes
SRG-360SHE	2.80	Yes
Sony SRG-300SE/301SE	2.20	Yes
Panasonic HD Integrated Camera Interface Specifications		
AW-UE40, AW-UE50, AW-UE80, AW-UE100, AW-UE150, AW-UE160	3.50	Yes
Display H.264 video of Panasonic cameras on Multimedia device (requires specific settings in the Panasonic camera, please contact Bosch ASA)		
Fixed preset number offset	3.20	
Fixed authentication mode	3.00	
AW-HE120, AW-HE130	2.60	Yes
AW-HE40, AW-HE50, AW-HE60, AW-UE70	2.20	Yes

5.2 Supported video encoders

Supported encoders	DCNM-LCC, DCNM-RENTAL, Registered system	Premium and Ultimate feature packages, DCNM-DEMO, DCNM-CRN
Extron SMP 351 & SMP 352 video encoder	3.70	Yes
Extron SMP 111 video encoder	3.40	Yes
Epiphan VGADVI broadcaster	1.30	Yes
DcnmBeamer application		No

5.3 Supported video switchers

Supported video switchers	DCNM-LCC, DCNM-RENTAL, Registered system	Premium and Ultimate feature packages, DCNM-DEMO, DCNM-CRN
TV One CORIOMatrix	1.40	Yes
Improvements	1.31	
Kramer MV-6 video switch	1.30	Yes
TvOne C2-2355A in combination with TvOne S2-108HD	1.00	No

5.4 Supported control equipment

Supported control equipment	DICENTIS
AMX NX integrated controllers'	4.30
Extron TouchLink Pro touchpanels and IP Link Pro control processors (using conference protocol)	3.50

6 Additional Information (not included in manuals)

6.1 Participant based license model

The new participant license models are available as Premium and Ultimate, more information about the difference is available in the DICENTIS configuration manual. Please note that Premium cannot be combined with Ultimate

The Participant license are available in 3 different subscription models:
4. Perpetual
5. Prepaid
6. Subscription

More information about the subscription models is available in the DICENTIS configuration manual.
Please note that:
- Perpetual cannot be combined with Prepaid
- Perpetual cannot be combined with Subscription
- Prepaid cannot be combined with Subscription

6.2 Setup, preparing, managing and joining DICENTIS Hybrid meetings

DICENTIS Hybrid meetings give the possibility for participants, that are not physically present in the meeting room, the possibility to join this meeting from a location using a web-browser.

6.2.1 Setup system
Data Privacy Agreement (DPA)
Before the DICENTIS Hybrid meetings can be used, an agreement on data privacy needs to be approved by the end customer. The end customer will receive an email on which the end customer needs to reply for agreement that Bosch processes personal data. The System Installer needs to contact Bosch to start this DPA process.

6.2.2 Security and monitoring
Failed login attempts by remote participants are logged on the DICENTIS server.
This logfile is located here: C:\ProgramData\Bosch\DICENTIS\Logs\ControlGateway_xx.log
The logfile indicates: *Failed login attempt by participant [username]*

6.2.3 Known issues with DICENTIS Hybrid meetings

6.3 Video switching configuration

6.3.1 Introduction
With the introduction of 5.0 software and availability of Premium and Ultimate licenses, a new advanced video management solution: Media gateway, is introduced.

As of version 6.11 the Media gateway can be configured using a webpage instead of changing the JSON-files. For more information see paragraph **Error! Reference source not found.**

It supports:
- 10 IP cameras
- 10 different views (canvasses)
- 3 different output streams
- Kramer MV6 and TV-One CorioMatrix SDI video switcher for single video
- Software video switching for:
    a. Multiple video feeds in a video layout
    b. IP video

This video switching functionality is available for the following licenses (and DCNM-DEMO and DCNM-CRN).

	Premium	Ultimate
Perpetual	DCNM-LPP-PE	DCNM-LPU-PE
Prepaid	DCNM-LPPP-P1Y	DCNM-LPUP-P1Y
Subscription	DCNM-LPPP-S1Y	DCNM-LPUP-S1Y

6.3.2 How to configure using JSON-file

The proper way of configuration is using the website, but for rare occasions configuration via a text editor might be required.

The configuration is a JSON type description that defines the behaviour of the Media Gateway including video switching. For the configuration of the JSON file it is recommended to use Microsoft Visual Studio Code (which can be freely downloaded from the internet).

The configuration is stored in:
C:\ProgramData\Bosch\DICENTIS\MediaGateway\MediaGatewaySettings.jsonc
Open this file using Microsoft Visual Studio Code.

More information about the json format can be found here:
https://www.digitalocean.com/community/tutorials/an-introduction-to-json
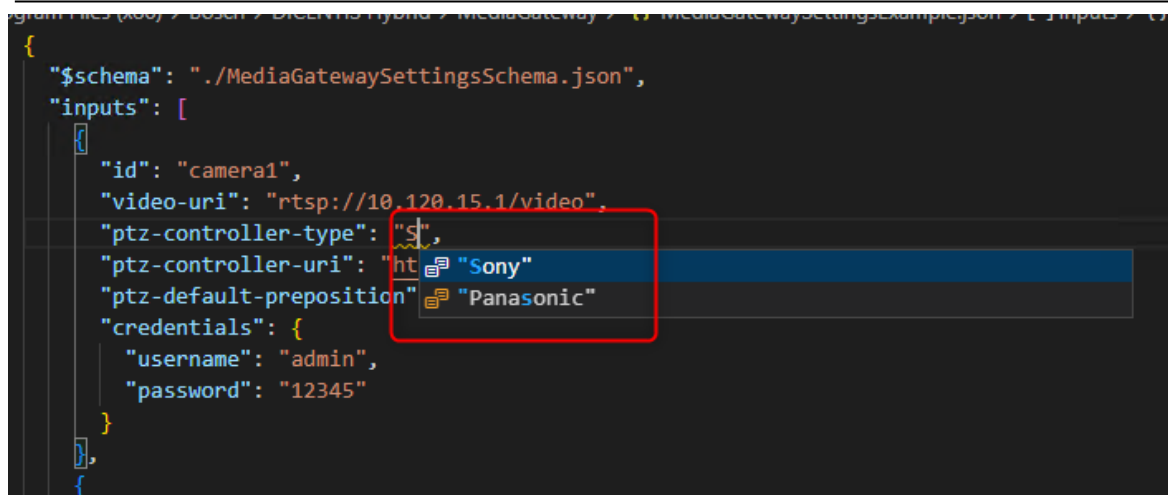
It contains 8 sections:

Inputs	Where the cameras are defined.
Seatmaps	Where the seats are defined and the presets. A seat can have multiple camera + preset combinations. Use the Center, Left, Right view to define from which angle the shot is made. This is used for a side-by-side video-split.
Video-switcher	Where the SDI video switcher is configured.
Canvases	Here you define your video views this can be a single video, a split, a quad, etc.
Contents	This is the section where you define when a Canvas is selected. E.g. in this section you define that the Overview-canvas is selected when nobody is speaking. Or that a 2-view-video-split is selected when 2 participants are speaking.
Stream	Here you define the output-stream, because you might want to use a different encoding for recording, than for broadcasting or for showing on a large screen.
Configuration	These are general settings like what is the stream for the local presentation source, is camera override used.
Global settings	These are the global settings link font, size and color for the overlay text.

6.3.3 Microsoft Visual Studio Code

The configuration of the video switcher is via a "JSONC" configuration file.

We advise to use the free of charge Microsoft Visual Studio Code because
- it shows you if you make formatting mistakes like forgetting a comma or adding one too many.
- It also has a kind of auto fill where it shows you the possibility via a kind of dropdown. It retrieves this information from this file: MediaGatewaySettingsSchema.jsonc

```json
{
    "$schema": "./MediaGatewaySettingsSchema.json",
    "inputs": [
        {
            "id": "camera1",
            "video-uri": "rtsp://10.120.15.1/video",
            "ptz-controller-type": "S",
            "ptz-controller-uri": "ht    "Sony"
            "ptz-default-preposition    "Panasonic"
            "credentials": {
                "username": "admin",
                "password": "12345"
            }
        },
        {
```

- When you hover over the "blue" text additional information is given.
- When you have a list of lines (e.g. cameras assigned to 1 seat) then you separate them via a comma. If you add a comma after the last item then an error is presented (red line under the comma:

```json
{
    "seat-name": "Seat 01",
    "prepositions": [
        { "source-id": "Lumens VC-TR40", "preposition": 1, "view": "Center" }
    ]
},
{
    "seat-name": "Seat 02",
    "prepositions": [
        { "source-id": "Lumens VC-TR40", "preposition": 2, "view": "Center" },
        { "source-id": "camera3", "preposition": 2, "view": "Left" }
    ]
},
{
    "seat-name": "Seat 03",
    "prepositions": [
        { "source-id": "Sony SRG-300", "preposition": 3, "view": "Cen
        { "source-id": "camera2", "preposition": 3, "view": "Right" },
    ]
},
```

Trailing comma json(519)
View Problem (Alt+F8)   No quick fixes available

The Microsoft Visual Studio Code software needs to be downloaded from Microsoft; due to legal rights on the software.

6.3.4   Software video switching requirements and restrictions
The Media Gateway runs on the PC running the DICENTIS software. The number of cameras, Canvasses and output streams depends on the performance of the computer.
To show video on a hall display as separate PC or a decoder (H264 -> HDMI) can be used.
Note that the decoder can introduce significant video delay.

DCNM-SERVER3 supports up to:
- 10 cameras
- 10 different views (canvasses)
- 3 output streams (2x 1080p and 1x 720p)

The hardware of the DCNM-SERVER3 consists of:
- Intel Core i7-12700
- Intel UHD Graphics 770 (embedded graphics)

For more demanding applications requiring more cameras, canvasses , output streams (possibly in 4k), we recommend to use a 3rd party server PC with more powerful graphical card (e.g. HP Z2 mini G9 with an NVIDIA® RTX™ A2000 GPU).

6.3.5 Getting started using a SDI-video switcher

If you are using a SDI video switcher, then your setup will look like below image:
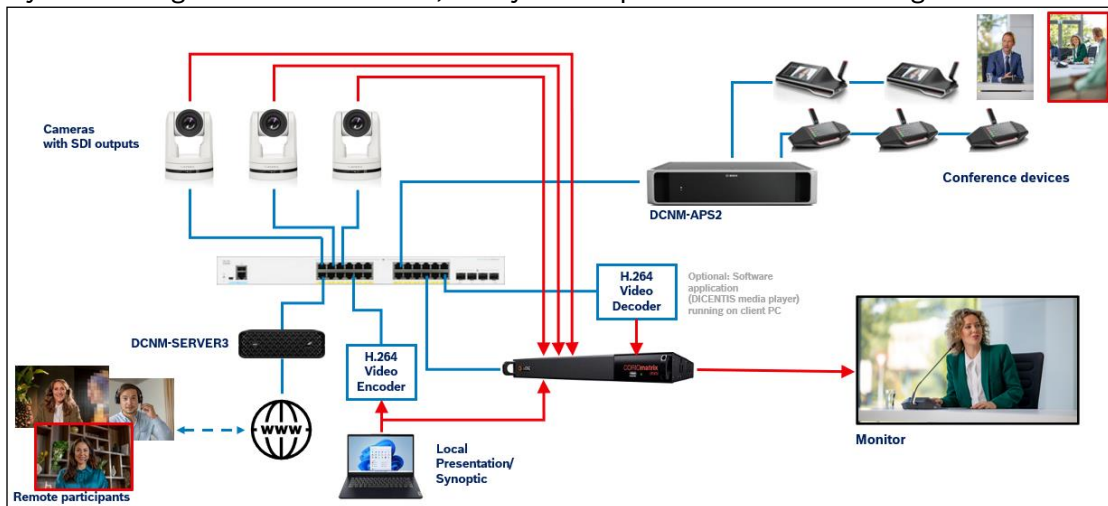
In this setup we have included a H.264 to SDI encoder to be able to supply the video feed of the remote participant or presentation of the remote participant to the SDI video switcher.
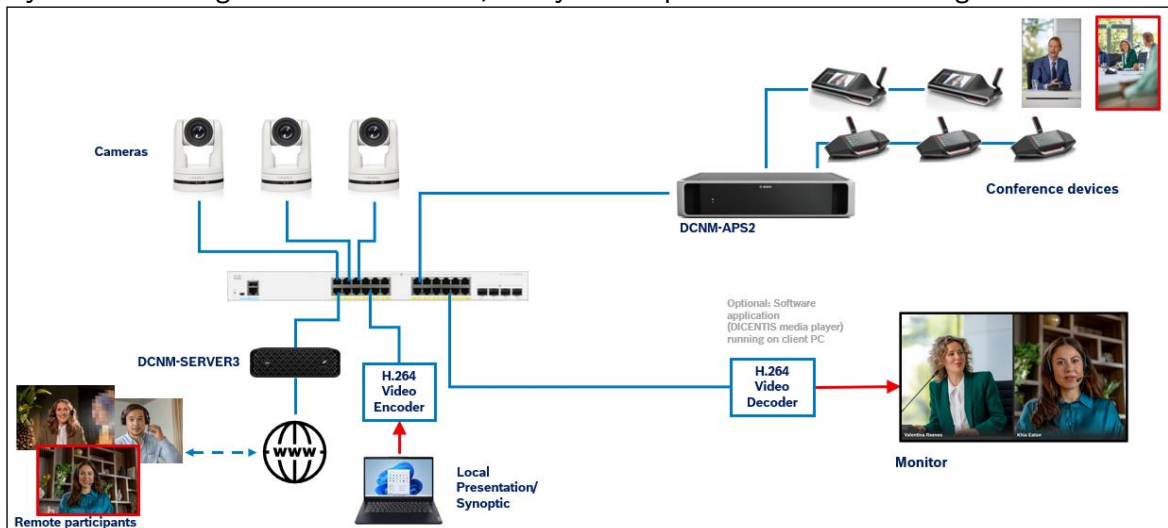
Follow the steps below:
1. Please use this file as starting point: MediaGatewaySettingsExampleSdi.jsonc
2. Make a copy and rename the file to MediaGatewaySettings.jsonc
3. This file contains the settings for a TvOne CorioMatrix. If you have a Kramer MV-6, then you need to copy the Kramer MV6 part from the file: MediaGatewaySettingsExample.jsonc
4. Edit the Inputs and Seatmaps section according the next paragraphs.
5. Save the file when you are done editing it.
6. Restart the services using the Server console to make the new configuration active.

Note: After editing the configuration file, you then need to restart the services for the changes to become active.

6.3.6 Getting started with using a Software video switcher (no SDI-video switcher)

If you are not using a SDI video switcher, then your setup will look like below image:

Follow these steps:
1. Please use this file as starting point: MediaGatewaySettingsExampleSoftware.jsonc
2. Make a copy and rename the file to MediaGatewaySettings.jsonc
3. This file contains the settings full screen video and a video-split to display 2 speakers.
4. Edit the Inputs and Seatmaps section according to the next paragraphs
5. Save the file when you are done editing it.
6. Restart the services using the Server console to make the new configuration active.

Note: After editing the configuration file, you then need to restart the services before the changes to become active.

6.3.7   Automatic updates and proxy settings

If the system has access to the internet, then the Video switching software is automatically updated on a regular basis.

When the system is behind a proxy, then normally logging in as administrator and setting the proxy settings via Windows should enable the video switching software to access the internet to download the latest version.

When that doesn't work on your system, because it is managed via the IT-department and special settings are made, then you need to configure the proxy settings by creating this file:

```
C:\ProgramData\Bosch\DICENTIS\proxySettings.json
```

With this content

```
{
        "Host": "<host>",
        "ProxyUser": "<user>",
        "ProxyPassword": "<password>"
}
```

It might look like this:

```
{
        "Host": "http://JohnsCompany.com:8080",
        "ProxyUser": "John",
        "ProxyPassword":  "JohnsPassword"
}
```

After creating or changing the file, the services need to be restarted using the Restart services option of the Server Console.

Validating the automatic updates can be done by checking this file:

```
C:\ProgramData\Bosch\DICENTIS Hybrid\PreInstaller\Logs
```

"The request was canceled…"   identifies connection issues
"Manifest File downloaded"   identifies correct functioning of the updates

6.3.8   Inputs

Here the cameras and presentation source are defined.

```
"inputs": [
  {
    "id": "camera1",
    "video-uri": "rtsp://172.16.4.76:8557/h264",
    "ptz-controller-type": "ONVIF",
    "ptz-controller-uri": "http://172.16.4.76:8080",
    "credentials": {
      "username": "admin",
      "password": "admin"
    }
  },
  {
    "id": "camera2",
    "video-uri": "rtsp://172.16.4.58/video2",
    "ptz-controller-type": "Sony",
    "ptz-controller-uri": "http://172.16.4.58:80",
    "ptz-default-preposition": 0,
    "credentials": {
      "username": "admin",
      "password": "admin"
    }
  },
  {
    "id": "camera3",
    "video-uri": "rtsp://admin:12345@172.16.4.71/mediainput/h264/stream_2",
    "ptz-controller-type": "Panasonic",
    "ptz-controller-uri": "http://172.16.4.71",
    "ptz-default-preposition": 0,
    "credentials": {
      "username": "admin",
      "password": "12345"
    }
  },
  {
    "id": "local-presentation",
    "video-uri": "rtsp://172.16.4.75:8557/h264"
  }
],
```

Id is the name of the camera which is used further on in the configuration. Each camera requires a unique name.

Video-uri is link to the video stream. This information can be retrieved from the camera browser.

ptz-controller-type is control protocol which the camera supports: ONVIF, Panasonic or Sony

ptz-controller-uri is the http or https address of the camera to send the control commands to.

Ptz-default-preposition is the preposition which is sent to the camera when it is not directed to a speaker. This is used for the overview of the room.

Credentials these are the username and password to control the camera.

A presentation source is also an input with video-uri and optional credentials.

The best way to retrieve the video-uri of the camera is to check the user documentation of the camera or use the webbrowser page of the camera like shown below of a Lumens camera:
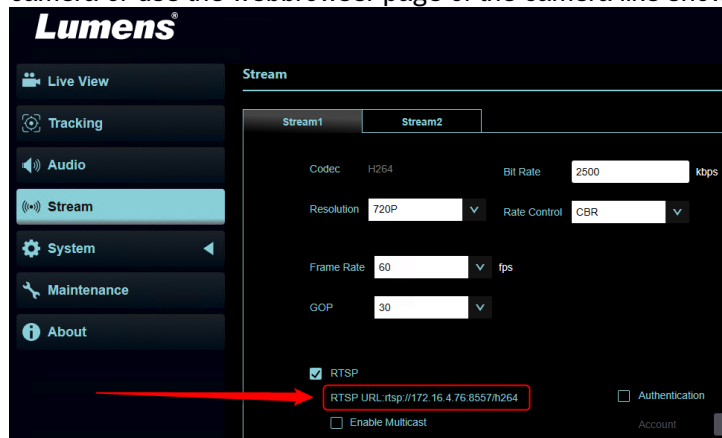
Retrieving the Video-uri from an ONVIF camera can be done using the freely downloadable Onvif Device Manager (this is a link where it can: https://sourceforge.net/projects/onvifdm/) and check the "identification" (note: you need to connect to the camera using the username and password of the camera in the top left corner of the ODM-application:
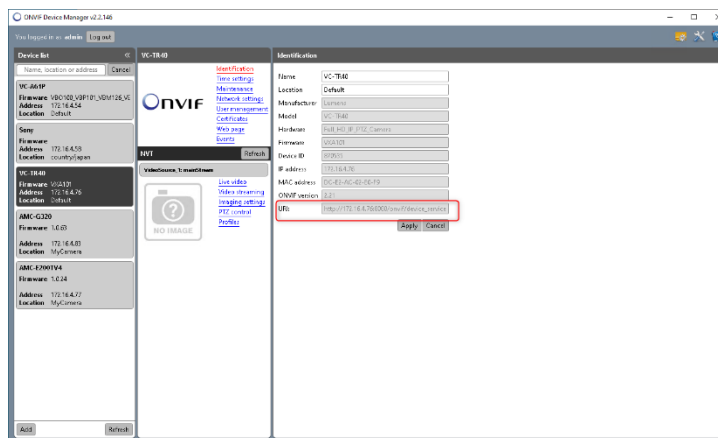
When copying the URI (e.g. http://172.16.4.76:8080/onvif/device_service), remove the /onvif/device_service part.

6.3.9 Seatmaps

Here the seats with their cameras and prepositions are defined. A seat can have multiple camera + preset combinations. Use the Center, Left, Right view to define from which angle the shot is made. This is used for a side-by-side video-split.

```
"seatmaps": [
  {
    "seat-name": "seat 1",
    "prepositions": [
      { "source-id": "camera1", "preposition": 1, "view": "Center" },
      { "source-id": "camera2", "preposition": 1, "view": "Right" },
      { "source-id": "camera3", "preposition": 1, "view": "Left" }
    ]
  },
  {
    "seat-name": "seat 4",
    "prepositions": [
      { "source-id": "camera1", "preposition": 4, "view": "Center" },
      { "source-id": "camera2", "preposition": 4, "view": "Right" },
      { "source-id": "camera3", "preposition": 4, "view": "Left" }
    ]
  },
  {
    "seat-name": "seat 5",
    "prepositions": [
      { "source-id": "camera1", "preposition": 5, "view": "Center" },
      { "source-id": "camera2", "preposition": 5, "view": "Right" },
      { "source-id": "camera3", "preposition": 5, "view": "Left" }
    ]
  },
  {
    "seat-name": "seat 6",
    "prepositions": [
      { "source-id": "camera1", "preposition": 6 }
    ]
  }
],
```

Use exactly the same "seat name" as is used in the Meeting application. That also includes the use of small letters, capitals, spaces and numbers.

The "source-id" is the "Id" specified in the Inputs section at the beginning of the file.

The "view" is the angle from which the camera looks at the participant. This "view" is later on used in the Canvas.

If multiple camera + prepositions are linked to the same seat, then add multiple lines with source-id.
The ordering of the lines, defines the order in which a camera is selected.
If a camera is already used for an active speaker, then the next line/camera will be selected.

For the SDI-video switch, only the first preposition is used.

6.3.10 Video switcher

Here the SDI video switcher is configured:

- The default configuration for both is available in this file: MediaGatewaySettingsExample.jsonc
- If you do not use a SDI-video switcher, then delete the information so it looks like this:

```
"video-switcher": [

],
```

- If you do not have an Kramer MV-6, delete the Kramer section
- If you do not have a CorioMatrix, delete the CorioMatrix section
- Configure the credentials, the default values are entered
- Configure which camera is assigned to which video switcher input
- Local-presentation is the input to which is switched when a presentation is active. If you do not want to switch to the presentation input, delete this line
- Media-gateway-mix is the input for the video coming from the remote participants (for future release)
- Overview is the input to which the overview camera is connected
- Output-config is the switch output which is connected to the hall display (this is the output which switches to the input)
- The Kramer inputs are number 1 to 6.
- The CorioMatrix inputs are number according the Coriomatrix numbering Slot of the frame and input of the card.

```
"video-switcher": [
  {
    "id": "Video switcher 1",
    "model": "tvONECorioMatrix",
    "ip-address": "192.168.2.99",
    "port": 10001,
    "credentials": {
      "username": "admin",
      "password": "adminpw"
    },
    "input-map": [
      {
        "input-id": "Camera1",
        "video-switch-input": "Slot_1_in_5"
      },
      {
        "input-id": "Camera2",
        "video-switch-input": "Slot_3_in_5"
      }
    ],
    "local-presentation": {
      "video-switch-input": "Slot_2_in_5"
    },
    "media-gateway-mix": {
      "video-switch-input": "Slot_9_in_2"
    },
    "overview": {
      "video-switch-input": "Slot_2_in_1"
    },
    "output-config": {
      "video-switch-output": "Slot_3_out_1"
    }
  },
```

```
  {
    "id": "Video switcher 2",
    "model": "Kramer",
    "ip-address": "192.168.2.98",
    "port": 5000,
    "credentials": {
      "username": "",
      "password": ""
    },
    "input-map": [
      {
        "input-id": "Camera3",
        "video-switch-input": "1"
      },
      {
        "input-id": "Camera4",
        "video-switch-input": "2"
      }
    ],
    "local-presentation": {
      "video-switch-input": "3"
    },
    "media-gateway-mix": {
      "video-switch-input": "4"
    },
    "overview": {
      "video-switch-input": "5"
    },
    "output-config": {
      "video-switch-output": ""
    }
  }
}
```

6.3.11 Canvases

The Canvases is where the video-views are defined. This can be a view of 1 full screen video, but also splits, quads, etc of multiple video feeds.

```json
"canvases": [
  {
    "id": "Overview",
    "width": 1920,
    "height": 1080,
    "fps": 60,
    "cameos": [
      {
        "source": { "source-id": "camera1" },
        "dimensions": { "x": 0, "y": 0, "width": 1920, "height": 1080 }
      }
    ]
  },
  {
    "id": "OneSpeaker",
    "width": 1920,
    "height": 1080,
    "fps": 60,
    "cameos": [
      {
        "source": { "speaker-nr": 1 },
        "dimensions": { "x": 0, "y": 0, "width": 1920, "height": 1080 },
        "overlay": [ { "source": "ParticipantName", "x": 50, "y": 80 } ]
      }
    ]
  },
  {
    "id": "Presentation",
    "width": 1920,
    "height": 1080,
    "fps": 60,
    "cameos": [
      {
        "source": { "presentation": true },
        "dimensions": { "x": 0, "y": 0, "width": 1920, "height": 1080 }
      }
    ]
  },
```

The Id is the name of the Canvas and is used in the Contents section to select the correct Canvas based on the number of speakers (or presentation).

Hovering over the blue text, gives additional information.

The screenline can be used to overlay the speakername on the video.

Note
Create a separate canvas for the overview which points directly to the camera providing the overview image (camera1 in the left image).

A preposition is not required, because that is the default preposition (assigned in the Inputs section, will be used.

The canvas can create fixed overlay text like "Meeting room X".

6.3.12 Contents
This section has the logic to define which canvas is selected

```json
"contents": [
  {
    "id": "MainContent",
    "scenes": [
      {
        "conditions": [
          { "variable": "PresentationActive", "operator": "Eq", "val
        ],
        "source-id": "Presentation"
      },
      {
        "conditions": [
          { "variable": "NrOfSpeakers", "operator": "Eq", "value": 1
        ],
        "source-id": "OneSpeaker"
      },
      {
        "conditions": [
          { "variable": "NrOfSpeakers", "operator": "Gt", "value": 1
        ],
        "source-id": "TwoSpeakers"
      },
      {
        "source-id": "Overview"
      }
    ]
  }
],
```

The Id is the name of the Content (logic). You can have different Contents (logics) for different purposes (e.g. different hall displays).

A "flowchart" of conditions is checked if the condition is met, then the flow stops. If the condition is not met, the next condition is checked.

In the left example, first the check for activate presentation is done, if that is not the case then a check for 2 speakers is done, and after that if 1 speaker is active. If all these conditions are not met, then the overview camera is selected.

Hovering over the blue text, gives additional information.

6.3.13 Streams
This section defines the stream settings of the output stream.

```
"streams": [
    {
        "id": "stream1",
        "width": 1280,
        "height": 720,
        "bitrate": 3000,
        "encoding": "H264",
        "source-id": "MainContent720p",
        "server-type": "RTSP"
    },
    {
        "id": "stream2",
        "width": 1280,
        "height": 720,
        "bitrate": 3000,
        "encoding": "H264",
        "source-id": "MainContent720p",
        "server-type": "RTSP"
    },
    {
        "id": "stream3",
        "width": 1920,
        "height": 1080,
        "bitrate": 3000,
        "encoding": "H264",
        "source-id": "MainContent",
        "server-type": "RTSP"
    }
],
```

In the default configuration the stream1 is used for the presentation stream.

In the default configuration the stream2 is used for the video stream to show the active speaker(s).

Hovering over the blue text, gives additional information.

6.3.14 Configuration
This section defines some default settings.

```
"configuration": {
    "local-presentation-source-id": "local-presentation",
    "camera-override": true,
    "dcnm-devices-video-stream-id": "stream2",
    "dcnm-devices-presentation-stream-id": "stream1",
    "remote-contribution": {
        "video-source-id": "overview",
        "presentation-source-id": "local-presentation"
    }
},
```

For a default configuration you should not have to edit this.

Hovering over the blue text, gives additional information.

6.3.15 Global settings
This section defines some global settings.

```
"global-settings": {
    "font-attributes": {
        "font-family": "Bosch Global Sans",
        "font-size": 50,
        "style": "Bold",
        "text-color": "#FFFFFFFF",
        "background-color": "#00000000"
    }
}
```

You can define here the font settings for the text overlay.

Hovering over the blue text, gives additional information.

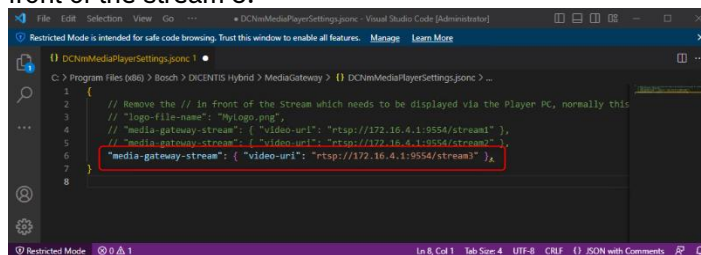### 6.3.16   Decoding the video with a SDI video switcher
When you use the SDI video switcher, then you can connect the hall monitor to the video output of the SDI video switcher.

6.3.17   Decoding the video with the Software video switcher
A client PC is required which runs the hall display application. Optionally a 3rd party decoder box can be used instead. Please note that using a decoder can significant increase video delay.

A player (software) can be found in the Tools\ directory (DCNmMediaPlayer.msi)
1. Install the DCNmMediaPlayer on the Video player PC, it will
    a. Install a player application, DCNmMediaPlayer.msi
    b. The installer configures the application to automatically start after the windows login
2. Copy the DCNmMediaPlayerSettings.jsonc file
    from the Server PC (C:\ProgramData\Bosch\DICENTIS\MediaGateway)
    to the Player PC (C:\ProgramFiles\Bosch\DICENTIS\MediaPlayer)
    this file contains the information about the streams which the Server PC generates.
3. Edit the DCNmMediaPlayerSettings.jsonc file. Remove the // for the stream you want to display on the hall display. If you are using the example configuration file, remove the // in front of the stream 3.

4. To configure the player PC to automatically logon, please follow the instructions from Microsoft: https://learn.microsoft.com/en-us/troubleshoot/windows-server/user-profiles-and-logon/turn-on-automatic-logon

6.4   DICENTIS Webserver browsers Autologin and full screen
The Manual lists the link for Google chrome, but you can also use Edge and Firefox.

Below the shortcuts/Targets for Chrome, Firefox and Edge.
<DICENTIS server> is the hostname or IP-address of the PC running the DICENTIS services.
<Location> is the location where you stored the autologin html file.
<Layout> is the name of the layout which needs to be opened automatically

Chrome:
"C:\Program Files (x86)\Google\Chrome\Application\chrome.exe" -start-fullscreen "file:///<Location>\autoLogin.html?Server=https://<DICENTIS server>:31416/&navbar=off&layout=<Layout>"

Firefox
Below the shortcut.
"C:\Program Files\Mozilla Firefox\firefox.exe" -kiosk "file:///<Location>\autoLogin.html?Server=https://<DICENTIS server>:31416/&navbar=off&layout=<Layout>"

Edge
Below the shortcut.
"C:\Program Files (x86)\Microsoft\Edge\Application\msedge.exe" --kiosk --edge-kiosk-type=fullscreen "file:///<Location>\autoLogin.html?Server=https://<DICENTIS server>:31416/&navbar=off&layout=<Layout>"

Edge browser kiosk mode by default runs in private mode.
You need to disable private browsing in the edge completely to make autologin work.

Disabling private mode in Edge:

1. Regedit: HKEY_LOCAL_MACHINE\SOFTWARE\Policies\Microsoft\Edge (if the Edge-key does not exist, then create it)

2. Create/modify InPrivateModeAvailability (32-bit Dword)

3. Set value to 1 (hexadecimal) to disable the private browsing (0: enable, 1: disable, 2: force to open all pages in private mode)

4. upon opening the browser go through the questions (Don't allow works ok), log in once and upon next opening the browser it should automatically log in.
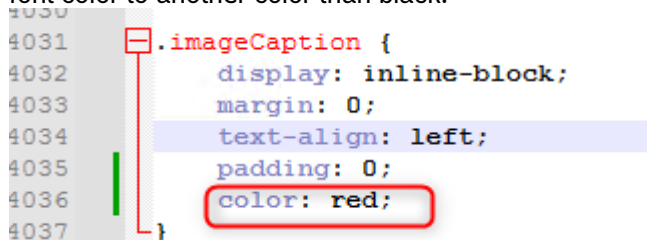
6.5   DICENTIS webserver, Synoptic

Next to the settings via the UI of the DICENTIS webserver there are some changes possible via the configuration files

6.5.1   Changing the font color of the screenline

You can change the font color of the screenline via modifying this file:
:\inetpub\wwwroot\DcnmSynopticControl\Client\css\main.css
By adding the option color in the section imageCaption and entering the color you can change the font color to another color than black.

```
4031    .imageCaption {
4032        display: inline-block;
4033        margin: 0;
4034        text-align: left;
4035        padding: 0;
4036        color: red;
4037    }
```

Note: This setting is for all layouts. So the screenline will have this color on all layouts. This is for Seats and for Interpreter desks.

6.5.2   Removing the screenline

You can remove the screenline via modifying this file:
:\inetpub\wwwroot\DcnmSynopticControl\Client\css\main.css
By changing inline-block to none.

```
4030
4031    .imageCaption {
4032        display: none;
4033        margin: 0;
4034        text-align: left;
4035        padding: 0;
4036        color: red;
4037    }
4038
```

Note: This setting is for all layouts. So the screenline will be hidden on layouts. This is for Seats and for Interpreter desks.
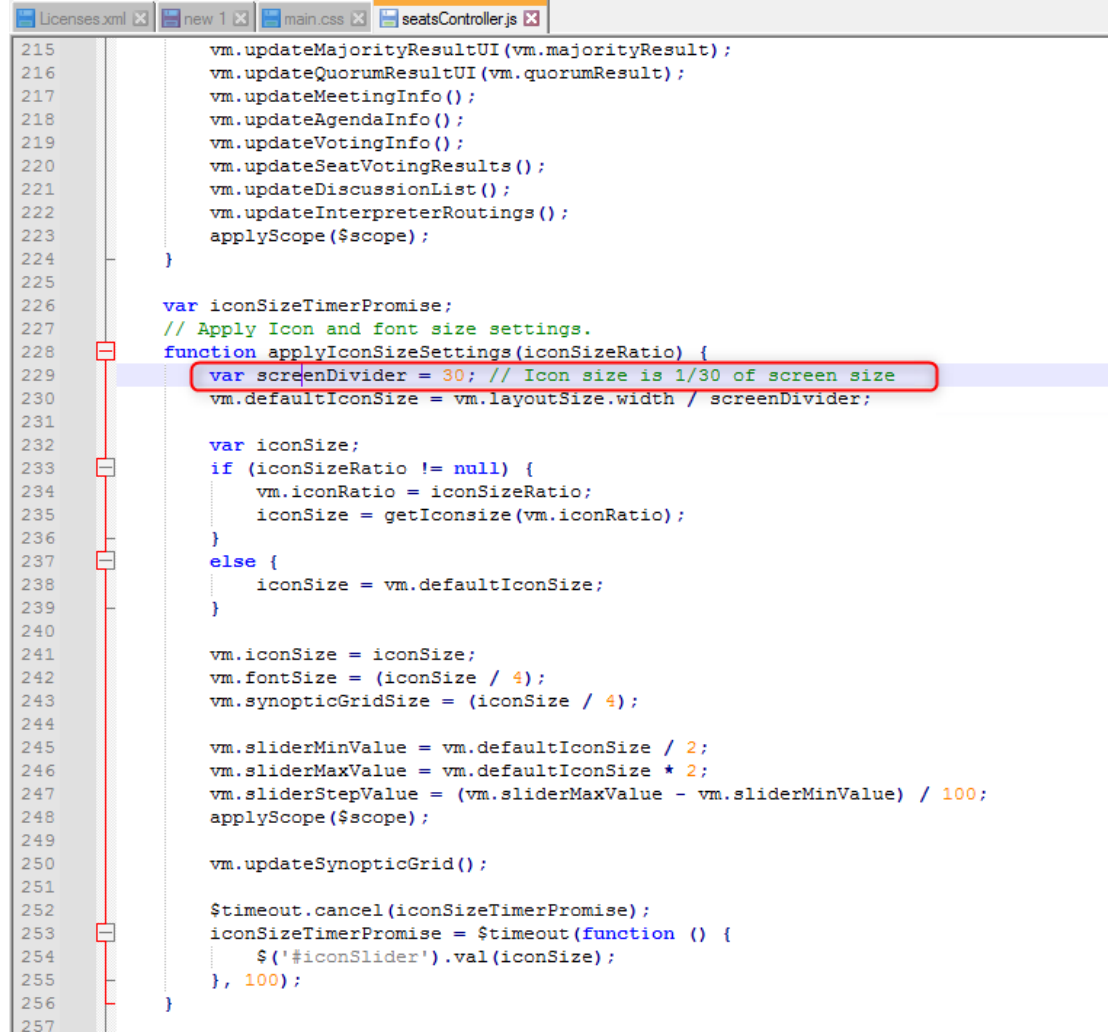
6.5.3   Increasing the amount of icons

The default icon size for a new layout is configured to have 30 icons possible on the same row. With the slider you can increase or decrease the icon size.

If you want to increase this default value of 30 icons on a row, then you can do so via modifying this file:

:\inetpub\wwwroot\DcnmSynopticControl\Client\controllers\controllers.js

By changing the value of **screenDivider**, the amount of icons on a row changes.

```
Licenses.xml | new 1 | main.css | seatsController.js

215         vm.updateMajorityResultUI(vm.majorityResult);
216         vm.updateQuorumResultUI(vm.quorumResult);
217         vm.updateMeetingInfo();
218         vm.updateAgendaInfo();
219         vm.updateVotingInfo();
220         vm.updateSeatVotingResults();
221         vm.updateDiscussionList();
222         vm.updateInterpreterRoutings();
223         applyScope($scope);
224     }
225
226     var iconSizeTimerPromise;
227     // Apply Icon and font size settings.
228     function applyIconSizeSettings(iconSizeRatio) {
229         var screenDivider = 30; // Icon size is 1/30 of screen size
230         vm.defaultIconSize = vm.layoutSize.width / screenDivider;
231
232         var iconSize;
233         if (iconSizeRatio != null) {
234             vm.iconRatio = iconSizeRatio;
235             iconSize = getIconsize(vm.iconRatio);
236         }
237         else {
238             iconSize = vm.defaultIconSize;
239         }
240
241         vm.iconSize = iconSize;
242         vm.fontSize = (iconSize / 4);
243         vm.synopticGridSize = (iconSize / 4);
244
245         vm.sliderMinValue = vm.defaultIconSize / 2;
246         vm.sliderMaxValue = vm.defaultIconSize * 2;
247         vm.sliderStepValue = (vm.sliderMaxValue - vm.sliderMinValue) / 100;
248         applyScope($scope);
249
250         vm.updateSynopticGrid();
251
252         $timeout.cancel(iconSizeTimerPromise);
253         iconSizeTimerPromise = $timeout(function () {
254             $('#iconSlider').val(iconSize);
255         }, 100);
256     }
257
```

Note: This setting is for all layouts.