Introduction
The latest version of the Release Notes is always available on the Bosch Product Catalog (www.boschsecurity.com). Version 7.0 introduces new features and resolved issues to your Bosch Video Management System.

In the following paragraphs, you will find:
- New features in 7.0
- Installation Notes
- Resolved issues in 7.0
- Known issues in 7.0

New features in 7.0
- Video authentication based on 2048 bit public/private key certificates
- Automated stream switching for live streams
- Encryption of communication from the camera to: Operator Client, VRM, Management Server
- Simple motion search
- Unmanaged sites: support for different time zones
- Unmanaged sites: VSG camera support

Installation Notes
- For system design specifications refer to the Bosch VMS datasheet, Configuration Manual and Quick Installation Guide on http://www.boschsecurity.com. The datasheet is subject to change. Translated versions are not published instantly, for the latest version refer to the English version.

For Installation manual and additional documentation of Bosch DSA E-Series iSCSI disk arrays, see the Bosch Online Product Catalog on http://www.boschsecurity.com.
Compatibility

- Tested with the following software/firmware versions (exact numbers subject to change):

  VideoSDK 5.92.0093
  Firmware MPEG-4 4.15.02
  Firmware CPP3 5.73.0046
  Firmware CPP4 6.32.0099
  Firmware CPP5 6.30.0047
  Firmware CPP6 6.32.0099
  Firmware CPP7 6.32.0099
  Firmware CPP-ENC 5.52.15 (for VIP X1600 XFM4)
  Firmware CPP-ENC 5.93.0026 (for VJT XF E family, VIDEOJET decoder 3000)
  Firmware X1/X2 2.53.05
  VIP XD HD 1.8
  VJD 7000 54.8.2
  VRM 3.60.0043
  VSG 6.30.0039
  iOS 7.1 / 8.3 / 9.0.2 / 9.3.5 / 10.0.1
  Web Client Internet Explorer 11.0.96
  Firefox 45.0.2
  Chrome 50.0.2661
  BIS 4.2 / 4.3
  Bintelan Analytics Platform 5.7.5955.25388
  Intrusion Panel firmware 3.03.14
  DiBos 8.7
  BRS 8.10/8.11
  Allegiant MCS 2.94
  Intuikey Keyboard 1.96
  VMWare 5.1.0
  DVR 2.3.2 / 3.60

- Operating Systems:
  - Operator Client:
    - Windows 8.1 (x64)
    - Windows 10 Anniversary (x64)
  - Configuration client:
    - Windows 8.1 (x64)
    - Windows 10 Anniversary (x64)
    - Windows 2008 Srv R2 SP1 (x64)
    - Windows 2012 Srv R2 (x64)
  - Management Server, MVS:
    - Windows 2008 Srv R2 SP1 (x64)
    - Windows 2012 Srv R2 (x64)
IMPORTANT: For the HW-requirements of other components like VRM, VSG, Allegiant MCS – Please refer to the documentation of these components

- NVIDIA Quadro Pro Driver for Microsoft Windows 7/8.1 (64-Bit) 369.09 (8 Sept 2016)
- NVIDIA Quadro Pro Driver for Microsoft Windows 10 (64-Bit) 369.09 (8 Sept 2016)
- AMD FirePro Unified Graphics Driver for Windows 10 (64-bit) 15.201.2401 (19 Jan 2016)

- When activating a license of the Operating System, make sure that the network adapters required for operation are active. When unplugging a network cable, these Operating Systems deactivate the corresponding network adapter.
- Upgrade is not working if Configuration Client is left open - close Configuration Client before upgrade.

Resolved issues in version 7.0

- FIXED: In some rare cases it can happen that the export of video data from a DVR 700 does not work correctly.
- FIXED: When upgrading to Bosch VMS 6.5.0.325 on a system where there is a Barco Monitor Wall or a Bosch Monitor Wall configured, execute the following steps to avoid a Central Server crash during startup of the service:
  - Perform the upgrade to Bosch VMS 6.5.0.
  - Install Patch 145423 - Migration issue.

Known issues in version 7.0

Configuration Client / Config Wizard

- The Configuration Client application help and the Configuration Manual contain an error regarding verification of authenticity. The English documentation is fixed but not the translations. Hence when you plan to configure the verification of authenticity, use the English application help or manual.
- When you change the image rotation of a camera on the corresponding encoder page, the resolution for the camera is changed accordingly. To retain this setting, please display the Edit Encoder dialog of this camera to retrieve the changed capabilities. On the Cameras and Recording page check the selected decs, save and activate.
- Changing the IP address of a password protected device in a different subnet is not working.

Operator Client

- When adding a new iSCSI drive it can happen that after the configuration activation the iSCSI is initially shown as "unknown" in Operator Client. To work around this problem, trigger another configuration change without changes to the VRM or restart the VRM. Afterwards the state is shown correctly.
• When using the Enterprise Operator Client video by event search: when the video by event dialog is opened and the time zone is changed, the time does not change accordingly in the events that are already listed.

• When using the Enterprise Operator Client Logbook: when the Logbook dialog is opened and the time zone is changed, the time does not change accordingly in the Logbook items that are already listed.

• Unprotect / delete video will not work when the Operator Client is connected through a routed access environment.

• Instant playback may show a black cameo if an instant playback value of less than 10 seconds is configured.

• When exporting video with changing FPS rates (for example, due to alarm recording), display of the frame rate is only correct if you use Windows Media ASF viewer.

• When using the remote Operator client, video export from devices added as a DVR will not work.

• When you connect an unmanaged site that is configured with an IP address that cannot be reached although it is a correct IP address, Operator Client can crash.

• Under very rare circumstances it can happen the Operator Client crashes when you drag a camera on an Image pane in Playback Mode and immediately afterwards close this Image pane.

• ANR playback does not show a Timeline.

• Audio is not supported for ANR playback.

• Under rare circumstances the transcoded stream can crash Op Client.

Integration with Ganetec Bintelan

• When a multi-channel encoder is used in Ganetec Bintelan, only video of the first camera will be used for analytics, even if the other cameras are being selected and configured.

• When removing a camera from the configuration, and later adding it again, Ganetec Bintelan will lose its relation to that specific camera. The camera then also needs to be reconfigured in Ganetec Bintelan.

VRM

• Direct iSCSI playback is not supported when using the Video Recording Manager large LUN feature.

• When using the VRM 3.60 large LUN feature, primary and secondary VRM must have the same configuration of the LUN size.

VSG

• When upgrading the Video Streaming Gateway the message Video Streaming Gateway Proxy has stopped working needs to be confirmed.

Intrusion panel

• If Microsoft patch 3155464 is installed, Bosch VMS is not able to communicate to the intrusion panels GV4, B-Series US1B or B-Series US1A. Bosch VMS does not receive events and alarm from the panels and cannot control the intrusion panel. To avoid this issue the panel firmware of B-Series US1B and G-Series US1A has to be upgraded to version 3.03.014. In case of GV4 panels the Microsoft patch 3155464 could be disabled via recommended Microsoft procedure: https://support.microsoft.com/en-us/kb/3155464

Warning: These workarounds may make a computer or a network more vulnerable to attack by
malicious users or by malicious software such as viruses. We do not recommend these workarounds but are providing this information so that you can implement these workarounds at your own discretion. Use these workarounds at your own risk.

**DVR / DVR AN**

- Authenticity check is not implemented for DIVAR AN 3000 and DIVAR AN 5000.
- When a DIVAR AN 3000 or DIVAR AN 5000 is added in unmanaged sites, the properties of the playback cameo do not contain the date and time.

**VIDEOJET connect 7000/8000**

- VIDEOJET 7000/8000 does not support audio playback.

**Management Server**

- When Windows 10 64-bit is used as the operating system for the Management Server computer (which is currently not supported), the “Bosch VMS DVR Adapter” and “Bosch VMS Web Service Host” services are not started automatically.

**Hyper-V**

- When using the Bosch VMS in a Hyper-V environment, the latest (network-card) drivers need to be installed.

**CameoSDK**

- When using the Bosch VMS CameoSDK, frequent connect/disconnect can cause a memory leak. It is recommended to use a permanent connection when using the CameoSDK.

**Upgrade**

- When you upgrade an old Bosch VMS version with a VRM version earlier than 3.50 to Bosch VMS 6.0 or later, recording continues but you cannot change the configuration of the old VRM. If you upgraded your VRM software from a version earlier than 3.50 and add this VRM which is already part of a Bosch VMS to Bosch VMS 6.0 or later, you must manually synchronize the Bosch VMS configuration. The VRM that you must synchronize, is indicated with a yellow exclamation mark.
- When replacing an encoder the new encoder does not record anymore. The camera has to be deleted from the Bosch VMS configuration and added again. The recording will continue and previous recordings will be available.
Bosch Video Management System Version 6.5

Introduction
The latest version of the Release Notes is always available on the Bosch Product Catalog (www.boschsecurity.com).
Version 6.5 introduces new features and resolved issues to your Bosch Video Management System.

In the following paragraphs, you will find:
- New features in 6.5
- Installation Notes
- Resolved issues in 6.5
- Known issues in 6.5

New features in 6.5
- Integration of Bintelan video analytics viewer
- Add Bosch VMS to an unmanaged site
- ZIP export (export to a single file)
- Config Wizard improvements
- Controls for panoramic view mode in Image pane

Installation Notes
- For system design specifications refer to the Bosch VMS datasheet, Configuration Manual and Quick Installation Guide on http://www.boschsecurity.com. The datasheet is subject to change. Translated versions are not published instantly, for the latest version refer to the English version.

For Installation manual and additional documentation of Bosch DSA E-Series iSCSI disk arrays, see the Bosch Online Product Catalog on http://www.boschsecurity.com.
• Compatibility
  - Tested with the following software/firmware versions (exact numbers subject to change):
    - VideoSDK: 5.92.0052
    - Firmware MPEG-4: 4.15.0002
    - Firmware CPP3: 5.73.0046
    - Firmware CPP4: 6.21.0008
    - Firmware CPP5: 5.92.0029
    - Firmware CPP6: 6.21.0008
    - Firmware CPP-ENC 5.52.0015 (for VIP X1600 XFM4)
    - Firmware CPP-ENC 5.93.0023 (for VJT XF E family, VIDEOJET decoder 3000)
    - Firmware X1/X2: 2.53.05
    - VIP XD HD 1.8.1
    - VJD 7000 54.8.2
    - VRM: 3.55.0010
    - VSG: 6.17.0064
    - DiBos: 8.7
    - BRS: 8.10 / 8.11
    - BIS: 4.0 / 4.1
    - iOS: 7.1 / 8.3 / 9.0.2
    - Web Client: IE 11
    - Allegiant MCS: 2.94
    - Intuikey Keyboard: 1.96
    - VMWare: 5.1.0 U1 build 1065491
    - DVR: 2.3.2 / 3.60
    - Bintelan Analytics Platform: 5.7.5955.25388

  - Operating Systems:
    - Operator Client: Windows 7 Professional or Ultimate SP 1 64-bit and Windows 8.1 64-bit
    - Configuration Client, Management Server, MVS:
      - Windows 7 SP 1 und 8.1 64-bit
      - Windows Server 2008 R2 SP1 64-bit
      - Windows Server 2012 R2 64-bit

**IMPORTANT: For the HW-requirements of other components like VRM, VSG, Allegiant MCS – Please refer to the documentation of these components**

- Broadcom NetXtreme Gigabit Driver for Microsoft Windows 7 and Windows 8.1 (64 bit) 16.8.4.1 Rev. A (14 Jan 2015)
- NVIDIA Quadro Professional Driver for Windows 7 and Windows 8.1 (64-bit): 358.87 Rev.A (2 Dec 2015)
- When activating a license of the Operating System, make sure that the network adapters required for operation are active. When unplugging a network cable, these Operating Systems deactivate the corresponding network adapter.
- Upgrade is not working if Configuration Client is left open - close Configuration Client before upgrade.

Resolved issues in version 6.5

Operator Client
- **FIXED:** Operator Client does not properly display HTML 5 documents. If you require HTML 5, install IE11, and add the following registry key:
  ```plaintext
  HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\InternetExplorer\MAIN\Feature Control\FEATURE_BROWSER_EMULATION
  DWORDs and Values:
  OperatorClient.exe  11001 (decimal)
  ConfigClient.exe    11001 (decimal)
  ```
- **FIXED:** Export: When remote export contains a transcoded stream, the full non-transcoded stream will be exported despite a warning message indicating, that the respective camera will not be included in Export. This may lead to the export taking a very long time.

Configuration Client
- **FIXED:** Client scripts: It is not possible to reference cameras of an unmanaged site in a client script on Operator Client which only contains unmanaged sites.
- **FIXED:** When importing a configuration file from an earlier Bosch VMS version (<= 5.5.8), the intrusion panel structure nodes and ONVIF are shown even if the event nodes are not generated yet. As always after upgrade and import of earlier configuration files please activate and restart CC to display new event types.
- **FIXED:** When using high resolution cameras with the default bitrate, please adapt the I-frame distance manually to 30 fps (instead of using "Auto" mode). Auto mode sets the I-frame-distance to 10 which may affect the image quality.

Integration with ONVIF cameras
- **FIXED:** Only stateful events are supported in Bosch VMS. Stateless events of ONVIF cameras are not supported in Bosch VMS 6.0.
- **FIXED:** Camera capabilities/parameters (vendor, etc...) are empty when adding ONVIF Encoder manually without pressing "Test".

MVS / Web Client
- **FIXED:** The following actions in Web Client are not logged:
  - Toggle relays, PTZ control, search for metadata; export video
  Following user actions are logged:
  - Log on and log off.
Security Systems

- FIXED: When “Multiple logons for the same user” is disabled in the Configuration Client, the user has to properly use the “logout button”. When the user just closes the web-client/App, the user is not able to log on to the system again for 5 minutes (connection time-out).

**Known issues in version 6.5**

**Integration with Ganetec Bintelan**
- Due to a late change, the translated application help and the translated manuals give wrong information on the installation directory of the Analytics Viewer to be installed on each desired Operator Client workstation. The correct installation directory is: 
  
  C:\%ProgramFiles(x86)\VideoAnalytics\AnalyticsViewer.exe

- When the application runs in an environment, where alarms are sent to Bosch VMS in high frequency (for example, number plate detection at a highway) and the server is shut down for a longer period, the following effects occur when MS is back:
  All queued alarms are pushed to the Alarm List of Operator Client, until the max. limit of 1,000 is reached. The server then automatically and successively clears the oldest entries to prevent overload. This may take several minutes. Alarms are logged in the Logbook.

**Upgrade**

- If you upgrade to Bosch VMS 6.5.0.325 on a system where you have configured a Barco Monitor Wall or a Bosch Monitor Wall, execute the following steps to avoid a Central Server crash during startup of the service:
  - Perform the upgrade to Bosch VMS 6.5.0.
  - Install Patch 145423 - Migration issue.
  
  For later Bosch VMS versions, this issue is resolved.

**VRM**

- Bosch VMS cannot import a VRM configuration that was created on DIP 2000 with camera types newer than this DIP 2000.

**SDK**

- When the SDK-method Api.CameraManager.StartAlarmrecording is called with a default Object() for parameter metadata set to an empty string, an empty string is frequently logged in the Operator Client log file.

**Routed access**

- Do not use audio intercom in routed access environment.
- Audio is not supported via routed access.
Configuration Client

- The Unknown state event was added as the new default state to the relays and inputs Event tree. In earlier Bosch VMS versions, the Error state event was the default state.

Operator Client

- Due to changes in MS Windows 8.1 the user cannot add further sessions to a multisession media (DVD, Blue-Ray, CD). Please use blank media only.
- Under some circumstances writing an export to read write media disks fails. We recommend using non-RW media.
- Using unmanaged site access, Operator Client ignores the operating permissions configured in the unmanaged Bosch VMS.

Setup

- Under certain circumstances an error message box can be displayed during update installation from Bosch VMS 6.0 to 6.5 saying "Directory is not empty". Click Retry. The Setup continues and the update installation is successfully finished.
- Under certain circumstances, the old VSG service can display an error message. Close this error message box, ensure that the VSG service is stopped and continue with Setup.
- The No Touch Deployment - Setup takes longer due to upgrade to the new .NET version, and this upgrade requires manual interaction.
- For the following camera types it is not possible to ensure that the playback of multiple cameras remains synchronous for a longer time period:
  - DVR
  - Transcoded video

Integration with ONVIF cameras

- Base notification for ONVIF devices is not supported.
- Switching relays of ONVIF devices is currently not supported by Bosch VMS, although relays of ONVIF cameras are displayed in the UI of the Web Client. The relays appear to be switchable in the Web Client, but this switching has no effect on the device.
- Cameras connected to VSG do not show connect / disconnect status but video loss instead.

VSG

- VSG section: In case of disconnect VSG is recording the video containing "video loss" - icon. Hence the red recording overlay icon is displayed.

Miscellaneous

- A fire / smoke alarm of an AVIOTEC camera always sends also a motion alarm.
- The Search tab of an opened CHM file on a Windows 7 64-bit OS with Arabic display language is fragmented. You can enter a search term and start the search but this not visible (see KB article 2021383).
- VJD7000/8000 does not support audio when configured and used in Bosch VMS.
- A multi client operation of PTZ cameras is not supported for domes on the same interface.
Bosch Video Management System 6.0

Introduction
The latest version of the Release Notes is always available on the Bosch Product Catalog (www.boschsecurity.com).
Version 6.0 introduces new features and resolved issues to your Bosch Video Management System.

In the following paragraphs, you will find:
- New features in 6.0
- Installation Notes
- Resolved issues in 6.0
- Known issues in 6.0

New features in 6.0
- 3rd party camera integration
  - ONVIF Mapping Files with predefined event mapping of ONVIF Cameras to BVMS events
  - Configuration of camera settings from within Configuration Client
  - 3rd party camera integration
- Unmanaged Site concept
  - to connect to cameras of up to 9.999 sites
  - with simultaneous connections to up several sites
  - for live&playback of DVR + DIVAR AN series
- Map features:
  - Advanced state display
  - thumbnails at mouse over
  - accept clear alarms on hotspot
  - Access pre-positions from hotspot
- Intrusion panel:
  - Support output
  - Support doors
  - Support of points
  - Silence areas
- Security related:
  - Prevent same user to log on to different Operator Client workstations
  - Enforce secure password (configurable)
  - Configurable alarm at “manually delete video”
  - Tamper proof export (encrypted with digital signature)
  - Configuration backup (scheduled and manual via SDK)
- Wizard:
  - Assign cameras to logical tree
  - Camera preview
  - Configurable Quality Profiles
  - Configurable Motion Recording
- Native integration of DIVAR AN 3000/5000
Security Systems

- Export of Configuration Reports
- Operator Client: Manual stream selection for live video
- Monitor Wall: Support of initial sequence (call up salvos)

**Installation Notes**

- For system design specifications refer to the Bosch VMS datasheet, Configuration Manual and Quick Installation Guide on [http://www.boschsecurity.com](http://www.boschsecurity.com). The datasheet is subject to change. Translated versions are not published instantly, for the latest version refer to the English version.

For Installation manual and additional documentation of Bosch DSA E-Series iSCSI disk arrays, see the Bosch Online Product Catalog on [http://www.boschsecurity.com](http://www.boschsecurity.com).
Compatibility

- Tested with the following software/firmware versions (exact numbers subject to change):
  - VideoSDK: 5.90.0084
  - Firmware MPEG-4: 4.15.0002
  - Firmware CPP3: 5.73.0046
  - Firmware CPP4: 6.11.0021
  - Firmware CPP5: 5.92.0026
  - Firmware CPP6: 6.11.0021
  - Firmware CPP-ENC: 5.52.0015 (for VIP X1600 XFM4)
  - Firmware CPP-ENC: 5.93.0015 (for VJT XF E family, VIDEOJET decoder 3000)
  - Firmware X1/X2: 2.53.05
  - VIP XD HD: 1.8.00
  - VJD 7000: 54.8.1
  - VRM: 3.50.0042
  - VSG: 6.17.0051
  - DiBos: 8.7
  - BRS: 8.10 / 8.11
  - BIS: 4.0 / 4.1
  - iOS: 7.1 / 8.3 / 9.0.2
  - Web Client: IE 11
  - Allegiant MCS: 2.94
  - Intuikey Keyboard: 1.96
  - VMWare: 5.1.0 U1 build 1065491
  - DVR: 2.1 / 3.60

- Operating Systems:
  - Operator Client: Windows 7 Professional or Ultimate SP 1 64-bit and Windows 8.1 64-bit
  - Configuration Client, Management Server, MVS:
    - Windows 7 SP 1 und 8.1 64-bit
    - Windows Server 2008 R2 SP1 64-bit
    - Windows Server 2012 R2 64-bit

**IMPORTANT:** For the HW-requirements of other components like VRM, VSG, Allegiant MCS – Please refer to the documentation of these components

- Broadcom NetXtreme Gigabit Driver for Microsoft Windows 7 and Windows 8.1 (64 bit) 16.8.4.1 Rev. A (14 Jan 2015)
When activating a license of the Operating System, make sure that the network adapters required for operation are active. When unplugging a network cable, these Operating Systems deactivate the corresponding network adapter.

- Upgrade is not working if Configuration Client is left open - close Configuration Client before upgrade.

**Resolved issues in version 6.0**

**Operator Client**

- FIXED: Anti-Aliasing effects in Image of Panoramic camera
  (Note: Press Ctrl-button and drag&drop points of interest in panoramic view to empty cameo to get an additional cropped views)
- FIXED: Operator Client restarted during update of the FW on VIP X16 XF E.
- FIXED: Under rare circumstances Operator Client unintentionally logs off and cannot log on automatically after a forced activation. This happens with higher probability in large systems with many Operator Client computers.
- FIXED: Sequencing black after switching Configuration Client

**Configuration Client**

- FIXED: Before deleting a device, please ensure that the Alarm List does not contain any alarms triggered by this device. Reason: The alarms cannot be cleared after the device is removed.
- FIXED: Email servers with SSL/TLS were not supported.

**Miscellaneous**

- FIXED: [DIVAR 3000/5000] Refresh problem by displaying protected recording in the Timeline after protecting a time period of video.
- FIXED: IntuiKey keyboard (workstation keyboard) stopped working after forced configuration change.
- FIXED: In some rare cases MOV export did not export audio data.
- FIXED: SDK now also reflects the debounce settings when retrieving the current state.

**Known issues in version 6.0**

**Integration with ONVIF cameras**

- Pls note, that the various manufacturers provide information on how to set up the camera so that it can be used as an ONVIF camera. This information can be found in the Interface Guide on the www.ONVIF.org website.
- Pls note, that the ONVIF-implementation has been reworked in Bosch VMS in order for the Client to be more robust and tolerant. This may though lead to changed behavior with existing installations containing ONVIF cameras already. If you have already some ONVIF cameras connected to former Bosch VMS (<6.0) and you cannot find them in the Bosch VMS 6.0 list (Bosch VMS IPP Web-page), please verify the functions on a Bosch VMS 6.0 Test-system first before you upgrade a system on the customer site.
- Pls also refer to the limits with regards to the mapping of ONVIF cameras indicated in the Sales Guide of BVMS
• Configuration of ONVIF cameras from within Bosch VMS Configuration
  Client offers a wide range of settings to configure ONVIF cameras in accordance with the ONVIF Standard. It is though not ensured, that all cameras support the configuration, since the scope is subject of the implementation of the standard in each ONVIF Camera model.

• Any message "Bad request" during configuration of ONVIF cameras means that the camera refused the entered value or data. Please contact the camera vendor for support.

• Camera capabilities/parameters (vendor, etc...) are empty when adding ONVIF Encoder manually without pressing "Test".

• [ONVIF] Every change on ONVIF Configuration pages (on a device) requires rebrowsing the camera capabilities and profiles.

• Please configure an ONVIF camera EITHER as VSG camera OR as Live-only camera, but do not use both modes for the same camera, as this may lead to toggling connect/disconnect status.

• Only stateful events are supported in Bosch VMS. Stateless events of ONVIF cameras are not supported in Bosch VMS 6.0.

• When an ONVIF camera that is connected to a VSG gets disconnected, its behavior will be similar as analog cameras connected to encoder: Status changes to "Disconnected". The recording will continue.

• The event "Video Loss" is used to indicate connection loss between digital encoder and analog camera. It is therefore not supported for IP cameras.

• Note: ONVIF events and configuration are specified via Port 80 only.

Setup

• [DIP] Bosch VMS Setup cannot be used on DIVAR IP hardware. To upgrade DIVAR IP to 6.0 or later, the Setup provided on the DIVAR IP Product Catalog page has to be used.

ONLY FOR TEST AND DEMO PURPOSES:

• Workaround to allow the update to BVMS 6.0 on DIP systems with the BVMS setup package
  o Find the files BvmsDesktop.exe and BvmsDesktop.exe.config in the folder C:\Program Files (x86)\Bosch\VMS\bin and save them for later use.
  o Execute the BVMS Setup from the command line “Setup.exe /v"INSTALLONDIVARIP=1”
  o After finishing the Setup, restore the 2 files

Management Server

• Microsoft SQL Server 2014 is officially not supported to be used for remote Logbook recording. If you use it remotely, you are acting on your own risk.

Configuration Client

• When using high resolution cameras with the default bitrate, please adapt the I-frame distance manually to 30 fps (instead of using "Auto" mode). Auto mode sets the I-frame-distance to 10 which may affect the image quality.

• A separate single-logon group is necessary for mobile and Web Client users that are part of dual logon user group. Dual logon users cannot log on as single users.

• Automatic distribution of LUNs on multi-port iSCSI (eSeries) does not work correctly when a basic configuration is performed.
  Please remove the iSCSI device and add it again to your system. Then the LUNs are evenly distributed.
A CSV file for importing unmanaged sites must be comma separated.

When using VSG or transcoder, none of the connected devices shall have a GOP length exceeding 30 frames. VSG and transcoder are limited to 30 frame-GOPs in replay.

Unmanaged sites: The connection string of an unmanaged site must contain a valid IP address without port, no DNS name.

Unmanaged sites: We strongly recommend that you do not use MS Excel to import sites due to the following risk: The passwords have to appear in Excel in plain text. If you still want to proceed on behalf of your own risk, please take corresponding precautions to prevent the passwords being exposed to unauthorized personnel.

The Configuration Reports contain the export of large parts of the configuration in CSV format. It had been implemented years ago for a large project and has now been merged to the Main Branch of Bosch VMS. The feature is "as is" and will not be further extended.

When the user of Configuration Client exports a report of the device permissions into a folder that has more than 256 characters, the report cannot be saved but no error message is displayed.

Client scripts: It is not possible to reference cameras of an unmanaged site in a client script on Operator Client which only contains unmanaged sites.

When importing a configuration file from an earlier Bosch VMS version (<= 5.5.8), the intrusion panel structure nodes and ONVIF are shown even if the event nodes are not generated yet. As always after upgrade and import of earlier configuration files please activate and restart CC to display new event types.

Configuration Client crashes on an Operating System with a non-Western calendar, for example Arabic for Saudi Arabia. Change the calendar of such a system to the Western calendar.

Operator Client

Camera has a password but Red-lock is missing in Device Tree (also for earlier Bosch VMS versions where customer starts using cameras with firmware >= 6.20)

Multiple operator client logons on the same machine using different Windows user accounts is not supported and may cause Operator Client crashes.

Operator Client does not properly display HTML 5 documents. If you require HTML 5, install IE11, and add the following registry key:

HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\Microsoft\InternetExplorer\MAIN\Feature Control\FEATURE_BROWSER_EMULATION

DWORDs and Values:
OperatorClient.exe   11001 (decimal)
ConfigClient.exe    11001 (decimal)


The tree search in Tree View does not work for cameras of an unmanaged site. Search for sites works as expected.

Exported video data in MOV format shows a delay between audio and video:
- delay between sound and video after 10 min is 4 sec
- delay between sound and video after 60 min is 20 sec
- no delay at the beginning of the exported MOV file
- audio is earlier than video
• When opening a ROI Camera, the context menu of an Image pane offers ‘Save Preset’ and displays an empty command list.
• When starting Operator Client as non-Windows Administrator and opening a map, the Autodesk Design Review Setup is started.
• It is possible to add unmanaged sites to "Favorites" only using drag and drop. It is not possible using the context menu of an unmanaged site.
• Protected recordings of a DVR AN 3000/5000 can manually be deleted.
• Jump to the oldest recording does not work on DIVAR AN 3000 and 5000.
• In some rare cases it can happen that the export of video data from a DVR 700 does not work correctly.
• Export: When remote export contains a transcoded stream, the full non-transcoded stream will be exported despite a warning message indicating, that the respective camera will not be included in Export. This may lead to the export taking a very long time.

**Web-Client/IOS-App**
• When “Multiple logons for the same user” is disabled in the Configuration Client, the user has to properly use the “logout button”. When the user just closes the web-client/App, he is not able to logon to the system again for 5 minutes (connection time-out).

**DVR/DIVAR AN**
• Permission to manually delete video is not activated per default in DVR. If this is required, please activate permission on DVR in order to be able to manually delete video from within Bosch VMS.
• Be aware that a running virus scanner can influence the DVR device scan result. Devices might be missing. To ensure a proper scan result, turn off virus scanner during scan, or add device manually.

**Devices**
• VIP-X1600X FM4 always uses stream 2 for the secondary VRM even although stream 1 has been configured.

**Intrusion Panel**
• When the intrusion panel is disconnected from Bosch VMS, the states of the outputs (relays) do not change to “unknown”.
• Doors are inserted in the Device Tree as an independent item and not as a child item of an area (like a point).
• When a user of RPS performs changes on the states of areas, points or outputs, it can happen that these changes are not correctly indicated by the status icons for these devices in Operator Client.
  To synchronize RPS with Bosch VMS configuration please rescan intrusion panel devices in Bosch VMS after changes in RPS.
• When adding a B8152 or B9512 panel, the type of the panel is not displayed properly in the device tree. It shows "New panel" and IP-address. But the panel can be renamed.
• B9512 supports only 16 supervised Keypads in BVMS
VRM

- Continuous recording: The entire block is protected. This can lead to an unexpected disk full state.
  Alarm recording: VRM supports a maximum number of 32 protected alarms per block. Consequently, if more alarms occur, alarm # 33 and above cannot be protected
- VRM cannot be configured on an All-In-One system with an already existing ATM/POS Bridge. First configure a VRM, then configure an ATM/POS bridge with the same IP address.
- VRM: When an encoder is deleted from the Primary VRM, the encoder password will also be deleted from the encoder.

Miscellaneous

- Do not exceed the Windows OS font-size setting of 100% to avoid the Bosch VMS UI being corrupted.
- Remote Desktop Connection to computers which run Bosch VMS components, has never been and is not supported.
Bosch Video Management System 5.5.8

Introduction
The latest version of the Release Notes is always available on the Bosch Product Catalog (www.boschsecurity.com).
Version 5.5.8 introduces new features and resolved issues to your Bosch Video Management System.

In the following paragraphs, you will find:
- New features in 5.5.8
- Installation Notes
- Known issues in 5.5.8

New features in 5.5.8
- Device icons on maps (hot spots) can now display device states with background color and blinking if the corresponding state event is configured (Advanced State Display).
- A client script can now trigger instant playback for a camera.

Installation Notes
- For system design specifications refer to the Bosch VMS datasheet, Configuration Manual and Quick Installation Guide on http://www.boschsecurity.com. The datasheet is subject to change. Translated versions are not published instantly, for the latest version refer to the English version.
For Installation manual and additional documentation of Bosch DSA E-Series iSCSI disk arrays, see the Bosch Online Product Catalog on http://www.boschsecurity.com.
Compatibility

- Tested with the following software/firmware versions (exact numbers subject to change):
  
  - VideoSDK: 5.83.0038
  - Firmware MPEG-4: 4.15.0002
  - Firmware CPP3: 5.73.0046
  - Firmware CPP4: 6.11.0021
  - Firmware CPP5: 5.92.0023
  - Firmware CPP6: 6.11.0021
  - Firmware CPP-ENC: 5.52.0015 (for VIP X1600 XFM4)
  - Firmware CPP-ENC: 5.93.0015 (for VJT XF E family, VIDEOJET decoder 3000)
  - Firmware X1/X2: 2.53.05
  - VIP XD HD: 1.8.00
  - VJD 7000: 54.8.00
  - VRM: 3.00.75
  - VSG: 5.91.0022
  - DiBos: 8.7
  - BRS: 8.10 / 8.11
  - BIS: 3.0 / 4.0 / 4.1
  - iOS: 7.1 / 8.3
  - Web Client: IE 11
  - Allegiant MCS: 2.94
  - Intuikey Keyboard: 1.96
  - VMWare: 5.1.0 U1 build 1065491
  - DVR: 2.1 / 3.60

- Operating Systems:
  - Operator Client: Windows 7 Professional or Ultimate SP 1 64-bit and Windows 8.1 64-bit
  - Configuration Client, Management Server, MVS:
    - Windows 7 SP 1 und 8.1 64-bit
    - Windows Server 2008 R2 SP1 64-bit
    - Windows Server 2012 R2 64-bit
    - Windows 8.1 64-bit

IMPORTANT: For the HW-requirements of other components like VRM, VSG, Allegiant MCS – Please refer to the documentation of these components

- Broadcom NetXtreme Gigabit Driver for Microsoft Windows 7 and Windows 8.1 (64 bit) 16.8.4.1 Rev. A (14 Jan 2015)
- When activating a license of the Operating System, make sure that the network adapters required for operation are active. When unplugging a network cable, these Operating Systems deactivate the corresponding network adapter.
- Upgrade is not working if Configuration Client is left open - close Configuration Client before upgrade.

**Known issues in version 5.5.8**
- The printout or snapshot of a map shows all hotspots without background color and those which are blinking with a rectangular frame.
- Advanced State Display is currently not supported for Enterprise Systems.
- The translated Application Help files do not contain descriptions of the Advanced State Display feature. The English Application Help does contain such descriptions.
Bosch Video Management System 5.5.5

Introduction
The latest version of the Release Notes is always available on the Bosch Product Catalog (www.boschsecurity.com).

Version 5.5.5 introduces new features and resolved issues to your Bosch Video Management System.

CHANGE: For purpose of better overview and completeness all known issues of all past releases, that were not addressed yet, have been added to this current version. They are structured according to topics. The order of the topics follows the alphabet.

In the following paragraphs, you will find:
- New features in 5.5.5
- Installation Notes
- Resolved issues in 5.5.5
- Known issues since version 1.0

New features in 5.5.5
- Integration of Bosch panoramic cameras:
  - with new flexibility for cameo space
  - and cropping of details from panoramic view to new cameo
- Support of the following panoramic cameras:
  - FLEXIDOME IP panoramic 7000 MP
  - FLEXIDOME IP panoramic 5000 MP
- Encryption of native Export
- Support of the new NetApp Controller E 2700 Series
- New features supported within the backwards compatibility:
  - Support of Favorites and Bookmarks
  - Control of relays
- ASF Export added as option again
- Support of AUTODOME 4000/5000
- Support DINION IP Ultra 8000 camera Perimeter
- Support EXTEGRA IP 9000 FX
- Support of the following RTEC cameras:
  - RTEC product name
  - RTCAM 8000
  - RTCAM 7000S
  - RTCAM 7000D
  - RTCAM 7000S dome
  - RTCAM 7000D dome
  - RTCAM 5000 dome
  - RTCAM 5000 bullet
  - RTCAM 7000D PTZ
  - RTCAM 7000S PTZ
  - RTCAM 7000 panoramic
Installation Notes

- For system design specifications refer to the Bosch VMS datasheet, Configuration Manual and Quick Installation Guide on http://www.boschsecurity.com. The datasheet is subject to change. Translated versions are not published instantly, for the latest version refer to the English version.

For Installation manual and additional documentation of Bosch DSA E-Series iSCSI disk arrays, see the Bosch Online Product Catalog on http://www.boschsecurity.com.
• Compatibility
  o Tested with the following software/firmware versions (exact numbers subject to change):
    VideoSDK: 5.83.0038
    Firmware MPEG-4: 4.15.0002
    Firmware CPP3: 5.73.0046
    Firmware CPP4: 6.10.0129
    Firmware CPP5: 5.92.0023
    Firmware CPP6: 6.10.0129
    Firmware CPP-ENC: 5.52.0015 (for VIP X1600 XFM4)
    Firmware CPP-ENC: 5.93.0015 (for VJT XF E family, VIDEOJET decoder 3000)
    Firmware X1/X2: 2.53.05
    VIP XD HD: 1.8.00
    VJD 7000: 54.8.00
    VRM: 3.00.75
    VSG: 5.91.0022
    DiBos: 8.7
    BRS: 8.10 / 8.11
    BIS: 3.0 / 4.0 / 4.1
    iOS: 7.1 / 8.3
    Web Client: IE 11
    Allegiant MCS: 2.94
    Intuikey Keyboard: 1.96
    VMWare: 5.1.0 U1 build 1065491
    DVR: 2.1 / 3.60
  
  o Operating Systems:
    • Operator Client: Windows 7 Professional or Ultimate SP 1 64-bit and Windows 8.1 64-bit
    • Configuration Client, Management Server, MVS:
      • Windows 7 SP 1 und 8.1 64-bit
      • Windows Server 2008 R2 SP1 64-bit
      • Windows Server 2012 R2 64-bit
      • Windows 8.1 64-bit

  IMPORTANT: For the HW-requirements of other components like VRM, VSG, Allegiant MCS – Please refer to the documentation of these components

  o Broadcom NetXtreme Gigabit Driver for Microsoft Windows 7 and Windows 8.1 (64 bit) 16.8.4.1 Rev. A (14 Jan 2015)
  o NVIDIA Quadro Professional Driver for Windows 7 and Windows 8.1 (64-bit): 347.52 Rev.A (12 Feb 2015)
When activating a license of the Operating System, make sure that the network adapters required for operation are active. When unplugging a network cable, these Operating Systems deactivate the corresponding network adapter.

Upgrade is not working if Configuration Client is left open - close Configuration Client before upgrade.

Resolved issues in version 5.5.5

- FIXED: A DIVAR 700 added to Bosch VMS, has a video quality issue in Live Mode.

Restrictions panorama camera

- Edge dewarping (Application Variant modes) not supported, since more flexible Client dewarping is in place.
- Keyboard control:
  - Intuikey keyboard: No E-PTZ in playback, Jog shuttle supported.
- Export: Only circled view is exported
  - To view dewarped video, open native export with Operator Client or Archive Player.
- Presets not supported (therefore presets cannot be used for alarm pop-ups, but always shows panorama view)
- Circled view only is shown in
  - Digital Monitor Wall control
  - Display of VIDEOJET decoders (Monitor Wall)
  - Web client/iOS App
  - Transcoded video (SW-/and HW-transcoded)
  - Reference image
- Forensic search:
  - IVA overlays are not displayed in Operator Client.
    - However, Forensic search is working fine.
  - Smart IVA search is not supported.

Known issues since version 1.0

ANR

- When configuring ANR for multi-channel encoders, it is only possible to configure ANR for all encoder channels (not for selected channels only).
- Please refer to the Release Notes and the Whitepaper of ANR to find out about the known limits. These documents are available in the documents’ section of the IP cameras in the Bosch product catalog in the Internet.

- A “buffered storage state” alarm might also indicate a missing or broken SD-card.

- ANR feature does not show playback if user/live password is set.

- The time of an SD card 100% fill level warning event is not the point in time when the recording gap is starting or ending.
- As of firmware version 6.10 the procedure for configuring the local storage of an encoder for use with ANR has been changed.
- Use of ANR applies to the platforms CPP6, CPP4 and CPP-ENC with Firmware version 5.90 or later.
ATM/POS

- To get ATM/POS working under Windows 2012 server R2, the following needs to be done: Deactivate the ECN Capability setting on Windows 2012.

Barco Monitor Wall Transform N

New RCP+ Agent has been introduced as of Bosch VMS 4.5.5 to integrate the Barco Transform N series. Barco RCP+ SDK Agent requires activation of multicast in all used cameras.

Known issues:

- Transform N series is in some cases not working with Bosch VMS 5.5.5. Previous version of Bosch VMS 5.5.1 is not affected. The issue is currently under investigation. Customers using transform N series are therefore recommended to stay on Bosch VMS 5.5.1 till issue is fixed. Transform A series is not affected.
- No multiple drag and drop support (sequences)
- No replay support

CameoSDK, Client scripts

- Most client scripts are not supported when Operator Client is connected to a Management Server with a previous version. When a user with restricted rights to access all cameras, executes a client script (via Logical Tree) that calls CameraManager.GetCameraInfoList(), ALL cameras are returned, not only those, the user has access rights for.

Configuration Client

- Before deleting a device, please ensure that the Alarm List does not contain any alarms triggered by this device. Reason: The alarms cannot be cleared after the device is removed.
- Adding a failover VRM does not work, when the VRM's license is expired. Workaround: Add the VRM as regular VRM (it is then licensed by BVMS), remove it and add it as failover VRM.
- Local storage devices do not support transcoding and no routed access.
- Activate the configuration manually after importing a configuration file from a previous Bosch VMS version.

- In Configuration Client you enter encoder names with more than 31 characters. But the encoder cannot store more than 31 characters, the name is truncated without warning.
- When using the Initial Device Scan to assign new IP addresses for new devices, ensure to not configure duplicate IP addresses.
- When configuring a Workflow alarm, do not use links containing a URL.

Config Wizard

- Config Wizard applies the global default password also to the VSG, but only if it is allocated to Pool 0.

Decoders

- OSD not possible with VJD-7000
  Software based decoders (XDHD/VJD7000) do not support RCP commands required for OSD.
- The setting “use any stream” is used as default, but not supported for older VIPXD decoder.
Monitor Wall reports "Layout changed" for all connected monitors, even when only one monitor layout was changed.

**Devices**

- IP devices already added to a DVR do appear again in device scan of VRM.
- A DIVAR 700 added to Bosch VMS, has a video quality issue in Live Mode.
- The following requirements must be met to configure ROI on the Cameras & Recording table:
  - Codes for stream 2 must be a ROI codec.
  - Stream 2 must be used for Live.
  - No recording configured for stream 2.
- On PTZ and ROI camera Image panes, the MD icon is not visible when video content analysis is enabled. The feature is working as expected.
- DVR 480 delivers images, which are horizontally stretched by approximately 20%.
- VIP X16 XF E has been moved to Device Family 2 for support of 2nd stream for recording. Deviating from the behavior of the other devices belonging to Device Family 2, VIP X16 XF E must use the same stream for all recordings. Although the user can configure stream 1 for continuous recording and stream 2 for alarm recording, the second setting will not take effect. After a Bosch VMS upgrade, perform the update of the device family manually.

**To update the device family:**
Right-click the device and click **Edit Encoder**. Click **OK**.
- DVR 700 does not support verifying authenticity for attached cameras.
- The first firmware update of a VIP XD HD reports a false error. The update is nevertheless successful. Please perform the update twice. The second update is executed without error message.
- VIP X16 XFE does not support VCA manipulation and Reference Image events.
- You can add a DVR device without using the DIVAR Admin account.
- As of Bosch VMS 5.0, 3rd party cameras can now be integrated via RTSP stream or MJPEG. Supervision of connection state and PTZ is not supported though.

**Hardware transcoding**

- Transcoded Image pane keeps last image at the end of recording instead displaying of blank image.
- Transcoding does not work with H.263 streams.
- Old FAS without wildcard support are not supported by transcoder.

**Integration with GV4 and B-Series Intrusion Panels**

Known behavior in Bosch VMS, yet new for the integration with intrusion panels:
- When Management Server is down or not up and running when an intrusion detection point is in alarm state, Bosch VMS is not able to display the alarm or get it later on.
- As it is not possible to retrieve the information on how many keypads are used, BVMS Configuration Client always shows the maximum number per default even if less are connected.
- To avoid missing that intrusion alarms are not logged, set the debounce time to 0.
• When a user enters a valid passcode a second time after access was already granted with this passcode, an error message is displayed in the keypad. But this error cannot be sent to Bosch VMS. (Note: Entering a wrong passcode is displayed in the Alarm List!).
• Bosch VMS does not configure the panel, it only retrieves data.
• Avoid multiple connections with different tools to the same panel. When a panel is connected to Bosch VMS, you cannot establish a connection to this panel with RPS.
• Maximum number of panels connected to BVMS is 20. Total event load of all panels must not exceed 100 events/minute.

Intrusion panel
• When applying changes to panel points (e.g. using the "Copy to all" feature) on the event settings page it takes a very long time (minutes).
  Recommendation: Make changes in smaller portions, e.g. 200 at a time.

Management Server
• When a configuration from a previous Bosch VMS version is imported, new events that did not exist in the previous version, do not appear. To get the new events, you must manually activate the configuration and restart the Central Server service.
• If you use a Management Server with multiple network adapters, it can happen that the time synchronization of encoders and decoders does not work correctly. To avoid issues ensure that the IP address of the time synchronization server is configured in the Management Server configuration file (TimeServerIPAddress in the app-config file CentralServer.exe.config).
• Whenever you have two or more network addresses you need to make sure that the time server entry in the Management Server configuration is set to the correct IP address.

Migration
• Reference image: The default setting has changed with FW 6.10. The whole camera image is defined as sensitive area. Use Reference image mask to exclude areas that are irrelevant. Note: Tamper configuration of previous FW 5.93 is lost as soon as configuring a new area.
• Old elements.bvms (< 3.0.0) cannot be migrated if .NET 3.5 is not installed.

• For projects, that used dual recording or failover recording workaround prior to Bosch VMS 5.0: Respective licenses are needed per channel for dual recording and failover recording. Commercial solution might be requested from BU-ESS/MKP1.1 in case, that new licenses cannot be sold. After licensing, the VRM configuration needs to be imported into Bosch VMS by context menu on an empty VRM node in Configuration Client.
• Record AAC does not work. Encoders will automatically use G.711 to record audio.
• ONVIF cameras: After migration from an earlier version to Bosch VMS 5.0 or later, ensure that the firmware of the cameras is updated to the latest version. Otherwise it can happen that the cameras do not function correctly.
Miscellaneous

- Windows media player only capable to display UHD video exports, when K-lite codec pack is installed. Alternatively use VLC player to view UHD camera exports.
- Bosch VMS pre-alarm default is set to be 10 seconds. When a user updates from a previous version to 5.5., the system behavior might change due to the fact that depending on the camera capabilities, the pre-alarm recording might now record in the RAM after update (thus not shown in Timeline any more).
- ASF exports are not possible for resolutions higher than HD (1920x1080).
- Debounce time for Virtual Input Data has been set to 0 to prevent losing events when used with additional data. Please set the debounce time to 0 when upgrading from an earlier version and using additional data.
- In previous BVMS version < 5.0 the "MON+CAM" commands referred to the logical numbers in Bosch VMS, not the numbers used by the Allegiant Matrix. This has been changed in BVMS 5.0. Instructions for customers, that rely on the "wrong" previous behavior of "MON+CAM" and want to reactivate the former behavior (swapped parameters):
  1) Stop the Management Server service
  2) Open BvmsCentralServer.exe.config
  3) Uncomment line 
  4) Save changed BvmsCentralServer.exe.config
  5) Start the Management Server service
- If you configure both a local and an Enterprise user group each with LDAP, only the local LDAP user group can be used. The Enterprise user LDAP configuration is always ignored.
- Bosch VMS does not support an LDAP system with more than 1000 User Groups for LDAP servers supporting protocol version 2 only.
- If the number of entries in the Alarm List becomes too large (>1000), Operator Client runs possibly very slow.
- In Operator Client the permissions for sequences are ignored for sequences placed on maps.
  The user can access a sequence for which the permission was removed. This happens when the sequence has been saved as Favorite earlier.
- Bosch VMS does not support B-frames. This may slightly reduce the image quality in the recording. If needed, please increase the bit rate in the profile settings in encoder to get the quality configured in the profile.
- Allegiant CCL Emulation applies to IP cameras and decoders only.

MVS/Web-Client

- Restart the IIS after changing IP address of the Management Server computer for MVS.
- Restrictions of feature permissions for selected cameras do not work for Web Client and Mobile App. Only the restriction for the access is working correctly.
• The operator permission for exporting video is not applied for exporting video with Web Client. Hence, a user without permission to export video on Operator Client can still export video from the Web Client.

• Calling up cameras on a DIVAR 700 using the MVS is under some rare circumstances not always stable in playback

• You cannot add an MVS in Configuration Client when the time between the Configuration Client computer and the MVS computer is not synchronized. Please ensure that the time is synchronized between the affected computers.

• If the IP address of a Management Server computer is changed during the MVS is offline, this new IP address is not transferred when the MVS becomes online again. Please perform a configuration change and activate. For example you can change the Day schedule.

• Web-Client works well with IE 11. It has also been tested with Firefox 30, Chrome 36 and Safari 7.0.5. These versions show some limitations in the PTZ functionality of an Image pane.

NVR
• The Bosch VMS NVR is not supported by Windows 7 or 8.1 and thus not supported in Bosch VMS 5.0 anymore.
  VIDOS NVR is not supported in Bosch VMS 5.0 anymore.

ONVIF
Note: Many ONVIF features are optional and their availability depends on the feature set of the currently used ONVIF device.

• To set up ONVIF event mapping please adjust the ONVIF section in the BVMS log config file (%programfiles(x86)%\Bosch\VMS\AppData\Server\CentralServer\BVMSLogCfg.xml) to retrieve the needed values for the corresponding camera type.
  To avoid issues, please copy this file as backup and edit it then. Exchange „WARN“ with „DEBUG“.
  When you configure two ONVIF encoders with same IP but different credentials, the state icons in the Device Tree gets mixed up. Please ensure to provide consistent settings (for example credentials) for all instances of a single camera.

• Aux commands for focus and Iris is not yet supported for ONVIF cameras.

• Monitor wall does not support ONVIF.

• VIDEOJET Decoder 7000 supports ONVIF via VSG, VIDEOJET 3000 does not.

• For some ONVIF cameras, Operator Client only provides the prepositions that have been created on the cameras’ web-page before.

Operator Client
• Operator Client will reboot in the course of updating the FW on VIP X16 XF E.

• Under rare circumstances Operator Client unintentionally logs off and cannot log on automatically after a forced activation. This happens with higher probability in large systems with many Operator Client computers.
- It is not possible to save an image on a PC without printer driver. Note: Windows 8.1 and 7 come with a printer driver pre-installed. In case Windows Storage Server 2012 is used, Operator can activate the Microsoft XPS Document Writer (without Administrator permissions).
- Encrypted export: Disable encryption in the export dialog if at least one camera of a Management Server running a previous Bosch VMS version has been selected.
- Under rare conditions with certain local security policies in place, Windows starts self repairing the Autodesk Review installation when Operator Client is started. In this case insert the Bosch VMS Setup DVD.
- Operator Client can terminate unexpectedly when camera sequences are running and the computer is locked, for example by pressing "Windows-key + L". Please avoid locking the computer when running sequences.
- Permission to use additional data does not work properly.
- The user can add the same camera to the Playback Image window. Bosch VMS allocates all available resources for decoding. This can significantly slow down the system.
- Playback is not possible in the hour after the second daylight saving time switch in each year.
- If clients are connected via low bandwidth, please do not force activation. The transfer of the new configuration can take very long time and no progress bar is displayed.
- An LDAP user can assign Allegiant cameras to AMG, but not clear them or assign another camera.
- Operator Client does not support Windows Guest account users.
- Disconnected OC will be logged by Management Server as "Logoff" instead of "Disconnected".
- At "Clear alarm" the user name could be missing in logbook.
- Manually triggered alarms (by user event buttons) with a higher priority are not ordered correctly in alarm list.
- Operator Client now supports a "Multi-view" feature when watching live. This is particularly useful for displaying a 4K camera in multiple Image panes. The operator can then adapt the image section in each Image pane by using focus and zoom. The CPU load of Operator Client does not increase in this case. The reason is that the camera image is decoded only once, the image sections in the Image panes are not decoded again. The entire multi-view can be saved as a favorite.

The multi-view feature is not supported for Playback Mode. In Playback Mode, an Image section of a camera is decoded for each Image pane. Displaying the recording of a 4K camera in multiple Image panes can lead to severe performance issues.

The multi-view feature is not supported for transcoded videos.
- When the connection of Operator Client to Management Server is reestablished after a period of working in offline mode, all user events that occurred during offline mode, are transmitted to the server. This is not valid for logon/logoff events. They are not logged during offline mode.

Panoramic cameras
- Platform Update for Windows 7 SP1 and Windows Server 2008 R2 SP1: MS KB 2670838 has to be installed for panoramic cameras.
- User must not configure edge dewarping on the CMlib page of a panoramic camera, since client dewarping is used for the purpose of more flexible operation.
SDK

- CameoSDK sample application: an unhandled exception is thrown when clicking "Disconnect" button.
- When a user with restricted rights to access all cameras, executes a client script (via Logical Tree) that calls CameraManager.GetCameraInfoList(), ALL cameras are returned, not only those, the user has access rights for.
- As of version 4.5.0 the DateTime objects returned by the ScheduleManager.GetScheduleStateTransitions() method have changed the value of the 'Kind ' property from 'Unspecified' to 'Local'. Please ensure that your script logic is adapted accordingly.
- Use valid admin account only to connect via SDK to CS.

Search functions

- Archive Player does not support the search for text data.
- When text exceeds 4000 bytes then the complete text block is not recorded (this may lead to no alarm being triggered).
- The Find video by event list always opens primary recording, even when search was run on secondary recording. Switch manually to secondary recording.
- When using Find Video by event, alarm recordings triggered by users cannot be found directly. You need to search for the general alarm recording and then sort by user.
- Forensic search is not possible when Operator Client is connected via routed access or on a transcoded stream.
- Video content analysis (IVA) on a transcoded Image pane is not supported.

VCA

- Description of selecting a VCA area is wrong as of FW 6.10. In the default setting, the whole camera image is defined as sensitive area. Use VCA masks to exclude disturbing objects or areas that are irrelevant for alarm event generation. Only objects moving outside VCA masks, in the sensitive area of the camera image, are detected as such and generate an alarm event. Objects moving inside VCA masks cannot generate an alarm event even if they are caught by the camera.

VIDEOJET connect 7000

- VIDEOJET connect can be used by Bosch VMS only with the corresponding variant type of the MIC IP 7000.
- Ensure that the VIDEOJET connect 7000 and MIC IP 7000 have the same password settings to grant access to each other.
- To achieve local recording with VIDEOJET connect 7000, the configuration of storage needs to be done via the Configuration Manager. The local storage then appears with the IP of the VJC 7000 as ISCSI target in the Configuration Client.
- Transcoding and state supervision for VIDEOJET connect 7000 are not supported.
- Automatic Network Replenishment with VIDEOJET connect 7000 is working with a batch file issued for the devices’ configuration.

VRM

- Auto-protect recording does not work with CPP3 devices.
• Auto-protected recording on alarm: It may sporadically occur that the pre-alarm is not protected with the alarm. This is the case when pre-alarm and alarm are recorded on different recording blocks and only the later block is protected.

• In some rare cases, pre-alarm cannot be protected together with the alarm when pre-alarm is on the previous block.

• Auto-protected recording on alarm: The Timeline in Operator Client indicates exactly the time period that was selected for protection. But in fact the entire recording block is protected, which the protected time period belongs to.

• Auto-protect is not designed to be used with high frequency alarms. If alarms come in too frequently, this may lead to the last auto-protected recordings losing their protection. Technical background: If more than 32 auto-protected alarms occur on a single recording block, the 33rd and following recordings will no longer be protected.

• When removing a VRM from the Bosch VMS configuration, ensure that this VRM is removed from the network before. Otherwise recording data might be lost.

• When the user of Configuration Client scans an existing VRM, the encoder names are renamed to default Bosch VMS names.
Bosch Video Management System 5.5

New features in version 5.5

- Support of intrusion panels from Bosch (B-Series, GV4-Series)
- Mapping ONVIF events to Bosch VMS events (for alarm handling)
- Support of the VIDEOJET connect 7000 with limited feature set when used with MIC IP 7000:
  - Supported: alarm inputs and outputs, audio in, washer relay, local recording and playback.
- ASF export is replaced by MOV export
- Export to multiple CD/DVDs
- Operator Client can work offline with a configuration of Bosch VMS version 5.0.5
  - First step of backwards compatibility Operator Client to Management Server
- Licensing available in Config Wizard, some GUI improvements
- Automatic logoff for Configuration Client
- VCA overlays are persisted in user settings
- Text data search conditions are persisted in user settings
Bosch Video Management System 5.0.5

Feature enhancements in version 5.0.5

Operator Client
- FIXED: Display and search for additional text data did not work reliably.

Web-client
- FIXED: Display and search for additional text data did not work reliably.

Mobile Video Service (MVS)
- MVS adapted to better perform on HW with low performance.
- For better usability, the local MVS is shown in port mapping table with public port 443 and IP address of the DIVAR IP when using the Wizard.
Bosch Video Management System 5.0

New features in version 5.0

Devices
- Support of new Flexidome and Dinion 2000/4000/5000/7000/8000/9000 cameras series
- Support of MIC 550/612 and MIC 7000
- Support of VJD 3000 and 7000 including the support of 2 monitors
- Support of the Arecont AV8185DN 180°, live & playback, without stitching
- Support of the Vision camera (legacy)
- Automated Network Replenishment
- Possibility to configure up to 7 different pre-alarms
- Region of Interest (ROI)
- Intelligent Tracking
- Support of new quality profiles
- Integration of the DTP3N (a German device to connect to ATMs)
- Integration of a Foyer Card Reader (Germany only)
- Malfunction relay (used to highlight a special event)
- Display of VBrick cameras on Monitor Wall
- Generic decoders added to AMG, differentiated between single and quad-view

Recording
- Dual recording and Failover VRM
- Support of up to 125 VRMs per Management Server, in LAN, with each VRM managing maximum 16 cameras.
- Automatically protected VRM recording on alarm
- Support of the E-series with dual controller
- User can select how many of the 7 instances of the VSG shall be installed
- VSG supports alarm recording triggered by BVMS events
- Backup LUNs/read only will not be overwritten anymore
- **On hold/not released:**
  Record, display and search for additional text data
  *Although implemented in Bosch VMS 5.0, this feature is unfortunately not working 100% reliably yet. Known effects are, that search results are missing sporadically, and searching for/ playing back video with additional data may cause unexpected effects. This will be solved by a firmware upgrade and (if the circumstances require) a Bugfix release of a Bosch VMS version 5.0.x*

Operator Client
- Multi-view feature for live view: Select a camera multiple times without additional CPU-load
- Use of Software transcoding provided by the Mobile Video Service as a backup, when no hardware transcoder is available (live only)
- Inactivity Logoff with configurable time
- Operator Client automatically uses TCP protocol when connecting via routed access (despite any configuration and user settings)
- New operator group permission to allow the operator to change his password

Web-client
- Automatic setup of IIS (Mobile Video Service)
- **On hold/not released:** Search for additional data s. above
- Trigger relays
- Trigger export at Management Server
- Support of PTZ
- Web-Client UI available in several new languages

Mobile App
- New: Record video using the IOS mobile camera.
- Transmits videos to MVS server to share it with other staff members
- Notify and share live video with other security staff in emergency situation
- Notification provided in Web-client, when video is loaded to MVS server

Integration:
• ONVIF provides status supervision
• Support of ONVIF cameras on Digital Monitor Wall (latest version)
• VSG supports audio for ONVIF cameras
• SNMP traps including MIB to other PSIM systems
• VSG supports RTSP and MJPEG (3rd party camera integration)
• New RCP+ Agent for Barco Transform N series
• Server SDK provides a sample application on how to BVMS broker to overcome the limitation of 2 subscriptions for server events.
• SDK is capable to dispose scripting objects on configuration change.
• Additional text data received by a BVMS event shows in the alarm list of the alarm

Miscellaneous
• VMware released with E-series
• Global security password to enforce password protection on all BVIP devices and secure the whole system
• Possibility to call up license manager in BVMS Configuration Client
Bosch Video Management System 4.5.9

New features in version 4.5.9

- Configuration Client and Configuration Wizard: To avoid security issues, a global default password must be set for all devices and all authorization levels (service, live, user) that are not password protected. You can disable this enforced password protection for BVIP devices.
Bosch Video Management System Version 4.5.8

New features in version 4.5.8

- User-defined columns can be added to the Server List.
- The Server List can be exported as csv file and imported again.
- For all cameras of a workstation you can configure that the default protocol used for network transmission is TCP or UDP. For a single camera you can override the default protocol.
Bosch Video Management System Version 4.5.5

New features in version 4.5.5

- New possibility to generically connect Bosch cameras:
  “Generically” means, that the Bosch encoders/decoders can be added firmware independently
  Bosch VMS is able to retrieve the device capabilities after device is being added. Feature
  requires firmware version 5.70 or higher.
  Following settings of those devices are retrieved:
  - Currently configured streams
  - Number of:
    - Video inputs
    - Streams per video input
    - Alarm inputs
    - Relays
    - Serial ports

- AutoDome 7000 series support

- Full support of VRM Pooling

- Server and Client SDK of Bosch VMS do not request recompilation of 3rd party integration when
  Bosch VMS 4.01 is upgraded to Bosch VMS 4.5.5 or later versions released in the future. Bosch
  VMS SDK of version 4.5.5 must be installed on the workstation running the SDK application
  using the new Setup option provided by Bosch VMS Setup.

- Web Client now supports IE 9 64bit and IE 10 64bit.
Bosch Video Management System Version 4.5.1

Feature enhancements in version 4.5.1

"Automatic Device Configuration" is now turned off by default and cannot be turned on anymore. Device Check is still checking the devices periodically. But mismatch errors and configuration of devices is only performed on activation.
Bosch Video Management System Version 4.5

New features in version 4.5

- Server Lookup
- Time zones
- VideoTec DCZ Keyboard support
- DVR 400/600/700 support
- Transcoding for low bandwidth transmission
- Export and import of configurations
- Enable TCP for live view
- Configuration Wizard
- Remote Access for Operator clients to Management Servers
- Web Client for live and playback video
- Storage state event
- Mobile Video Service (MVS) support of ONVIF, DVR, BRS
Bosch Video Management System Version 4.0

New features in version 4.0

- Enterprise System: Support of up to 10 subsystems
- Support of ONVIF compliant cameras
- Mobile Video Service
- Monitor Wall
- Bookmarks for Live and Playback mode
- Automatic map display
- RemoteClient Enterprise SDK
- Video Streaming Gateway available on Setup DVD.
- Cameo SDK 1.0 available on Setup DVD.
- Remote Logbook
Bosch Video Management System Version 3.0.1

New features in version 3.0.1

- Support for VIP X1 XF E
- Support for AutoDome 700 IP
- Support for Bosch Recording Station Appliance
Bosch Video Management System Version 3.0

New features in version 3.0

- Larger Systems with up to 2000 cameras, 100 workstations, and 40 VRMs
- Increased Reliability at multiple levels
  - Continuous Operation during Central Server maintenance, disconnection or downtime
  - High Availability Central Server with VMware
  - IP cameras and encoders can now record motion-based alarms independently of Central Server
  - Playback of video now possible when VRM not available
- Independent Operator Client
  - Continuous operation for live, playback and export during Central Server downtimes or while connection to Central Server not available
  - Any user can log on to an Operator Client not connected to Central Server
  - Automatic replenishment of user events to central logbook once connection to Central Server established again
- Latest IT environment
  - Windows Server 2008R2 64-bit support
  - Windows 7 64-bit SP1 support
- Better Operator Client performance by using up to 4GB RAM
- VIPXD-HD support with Single and Quad layout
- Dinion 1080p
- FlexiDome 1080p
- Improved debouncing with priorities
- Simplified and faster configuration of recording settings. Configure the settings per camera groups along your real-life project, not by technical differences of various camera types.
- New Default Qualities for easier configuration for 720p and 1080p with 5MBit/s target bit-rate and 10MBit/s max-bit rate
- Device Tree now displays the number of subnodes. When filtering is used the number of filtered and total is displayed
- Configuration Client now offers filtering for devices to allow easier configuration in large systems
- OSD on Alarm for VIPXD and VIPXD-HD is now also supported in Quad-Mode