



# Video Client 1.7.6 Software Release Letter

## Software Version 1.7.6 SR3

Release Letter Version 1.0

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## A. General

The Bosch Video Client is a Windows PC application for live viewing of network-connected cameras and playback of their recordings.

Make sure to always use the latest released version.

Changes to last version marked [blue](#).

## B. New Features and Fixed Problems

### Video Client 1.7.6 Service Release 3 changes and fixed problems

#### Fixed problems

1. This version includes a fix for a recently discovered security vulnerability CVE-2019-6957. The vulnerability potentially allows the unauthorized execution of code in the system via the network interface. Bosch rates this vulnerability at 9.8 (Critical) and recommends customers to update the software to this fixed version as soon as possible. For detailed information please refer to the published Security Advisory.
2. This version includes a fix for a recently discovered security vulnerability CVE-2019-6958. The vulnerability allows unauthorized read and write access data to the system by injection of RCP+ commands. Bosch rates this vulnerability at 8.8 (High) and recommends customers to update the software to this fixed version as soon as possible. For detailed information please refer to the published Security Advisory.

#### Changes

- VDP for DIVAR network and hybrid is updated to latest released version.

#### Note

- Configuration Manager 5.50 or higher cannot be used together with Video Client. Configuration Manager 5.50 or higher is a 64bit application that installs in a different directory and runs in parallel to an older 32bit Configuration Manager installation. Do not uninstall Configuration Manager 5.43 to retain the database Video Client is using.

## Video Client 1.7.6 Service Release 2 changes and fixed problems

### Fixed problems

1. An issue with Export Player not able to replay exports from DVRs on workstations where no Video Client is installed has been fixed (TSEMEA-9800, TSEMEA-9883, TSNA-4693, TSNA-5139).
2. An issue with favorite views of panoramic cameras lost after restart has been fixed (TSEMEA-7210).

### Changes

- The limit for number of sites has been removed.

### Note

- Configuration Manager 5.50 or higher cannot be used together with Video Client. Configuration Manager 5.50 or higher is a 64bit application that installs in a different directory and runs in parallel to an older 32bit Configuration Manager installation. Do not uninstall Configuration Manager 5.43 to retain the database Video Client is using.

## **Video Client 1.7.6 Service Release 1 changes and fixed problems**

### **Fixed problems**

1. An issue where Video Client can't display video with the latest Windows updates for the DIVAR AN / network and hybrid families has been fixed (TSEMEA-8935, TSNA-3592).
2. PTZ control for IP dome cameras is a lot smoother with DIVAR network/hybrid FW v1.2.1.
3. PTZ control for analog domes with the DIVAR AN families has been improved (TSEMEA-6127).
4. An issue where playback was not possible for the DIVAR network/hybrid families if there was no recording on CH1 has been fixed.

### **Changes**

- The limit for number of sites has been increased from 8000 to 10000.

### **New restrictions**

- Configuration Manager 5.50 or higher cannot be used together with Video Client. Configuration Manager 5.50 or higher is a 64bit application that installs in a different directory and runs in parallel to an older 32bit Configuration Manager installation. Do not uninstall Configuration Manager 5.43 to retain the database Video Client is using.

## Video Client 1.7.6 new features and fixed problems

### New Features

1. Video Client now supports the DIVAR hybrid and DIVAR network families. Please note that FW 1.1.1 or higher is required on the devices.
2. Video Client can now receive audio from MIC 7000 when MIC is linked to VIDEOJET connect 7000.
3. PTZ with cameras on Video Streaming Gateway (VSG) is now possible.

### Fixed problems

5. An issue with sending views to the VIDEOJET decoder 8000 has been fixed (BVC-2118, TSEMEA-7155).
6. An issue with replay in 2x2 view has been fixed (BVC-2109, TSEMEA-6940).

### New restrictions

- Network scan does not work for DiBos/BRS devices anymore. New such devices can only be added manually.

### Recommendation

Video Client is not fully hardened against cyberattacks. If Video Client is used over Internet or in a non-exclusive corporate or office network it is recommended to communicate over secure connections only. This can be managed by only allowing HTTPS connections to the cameras and recording devices via appropriate Configuration Manager settings.

## C. Installation requirements

The Video Client application requires the following minimum PC configuration:

- Processor: Intel Pentium DualCore, 3.0 GHz or comparable
- RAM memory: 4096 MB
- Free hard disk space: 20 GB
- Graphics card: NVIDIA GeForce 8600 or higher
- Network interface: 100/1000-BaseT
- Operating System: Windows 7 (32 bits and 64 bits)  
Windows 8.1  
Windows 10
- Software: DirectX 11.0c

For viewing UHD (4K) Videos higher processor-power, e.g. Intel CORE i3 (dual core with hyper threading) or better, is recommended.

## D.3<sup>rd</sup> Party Components

The Video Client application uses following components:

- VSDK 6.05.0288
- VideoSDK Core 6.01.0073
- BVIP VDP 2.92.0204
- DVR600Proxy 18.30.305
- DVR700Proxy 18.30.305
- [DVR5000Proxy 3.0.0.68](#)
- [DIVAR network/hybrid VDP 3.0.0.70](#)
- DiBos/BRS VDP 2.0.0.42
- VCAplugins 3.10.0143
- RCP+ 4.52.0.12.12
- [RCPmediaSDK 2.15.0007](#)
- PdSDK 01.20.0002
- ConfigManager 5.43.0238

### Acknowledgement

- DIVAR network/hybrid VDP 3.0.0.41:

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>).

This product includes cryptographic software written by Eric Young ([eay@cryptsoft.com](mailto:eay@cryptsoft.com)).

This product includes software written by Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)).

## E. Firmware Compatibility Information

Recommended minimum firmware-versions for devices are

- BVIP-devices 6.3x/5.9x
- DVR 400 2.1.3
- DVR 600 2.1.3
- DIVAR 700 / XF 3.61 (18.30.164.0)
- [DIVAR 3000 / 5000](#) 2.6.0
- [Divar hybrid / network](#) 2.0.0
- BRS / DiBos 8.11
- DIVAR IP 3000 / 7000 4.5.8

## F. Quick installation and configuration

1. Double-click the installer.  
Follow the instructions of the software package installer.
2. Start Video Client by double clicking the Video Client icon on the desktop.
3. To log on directly to a device:
  - In the first field, enter the URL or the IP address of the device you want to log on to. It is also possible to use a DDNS address if the device is configured accordingly.
  - Type the corresponding user name and password.
  - Click „Log on directly“.
3. Instead of directly connecting to a specific device, you can create a (local) pre-configured monitoring system:
  - Click “Start Setup” to start the Configuration Manager for a first-time system configuration.
  - Close the Configuration Manager program.
4. Run the Video Client software: Start | All Programs | Bosch Video Client | Bosch Video Client.

## G. Tips and tricks

1. After uninstalling Video Client and reinstalling it again, the existing configuration of the first installation is still available to the newly installed Video Client. If you do not want this, you should remove the file:

```
C:\Documents and Settings\\Application  
Data\Bosch\VIDOS\conf\vdb.xml
```

(on Windows XP)

Note: In this path you should replace <user name> with the name of the logged on user.

After running the configuration wizard, the file vdb.xml will be created.

2. For performance reasons, we recommend to exclude VideoClient.exe (usually C:\%ProgramFiles(x86)%\Bosch\Video Client\VideoClient.exe) from your virus scanner.

## H. Known limitations

1. The Video Client application has localization in place for 19 languages, but only English Video Client operator's manual and help is available at release of Video Client1.4. Some search algorithms in Forensic search are available only in English and German language. They will present English language dialogs in other languages. Translations of the manual will be available at the Bosch website. The translated application help files will be made available in an aftercare release that will be available on the Bosch website <http://www.boschsecurity.com>.
2. When installing Video Client on a computer which has BVIP Lite Suite installed, the number of users that can be defined is limited to 30.
3. The configuration manager allows a camera to be attached to more than one VRM (for instance by running the wizard twice and assigning the same camera to two different VRMs). This however leads to unpredictable behavior and should be avoided.
4. Video Client1.4 and higher supports export in windows compatible ASF format and native MP4 Format. For export in ASF format to work, your PC must have Windows Media player 11 installed.
5. Maximum export file length of Video Client 1.4 and higher is limited to 2 GByte.
6. Under Vista when using UAC, Configuration Manager must be run as administrator for valid licensing.
7. Password-protected devices cannot be reconfigured using the Wizard.
8. FTP is limited to IP address only, using and URL is not supported.
9. When the integrated iqn-Mapper is used in a non-VRM environment, the iSCSI configuration passwords must be set equal at all iSCSI targets.
10. Alarm input rules of AUTODOMEs running firmware version 4.10 cannot be configured correctly in Configuration Manager. The Web interface should be used instead.
11. After changing the IP address of a device the settings page might not be updated automatically. Manual refresh might be required.
12. The Wizard may run into a timeout situation when configuring a camera with motion recording. A "Retry" button appears which needs to be pressed then.
13. In CM when time zone had been changed in Advanced Mode, synchronization to PC in Basic Mode does not update time zone.
14. In CM the "Save" button is not activated in Basic Mode when DHCP settings are changed.
15. In CM in Date/Time settings page, the date and time values shown are from PC instead of from device.
16. Upload of a configuration file might be incomplete if it includes recording settings. It is recommended to check the settings manually.
17. Special characters like '<:;>@' are not allowed for names and passwords. If entered into devices using the Web GUI the Configuration Manager will not be able to access the devices.
18. Video Client system setup is limited to 200 inputs (cameras, relays, digital I/O).
19. When setting up an environment using multiple (VRM) recorders, extra caution is required when using Configuration Managers Wizard:
20. As expected: Devices configured for the recorder referred in the recorder step will be marked by a green block in the checkbox.
21. Pitfall: Devices configured for another recorder will not be marked by a green block in the checkbox.
22. Selecting the devices for (re-)configuration can cause unpredictable behavior for earlier settings and recordings. Earlier recordings may not be accessible any more.

23. When setting up an environment using Divars, extra caution is required when configuring user rights. The user rights in a system with Video Client are managed by Video Client. This means that the user account used to access the recorder must have full rights assigned.
24. A side effect of this is that a Video Client user, who may not have playback rights to a camera attached to a DVR, will be able to switch to playback. However he will not see a timeline and he will not be able to do playback.
25. User names and passwords for Video Client user management are limited to 31 characters.
26. Video Client does not refresh the monitor wall tab when a broken network connection to a VIPXD device is restored. Please restart Video Client to refresh.
27. Exports contain no motion events.
28. Protect or erase track do not work for device local recording.
29. Timeline/event searches do not contain audio.
30. When logging onto a recorder using the site connector feature, Video Client can possibly indicate the wrong site name, if the recorder is mentioned multiple times in the site configuration file.
31. When using the instant playback feature of Video Client, the cameo of the instant playback camera can go black once the playback time gets close to NOW.
32. Use monitor wall 4 software with Video Client only when only a single Video Client controls the monitor wall. Monitor wall 4 does not notify view changes. Monitor wall 5 does not have this limitation as view changes get properly notified.
33. Select Bosch AUTODOME Bilinx protocol to control PTZ of a VGEN4 dome, not the Bosch AUTODOME protocol. The Bosch AUTODOME protocol causes IVA metadata recording to stop.
34. Video Client export player does not support native export of BRS archives. However, ASF export is supported.
35. Instant recording of cameras connected to the same Divar 700 Series recorder is limited to 1 camera at the time. (A Divar 700 Series recorder can only perform one backup job at the time.)
36. When using Intuikey with Video Client the Intuikey Softkey and status Display strings are in English language only.
37. When using Intuikey, no more than 999 cameras can be selected using numeric keypad (3 digits).
38. The device time as shown in live cameo for BVIP devices actually is based on workstation time, not on the device time.
39. In recorder systems with VRM, where the obsolete VRM configurator was used to configure the VRM, cameras configured for VRM will show up twice in the camera device list of Video Client if the cameras and the VRM have also been added to the Video Client system using Configuration Manager.
40. Currently the export log file ExportLog.txt is located in a fixed location and cannot be modified:
41. On XP C:\Documents and Settings\All Users\Application Data\Bosch\VideoClient
42. On Win7 and higher C:\ProgramData\Bosch\VideoClient
43. Video Client exports from BVIP devices do not contain motion events
44. Protect for local recording does not work.
45. Delete of local recordings does not work.
46. BRS can only delete recordings per whole day. Divar 700 only allow a delete from start of recording until selected end-time, selected start-time will be ignored. BVIP devices/VRM allow arbitrary timestamps in seconds for specifying start and end-time of recordings to be deleted. The Video Client user interface does not give recorder specific feedback.

47. CM cannot start native configuration of BRS systems.
48. ASF exports for 720p or higher resolution video streams may encounter computer crashes due to the Windows Media Player ASF encoder library using too much computer memory (OutOfMemoryException). As this encoder library is outside our control, we cannot make a permanent solution for this problem.
49. As a partial workaround for 64 bit operating systems, it is possible for processes to consume 4 GByte of memory instead of only 2. This will require to set the “App can handle > 2GB address space” flag on the executable file of Video Client: VideoClient.exe. This flag is set automatically when running Video Client. No further action needed.
50. As a partial workaround for 32 bit operating systems it is possible to make more physical memory accessible to Video Client. For detailed information please refer to:  
<http://usa.autodesk.com/adsk/servlet/ps/dl/item?siteID=123112&id=9583842&linkID=9240697>  
and  
<http://msdn.microsoft.com/en-us/library/ff556232.aspx>
51. Video Client will not display correct cameo time for cameras attached through VSG.
52. When a text source on a Divar 700 recorder is attached to two different cameras, text searches will only return search hits for the first camera.
53. Video Client workstation-local recording of VSG-connected cameras does not work.
54. Forensic search on exported video clips can sometimes lead to wrong results
55. Direct login via command line is not supported for DVR400/600.
56. Do not run an event search on the DVR400/600 while an IVA search is running for the same device. In this case, the search functionality will no longer work correctly and the device needs to be reconnected.
57. DVR400/600 archives made in native format always specifies in the timeline that there is audio present, even if there is no audio recorded.
58. Zooming with an IntuiKey keyboard for the DVR400/600 does not use incremental speed and instead will zoom at 1 static speed.
59. Authentication on exports via Video Client is not supported for DVR400/600. To get export with authentication either perform export on local DVR or via the Web client.
60. Building up the time line for DVR400/600 could be slower compared to Divar 700.
61. No overlay data (VCA) is supported on DVR400/600.
62. Playback of recordings made by earlier DVR400/600 firmware releases could cause an error message in the timeline.
63. IntuiKey keyboard: FW 1.96 is required to work with Video Client.
64. BRS-Plugin does not support JPEG-streams.
65. SmartSearch from BRS is not supported.
66. DIVAR 670: FW 2.1.0 or higher is required to work with Video Client.
67. Authentication on exports via Video Client is not supported for DIVAR3000/5000 or DIVAR network/hybrid. To get export with authentication either perform export on local DVR or via the Web client.
68. Pre-event recording is available although not visible in Video Client timeline. To play pre-event recordings select event recording and perform reverse playback.
69. Time line of event recordings is showing no video when hairline is some seconds before timeline end. However all recorded video is shown (time line is a bit too long).
70. Recorded audio in DIVAR3000/5000 or DIVAR network/hybrid is not shown in timeline
71. Discovery of DIVAR3000/5000 devices via Configuration Manager could take some time.

72. DIVAR AN 3000/5000: FW 1.3.0 or higher is required to work with Video Client1.6.
73. Devices of the DIVAR Family do not require any additional license in Video Client. When adding DIVARs to Video Client up to 256 simultaneous connected channels are supported.
74. ASF-export for UHD-cameras is not fully supported.
75. If a DIVAR 3000/5000 has got a lot of data stored (4+TB and many short motion files), the timeline search for all data might not return the complete timeline
76. Closing Video Client while a low-bandwidth JPEG-stream is displayed, the Video Client application may shutdown unexpectedly.
77. Restrict / Protect / Erase for DIVAR AN 3000/5000 on recorded files works on recorded files up to 1 hour. Performing this action will therefore execute on a bigger time than planned. More details can be found in the DIVAR AN 3000/5000 firmware v2.1 or DIVAR network/hybrid release note.
78. Erase does not work one hour before the current live time
79. Image-Adjustment-Panel is not working properly with FLEXIDOME IP panoramic 7000.
80. Protect/Delete-Operations on an http/https-connection to an VRM-System currently lead to errors and are therefore not available. RCP+-Connections shall be used instead.
81. Monitor Wall will show the non-transcoded stream, even when assigning a transcoded stream to the Monitor Wall in Video Client.
82. Port mapping has to be enabled in DIVAR IP 3000 / 7000 devices in order to connect with Video Client. That needs to be done even when no remote connection is needed. An arbitrary external IP, e.g. 0.0.0.0, may be used in the DIVAR IP 3000 / 7000 settings.
83. Video Client needs .NET 2 and .NET 3.5 installed in order to work with BRS (BVC-1981)
84. Video exports from SD card recording are only possible when using RCP+ connection protocol.
85. Reverse playback does not work correctly when the I-frame distance is bigger than 1.
86. Multispeed (2x or higher) playback on the DIVAR network/hybrid series will always play I-frame only. On 4x speed every other I-frame is shown while on 4+ speed, only 1 out of every 4 I-frames are shown.
87. Export video from the DIVAR network/hybrid series is only available in MPEG-4 and Native format.
88. It is not possible to perform an actual motion search (motion+/IVA) on the DIVAR network/hybrid series. Motions can be found through the event search with the motion flag though.
89. Playback of the second stream recording is not possible for the DIVAR network/hybrid
90. Executing of AUX commands is not supported by KBD Universal XF keyboard.

**Note:**

If multiple Configuration Managers are used in the network, maintaining the same or an overlapping set of devices simultaneously, unpredictable effects might occur when writing to the devices.

# I. Version History

## Video Client 1.7.5 new features and fixed problems

### New Features

1. Video Client now supports the KBD-Universal XF keyboard.
2. Video smoothing can now be enabled for the Video Client in Configuration Manager (BVC-1564, CM-4559).
3. The Video Client now shows IVA overlay on all video views, not only on the active video view (BVC-1078).

### Fixed problems

1. An issue with the Monitor Wall configuration has been solved (BVC-1936, TSEMEA-3575).
2. It is now possible to maximize the Video Client using the IntuiKey keyboard (BVC-1817, TSAP-1055).
3. The time format display has been improved (BVC-1905, TSAP-1583).
4. Fixed a bug with PTZ control of dome cameras (BVC-2047, TSEMEA-5493).
5. Fixed a bug with video stamping on the second monitor (BVC-2038, TSEMEA-5155).
6. Fixed a bug in the screenshot function (BVC-2018, TSEMEA-4469).
7. Replay of VRM recordings is possible, even when cam is offline (BVC-2027, TSEMEA-4740).

## Video Client 1.7.4 new features and fixed problems

### New Features

1. Video Client now supports the playback of recordings exported from a VRM with the “VRM Export Wizard”. Copy the exported directory into Video Client’s recordings directory to see the export appear in the replay mode of the Video Client.

### Fixed problems

2. An issue with PTZ controls of analog domes has been fixed (BVC-1899, TSEMEA-3174, TSEMEA-3188)
3. The “maximize video area” function on the Intuikey keyboard has been fixed (BVC-1817, TSAP-1055)
4. A problem with the stream selection for DIVAR AN 3000 / 5000 has been fixed (BVC-1898, TSAM-811).

### Video Client 1.7.3 new features and fixed problems

#### New Features

1. It is not possible anymore to select “Alarm Message” for IVA searches via http connections.
2. Video Client now supports the 2<sup>nd</sup> stream of VIP-X16XF-E, VIDEOJET multi 4000, VJT-X20XF-E, and VJT-X40XF-E devices.
3. Video Client now shows the watermark icons.
4. Improved device tree handling.
5. The video area can now be maximized via Intuikey keyboard.
6. When displaying more than one track in replay mode, all timelines now receive continuous updates.

#### Fixed problems

1. An issue in the event search has been fixed that may have shown more event types than selected.
2. The handling of PTZ with the Intuikey keyboard in case digital zoom was enabled has been fixed.
3. Improved mapping of DIVAR AN 3000 / 5000 cameras to Intuikey keyboard numbers.
4. Exporting video from a Divar 600 is now disabled, if the user has no export rights.
5. Some minor GUI improvements.
6. Screen shots of DIVAR AN 3000 / 5000 videos are now labeled with the correct device name.
7. Corrected a daylight savings time problem with DIVAR AN 3000 / 5000.
8. An issue in the command line options has been fixed.

### Video Client 1.7.2 new features and fixed problems

#### New Features

1. It is now possible to add the same device multiple times to Video Client, as long as they have different IP addresses (e.g. internal IP and a dynamic DNS service).
2. When no transcoder session is available, Video Client shows JPEG previews instead of transcoded live video.
3. The VRM Log Monitor tools will not be distributed anymore.

#### Fixed problems

1. Various minor bug fixes.

### Video Client 1.7.1 new features and fixed problems

#### New Features

1. No new Features in Video Client. Configuration Manager 5.22 added to installer.

#### Fixed problems

2. IVA tasks now show up again on high-bandwidth connections to an DIVAR IP 3000
3. Low-Bandwidth-stream for DIVAR AN 3000 / 5000 will now be treated properly

### **Video Client 1.7.0 new features and fixed problems**

#### **New Features**

1. Additional datafields (from Configuration Manager) are considered in Device-Tree-Filter
2. Ability to protect overwrite and restrict playback rights on records for DIVAR AN 3000/5000 (required fw v2.1 in local DIVAR AN 3000/5000 unit)
3. Ability to search for protect overwrite and restrict playback records for DIVAR AN 3000/5000
4. Ability to delete video for DIVAR AN 3000/5000.
5. Support of devices with ultra-wide-angle devices.
6. Snapshot will consider view of current cameo (instead of using the whole camera image)

#### **Fixed problems**

1. Command line-parameter –logon and –view can now be used in conjunction
2. PTZ on DIVAR IP 2000 is working again
3. Several small improvements in GUI (e. g. misalignment of text, icons)
4. Video Inputs from BRS are correctly shown

### **Video Client 1.6.2 new features and fixed problems**

#### **New Features**

1. Configuration Manager is now listed as optional component during installation
2. Preset position can be stored within views
3. Windows 8.1 is now fully supported
4. DST-support for DVR400/600 range in conjunction with FW 2.1.3  
In order to benefit from the DST support, FW 2.1.3 is required

#### **Fixed problems**

5. Fixed a problem when Video Client did not follow the camera-order configured in Configuration Manager
6. Sending PTZ-commands to multichannel-devices is now handled correctly
7. Usage of command-line-argument '-logon' and '-view' at the same time is now fixed
8. Inconsistency of "Send To"-command reworked
9. PTZ-commands for devices connected to DIVAR IP 2000 are now handled correctly
10. Events from inaccessible cameras are fixed and not to be displayed
11. Contact-Alarms on DIVAR AN 3000 / 5000 will now send Video Client in foreground again (if configured accordingly)
12. Inconsistency of in-cameo-PTZ for VIP16XFE fixed
13. VSG-lines are now hidden, when no camera is configured
14. With DST-ON a one hour time display shift was noticed between DVR400/600 and Video Client.
15. Missing timeline information using DVR600 when zoom-in on the timeline.

DVR400/600 issues are fixed in combination with DVR400/600 firmware v2.1.3 or higher:

- DVR430/451    firmware        400series\_2.1.3\_140910.bin
- DVR440        firmware        440series\_2.1.3\_140910.bin
- DVR480        firmware        480series\_2.1.3\_140910.bin
- DVR630/650    firmware        600series\_2.1.3\_140910.bin
- DVR670        firmware        600rtseries\_2.1.3\_140910.bin

## Video Client 1.6.026 new features and fixed problems

### New Features

1. Support of camera/encoder firmware 5.91 (support of UHD-devices)

### Fixed problems

1. Flickering of 50 or 60 Hz Videos is fixed.

## Video Client 1.5.336 new features and fixed problems

### New Features

1. Entries in the video device list panel can be filtered on-th-fly: while typing all entries that do not match the string are hidden.
2. Video Client allows mpeg-4 exports of recorded video clips.
3. Streams as provided by the device can be set as “preferred stream” in the devices context menu within the device list panel or on demand in the cameo context menu. If transcoded streams are available, they are also considered in the context menus.
4. Transcoded streams can be adjusted within the video display area for high quality or smoother viewing experience.
5. Usage of Transcoder-sessions is displayed in the device list panel for devices having access to the transcoder.
6. General improvements for transcoded/low-bandwidth connections via the default http-protocol. Note: For legacy behavior please change default protocol for Video Transmission in Configuration Manager.
7. Connecting to single devices or appliance without using any local database.
8. Support for DIVAR IP 3000 / 7000.  
Note: for direct connections use `bvms://URI` for establishing the connection to the DIVAR IP 3000 / 7000.
9. Centralized Database can be used: connecting to an ‘external’ vdb.xml (e. g. `\\server\path\vdb.xml`) is supported for direct connections.
10. Devices can be put into sites in Configuration Manager: Devices within groups will be connected immediately; devices in sites only when site is connected. Legacy ‘sites.xml’ will stay available but is deprecated with this version.  
Note: only one site at a time can be connected.

### Fixed problems

1. Workstation-local playback of SD-card containing video data recorded in-camera fixed.
2. Several Improvements in User Interface and UI texts.
3. Fixed a problem where workstation export from DVR700 did not work.
4. (Digital) Zoom with mouse-wheel was not accurate and is improved now.

#### Video Client **1.4.492 SR7 new features and fixed problems**

##### **New Features**

1. DST-support for DIVAR AN 3000/5000 in conjunction with FW 1.3  
To use this Video Client release, FW 1.3 is required!

##### **Fixed problems**

1. ASF export for DIVAR AN 3000/5000 works for multiple cameras
2. Multiple channel playback performance of DIVAR AN 3000/5000 has been improved
3. DVR 600 will reconnect correctly again if disconnected longer than 30 seconds for FW 2.1.0
4. Live stream stop when adjusting the PC time forward resolved for all DIVARs
5. Fixed a problem where Video Client could hang during disconnect of the DVR 700

#### Video Client **1.4.487 SR6 new features and fixed problems**

##### **New Features**

1. Video Client now supports low bandwidth behavior for the DIVAR 3000/5000 in conjunction with Firmware 1.2  
Playback in low bandwidth for the DIVAR 3000/5000 has a different behavior to handle the limited bandwidth better:
  - Default speed is 0.5 x speed
  - Single camera playback streams I-Frame only
  - 2x2 playback streams 1 I-Frame every 4 seconds
  - Pause mode will stream all frames in single stepping

##### **Fixed problems**

1. Motion+ search is now working for the DIVAR 3000/5000
2. Native export for DIVAR 3000/5000 series is now working correctly, including audio
3. The Divar 700 will no longer hang when a device is unplugged during operation

#### Video Client **1.4.464 SR5 new features and fixed problems**

##### **New Features**

Bugfix-release only. No new features.

##### **Fixed problems**

1. DST-support in BRS/Dibos corrected
2. Aux-Commands for BVIP-devices corrected
3. Building up timeline for DIVAR 3000 / 5000 improved

4. Multi-camera playback of motion/alarm recording for DIVAR 3000 / 5000 improved

#### Video Client **1.4.458 SR4 new features and fixed problems**

##### **New Features**

1. Video Client now supports DIVAR 3000/5000 devices.

##### **Fixed problems**

1. Setting and restoring presets on Pelco Domes is now supported
2. Tracking on Click for CPP4 corrected
3. Control Problem with KBD and Video Client corrected
4. Timeline issues with BRS corrected

#### Video Client **1.4.407 SR3 new features and fixed problems**

##### **New Features**

1. Video Client now supports other ports than 80 on Divar devices. The device has to be added in the Configuration Manager by a fully qualified URL of the form `http://<user>:<pass>@<ip>:<port>`.
2. Video Client now supports the sites parameter also for Divar 440/480/630/650 and VRM. Use `<Device type="Divar 400">` in sites.xml for 400 series Divar, `<Device type="Divar 600">` in sites.xml for 600 series Divar and `<device type="Storage Manager">` in sites.xml for VRM.
3. Forward compatibility: Video Client now accepts unknown and new devices by default – although features of upcoming devices may be limited.
4. Transcoder Support: Transcoded replay from VRM is automatically used, in remote scenarios. Use `http://<http>` to connect to the remote VRM.
5. Support of Region of Interest

##### **Fixed problems**

1. Improved stability, minor bug fixes
2. Time of exported video is now correctly displayed in export-player (CCTV-17394, CCTV-17277)
3. Position of Hairline is remembered, when toggling between Live and Playback (CCTV-17188)
4. Charsets on IntuiKey keyboard now work with polish language. (CCTV-16766)

#### Video Client **1.4.270 new features and fixed problems**

##### **New Features**

1. Video Client now fully supports new Bosch IP devices: FLEXIDOME HD 1080p VR, FLEXIDOME HD 1080p HDR VR, FLEXIDOME HD 720p VR
2. Video Client now supports transcoded replay of recordings via low bandwidth using a transcoder unit.

3. Forward Compatibility: Unknown Bosch IP devices are accepted by Video Client, although full support cannot be granted.
4. Video Client now supports VRM 3.0. Connecting to multiple VRMs is supported; however the total number of channels must not exceed the number of licensed channels.

#### **Fixed problems**

1. Timeline misrepresentation when replaying two devices on a VJT XTC.

#### **Video Client 1.4.245 SR2 new features and fixed problems**

##### **New Features**

1. Video Client now supports DVR440/480/630/650 and 670 devices. Firmware 2.1.0 is required on the DVRs to be supported in Video Client 1.4 SR2.
2. AES capability now always available (does not require additional license)

##### **Fixed problems**

1. Improved stability of Video Client and Export Player.

#### **Video Client 1.4.203 SR1 new features and fixed problems**

##### **New Features**

1. Support of IP camera/Encoder Firmware 5.60
2. Support of VIPX16 XFE
3. Image Calibration:  
Adjust brightness, contrast and gamma correction for all channels, or independently for red, green, and blue channel: Affects only video display, the video data itself is not altered.  
Sharpen video display: Affects only video display, the video data itself is not altered.

##### **Fixed problems**

1. Minor translation issues corrected
2. Update of some GUI context menus
3. User permissions for PTZ controllable devices now work correctly

#### **Video Client 1.4.083 new features and fixed problems**

##### **New Features**

1. Video Client now supports all Bosch IP devices with firmware 5.52, including the autotracker domes.
2. Intuikey support for Video Client has been expanded and improved:
  - a. Playback is now supported
  - b. Both ASCII keyboard/mouse and Intuikey can be used simultaneously
  - c. Live camera stream can now be assigned to cameos on the second monitor
3. Video Client now works with VRM 2.30 which has support for NetApp E-series storage solutions.

##### **Fixed problems**

1. Intuikey tilt up/down operation has been swapped.

### Video Client 1.3.837 new features and fixed problems

#### New Features

1. Video Client now supports all Bosch IP devices with firmware 5.51, only the autotracker feature is not yet supported.

#### Fixed problems

1. A problem with playback of recordings of Sony ONVIF cameras through VSG has been fixed.
2. Intuikey tilt up/down has been reversed.
3. Video Client would crash when installed in a folder with a name containing Chinese characters. This has been fixed.

### Video Client 1.3.825 new features and fixed problems

#### New Features

1. Video Client recognizes and supports the following new devices:  
Video Streaming Gateway (part of VRM 2.22)  
AUTODOME 700  
VG5-836  
DINION NER-L2  
DINION HD 1080p HDR IVA  
FLEXIDOME HD 1080p HDR IVA

#### Fixed problems

1. Video Client crash when log-off from VRM and perform a re-logout
2. Random crash during logon with VRM set up
3. No VCA list in IVA search after logout and login - playback - same track

### Video Client 1.3.812 new features and fixed problems

#### New features

1. Video Client supports all cameras supported by camera firmware 5.50
2. Video Client supports VRM 2.21.17
3. Video Client shows VRM logbook entries.
4. Video Client supports BRS 8.9 and Dibos 8.5 live viewing and playback license free.
5. Video Client allows workstation-local playback of SD-card containing video data recorded in-camera.
6. Video Client supports a second monitor as spot monitor showing predefined multi-views and sequences.
7. Video Client supports Intuikey operation of Video Client live mode. Please use firmware 1.96 on the Intuikey unit. In Intuikey mode, no PC keyboard or mouse are needed to operate Video Client.
8. Video Client supports recorder-local time entry for searching and playback. This feature enables operators to use recorder-local time even when performing searches on Video Client workstations located in another time zone.
9. Video Client supports forensic search on Divar 700 recordings. (Divar 700 firmware must be upgraded to 3.6)
10. Video Client allows license free replay, only live mode has camera channel licenses for BVIP devices. The first 16 live camera channels are free. Above 16 camera channels additional licenses can be bought. Video Client supports up to 128 BVIP camera channels. For Divar 700 Series and BRS systems no Video Client licenses are needed for live or playback.

11. Video Client installer now supports unattended install.
12. Video Client can be “deployed” as a zero-install application directly from the Divar 700 Series recorders running firmware 3.6.

#### **Fixed problems**

1. Text search on a DVR export now works.
2. Exports of Divar 700 Series now contain motion events and alarms.
3. HD cameras connected through Divar 700 will now show with correct aspect ratio in Video Client.

#### **Video Client 1.2.654 new features and fixed problems**

##### **New features**

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##### **Fixed problems**

1. A problem with daylight saving time for UK (local time = UTC) has been fixed.

#### **Video Client 1.2.653 new features and fixed problems**

##### **New features**

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##### **Fixed problems**

1. A problem in Configuration Manager with PSK for wireless cameras has been fixed.

#### **Video Client 1.2 new features and fixed problems**

##### **New features**

1. Video Client provides viewing, playback and archiving facilities for all IP camera and IP encoder devices supported by VideoSDK 5.1. The configuration wizard helps the user getting the camera system up and running quickly. The configuration manager allows detailed control of all features of the encoder and camera devices.
2. Video Client supports the Divar 700 Series recorders with analog and SD and HD IP cameras. For configuration of Divar recorders the Divar Configuration Tool can be activated from within the configuration manager.
3. Video Client supports direct connection to a single VRM or single Divar 700 Series recorder and use of entitlements and rights defined at the device.
4. Video Client supports single site logon connection to up to 3000 sites. All recorders on a site must have the same user accounts and user-passwords defined. When logging on to a site all cameras enabled on the recorders on a site are directly visible within Video Client. For system configurations with many sites a filter can be defined which limits the sites visible in the site selection list to a manageable number.
5. Video Client allows per user definition of directories containing exports and screenshots. These directories are traversed when showing listings of exports and screenshots available for playback.
6. Video Client screenshot images can be captured in BMP, JPEG and PNG image format.
7. Video Client supports VRM 2.12.0019 or later.

8. Video Client supports the BVIP VIPXD and VIPXHD decoders. This feature allows live camera streams from BVIP devices to be redirected from Video Client to decoders. The monitor wall task panel shows the special relationship of the monitors attached to decoders.
9. Video Client collects the logs of Divar 700 devices.
10. Video Client can show recorded text metadata from ATM/POS devices connected to Divar 700 Series units with both live and recorded video for a single stream. It also allow text search on recorded streams.
11. Video Client shows multiple tracks per video input when two recording tracks are defined for a video input or when a VRM backup track has been configured in the CM.
12. Video Client allows definition and starting of VRM backup jobs. It shows the completion status of the background jobs like backup jobs, format and ANR. These jobs can be cancelled from Video Client.
13. Video Client supports backup or fail-over VRM servers. When logon to the primary server fails, the second VRM server is used. Should the primary server come online again, then Video Client will not try to reconnect to this primary server automatically. When Video Client is restarted logon to the primary VRM server is tried first.
14. Video Client can be “deployed” as a zero-install application directly from the Divar 700 Series recorders running firmware 3.43. Note that Divar 700 firmware 3.41 contains the zero-install version of Divar 700 Series Control Center (predecessor of Video Client). In all other aspects both versions are identical.

### Fixed problems

1. AUX commands now work for correctly for OSRD and Bicom.
2. Replay from local recording (SD cards, direct iSCSI, built-in HDD/USB drive) now works if user level password is set on the encoder, provided you only have devices with local recording. Replay is possible if you add this password to the CM\System tab General\Client/Server - iSCSI Media tab. Please note that as soon as you have a VRM also added to your system then you have no replay from the devices with local recording, even not from a device that is in your VRM with ANR activated "Track 2".
3. Video Client audio replay now Works reliably.
4. A problem preventing motion alarms from appearing in the event list has been fixed. So maximize on new alarm now works.

### Video Client1.1.400 new features and fixed problems

#### New features

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#### Fixed problems

1. Multicast is supported in networks having routers capable of handling multicast traffic.
2. PTZ handling is improved. Cameras in the junior dome family used to revert to auto-iris and autofocus when the manual iris or focus control button was released. This is no longer the case.
3. When opening a video stream for display in a cameo, sometimes the cameo remained black. This has been fixed.
4. The camera extension license(s) are now accepted.

### Video Client1.1 new features and fixed problems

#### New features

1. An Export log file containing a list of exports is now created:  
In XP:  
C:\Documents and Settings\All Users\Application Data\Bosch\VideoClient\ExportLog.txt  
In WIN7:  
C:\ProgramData\Bosch\VideoClient\ExportLog.txt

2. Video Client has support for DLA 1200 and 1400 Series storage systems.
3. Video Client now shows the total number of search hits during IVA search and Event search.
4. The context menu of export now has an authentication option.
5. A logbook is kept and stored:  
In XP:  
C:\Documents and Settings\username\Application Data\Bosch\VideoClient\Logbook<n>.txt  
In Win7:  
C:\Users\username\AppData\Roaming\Bosch\VideoClient\Logbook<n>.txt

### Fixed problems

1. Cameo overlay icons did not always (dis)appear correctly in all use-cases. This has been fixed.
2. On windows 7 systems the help viewer could not be started.
3. In some cases the Configuration Manager did generate an incorrect database encoding which Video Client failed to read.
4. Playback of recordings on VRM device was impossible for disconnected cameras.
5. Some property dialogs did not correctly show (long) property values.
6. Under some conditions DirectX Redistributables would not install properly, requiring reregistering certain security DLLs. This is no longer needed.
7. Password length is now 31 characters in both Configuration manager and Video Client.
8. A bug in Configuration Manager that would crash Configuration Manager when no password was entered for access to a password protected configuration database has been fixed.
9. When camera access in Configuration Manager has been set to "Access Denied", you no longer can view the camera recordings or the relay/contact state in playback.
10. Setting "Control denied" on a camera in Configuration Manager now shows the contact/relay state of the camera, but does not allow toggling of this state.