

Milestone XProtect® Device Pack 12.2a

It is with great pleasure that Milestone Systems as of June 23rd, 2022, is shipping the newly added support for devices to our Device Packs.

Device Compatibility Overview

This release note lists the changes in Device Pack 12.2a that are supported in the following VMS versions:

- XProtect Corporate 2019 – 2022
- XProtect Expert 2019 – 2022
- XProtect Professional+ 2019 – 2022
- XProtect Express+ 2019 – 2022
- XProtect Essential+ 2019 – 2022

For Husky M50A, M500A, M550A, Husky X-series (X2 and X8 model) NVRs and Husky IVO Appliances, the changes are supported according to the VMS software version installed.

For more information on the availability and support on the different VMS versions, please check our [Product Lifecycle](#) webpage.

NOTES

Please note, that installation of DP 10.0 and higher requires .Net 4.7 to be installed first (for details and alternative options, please refer to [Milestone Knowledge Base](#)).

Please note there are special requirements for the support of the following functionalities:

Functionality	Version required
Audio	
Multi-streams	XProtect Corporate 2.0a or above
Pre-alarms	
H.264	XProtect Corporate 2.0b or above
Interlaced field-encoded H.264	XProtect Corporate 4.1a or above
GOP	XProtect Corporate 5.0a or above
H.265	XProtect Corporate 10.2b or above

Device Pack Updates

New firmware support for devices for the following partners:

- Axis
- Pelco
- Vivotek

Additional support for specific features for the following partners and drivers:

- Canon
 - Added support for Video Codec H.265
 - Added support for Audio Codec ACC
 - Increased maximum frame rate support from 30 to 60 fps
 - Added new Bit Control Mode – MBR
- Digital Barriers
 - Updated SDK version to 8.1.4.899
- i-PRO/Panasonic
 - Added new high-resolution support for the new i-Pro high resolution camera models
 - Added new property support for changing the Image Capture Mode setting
 - Added different number of Video Channels support depending on the Image Capture Mode

ONVIF updates:

No additional changes

New device support for:

- ACTi
 - Z49, Z98
- Axis
 - XPQ1785
- Canon
 - VB-S820D, VB-S920F
- Comelit Group S.p.a

IPBCAMA08Z01B, IPBCAMA08FB, IPTCAMA08ZB, IPTCAMA08FB, IPKCAMA08ZB, IPBCAMA05Z02A, IPTCAMA05Z02A, WICAMA02FA, IPSCAMA08F04A, IPPTZA04Z30A

- Dahua
DH-SDT5X425-4Z4-QA-0832, DH-SDT5X425-4Z4-QA-2812, DH-SD8A840-HNF-PA, DH-SD8A440-HNF-PA, DH-SD8A845QA-HNF, DH-SD6C3425XB-HNR-A-PV1, DH-SD6C3432XB-HNR-AGQ-PV, DH-XVR5108HS-4KL-I3, DH-XVR5108H-4KL-I3, DH-XVR5108HE-4KL-I3, DH-XVR5208A-4KL-I3, DH-XVR5208AN-4KL-I3, DH-XVR1B16H-I, DH-XVR5116HS-I3, DH-XVR5116H-I3, DH-XVR5116HE-I3, DH-XVR5216AN-I3, DH-XVR5216A-I3, DHI-NVR2104-I2, DHI-NVR2108-I2, DHI-NVR2116-I2, DHI-NVR2104-P-I2, DHI-NVR2108-8P-I2, DHI-NVR2104HS-I2, DHI-NVR2108HS-I2, DHI-NVR2116HS-I2, DHI-NVR2104HS-P-I2, DHI-NVR2108HS-8P-I2, DHI-NVR2204-I2, DHI-NVR2208-I2, DHI-NVR2216-I2, DHI-NVR2204-P-I2, DHI-NVR2208-8P-I2, DHI-NVR2216-16P-I2, DHI-NVR1104HS-W-S2, DHI-NVR1108HS-W-S2, DH-IPC-HF7442F-Z-S2, DH-IPC-HF7842FP-Z-S2, DH-IPC-HFW7442H-Z-S2, DH-IPC-HFW7442H-Z4-S2, DH-IPC-HFW7842H-Z-S2, DH-IPC-HFW7842H-Z4-S2, DH-IPC-HDBW7442H-Z-S2, DH-IPC-HDBW7442H-Z4-S2, DH-IPC-HDBW7842H-Z-S2, DH-IPC-HDBW7842H-Z4-S2, DH-IPC-MFW7442K1-Z4-T40, DH-IPC-MFW7442K1-Z7-T40, DH-IPC-MFW7842K1-Z4-T20, DH-IPC-MFW7842K1-Z7-T20, DH-IPC-HDEW8441R-Z, DH-IPC-HFW5842H-ZHE-S2, DH-IPC-HFW5842H-Z4HE-S2, DH-IPC-HDBW5842H-ZHE-S2, DH-IPC-HDBW5842H-Z4HE-S2, DH-IPC-HFW5449T1-ASE-D2, DH-IPC-HDW5449H-ASE-D2, DH-IPC-HFW3449T1-AS-PV-S3, DH-IPC-HFW3549T1-AS-PV-S3, DH-IPC-HFW3849T1-AS-PV-S3, DH-IPC-HDBW3449H-AS-PV-S3, DH-IPC-HDBW3549H-AS-PV-S3, DH-IPC-HDBW3849H-AS-PV-S3, DH-IPC-HDBW5441FN-AS-E2
- Dallmeier electronic GmbH & Co.KG
RDF6400HD, RDF6800DN, SDF6800DN
- Hanwha Techwin
TNO-7180R, PNM-9084QZ1, PNM-9084RQZ1, PNM-9085RQZ1, PNM-C12083RVD, PNM-C7083RVD, TNU-6321, QRN-820S, QRN-420S, QRN-1620S
- HikVision
DS-2CD2543G2-I
- INDIGOVISION LIMITED
BX-2MP-BO-S-IR, BX-2MP-DO-S-IR, BX-3MP-BO-T-IR, BX-5MP-BO-S-IR, BX-5MP-BO-T-IR, BX-5MP-DO-S-IR
- Intelbras
VIP 94120 LPR IA FT G2
- Interlogix
TVGP-M01-0201-PTZ-G, TVGP-M01-0401-PTZ-G, TVGP-M01-0402-PTZ-G, TVGP-M01-0403-PTZ-G
- IONODES

PERCEPT-BC100

- IPRO/Panasonic
WV-S8574L, WV-S8573L, WV-S8564L, WV-S8563L, WV-S8544L, WV-S8543L, WV-S8544, WV-S8543,
WV-S15500-V3L, WV-S15500-V3LN, WV-S15500-V3LNJ, WV-S15500-V3LN1, WV-S15500-V3LK, WV-
S15600-V2L, WV-S15600-V2LN, WV-S15700-V2L, WV-S15700-V2LN, WV-S15700-V2LNJ, WV-S15700-
V2LK, WV-S15700-V2LKJ, WV-S22500-V3L, WV-S22500-V3LJ, WV-S22500-V3LG, WV-S22500-V3L1,
WV-S22600-V2L, WV-S22600-V2LG, WV-S22700-V2L, WV-S22700-V2LG, WV-S22700-V2L1, WV-
S25500-V3L, WV-S25500-V3LN, WV-S25500-V3LNJ, WV-S25500-V3LG, WV-S25500-V3LN1, WV-
S25600-V2L, WV-S25600-V2LN, WV-S25600-V2LG, WV-S25700-V2L, WV-S25700-V2LN, WV-S25700-
V2LNJ, WV-S25700-V2LG, WV-S25700-V2LN1, WV-S1536LBUX, WV-S2136LBUX, WV-S1536LUX, WV-
U2132LAUX, WV-U2130LAUX, WV-U1532LAUX, WV-U1132AUX, WV-U1130AUX, WV-S4151UX, WV-
S3131LUX
- JVC
VN-H58, VN-H258R, VN-H258VPR, VN-H158WPR
- Norden Communication
ENV-HCB5F-30R-89, ENV-HCB6F-30R-89, ENV-HCD5F-30R-89, ENV-HCV5F-30R-89, ENV-HCD6F-30R-
89, ENV-HCV6F-30R-89
- Pelco
P2230L
- Petawise Inc.
PW632-IU33
- Uniview
IPC6634S-X33-VF, IPC6658SR-X25-VF, IPC6658SR-X25-VF-NB, IPC6652EL-X33-VF, IPC6652EL-X33-VF-
NB, IPC6854ER-X40G-VF, IPC6854ER-X40G-VF-NB, IPC6634S-X33-VF-NB, IPC6858ER-X40-VF,
IPC6858ER-X40-VF-NB, IPC6854ER-X40-VF, IPC6854ER-X40-VF-NB, IPC213L-IR3-APKF28-G-DT,
IPC213L-IR3-APKF40-G-DT, IPC213L-IR3-APKF60-G-DT, IPC233L-IR5-AF60-G-DT, IPC233L-IR5-AF80-G-
DT, IPC2D2E-WH-AF40-G-DT, IPC2D2E-WH-AF60-G-DT, IPC2D2E-WH-APF40-G-DT, IPC2D2E-WH-
APF60-G-DT, IPC2D2S-WH-AF40-G-DT, IPC2D2S-WH-AF60-G-DT, IPC2D2S-WH-AF80-G-DT, IPC2D2S-
WH-APF40-G-DT, IPC2D2S-WH-APF60-G-DT, IPC2D2S-WH-APF80-G-DT, IPC2A3S-FW-APCF60-G-DT,
IPC2A3S-FW-APCF40-G-DT, IPC2A3S-FW-ACF60-G-DT, IPC2A3S-FW-ACF40-G-DT, IPC3A3L-IR3-AF28-
G-DT, IPC3A3L-IR3-AF40-G-DT, IPC3A3L-IR3-AF60-G-DT, IPC234L-IR5-AF40-G-DT, IPC234L-IR5-AF60-
G-DT, IPC234L-IR5-APF40-G-DT, IPC234L-IR5-APF60-G-DT, IPC2C4L-IR5-AF40-G-DT, IPC2C4L-IR5-
AF60-G-DT, IPC2C4L-IR5-APF40-G-DT, IPC2C4L-IR5-APF60-G-DT, IPC2E4L-FW-AF40-G-DT, IPC2E4L-
FW-AF60-G-DT, IPC2E4L-FW-APF40-G-DT, IPC2E4L-FW-APF60-G-DT, IPC2H4L-IR5-AF40-G-DT,
IPC2H4L-IR5-AF60-G-DT, IPC2H4L-IR5-APF40-G-DT, IPC2H4L-IR5-APF60-G-DT, IPC-L352S-
IR@ACPAEK-IR3-Z, IPC2E4L-FW-AKCPF40-G-DT, IPC2E4L-FW-AKCPF60-G-DT, IPC2E3L-FW-AF40-H-DT,
IPC2E3L-FW-AF60-H-DT, IPC2E3L-FW-AF80-H-DT, IPC2E3L-FW-APF40-H-DT, IPC2E3L-FW-APF60-H-

DT, IPC2E3L-FW-APF80-H-DT, IPC2H3L-IR6-AF40-H-DT, IPC2H3L-IR6-AF60-H-DT, IPC2H3L-IR6-AF80-H-DT, IPC2H3L-IR6-APF40-H-DT, IPC2H3L-IR6-APF60-H-DT, IPC2H3L-IR6-APF80-H-DT, IPC3A3L-IR3-AF28-H-DT, IPC3A3L-IR3-AF40-H-DT, IPC3A3L-IR3-AF60-H-DT, IPC3A3L-IR3-APF28-H-DT, IPC3A3L-IR3-APF40-H-DT, IPC3A3L-IR3-APF60-H-DT, IPC2A3L-IR6-AF40-H-DT, IPC2A3L-IR6-AF60-H-DT, IPC2A3L-IR6-AF80-H-DT, IPC2A3L-IR6-APF40-H-DT, IPC2A3L-IR6-APF60-H-DT, IPC2A3L-IR6-APF80-H-DT, IPC2A3L-FW-AF40-H-DT, IPC2A3L-FW-AF60-H-DT, IPC2A3L-FW-AF80-H-DT, IPC2A3L-FW-APF40-H-DT, IPC2A3L-FW-APF60-H-DT, IPC2A3L-FW-APF80-H-DT IPC2H5L-IR6-AF40-H-DT, IPC2H5L-IR6-AF60-H-DT, IPC2H5L-IR6-AF80-H-DT, IPC2H5L-IR6-APF40-H-DT, IPC2H5L-IR6-APF60-H-DT, IPC2H5L-IR6-APF80-H-DT, IPC3A5L-IR3-AF28-H-DT, IPC3A5L-IR3-AF40-H-DT, IPC3A5L-IR3-AF60-H-DT, IPC3A5L-IR3-APF28-H-DT, IPC3A5L-IR3-APF40-H-DT, IPC3A5L-IR3-APF60-H-DT, IPC-B2A2-IR@PKF60-G, IPC-B2A2-IR@PKF80-G, IPC-B2A2-IR@PKF40-G, IPC-B2A2-IR@PKF40-G, IPC-B2A2-IR@PKF60-G, IPC-B2A2-IR@PKF80-G, IPC-B312-IR@PKF28-G, IPC-B312-IR@PEKF40-G, IPC-B312-IR@PKF60-G, IPC-B312-IR@PKF40-G, IPC-B312-IR@PEKF60-G, IPC-B312-IR@PEKF28-G, IPC-B3A2-IR@PKF40-G, IPC-B3A2-IR@PKF28-G, IPC-B3A2-IR@KF60-G, IPC-B3A2-IR@KF28-G, IPC-B3A2-IR@KF40-G, IPC-B3A2-IR@PKF60-G, IPC-B2A2-IR@PEKZ-G, IPC-B362-IR@PEKZ-G, IPC-B2A4-IR@KF40-G, IPC-B2A4-IR@KF80-G, IPC-B2A4-IR@PEKF40-G, IPC-B2A4-IR@KF60-G, IPC-B2A4-IR@PEKF80-G, IPC-B2A4-IR@PEKF60-G, IPC-B314-IR@PEKF28-G, IPC-B314-IR@PEKF40-G, IPC-B314-IR@PEKF60-G, IPC-B3A4-IR@PKF40-G, IPC-B3A4-IR@PKF60-G, IPC-B3A4-IR@PKF28-G, IPC-B2A4-IR@PEKZ-G, IPC-B364-IR@PEKZ-G, IPC3A5I-FW-AEPKCF28-B-DT, IPC-B3A4-FW@PAEK-IR3-F28-TK-VG, IPC2A5I-IR6-AF40-C-DT, IPC2A5I-IR6-AF60-C-DT, IPC2A5I-IR6-AF80-C-DT, IPC2A5I-IR6-APF40-C-DT, IPC2A5I-IR6-APF60-C-DT, IPC2A5I-IR6-APF80-C-DT, IPC3A5I-IR3-AF28-C-DT, IPC3A5I-IR3-AF40-C-DT, IPC3A5I-IR3-AF60-C-DT, IPC3A5I-IR3-APF28-C-DT, IPC3A5I-IR3-APF40-C-DT, IPC3A5I-IR3-APF60-C-DT, IPC-H244@PEK-F40-PW-VG, IPC-H244@PEK-F60-PW-VG, IPC2K4E-WH-AKF40-DT, IPC-B2K4-WH@PAEK-F40-G, IPC2K24SE-ADF40KMC-WL-I0-(NB)

- Veracity UK Ltd
CSTORE8-2U, CSTORE8-C, CSTORE15-3U, CSTORE15-3U-PRO, CSTORE45-4U
- Vivotek
FE9192-H, FE9391-EHV-v2, CC9160-H
- WatchNet
MPIX-8H-BIMR, MPIX-8H-VDV-IRM, MPIX-40BILR, MPIX-40VDF-IR28, MPIX-40IR30X, MPIX-50-BIVF, EN-644K, MPIX-40VDV-IRMAI, MPIX-20VDV-IRV, MPIX-20BIVF, MPIX-20-BIF

Fixed Issues:

- Improvements and fixed heap corruption crash for Digital Barriers driver.
- Fixed issues for new i-PRO high-resolution cameras – missing Image Capture Mode, device added with wrong driver when using Panorama Mode, no audio when using H.265 codec, 4k resolutions missing or cannot be set, changing a setting to one video channel is applied to the rest of the video channels.

- Fixed issue for Axis XQP1785 - device cannot be added Management Client.
- Fixed issues for Hanwha driver with new different models – missing FPS section in Management Client, Dynamic Events do not appear.
- Fixed issue with Axis 1click breaks after DP 11.7.
- Fixed issues with Mobotix driver crashing.

ADDITIONAL REMARKS

Replace Hardware Remarks:

Be aware that after using Replace Hardware and changing the license, the license should always be checked to verify that it is activated.

4K Remarks:

Due to the nature of 4K and the high resolution at high frame rates, this will increase the demand for high performing network, CPU, graphic adaptors, and monitors. Unless all components in the hardware infrastructure is prepared for a high load, there might be limitations seen as latency, stutter etc.

4K - Recommended XProtect version 2016 or newer, supporting HW accelerated decoding using the GPU

ONVIF upgrade from DP 6.2 or earlier remarks:

After upgrade, some ONVIF devices might not work. The new version of ONVIF now only shows features that a responding correctly through the ONVIF interface. Since XProtect Corporate does not allow things like e.g. Audio, Input or similar to be removed, the ONVIF device will not be upgraded properly and hence not work. A work-around is to do replace hardware.

After upgrade Video Stream 1 and 2 might not correctly reflect the actual settings on those profiles. This is due to the ONVIF driver only used to have two video streams, where you selected a profile, where it now will have a video stream for each profile. XProtect Corporate “copies” the settings for each video stream when the driver is upgraded, so if Video Stream 1 or 2 did not have the correct profile that is now mapped to the stream it will show the same settings as before the upgrade even though the mapped profile might actually have other settings. The streams should work with the new settings unless some of these are not supported on the profile.

Some settings might be missing because the driver now only looks for the different type of settings in the places, they should be according to standard.

Some features might not work any longer because the driver now only looks for the features and corresponding settings in the places and in the format, they should have according to the standard.

Profile names might get changed after the upgrade because we now use the names given by the device for the profiles. These will not always correspond to what was previously used.

Axis Remarks:

The Axis M, P and Q drivers (except P8221) have been replaced with four new dynamic drivers that also supports the new Axis Events handling. This means that all new devices added to a system will automatically be detected on one of the new drivers.

Note: If your devices are using firmware 5.20 or lower then Events and I/O will not work with the new drivers. You should either upgrade to a newer firmware or manually select the driver to add the device. Be aware if you add the device manually and later upgrade the firmware you will need to do a Replace Hardware to change to the new driver.

Note: Before Replacing Hardware to only change the driver and not the hardware please contact Support on how to do this correctly.

AVHS: Due to a limitation in the firmware only 9 socket connections can be open on an AVHS device at any time. JPEG video streams, Audio In streams, Audio Out and Output streams use 1 socket connection each. H.264 video streams, Events, Inputs and Edge Storage use 2 connections each. This also means that when upgrading from a previous Device Pack to 7.3 all Channels should be disabled before the upgrade.

AVHS: Audio Out does not work properly with firmware before 5.50 when running the 2013 or older versions. To get Audio Out to work in the 2013 or older versions with a firmware before 5.50 you need to either enable anonymous login or disable all authentication on the device. Audio Out will work with firmwares before 5.50 on the new 2014 versions.

Axis S3008 Recorder integration

(KB 000035801; KB 000034500)

Axis S3008 Recorder is used as an external storage for camera devices added to Milestone VMS. It is not added as a separate hardware device.

The cameras should be connected to Axis Recorder and properly set in Management client to retrieve the recordings.

Setup steps:

1. Connect the Axis S3008 Recorder to your device network.
2. Define username and password for the Recorder.
3. Add the camera devices in XProtect.
4. For each device make the next settings in Management client:
 - Select the preferred stream used for recording from the drop-down menu in *Settings tab > Stream number section > "Recorder stream index" field*

The following settings are dedicated to adjust the S3008 Recorder parameters:

- **Recorder audio enabled** – Enable audio recording. Audio channels map one to one with that of video
 - o **Yes** – Audio recording is enabled

- **No** – Audio recording is disabled (default)
- **Recorder mode** – Select desired mode/action for recording
 - **Disabled** – The recording for this channel is disabled (default)
 - **Continuous** – The external recorder will record continuously
 - **Motion** - The external recorder will record on motion
- **Recorder post-trigger time (seconds)** - Specify the number of seconds to include from the time immediately after a recording is stopped.

- **Recorder pre-trigger time (seconds)**- Specify the number of seconds to include from the time immediately before a recording is started once the Motion/event is activated.
- **Recorder retention time (hours)** - The maximum number of hours that a recording will be saved. A zero means indefinite.
- **Recorder stream index** - preferred stream settings (*Video stream 1 - Video stream 8*) used for recording. Some constraints are:
 - In case of **MJPEG** codec, the recording stream will use **H.264** instead
 - When the ZipStream GOP mode is set to **Dynamic**, the recording will still use **Fixed**
 - The maximum keyframe interval is limited to **100**

- In *Settings tab > External Recorder*
Enter the Axis Recorder IP address and credentials (as defined in step2)

There are the following known limitations:

- The camera devices can use only the default ports (80 or 443).
- Error handling is still not fully implemented.
- If a device connected to Axis Recorder is removed from Management Client, the recordings from this device on Axis Recorder are not removed.

Bosch remarks:

For Bosch devices with FW 6.60 and above, adding might fail, if you use Auto Discovery method and have more than 3 unsuccessful tries with incorrect credentials. To avoid that, we recommend manually add these Bosch devices with correct credentials. For details please refer to:

https://supportcommunity.milestonesys.com/s/article/unable-to-add-device-with-any-driver-even-if-the-correct-password-is-in-the-list?language=en_US

Hikvision remarks:

Due to the new security policy introduced by Hikvision with the 5.3.x baseline firmware, adding Hikvision cameras may cause temporary lockout of devices, even if the correct username and password have been predefined. This can be avoided by disabling the 'Enable Illegal Login Lock' option on the camera's webpage, if it is available in the firmware.

Firmware versions supporting the 'Enable Illegal Login Lock':

v5.3.8 build 150722
v5.3.0 build 150513
v5.3.8 build 151224
v5.3.10 build 150917

Firmware versions without the 'Enable Illegal Login Lock':

v5.3.8 build 150707
v5.3.9 build 150910

Recommended installation steps:

For devices that have the ability to control the Illegal Login Lock:

It is recommended to disable the Illegal Login Lock from camera's web page prior adding the device to XProtect software.

Enabling it afterwards will not affect the functionality of this camera.

If disabling this feature is not an option, please mind the following:

1. Avoid using express scan. If this is not an option, please specify the username and password on top of the credentials' list.
2. When using IP range don't define more than 1 password and username.
3. If you need to add a lot of cameras with different credentials it is recommended using CSV file method.
4. Use manual add method (auto discovery).

For devices without Illegal Login Lock control in their webpage:

5. Avoid using express scan. If this is not an option, please specify the username and password on top of the credentials' list.
6. When using IP range don't define more than 1 password and username.
7. If you need to add a lot of cameras with different credentials it is recommended using CSV file method.
8. Use manual add method (auto discovery).

Using firmware 5.5.0 and later versions

With firmware 5.5.0 Onvif will no longer be enabled by default.

To enable it, you need to use the Hikvision's tool which is found on their webpage or do it directly on the camera's homepage.

Multi stream devices: Some Hikvision cameras have support for up to 10 streams. If stream 6 to 10 needs to be used it should be set up on the camera's webpage before the device is added to Milestone.

Video will be lost if stream 6 to 10 is selected in Milestone and not set up on the camera's webpage.

Robotix remarks:

For the Mobotix Q24 / Q25/ Q26: With JPEG streaming and use of Audio, there is a tradeoff between network bandwidth and audio quality. In order to lower the bandwidth, the user should tune the FPS of MxPEG codec settings in a way that audio quality does not get too bad.

Panasonic remarks:

Be aware that changing a stream setting on a device using i-Pro/Panasonic driver will apply the change on all its channels, due to device specifics.

Stretch Remarks:

To accommodate requests that the Stretch cards can run in a machine that has no Network card, the Stretch cards will from Device Pack 7.1 use a new scheme to retrieve a serial number. This means that when updating from a previous device pack, you need to run a Replace Hardware and get a new license for the Stretch cards to work.

Stretch driver is last contained in Device Pack 11.2. It is included in Legacy device Pack 2.0

Upgrade from DP 6.7 or earlier remark:

If you are upgrading from a device pack prior to Device Pack 6.7 and using XProtect Enterprise 8.x, XProtect Professional 8.x, XProtect Express, XProtect Essential 2.x or XProtect Go 2.x versions, it is important that you do not uninstall the previous Device Pack first.

Software Manager:

The 2018 R2 release of XProtect VMSs includes an updated version of the Software Manager. This version of the Software Manager removes the need for special deployment packages and allows using the standard installers for deployment. Distributing Device Packs to Recording Servers using Software Manager will be possible to do using the normal Device Pack installer from version 9.9a.

Legacy Device Pack:

Device drivers are now split into two device packs: the regular device pack with newer drivers and the legacy device pack with older drivers.

The regular device pack is included in the Product release. The legacy device pack is a separate installer. More information about the drivers could be found on the Milestone website: <https://www.milestonesys.com/community/business-partner-tools/device-packs/>

Legacy Device Pack 2.1b updates:

Fixed bug (missing ACC audio support for XPCO) in Janteq driver.

Last released: **Legacy Device Pack 2.1b**

Warning: You have to stop the Milestone Recording Server service in order to install the Legacy Device Pack

VMS Features supported by Drivers:

See KB ID 000036656

Driver/Feature	Bulk password change (released with 2019R2)	Initial device configuration (released with 2020R3)	Device Firmware Update (released with 2021R1)**
Axis*	since DP 10.3	since DP 11.1	DP 11.5b
Bosch*	since DP 10.3	since DP 11.1	DP 11.5b
Hanwha (Generic)	since DP 10.4	since DP 11.1	DP 11.5b
ONVIF/ONVIF16	since DP 10.3	since DP 11.1	DP 11.5b
Panasonic	since DP 10.4	No	No
PanasonicSPSF	since DP 10.4	No	No
HikvisionGeneric	since DP 10.4	No	No
Sony*	since DP 11.1	No	No
Canon*	since DP 11.1	No	No

Note: The availability of the VMS (XProtect®) features can depend on the XProtect® VMS product. For details, please refer to the [XProtect Product Comparison Charts](#).

*Ref the below table for the Driver details.

AXIS	BOSCH	SONY	CANON
Axis (since DP 11.5)	Bosch (since DP 11.5)	SonyG7	Canon1ChDevice
Axis11ChDevice	Bosch16ch	SonyVB600	Canon1ChPtzDevice
Axis12ChDevice	Bosch1ch	SonyER	CanonVBM
Axis1ChDevice	Bosch2ch	SonyG6Ptz	CanonVBM40
AxisAxis1ChPtzDevice	Bosch3ch	SonyRHRS	CanonVBS
Axis2ChDevice	BoschPTZ	SonyZR550	CanonVBSNoPtz
Axis3ChDevice	BoschX20XF	SonyGenX	
Axis4ChCamera	BoschX40XF"		
Axis4ChDevice			
Axis8ChDevice			
AxisAudioDevice			

** Device Firmware update also depends on the current firmware version of the device:
For Axis devices the feature is available for Axis firmware version 7.4 and newer.

For Bosch devices the feature is available as follows:
for CPP3 -> from firmware version 5.70.0039 and newer
for CPP4 -> from firmware version 6.32.0124 and newer