

# Technical Bulletin – ViconNet 6.0 Release

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## General Description

Vicon is releasing ViconNet version 6.0 for NVRs, Workstations and Kollector DVRs. ViconNet 6.0 is the latest ViconNet version and includes ViconNet software enhancement as well as a number of new features across the ViconNet line.

One of the main features enabled in V6 is the Kollector Force and Strike ability to encode in H.264 as an alternative to ViconNet compression.

Along with this version, Vicon is releasing driver version 926 as the latest driver.

## Added and Improved Features

Below are ViconNet 6.0's highlights:

1. **Archive wizard and player** – New wizard for creating archives has been added, allowing a more streamlined process of archive creation, including wizard setup, archive creation and using the new player from different media.

Note: The archive player requires an up-to-date operating system in order to run (latest Microsoft components installed) will notify if those are not installed and will provide a link to download them.

2. **Running URL from GUI** – A web page can now be launched from the main GUI; this requires a page to be set up and then chosen from a list. Pages can open in a separate window every time or switch in the same window. Testing should include setting up URLs and running them from the application.
3. **Running application or batch from macro** – The macro can trigger an application (such as calculator, Word, etc.) or batch file that runs additional tasks, such as play an audio file or open a web page. Testing should include setting up application and batch files to run in the macro and using macro to run them on schedule, alarm or manually.
4. **Running audio file from macro** – Specifically meant to allow running an audio file from a macro for alarming or even audible instructions. Testing should include several audio files run by a different macro as part of the macro.
5. **Video Vault** – Protects alarm video from being overwritten by FIFO by allowing any event that was tagged as an alarm (VMD, video loss, dry contact or via events management) to be saved into a separate database so it will not be overwritten by FIFO. Testing should include setting up the Video Vault in the storage DB, setting alarms, reaching FIFO and verifying video was not overwritten.

6. **Macro on CFN/RVS** – Primarily allows a macro to run on CFN/RVS in order to trigger an email to user; it also can be any macro action such as display video. Testing should include setting up a macro and assigning to CFN or RVS, creating such alarms and verifying macro was run.
7. **Authorization copy and duplicate** – Allows sending authorization settings to other workstations to eliminate the need to program each workstation separately. It also allows creating new user groups for authorization and then copying authorizations from other groups, to avoid the need to program from zero. Testing should include creating user groups, duplicating and copying authorizations from group to group and to other workstations.
8. **Enhanced logs collection** – Logs exported through ViconNet will also collect Windows and setup logs. Test by collecting logs.

## Enhancements

The following enhancements were added following feedback and requirements from the field:

1. Enhanced user and password encryption to comply with AES256 specification requirement.
2. Improved support for multiple network card computers (example, a laptop with wired and wireless cards or a PC using VPN)) when running on Windows 7. This fixes a problem that would force some users to disable one card in order to allow ViconNet to run.
3. Corrected archive problems on Window 7. This corrects a situation that randomly occurred on Window 7 that would fail the archive to CD/DVD process in the middle.
4. Enhanced handling for recording macros with H.264 cameras and additional support for recovering disconnected cameras.
5. FPS control in macro when using Arecont cameras, now allows recording at a lower FPS then displaying (requires driver 926 installed)
6. Support for very large storage archive access and creation.
7. Solution for multiple microphones recording on server based NVRs.
8. Events management system enhancements correcting reported failures due do usage of “illegal” characters (such as ‘ , ; ) in a data string.
9. Sensors on DVRs can be defined as ”normally open” or “normally closed” during set up instead of sensing a state on power up. This eliminates a false positive situation that could occur if the sensor was triggered during power-up.

## Kollector Compression Control

The feedback from the beta sites and the response from the field indicated that we need to be able to provide a very high level of picture detail in some cases, for example, a casino that asked for an extreme detail level in its pictures.

H.264-based compression, like in our IP cameras and version 6 Kollector Strike and Force offers a way to control this level of compression (how much compression is applied on the raw picture) and in that way have control over the picture quality.

When using our ViconNet (MPEG-4) compression, which has been and still is very efficient, we added the ability to select a “Super Fine” resolution mode that will decrease the overall compression and will therefore produce very high quality pictures. This will impact on the picture size and use higher bandwidth and storage:

- “Super fine” mode is an option for **ViconNet** compression **only** on Kollector Force and Strike running version **6**.
- The “standard” resolution, which is the default, will still provide the high picture quality it does today and should be sufficient for 99% of the systems.
- Bandwidth and storage will be 25% higher (add 25% to what the calculator gives you).

## Known Issues

There are a few known issues with the current release that will be addressed in the form of a software patch in the near future.

1. Systems that are set to “auto-login” need to be changed to manual login for the duration of an upgrade to version 6. Once the system has run the first time in version 6, the “auto-login” can be reconfigured.
2. User trying to access a version 6 device’s setup menu from a version 5.6 system may get a “No Authorization” error. User will need to either setup on the device itself or from another device running version 6. This does not affect system operation and is related to changes in setup internal structure.

## Software Compatibility

Version 6 is backward compatible with both version 4.0 and 5.6d devices. The Nucleus for the system will have to be updated to version 6. Note that accessing a version 6 device’s setup menu from a version 5.6 system may get a “No Authorization” error. User will need to either setup on the device itself or from another device running version 6. This does not affect system operation and is related to changes in setup internal structure.

## Vicon IP devices

The IP cameras and encoders running the latest ViconNet firmware: VN301T, V910IP, V910PoE, SVFT-IP, VN-855/856, KTX-4, Surveyor Mini. Do not require a firmware update to V6 and they remain fully compatible with the latest V5 firmware.

The Version 6 CD will have the latest IP devices version and firmware to allow anyone in doubt to update to the latest firmware.

## Software and Hardware Upgrades

### **Recommended Hardware for fully supported V6 functionality:**

- Processor CoreDuo2 with 2.66Ghz
- 2GB RAM
- Display card with 256MB memory

If the system meets the specification above, there is no limitation on install / upgrade.

Version 6.0 in general requires more computing resources from the system than the former versions. This is especially important when upgrading an old system to version 6. If the intention is to operate the new process intensive functionality on the older hardware, for example, if an old Kollector Pro is being upgraded to version 6 and will now start displaying H.264 video that it did not before, this might create a processing load that will hurt the Kollector's performance.

In general, the guideline for upgrades is as follows:

### **Minimum hardware for V6 upgrade:**

**Minimum** processor Pentium4 with 3GHZ clock

**Minimum** 1GB RAM

**Minimum** display card with 128MB memory

This is with the assumption that **no new process intensive functionality** is going to be added to the existing units being upgraded.

Functionality that is considered process intensive:

- Display of H.264 video from Kollectors or IP cameras on this device
- Operation of the "Video Vault" feature on this device
- Addition of new Events Management functionality to run on this device

Systems that are below these **minimum** requirements are not recommended for running version 6 and hardware upgrade should be considered. If you are unsure of the hardware platform, please submit model/product code/serial number of the product in question to [technicalsupport@vicon-security.com](mailto:technicalsupport@vicon-security.com)

If there is any doubt regarding upgrading older hardware, please consult product management.

## **Web Browser**

Part of ViconNet 6.0 is the support for a web-based client. This feature requires a version 6-based system Nucleus or a dedicated web server, depending on the usage and load on the system. The web server and browser features, specifications and limitations are covered in a separate Technical Bulletin.

## **Software CDs**

The software and documents for ViconNet 6.0 will be provided on two CDs. This is due to the size of the installation package and the documents provided.

The software is available for download by contacting your inside sales manager,

## **Product Availability and Release**

Version 6 and the web server will be ready for production November 2010. Like every major product release, Vicon will run a controlled process and not switch over to version 6 over night.

The default system to sell and offer are still version 5.6d based, however, any customer or project that is asking in specific or requires a feature in version 6, will be able to buy it.

Vicon expects this transition period to take about 60 days and should bring us to the beginning of 2011 for a complete switch over of production to version 6 as the default version.