

R2  
2018

Product Release 2018 R2

# XProtect® like you have never seen it

Connect more cameras than ever  
before with support for NVIDIA  
GPUs in the Recording Server

GENERAL AVAILABILITY:  
JUNE 7

Our second release of 2018 includes:

**NVIDIA support in the Recording and Mobile Servers** Connect more cameras per recording server than ever before

**Building support in Smart Map** Navigate with ease between cameras on different floors

**Milestone Customer Dashboard** The same great user experience, now in your local language

MAKE THE  
WORLD SEE

 milestone

# XProtect 2018 R2: Your system is capable of more than you know

Hardware acceleration: Because more connected devices require more processing power

Advances in technology push users to aggregate more connected devices per installation. This requires more processing power. Hardware acceleration is designed to do exactly that: provide the user with more processing power, by shifting the processing power required for decoding the video from the CPU to the GPU.

By allowing VMS to utilize external GPUs for decoding video, it becomes possible to multiply the potential processing power several times over. This lets the user maximize the potential of the system and enjoy a significant increase in performance. This all means that it becomes possible to connect more cameras and watch more

streams simultaneously, with a lower CPU load.

## XProtect and hardware acceleration: The journey

XProtect's hardware acceleration journey began with the 2016.

This is when we introduced the use of Intel Quick Sync in video decoding, making XProtect the first VMS in the world to use the built-in Intel GPU to decode video.

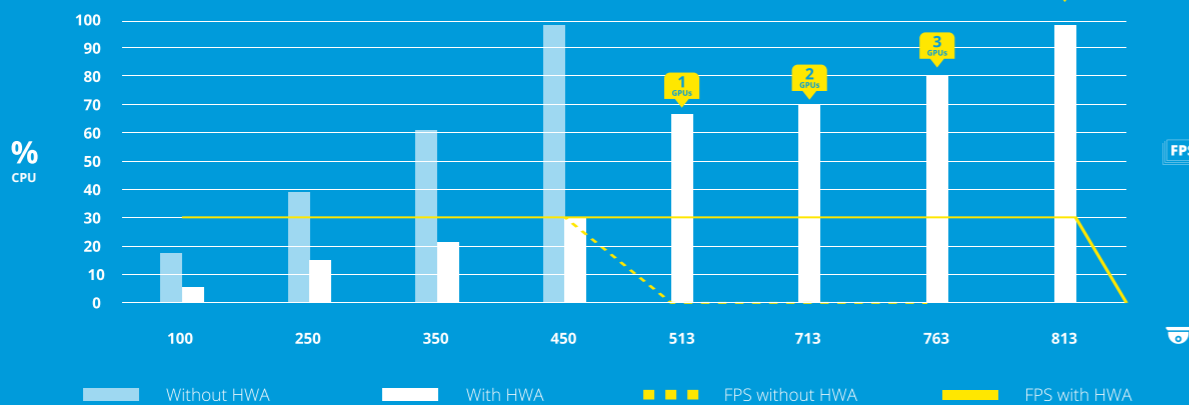
In 2018 R2, we introduced the use of multiple NVIDIA graphics cards on the Smart Client side. This meant that it became possible to multiply the

number of streams the user can watch several times over, enabling the use of state of the art high definition screens as monitors and even as a part of a Smart Wall installation.

After laying the building blocks for hardware acceleration in 2016 and making sure the client is ready to support the ultimate user experience in 2018, 2018 R2 introduces hardware acceleration in the Recording and Mobile servers using multiple NVIDIA cards.



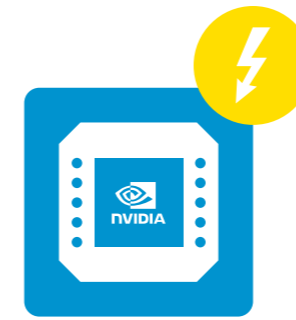
## CPU load by number of streams



Performance measured for h.264 stream format in full HD (1920X1080). Tested hardware: Windows server 2016, 2X Intel Xeon Silver 4114, 64 GB RAM, 4X NVIDIA Quadro P2000

### Top 3 benefits

- Free up space for other tasks
- Avoid unnecessary hardware costs
- Save on your total cost of ownership



## Expect immediate results

During a recent performance test, we added NVIDIA cards one after the other while monitoring the decrease in the CPU load, the usage levels of the GPUs, and how many more streams the Recording Server can handle without dropping any frames.

Using a total of four NVIDIA graphics cards, we managed to increase the total number of cameras connected to the Recording Server by 80%, while lowering the CPU load by more than 60% on average and maintaining a steady frame rate of 30 frames per second.

When we use only the CPU, or the built in Intel GPU, this machine in this specific setup could handle up to 450 connected cameras before maxing out the CPU and starting to drop frames.

With hardware acceleration and 4 NVIDIA cards added, we managed to almost double that amount, with more than 800 cameras connected to the same Recording Server without losing any frames at all. It is another step forward in delivering higher performance at a lower cost, and making sure your system operates to its maximum potential.

## Building Support in Smart Map:

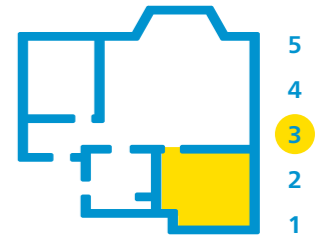
Navigate between cameras on different floors with ease.

In installations set in buildings with more than one floor, cameras as located in the same position on different floors might look clustered in the Smart Client. Also, navigating between cameras, for instance when monitoring events, is difficult and confusing.

The second release of XProtect in 2018 introduces support for multi-layer buildings in the Smart Map, providing a smooth user experience navigating between cameras on different floors in the same building. Based on already supported map services such as Google and Bing, users can now define building layouts on the map, upload supported floor plans (CAD/JPEG/PNG), populate each floor with cameras according to their exact location and easily navigate between the floors and the cameras for complete situational awareness.

Unlike other VMS that require the user to switch between different maps, XProtect brings a smoother and easy to use experience since it combines both the publicly accessible maps and the individually uploaded ones into one working environment, allowing the user to zoom in and out from one building to another easily, all from the same map and view in the Smart Client.

### 3 steps to get started



Just define the building layout and number of floors



Upload your floor plan



Position the cameras and enjoy a smooth and seamless experience.










## Milestone Customer Dashboard Your experience, your language

Our online system monitoring service is designed to guarantee that your system always works. It is now available in English, German, French, Spanish, Italian, Danish and Russian.




# How can you prepare for 2018 R2?

Here's everything you need to know to perform the necessary upgrades and bring your system up to speed.

- [XProtect VMS Comparison Chart](#) 
- [Price list](#) 
- [XProtect Hardware Acceleration video](#) 
- [XProtect Hardware Acceleration presentation](#) 
- [XProtect Hardware Acceleration feature brief](#) 
- [Building support in Smart Map feature brief](#) 
- [XProtect 2018 R2 New features presentation](#) 

## Practice makes perfect

Explore our most recent release with these eLearning courses, available 24/7

- [Exploring XProtect 2018 R2 Update Features](#) 
- Covering:**
  - Motion Detection in the Recording Server using NVIDIA cards
  - Smart Map – Building support and MIP SDK support
  - Milestone XProtect VMS Deployment Best Practice Guide
- [Adding Cameras and Devices](#) 
- [Configuring and Using the XProtect Smart Map](#) 

## Join the community



milestonesys.com

## Previous product releases



Did you know that we now support more than 7,000 devices?

We take great pride in sustaining and finding new ways of supporting our community of tens of thousands of technology partners all over the globe. One way of doing this is ensuring that we have the largest selection of supported devices in the industry. Which means that you can pick the device that best fits your installation's exact needs. When you choose Milestone, you get instant access to a global network of vendors with devices that are proven to work with XProtect. For us, this is proof of the unlimited potential of the open platform.

Want to find out if we support a particular device?

**Go to our Device Pack page**

- [Device Pack](#) 