Milestone Systems

XProtect® Smart Client 2017 R3

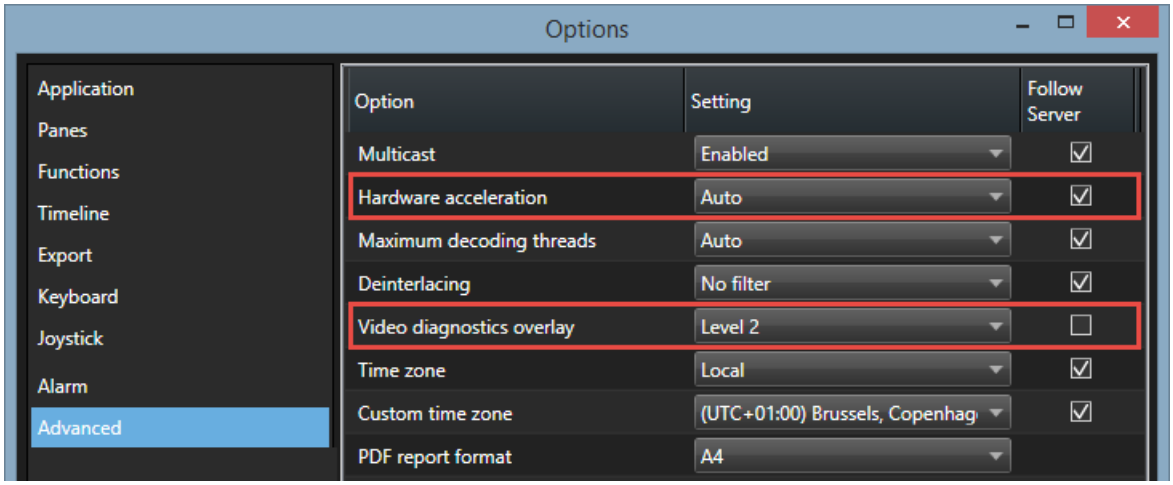
Hardware acceleration guide

Contents

Hardware acceleration (explained)

In XProtect Smart Client, there are two settings for hardware acceleration: **Auto** and **Off**. Go to **Options** > **Advanced** > **Hardware acceleration**. The default setting is **Auto**.

The current status of the stream including the hardware acceleration status is visible by enabling **Video diagnostics overlay** > **Level 2**.



Hardware acceleration has the status **On** or **Off** in the video diagnostics overlay in the view item.

If **Hardware acceleration** is **Off**, use the steps to help you determine if hardware acceleration is available. To check if your computer is capable of hardware acceleration, you need to make sure that Intel® Quick Sync is supported. You can do this by examining your computer in the following areas:

1. Operating system (see "Verify your operating system" on page 4)
2. CPU (see "Check CPU Quick Sync support" on page 4)
3. Device manager (see "Examine the Device Manager" on page 5)
4. BIOS (see "Enable the Intel HD adapter in the BIOS" on page 5)
5. Video driver (see "Update the Intel video driver" on page 6)
6. Memory (see "Check memory modules configuration" on page 6)

Verify your operating system

Make sure your operating system is Microsoft® Windows® 8.1, Windows® Server 2012, or newer.

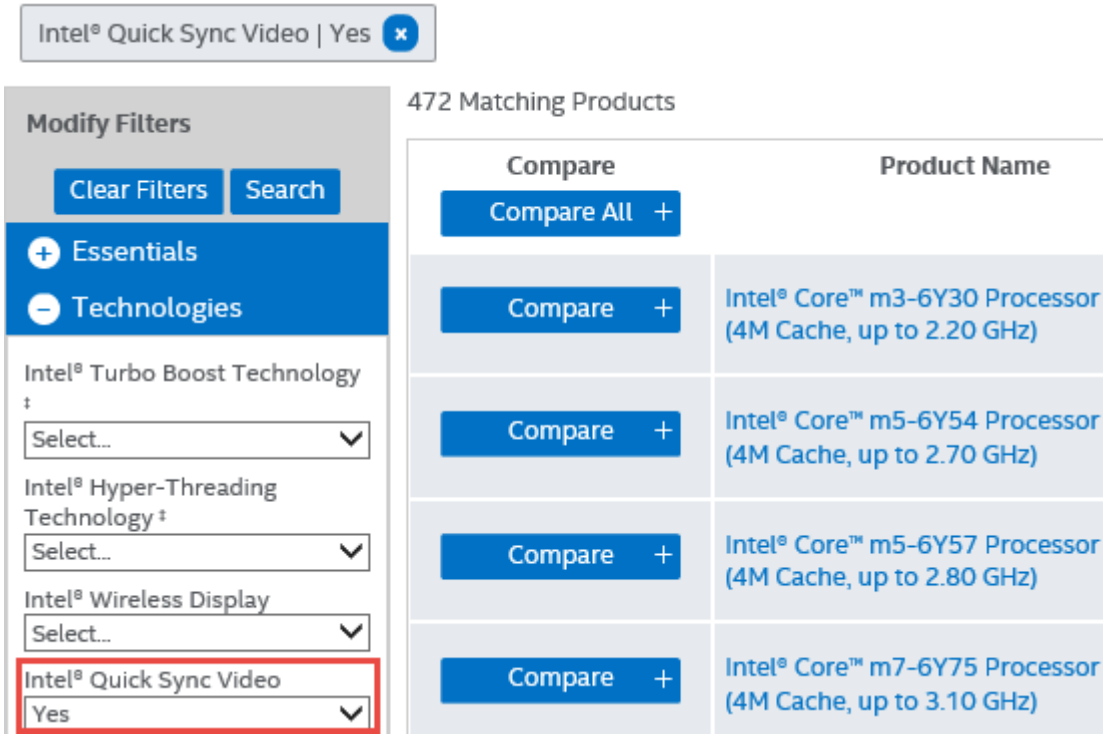
Only non-virtual environments are supported.

Next, check that your processor supports Intel Quick Sync Video (see "Check CPU Quick Sync support" on page 4).

Check CPU Quick Sync support

To verify that your processor supports Intel Quick Sync Video, visit the Intel website (http://ark.intel.com/search/advanced?s=t&quicksyncvideo=true).

In the menu, set **Technologies** > **Intel Quick Sync Video** filter to **Yes**.

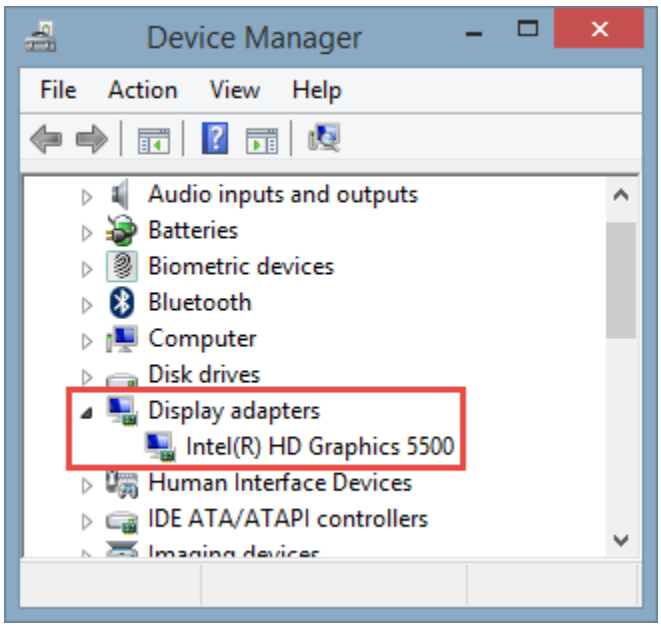


Next, examine the Device Manager (on page 5).

Examine the Device Manager

The Intel HD display adapter must be present in Windows Device Manager.

You can connect your displays to any display adapter available. If a more powerful display adapter is available in your computer, typically NVIDIA® or AMD®, connect your displays to this adapter to use both resources. Intel HD adapter for hardware accelerated decoding and NVIDIA or AMD for rendering.



If the Intel HD adapter is not present, you must enable the display adapter in the computer BIOS (see "Enable the Intel HD adapter in the BIOS" on page 5).

Enable the Intel HD adapter in the BIOS

If another display adapter card, for example NVIDIA or AMD, is available in your computer, the onboard Intel HD display adapter may be disabled, and you must enable it.

The Intel HD display adapter is located on the motherboard as a part of the CPU. To enable it, look for graphics, CPU or display settings in the computer BIOS. The vendor's motherboard manual may be helpful to find the relevant settings.

If changing the settings does not enable the onboard Intel HD display adapter, you can try to move the display adapter card to another slot and then connect the display to the motherboard. In some cases, this can enable the onboard display adapter.

Next, update the Intel video driver (on page 6).

Update the Intel video driver

Make sure that the driver version for your Intel HD display adapter supports Intel Quick Sync Video. You can do this by updating the driver version to the newest version available from Intel.

The driver version provided by the PC vendor can be an older version and may not support Intel Quick Sync Video.

There are two ways of updating your Intel driver. Manual download and install or using the Intel Driver Update Utility.

Manual download and install:

7. Go to the Intel download website (https://downloadcenter.intel.com/).
8. Enter the name of your integrated display adapter.
9. Manually download and install the driver.

For automatic detection and updates of Intel components and drivers:

1. Download Intel Driver Update Utility (http://www.intel.com/p/en_us/support/detect).
2. Auto search for the drivers.
3. Choose to update the driver for Intel HD Graphics.

Last, you can check how the memory modules are configured (see "Check memory modules configuration" on page 6).

Check memory modules configuration

If your system supports more than one memory channel, you can increase the system performance by making sure that a minimum of two channels have a memory module inserted in the correct DIMM slot. Refer to the motherboard manual to find the correct DIMM slots.

Example:

A system with two memory channels and a total of 8 GB of memory obtains the best performance using a 2 x 4 GB memory module configuration.

If you use a 1 x 8 GB memory module configuration, you only use one of the memory channels.

About Milestone Systems

Milestone Systems is a leading provider of open platform video management software; technology that helps the world see how to ensure safety, protect assets and increase business efficiency. Milestone enables an open platform community that drives collaboration and innovation in the development and use of network video technology, with reliable and scalable solutions that are proven in more than 150,000 sites worldwide. Founded in 1998, Milestone is a stand-alone company in the Canon Group. For more information, visit: http://www.milestonesys.com.