Are there hardware-restrictions when using Industrial HiVision on a Windows 7 (or later) installation?

Hendrik Lepple - 2019-04-08 - Industrial HiVision

The 64bit variants of Windows 7 (and later versions) offer support for hardware configurations that exceed 64 logical processors. These processors will be divided into so called "kgroups" by Windows operating systems. This can lead to problems for applications which rely on older kernel APIs for affinitizing threads inside a process, resulting in the process running on fewer logical processors than presented in the operating system for use. (Independant of the processors assigned to a virtual machine. Even if only one processor is assigned to the virtual machine which hosts the Industrial HiVision services, it will run into performance issues after some uptime.)

We noticed performance issues on e.g. Hewlett Packard ProLiant Gen9 Servers, please refer to the following article for further information from the manufacturer:

http://h20566.www2.hpe.com/hpsc/doc/public/display?sp4ts.oid=5379860&docId=emr_na-c04650594&docLocale=en_US

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All variants of Windows later or equal to Windows 7 are affected by this behaviour. This includes:

- Desktop variants (Windows 7, 8, 8.1, 10)
- Server variants (Server 2008 R2, 2012, 2012 R2, 2016, 2019)

A possible fix on the operating system side is not planned, as Microsoft still groups the logical processors into "kgroups".

Detailed information is available on the Microsoft homepage:

https://docs.microsoft.com/de-de/windows/desktop/ProcThread/processor-groups

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If you are unsure whether your hardware is affected by this issue or not, please feel free to open a support ticket and one of our support engineers will assist you.