



What are the technical requirements to run Physibel applications?

PHYS02c

Overview

	BISCO – BISTRA – Trisco2D – GLASTA Physibel 1D and 2D applications		TRISCO – SOLIDO – VOLTRA – CAPSOL Physibel 3D applications	
	Minimum	Advised	Minimum	Advised
Software				
Operating system	MS Windows 7 64-bit	MS Windows 10 64-bit	MS Windows 7 64-bit	MS Windows 10 64-bit
.NET Framework	4.0	4.7	4.0	4.7
MS VC Redistributable	VS 2015–2019 (<i>incl. in installer</i>)	/	VS 2015–2019 (<i>incl. in installer</i>)	/
Hardware				
Processor	Intel or AMD processor with clock rate of 1.6 GHz	Intel or AMD processor with clock rate of 4.0 GHz (or more)	Intel or AMD processor with clock rate of 1.6 GHz	Intel or AMD processor with clock rate of 4.0 GHz (or more)
Memory (RAM)	4 GB	8 GB (or more)	4 GB	8 GB (or more)
Graphics Controller	256 MB, OpenGL 4.5 support	/	256 MB, OpenGL 4.5 support	4 GB, OpenGL 4.6 support

Processor

Physibel applications are single-threaded and thus only use a single processor core each. The clock rate determines the speed of the calculation. Processors with higher clock rates are mainly beneficial for:

- (i) Large models (high number of model nodes), typically when using the Unlimited Nodes feature
- (ii) Models with a large number of view factors (requires detailed thermal radiation calculation with RADCON module)
- (iii) Dynamic applications (VOLTRA, BISTRA, CAPSOL), which require a calculated solution for each time step

Graphics controller

A minimum memory of 256 MB and the support of OpenGL is required to run Physibel applications. This means that Physibel applications can also be run with an integrated graphics processor. However, for 3D applications (TRISCO, VOLTRA, SOLIDO), an integrated graphic processor may fail and result in crashes. For this reason, we advise a dedicated GPU (Graphical Processing Unit), typically from NVIDIA or AMD.

Memory (RAM)

2 GB available RAM is typically sufficient to process models in the Physibel applications without the Unlimited Nodes feature. When the Unlimited Nodes feature is unlocked, the maximum number of nodes depends on the RAM installed.

Example: computer with 32 GB RAM:

- BISCO/BISTRA + feature Unlimited Nodes: up to 50 000 000 calculation nodes
- TRISCO/SOLIDO/VOLTRA + feature Unlimited Nodes: up to 100 000 000 calculation nodes