System Requirements Nastran 2022

The tables below show the minimum, budget, and high-end system and hardware requirements for workstations and laptops necessary to achieve maximum performance with Autodesk Inventor Nastran and Autodesk Nastran. There are no special hardware requirements for the Nastran products beyond those imposed by Microsoft® Windows®.

Note: Autodesk Inventor (Standard or Professional) 2022 must be installed before installing Inventor Nastran 2022. If you are installing Autodesk Nastran on a Linux operating system, Autodesk Inventor is not required.

Windows Operating System (desktop workstations or laptops)	64-bit Microsoft Windows 10
Linux Operating System (Autodesk Nastran only)	RedHat or CentOS 7 or 7+, glibc 2.17 or 2.17+ libstdc++/compat-libstdc++ 5.3.1 or 5.3.1+
Network Card	Required for network installation with FlexLM licensing for all workstations or laptops.

Linux Operating System Requirements

The Linux version of Autodesk Nastran is built on CentOS 7. We recommend you use version 7 or newer of this Linux distribution. This release will also work on Red Hat Enterprise Linux 7 versions. Support for Red Hat Enterprise Linux 5 and 6 has been discontinued.

Autodesk Nastran may work on other Linux distributions which are not officially supported. On other Linux distributions, binary compatibility of Autodesk Nastran requires that a specific version, or greater, of two core system components be installed. These system components are the glibc library and the libstdc++ library. The version of the libstdc++ library is usually tied to the version of gcc on your system. Additionally, newer Linux distributions may have moved the required libstdc++ libraries to a "compat-libstdc++" package. Please consult your distribution's documentation to learn how to determine the versions you have installed. Alternatively, websites such as http://www.distrowatch.org maintain databases of the versions of components available with specific distributions. The table below summarizes the requirements.

We recommend you upgrade to the latest stable version of Linux. The improvements in performance, security, and reliability may be beneficial - even if you only use Autodesk Nastran occasionally. Installation requires a number of standard system utilities such as gzip, tar, sed, grep, and bash which are most likely installed by default on your system. If you find these are missing, please ask your system administrator to install.

Desktop Workstation Specifications:

	Minimum Workstation	Budget Workstation	High-End Workstation
Computer, CPU	2.5 GHz or greater *	3.0 GHz or greater *	3.0 GHz or greater, 8 or more cores *
Memory, RAM	8 GB	16 GB	32 GB+
Graphics Card	1 GB dedicated video card, DirectX 11 compliant	2 GB dedicated video card, DirectX 11 compliant	4+ GB dedicated video card, DirectX 11 compliant
Hard Disk	40 GB free space	1 TB SSD	2 TB SSD with fast read/write speeds

Laptop Specifications:

	Minimum Laptop	Budget Laptop	High-End Laptop
Computer, CPU	2.5 GHz or greater *	3.0 GHz or greater *	3.0 GHz or greater, 4 or more cores *
Memory, RAM	8 GB	16 GB	32 GB+
Graphics Card	1 GB dedicated video card, DirectX 11 compliant	2 GB dedicated video card, DirectX 11 compliant	4+ GB dedicated video card, DirectX 11 compliant
Hard Disk	40 GB free space	512 GB SSD	2 TB SSD with fast read/write speeds

* Support AVX instructions, see the following site for more details: https://colfaxresearch.com/skl-avx512/

There are many types of hardware that will allow you to use Inventor Nastran and Autodesk Nastran. Proper choice of hardware, however, can often make the difference between frustration and productivity. Here are a few suggestions:

- Add more memory (RAM) above the minimum configuration. This will allow you to specify more memory for the Nastran products and reduce the likelihood of memory thrashing (excessive paging of virtual memory to disk).

- Hard disk space recommendations are general guidelines only. User requirements can vary considerably, especially when using large models.

- Purchase or upgrade to the latest versions of Windows. The improvements in performance and reliability will more than outweigh the initial cost - even if you only use the Nastran products occasionally.