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 Windows.

Note: Autodesk Inventor (Standard or Professional) 2020must be installed before installing Inventor Nastran 2020. If you are installing Autodesk Nastran on a Linux operating system, Autodesk Inventor is not required.

Windows Operating System (desktop workstations or laptops)	Windows 7 SP1 64-bit (Home Premium, Professional, Ultimate, and Enterprise editions), Windows 8 / 8.1 64-bit (Basic, Pro, or Enterprise editions), Windows 10 64-bit (Home, Pro, Enterprise, or Education editions) **Note:** 32-bit (x86) versions of Windows are NOT supported.
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	Intel Pentium or AMD based	Intel Core i5/i7 – Dual or Quad Core at high clock speed	Dual Intel Xeon Quad-core CPUs at high clock speed (3.5+ GHz). or single Xeon 8-core CPU at high clock speed (2.8+ GHz)

	Minimum Workstation	Budget Workstation	High-End Workstation
Memory, RAM	2 GB	8 GB	32 GB+
Graphics Card	256 MB workstation video card	1GB dedicated video card	2+GB NVIDIA Quadro K4000 or similar
Hard Disk	40 GB free space	1 TB SATA 7200RPM and 256GB SSD for temp files	2 TB 7200 SATA for file storage and 512 GB SSD for temp files Note: High write speed is critical (at least 400MB/sec is good)

Laptop Specifications:

	Minimum Laptop	Budget Laptop	High-End Laptop
Computer, CPU	Intel Pentium or AMD based	Intel Core i5 – Dual or Quad Core at high clock speed	Intel Core i7 – Dual or Quad Core at high clock speed
Memory, RAM	2 GB	4 GB	16 GB+
Graphics Card	256 MB workstation video card	1 GB dedicated video card	2+ GB NVIDIA or equivalent ATI
Hard Disk	40 GB free space	1 TB SATA 7200RPM	512 GB or 1 TB SSD Note: High write speed is critical (at least 400 MB/sec is good)

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).

- Required hard disk space is difficult to estimate, but in general you will never have enough. This is especially true when running large models. If you are continuously running out of disk space, you may want to invest in a larger and faster hard disk. Disk compression software may also help, but may also degrade performance.

- 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.