

## **FEMAP v11.2 - Operating Systems and Minimum Hardware Requirements**

### **Important Notes Regarding 32 bit Windows Operation Systems and Windows XP and Windows Vista**

**Femap v11.1 was the last release of Femap that runs on 32 bit Windows Operating Systems. Femap versions 11.1.1, v11.1.2 and 11.2.x require a 64 bit Windows OS.**

**FEMAP v11.1 was the last supported release of FEMAP that runs on the Windows XP and Windows Vista operating systems.**

### **Table of Contents**

Femap v11.x Supported Operating Systems	2
Femap v11.x Minimum Hardware Requirements	3
Femap v11.x Graphics Card Requirements	4
General Statement and Base Graphics Option	4
FEMAP v11.1.x and v11.2.x VBO Option Graphics Card Requirements	5
FEMAP v11.1.x and v11.2.x Performance Graphics Option Graphics Card Requirements	6

## FEMAP v11.x Supported Operating Systems

Operating Systems – FEMAP v11.2		
	FEMAP	NX Nastran 10.0p1
Windows 7 – 32 bit	NO	NO
Windows 7 – 64 bit	Yes	Yes
Windows 8.x and Windows 8.x Pro – 64 bit <sup>3</sup>	Yes	Yes

Operating Systems – FEMAP v11.1.2		
	FEMAP	NX Nastran9.1
Windows 7 – 32 bit	NO	NO
Windows 7 – 64 bit	Yes	Yes
Windows 8.x and Windows 8.x Pro – 64 bit <sup>3</sup>	Yes	Yes

Operating Systems – FEMAP v11.1		
	FEMAP	NX Nastran9
Windows XP – 32 bit	Yes <sup>1,2</sup>	<b>No</b>
Windows XP – 64 bit	Yes <sup>1</sup>	<b>No</b>
Windows Vista – 32 bit	Yes <sup>1,2</sup>	<b>No</b>
Windows Vista – 64 bit	Yes <sup>1</sup>	Yes
Windows 7 – 32 bit	Yes <sup>2</sup>	<b>No</b>
Windows 7 – 64 bit	Yes	Yes
Windows 8.x and Windows 8.x Pro – 64 bit <sup>3</sup>	Yes	Yes

1: Limited support. The OS is no longer being used in development and no support is available from the vendor. An OS upgrade will be required for full support.  
**FEMAP releases after v11.1 may not run on Windows XP or Windows Vista and in any case, are unsupported by GTAC.**

2: Available by download only. Includes NX Nastran 8.5

3: Windows RT is not supported.

## FEMAP v11.x Minimum Hardware Requirements

There are no special hardware requirements for FEMAP beyond those imposed by Windows. The **minimum** requirements are as follows.

**Computer, CPU:** Minimum as required for the Windows OS and Graphics Adapter.

**Memory, RAM:** 64 Bit Windows: 4 GB minimum. At least 8 GB recommended for larger models. More RAM is better for even larger models.

**Graphics Card:** See pages 4 through 6.

Minimum Free Hard Drive Space Requirements for FEMAP Installation	
Description	Free Disk Space Required
Femap Standalone (including documentation, FlexLM server software and VisQ)	1,033 MB
NX Nastran (including NX Nastran and NX Nastran Documentation)	1,830 MB
Femap Flow/Thermal UI, Solver and Documentation	352 MB
Femap Structural Analysis Toolkit	525 MB
Total – All Options	3,740 MB (3.74 GB)

**Free Hard Drive space:** In addition to the disk space required for the installation of FEMAP and its options as shown in the table above, additional **local** free disk space is required for FEMAP scratch and NX Nastran scratch files.

A minimum of 10 GB is recommended for small models and can increase rapidly as model size increases. FEMAP model files can range in size from 50 Kb for a file with no entities to greater than 1 GB depending on the number of entities and the results sets.

NX Nastran scratch and results files for large models can be hundreds of gigabytes.

## **FEMAP v11.x Graphics Card Requirements**

### **General statement regarding Graphics Cards**

Femap has been developed with the intent to support all cards that implement the required versions of OpenGL. However, AMD® considers Radeon® cards and NVIDIA® considers GeForce® cards to be consumer cards. Therefore, it is highly recommended that Femap be used on PCs with AMD FirePro or NVIDIA Quadro cards (Quadro NVS cards are for business use and are not intended for 3D graphics). The Femap development group receives significant support from AMD for FirePro cards and from NVIDIA for Quadro cards, while receiving minimal support from AMD for Radeon cards and NVIDIA GeForce cards.

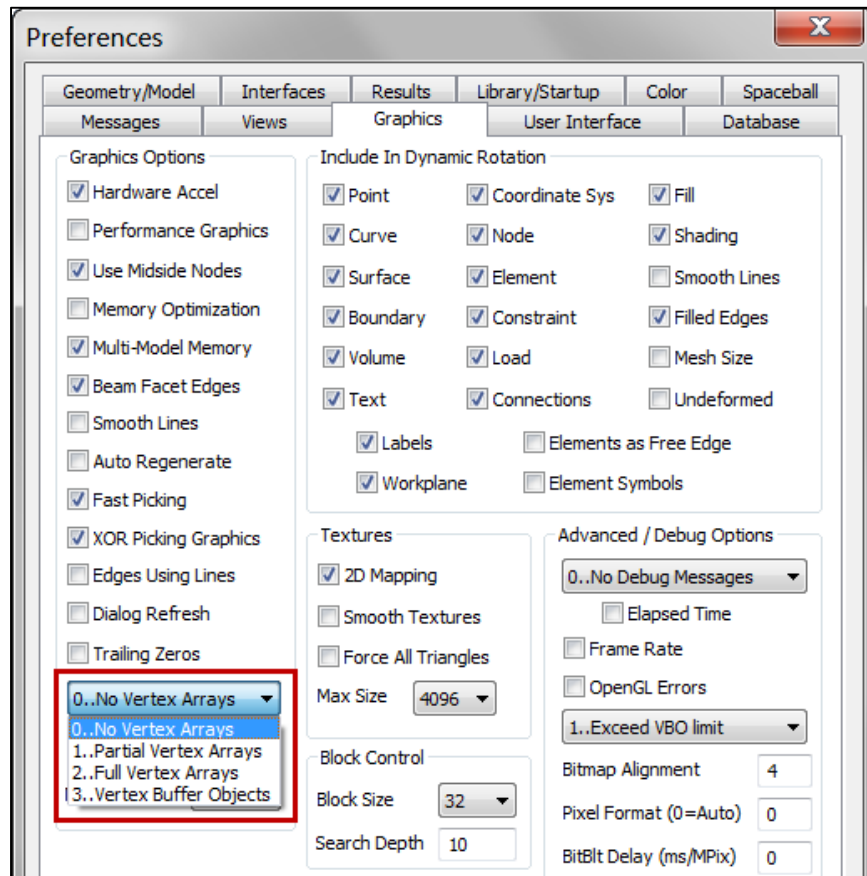
In addition, the latest graphics card drivers should be used and in cases where the PC vendor has a graphics driver specific to their computer model number and graphics chip, the driver certified by the PC manufacturer should be used.

**Base Graphics** requires an OpenGL graphics card with a minimum of 512 Mb dedicated graphics memory.

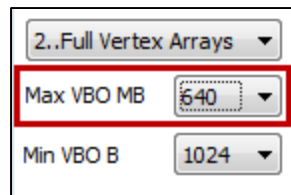
## FEMAP v11.1.x and v11.2.x VBO Option Graphics Card Requirements

The **VBO Option** requires an OpenGL 2.1 graphics card or higher.

- Enable VBOs with the **File, Preferences** command. In the *Preferences* dialog box, select the **Graphics** tab, then enable one of the three (3) VBO options from the Vertex Arrays pulldown menu. See Section 2.6.2.3 of the Femap Commands manual for details on these options.



- **MAX VBO** should be set in a range from 50 to 75 percent (%) of the total graphics card memory of the installed graphics card.



## FEMAP v11.1.x and v11.2.x Performance Graphics Option Graphics Card Requirements

The **Performance Graphics** option requires an OpenGL 4.2 or higher graphics card. This option dramatically improves graphics performance for model with a large number of entities. Please refer to the *What's New in Femap* document (*newfeat.pdf*) for details on entities and post-processing view styles supported by Performance Graphics.

- Performance Graphics can be combined with the use of Vertex Arrays and VBOs.
- Performance Graphics is not supported on Intel graphics hardware.
- Enable Performance Graphics with the **File, Preferences** command. In the *Preferences* dialog box, select the **Graphics** tab, then, enable the option for **Performance Graphics**.

