

WORKSTATION APPLICATION

NVIDIA QuadroView Release Notes

Software Version 2.05

NVIDIA Corporation December 19, 2002

Published by NVIDIA Corporation 2701 San Tomas Expressway Santa Clara, CA 95050

Copyright © 2002 NVIDIA Corporation. All rights reserved.

This software may not, in whole or in part, be copied through any means, mechanical, electromechanical, or otherwise, without the express permission of NVIDIA Corporation.

Information furnished is believed to be accurate and reliable. However, NVIDIA assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties, which may result from its use. No License is granted by implication or otherwise under any patent or patent rights of NVIDIA Corporation.

Specifications mentioned in the software are subject to change without notice.

NVIDIA Corporation products are not authorized for use as critical components in life support devices or systems without express written approval of NVIDIA Corporation.

NVIDIA, the NVIDIA logo, Quadro, and QuadroView are registered trademarks or trademarks of NVIDIA Corporation in the United States and/or other countries.

AutoDesk, AutoCAD, AutoCAD Architectural Desktop, Mechanical Desktop, and *WHIP!* are trademarks or registered trademarks of Autodesk. Windows, Windows logo, Windows NT, and/or other Microsoft products referenced in this guide are either registered trademarks or trademarks of Microsoft Corporation in the U.S. and/or other countries. OpenGL is a registered trademark of Silicon Graphics Inc.

Other company and product names may be trademarks or registered trademarks of the respective owners with which they are associated.



Table of Contents



1. About NVIDIA QuadroView

Overview
Recent Features and Changes
Enhanced Material Editor
Pack'N'Go
Improved HTML Online Help
Improved Installation/Setup
Preference Dialog Box
Mouse Wheel Support
Extended Full-Screen (Maximized) Render Area
3
Extended Stereo Support
Other Improvements
Animation Toolbar
New Animation Slider
Release History
Supported Languages
User Interface
Online Help
System Requirements and Installation
Overview of Resolved Issues by Version
Issues Resolved in Version 2.05
Issues Resolved in Version 2.04.15 6
Issues Resolved in Version 2.04.08 6
Issues Resolved in Version 2.04.06 6
Issues Resolved in Version 2.04.03 7
Issues Resolved in Version 2.04.01 7
Issues Resolved in Version 2.03.02 7
Issues Resolved in Version 2.03.01 7
Issues Resolved in Version 2.03.00 7
Known Issues
2D Drawings in QuadroView
Appearance of QuadroView Objects 8
For Previous Users of QuadroView Beta Version
8
For Previous Alpha or Beta Installations 8
Updating Geometric Data
Loading Drawings Created With Older Versions
of AutoCAD
Possible Problems With Sample Drawing §
Possible Pixel Format Error
Backward Compatibility and Animation Formats
10
Drawings Created in VRML (version 2) Format
10



List of Tables



NVIDIA Corporation ii

CHAPTER

ABOUT NVIDIA QUADROVIEW

This chapter contains the following major topics:

- "Overview" on page 1
- "Recent Features and Changes" on page 2
- "Release History" on page 4
- "Supported Languages" on page 5
- "System Requirements and Installation" on page 5
- "Overview of Resolved Issues by Version" on page 5
- "Known Issues" on page 7

Overview

 $NVIDIA^{\mathbb{R}}$ QuadroViewTM is a Quadro^{\mathbb{R}} workstation application utility and consists of several modules.

The function of the **viewer module** (the *main* module) is to render 3D models using easy-to-use controls in real-time. The viewer utilizes the Open Inventor 3D library, which is a class hierarchy based on OpenGL. The models can be read from files, such as files using the **VRML Internet (.wrl)** or **Open Inventor (.iv)** file format or received through a communications link from another application. Models read from files do not need an active link to an application. For example, you can create and save your model on a CAD workstation. Then you only need the viewer and the saved files on a customer's system for a presentation, as an example.

Communication modules set up the link to CAD applications. The link allows the application to send a model to the viewer and control it in real-time. The link works in the opposite direction as well; the viewer can send commands and data to the application. The QV_C.ARX module for AutoCAD provides the link to AutoCAD and is part of the QuadroView installation software. Separation of the Viewer and Communication module results in better usage of multi-processor computing.

The ARX (AutoCAD Runtime Extension) module is *optionally* installed by the QuadroView Setup program and registered for "Demand Loading" for all installed versions of AutoCAD. By default, the Demand Load setting is configured in so that QuadroView starts automatically when AutoCAD is started.

Using the LoadConfig.exe configuration tool, you can modify the demand load (startup) functionality of QuadroView for each installed version of AutoCAD. (See QuadroView online Help for details on using this and other QuadroView features.)

Recent Features and Changes

Enhanced Material Editor

The Material Editor has been redesigned and now includes texture environment mapping.

Note: The Global Environment Mapping option has been removed from the Render Toolbar.

- You can now assign material using "drag & drop" to Objects in the scene. In other words, you can simply drag the desired material from the Preview window of the Material Editor onto the desired target object in the scene.
- You can completely edit the material using the Material Editor.
- Materials can also contain textures
- You can establish your own Material Library to reuse the materials in other scenes.

Pack'N'Go

"Pack'N'Go" is a File menu option that lets you save the scene file (similar to a "Save As" operation), in addition to any materials and textures (files) you may have added to the scene, into one directory. This way, you can access all necessary files for the saved scene from one location.

Improved HTML Online Help

When you have any NVIDIA QuadroView application window open, press **F1** to display online HTML Help, which provides detailed user information about the features.

Improved Installation/Setup

The Setup program lets you install QuadroView for several installed versions of AutoCAD on one computer.

Preference Dialog Box

The handling of options through the Preferences dialog box contains the following improvements:

- The LoadConfig utility can be started through the Preferences dialog box in QuadroView.
- All sheets are visible, even when you are not linked to AutoCAD.

Mouse Wheel Support

Mouse wheel support is available for navigation in Examiner, Fly, and Walk viewing modes.

Extended Full-Screen (Maximized) Render Area

The full screen/maximized render area support lets you view the model in a maximized render window, which eliminates the need for menus or toolbars. If you maximize the QuadroView main window before using this mode, the model spans the entire screen without any toolbars.

The full screen/maximized render area support also includes improved popup menu choices in viewing modes, animation, cutting plane, stereo, etc.

Extended Stereo Support

Extended stereo support includes support for Shutter Glasses/Quadbuffered Stereo

Other Improvements

- Improved Animation Support
- Improved AVI Settings dialog box includes 1) Output Size combo box with selectable width, height, and image aspect ratio and 2) Frames per second (fps) support for frame based animation
- **Improved Animation Editor** dialog box where you can manipulate the key frame settings and path settings
- Animation formats in .iv (Open Inventor) and .dwg file formats

Animation Toolbar

The Animation toolbar features improved handling and contains the following options:

Go to start	Stop	Hide camera path
Go to end	Select camera path	Open Animation Editor
Play forward	Select look At path	Send animation data to AutoCAD
Play backward	Show camera path	Create AVI file

New Animation Slider

The new Animation slider is visible if the scene contains animation data. The Animation slider in the viewer window contains:

- Single step Forward and Backward option
- Frame counter

Release History

Table 1.1 contains a summary of NVIDIA QuadroView releases and the versions associated with them. Some versions listed may not have been released outside of NVIDIA.

 Table 1.1
 NVIDIA QuadroView Release History

Release	Version	Comments
Release 2.05	2.05.00 - 2.05.xx	Releases ongoing
Release 2.04	2.04.00 - 2.04.xx	Releases ongoing
Release 2.03	2.03.00 - 2.03.02	

Supported Languages

User Interface

The NVIDIA QuadroView user interface support the following languages:

Chinese (traditional)GermanNorwegianChinese (simplified)HungarianPolishCzechItalianRussianEnglishJapaneseSpanish

French Korean

Online Help

The NVIDIA QuadroView online Help supports the following languages:

Arabic Finnish Norwegian

Chinese (simplified) French Portuguese (Brazil)

Chinese (traditional)GermanRussianDanishItalianSpanishDutchJapaneseSwedishEnglishKoreanThai

System Requirements and Installation

System Requirements and installation information are discussed in the *QuadroView User's Guide*.

Overview of Resolved Issues by Version

This section contains the following categories:

- "Issues Resolved in Version 2.05" on page 6
- "Issues Resolved in Version 2.04.15" on page 6
- "Issues Resolved in Version 2.04.08" on page 6
- "Issues Resolved in Version 2.04.06" on page 6
- "Issues Resolved in Version 2.04.03" on page 7
- "Issues Resolved in Version 2.04.01" on page 7

- "Issues Resolved in Version 2.03.02" on page 7
- "Issues Resolved in Version 2.03.01" on page 7
- "Issues Resolved in Version 2.03.00" on page 7

Issues Resolved in Version 2.05

- Fixed: QuadroView 2.05.04 Installation ends with Unhandled Exception.
- Fixed: QuadroView with new Open Inventor 3.1.1 is very slow on changing Edit Mode.
- Fixed: QuadroView with new Open Inventor 3.1.1 is very slow on selection.
- Fixed: QuadroView 2.05.02 loads too much Materials into the Material Editor.
- Fixed: QuadroView 2.05.02 numeric input of transparency and shininess is not possible.
- Fixed: QuadroView 2.05.01 textures is not found
- Fixed: QuadroView 2.05.xx: Missing DLLs after Installation.
- Fixed: Material Editor: Texture Scale needs link.
- Fixed: Material Editor: Color Editor did not close

Issues Resolved in Version 2.04.15

Fixed: Quadro4 500 GoGL, Win 2K: Opera and Campus samples don't properly render.

Issues Resolved in Version 2.04.08

Fixed: Uninstalling QuadroView affects Architectural Desktop 3.3 configuration — certain Architectural Desktop menus are not available.

Issues Resolved in Version 2.04.06

- Fixed: QuadroView Setup dialog does not list Architectural Desktop 3.3.
- Fixed: Multi-monitor workstation applications cannot recognize Quadro card under Windows 2000.
- Fixed: QuadroView 2.04.03 is missing the Environment bitmap.
- Fixed: No Help is available in QuadroView 2.04.02.

Issues Resolved in Version 2.04.03

- Fixed: No Readme file is available in QuadroView 2.04.02.
- Fixed: Stand-alone installation of QuadroView on systems without AutoCAD is not possible.

Issues Resolved in Version 2.04.01

- Fixed: Installation doesn't install Help and Readme files.
- Fixed: Installation/Setup labels are inaccurate.
- Fixed: Using the 30-day demo mode is not possible.

Issues Resolved in Version 2.03.02

- Fixed: QuadroView closes by using Print Preview on systems without an installed Printer.
- Fixed: QuadroView icons need improvement; i.e., NVIDIA logo is jagged.
- Fixed: QuadroView does not start on non-Quadro card (no trial version).
- Fixed: QuadroView does not remove all files during the uninstallation.
- Fixed: QuadroView 2.03 and the POWERdraft 15.02.00 applications hang.

Issues Resolved in Version 2.03.01

- Fixed: "alpha 00" appears in "About NVIDIA QuadroView" window.
- Fixed: Wrong icon name of "QuadroView3D" on the Windows 2000 desktop.

Issues Resolved in Version 2.03.00

Fixed: Unable to start AutoCAD 2000 after uninstalling QuadroView and POWERdraftTM (Windows 2000).

Known Issues

The following issues are known to be open in the current version of QuadroView.

Note: Certain issues may be fixed in later releases.

- "2D Drawings in QuadroView" on page 8
- "Appearance of QuadroView Objects" on page 8
- "For Previous Users of QuadroView Beta Version" on page 8
- "For Previous Alpha or Beta Installations" on page 8
- "Updating Geometric Data" on page 9
- "Loading Drawings Created With Older Versions of AutoCAD" on page 9
- "Possible Problems With Sample Drawing" on page 9
- "Possible Pixel Format Error" on page 9
- "Backward Compatibility and Animation Formats" on page 10
- "Drawings Created in VRML (version 2) Format" on page 10

2D Drawings in QuadroView

2D drawings do not render properly/completely in QuadroView. This is because QuadroView is a 3D viewer and not designed to show 2D drawings correctly. Text will not be drawn and circles (and other closed polygons) are filled.

Appearance of QuadroView Objects

In certain viewport display configurations in AutoCAD Architectural Desktop 3.3, the appearance of objects in QuadroView can differ from the appearance in the Architectural Desktop viewport. For better results, change to a different viewport display settings.

Refer to the Architectural Desktop user documentation for details on changing settings.

For Previous Users of QuadroView Beta Version

If you previously used a "beta" version of NVIDIA QuadroView, do not use data (files with .iv and .vrml extensions) created with the beta version in the current application. There is no guarantee that this data will be compatible with the current QuadroView product.

For Previous Alpha or Beta Installations

If you installed an alpha or beta version of QuadroView, delete the following registry entry to prevent crashes:

HKEY_CURRENT_USER\Software\NVIDIA Corporation\QuadroView 2.x

Updating Geometric Data

If you use external references, in certain cases, layer changes will not be updated immediately in the viewer. To update the geometric data in the viewer, use the command "NVA".

Loading Drawings Created With Older Versions of AutoCAD

Loading drawings generated with versions earlier than AutoCAD 2000 into AutoCAD 2000 could lead to problems when editing Light Sources. (AutoDesk has improved the Light Sources in AutoCAD 2000.)

Note: Editing an old Light Source can cause AutoCAD to crash. However, you can avoid this problem by following these steps:

- 1 Load drawing into AutoCAD 2000.
- **2** Open the Light dialog box in AutoCAD and select a Light Source.
- **3** Click the **Modify** button.
- 4 Click OK.
- **5** Repeat steps b through d for every Light Source.
- **6** Save the drawing. Light Sources will now have a valid format in order to work with QuadroView.

Possible Problems With Sample Drawing

In certain cases, the sample drawing Watch.dwg can cause problems when changing the filter settings or the deviation while AutoCAD Wireframe setting is turned Off in the Preferences dialog box.

Possible Pixel Format Error

In certain cases, you may get a pixel format error where the viewport remains black while using the Demo mode. If you encounter this problem, you can use the following system variable to run QuadroView in a compatible mode:

```
QUADROVIEW_COMPAT = 1
```

To set an environment variable, follow these steps:

- 1 Open the **System Properties** > **Environment** dialog box.
- 2 In the Variable field, type: QUADROVIEW COMPAT

- **3** In the Value field, type 1.
- 4 Click **Set** to complete the process.

Note: IMPORTANT! You need to remove this variable when the 30-day trial/demo period is over and/or you have switched to using an NVIDIA GPU-based graphics card (in case you were using a graphics card that was not based on an NVIDIA GPU).

Backward Compatibility and Animation Formats

QuadroView is not backwards compatible for animation formats; i.e, animation data created with version 2.04 and higher will not run on version 2.03 (animation format is 1.1) or other lower versions of QuadroView. However, older animation formats can be read in newer QuadroView versions.

Drawings Created in VRML (version 2) Format

Certain drawings created in VRML (version 2) format cannot be saved in VRML format again.