QUADRO WORKSTATION APPLICATION

# *NVIDIA QuadroView Release Notes*

*Based on* **Version 2.04.15**

**NVIDIA Corporation**
**April 17, 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, nForce, nView, GeForce, GeForce2, GeForce 256, GeForce3, Quadro, QuadroView, Riva 128, RIVA 128ZX, RIVA TNT, TNT2, and Vanta 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.

ELSA GLoria, ELSA Synergy, ELSA MAXtreme, and ELSA POWERdraft are trademarks of ELSA AG.

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 . . . . . 1
New Features and Changes. . . . . 2
Release History . . . . . 4
Supported Languages. . . . . 4
User Interface . . . . . 4
Online Help. . . . . 5
System Requirements. . . . . 5
Operating System . . . . . 5
Disk Space . . . . . 5
Hardware: Supported NVIDIA Products . . . . 6
Stereo Requirements. . . . . 6
NVIDIA Driver Software . . . . . 7
Software Components . . . . . 7
AutoCAD Applications . . . . . 7
Overview of Resolved Issues by Version . . . . . 8
Issues Resolved in Version 2.04.15 . . . . . 8
Issues Resolved in Version 2.04.08 . . . . . 8
Issues Resolved in Version 2.04.06 . . . . . 8
Issues Resolved in Version 2.04.03 . . . . . 8
Issues Resolved in Version 2.04.01 . . . . . 9
Issues Resolved in Version 2.03.02 . . . . . 9
Issues Resolved in Version 2.03.01 . . . . . 9
Issues Resolved in Version 2.03.00 . . . . . 9
Known Issues . . . . . 9
2D Drawings in QuadroView . . . . . 10
Appearance of QuadroView Objects . . . . . 10
For Previous Users of QuadroView Beta Version 10
For Previous Alpha or Beta Installations . . . 10
Updating Geometric Data . . . . . 10
Loading Drawings Created With Older Versions of AutoCAD . . . . . 11
Possible Problems With Sample Drawing . . 11
Possible Pixel Format Error . . . . . 11
Backward Compatibility and Animation Formats 12
Drawings Created in VRML (version 2) Format 12

## 2. Installation and Uninstallation

Before You Install QuadroView . . . . . 13
Installing and Configuring NVIDIA QuadroView. 13
Standard Mode. . . . . 13
Silent Mode . . . . . 14
Starting NVIDIA QuadroView . . . . . 14
Uninstalling NVIDIA QuadroView . . . . . 15

# List of Tables

**Table 1.1** NVIDIA QuadroView Release History . . . . . 4
**Table 1.2** Supported NVIDIA Products . . . . . 6

CHAPTER 1

# ABOUT NVIDIA QUADROVIEW

This chapter contains the following major topics:


- "Overview" on page 1
- "New Features and Changes" on page 2
- "Release History" on page 4
- "Supported Languages" on page 4
- "System Requirements" on page 5
- "Overview of Resolved Issues by Version" on page 8
- "Known Issues" on page 9


## Overview

NVIDIA QuadroView is a Quadro 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.)

# New Features and Changes

## 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.

For additional information about online Help installation and access, see "Software Components" on page 7.

## 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 has improved:

- 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 now exists for:

- **Examiner Viewer**
- **Fly Viewer**
- **Walk Viewer**

## Global Environment Mapping

When using the Global Environment Mapping (chrome effect) button in the Render toolbar, the model appears to be made of chrome and the environment mirrors on the surface.

## 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 pop-up menu choices in viewing modes, animation, cutting plane, stereo, etc.

## Extended Stereo Support

Extended Stereo includes support for:

- Shutter Glasses
- Quad-buffered Stereo

## Improved Animation Support

- **Improved AVI Settings dialog box** includes:
  - Output Size combo box with selectable width, height, and image aspect ratio
  - Frames per second (FPS) support for frame based animation
  - Single-step and Animation slider
  - 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

- **Extended 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** (visible if scene contains animation data) 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 2.04 | 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) | German | Norwegian |
| Chinese (simplified) | Hungarian | Polish |
| Czech | Italian | Russian |
| English | Japanese | Spanish |
| French | Korean | |

## Online Help

The NVIDIA QuadroView online Help supports the following languages:

| | | |
|---|---|---|
| Arabic | Finnish | Norwegian |
| Chinese (simplified) | French | Portuguese (Brazil) |
| Chinese (traditional) | German | Russian |
| Danish | Italian | Spanish |
| Dutch | Japanese | Swedish |
| English | Korean | Thai |

# System Requirements

Before you install and use NVIDIA QuadroView, make sure you have the prerequisites as explained in these sections:


- "Operating System" on page 5
- "Disk Space" on page 5
- "Hardware: Supported NVIDIA Products" on page 6
- "Stereo Requirements" on page 6
- "NVIDIA Driver Software" on page 7
- "Software Components" on page 7
- "AutoCAD Applications" on page 7


## Operating System

This release of QuadroView includes drivers for each of the following operating systems:

- Microsoft® Windows XP (Home and Professional Editions)
- Microsoft Windows 2000
- Microsoft Windows NT® 4.0 (*at least*, Service Pack 4)

## Disk Space

This release of QuadroView (English version) requires 40 MB of disk space.

## Hardware: Supported NVIDIA Products

You need a workstation graphics card based on one of the NVIDIA products *or* an equivalent ELSA graphics card as listed in Table 1.2.

**Table 1.2** Supported NVIDIA Products

| NVIDIA Workstation Product | Equivalent ELSA Graphics Card (distributed by ELSA) |
|---|---|
| Quadro™ 4 500 GoGL | |
| Quadro4 900 XGL<br>Quadro4 750 XGL<br>Quadro4 700 XGL<br>Quadro4 550 XGL | |
| Quadro™ DCC | ELSA GLoria DCC |
| Quadro™ 2 Pro | ELSA GLoria III |
| Quadro2 MXR | ELSA Synergy III |
| Quadro2 Go | |
| Quadro2 EX | ELSA Synergy 2000 |
| Quadro™ | ELSA GLoria II |

**Note:** NVIDIA QuadroView 2.03.00 and later versions will not run with the ELSA Synergy II graphics card. Older versions (*earlier than 2.03.00*) of NVIDIA QuadroView can run with ELSA Synergy II *and* ELSA driver software.

## Stereo Requirements

- If you have Quad-buffered OpenGL Stereo mode enabled in QuadroView, then you need stereo shutter glasses such as the ELSA 3D Revelator.
- If you have Interlaced Stereo mode enabled in QuadroView, you need a stereo monitor such as the ELSA Ecomo 4D. (Interlaced stereo can be vertical or horizontal interlaced.)
- If you have Anaglyph Stereo mode enabled in QuadroView, you need special colored filter glasses. (Anaglyph stereo can be red/cyan, blue/yellow, green/magenta.)

## NVIDIA Driver Software

You need one of the following NVIDIA Drivers:

- NVIDIA Windows NT 4.0 Display Driver (*at least* Version 6.46) *or*
- NVIDIA Windows XP/2000 Display Driver (*at least* Version 6.46)

## Software Components

The NVIDIA QuadroView Setup directory contains the following files:

- `Readme.txt` file
- `Setup.exe` installation program for Windows
- Other files required by the Setup program

**Note:** The NVIDIA QuadroView online HTML Help file `(QuadroView*.chm)` is installed in the NVIDIA QuadroView directory during installation.

## AutoCAD Applications

AutoCAD must be installed on your system *before* you install NVIDIA QuadroView.

NVIDIA QuadroView will work with any one of the following applications:

- AutoCAD 2002
- AutoCAD 2000i
- AutoCAD 2000
- AutoCAD Architectural Desktop Version 2
- AutoCAD Architectural Desktop Version 2i
- Mechanical Desktop 6
- Mechanical Desktop 5
- Mechanical Desktop 4

**Note:** You need to install AutoCAD to run Mechanical Desktop or Architectural Desktop applications.

# Overview of Resolved Issues by Version

This section contains the following topics:


- "Issues Resolved in Version 2.04.15" on page 8
- "Issues Resolved in Version 2.04.08" on page 8
- "Issues Resolved in Version 2.04.06" on page 8
- "Issues Resolved in Version 2.04.03" on page 8
- "Issues Resolved in Version 2.04.01" on page 9
- "Issues Resolved in Version 2.03.02" on page 9
- "Issues Resolved in Version 2.03.01" on page 9
- "Issues Resolved in Version 2.03.00" on page 9


## Issues Resolved in Version 2.04.15

Fixed rendering problem with Opera and Campus samples.

## 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 POWERdraft™ (Windows 2000).

# Known Issues

The following issues are known to be open in the current version of QuadroView. Certain issues may be fixed in later releases.


- “2D Drawings in QuadroView” on page 10
- “Appearance of QuadroView Objects” on page 10
- “For Previous Users of QuadroView Beta Version” on page 10
- “For Previous Alpha or Beta Installations” on page 10
- “Updating Geometric Data” on page 10
- “Loading Drawings Created With Older Versions of AutoCAD” on page 11

- "Possible Problems With Sample Drawing" on page 11
- "Possible Pixel Format Error" on page 11
- "Backward Compatibility and Animation Formats" on page 12
- "Drawings Created in VRML (version 2) Format" on page 12


## 2D Drawings in QuadroView

2D drawings do not render properly/completely in QuadroView. This is because Quadro view 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.

CHAPTER 2

# INSTALLATION AND UNINSTALLATION

This chapter contains the following sections:


- "Before You Install QuadroView" on page 13
- "Installing and Configuring NVIDIA QuadroView" on page 13
- "Starting NVIDIA QuadroView" on page 14
- "Uninstalling NVIDIA QuadroView" on page 15


## Before You Install QuadroView

Before you install NVIDIA QuadroView, note the following:

- If you received the QuadroView installation package in compressed format, be sure to expand it retaining the subdirectory structure. Use the option "`-d`" for `Pkunzip` or, if you use another packer, use an equivalent option.
- Make sure that AutoCAD is installed but *not* running.

## Installing and Configuring NVIDIA QuadroView

You can install NVIDIA QuadroView using either Standard mode or the Silent mode, as explained in the sections that follow.

### Standard Mode

From the installation directory, click the Setup program and follow the prompts from the InstallShield program.

## Silent Mode

To run the Setup program without any dialog boxes and user input, you must create a response file. The response file will hold your responses to the dialog boxes that appear in a dialog driven installation.

1 To build the response file, start the Setup program with the `-r` option, as shown:

```
setup.exe -r
```

This command starts a dialog box driven Setup and creates the `Setup.iss` file in your Windows directory. `Setup.iss` stores the information you enter when you run Setup.

No messages are displayed during a Silent Setup. Instead a log file named `Setup.log` captures installation information including whether the installation was successful or not. You can review the log file to determine the results of the installation.

2 To start the Silent Setup, enter the following command:

```
setup.exe -s -f1<path of setup.iss> -f2<path of setup.log>
```

-s indicates that this is a Silent Setup.

-fl tells Setup where to find the response file.

-f2 tells the Setup where to write the log file. Without this option, the log file is created in the current directory. Since it is impossible to create a log file on a CD-ROM, specify another path where this file has to be created.

**Example:** The following is a sample command line for Silent Setup:

```
setup.exe -s -f1c:\setup.iss -f2c:\setup.log
```

If the installation program stops processing and generates an error message, try to run it with Administrator access rights.

# Starting NVIDIA QuadroView

- To start QuadroView in stand-alone mode, from your Windows desktop, click **Start** > **Programs** > **NVIDIA Corporation** > **QuadroView 2.04 > QuadroView**.
- To start QuadroView from an AutoCAD application, see the QuadroView online Help for “Demand Load” Configuration.

**Note:** If, for any reason, AutoCAD does not start after NVIDIA QuadroView installation, re-install NVIDIA QuadroView.

# Uninstalling NVIDIA QuadroView

To uninstall NVIDIA QuadroView, follow these steps:

1. From the Windows desktop, click **Start** > **Settings** > **Control Panel** > **Add/Remove Programs**.
2. Click the **Add/Remove Programs** icon.
3. Click **QuadroView** from the list.
4. Click the **Change/Remove** button.
5. Follow the instructions from the InstallShield program to complete uninstallation.